# CITY OF BURLINGTON

# BURLINGTON PARKS, RECREATION & WATERFRONT

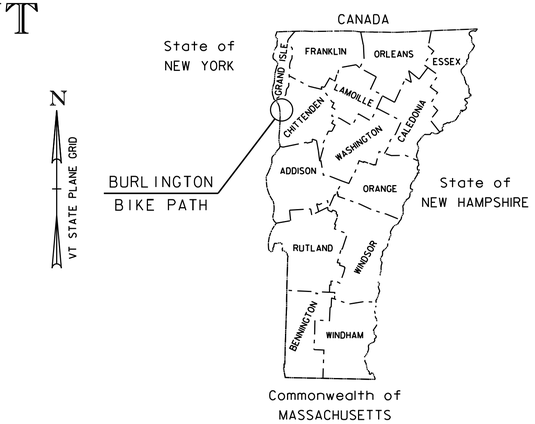
BURLINGTON
PARKS
RECREATION
WATERFRONT

## INDEX OF SHEETS


1. TITLE SHEET
2. CONVENTIONAL SYMBOLOGY LEGEND
3-5. TYPICAL SECTIONS
6. PROJECT NOTES
7-9. QUANTITY SHEETS
10. EARTHWORK SUMMARY SHEET
11-15. DETAIL SHEETS
16. ALIGNMENT POINTS SHEET
17-27. ALIGNMENT SHEETS
28-38. LAYOUT SHEETS
39-40. PAUSE PLACE DETAILS
41-43. LANDSCAPE PLANS
44-54. PATH PROFILE SHEETS
55-74. PATH CROSS SECTIONS
75-76. TEXACO WALKWAY CROSS SECTIONS
77-78. TRAFFIC CONTROL PLANS
79. EPSC NARRATIVE
80-83. EPSC DETAILS
84-94. EPSC EXIST. CONDITIONS PLANS
95-105. EPSC PLANS
106-116. EPSC FINAL CONDITIONS


## LIST OF STANDARDS

| | | |
|---|---|---|
| A-80 | SHARED USE PATH DETAILS | 03-31-2004 |
| B-5 | SLOPE GRADING, EMBANKMENTS, MUCK | 06-01-1994 |
| E-195 | SHARED USE PATH PAVEMENT MARKINGS AND SIGN DETAILS | 06-09-2008 |
| F-2 | CHAIN LINK FENCE, TYPE I DETAILS | 06-01-1994 |
| F-6 | CHAIN LINK SCREENING FENCE TYPE I & II DETAILS | 06-01-1994 |

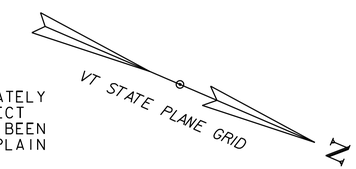



# PROPOSED IMPROVEMENT

# BURLINGTON BIKE PATH REHABILITATION PROJECT PHASE 1B

CITY OF BURLINGTON
COUNTY OF CHITTENDEN

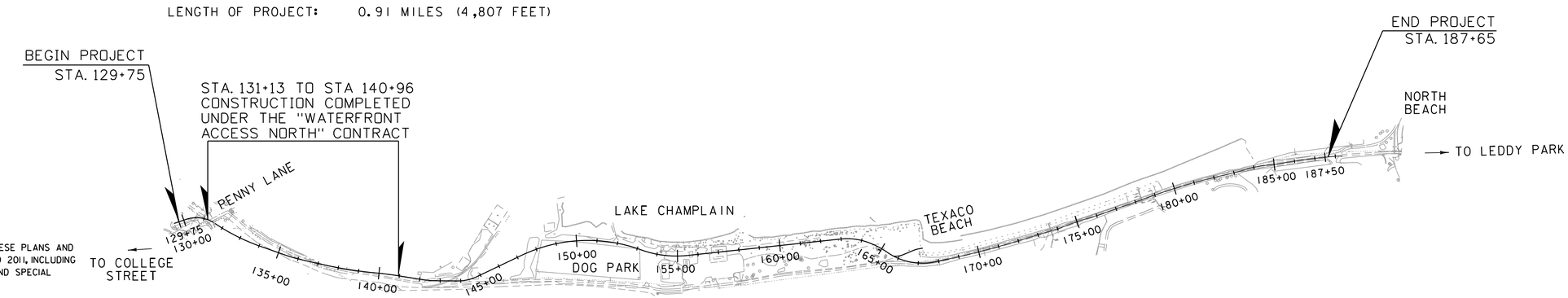
**CONTRACT PLANS (100%)**
MARCH 2016




PROJECT LOCATION: LOCATED IN THE COUNTY OF CHITTENDEN, CITY OF BURLINGTON, THE PROJECT BEGINS AT A POINT APPROXIMATELY 150 FEET SOUTH OF THE INTERSECTION OF PENNY LANE AND THE BIKE PATH AT STATION 129+75. THE PROJECT CONTINUES TO STATION 131+13 AT WHICH POINT THE BIKE PATH FROM THERE NORTH TO STATION 140+96 HAS BEEN CONSTRUCTED UNDER THE "WATERFRONT ACCESS NORTH" CONTRACT. THE PATH THEN FOLLOWS ALONG LAKE CHAMPLAIN AND EXTENDS NORTHERLY PAST THE URBAN RESERVE TO STATION 187+65 AT THE ENTRANCE TO NORTH BEACH.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES PATH REALIGNMENT, CLEARING VEGETATION, REMOVING CONCRETE AND BITUMINOUS PAVEMENT, RE-GRADING, PAVEMENT MARKINGS, REHABILITATION TO "TEXACO BEACH" AREA AND OTHER PATH IMPROVEMENTS.

LENGTH OF PROJECT: 0.91 MILES (4,807 FEET)




CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THIS CONTRACT.

SCALE IN FEET
300 0 300

| | |
|---|---|
| SURVEYED BY : | VHB<br>ALDRICH + ELLIOT, PC<br>BUTTON PROFESSIONAL LAND SURVEYORS, PC<br>CROSS CONSULTING ENGINEERS |
| SURVEYED DATE : | AUGUST 2013, AUGUST 2015 |

DATUM

| | |
|---|---|
| VERTICAL | NAVD 88 |
| HORIZONTAL | NAD 83 (07) |

vhb

| | |
|---|---|
| PROJECT MANAGER : | JEN FRANCIS |
| PROJECT NAME : | BURLINGTON BIKE PATH |
| PROJECT NUMBER : | 57634.00 |

SHEET 1 OF 116 SHEETS

## GENERAL INFORMATION

### SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

## R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

| POINT | CODE | DESCRIPTION |
|---|---|---|
| | CH | CHANNEL EASEMENT |
| | CONST | CONSTRUCTION EASEMENT |
| | CUL | CULVERT EASEMENT |
| | D&C | DISCONNECT & CONNECT |
| | DIT | DITCH EASEMENT |
| | DR | DRAINAGE EASEMENT |
| | DRIVE | DRIVEWAY EASEMENT |
| | EC | EROSION CONTROL |
| | HWY | HIGHWAY EASEMENT |
| | I&M | INSTALL & MAINTAIN EASEMENT |
| | LAND | LANDSCAPE EASEMENT |
| | R&RES | REMOVE & RESET |
| | R&REP | REMOVE & REPLACE |
| | SR | SLOPE RIGHT |
| | UE | UTILITY EASEMENT |
| | (P) | PERMANENT EASEMENT |
| | (T) | TEMPORARY EASEMENT |
| ■ | BNDNS | BOUND SET |
| ⊡ | BNDNS | BOUND TO BE SET |
| ● | IPNS | IRON PIN SET |
| ◎ | IPNS | IRON PIN TO BE SET |
| ⊠ | CALC | EXISTING ROW POINT |
| ○ | PROW | PROPOSED ROW POINT |
| [LENGTH] | | LENGTH CARRIED ON NEXT SHEET |

## COMMON TOPOGRAPHIC POINT SYMBOLS

| POINT | CODE | DESCRIPTION |
|---|---|---|
| | APL | BOUND APPARENT LOCATION |
| | BM | BENCH MARK |
| | BND | BOUND |
| | CB | CATCH BASIN |
| | COMB | COMBINATION POLE |
| | DITHR | DROP INLET THROATED DNC |
| | EL | ELECTRIC POWER POLE |
| | FPOLE | FLAGPOLE |
| | GASFIL | GAS FILLER |
| | GP | GUIDE POST |
| | GSO | GAS SHUT OFF |
| | GUY | GUY POLE |
| | GUYW | GUY WIRE |
| | GV | GATE VALUE |
| | H | TREE HARDWOOD |
| | HCTRL | CONTROL HORIZONTAL |
| | HVCTRL | CONTROL HORIZ. & VERTICAL |
| | HYD | HYDRANT |
| | IP | IRON PIN |
| | IPIPE | IRON PIPE |
| | LI | LIGHT - STREET OR YARD |
| | MB | MAILBOX |
| | MH | MANHOLE (MH) |
| | MM | MILE MARKER |
| | PM | PARKING METER |
| | PMK | PROJECT MARKER |
| | POST | POST STONE/WOOD |
| | RRSIG | RAILROAD SIGNAL |
| | RRSL | RAILROAD SWITCH LEVER |
| | S | TREE SOFTWOOD |
| | SAT | SATELLITE DISH |
| | SHRUB | SHRUB |
| | SIGN | SIGN |
| | STUMP | STUMP |
| | TEL | TELEPHONE POLE |
| | TIE | TIE |
| | TSIGN | SIGN W/DOUBLE POST |
| | VCTRL | CONTROL VERTICAL |
| | WELL | WELL |
| | WSO | WATER SHUT OFF |

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

## PROPOSED GEOMETRY CODES

| CODE | DESCRIPTION |
|---|---|
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| CC | CENTER OF CURVE |
| PT | POINT OF TANGENCY |
| PCC | POINT OF COMPOUND CURVE |
| PRC | POINT OF REVERSE CURVE |
| POB | POINT OF BEGINNING |
| POE | POINT OF ENDING |
| STA | STATION PREFIX |
| AH | AHEAD STATION SUFFIX |
| BK | BACK STATION SUFFIX |
| D | CURVE DEGREE OF (100FT) |
| R | CURVE RADUIS OF |
| T | CURVE TANGENT LENGTH |
| L | CURVE LENGTH OF |
| E | CURVE EXTERNAL DISTANCE |

## UTILITY SYMBOLOGY

### UNDERGROUND UTILITIES

| | |
|---|---|
| UT | TELEPHONE |
| UE | ELECTRIC |
| UC | CABLE (TV) |
| UEC | ELECTRIC+CABLE |
| UET | ELECTRIC+TELEPHONE |
| UCT | CABLE+TELEPHONE |
| UECT | ELECTRIC+CABLE+TELEP. |
| G | GAS LINE |
| W | WATER LINE |
| S | SANITARY SEWER (SEPTIC) |

### ABOVE GROUND UTILITIES (AERIAL)

| | |
|---|---|
| T | TELEPHONE |
| E | ELECTRIC |
| C | CABLE (TV) |
| EC | ELECTRIC+CABLE |
| ET | ELECTRIC+TELEPHONE |
| AER E&T | ELECTRIC+TELEPHONE |
| CT | CABLE+TELEPHONE |
| ECT | ELECTRIC+CABLE+TELEP. |
| | UTILITY POLE GUY WIRE |

## PROJECT CONSTRUCTION SYMBOLOGY

### PROJECT DESIGN & LAYOUT SYMBOLOGY

| | |
|---|---|
| CZ | CLEAR ZONE |
| | PLAN LAYOUT MATCHLINE |

### PROJECT CONSTRUCTION FEATURES

| | |
|---|---|
| | TOP OF CUT SLOPE |
| | TOE OF FILL SLOPE |
| | STONE FILL |
| | BOTTOM OF DITCH ℄ |
| | CULVERT PROPOSED |
| | STRUCTURE SUBSURFACE |
| PDF PDF | PROJECT DEMARCATION FENCE |
| BF BF | BARRIER FENCE |
| | TREE PROTECTION ZONE (TPZ) |
| | STRIPING LINE REMOVAL |
| | SHEET PILES |

## CONVENTIONAL BOUNDARY SYMBOLOGY

### BOUNDARY LINES

| | |
|---|---|
| TOWN LINE | TOWN BOUNDARY LINE |
| COUNTY LINE | COUNTY BOUNDARY LINE |
| STATE LINE | STATE BOUNDARY LINE |
| | PROPOSED STATE R.O.W. (LIMITED ACCESS) |
| | PROPOSED STATE R.O.W. |
| | STATE ROW (LIMITED ACCESS) |
| | STATE ROW |
| | TOWN ROW |
| | PERMANENT EASEMENT LINE (P) |
| | TEMPORARY EASEMENT LINE (T) |
| | SURVEY LINE |
| P L P L | PROPERTY LINE (P/L) |
| SR SR SR | SLOPE RIGHTS |
| 6f 6f | 6F PROPERTY BOUNDARY |
| 4f 4f | 4F PROPERTY BOUNDARY |
| HAZ HAZ | HAZARDOUS WASTE |

## EPSC LAYOUT PLAN SYMBOLOGY

### EPSC MEASURES

| | |
|---|---|
| | FILTER CURTAIN |
| | SILT FENCE |
| | SILT FENCE WOVEN WIRE |
| | CHECK DAM |
| | DISTURBED AREAS REQUIRING RE-VEGETATION |
| | EROSION MATTING |

### ENVIRONMENTAL RESOURCES

| | |
|---|---|
| | WETLAND BOUNDARY |
| | RIPARIAN BUFFER ZONE |
| | WETLAND BUFFER ZONE |
| | SOIL TYPE BOUNDARY |
| T&E | THREATENED & ENDANGERED SPECIES |
| HAZ HAZ | HAZARDOUS WASTE AREA |
| AG | AGRICULTURAL LAND |
| HABITAT | FISH & WILDLIFE HABITAT |
| FLOOD PLAIN | FLOOD PLAIN |
| OHW | ORDINARY HIGH WATER (OHW) |
| | STORM WATER |
| | USDA FOREST SERVICE LANDS |
| | WILDLIFE HABITAT SUIT/CONN |

### ARCHAEOLOGICAL & HISTORIC

| | |
|---|---|
| ARCH | ARCHEOLOGICAL BOUNDARY |
| HISTORIC DIST | HISTORIC DISTRICT BOUNDARY |
| HISTORIC | HISTORIC AREA |
| H | HISTORIC STRUCTURE |

## CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

### EXISTING FEATURES

| | |
|---|---|
| | ROAD EDGE PAVEMENT |
| | ROAD EDGE GRAVEL |
| | DRIVEWAY EDGE |
| | DITCH |
| | FOUNDATION |
| | FENCE (EXISTING) |
| | FENCE WOOD POST |
| | FENCE STEEL POST |
| | GARDEN |
| | ROAD GUARDRAIL |
| | RAILROAD TRACKS |
| | CULVERT (EXISTING) |
| | STONE WALL |
| | WALL |
| | WOOD LINE |
| | BRUSH LINE |
| | HEDGE |
| | BODY OF WATER EDGE |
| | LEDGE EXPOSED |

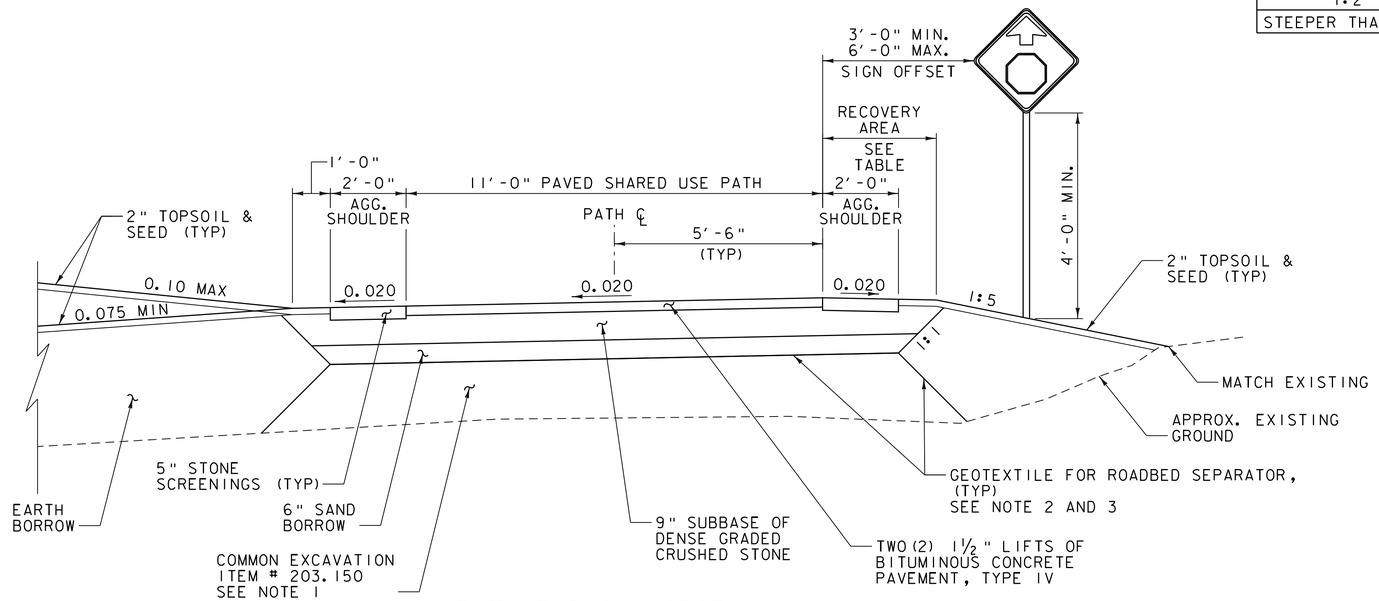
PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634

FILE NAME: z57634_con_symbol.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 3/25/2016
DRAWN BY: D.A. GINGRAS
CHECKED BY: M.A. COLGAN
SHEET 2 OF 116

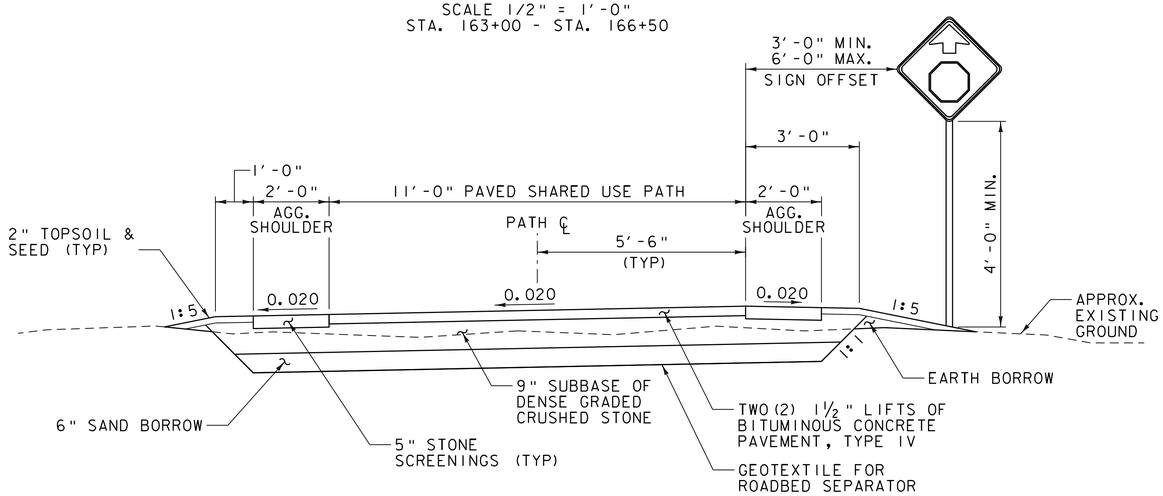
| MATERIAL TOLERANCES | |
|---|---|
| MATERIAL ITEM | THICKNESS TOLERANCE |
| PAVEMENT (FULL DEPTH) | +/- 1/4" (TOTAL THICKNESS) |
| SUBBASE | 1/2" |
| SAND BORROW | 1" |

| RECOVERY AREA TABLE | | |
|---|---|---|
| SIDE SLOPE | PAVED SURFACE | |
| | MIN. | PREFERRED |
| 1:4 OR FLATTER | 0 | 3'-0" |
| 1:3 | 3'-0" | 4'-0" |
| 1:2 | 4'-0" | 5'-0" |
| STEEPER THAN 1:2 | 5'-0" | >5'-0" |




PATH TYPICAL SECTION
(REGRADE FILL SLOPE)

SCALE 1/2" = 1'-0"
STA. 163+00 - STA. 166+50




PATH TYPICAL SECTION
(NORMAL FILL SLOPE)

SCALE 1/2" = 1'-0"

| GRADING TABLE | | | |
|---|---|---|---|
| STATION RANGE | | SIDE SLOPE GRADE | |
| START | END | LEFT | RIGHT |
| 141+50 | 142+00 | 1:2 | 1:5 |
| 142+00 | 142+50 | 1:5 | 0.075 |
| 142+50 | 143+00 | 0.075 | 0.02 |
| 143+00 | 143+50 | 0.02 | 1:5 |
| 143+50 | 145+00 | 0.075 | 0.02 |
| 145+00 | 147+50 | 0.075 | 1:5 |
| 147+50 | 148+00 | 1:5 | 1:5 |
| 148+00 | 150+50 | 0.075 | 1:5 |
| 150+50 | 152+00 | 1:5 | 1:5 |
| 152+00 | 153+50 | 0.075 | 1:5 |
| 153+50 | 154+50 | 1:5 | 1:5 |
| 154+50 | 156+00 | 0.075 | 1:5 |
| 156+00 | 157+00 | 1:5 | 1:5 |
| 157+00 | 163+00 | 0.075 | 1:5 |
| 163+00 | 164+50 | 1:5 | 1:5 |
| 164+50 | 165+00 | 0.05 | 1:5 |
| 165+00 | 166+00 | 0.0 | 1:5 |
| 166+00 | 168+00 | 1:5 | 1:5 |

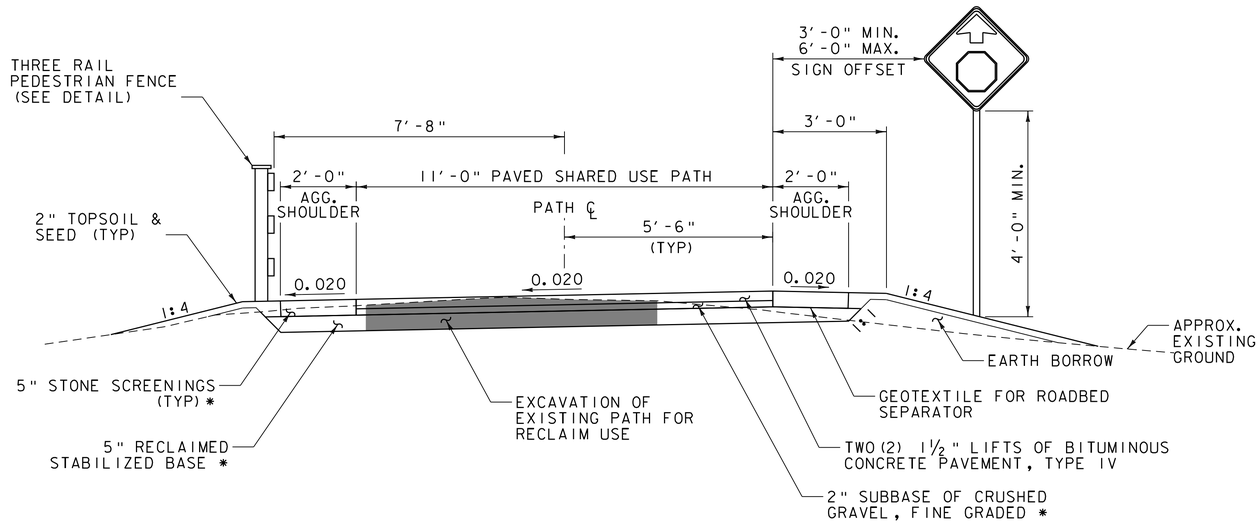
NOTES:

1. THE MINIMUM PAVED PATH WIDTH SHALL BE 11'-0" UNLESS NOTED OTHERWISE IN THE PLANS.
2. WHEN USING A PAVED SURFACE, ROADBED SUBGRADE SEPARATOR FABRIC SHALL BE PLACED BETWEEN THE SUBGRADE AND SUBBASE.
3. THE USE OF UNDERDRAIN IS OPTIONAL. HOWEVER, ITS USE IS ENCOURAGED WHEN WET SUBGRADE CONDITIONS ARE ENCOUNTERED.
4. WHEN SAND BORROW IS USED IN APPROACH WORK, ITS THICKNESS SHALL BE TRANSITIONED TO OR FROM FULL DEPTH AT THE RATE OF 1:25 ALONG THE LENGTH OF THE PATH TO PREVENT A BUMP FROM OCCURRING AT ITS TERMINUS.
5. THE PATH SHALL HAVE A UNIFORM TWO PERCENT CROSS SLOPE IN THE DIRECTION SHOWN IN THE PLANS, AND THE SUBBASE SHALL BE GRADED TO MATCH.
6. ALL SHARED USE PATHS SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) TO THE EXTENTS POSSIBLE GIVEN EXISTING CONDITIONS. REFER TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) FOR SPECIFIC DETAILS.
7. ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE PRUNED AND PROTECTED ACCORDING TO SPECIAL PROVISION (ROOT PRUNING AND TREE PROTECTION).
8. STONE FILL, TYPE II IS REQUIRED ON ANY SLOPE STEEPER THAN 1:2. A 6" LAYER OF COVER MATERIAL OVER THE STONE IS ALSO REQUIRED AND ARE TO BE PAID UNDER THEIR RESPECTIVE UNIT ITEMS.
   A) ANY SLOPES ADJACENT TO WETLANDS OR STREAMS SHALL USE GRUBBING MATERIAL AS A COVER FOR THE STONE FILL.
   B) STONE COVERED SLOPES IN DRY AREAS SHALL USE EARTH BORROW AS A COVER MATERIAL. COVER MATERIAL SHALL BE SEEDED AND MULCHED.
9. DITCHES SHALL RECEIVE THE FOLLOWING TREATMENTS BASED ON THEIR SLOPE, UNLESS SHOWN OTHERWISE ON THE PLANS.
   A) 0-1% SEED AND MULCH
   B) 1-2.5% EROSION CONTROL MATTING AND SEED
   C) 2.5-10% TYPE I STONE FILL - 1'-0" DEPTH
   D) >10% TYPE II STONE FILL - 2'-0" DEPTH
10. PAYMENT OF DITCH LINE TREATMENTS SHALL BE UNDER THE FOLLOWING RESPECITVE VTRANS UNIT ITEMS:
   A) SEED - 651.15
   B) HAY MULCH - 651.25
   C) TEMPORARY EROSION CONTROL MATTING - 653.20
   D) TYPE I STONE FILL - 613.10
   E) TYPE II STONE FILL - 613.11
11. AGGREGATE SHOULDER SHALL BE PAID UNDER ITEM NO. 900.608 SPECIAL PROVISION (STONE SCREENINGS, IN PLACE)
12. SOILS PLACED BENEATH THE GEOTEXTILE FABRIC SHALL CONSIST ONLY OF SOILS EXCAVATED WITHIN THE URBAN RESERVE
13. GEOTEXTILE FABRIC SHALL BE PLACED WITH A MIMIMUM OVERLAP OF 24" OR MORE BASED ON ENGINEERING JUDGEMENT TO PROVIDE ADEQUATE COVERAGE
14. THE CONTRACTOR SHALL OBTAIN THE GEOTEXTILE MANUFACTURE'S RECOMMENDATIONS FOR THE SEAM AND STITCH TYPE TO BE USED. IF NO COMMENDATIONS ARE OBTAINED, THE CONTRACTOR SHALL USE A "J" SEAM WITH TWO PASSES OF A LOCK-TYPE STITCH WITH THREE STITCHES PER 1" (25 mm) OF SEWN SEAM

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634typ.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
TYPICAL SECTIONS (1 OF 3)

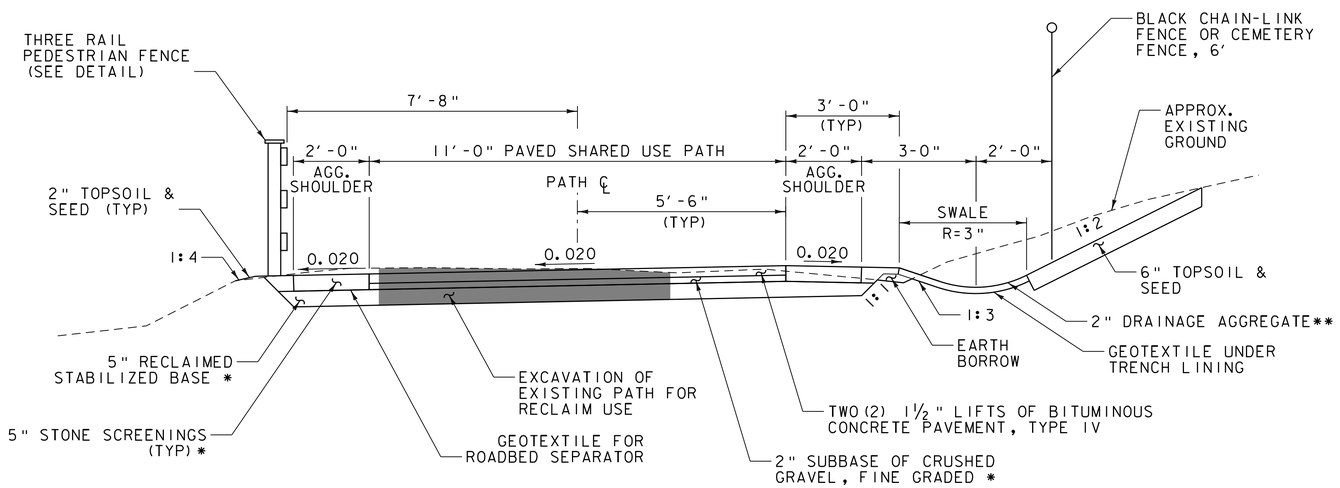
PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 3 OF 116




## RECLAMATION TYPICAL SECTION

SCALE 1/2" = 1'-0"
STA. 168+50 - STA. 176+00
STA. 180+00 - STA. 187+50

| GRADING TABLE | | | |
|---|---|---|---|
| STATION RANGE | | SIDE SLOPE GRADE | |
| START | END | LEFT | RIGHT |
| 168+50 | 169+00 | 1:2 | 1:2 |
| 169+00 | 170+50 | 1:4 | 0.02 |
| 170+50 | 171+00 | 1:4 | 1:5 |
| 171+00 | 172+50 | 1:4 | 1:4 |
| 172+50 | 174+00 | 1:4 | 0.02 |
| 174+00 | 176+00 | 1:4 | 1:4 |
| 176+00 | 177+00 | 1:4 | 0.02 |
| 177+00 | 178+00 | 1:4 | 1:4 |
| 178+00 | 179+50 | 1:4 | 0.02 |
| 179+50 | 180+00 | 1:4 | 1:4 |
| 180+00 | 182+00 | 1:4 | 0.02 |
| 182+00 | 182+50 | 1:2 | 0.02 |
| 182+50 | 183+50 | 1:4 | 0.02 |
| 183+50 | 184+00 | 1:4 | 1:4 |
| 184+00 | 184+50 | 1:1.5 | 1:1.5 |
| 184+50 | 185+00 | 1:4 | 1:1.5 |
| 185+00 | 187+50 | 1:4 | 0.02 |
| 187+50 | 187+50 | 1:4 | 1:4 |
| 188+00 | 188+00 | 0.0 | 0.0 |




## DITCH TYPICAL SECTION

SCALE 1/2" = 1'-0"
STA. 176+50 - STA. 180+00

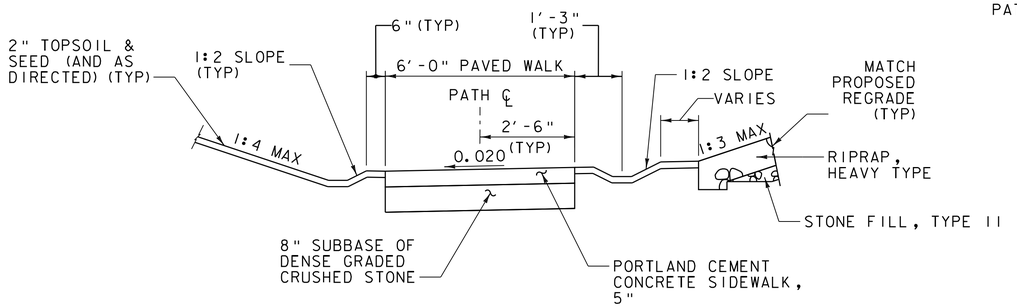
NOTES:

1. SUBBASE BELOW EXISTING BITUMUNOUS PAVEMENT SHALL BE EXCAVATED WITHIN LIMITS SHOWN ON CROSS SECTION SHEETS. MATERIAL SHALL BE REMOVED AND REPLACED IN A 5" RECLAIMED STABILIZED BASE LAYER UNDER THE NEW PATH WIDTH.
2. * WHERE 5" OF RECLAIMED STABILIZED BASE CANNOT BE OBTAINED, SUBBASE OR STONE SCREENINGS SHALL BE USED TO OBTAIN REQUIRED GRADE
3. ** DRAINAGE AGGREGATE SHALL BE PAID FOR UNDER ITEM NO. 401.10 AND SHALL FOLLOW THE MATERIAL SPECIFICATION 704.16.

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634typ.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
TYPICAL SECTIONS (2 OF 3)

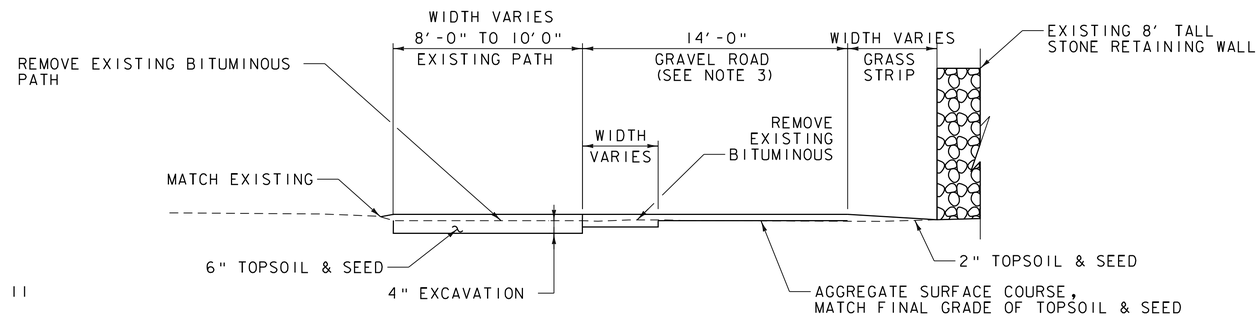
PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 4 OF 116




## TEXACO BEACH WALKWAY

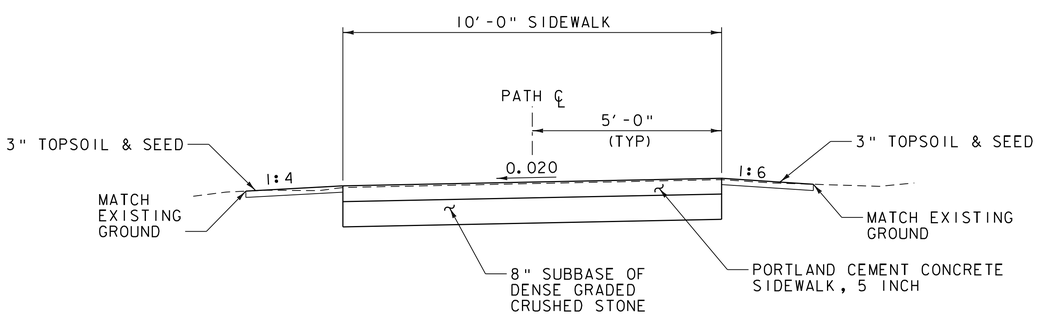
SCALE 1/2" = 1'-0"

| STATIONING | |
|---|---|
| BEGIN | END |
| 300+24 | 301+68 |




## EXISTING PATH REMOVAL

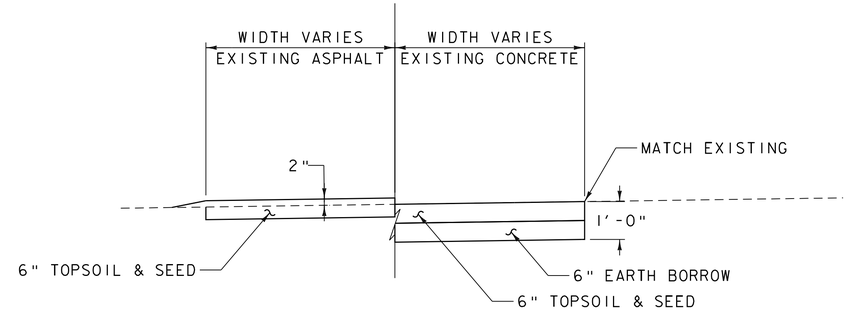
SCALE 1/2" = 1'-0"




## WATERFRONT PARK SPUR

SCALE 1/2" = 1'-0"

| STATIONING | |
|---|---|
| BEGIN | END |
| 203+75 | 204+25 |




## BITUMINOUS/CONCRETE REMOVAL*

SCALE 1/2" = 1'-0"

* REMOVE EXISTING BITUMINOUS OR CONCRETE TO SUBGRADE (WITHIN LIMITS SHOWN ON LAYOUT SHEETS AND AS DIRECTED) (SEE NOTES 1 AND 2)

NOTES:

1. ALL CONCRETE IS ASSUMED TO BE A DEPTH OF 1'-0". ALL CONCRETE SHALL BE REMOVED TO SUBGRADE AND BACKFILLED WITH EARTH BORROW AS DIRECTED BY THE ENGINEER, TOPPED WITH A 6" DEPTH OF TOPSOIL.
2. BITUMINOUS CONCRETE PAVEMENT IS ASSUMED TO BE A DEPTH OF 2". REMOVE SURFACE AND REGRADE AND REPLACE WITH 6" TOPSOIL AND SEED.
3. A MINIMUM WIDTH OF 14'-0" SHALL BE MAINTAINED FOR GRAVEL ROAD.

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634typ.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
TYPICAL SECTIONS (3 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 5 OF 116

# PROJECT NOTES

## GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS.

2. PER AMERICANS WITH DISABILITIES ACT ACCESSABILITY GUIDELINES (ADAAG), PATH CROSS SLOPES SHALL NOT EXCEED 2%.

3. ALL SHARED USE PATH LONGITUDINAL RAMPS AT ROADWAY AND DRIVEWAY CROSSINGS SHALL NOT EXCEED 5%.

4. ALL EXISTING PAVED SURFACES CALLED OUT FOR REMOVAL ON THE LAYOUT PLANS SHALL BE REPLACED WITH 6" OF TOPSOIL & SEED, UNLESS OTHERWISE NOTED ON THE PLANS.

5. ALL EXISTING TREES WITHIN THE PROPOSED CONSTRUCTION LIMITS SHALL BE SAVED (SEE NOTE 28) UNLESS OTHERWISE NOTED IN THE PLANS. TREE REMOVAL SHALL BE PAID FOR UNDER THE APPROPRIATE CONTRACT ITEMS.

6. ANY WASTE MATERIAL THAT WILL BE TAKEN OFF SITE SHALL BE REMOVED AND HAULED TO A PREVIOUSLY APPROVED FACILITY.

## CONSTRUCTION

7. THE CONTRACTOR SHALL ERECT, MAINTAIN, REMOVE, AND/OR RESET AS REQUIRED ALL ON-PROJECT CONSTRUCTION SIGNS AND BARRICADES. ALL SIGNS AND BARRICADES SHALL BE INSPECTED AND REPAIRED DAILY. ALL SIGNS AND BARRICADES SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD AND SHALL BE CLEANED OF DUST AND DEBRIS WEEKLY.

8. ANY EXISTING SIGNS NOT REUSED SHALL REMAIN THE PROPERTY OF THE CITY OF BURLINGTON. THESE SIGNS SHALL BE REMOVED BY THE CONTRACTOR AND STOCKPILED FOR REMOVAL BY THE CITY. STOCKPILE LOCATION TO BE DETERMINED BY THE ENGINEER.

9. FULL ACCESS TO ALL DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. IF FULL ACCESS CANNOT BE MAINTAINED, THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE BUSINESS OR PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF TEMPORARILY CLOSING OFF THE ACCESS.

10. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL BURIED AND AERIAL UTILITIES AND POLES PRIOR TO STARTING WORK. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION.

    DIG-SAFE (1-888-344-7233)

11. THE FOLLOWING IS A LIST OF CONTACTS THE CONTRACTOR SHALL NOTIFY AT LEAST SEVEN (7) FULL BUSINESS DAYS PRIOR TO EXCAVATING:

    CITY OF BURLINGTON:
    JESSE BRIDGES, DIRECTOR OF PARKS, RECREATION & WATERFRONT;
    (802) 865-7557
    JEN FRANCIS, BURLINGTON BIKE PATH REHABILITATION PROJECT MANAGER;
    (802) 865-7248

12. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS.

13. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

14. IN THE EVENT GROSS CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE RESIDENT ENGINEER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.

15. DAMAGE RESULTING FROM CONTRACTOR CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.

16. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION AS PER THE EPSC NARRATIVE AND DETAILS PROVIDED IN THESE PLANS TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.

17. EXISTING PATH BITUMINOUS PAVEMENT FROM STATION 147+20 TO STATION 153+64 SHALL REMAIN FOR SOIL STAGING AREA USE BY THE CONTRACTOR FOR STORAGE OF EXCAVATED MATERIALS FROM STATION 168+50 TO STATION 187+65 UNTIL ALL EARTHWORK EXCEPT FOR EXISTING PATH REMOVAL HAS BEEN COMPLETED.

18. CHAIN LINK FENCE AND GATE MATERIALS SHALL BE BLACK VINYL COATED AND SHALL BE PAID FOR UNDER ITEM NO. 620.11, 620.12, 620.15, 620.16. SEE LAYOUT PLAN SHEETS FOR LOCATIONS OF FENCE AND GATE PLACEMENT.

19. LAKE CHAMPLAIN SURFACE WATER ELEVATIONS SHOWN ON PLANS WERE TAKEN AT TIME OF SURVEY AND MAY DIFFER DURING CONSTRUCTION.

20. ALL PROJECT SOIL EXCAVATION AND HANDLING SHALL BE COMPLETED IN ACCORDANCE WITH THE CORRECTIVE ACTION PLAN FOR PHASE 1B OF THE BURLINGTON BIKE PATH PROJECT - PHASE 1B.

21. ALL CONTRACTORS WORKING IN DIRECT CONTACT WITH SOILS FOR EXCAVATING, REGRADING, AND OTHER PROJECT TASKS SHALL BE OSHA-HAZWOPER CERTIFIED.

## UTILITY

22. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR DESIGN ENGINEER HAVE NOT INDEPENDENTLY VERIFIED ALL OF THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED WORK, INCLUDING WORK WITHIN THE PUBLIC RIGHTS OF WAY. EXPLORATORY EXCAVATION SHALL BE PAID FOR UNDER ITEM 204.22 - TRENCH EXCAVATION OF EARTH, EXPLORATORY.

23. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED AND THE INFORMATION FURNISHED IN WRITING TO THE RESIDENT ENGINEER FOR THE RESOLUTION OF THE CONFLICT.

24. EXISTING RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS WITHIN THE LIMITS OF THE PROPOSED WORK, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:

    A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
    B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
    C. LANDSCAPE, TOPSOIL AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION

25. THE USE OF BRICK AND MORTAR TO ADJUST THE ELEVATION OF DRAINAGE OR SANITARY STRUCTURES IS PROHIBITED. ALL ELEVATION ADJUSTMENTS SHALL BE MADE USING EITHER GRADE RINGS OR A SYNTHETIC RISER.

26. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND NEW DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.

27. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND ADJUSTING ALL CURB STOPS, WATER VALVES, MANHOLES, & DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS TO THE FINAL GRADE ELEVATION. PAYMENT FOR ADJUSTMENTS SHALL BE PAID FOR UNDER THE APPROPRIATE CONTRACT PAY ITEMS.

## TRAFFIC CONTROL

28. PLEASE SEE TRAFFIC CONTROL PLANS FOR ALL NOTES PERTAINING TO TRAFFIC CONTROL.

## EROSION PREVENTION AND SEDIMENT CONTROL

29. PLEASE SEE EPSC NARRATIVE FOR ALL NOTES PERTAINING TO EROSION PREVENTION AND SEDIMENT CONTROL.

## RIGHT OF WAY

30. THE RAILROAD RIGHT-OF-WAY LOCATION AS SHOWN IS BASED ON "LOCATION PLANS OF THE RUTLAND RAILROAD. RUTLAND-CANADIAN DIV. VOL. 1. BURLINGTON TO ISLAND PARK," FOUND AT THE VERMONT STATE ARCHIVES, DOCUMENT #PRA-00441; MINIMAL EXISTING RAILROAD MONUMENTS WERE FOUND; THE R.O.W. LOCATION AS SHOWN IS BASED SOLELY UPON UTILIZING THE EXISTING BIKE PATH LOCATION AS EVIDENCE OF THE TRACK LOCATION AS DEPICTED ON SAID LOCATION PLANS. THE R.O.W. LOCATION MAY VARY UPON FUTURE DISCOVERY OF MONUMENTS AND AN ASSESSMENT OF COMMISSIONER'S AWARDS (VOL. 46 PG. 201-203).

31. RAILROAD RIGHT-OF-WAY LOCATION BASED ON PLAN ENTITLED "LOT LINE ADJUSTMENT BETWEEN 329 & 351 NORTH AVENUE, BURLINGTON COLLEGE," BY CIVIL ENGINEERING ASSOCIATES, INC. OF SOUTH BURLINGTON VERMONT, DATED DEC. 18, 2014, RECORDED IN THE CITY OF BURLINGTON LAND RECORDS (MAP SLIDE 509-C).

## ROOT PRUNING AND TREE PROTECTION

32. ALL EXCAVATION AND CONSTRUCTION OPERATIONS TO BE PERFORMED SHALL BE COMPLETED WITH EXTREME CARE TO NOT DAMAGE THE EXISTING TREES IN THE URBAN RESERVE EXCEPT FOR THOSE NOTED ON THE PLANS AS TO BE REMOVED. ALL COSTS SHALL BE INCLUDED UNDER APPROPRIATE EXCAVATION AND ROOT PRUNING AND TREE PROTECTION PAY ITEMS FOR PROTECTION OF EXISTING TREES. IF DAMAGE DOES OCCUR TO ANY OF THE EXISTING TREES NOT TO BE REMOVED, ALL COSTS FOR REPLACEMENT TO THE CITY'S SATISFACTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

# QUANTITY SHEET 1

| SUMMARY OF ESTIMATED QUANTITIES | | | TOTALS | | DESCRIPTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| ROADWAY (NO FEDERAL/STATE | EROSION CONTROL (NO FEDERAL/STA | FULL C.E. ITEMS | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
| 1 | | | 1 | | LS | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10 | - |
| 52 | | | 52 | | EACH | REMOVING MEDIUM TREES | 201.15 | - |
| 4700 | | | 4700 | | CY | COMMON EXCAVATION | 203.15 | 30.6 |
| 510 | | | 510 | | CY | SOLID ROCK EXCAVATION | 203.16 | 4 |
| 1400 | | | 1400 | | CY | EXCAVATION OF SURFACES AND PAVEMENTS | 203.28 | 2.2 |
| 2000 | | | 2000 | | CY | EARTH BORROW | 203.30 | |
| 850 | | | 850 | | CY | SAND BORROW | 203.31 | EST |
| 20 | | | 20 | | CY | GRANULAR BORROW | 203.32 | |
| 50 | | | 50 | | CY | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.) | 204.22 | EST |
| 3 | | | 3 | | SY | COLD PLANING, BITUMINOUS PAVEMENT | 210.10 | |
| 1500 | | | 1500 | | CY | SUBBASE OF DENSE GRADED CRUSHED STONE | 301.35 | 11.1 |
| 110 | | | 110 | | CY | AGGREGATE SURFACE COURSE | 401.10 | |
| 13 | | | 13 | | CWT | EMULSIFIED ASPHALT | 404.65 | 0.4 |
| 110 | | | 110 | | TON | BITUMINOUS CONCRETE PAVEMENT | 406.25 | 9.7 |
| 1 | | | 1 | | LU | PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.) | 406.50 | |
| 625 | | | 625 | | CY | CONCRETE, CLASS B | 541.25 | |
| 51 | | | 51 | | LF | 12" CPEP(SL) | 601.2605 | |
| 20 | | | 20 | | LF | 18" CPEP(SL) | 601.2615 | |
| 1 | | | 1 | | EACH | CONCRETE CATCH BASIN WITH CAST IRON GRATE | 604.10 | |
| 320 | | | 320 | | MGAL | DUST CONTROL WITH WATER | 609.10 | 4 |
| 350 | | | 350 | | CY | STONE FILL, TYPE II | 613.11 | |
| 1050 | | | 1050 | | CY | RIPRAP, HEAVY TYPE | 613.15 | |
| 160 | | | 160 | | SY | PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH | 618.10 | 5.3 |
| 1120 | | | 1120 | | LF | CHAIN-LINK FENCE, 4 FEET | 620.11 | |
| 680 | | | 680 | | LF | CHAIN-LINK FENCE, 6 FEET | 620.12 | |
| 40 | | | 40 | | LF | GATE FOR CHAIN-LINK FENCE, 4 FEET | 620.15 | |
| 4 | | | 4 | | LF | GATE FOR CHAIN-LINK FENCE, 6 FEET | 620.16 | |
| 3300 | | | 3300 | | LF | REMOVAL OF EXISTING FENCE | 620.55 | 4 |
| 9 | | | 9 | | HR | UNIFORMED TRAFFIC OFFICERS | 630.10 | - |
| 230 | | | 230 | | HR | FLAGGERS | 630.15 | 8 |
| | | 1 | 1 | | LS | FIELD OFFICE, ENGINEERS | 631.10 | - |
| | | 1 | 1 | | LS | TESTING EQUIPMENT, CONCRETE | 631.16 | - |
| | | 1 | 1 | | LS | TESTING EQUIPMENT, BITUMINOUS | 631.17 | - |
| | | 3000 | 3000 | | DL | FIELD OFFICE TELEPHONE (N.A.B.I.) | 631.26 | - |
| 1 | | | 1 | | LS | MOBILIZATION/DEMOBILIZATION | 635.11 | - |
| 1 | | | 1 | | LS | TRAFFIC CONTROL | 641.10 | - |
| 1900 | | | 1900 | | LF | 4 INCH YELLOW LINE | 646.21 | 15 |
| 6 | | | 6 | | LF | 12 INCH WHITE LINE | 646.24 | |
| 18 | | | 18 | | EACH | LETTER OR SYMBOL | 646.30 | - |
| | 1100 | | 1100 | | SY | GEOTEXTILE FOR ROADBED SEPARATOR | 649.11 | |

| DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|
| QUANTITIES | UNIT | ITEMS |

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634qs.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
QUANTITY SHEET (1 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: D.A. GINGRAS
SHEET 7 OF 116

# QUANTITY SHEET 2

| SUMMARY OF ESTIMATED QUANTITIES | | | TOTALS | | DESCRIPTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| ROADWAY (NO FEDERAL/STATE | EROSION CONTROL (NO FEDERAL/STA | FULL C.E. ITEMS | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
| | 4750 | | 4750 | | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | |
| | 420 | | 420 | | SY | GEOTEXTILE FOR UNDERDRAIN TRENCH LINING | 649.41 | |
| | 1000 | | 1000 | | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | 1.5 |
| | 1400 | | 1400 | | SY | GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED | 649.515 | |
| | 300 | | 300 | | SY | GEOTEXTILE FOR FILTER CURTAIN | 649.61 | |
| | 150 | | 150 | | LB | SEED | 651.15 | 0.6 |
| | 1500 | | 1500 | | LB | FERTILIZER | 651.18 | 1.7 |
| | 5 | | 5 | | TON | AGRICULTURAL LIMESTONE | 651.20 | 0.3 |
| | 7 | | 7 | | TON | HAY MULCH | 651.25 | 0.3 |
| | 150 | | 150 | | CY | TOPSOIL | 651.35 | 4.6 |
| | 1 | | 1 | | LS | EPSC PLAN | 652.10 | - |
| | 24 | | 24 | | HR | MONITORING EPSC PLAN | 652.20 | - |
| | 1 | | 1 | | LU | MAINTENANCE OF EPSC PLAN (N.A.B.I.) | 652.30 | - |
| | 670 | | 670 | | SY | PERMANENT EROSION MATTING | 653.21 | |
| | 30 | | 30 | | CY | VEHICLE TRACKING PAD | 653.35 | 5.9 |
| | 3 | | 3 | | EACH | INLET PROTECTION DEVICE, TYPE I | 653.40 | |
| | 2 | | 2 | | EACH | INLET PROTECTION DEVICE, TYPE II | 653.41 | |
| | 500 | | 500 | | LF | BARRIER FENCE | 653.50 | 10 |
| | 10200 | | 10200 | | LF | PROJECT DEMARCATION FENCE | 653.55 | 19 |
| 27 | | | 27 | | EACH | EVERGREEN TREES (THUJA OCCIDENTALLIS NORTHERN WHITE CEDAR) (B&B) (6-7 H) | 656.20 | |
| 26 | | | 26 | | EACH | DECIDUOUS TREES (ACER X FREEMANII CELEBRATION RED MAPLE) (B&B) (2-2.5 CAL.) | 656.30 | |
| 20 | | | 20 | | EACH | DECIDUOUS TREES (AMELANCHIER ARBOREA AUTUMN BRILLIANCE SERVICEBERRY)(B&B) (8-10 H) | 656.30 | |
| 1 | | | 1 | | EACH | DECIDUOUS TREES (AMELANCHIER ARBOREA DOWNY SERVICEBERRY) (B&B) (8 H) | 656.30 | |
| 3 | | | 3 | | EACH | DECIDUOUS TREES (AMELANCHIER CANADENSIS CANADIAN SERVICEBERRY)(B&B) (8 H) | 656.30 | |
| 23 | | | 23 | | EACH | DECIDUOUS TREES (BETULA NIGRA RIVER BIRCH) (B&B) (2-2.5" CAL.) | 656.30 | |
| 5 | | | 5 | | EACH | DECIDUOUS TREES (BETULA PAPYRIFERA PAPER BIRCH) (B&B) (2-2.5" CAL.) | 656.30 | |
| 7 | | | 7 | | EACH | DECIDUOUS TREES (CARPINUS CAROLINIANA AMERICAN HORNBEAM) (B&B) (2-2.5" CAL.) | 656.30 | |
| 4 | | | 4 | | EACH | DECIDUOUS TREES (HAMAMELIS VIRGINIANA COMMON WITCH HAZEL) (B&B) (8 H) | 656.30 | |
| 15 | | | 15 | | EACH | DECIDUOUS TREES (POPULUS BALSAMIFERA BALSAM POPLAR) (B&B) (1-1.5" CAL.) | 656.30 | |
| 19 | | | 19 | | EACH | DECIDUOUS TREES (QUERCUS RUBRA NORTHERN RED OAK) (B&B) (2-2.5" CAL.) | 656.30 | |
| 25 | | | 25 | | EACH | DECIDUOUS SHRUBS (ARONIA MELANOCRPA BLACK CHOKEBERRY) (3 GAL) | 656.35 | |
| 6 | | | 6 | | EACH | DECIDUOUS SHRUBS (CEPHALANTHUS OCCIDENTALIS BUTTON BUSH) (5 GAL) | 656.35 | |
| 25 | | | 25 | | EACH | DECIDUOUS SHRUBS (CORNUS RACEMOSA GRAY DOGWOOD) (3 GAL) | 656.35 | |
| 16 | | | 16 | | EACH | DECIDUOUS SHRUBS (CORNUS SERICEA RED TWIG DOGWOOD) (5 GAL) | 656.35 | |
| 29 | | | 29 | | EACH | DECIDUOUS SHRUBS (ILEX VERTICILLATA WINTERBERRY) (5 GAL) | 656.35 | |
| 14 | | | 14 | | EACH | DECIDUOUS SHRUBS (RHUS AROMATICA FRAGRANT SUMAC) (5 GAL) | 656.35 | |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | |

# QUANTITY SHEET 3

| SUMMARY OF ESTIMATED QUANTITIES | | | TOTALS | | DESCRIPTIONS | | | | DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROADWAY (NO FEDERAL/STATE | EROSION CONTROL (NO FEDERAL/STA | FULL C.E. ITEMS | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND | QUANTITIES | UNIT | ITEMS |
| | 16 | | | 16 | | EACH | DECIDUOUS SHRUBS (ROSA BLANDA SMOOTH ROSE) (5 GAL) | 656.35 | | | | |
| | 28 | | | 28 | | EACH | DECIDUOUS SHRUBS (SABUCUS CANADENSIS AMERICAN ELDERBERRY) (3 GAL) | 656.35 | | | | |
| | 1 | | | 1 | | LS | TREE PROTECTION | 656.85 | - | | | |
| | 1 | | | 1 | | EACH | REMOVING SIGNS | 675.50 | - | | | |
| | 1 | | | 1 | | EACH | ERECTING SALVAGED SIGNS | 675.60 | | | | |
| | 1 | | | 1 | | LU | PRICE ADJUSTMENT, FUEL (N.A.B.I.) | 690.50 | | | | |
| | 120 | | | 120 | | CY | SPECIAL PROVISION SPECIAL PROVISION (BARK MULCH) | 900.608 | | | | |
| | 25 | | | 25 | | CY | SPECIAL PROVISION SPECIAL PROVISION (CONTAMINATED MEDIA) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (DISPOSAL OF CLASS I SOILS) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (DISPOSAL OF CLASS II SOILS) | 900.608 | | | | |
| | 1215 | | | 1215 | | CY | SPECIAL PROVISION SPECIAL PROVISION (DISPOSAL OF CLASS III SOILS) | 900.608 | | | | |
| | 20 | | | 20 | | CY | SPECIAL PROVISION SPECIAL PROVISION (DISPOSAL OF CLASS IV SOILS) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (DISPOSAL OF CLASS V SOILS) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (HAZARDOUS MEDIA) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (MANAGEMENT OF CLASS I SOILS) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (MANAGEMENT OF CLASS II SOILS) | 900.608 | | | | |
| | 2800 | | | 2800 | | CY | SPECIAL PROVISION SPECIAL PROVISION (MANAGEMENT OF CLASS III SOILS) | 900.608 | | | | |
| | 20 | | | 20 | | CY | SPECIAL PROVISION SPECIAL PROVISION (MANAGEMENT OF CLASS IV SOILS) | 900.608 | | | | |
| | 5 | | | 5 | | CY | SPECIAL PROVISION SPECIAL PROVISION (MANAGEMENT OF CLASS V SOILS) | 900.608 | | | | |
| | 200 | | | 200 | | CY | SPECIAL PROVISION SPECIAL PROVISION (STONE SCREENINGS) | 900.608 | | | | |
| | 4 | | | 4 | | EACH | SPECIAL PROVISION SPECIAL PROVISION (BENCH) | 900.620 | | | | |
| | 14 | | | 14 | | EACH | SPECIAL PROVISION SPECIAL PROVISION (BIKE RACK) | 900.620 | | | | |
| | 115 | | | 115 | | EACH | SPECIAL PROVISION SPECIAL PROVISION (REMOVAL OF EXISTING RAILROAD TIES) | 900.620 | | | | |
| | 10000 | | | 10000 | | GAL | SPECIAL PROVISION SPECIAL PROVISION (GROUNDWATER) | 900.625 | | | | |
| | 225 | | | 225 | | LF | SPECIAL PROVISION SPECIAL PROVISION (REMOVAL OF EXISTING RAILROAD TRACKS) | 900.640 | | | | |
| | 1150 | | | 1150 | | LF | SPECIAL PROVISION SPECIAL PROVISION (STEEL EDGING) | 900.640 | | | | |
| | 1755 | | | 1755 | | LF | SPECIAL PROVISION SPECIAL PROVISION (THREE RAIL PEDESTRIAN FENCE) | 900.640 | | | | |
| | 1 | | | 1 | | LS | SPECIAL PROVISION SPECIAL PROVISION (PAUSE PLACE OVERLOOK) | 900.645 | | | | |
| | 1 | | | 1 | | LS | SPECIAL PROVISION SPECIAL PROVISION (STONE SEAT WALL) | 900.645 | | | | |
| | 1 | | | 1 | | LS | SPECIAL PROVISION SPECIAL PROVISION (STONE STAIRS) | 900.645 | | | | |
| | 200 | | | 200 | | SY | SPECIAL PROVISION SPECIAL PROVISION (EXPOSED AGGREGATE CONCRETE) | 900.675 | | | | |

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634qs.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
QUANTITY SHEET (3 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: ------
SHEET 9 OF 116

# EARTHWORK SUMMARY SHEET

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| **WATERFRONT NORTH TO TEXACO BEACH** | | | | | | | | | |
| 140+96 | | 8.75 | | | | 15.77 | | | |
| | 4 | | 1.31 | | | | 2.11 | | |
| 141+00 | | 8.95 | | | | 12.78 | | | |
| | 50 | | 28.51 | | 65.30 | | 18.82 | | |
| 141+50 | | 21.84 | | | | 7.55 | | | |
| | 50 | | 40.92 | | | | 6.99 | | |
| 142+00 | | 22.35 | | | | 0.00 | | | |
| | 50 | | 40.37 | | | | 0.04 | | |
| 142+50 | | 21.25 | | | | 0.04 | | | |
| | 50 | | 38.19 | | | | 0.29 | | |
| 143+00 | | 19.99 | | | | 0.27 | | | |
| | 50 | | 40.21 | | | | 0.25 | | |
| 143+50 | | 23.44 | | | | 0.00 | | | |
| | 50 | | 44.79 | | | | 0.00 | | |
| 144+00 | | 24.93 | | | | 0.00 | | | |
| | 50 | | 43.28 | | | | 0.00 | | |
| 144+50 | | 21.81 | | | | 0.00 | | | |
| | 50 | | 39.00 | | | | 32.68 | | |
| 145+00 | | 20.31 | | | | 0.02 | | | |
| | 50 | | 36.77 | | | | 0.04 | | |
| 145+50 | | 19.41 | | | | 0.02 | | | |
| | 50 | | 35.47 | | | | 0.06 | | |
| 146+00 | | 18.90 | | | | 0.04 | | | |
| | 50 | | 37.92 | | | | 0.03 | | |
| 146+50 | | 22.06 | | | | 0.00 | | | |
| | 50 | | 38.23 | | | | 0.00 | | |
| 147+00 | | 19.23 | | | | 0.00 | | | |
| | 50 | | 26.32 | | | | 1.98 | | |
| 147+50 | | 9.20 | | | | 2.14 | | | |
| | 50 | | 28.78 | | | | 1.98 | | |
| 148+00 | | 21.89 | | | | 0.00 | | | |
| | 50 | | 38.10 | | | | 0.04 | | |
| 148+50 | | 19.26 | | | | 0.04 | | | |
| | 50 | | 37.28 | | | | 0.04 | | |
| 149+00 | | 20.99 | | | | 0.00 | | | |
| | 50 | | 39.02 | | | | 0.00 | | |
| 149+50 | | 21.15 | | | | 0.00 | | | |
| | 50 | | 43.83 | | | | 0.20 | | |
| 150+00 | | 19.43 | | | | 0.21 | | | |
| | 50 | | 29.40 | | | | 1.37 | | |
| 150+50 | | 12.32 | | | | 1.27 | | | |
| | 50 | | 23.58 | | | | 2.02 | | |
| 151+00 | | 13.14 | | | | 0.92 | | | |
| | 50 | | 28.77 | | | | 1.02 | | |
| 151+50 | | 17.93 | | | | 0.19 | | | |
| | 50 | | 35.30 | | | | 0.48 | | |
| 152+00 | | 20.20 | | | | 0.33 | | | |
| | 50 | | 33.35 | | | | 1.12 | | |
| 152+50 | | 15.83 | | | | 0.88 | | | |
| | 50 | | 23.62 | | 10.2 | | 6.56 | | |
| 153+00 | | 9.68 | | | | 0.70 | | | |
| | 50 | | 25.28 | | | | 12.30 | | |
| 153+50 | | 0.00 | | | | 12.59 | | | |
| | 50 | | 0.97 | | | | 18.72 | | |
| 154+00 | | 1.05 | | | | 7.63 | | | |
| | 50 | | 16.74 | | 21.5 | | 18.11 | CUT | 2535 |
| 154+50 | | 17.03 | | | | 0.43 | | ROCK | 506 |
| | 50 | | 28.47 | | 93.0 | | 48.39 | R.FAC | .495 |
| 155+00 | | 13.72 | | | | 1.72 | | FILL | 5339 |
| | 50 | | 29.71 | | 40.0 | | 21.38 | F.FAC | 1.15 |
| 155+50 | | 18.37 | | | | 0.00 | | EX F | 3354 |
| | 50 | | 24.20 | | 17.0 | | 11.31 | | |
| 156+00 | | 7.76 | | | | 3.21 | | | |
| | 50 | | 21.71 | | | | 3.93 | | |
| 156+50 | | 15.68 | | | | 1.03 | | | |
| | 50 | | 32.95 | | | | 0.99 | | |
| 157+00 | | 19.91 | | | | 0.04 | | | |
| | 50 | | 34.16 | | 216.0 | | 108.25 | | |
| 157+50 | | 16.98 | | | | 0.38 | | | |
| | 50 | | 33.74 | | 43.0 | | 22.46 | | |
| 158+00 | | 19.46 | | | | 0.76 | | | |
| | 50 | | 34.50 | | | | 1.03 | | |
| 158+50 | | 17.80 | | | | 0.36 | | | |
| | 50 | | 29.98 | | | | 2.32 | | |
| 159+00 | | 14.57 | | | | 2.15 | | | |
| | 50 | | 31.59 | | | | 3.43 | | |
| 159+50 | | 19.55 | | | | 1.55 | | | |
| | 50 | | 40.41 | | | | 1.44 | | |
| 160+00 | | 24.10 | | | | 0.00 | | | |
| | 50 | | 44.50 | | | | 0.01 | | |
| 160+50 | | 23.97 | | | | 0.02 | | | |
| | 50 | | 48.30 | | | | 0.01 | | |
| 161+00 | | 28.19 | | | | 0.00 | | | |
| | 50 | | 44.70 | | | | 0.25 | | |
| 161+50 | | 20.08 | | | | 0.27 | | | |
| | 50 | | 73.97 | | | | 1.26 | | |
| 162+00 | | 59.81 | | | | 1.09 | | | |

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| | 16250 | | 2257.06 | | | | 1332.86 | | |
| 162+50 | | 7.50 | | | | 4.43 | | | |
| | 50 | | 6.94 | | | | 31.30 | | |
| 163+00 | | 0.00 | | | | 29.37 | | | |
| | 50 | | 92.54 | | | | 87.65 | | |
| 163+50 | | 99.94 | | | | 65.29 | | | |
| | 50 | | 139.00 | | | | 121.18 | | |
| 164+00 | | 50.18 | | | | 65.59 | | | |
| | 50 | | 139.31 | | | | 266.68 | | |
| 164+50 | | 100.28 | | | | 222.43 | | | |
| | 50 | | 159.52 | | | | 738.10 | | |
| 165+00 | | 72.00 | | | | 574.72 | | | |
| | 50 | | 66.67 | | | | 1237.23 | | |
| 165+50 | | 0.00 | | | | 761.49 | | | |
| | 50 | | 0.00 | | | | 1280.97 | | |
| 166+00 | | 0.00 | | | | 621.95 | | | |
| | 50 | | 14.32 | | | | 888.10 | | |
| 166+50 | | 15.47 | | | | 337.20 | | | |
| | 50 | | 174.02 | | | | 315.68 | | |
| 167+00 | | 172.47 | | | | 3.73 | | | |
| | 50 | | 168.83 | | | | 7.61 | | |
| 167+50 | | 9.86 | | | | 4.48 | | | |
| | 50 | | 26.73 | | | | 4.48 | | |
| 168+00 | | 19.01 | | | | 0.36 | | | |
| | 50 | | 36.37 | | | | 0.85 | | |
| 168+50 | | 20.27 | | | | 0.56 | | | |
| **TEXACO BEACH TO NORTH BEACH** | | | | | | | | | |
| 168+50 | | 20.27 | | | | 0.56 | | | |
| | 50 | | 26.00 | | | | 1.29 | | |
| 169+00 | | 7.81 | | | | 0.84 | | | |
| | 50 | | 16.21 | | | | 1.01 | | |
| 169+50 | | 9.70 | | | | 0.26 | | | |
| | 50 | | 19.70 | | | | 0.53 | | |
| 170+00 | | 11.58 | | | | 0.31 | | | |
| | 50 | | 21.28 | | | | 0.60 | | |
| 170+50 | | 11.40 | | | | 0.33 | | | |
| | 50 | | 21.53 | | | | 0.55 | | |
| 171+00 | | 11.85 | | | | 0.26 | | | |
| | 50 | | 20.72 | | | | 0.48 | | |
| 171+50 | | 10.53 | | | | 0.26 | | | |
| | 50 | | 19.19 | | | | 0.62 | | |
| 172+00 | | 10.20 | | | | 0.40 | | | |
| | 50 | | 19.65 | | | | 1.03 | | |
| 172+50 | | 11.02 | | | | 0.70 | | | |
| | 50 | | 22.08 | | | | 0.90 | | |
| 173+00 | | 12.83 | | | | 0.26 | | | |
| | 50 | | 24.79 | | | | 0.63 | | |
| 173+50 | | 13.94 | | | | 0.42 | | | |
| | 50 | | 22.17 | | | | 2.43 | | |
| 174+00 | | 10.01 | | | | 2.21 | | | |
| | 50 | | 19.12 | | | | 2.52 | | |
| 174+50 | | 10.64 | | | | 0.51 | | | |
| | 50 | | 20.97 | | | | 1.68 | | |
| 175+00 | | 12.01 | | | | 1.31 | | | |
| | 50 | | 23.62 | | | | 1.55 | | |
| 175+50 | | 13.50 | | | | 0.37 | | | |
| | 50 | | 24.92 | | | | 0.65 | | |
| 176+00 | | 13.41 | | | | 0.33 | | | |
| | 50 | | 30.51 | | | | 0.55 | | |
| 176+50 | | 19.55 | | | | 0.26 | | | |
| | 50 | | 42.31 | | | | 0.57 | | |
| 177+00 | | 26.14 | | | | 0.36 | | | |
| | 50 | | 63.33 | | | | 1.11 | | |
| 177+50 | | 42.25 | | | | 0.84 | | | |
| | 50 | | 57.33 | | | | 1.02 | | |
| 178+00 | | 19.66 | | | | 0.26 | | CUT | 976 |
| | 50 | | 32.50 | | | | 0.85 | ROCK | 0 |
| 178+50 | | 15.44 | | | | 0.66 | | R.FAC | .495 |
| | 50 | | 25.12 | | | | 0.85 | FILL | 68 |
| 179+00 | | 11.68 | | | | 0.26 | | F.FAC | 1.15 |
| | 50 | | 28.98 | | | | 0.48 | EX C | 897 |
| 179+50 | | 19.61 | | | | 0.26 | | | |
| | 50 | | 25.98 | | | | 1.70 | | |
| 180+00 | | 8.45 | | | | 1.58 | | | |
| | 50 | | 14.97 | | | | 7.84 | | |
| 180+50 | | 7.72 | | | | 6.89 | | | |
| | 50 | | 16.57 | | | | 6.62 | | |
| 181+00 | | 10.18 | | | | 0.26 | | | |
| | 50 | | 17.40 | | | | 0.53 | | |
| 181+50 | | 8.61 | | | | 0.32 | | | |
| | 50 | | 16.82 | | | | 0.78 | | |
| 182+00 | | 9.56 | | | | 0.52 | | | |
| | 50 | | 17.65 | | | | 1.35 | | |
| 182+50 | | 9.50 | | | | 0.93 | | | |

| STATION | DIST FT. | TOTAL EXCAVATION EARTH AND ROCK AREA S.F. | TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y. | ROCK EXCAVATION AREA S.F. | ROCK EXCAVATION VOLUME C.Y. | EMBANKMENT AREA S.F. | EMBANKMENT VOLUME C.Y. | AREA S.F. | VOLUME C.Y. |
|---|---|---|---|---|---|---|---|---|---|
| | 18300 | | 4995.22 | | | | 91.97 | | |
| 183+00 | | 14.74 | | | | 0.27 | | | |
| | 50 | | 34.43 | | | | 0.49 | | |
| 183+50 | | 22.44 | | | | 0.26 | | | |
| | 50 | | 38.64 | | | | 2.30 | | |
| 184+00 | | 19.29 | | | | 2.22 | | | |
| | 50 | | 31.31 | | | | 2.73 | | |
| 184+50 | | 14.53 | | | | 0.72 | | | |
| | 50 | | 25.08 | | | | 1.10 | | |
| 185+00 | | 12.56 | | | | 0.47 | | | |
| | 50 | | 22.63 | | | | 1.74 | | |
| 185+50 | | 11.88 | | | | 1.41 | | | |
| | 50 | | 20.63 | | | | 4.21 | | |
| 186+00 | | 10.40 | | | | 3.13 | | | |
| | 50 | | 18.42 | | | | 6.95 | | |
| 186+50 | | 9.49 | | | | 4.37 | | | |
| | 50 | | 18.26 | | | | 5.10 | | |
| 187+00 | | 10.23 | | | | 1.14 | | | |
| | 50 | | 20.88 | | | | 1.36 | | |
| 187+50 | | 12.32 | | | | 0.33 | | | |
| | 50 | | 11.41 | | | | 0.31 | | |
| 188+00 | | 0.00 | | | | 0.00 | | | |
| **PENNY LANE TIE-IN** | | | | | | | | | |
| 129+50 | | 5.04 | | | | 0.00 | | | |
| | 50 | | 28.40 | | | | 1.07 | | |
| 130+00 | | 25.64 | | | | 1.15 | | | |
| | 50 | | 52.20 | | | | 1.55 | | |
| 130+50 | | 30.74 | | | | 0.52 | | CUT | 150 |
| | 50 | | 49.43 | | | | 0.48 | ROCK | 0 |
| 131+00 | | 22.64 | | | | 0.00 | | R.FAC | .495 |
| | 19 | | 16.91 | | | | 0.00 | FILL | 3 |
| 131+19 | | 25.41 | | | | 0.00 | | F.FAC | 1.15 |
| | 6 | | 2.82 | | | | 0.00 | EX C | 146 |
| 131+25 | | 0.00 | | | | 0.00 | | | |
| **WATERFRONT PARK SIDEWALK** | | | | | | | | | |
| 203+50 | | 0.00 | | | | 0.00 | | | |
| | 25 | | 5.05 | | | | 0.00 | | |
| 203+75 | | 10.90 | | | | 0.00 | | CUT | 14 |
| | 25 | | 7.23 | | | | 0.00 | ROCK | 0 |
| 204+00 | | 4.72 | | | | 0.00 | | R.FAC | .495 |
| | 25 | | 2.18 | | | | 0.00 | FILL | 0 |
| 204+25 | | 0.00 | | | | 0.00 | | F.FAC | 1.15 |
| | | | | | | | | EX C | 14 |

## SUMMARY AND BALANCES

| STATION TO STATION | | TOT EXC. EARTH & ROCK C.Y. | ROCK EXCAV C.Y. | EMBANK C.Y. | EXCESSES CUT | EXCESSES FILL | ACUMULATIVE EXCESSES CUT | ACUMULATIVE EXCESSES FILL |
|---|---|---|---|---|---|---|---|---|
| **WATERFRONT NORTH TO TEXACO BEACH** | | | | | | | | |
| 140+96 | 168+50 | 3041 | 506 | 5339 | | 2804 | | 2804 |
| **TEXACO BEACH TO NORTH BEACH** | | | | | | | | |
| 168+50 | 188+00 | 976 | 0 | 68 | 908 | | | 1896 |
| **PENNY LANE TIE-IN** | | | | | | | | |
| 129+50 | 131+25 | 150 | 0 | 3 | 147 | | | 1749 |
| **WATERFRONT PARK SIDEWALK** | | | | | | | | |
| 203+50 | 204+25 | 14 | 0 | 0 | 14 | | | 1735 |

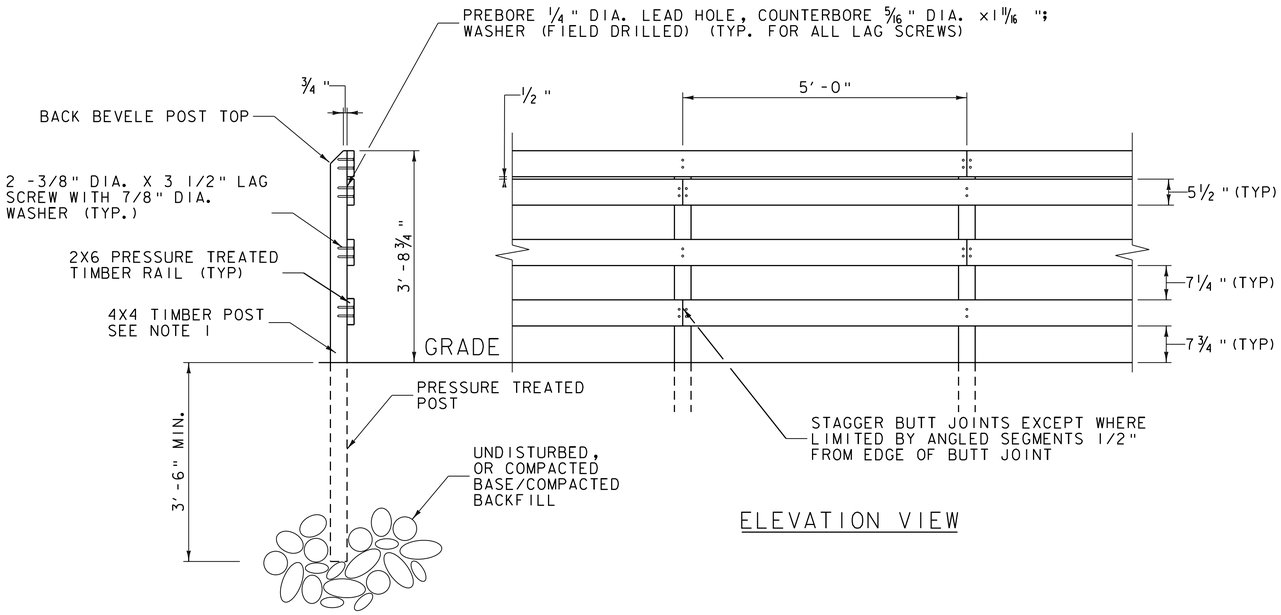
## REMARKS

| | | |
|---|---|---|
| EARTH AND ROCK EXCAVATION | 4687 | |
| SOLID ROCK EXCAVATION | 506 | |
| EARTH EXCAVATION | 4181 | |
| PLANIMETERED FILL | 5410 | |
| LESS FACTORED SOLID ROCK | | |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | | |
| NET PLANIMETERED FILL | 5410 | |
| FACTOR | 1.15 | |
| PLANIMETERED FILL INCLUDING FACTOR | 6222 | |
| MATERIALS AVAILABLE FOR FILLS | | |
| EARTH EXCAVATION | 4181 | |
| TRENCH EXCAVATION | 50 | |
| UNDERDRAIN EXCAVATION | | |
| STRUCTURE EXCAVATION | | |
| TOTAL MATERIAL AVAILABLE FOR FILL | 4231 | |
| TOTAL FILL INCLUDING FACTOR | 6222 | |
| TOTAL MATERIAL FOR FILL | 4231 | |
| BORROW | 1991 | |
| EXCESS EXCAVATION | 0 | |

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

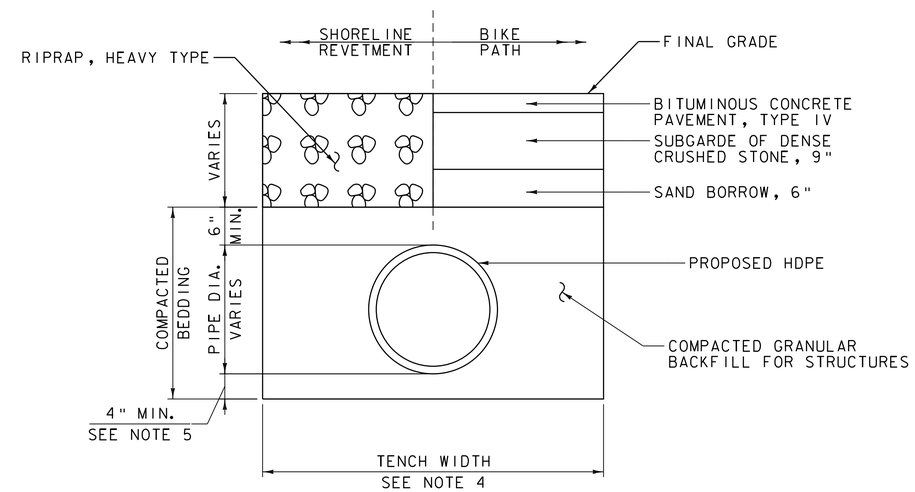
FILE NAME: z57634qs.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
EARTHWORK SUMMARY SHEET

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: ------
SHEET 10 OF 116



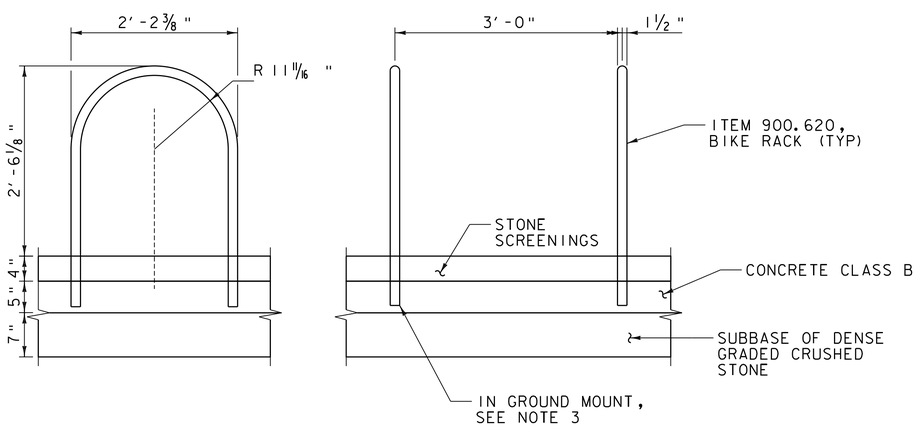

THREE RAIL PEDESTRIAN FENCE (SPECIAL PROVISION)

NOT TO SCALE
SEE NOTE 1 AND 2



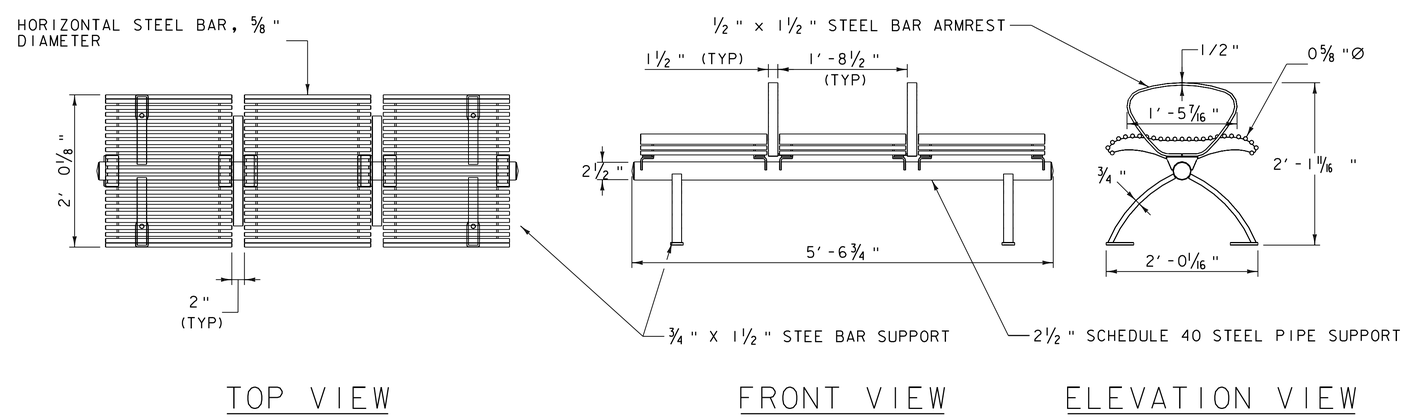

CULVERT INSTALLATION

NOT TO SCALE
STA. 156+00
STA. 162+00




BIKE RACK

SCALE 1" = 1'-0"



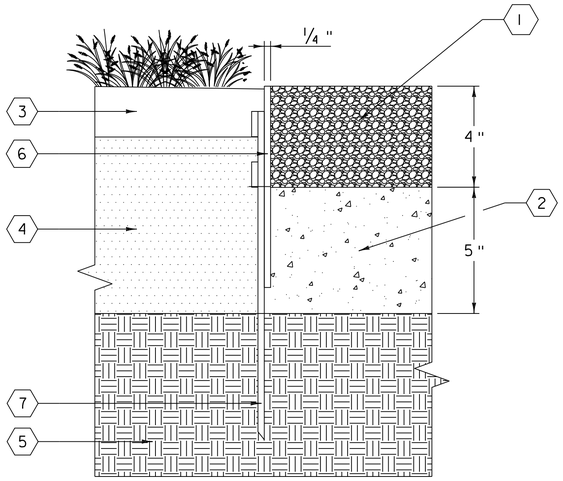

STEEL BENCH

SCALE 1" = 1'-0"
SEE NOTE 6

NOTES:

1. POSTS SHALL CONFORM TO 709.01 - STRUCTURAL LUMBER AND TIMBER.
2. HARDWARD SHALL BE GALVANIZED AND CONFORM TO THE RELEVANT PROVISIONS OF SUBSECTION 709.01.
3. IN GROUND MOUNT TO BE CORE DRILLED WITH NON-SHRINK EPOXY GROUT INCIDENTAL TO ITEM 900.620, "SPECIAL PROVISION (BIKE RACK)". INSTALL USING MANUFACTURER'S RECOMMENTDATIONS FOR NEW SIDEWALK INSTALLATIONS.
4. FOR 12" DIA. HDPE, DIMENSION IS 30". FOR 18" DIA. HDPE, DIMENSION IS 38".
5. IF UNDERLYING MATERIAL IS FOUND TO BE ROCK, REMOVE ROCK TO MIN DEPTH SHOWN AND REPLACE WITH SPECIFIED EMBEDMENT MATERIAL
6. STEEL BENCHES TO BE ATTACHED USING 8" ANCHOR BOLTS. IN GROUND MOUNT TO CONCRETE SLAB TO BE CORE DRILLED WITH NON-SHRINK EPOXY GROUT INCIDENTAL TO ITEM 900.620, "SPECIAL PROVISION (BENCH)".

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634det.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: P.A. MILLER | CHECKED BY: E.B. PARIZO |
| DETAIL SHEETS (1 OF 5) | SHEET 11 OF 116 |




LEGEND

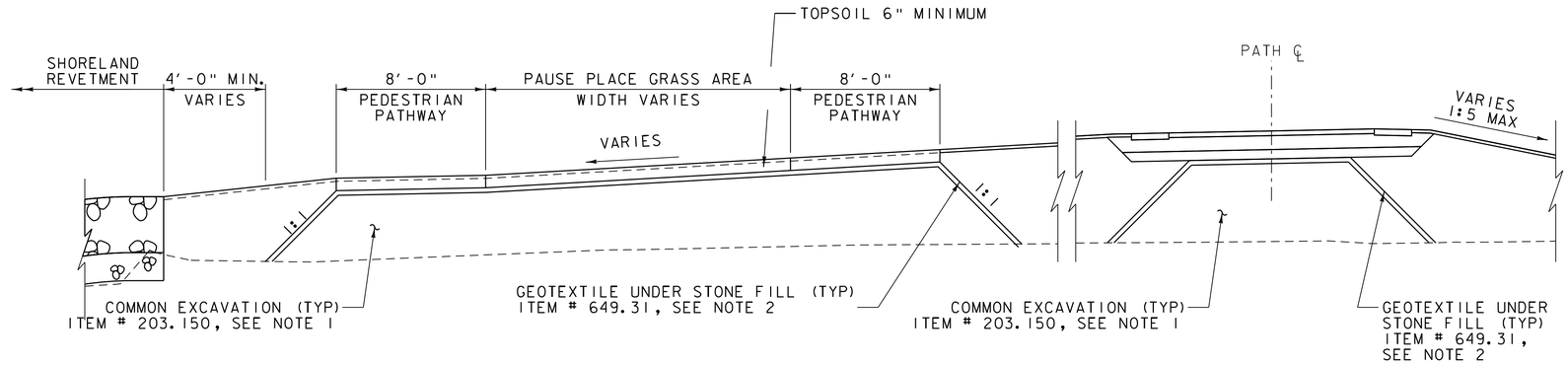
1. STONE SCREENINGS
2. PORTLAND CEMENT CONCRETE SLAB, 5" OR SUBBASE OF DENSE GRADE CRUSHED STONE
3. TOPSOIL AND SEED, 2"
4. EARTH BORROW
5. COMPACTED OR UNDISTURBED SUBGRADE
6. STEEL EDGING
7. STEEL STAKE

NOTES

1. STAKING SHALL OCCUR EVERY 24" O.C. MIN.
2. STEEL STAKES SHALL BE 18" LONG, MIN.

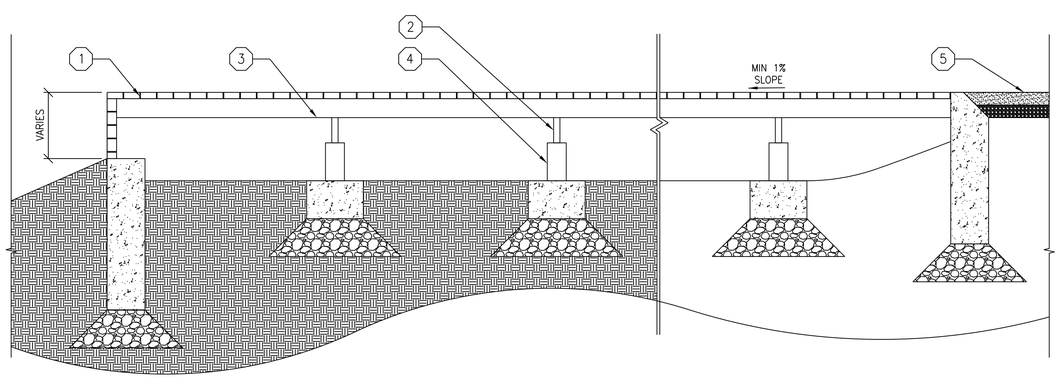
STEEL EDGING - ALL PAUSE PLACE LOCATIONS

SCALE 4" = 1'-0"




URBAN RESERVE FILL TYPICAL SECTION

NOT TO SCALE




LEGEND

1. 1 1/4"X5" IPE WOOD DECKING W/ 1/8" SPACING USING IPE CLIP INVISIBLE FASTENERS (TYP.)
2. 2"X8" BEAM, TYP. (NOMINAL SIZE)
3. 2"X6" JOISTS @ 18" O.C., TYP. (NOMINAL SIZE)
4. 6"X6" POSTS
5. ADJACENT STONE DUST, TYP.

NOTES

1. WOODEN DECK TO MEET ALL CODE REQUIREMENTS, INCLUDING ADA GUIDELINES.
2. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT AND DESIGN OF WOODEN DECK, PIERS, RAILING, AND CONNECTIONS. ALL CONCRETE STRUCTURES, REINFORCING STEEL, AND DECK DESIGN SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF VERMONT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR APPROVAL.

WOODEN DECK - PAUSE PLACE LOCATION 3

SCALE 1/2" = 1'-0"

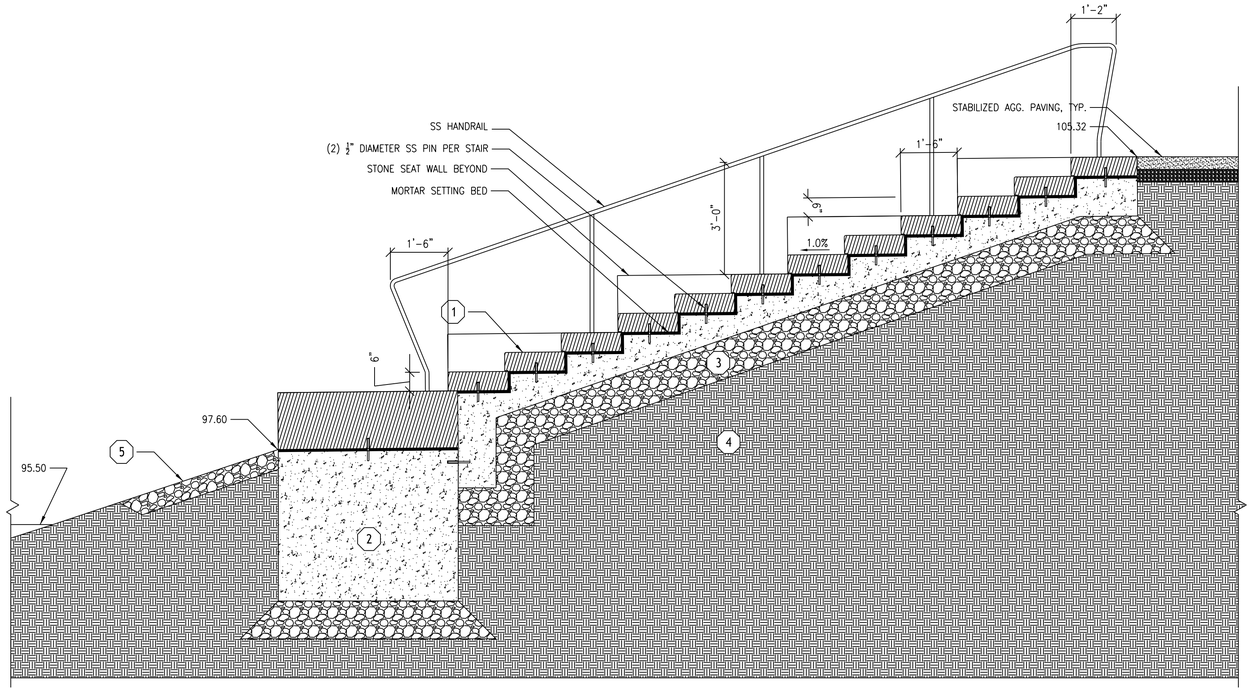
NOTE 1:

1. SOILS PLACED BENEATH THE GEOTEXTILE FABRIC SHALL CONSIST ONLY OF SOILS EXCAVATED WITHIN THE URBAN RESERVE

2. GEOTEXTILE FABRIC SHALL BE PLACED WITH A MIMIMUM OVERLAP OF 24" OR MORE BASED ON ENGINEERING JUDGEMENT TO PROVIDE ADEQUATE COVERAGE

   THE CONTRACTOR SHALL OBTAIN THE GEOTEXTILE MANUFACTURE'S RECOMMENDATIONS FOR THE SEAM AND STITCH TYPE TO BE USED. IF NO RECOMMENDATIONS ARE OBTAINED, THE CONTRACTOR SHALL USE A "J" SEAM WITH TWO PASSES OF A LOCK-TYPE STITCH WITH THREE STITCHES PER 1" (25 mm) OF SEWN SEAM

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634det.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: SASAKI | CHECKED BY: E.B. PARIZO |
| DETAIL SHEETS (2 OF 5) | SHEET 12 OF 116 |




STONE STAIRS AT SEAT WALL - PAUSE PLACE LOCATION 2

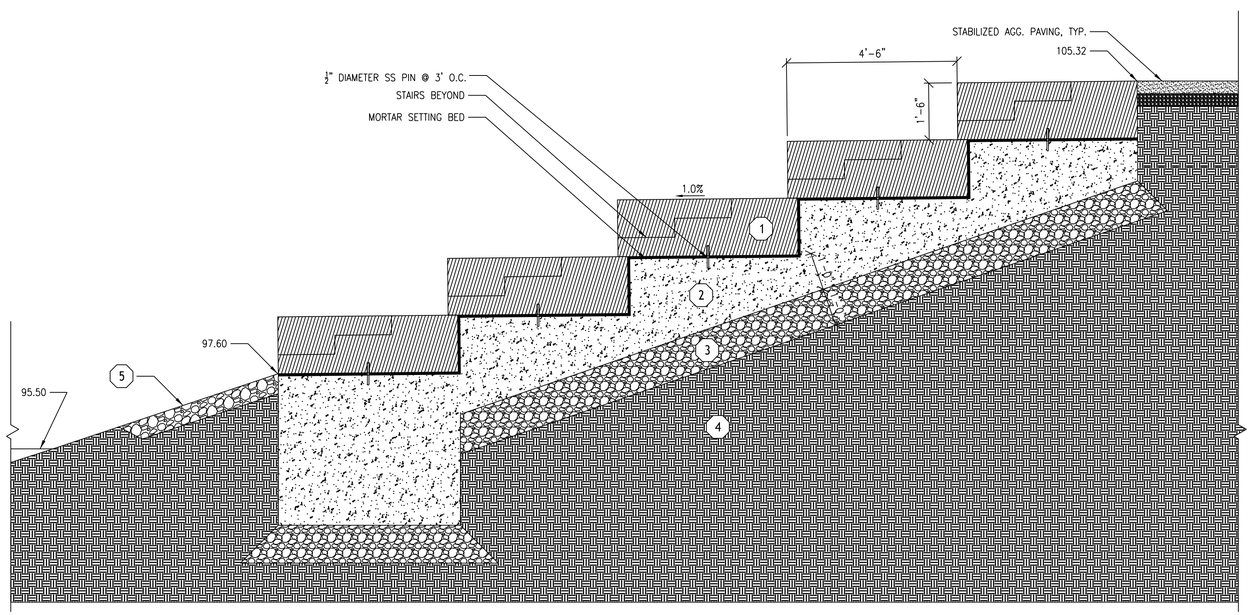
SCALE ½" = 1'-0"

LEGEND

1. STONE STAIR, TYP.
2. REINFORCED CONCRETE FOUNDATION
3. AGGREGATE BASE
4. COMPACTED OR UNDISTURBED SUB-GRADE
5. 18" MAX RIP-RAP BELOW LAST STONE BLOCK

NOTES

1. STONE STAIRS TO BE THERMAL FINISH ON ALL EXPOSED SURFACES, SAWCUT ALL OTHER FACES.
2. CONTRACTOR IS RESPONSIBLE FOR STONE STAIR LAYOUT AND DESIGN. ALL CONCRETE STRUCTURES AND REINFORCING STEEL SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF VERMONT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR APPROVAL.
3. DEPTH OF AGGREGATE BASE TO BE COORDINATED WITH GEOTECHNICAL ANALYSIS




STONE SEAT WALLS - PAUSE PLACE LOCATION 2

SCALE ½" = 1'-0"

LEGEND

1. STONE SEAT WALL
2. REINFORCED CONCRETE FOUNDATION
3. AGGREGATE BASE
4. COMPACTED OR UNDISTURBED SUB-GRADE
5. 18" MAX RIP-RAP BELOW LAST STONE BLOCK

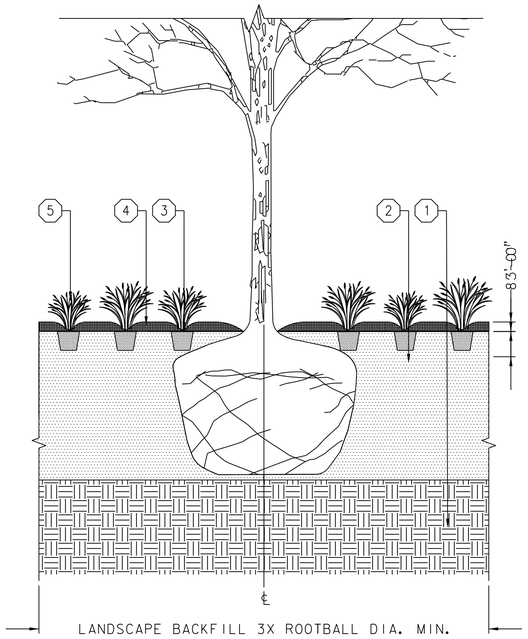
NOTES

1. EASE ALL EDGES OF STONE SEAT WALL BLOCKS.
2. STONE SEAT WALL TO BE THERMAL FINISH ON ALL EXPOSED SURFACES, SAWCUT ALL OTHER FACES.
3. CONTRACTOR IS RESPONSIBLE FOR STONE SEAT WALL LAYOUT AND DESIGN. ALL CONCRETE STRUCTURES AND REINFORCING STEEL SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF VERMONT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR APPROVAL.
4. DEPTH OF AGGREGATE BASE TO BE COORDINATED WITH GEOTECHNICAL ANALYSIS

NOTES:

1. THE STAIRS AND SEATWALL SHALL BE MADE OF AN ATTRACTIVE, DURABLE STONE, SUCH AS GRANITE. THEY WILL NEED TO BE FABRICATED WITH PRECISION TO ENSURE ADA COMPLIANCE.
2. CORE DRILL CONCRETE/STONE FOR HANDRAIL EMBEDMENT (6" MIN). USE NON-SHRINK EPOXY GROUT TO SET IN PLACE. SLOPE GROUT AWAY FROM RAILING AT BASE.

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634det.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: SASAKI | CHECKED BY: E.B. PARIZO |
| DETAIL SHEETS (3 OF 5) | SHEET 13 OF 116 |




TREE PLANTING AT PERENNIAL PLANTING BED

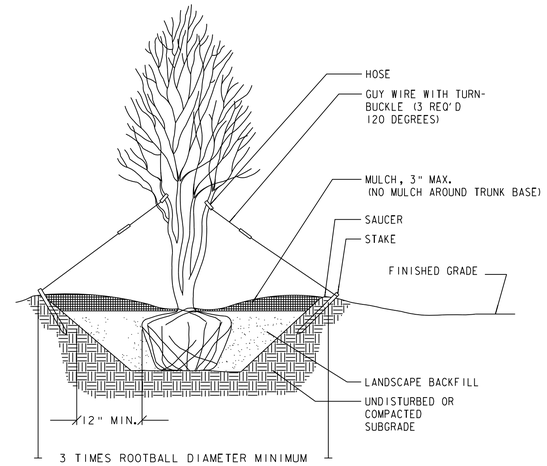
SCALE: ½"=1'0"

LEGEND

1. COMPACTED OR UNDISTURBED SUBSOIL
2. LANDSCAPE BACKFILL
3. FINISHED GRADE
4. MULCH
5. HERBACEOUS PLANTS

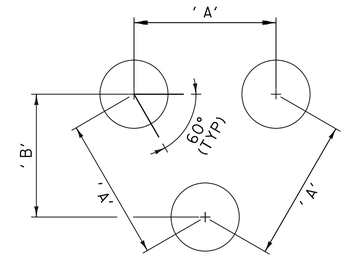
NOTES

1. TREE TRUNK TO BE PLUMB VERTICAL
2. DO NOT BURY BASE OF TREE TRUNK
3. DO NOT BURY STEMS OF HERBACEOUS PLANTINGS
4. HERBACEOUS PLANTINGS MAY BE PLANTED OVER ROOTBALL OF TREES AS LONG AS FINISHED GRADE IS MAINTAINED - ROOTBALL OF HERBACEOUS PLANTS MAY BE LOOSENED AND ADJUSTED TO ACCOMMODATE PLACEMENT AS LONG AS ROOTS ARE NOT DAMAGED




MULTISTEMMED TREE PLANTING

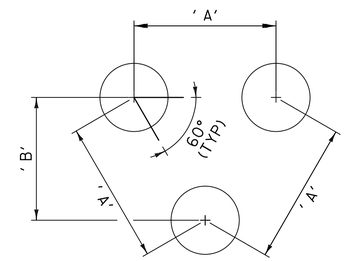
SCALE: N.T.S.




| PLANT SPACING O.C. ('A') | ROW SPACING O.C. ('B') |
|---|---|
| 6" | 5" |
| 8" | 7" |
| 10" | 8½" |
| 12" | 10½" |
| 15" | 13" |
| 18" | 16" |
| 24" | 21" |
| 30" | 26" |

PLANT SPACING CHART

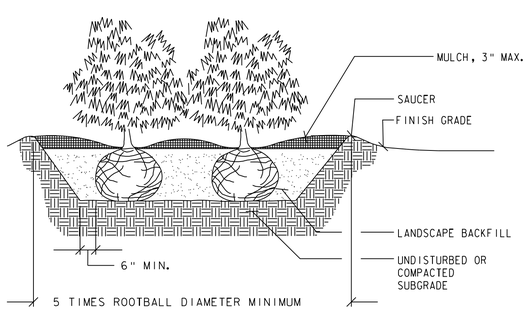
NOT TO SCALE




| TREE SPACING O.C. 5" (A0)' | ROW SPACING O.C. 4" (B4)' |
|---|---|
| 6'-0" | 5'-2" |
| 7'-0" | 6'-0" |
| 8'-0" | 7'-0" |
| 10'-0" | 8'-8" |
| 12'-0" | 10'-5" |
| 15'-0" | 13'-0" |
| 20'-0" | 17'-4" |
| 25'-0" | 21'-8" |
| 30'-0" | 26'-0" |

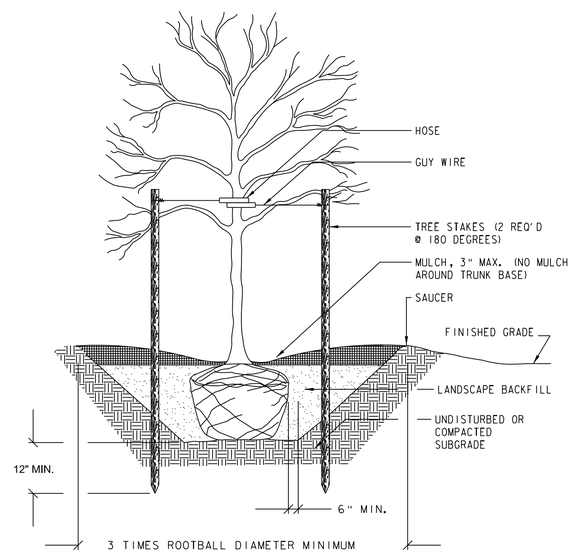
TREE SPACING CHART

NOT TO SCALE



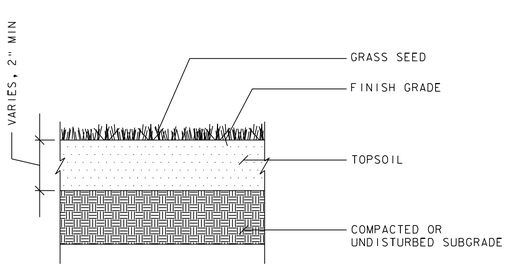

DECIDUOUS SHRUB PLANTING

SCALE: N.T.S.



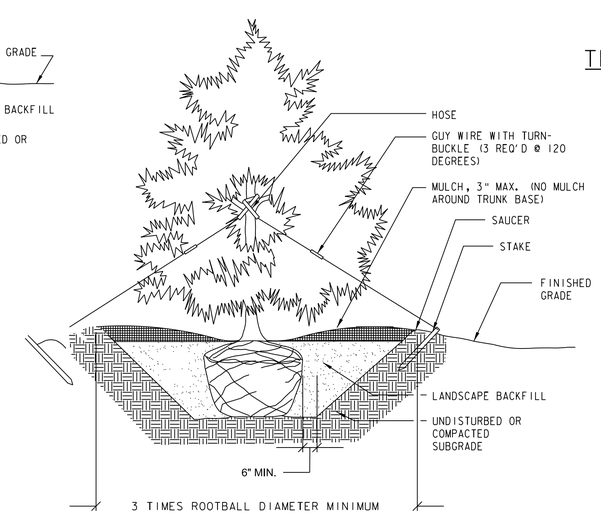

DECIDUOUS TREE PLANTING STAKED

SCALE: N.T.S.




SEEDED LAWN

SCALE: 1"=1'0"

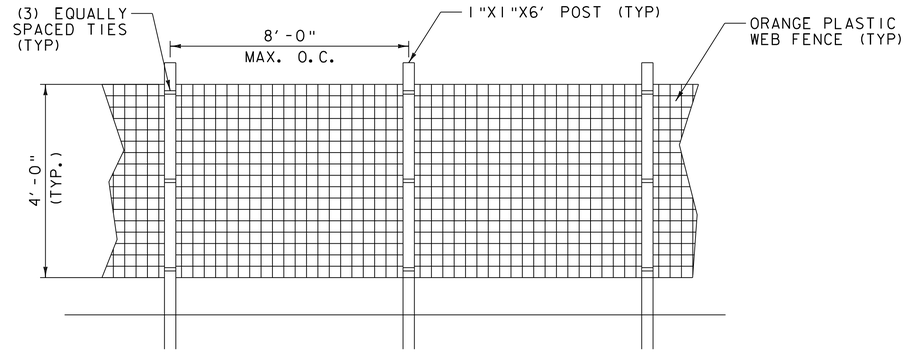



CONIFEROUS TREE PLANTING

SCALE: N.T.S.

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634det.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: P.A. MILLER | CHECKED BY: E.B. PARIZO |
| DETAIL SHEETS (4 OF 5) | SHEET 14 OF 116 |



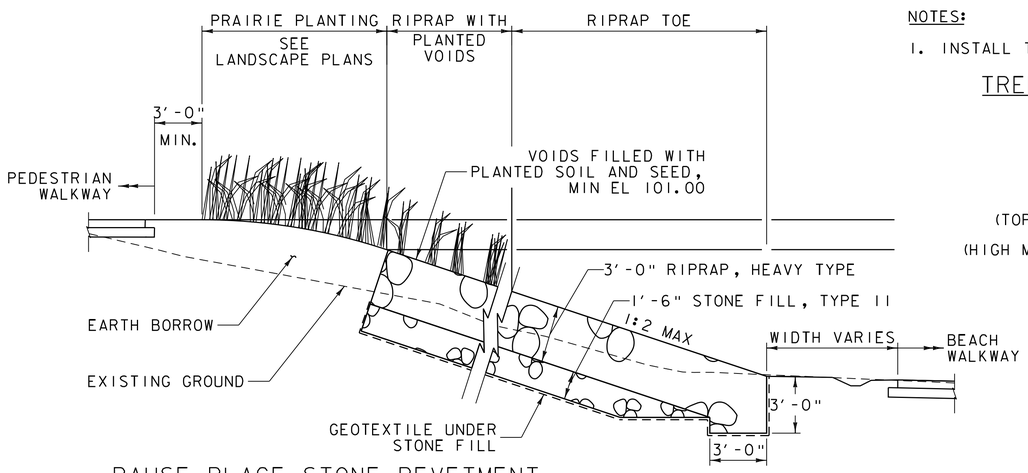

ELEVATION VIEW

NOTES:

1. INSTALL TREE PROTECTION FENCE AS SHOWN IN PLANS

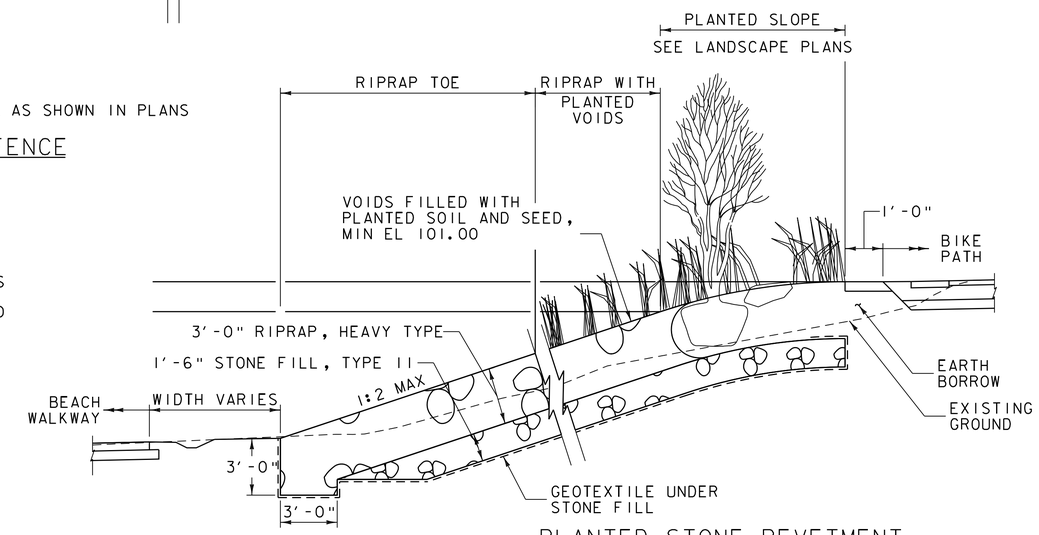
## TREE PROTECTION FENCE

NOT TO SCALE



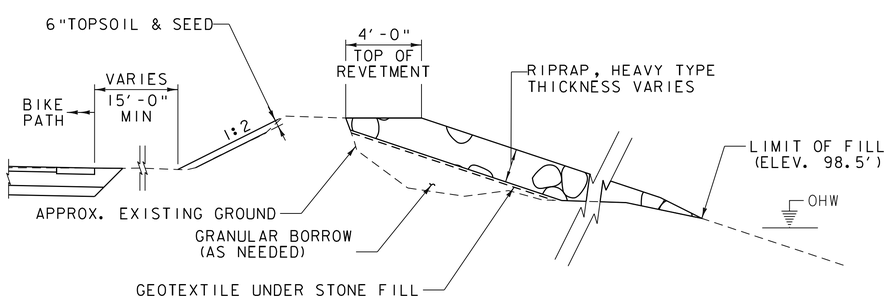

## PAUSE PLACE STONE REVETMENT

NOT TO SCALE



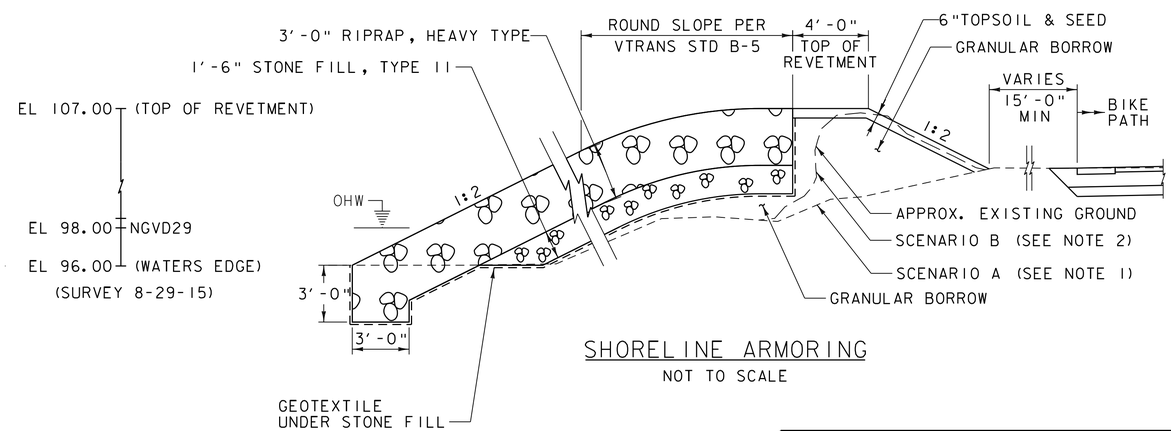

## PLANTED STONE REVETMENT

NOT TO SCALE




## SHORELINE REPAIR

NOT TO SCALE




## SHORELINE ARMORING

NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634det.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: P.A. MILLER | CHECKED BY: E.B. PARIZO |
| DETAIL SHEETS (5 OF 5) | SHEET 15 OF 116 |

## MAIN ALIGNMENT

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| PI | 132+81.49 | 723122.4294 | 1451786.2015 |
| PC | 131+58.71 | 723000.4194 | 1451799.9007 |
| PT | 134+02.90 | 723236.9002 | 1451741.8106 |
| PI | 135+72.47 | 723395.0039 | 1451680.4993 |
| PC | 135+37.58 | 723362.4709 | 1451693.1153 |
| PT | 136+07.29 | 723425.8753 | 1451664.2355 |
| PI | 138+54.27 | 723644.3826 | 1451549.1204 |
| PC | 137+21.33 | 723526.7672 | 1451611.0831 |
| PRC | 139+86.80 | 723752.5219 | 1451471.7987 |
| PI | 140+41.40 | 723796.9361 | 1451440.0416 |
| PRC | 139+86.80 | 723752.5219 | 1451471.7987 |
| PT | 140+95.95 | 723843.5417 | 1451411.5976 |
| PI | 142+44.69 | 723970.5040 | 1451334.1109 |
| PC | 142+06.33 | 723937.7595 | 1451354.0953 |
| PT | 142+82.90 | 723999.8167 | 1451309.3653 |
| PI | 144+34.54 | 724115.6871 | 1451211.5484 |
| PC | 143+82.58 | 724075.9878 | 1451245.0623 |
| PT | 144+84.70 | 724136.6737 | 1451164.0219 |
| PI | 150+36.84 | 724359.7083 | 1450658.9329 |
| PC | 147+21.38 | 724232.2779 | 1450947.5145 |
| PRC | 153+18.61 | 724655.0991 | 1450548.1980 |
| PI | 154+35.08 | 724764.1633 | 1450507.3125 |
| PRC | 153+18.61 | 724655.0991 | 1450548.1980 |
| PT | 155+47.48 | 724843.9315 | 1450422.4382 |
| PI | 164+13.70 | 725437.1613 | 1449791.2344 |
| PC | 162+96.53 | 725356.9173 | 1449876.6150 |
| PCC | 164+31.84 | 725468.3333 | 1449801.8724 |
| PRC | 165+37.08 | 725570.4153 | 1449777.5584 |
| PI | 166+68.95 | 725701.6020 | 1449764.0946 |
| PRC | 165+37.08 | 725570.4153 | 1449777.5584 |
| PCC | 167+80.07 | 725777.0521 | 1449662.7159 |
| PT | 168+50.00 | 725819.4382 | 1449607.0990 |
| PI | 170+52.18 | 725940.8037 | 1449445.4011 |
| PC | 168+50.00 | 725819.4382 | 1449607.0990 |

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| PCC | 172+28.39 | 726034.3309 | 1449295.7731 |
| PT | 172+83.71 | 726063.8072 | 1449248.9593 |
| PI | 174+13.87 | 726132.8817 | 1449138.6443 |
| PC | 173+96.91 | 726123.8856 | 1449153.0115 |
| PRC | 174+30.80 | 726140.8841 | 1449123.7008 |
| PI | 174+96.36 | 726171.8320 | 1449065.9094 |
| PRC | 174+30.80 | 726140.8841 | 1449123.7008 |
| PRC | 175+61.83 | 726207.7038 | 1449011.0384 |
| PI | 176+23.83 | 726241.6287 | 1448959.1453 |
| PRC | 175+61.83 | 726207.7038 | 1449011.0384 |
| PCC | 175+97.84 | 726226.6742 | 1448980.4414 |
| PRC | 178+41.26 | 726347.6200 | 1448769.1953 |
| PI | 179+00.90 | 726376.6783 | 1448717.1192 |
| PRC | 178+41.26 | 726347.6200 | 1448769.1953 |
| PT | 179+60.51 | 726407.7900 | 1448666.2431 |
| PI | 181+30.14 | 726496.2860 | 1448521.5277 |
| PC | 180+10.18 | 726433.7019 | 1448623.8700 |
| PT | 182+50.00 | 726566.1359 | 1448423.9997 |
| PI | 184+95.53 | 726709.1031 | 1448224.3812 |
| PC | 183+30.98 | 726613.2903 | 1448358.1603 |
| PCC | 184+95.07 | 726714.7766 | 1448229.2953 |
| PT/POE | 188+00.00 | 726919.7505 | 1448003.5758 |

## WATERFRONT PARK TIE IN

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| POB | 129+50.00 | 722849.6689 | 1451929.7391 |
| PI | 130+85.09 | 722918.3740 | 1451813.4277 |
| PC | 130+10.64 | 722880.5110 | 1451877.5262 |
| PT | 131+50.00 | 722991.7937 | 1451801.1077 |

## WATERFRONT PARK SIDEWALK

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| POB | 203+75.00 | 722854.2249 | 1451748.0696 |
| PI | 203+97.69 | 722883.0339 | 1451815.7552 |
| PT | 204+18.58 | 722899.6777 | 1451833.3723 |
| POE | 204+31.28 | 722908.3931 | 1451842.5974 |

## TEXACO BEACH WALKWAY

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| POB | 300+00.00 | 725582.4405 | 1449770.5208 |
| PI | 301+05.95 | 725674.9875 | 1449718.9411 |
| PC | 300+34.65 | 725612.7080 | 1449753.6517 |
| PT | 301+68.45 | 725689.6665 | 1449649.1695 |

## DOG PARK
## (AS LABELED ON LAYOUT SHEETS)

| POINT | STATION | NORTHING | EASTING |
|---|---|---|---|
| A | N/A | 724464.5369 | 1450866.9480 |
| B | N/A | 724642.4052 | 1450737.4765 |
| C | N/A | 724747.5220 | 1450660.9603 |
| D | N/A | 724712.1988 | 1450612.4610 |
| E | N/A | 724706.3137 | 1450604.3761 |
| F | N/A | 724698.2288 | 1450610.2612 |
| G | N/A | 724704.1138 | 1450618.3461 |
| H | N/A | 724607.0987 | 1450688.9723 |
| I | N/A | 724676.8884 | 1450563.9515 |
| J | N/A | 724401.9800 | 1450764.0300 |
| K | N/A | 724393.9128 | 1450769.9313 |
| L | N/A | 724399.7600 | 1450778.0000 |
| M | N/A | 724407.8800 | 1450772.1500 |

## LEGEND

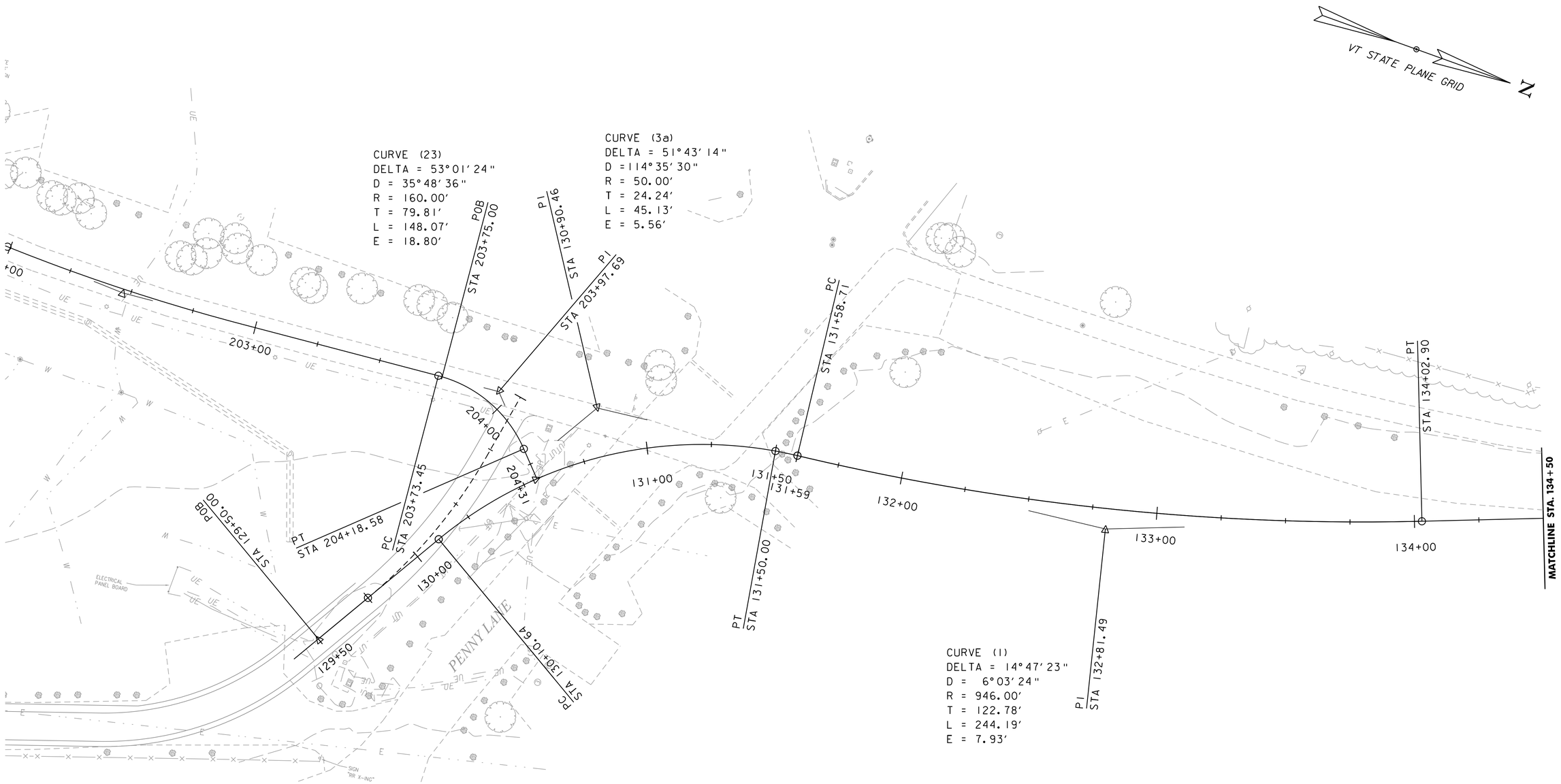
| | |
|---|---|
| POB | POINT OF BEGINNING ALIGNMENT |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENT |
| PCC | POINT OF COMPOUND CURVATURE |
| PRC | POINT OF REVERSE CURVATURE |
| POE | POINT OF END ALIGNMENT |
| STA. EQN | STATION EQUATION POINT |

NOTE: PLEASE REFERENCE ALIGNMENT SHEETS FOR INFORMATION REGARDING POINTS OF INTERSECTION BETWEEN MULTIPLE ALIGNMENTS.

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ali_pt.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: D.M. PECK
ALIGNMENT POINTS SHEET

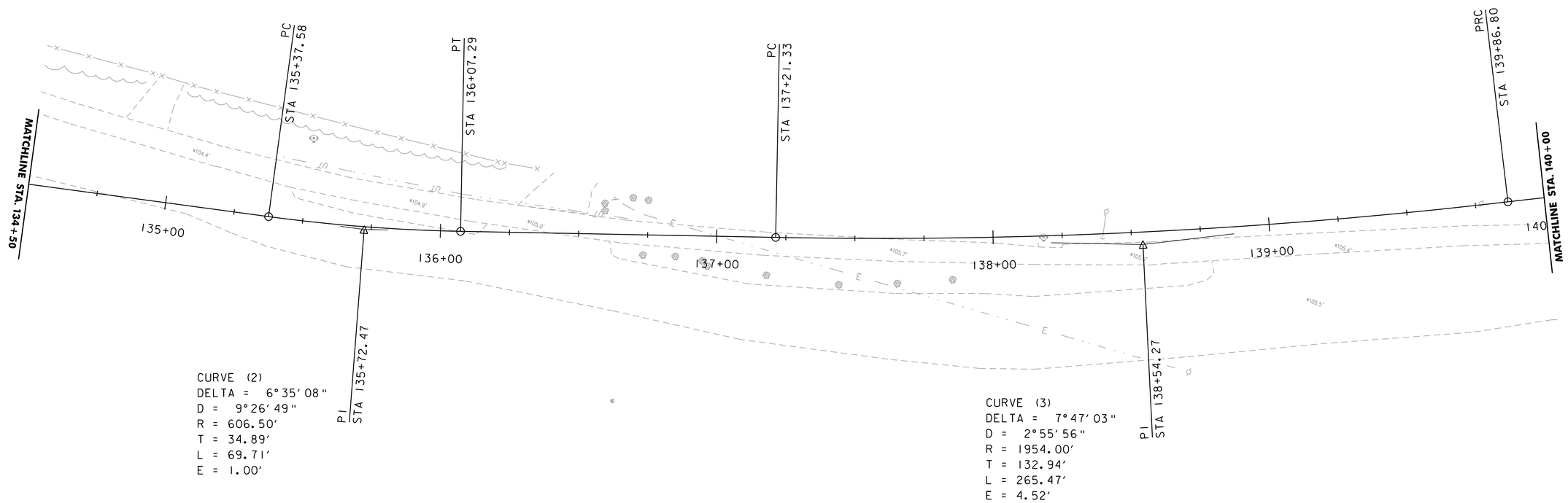
PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: D.M. PECK
SHEET 16 OF 116




SCALE 1" = 20'-0"

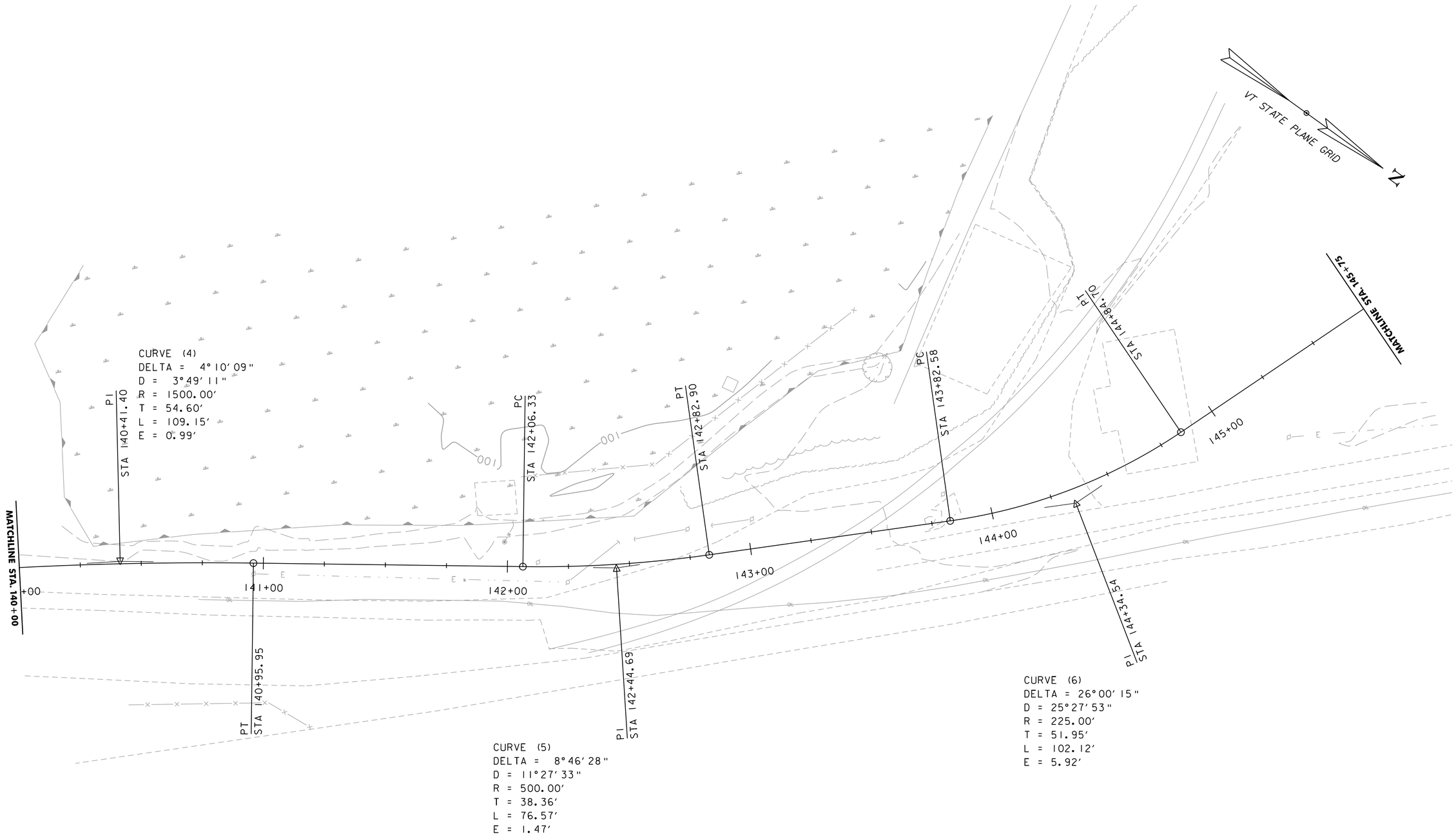
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (1 OF 11) | SHEET 17 OF 116 |



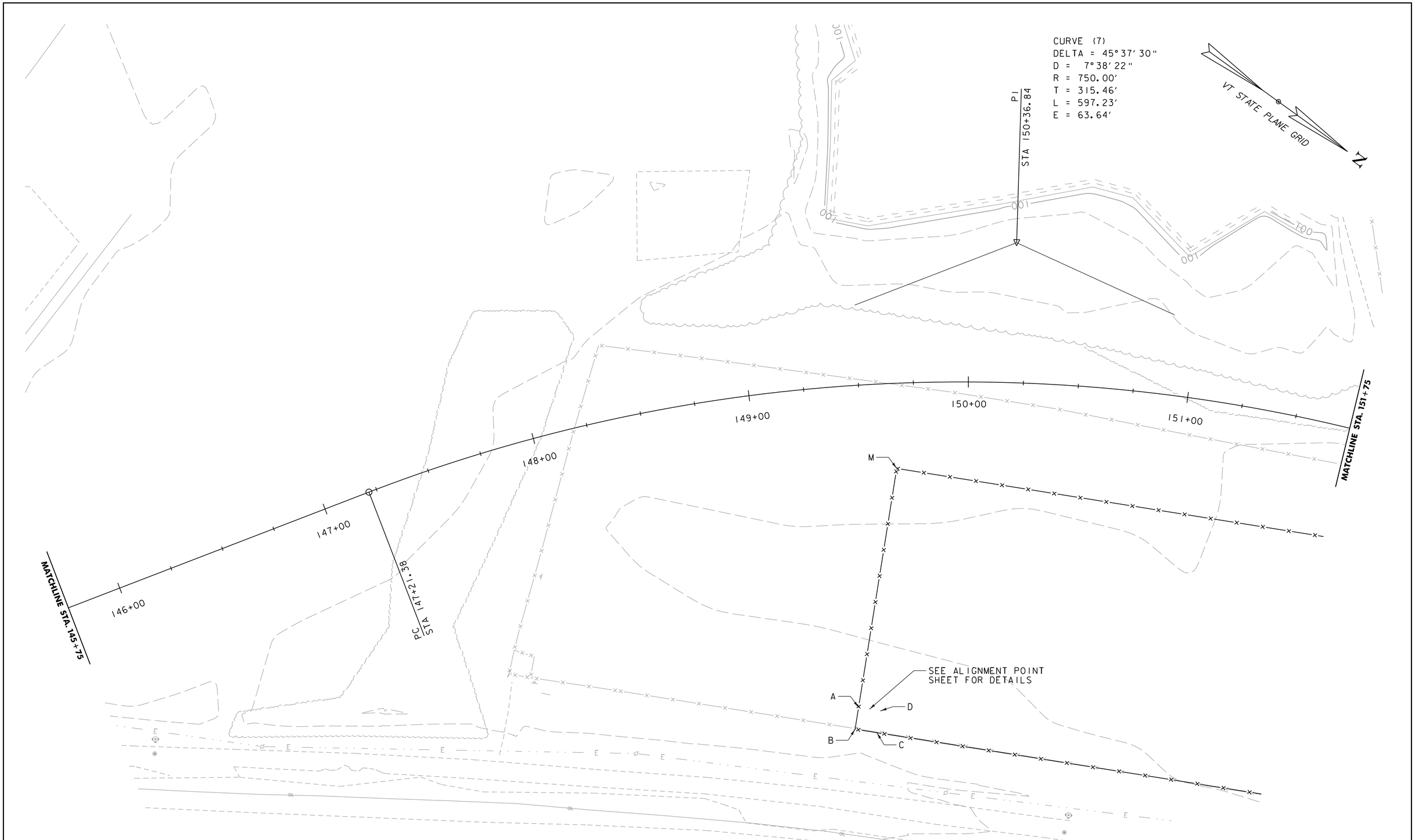

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (2 OF 11) | SHEET 18 OF 116 |

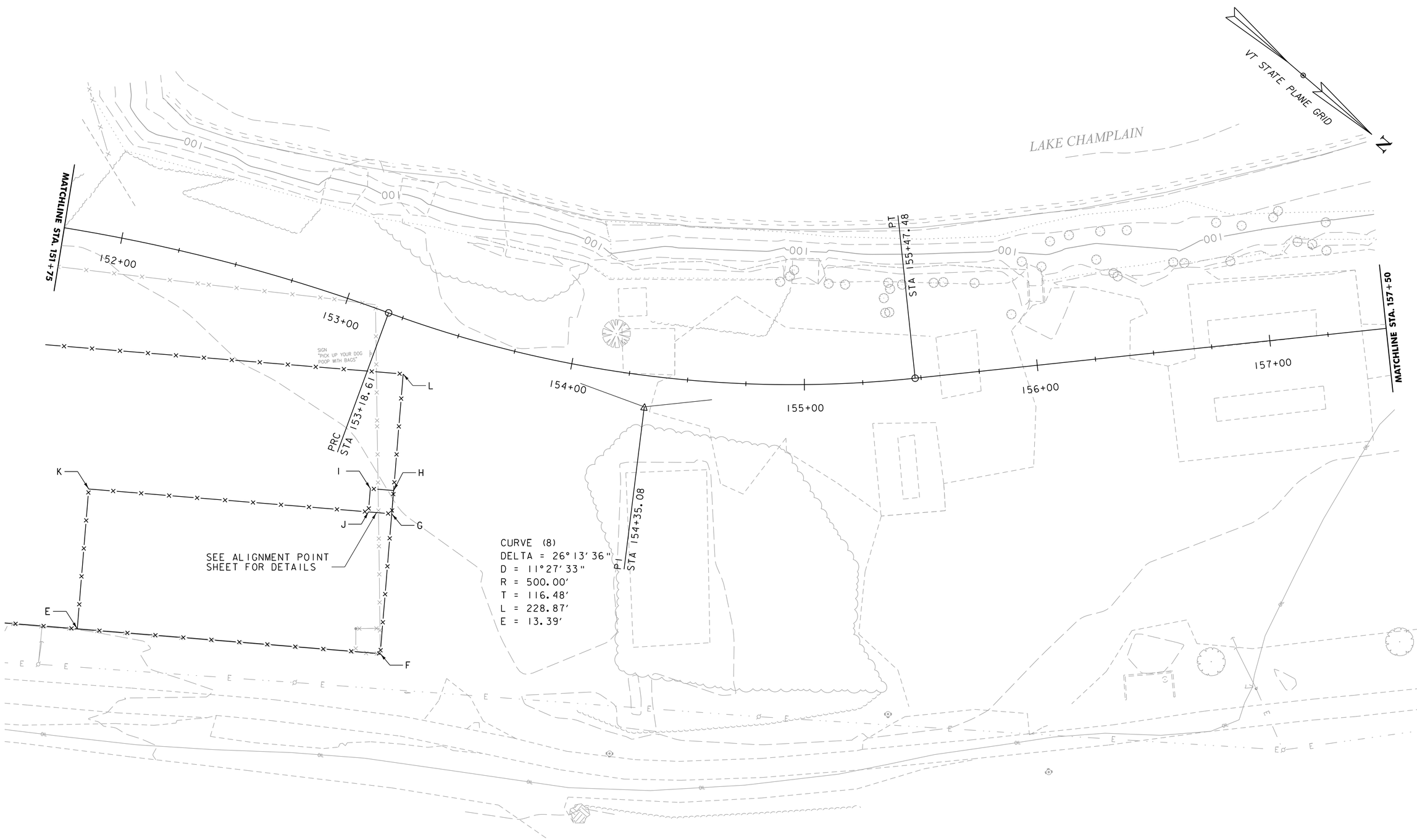



SCALE 1" = 20'-0"
20 0 20

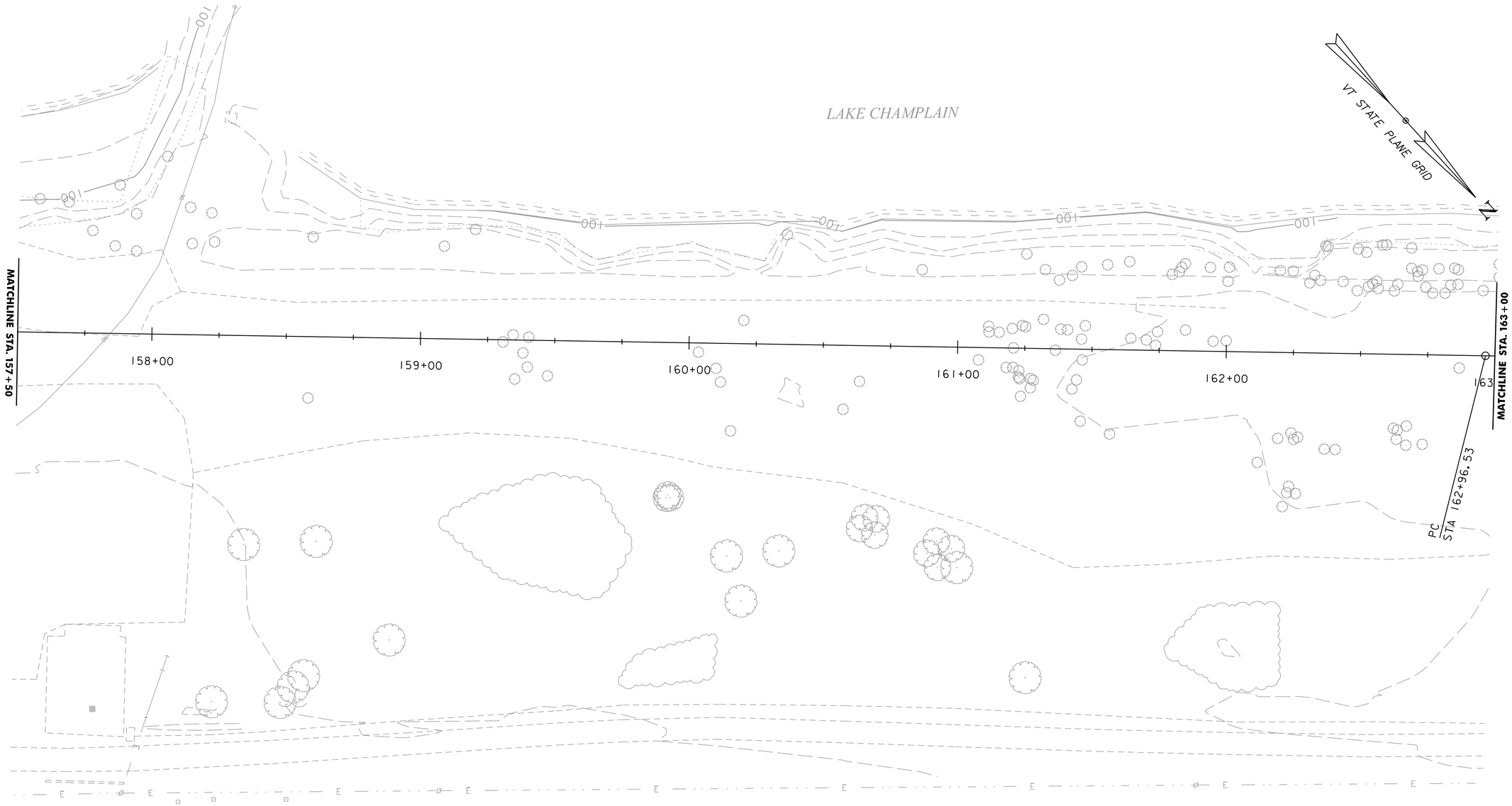
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (3 OF 11) | SHEET 19 OF 116 |




| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (4 OF 11) | SHEET 20 OF 116 |

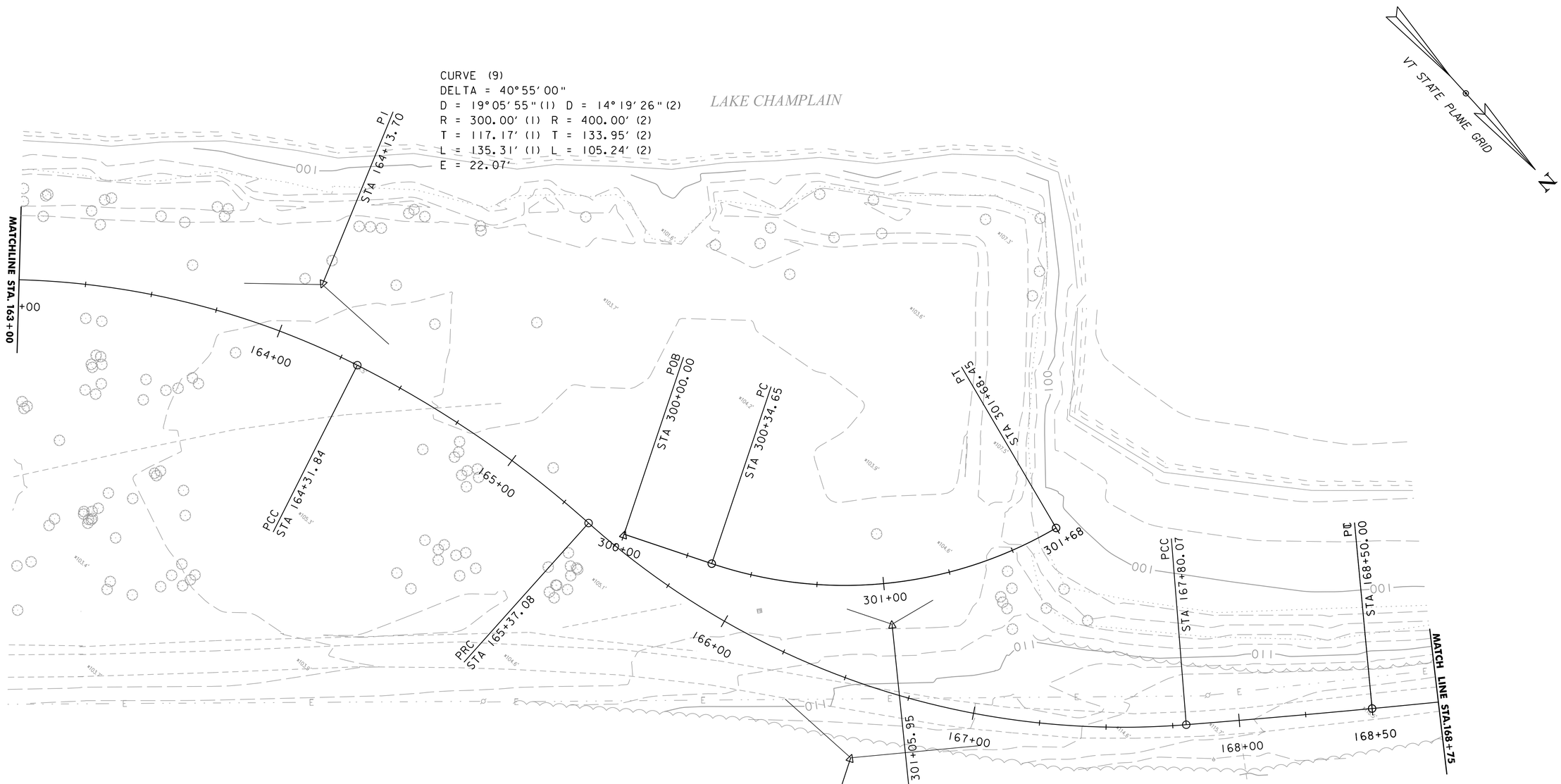



| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (5 OF 11) | SHEET 21 OF 116 |

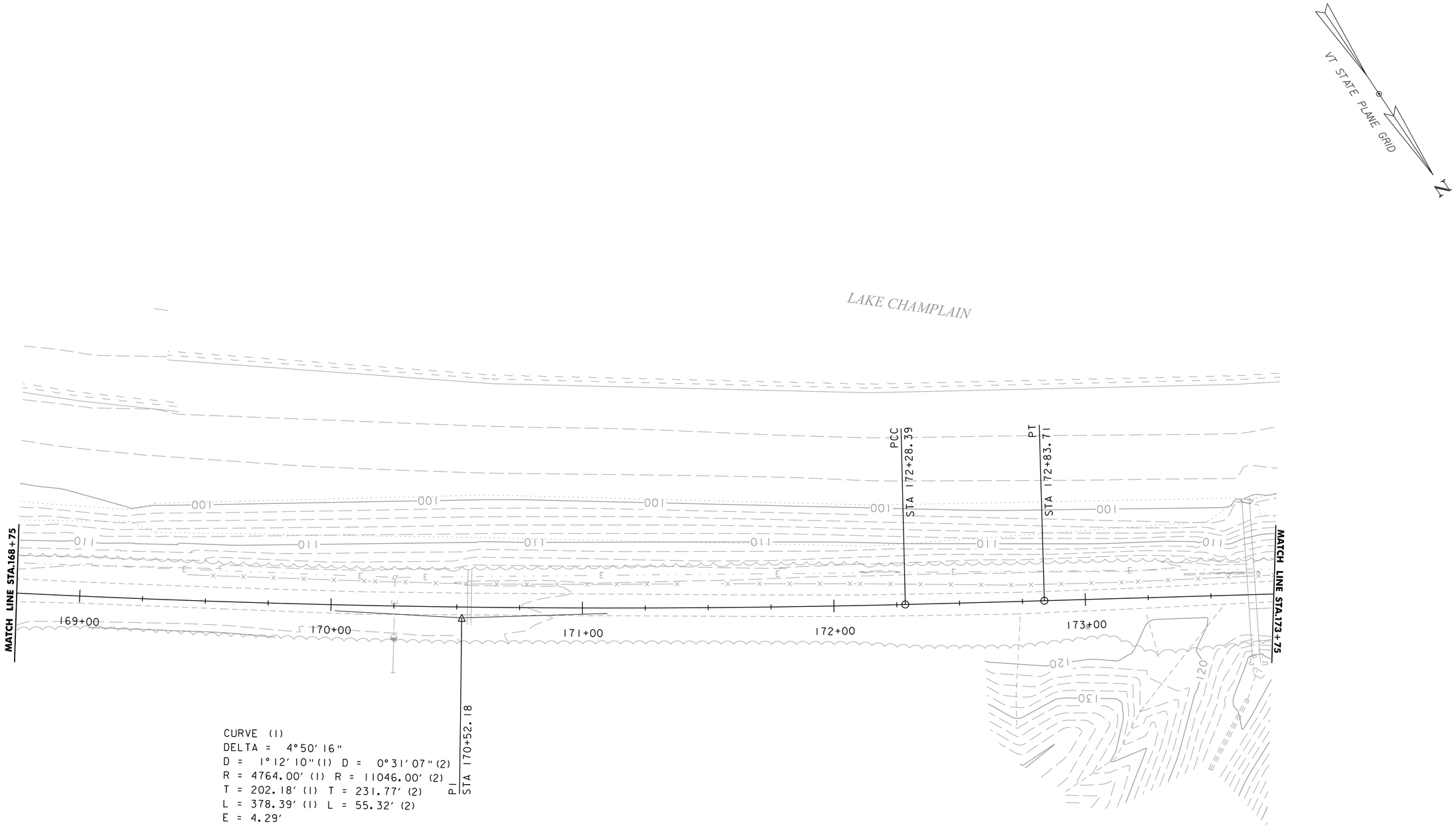



SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (6 OF 11) | SHEET 22 OF 116 |

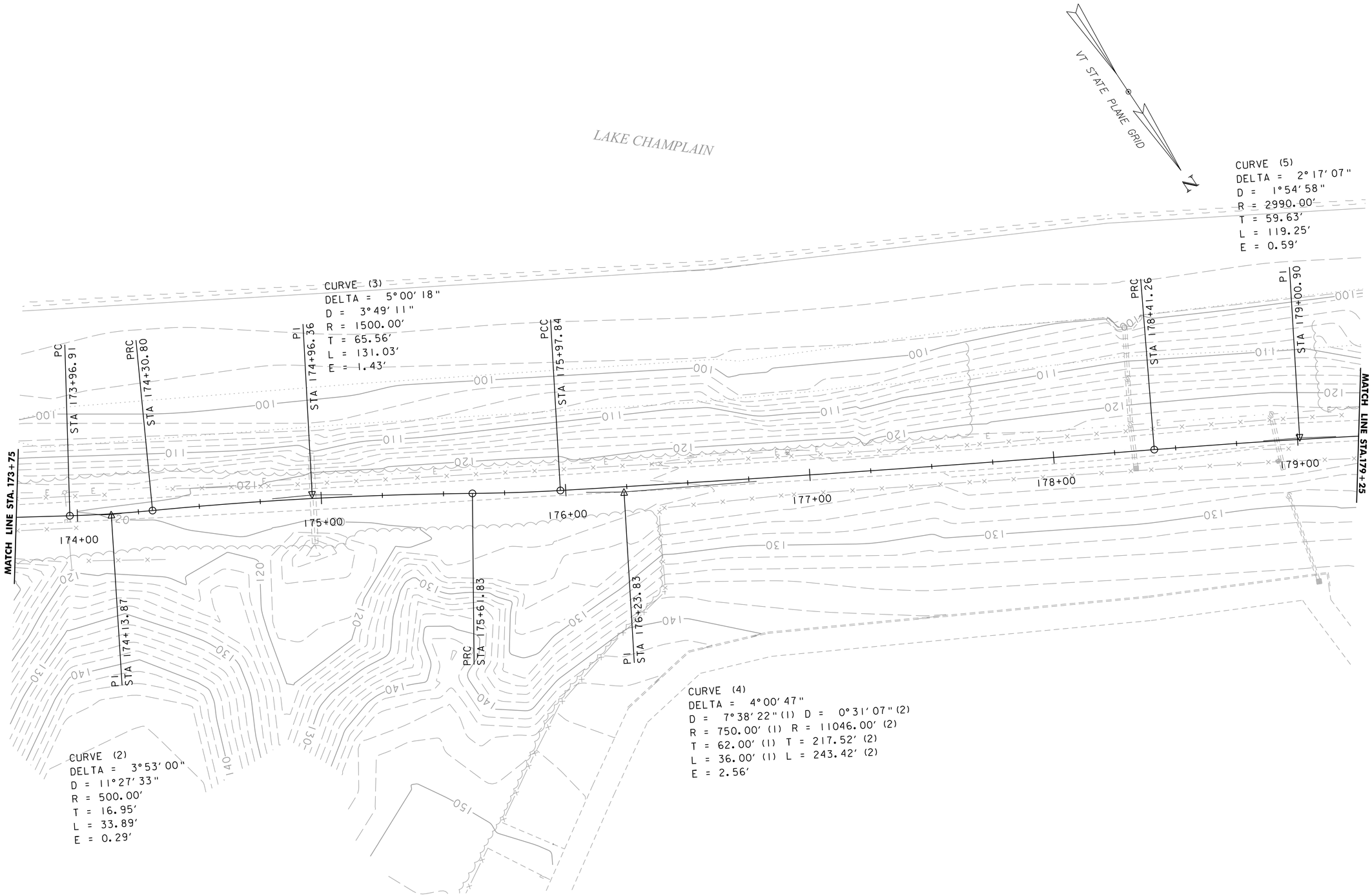



| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D.M. PECK | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (7 OF 11) | SHEET 23 OF 116 |

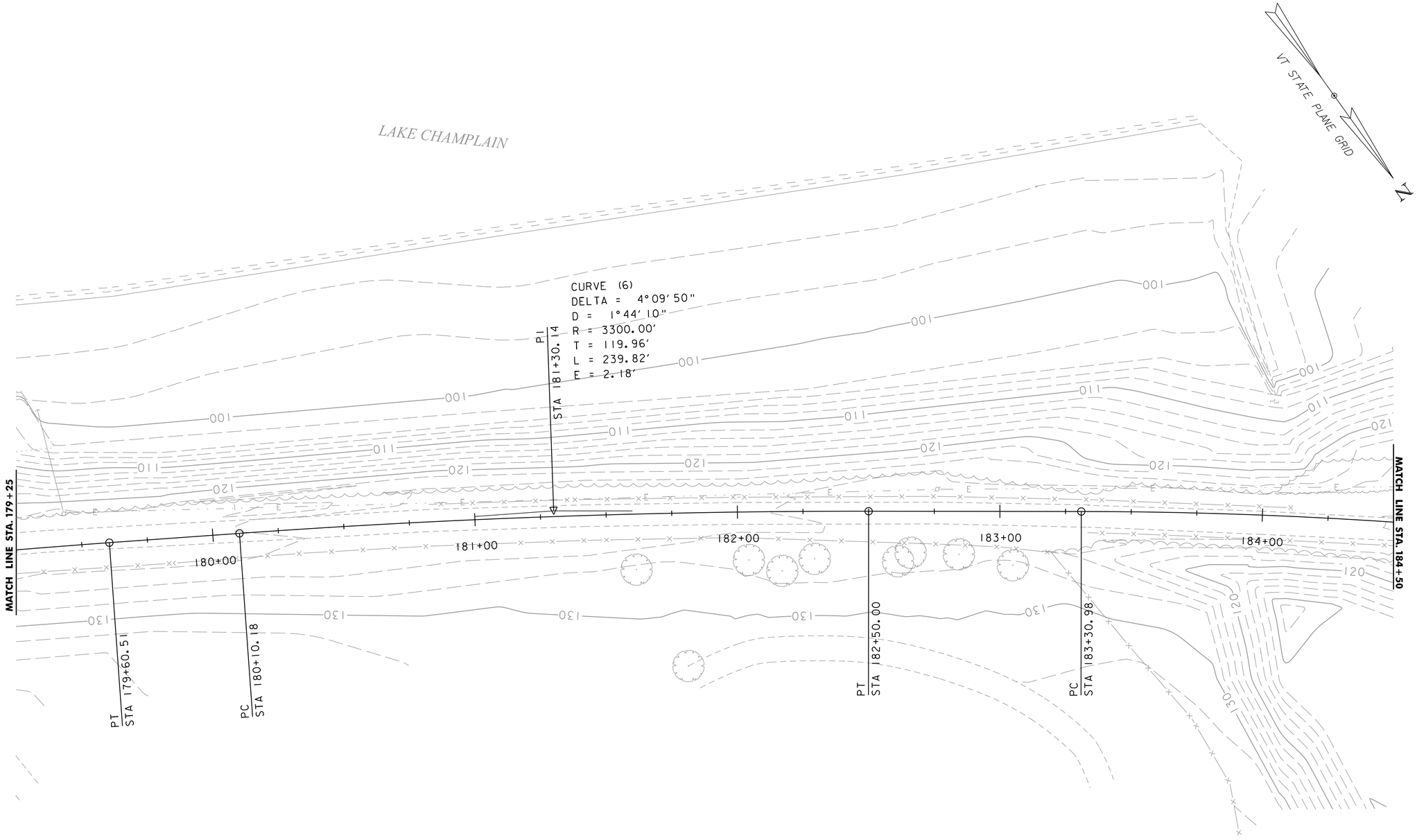



SCALE 1" = 20′-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (8 OF 11) | SHEET 24 OF 116 |




| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (9 OF 11) | SHEET 25 OF 116 |

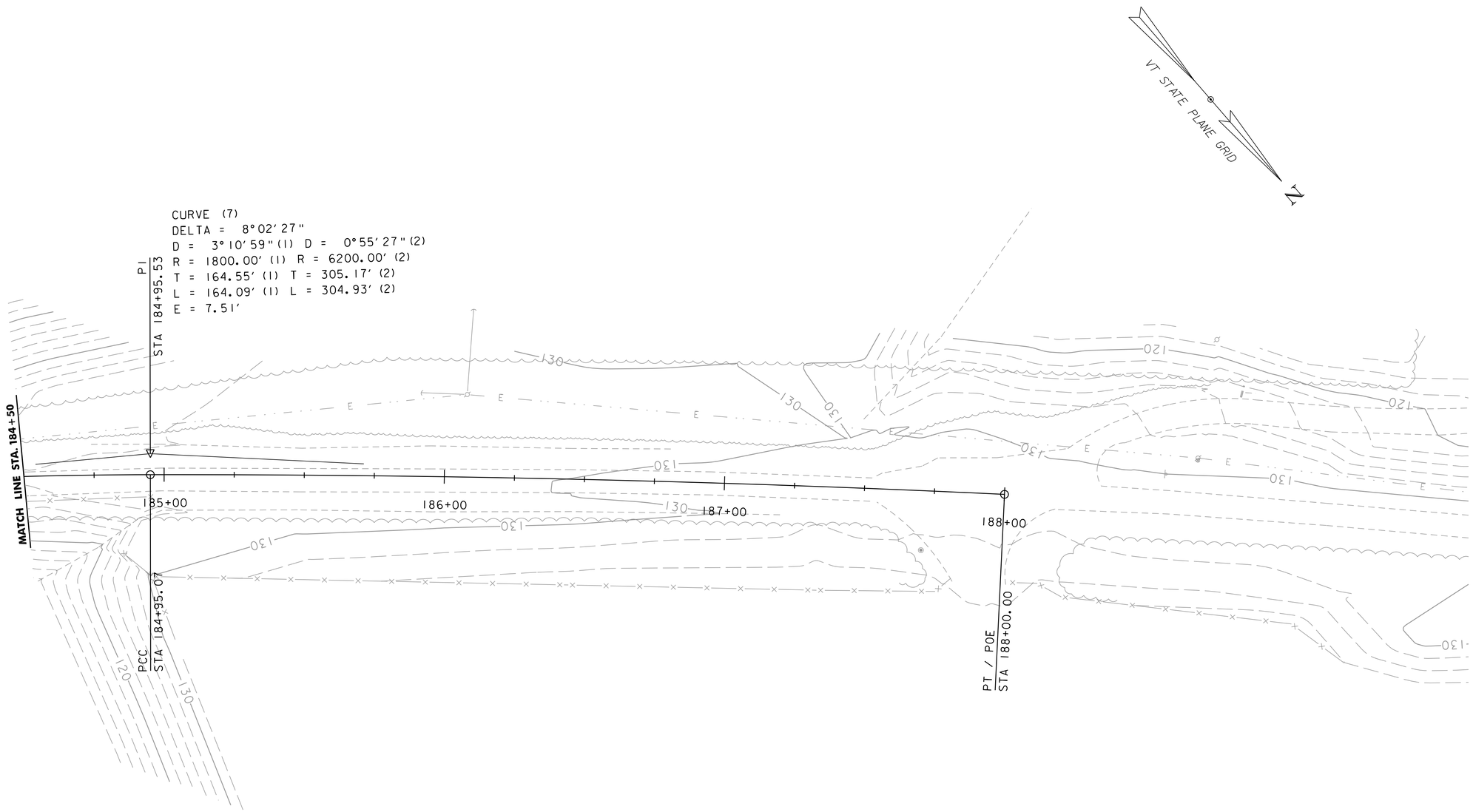



SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | PROJECT NUMBER |

| | |
|---|---|
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (10 OF 11) | SHEET 26 OF 116 |

VHB 57634.00




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ali.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| ALIGNMENT SHEET (II OF II) | SHEET 27 OF 116 |

EXCAVATION OF SURFACES & PAVEMENTS
STA. 130+02, 7.5′ LT TO 131+09, 7.5′ LT

COLD PLANING, BITUMINOUS PAVEMENT
STA. 129+50 TO 129+75

REMOVING SIGNS
STA. 130+59.2, 20′ LT

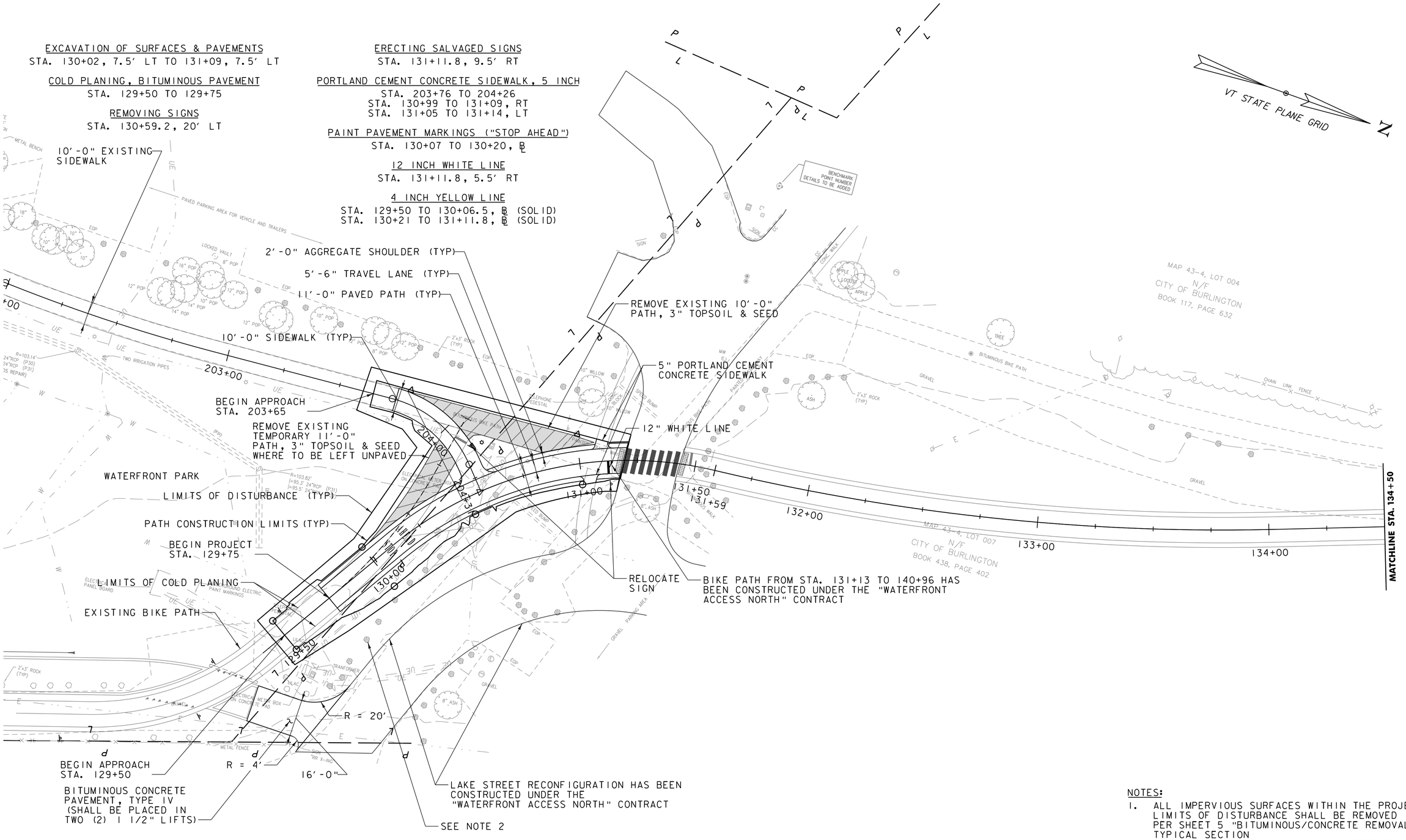
ERECTING SALVAGED SIGNS
STA. 131+11.8, 9.5′ RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA. 203+76 TO 204+26
STA. 130+99 TO 131+09, RT
STA. 131+05 TO 131+14, LT

PAINT PAVEMENT MARKINGS ("STOP AHEAD")
STA. 130+07 TO 130+20, ℞

12 INCH WHITE LINE
STA. 131+11.8, 5.5′ RT

4 INCH YELLOW LINE
STA. 129+50 TO 130+06.5, ℞ (SOLID)
STA. 130+21 TO 131+11.8, ℞ (SOLID)



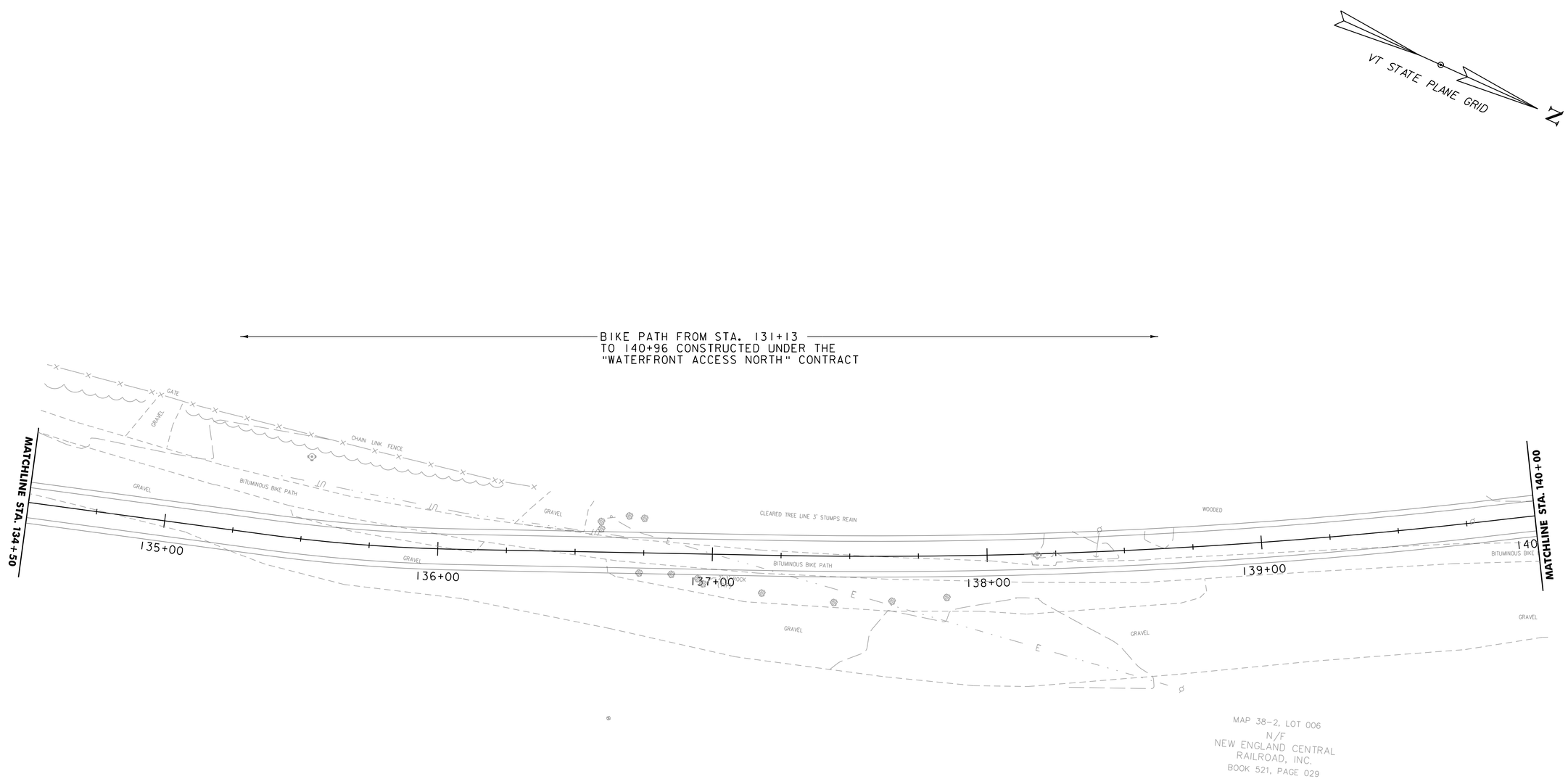

= REMOVE EXISTING CONCRETE/BITUMINOUS SURFACE

SCALE 1" = 20′-0"
20 0 20

NOTES:
1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER SHEET 5 "BITUMINOUS/CONCRETE REMOVAL" TYPICAL SECTION
2. EXISTING BOULDERS SHOWN IN WATERFRONT PARK HAVE BEEN REMOVED PREVIOUSLY

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (1 OF 11) | SHEET 28 OF 116 |

VHB 57634.00




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (2 OF 11) | SHEET 29 OF 116 |

VHB 57634.00

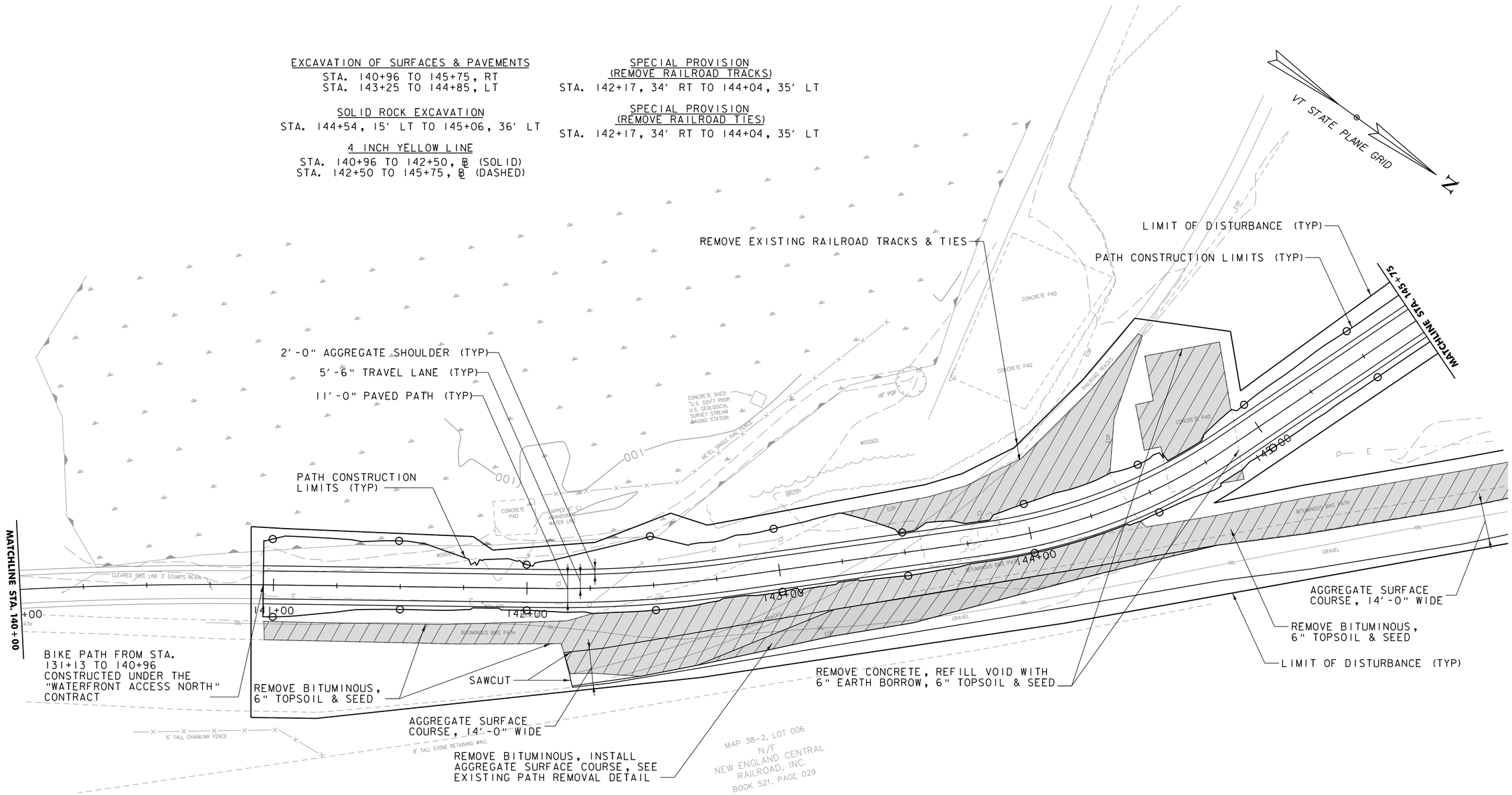
EXCAVATION OF SURFACES & PAVEMENTS
STA. 140+96 TO 145+75, RT
STA. 143+25 TO 144+85, LT

SOLID ROCK EXCAVATION
STA. 144+54, 15' LT TO 145+06, 36' LT

4 INCH YELLOW LINE
STA. 140+96 TO 142+50, ℄ (SOLID)
STA. 142+50 TO 145+75, ℄ (DASHED)

SPECIAL PROVISION
(REMOVE RAILROAD TRACKS)
STA. 142+17, 34' RT TO 144+04, 35' LT

SPECIAL PROVISION
(REMOVE RAILROAD TIES)
STA. 142+17, 34' RT TO 144+04, 35' LT




NOTES:
1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER SHEET 5 "BITUMINOUS/CONCRETE REMOVAL" TYPICAL SECTION
2. EXISTING UTILITY POLES AT STA. 140+96 RT, STA. 142+13 LT AND STA. 142+25 RT TO BE REMOVED BY UTILITY COMPANY PRIOR TO CONSTRUCTION

= REMOVE EXISTING CONCRETE/BITUMINOUS SURFACE

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (3 OF 11) | SHEET 30 OF 116 |

vhb

EXCAVATION OF SURFACES & PAVEMENTS
STA. 145+75 TO 151+75, RT

4 INCH YELLOW LINE
STA. 145+75 TO 151+75 ℄ (DASHED)

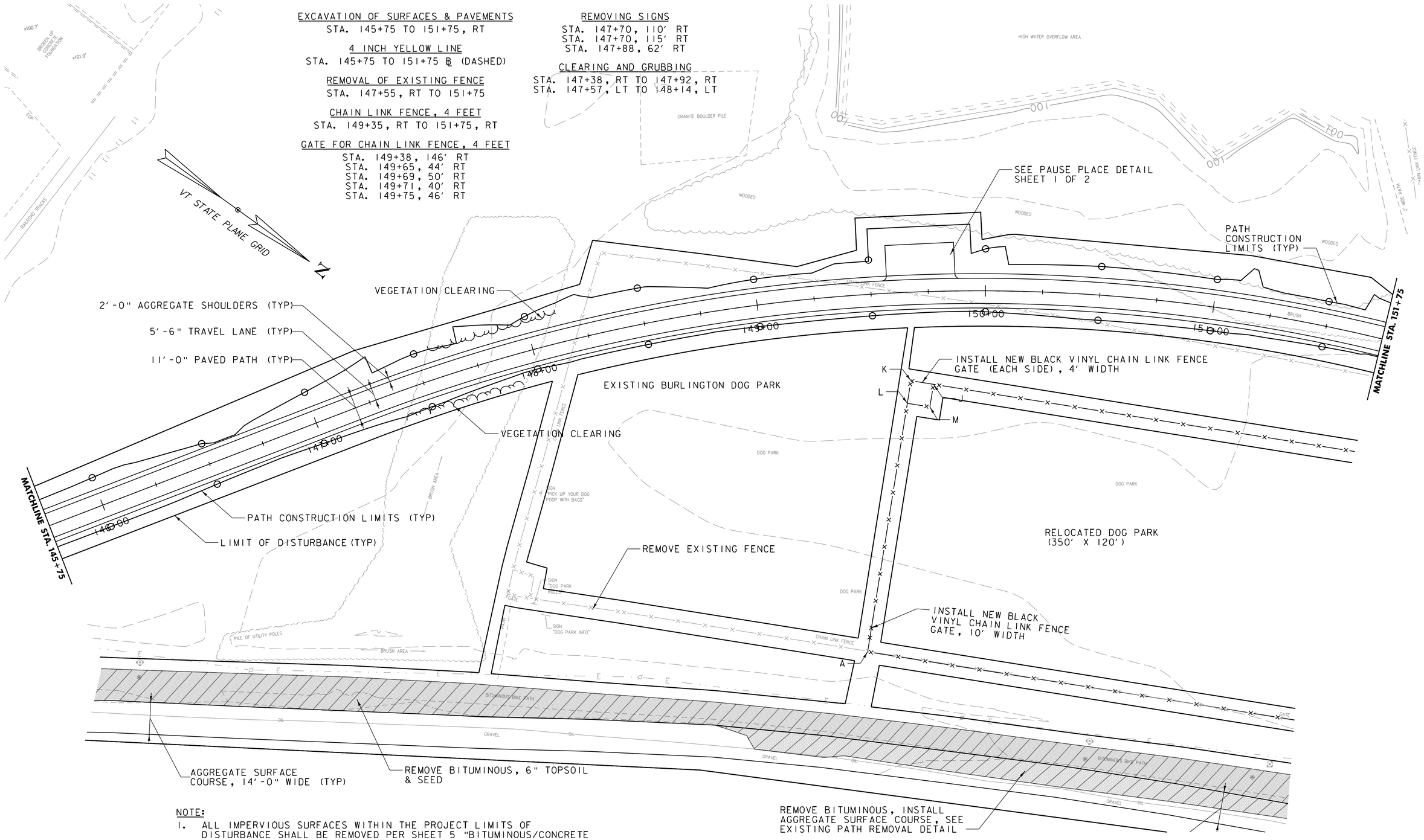
REMOVAL OF EXISTING FENCE
STA. 147+55, RT TO 151+75

CHAIN LINK FENCE, 4 FEET
STA. 149+35, RT TO 151+75, RT

GATE FOR CHAIN LINK FENCE, 4 FEET
STA. 149+38, 146′ RT
STA. 149+65, 44′ RT
STA. 149+69, 50′ RT
STA. 149+71, 40′ RT
STA. 149+75, 46′ RT

REMOVING SIGNS
STA. 147+70, 110′ RT
STA. 147+70, 115′ RT
STA. 147+88, 62′ RT

CLEARING AND GRUBBING
STA. 147+38, RT TO 147+92, RT
STA. 147+57, LT TO 148+14, LT




NOTE:
1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER SHEET 5 "BITUMINOUS/CONCRETE REMOVAL" TYPICAL SECTION

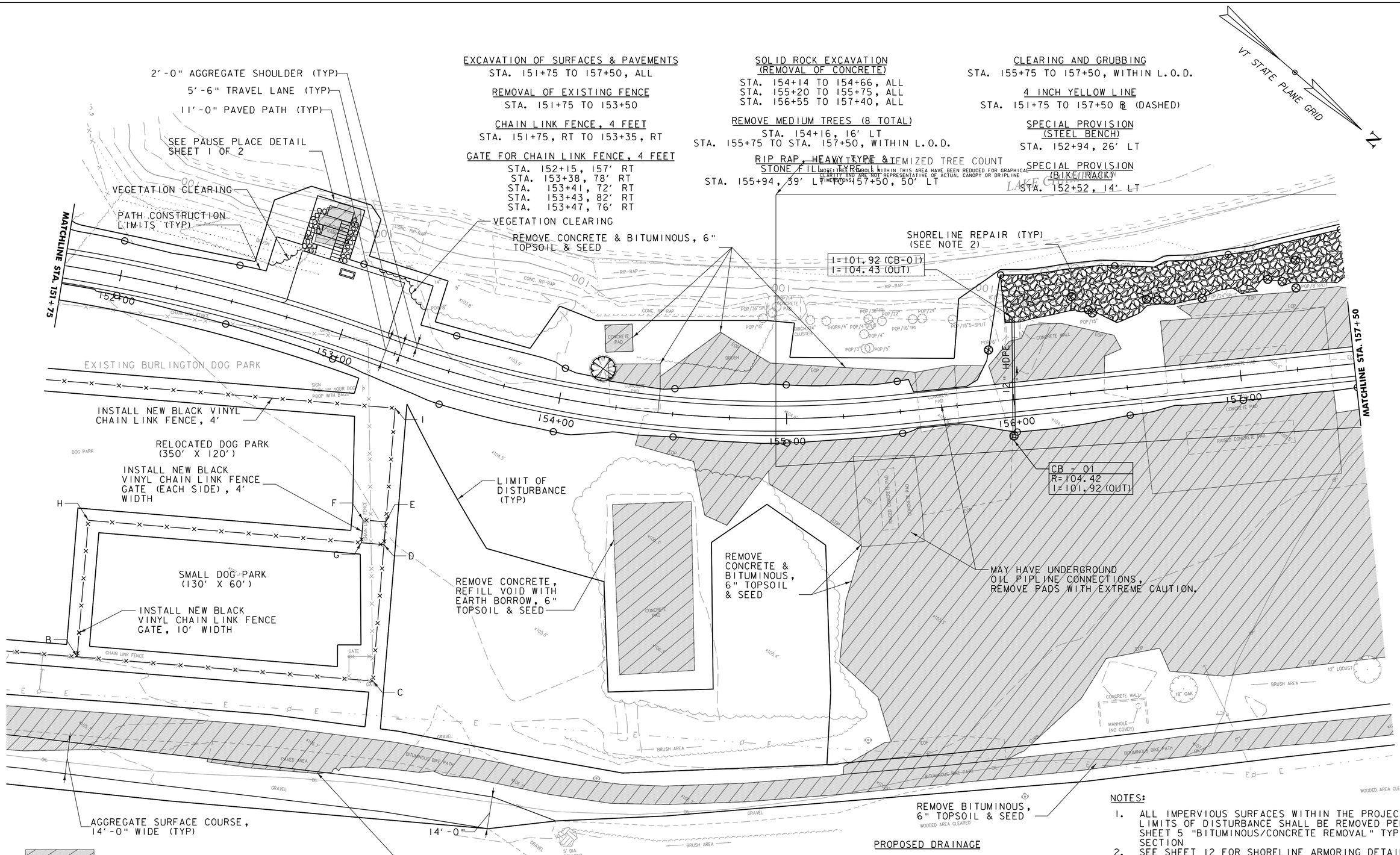
MAP 38-2, LOT 006
N/F
NEW ENGLAND CENTRAL RAILROAD, INC.
BOOK 521, PAGE 029

= REMOVE EXISTING CONCRETE/BITUMINOUS SURFACE

SCALE 1" = 20′-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (4 OF 11) | SHEET 3 OF 16 |

REMOVE EXISTI
VHB 57634.00




NOTES:

1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER SHEET 5 "BITUMINOUS/CONCRETE REMOVAL" TYPICAL SECTION
2. SEE SHEET 12 FOR SHORELINE ARMORING DETAILS

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (5 OF 11) | SHEET 32 OF 116 |

EXCAVATION OF SURFACES & PAVEMENTS
STA. 157+50 TO 163+00, ALL

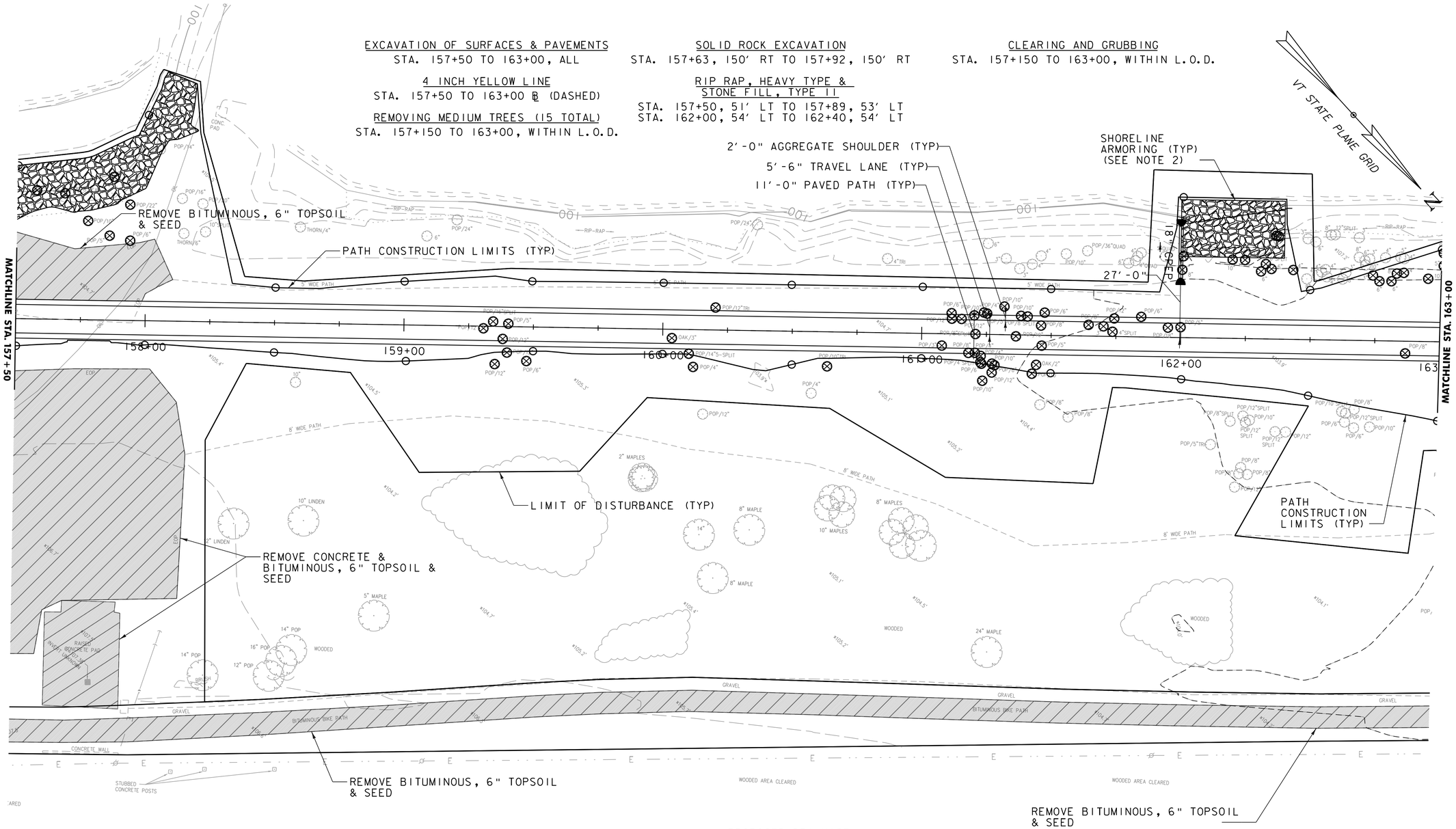
4 INCH YELLOW LINE
STA. 157+50 TO 163+00 ℄ (DASHED)

REMOVING MEDIUM TREES (15 TOTAL)
STA. 157+150 TO 163+00, WITHIN L.O.D.

SOLID ROCK EXCAVATION
STA. 157+63, 150' RT TO 157+92, 150' RT

RIP RAP, HEAVY TYPE &
STONE FILL, TYPE II
STA. 157+50, 51' LT TO 157+89, 53' LT
STA. 162+00, 54' LT TO 162+40, 54' LT

CLEARING AND GRUBBING
STA. 157+150 TO 163+00, WITHIN L.O.D.




PROPOSED DRAINAGE

STA. 162+00, LT. 23' - STA. 162+00, LT. 43'
NEW 20 LF X 18" CPEP(SL)
NEW 18" CPEPES AT INLET, +00, LT. 23'
18" INV. AT INLET = 103.80
NEW 18" CPEPES AT OUTLET, +00, LT. 43'
18" INV. AT OUTLET = 103.40

NOTES:

1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER SHEET 5 "BITUMINOUS/CONCRETE REMOVAL" TYPICAL SECTION
2. SEE SHEET 12 FOR SHORELINE ARMORING DETAILS

= REMOVE EXISTING CONCRETE/BITUMINOUS SURFACE

= REMOVE TREE

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (6 OF 7) | SHEET 33 OF 116 |

EXCAVATION OF SURFACES & PAVEMENTS
STA. 163+00, 150' RT TO 165+90, 32' RT

REMOVING MEDIUM TREES (29 TOTAL)
STA. 163+00 TO STA. 168+75, WITHIN L.O.D.

PORTLAND CONCRETE CEMENT SIDEWALK, 5"
STA. 324+00 TO 301+68

RIP RAP, HEAVY TYPE & STONE FILL, TYPE II
STA. 163+45, 59' LT TO 165+13, 166' LT

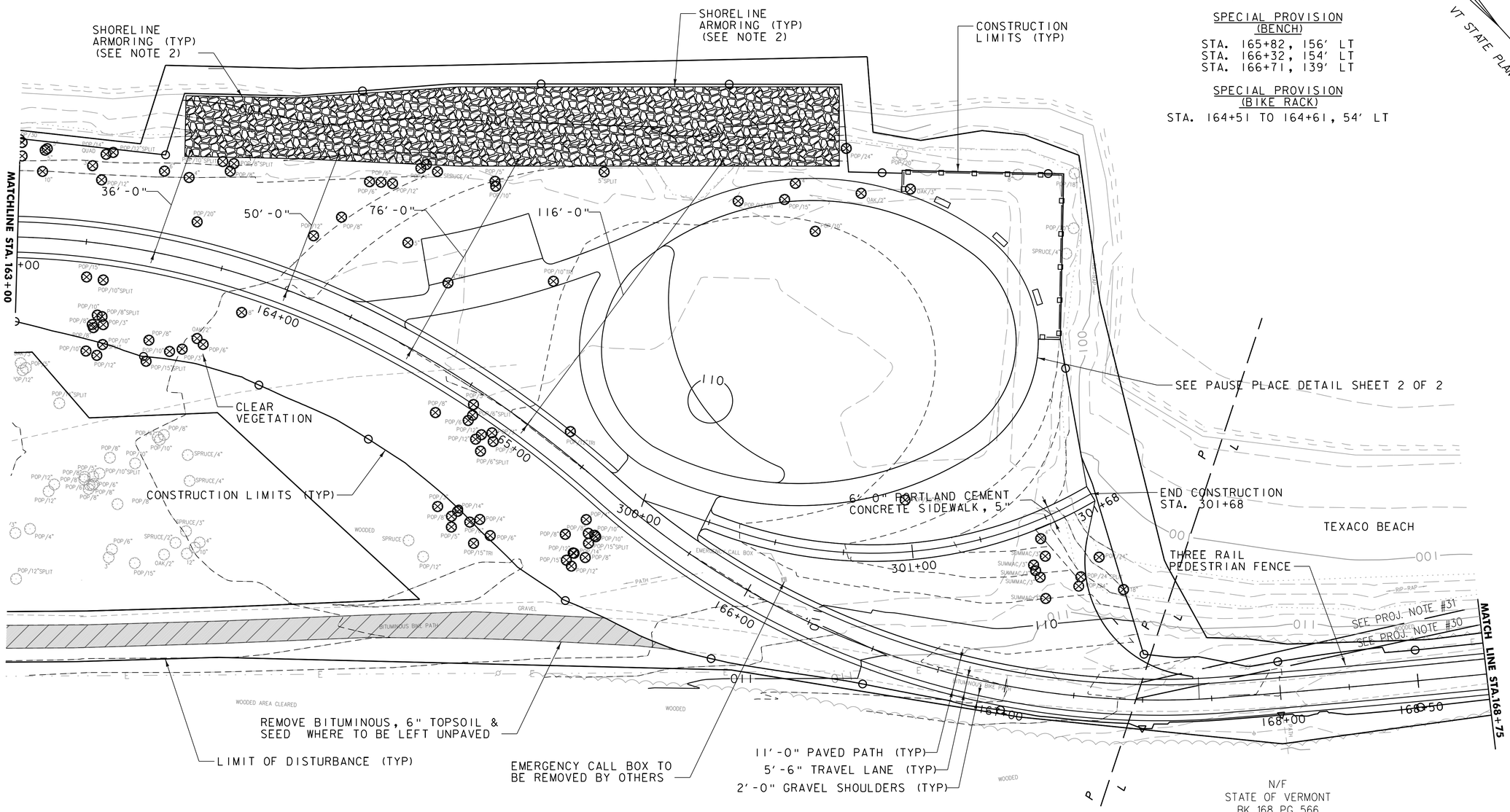
4 INCH YELLOW LINE
STA. 163+00 TO 168+75 ℄ (DASHED)

SPECIAL PROVISION (REMOVE EMERGENCY CALL BOX)
STA. 166+11, 9' LT

SPECIAL PROVISION (THREE RAIL PEDESTRIAN FENCE)
STA. 167+70, 8' LT TO 168+75, 8' LT

SPECIAL PROVISION (BENCH)
STA. 165+82, 156' LT
STA. 166+32, 154' LT
STA. 166+71, 139' LT

SPECIAL PROVISION (BIKE RACK)
STA. 164+51 TO 164+61, 54' LT




NOTES:

1. ALL IMPERVIOUS SURFACES WITHIN THE PROJECT LIMITS OF DISTURBANCE SHALL BE REMOVED PER TYPICAL SECTIONS UNLESS OTHERWISE NOTED
2. SEE SHEET 12 FOR SHORELINE ARMORING DETAILS

= REMOVE EXISTING CONCRETE/BITUMINOUS SURFACE

= REMOVE TREE

SCALE 1" = 20'-0"
20 0 20

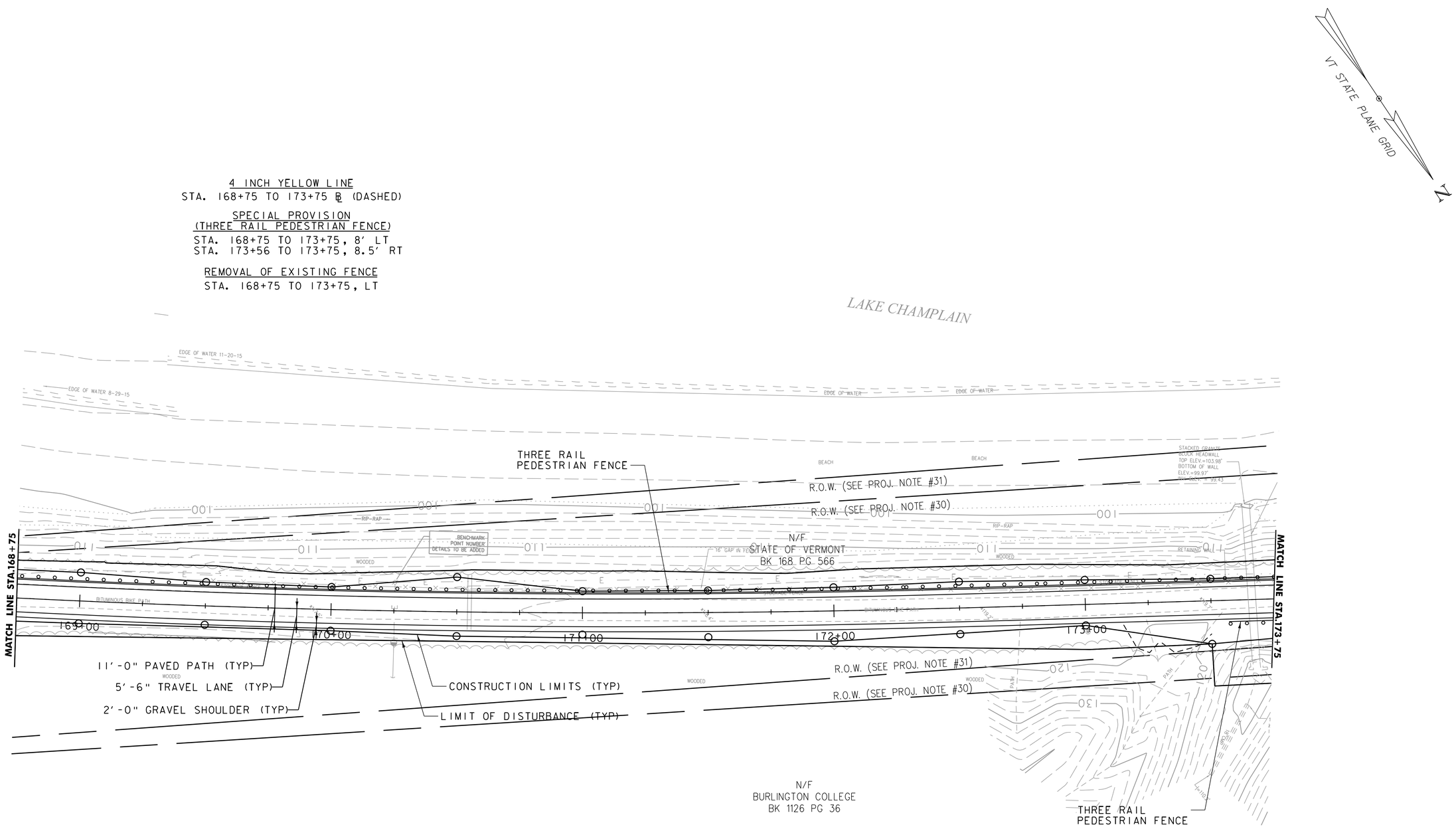
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: E.B. PARIZO | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (7 OF 11) | SHEET 34 OF 116 |

vhb

4 INCH YELLOW LINE
STA. 168+75 TO 173+75 ℄ (DASHED)

SPECIAL PROVISION
(THREE RAIL PEDESTRIAN FENCE)
STA. 168+75 TO 173+75, 8′ LT
STA. 173+56 TO 173+75, 8.5′ RT

REMOVAL OF EXISTING FENCE
STA. 168+75 TO 173+75, LT




SCALE 1" = 20′-0"
20 0 20

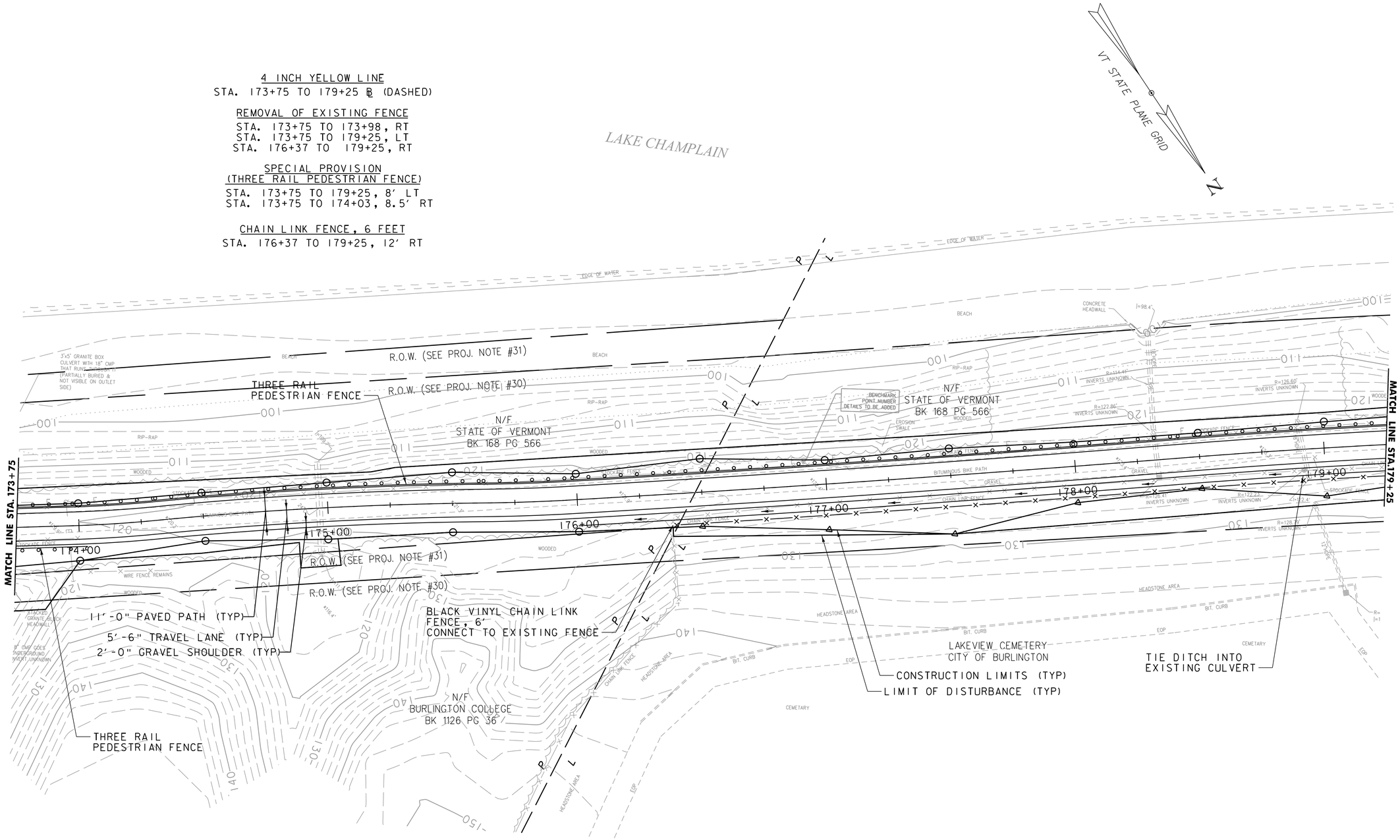
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (8 OF 11) | SHEET 35 OF 116 |

4 INCH YELLOW LINE
STA. 173+75 TO 179+25 ℄ (DASHED)

REMOVAL OF EXISTING FENCE
STA. 173+75 TO 173+98, RT
STA. 173+75 TO 179+25, LT
STA. 176+37 TO 179+25, RT

SPECIAL PROVISION
(THREE RAIL PEDESTRIAN FENCE)
STA. 173+75 TO 179+25, 8' LT
STA. 173+75 TO 174+03, 8.5' RT

CHAIN LINK FENCE, 6 FEET
STA. 176+37 TO 179+25, 12' RT




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (9 OF 11) | SHEET 36 OF 116 |

VHB 57634.00

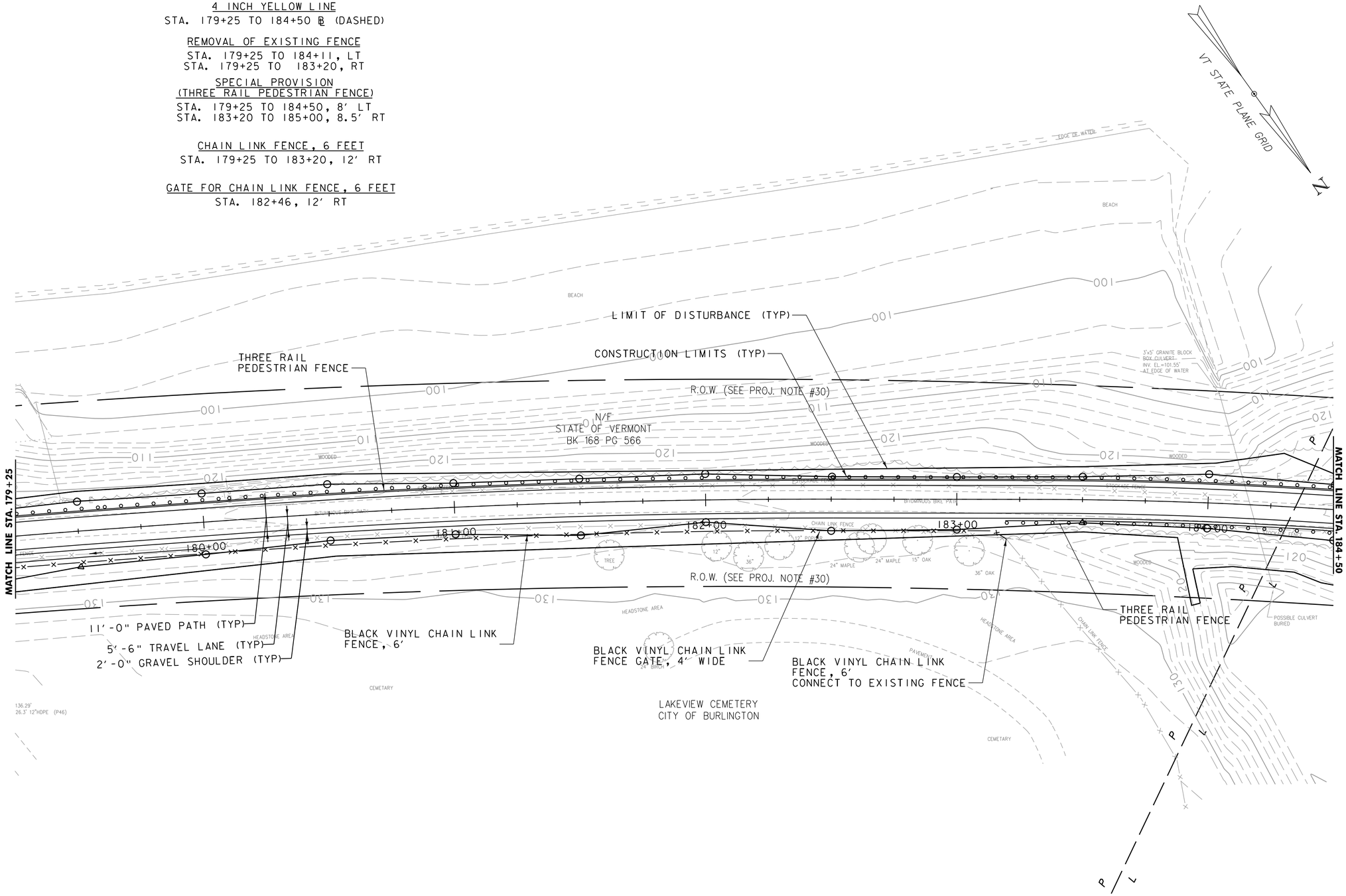
4 INCH YELLOW LINE
STA. 179+25 TO 184+50 ℄ (DASHED)

REMOVAL OF EXISTING FENCE
STA. 179+25 TO 184+11, LT
STA. 179+25 TO 183+20, RT

SPECIAL PROVISION
(THREE RAIL PEDESTRIAN FENCE)
STA. 179+25 TO 184+50, 8′ LT
STA. 183+20 TO 185+00, 8.5′ RT

CHAIN LINK FENCE, 6 FEET
STA. 179+25 TO 183+20, 12′ RT

GATE FOR CHAIN LINK FENCE, 6 FEET
STA. 182+46, 12′ RT




SCALE 1" = 20′-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: PROJECT NUMBER | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (10 OF 11) | SHEET 37 OF 116 |

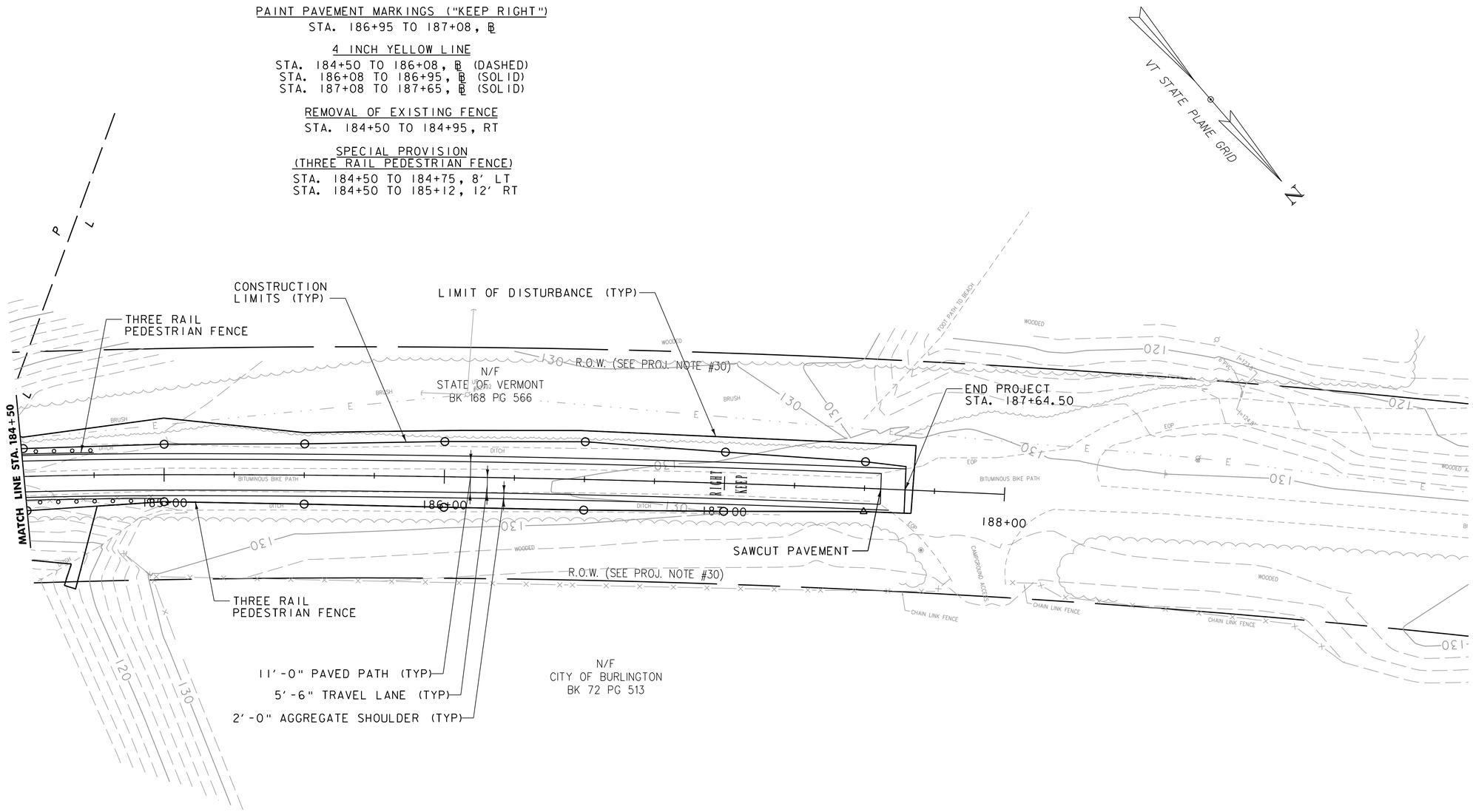
VHB 57634.00

PAINT PAVEMENT MARKINGS ("KEEP RIGHT")
STA. 186+95 TO 187+08, ℞

4 INCH YELLOW LINE
STA. 184+50 TO 186+08, ℞ (DASHED)
STA. 186+08 TO 186+95, ℞ (SOLID)
STA. 187+08 TO 187+65, ℞ (SOLID)

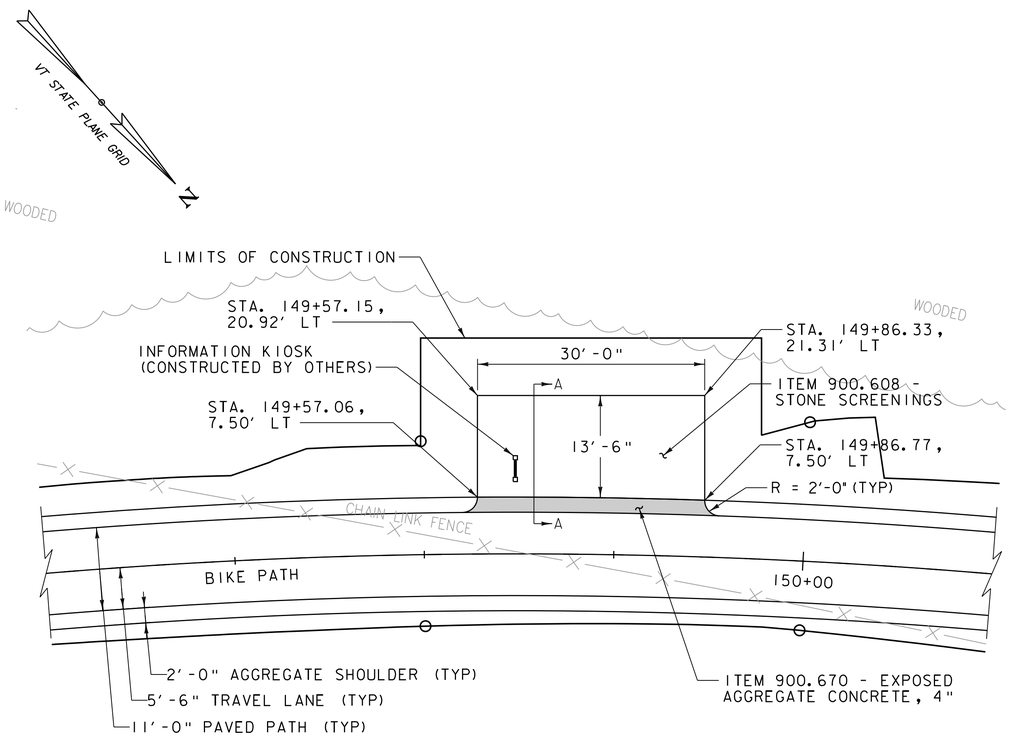
REMOVAL OF EXISTING FENCE
STA. 184+50 TO 184+95, RT

SPECIAL PROVISION
(THREE RAIL PEDESTRIAN FENCE)
STA. 184+50 TO 184+75, 8' LT
STA. 184+50 TO 185+12, 12' RT



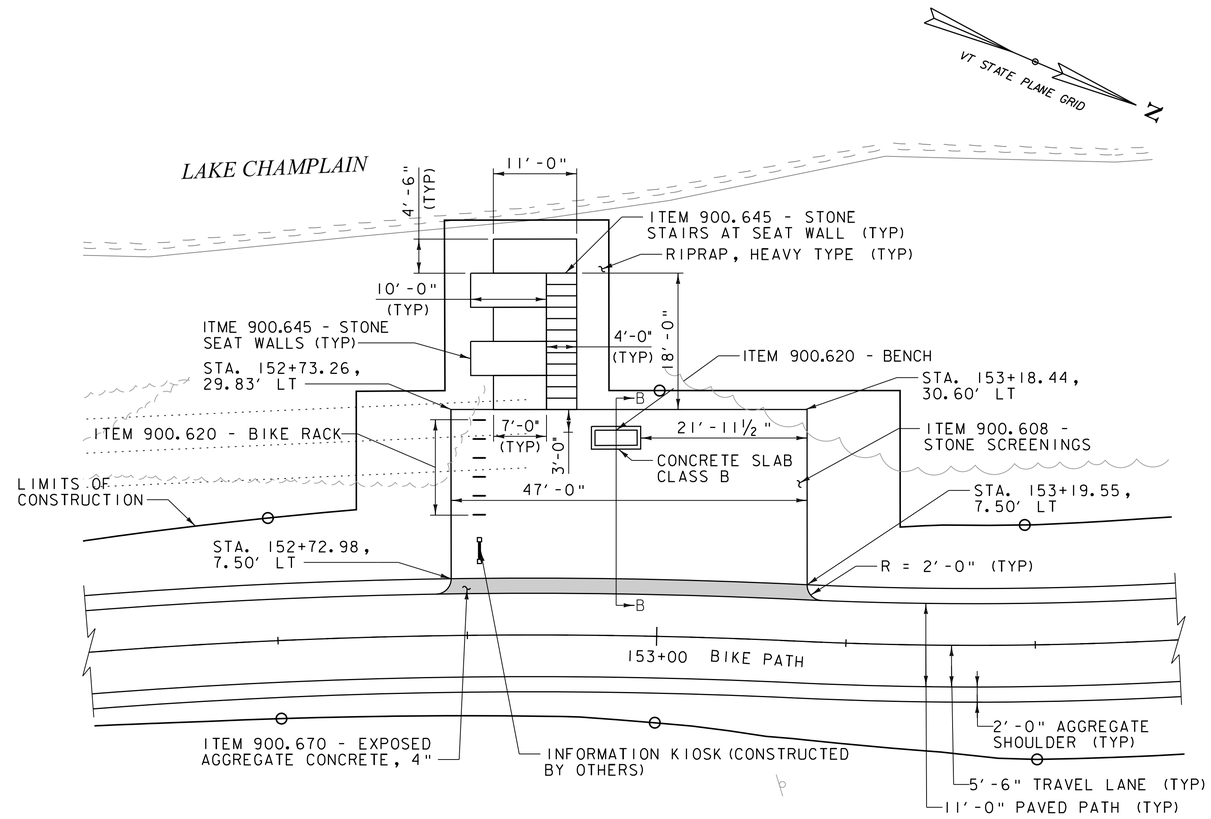

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_nul.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| LAYOUT SHEET (11 OF 11) | SHEET 38 OF 116 |



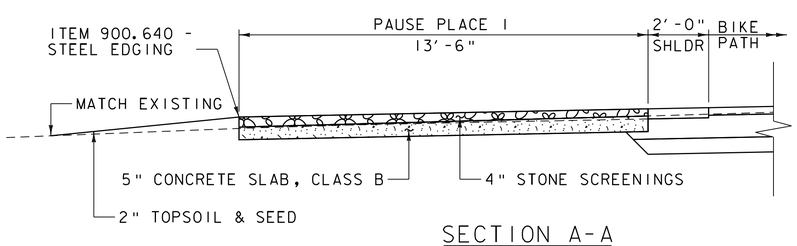

PAUSE PLACE LOCATION 1

SCALE 1" = 10'-0"



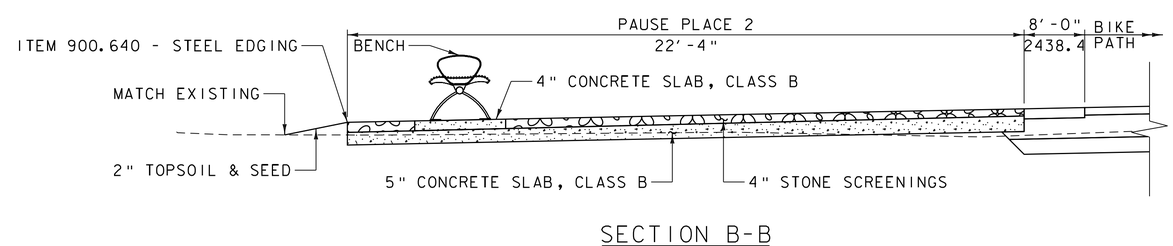

PAUSE PLACE LOCATION 2

SCALE 1" = 10'-0"




SECTION A-A

NOT TO SCALE



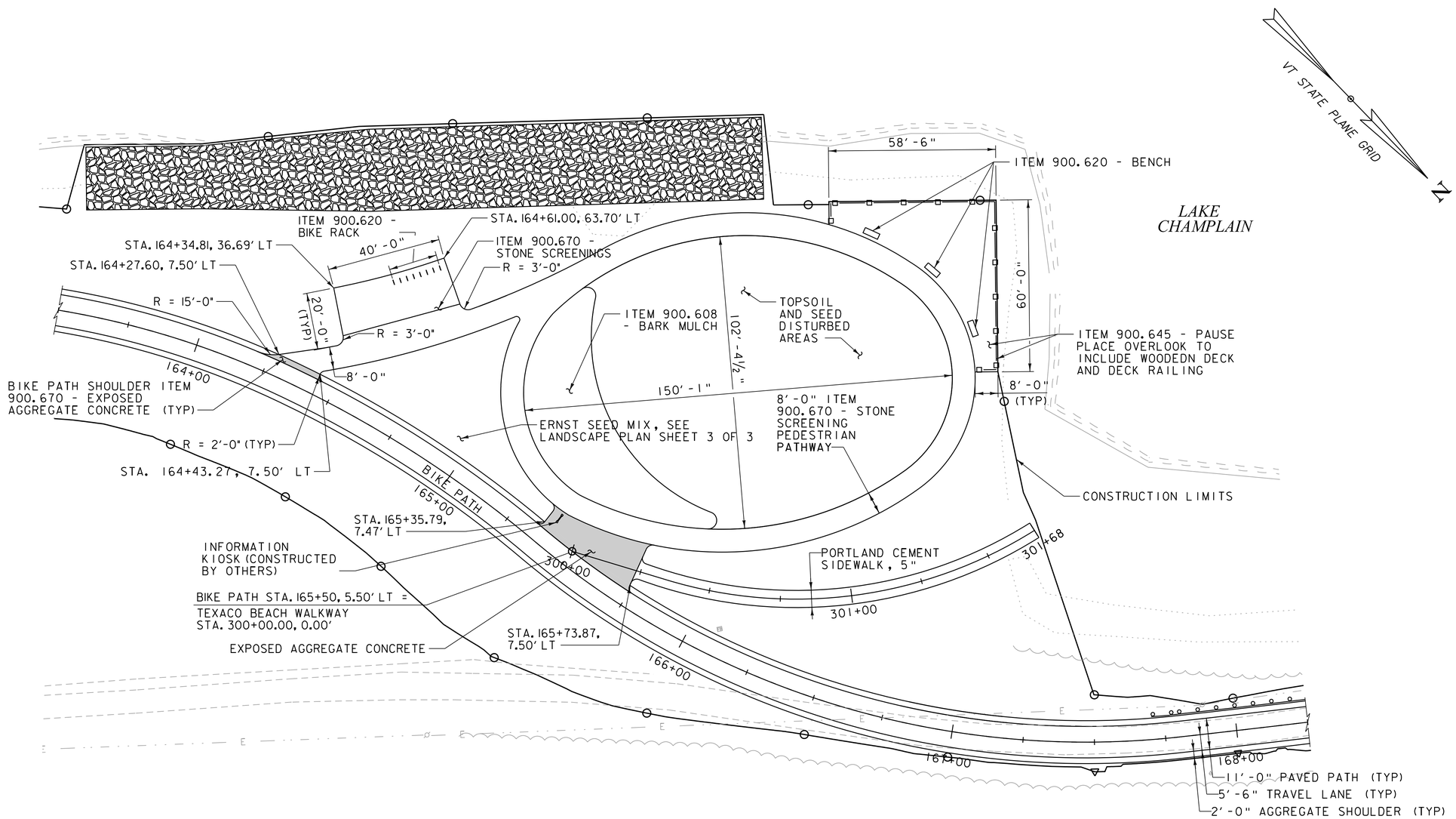

SECTION B-B

NOT TO SCALE

NOTE:

1. SEE DETAIL SHEETS (1 OF 6), (3 OF 6), AND (4 OF 6) FOR MORE INFORMATION.

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pauseplace.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: E.F. LAWES |
| DESIGNED BY: SASAKI | CHECKED BY: E.B. PARIZO |
| PAUSE PLACE DETAILS (1 OF 2) | SHEET 39 OF 116 |



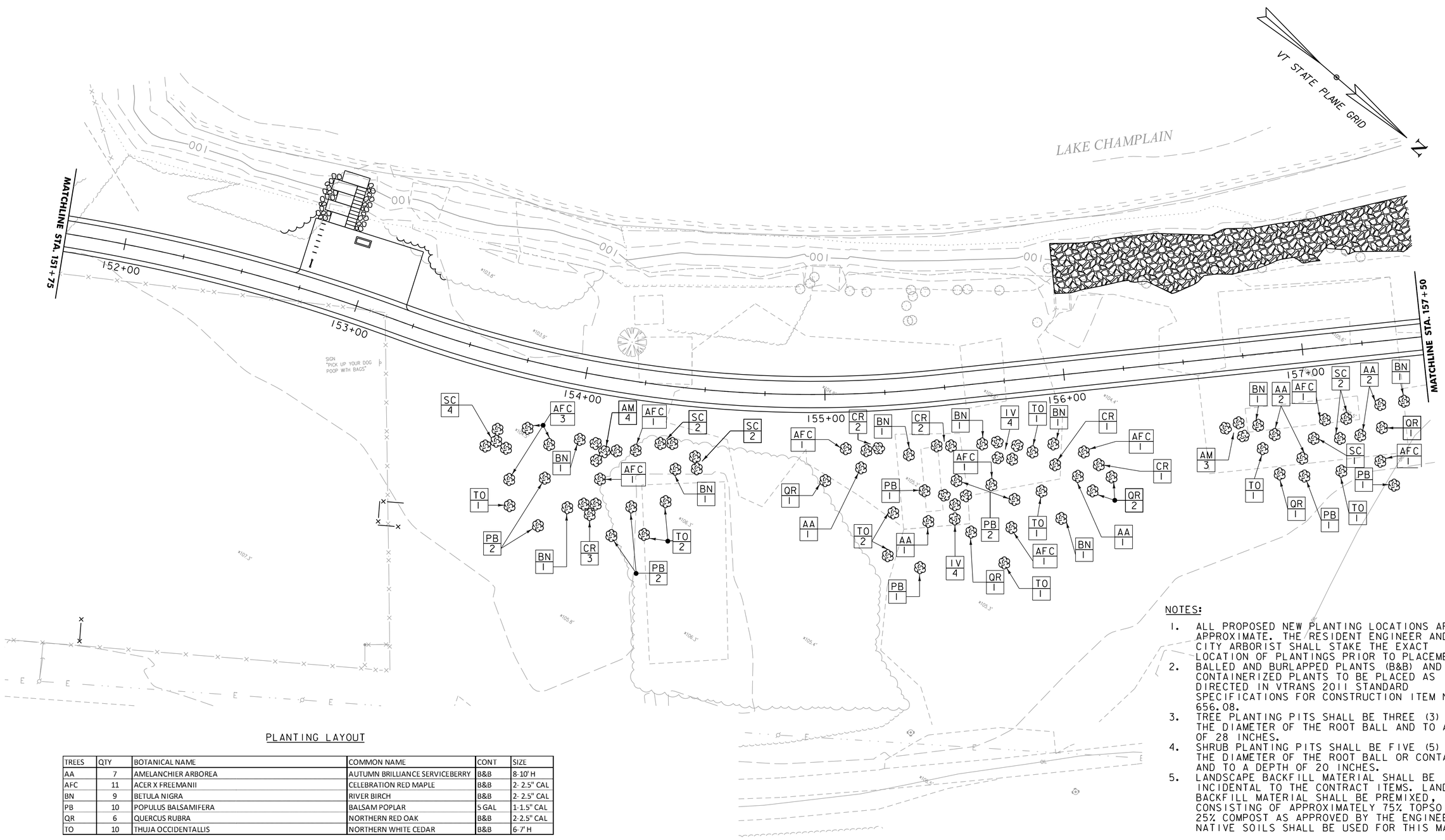

## PAUSE PLACE LOCATION 3

SCALE 1" = 20'-0"

NOTE:

1. SEE DETAIL SHEETS (1 OF 6), (3 OF 6), AND (4 OF 6) FOR MORE INFORMATION.

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pauseplace.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: E.F. LAWES |
| DESIGNED BY: SASAKI | CHECKED BY: E.B. PARIZO |
| PAUSE PLACE DETAILS (2 OF 2) | SHEET 40 OF 116 |




## PLANTING LAYOUT

| TREES | QTY | BOTANICAL NAME | COMMON NAME | CONT | SIZE |
|---|---|---|---|---|---|
| AA | 7 | AMELANCHIER ARBOREA | AUTUMN BRILLIANCE SERVICEBERRY | B&B | 8-10' H |
| AFC | 11 | ACER X FREEMANII | CELEBRATION RED MAPLE | B&B | 2- 2.5" CAL |
| BN | 9 | BETULA NIGRA | RIVER BIRCH | B&B | 2- 2.5" CAL |
| PB | 10 | POPULUS BALSAMIFERA | BALSAM POPLAR | 5 GAL | 1-1.5" CAL |
| QR | 6 | QUERCUS RUBRA | NORTHERN RED OAK | B&B | 2-2.5" CAL |
| TO | 10 | THUJA OCCIDENTALLIS | NORTHERN WHITE CEDAR | B&B | 6-7' H |

| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING |
|---|---|---|---|---|---|
| AM | 7 | ARONIA MELANOCRPA | BLACK CHOKEBERRY | 3 GAL | 5-6' O.C. |
| CR | 9 | CORNUS RACEMOSA | GRAY DOGWOOD | 3 GAL | 5-6' O.C. |
| IV | 8 | ILEX VERTICILLATA | WINTERBERRY | 3 GAL | 5-6' O.C. |
| SC | 11 | SAMBUCUS CANADENSIS | AMERICAN ELDERBERRY | 3 GAL | 5' O.C. |

SCALE 1" = 20'-0"
20 0 20

## NOTES:

1. ALL PROPOSED NEW PLANTING LOCATIONS ARE APPROXIMATE. THE RESIDENT ENGINEER AND CITY ARBORIST SHALL STAKE THE EXACT LOCATION OF PLANTINGS PRIOR TO PLACEMENT.
2. BALLED AND BURLAPPED PLANTS (B&B) AND CONTAINERIZED PLANTS TO BE PLACED AS DIRECTED IN VTRANS 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION ITEM NUMBER 656.08.
3. TREE PLANTING PITS SHALL BE THREE (3) TIMES THE DIAMETER OF THE ROOT BALL AND TO A DEPTH OF 28 INCHES.
4. SHRUB PLANTING PITS SHALL BE FIVE (5) TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER AND TO A DEPTH OF 20 INCHES.
5. LANDSCAPE BACKFILL MATERIAL SHALL BE INCIDENTAL TO THE CONTRACT ITEMS. LANDSCAPE BACKFILL MATERIAL SHALL BE PREMIXED, CONSISTING OF APPROXIMATELY 75% TOPSOIL AND 25% COMPOST AS APPROVED BY THE ENGINEER. NO NATIVE SOILS SHALL BE USED FOR THIS MATERIAL.

vhb

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634bdr_landscape.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
LANDSCAPE PLAN (1 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 41 OF 116

## PLANTING LAYOUT

| TREES | QTY | BOTANICAL NAME | COMMON NAME | CONT | SIZE |
|---|---|---|---|---|---|
| AA | 10 | AMELANCHIER ARBOREA | AUTUMN BRILLIANCE SERVICEBERRY | B&B | 8-10' H |
| AFC | 2 | ACER X FREEMANII | CELEBRATION RED MAPLE | B&B | 2- 2.5" CAL |
| BN | 11 | BETULA NIGRA | RIVER BIRCH | B&B | 2- 2.5" CAL |
| CC | 2 | CAPRINUS CAOLINIANA | AMERICAN HORNBEAM | B&B | 2- 2.5" CAL |
| PB | 3 | POPULUS BALSAMIFERA | BALSAM POPLAR | 5 GAL | 1-1.5" CAL |
| QR | 10 | QUERCUS RUBRA | NORTHERN RED OAK | B&B | 2- 2.5" CAL |
| TO | 11 | THUJA OCCIDENTALLIS | NORTHERN WHITE CEDAR | B&B | 6-7' H |

| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING |
|---|---|---|---|---|---|
| AM | 13 | ARONIA MELANOCRPA | BLACK CHOKEBERRY | 3 GAL | 5-6' O.C. |
| CR | 8 | CORNUS RACEMOSA | GRAY DOGWOOD | 3 GAL | 5-6' O.C. |
| IV | 13 | ILEX VERTICILLATA | WINTERBERRY | 3 GAL | 5-6' O.C. |
| SC | 11 | SAMBUCUS CANADENSIS | AMERICAN ELDERBERRY | 3 GAL | 5' O.C. |

SCALE 1" = 20'-0"

20 0 20

## NOTES:

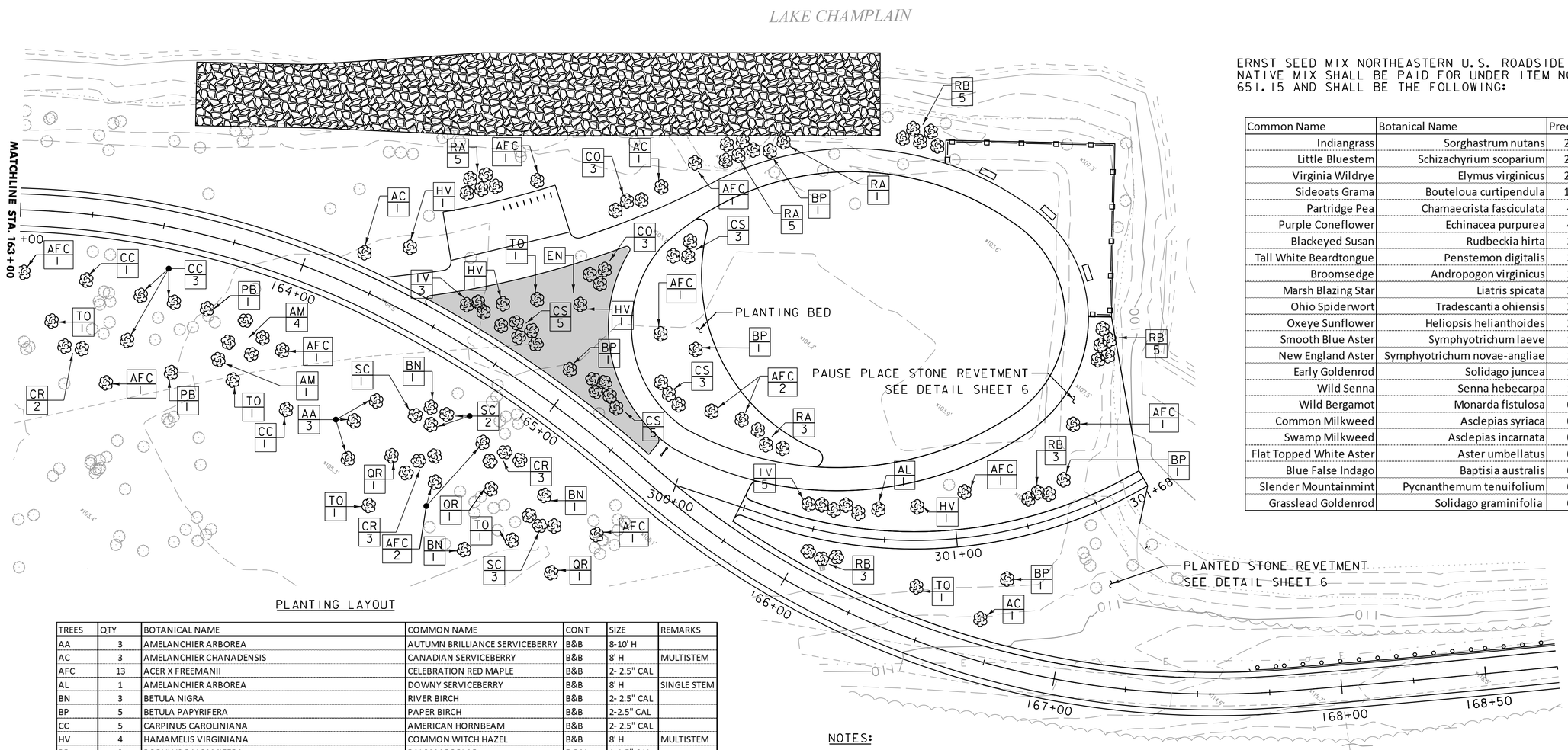
1. ALL PROPOSED NEW PLANTING LOCATIONS ARE APPROXIMATE. THE RESIDENT ENGINEER AND CITY ARBORIST SHALL STAKE THE EXACT LOCATION OF PLANTINGS PRIOR TO PLACEMENT.
2. BALLED AND BURLAPPED PLANTS (B&B) AND CONTAINERIZED PLANTS TO BE PLACED AS DIRECTED IN VTRANS 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION ITEM NUMBER 656.08.
3. TREE PLANTING PITS SHALL BE THREE (3) TIMES THE DIAMETER OF THE ROOT BALL AND TO A DEPTH OF 28 INCHES.
4. SHRUB PLANTING PITS SHALL BE FIVE (5) TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER AND TO A DEPTH OF 20 INCHES.
5. LANDSCAPE BACKFILL MATERIAL SHALL BE INCIDENTAL TO THE CONTRACT ITEMS. LANDSCAPE BACKFILL MATERIAL SHALL BE PREMIXED, CONSISTING OF APPROXIMATELY 75% TOPSOIL AND 25% COMPOST AS APPROVED BY THE ENGINEER. NO NATIVE SOILS SHALL BE USED FOR THIS MATERIAL.

vhb

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634bdr_landscape.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
LANDSCAPE PLAN (2 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 42 OF 116




ERNST SEED MIX NORTHEASTERN U.S. ROADSIDE NATIVE MIX SHALL BE PAID FOR UNDER ITEM NO. 651.15 AND SHALL BE THE FOLLOWING:

| Common Name | Botanical Name | Precentage |
|---|---|---|
| Indiangrass | Sorghastrum nutans | 20.0% |
| Little Bluestem | Schizachyrium scoparium | 20.0% |
| Virginia Wildrye | Elymus virginicus | 20.0% |
| Sideoats Grama | Bouteloua curtipendula | 10.0% |
| Partridge Pea | Chamaecrista fasciculata | 4.5% |
| Purple Coneflower | Echinacea purpurea | 4.0% |
| Blackeyed Susan | Rudbeckia hirta | 3.0% |
| Tall White Beardtongue | Penstemon digitalis | 3.0% |
| Broomsedge | Andropogon virginicus | 2.0% |
| Marsh Blazing Star | Liatris spicata | 2.0% |
| Ohio Spiderwort | Tradescantia ohiensis | 2.0% |
| Oxeye Sunflower | Heliopsis helianthoides | 2.0% |
| Smooth Blue Aster | Symphyotrichum laeve | 1.5% |
| New England Aster | Symphyotrichum novae-angliae | 1.0% |
| Early Goldenrod | Solidago juncea | 1.0% |
| Wild Senna | Senna hebecarpa | 1.0% |
| Wild Bergamot | Monarda fistulosa | 0.7% |
| Common Milkweed | Asclepias syriaca | 0.5% |
| Swamp Milkweed | Asclepias incarnata | 0.5% |
| Flat Topped White Aster | Aster umbellatus | 0.5% |
| Blue False Indago | Baptisia australis | 0.5% |
| Slender Mountainmint | Pycnanthemum tenuifolium | 0.2% |
| Grasslead Goldenrod | Solidago graminifolia | 0.1% |

PLANTING LAYOUT

| TREES | QTY | BOTANICAL NAME | COMMON NAME | CONT | SIZE | REMARKS |
|---|---|---|---|---|---|---|
| AA | 3 | AMELANCHIER ARBOREA | AUTUMN BRILLIANCE SERVICEBERRY | B&B | 8-10' H | |
| AC | 3 | AMELANCHIER CHANADENSIS | CANADIAN SERVICEBERRY | B&B | 8' H | MULTISTEM |
| AFC | 13 | ACER X FREEMANII | CELEBRATION RED MAPLE | B&B | 2- 2.5" CAL | |
| AL | 1 | AMELANCHIER ARBOREA | DOWNY SERVICEBERRY | B&B | 8' H | SINGLE STEM |
| BN | 3 | BETULA NIGRA | RIVER BIRCH | B&B | 2- 2.5" CAL | |
| BP | 5 | BETULA PAPYRIFERA | PAPER BIRCH | B&B | 2-2.5" CAL | |
| CC | 5 | CARPINUS CAROLINIANA | AMERICAN HORNBEAM | B&B | 2- 2.5" CAL | |
| HV | 4 | HAMAMELIS VIRGINIANA | COMMON WITCH HAZEL | B&B | 8' H | MULTISTEM |
| PB | 2 | POPULUS BALSAMIFERA | BALSAM POPLAR | 5 GAL | 1-1.5" CAL | |
| QR | 3 | QUERCUS RUBRA | NORTHERN RED OAK | B&B | 2- 2.5" CAL | |
| TO | 6 | THUJA OCCIDENTALLIS | NORTHERN WHITE CEDAR | B&B | 6-7' H | |

| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING |
|---|---|---|---|---|---|
| AM | 5 | ARONIA MELANOCRPA | BLACK CHOKEBERRY | 3 GAL | 5-6' O.C. |
| CR | 8 | CORNUS RACEMOSA | GRAY DOGWOOD | 3 GAL | 5-6' O.C. |
| CO | 6 | CEPHALANTHUS OCCIDENTALIS | BUTTONBUSH | 5 GAL | 6' O.C. |
| CS | 16 | CORNUS SERICEA | RED TWIG DOGWOOD | 5 GAL | 5-6' O.C. |
| IV | 8 | ILEX VERTICILLATA | WINTERBERRY | 5 GAL | 5-6' O.C. |
| RA | 14 | RHUS AROMATICA | FRAGRANT SUMAC | 5 GAL | 5-6' O.C. |
| RB | 16 | ROSA BLANDA | SMOOTH ROSE | 5 GAL | 5-6' O.C. |
| SC | 6 | SAMBUCUS CANADENSIS | AMERICAN ELDERBERRY | 3 GAL | 5' O.C. |

| PLANT | QTY | BOTANICAL NAME | REMARKS |
|---|---|---|---|
| EN | 4550 SF | ERNST SEED MIX NORTHEASTERN U.S. ROADSIDE NATIVE MIX | SEED |

NOTES:

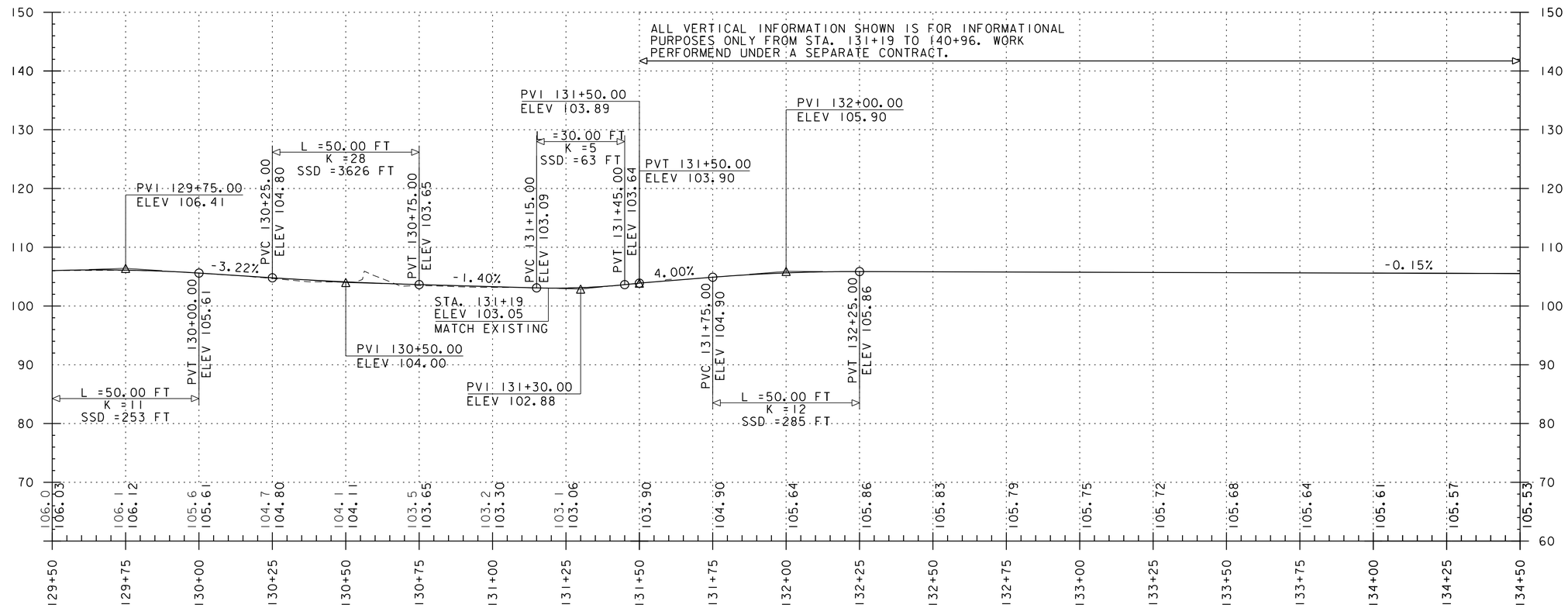
1. ALL PROPOSED NEW PLANTING LOCATIONS ARE APPROXIMATE. THE RESIDENT ENGINEER AND CITY ARBORIST SHALL STAKE THE EXACT LOCATION OF PLANTINGS PRIOR TO PLACEMENT.
2. BALLED AND BURLAPPED PLANTS (B&B) AND CONTAINERIZED PLANTS TO BE PLACED AS DIRECTED IN VTRANS 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION ITEM NUMBER 656.08.
3. TREE PLANTING PITS SHALL BE THREE (3) TIMES THE DIAMETER OF THE ROOT BALL AND TO A DEPTH OF 28 INCHES.
4. SHRUB PLANTING PITS SHALL BE FIVE (5) TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER AND TO A DEPTH OF 20 INCHES.
5. LANDSCAPE BACKFILL MATERIAL SHALL BE INCIDENTAL TO THE CONTRACT ITEMS. LANDSCAPE BACKFILL MATERIAL SHALL BE PREMIXED, CONSISTING OF APPROXIMATELY 75% TOPSOIL AND 25% COMPOST AS APPROVED BY THE ENGINEER. NO NATIVE SOILS SHALL BE USED FOR THIS MATERIAL.

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634bdr_landscape.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: P.A. MILLER
LANDSCAPE PLAN (3 OF 3)

PLOT DATE: 3/25/2016
DRAWN BY: P.A. MILLER
CHECKED BY: E.B. PARIZO
SHEET 43 OF 116




PROFILE KEY

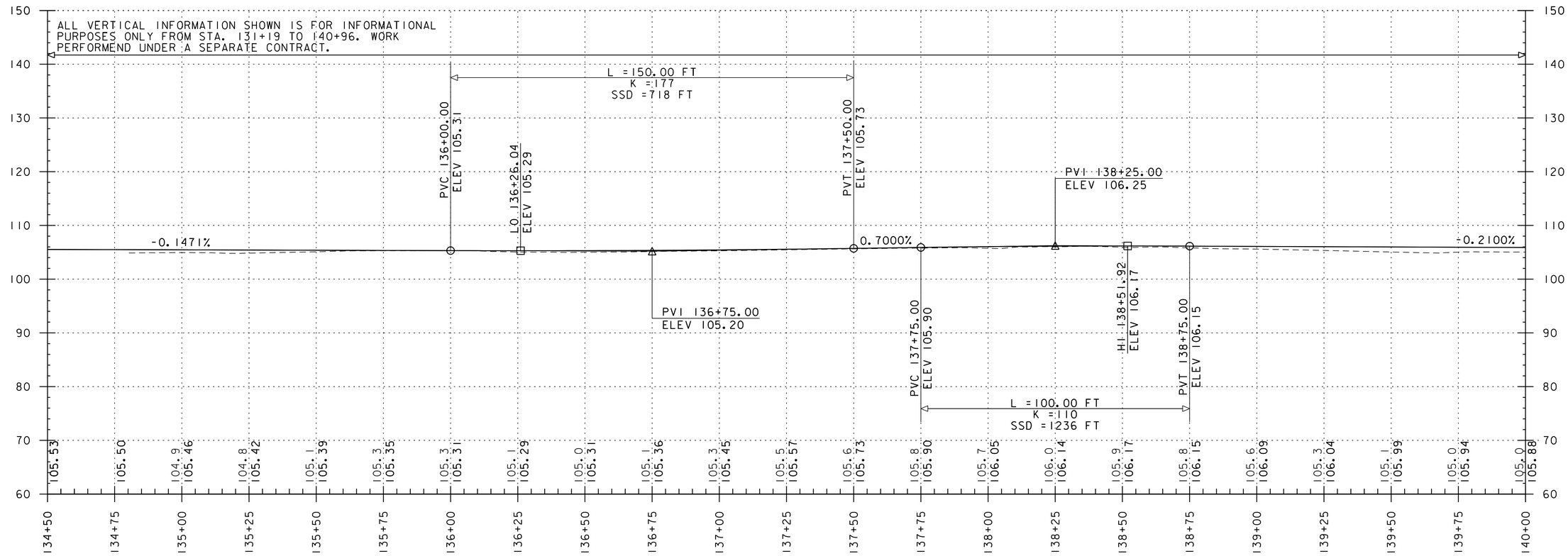
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (1 OF 11) | SHEET 44 OF 116 |




PROFILE KEY

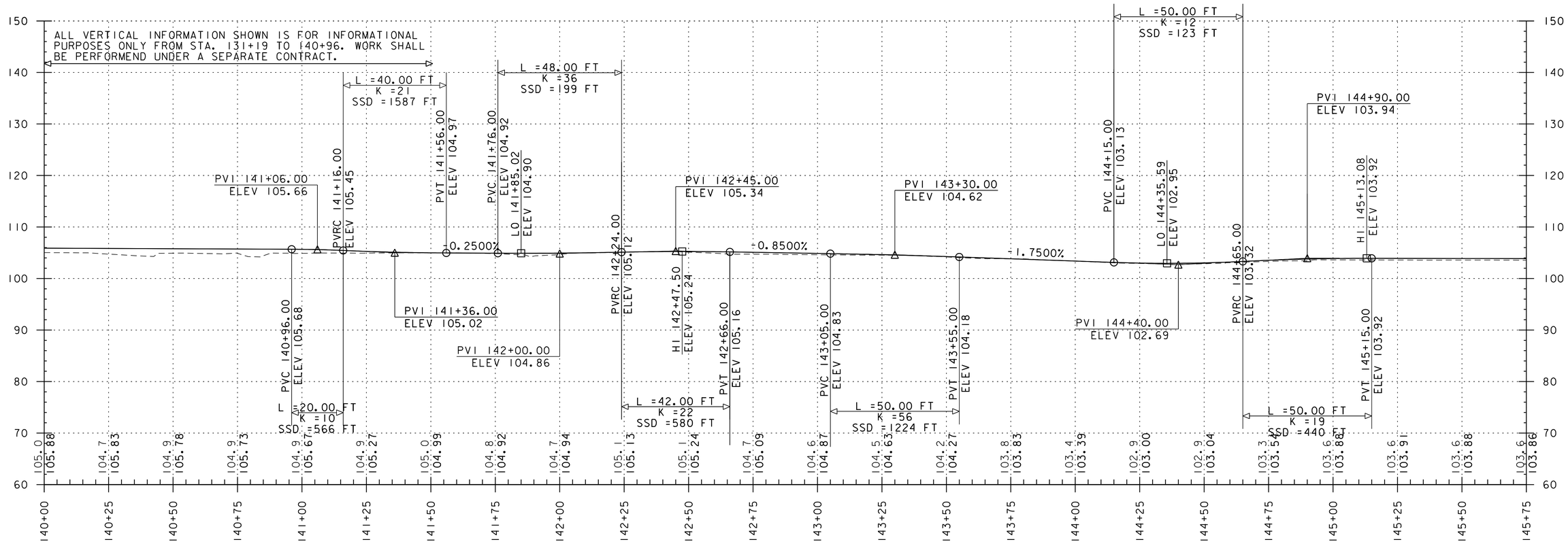
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (2 OF 11) | SHEET 45 OF 116 |




PROFILE KEY

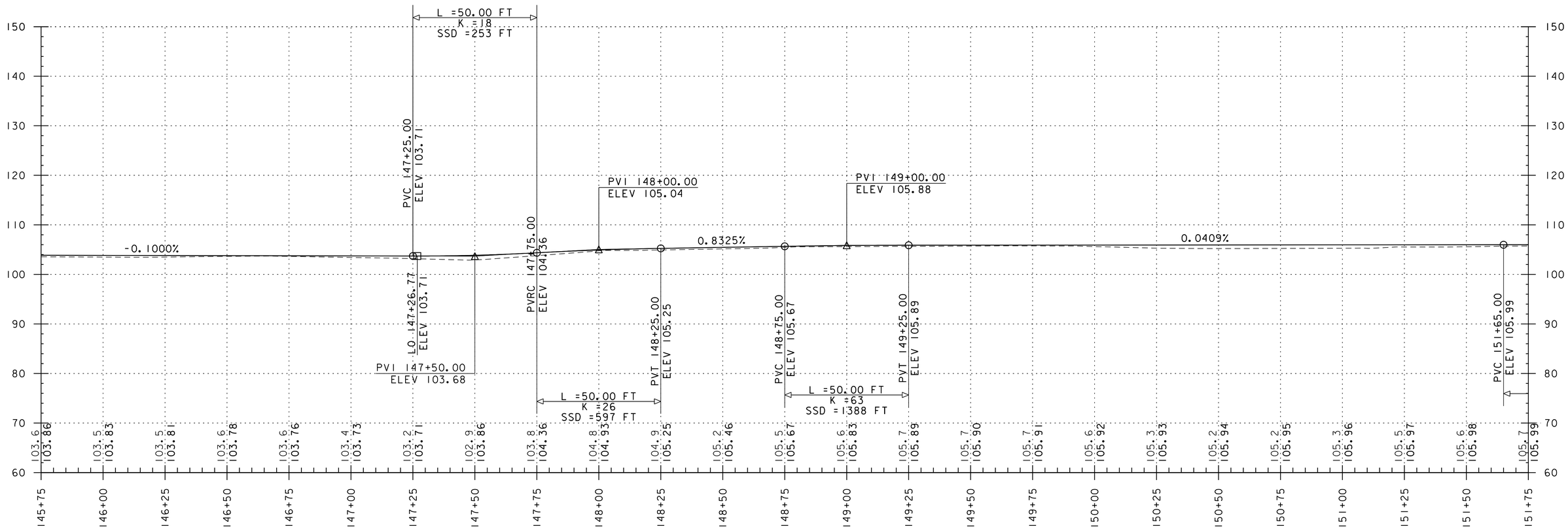
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (3 OF 11) | SHEET 46 OF 116 |




PROFILE KEY

——— = PROPOSED FINISHED GRADE

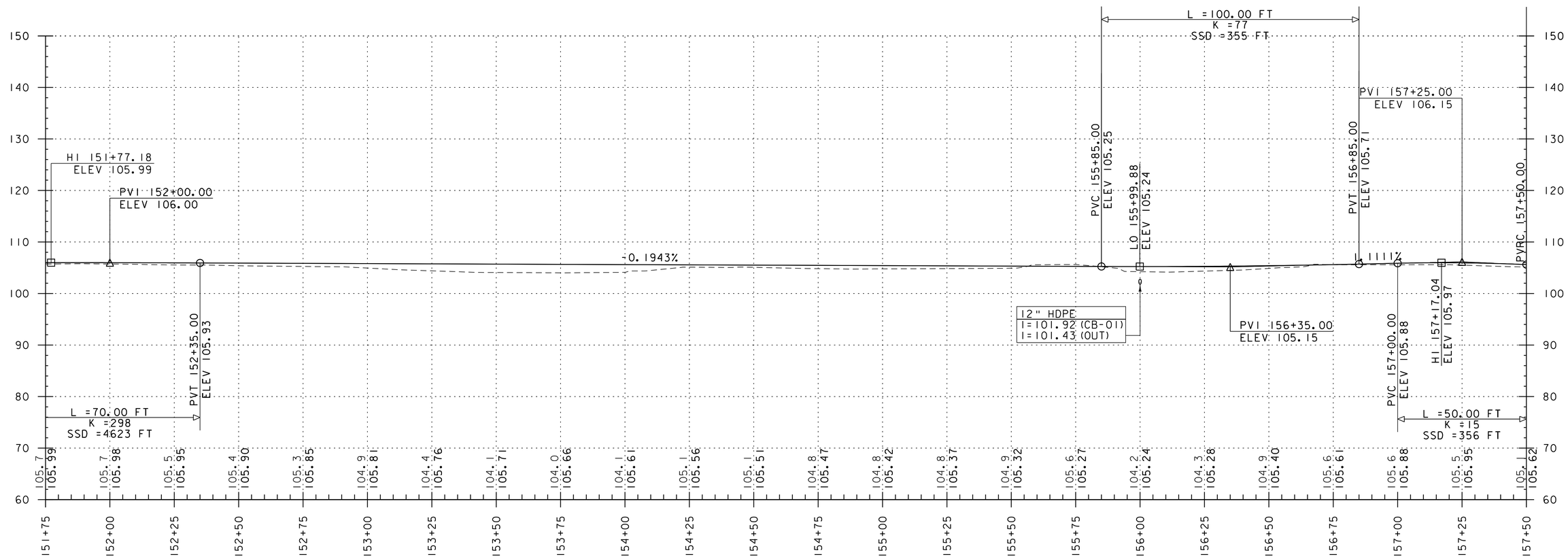
- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (4 OF 11) | SHEET 47 OF 116 |




PROFILE KEY

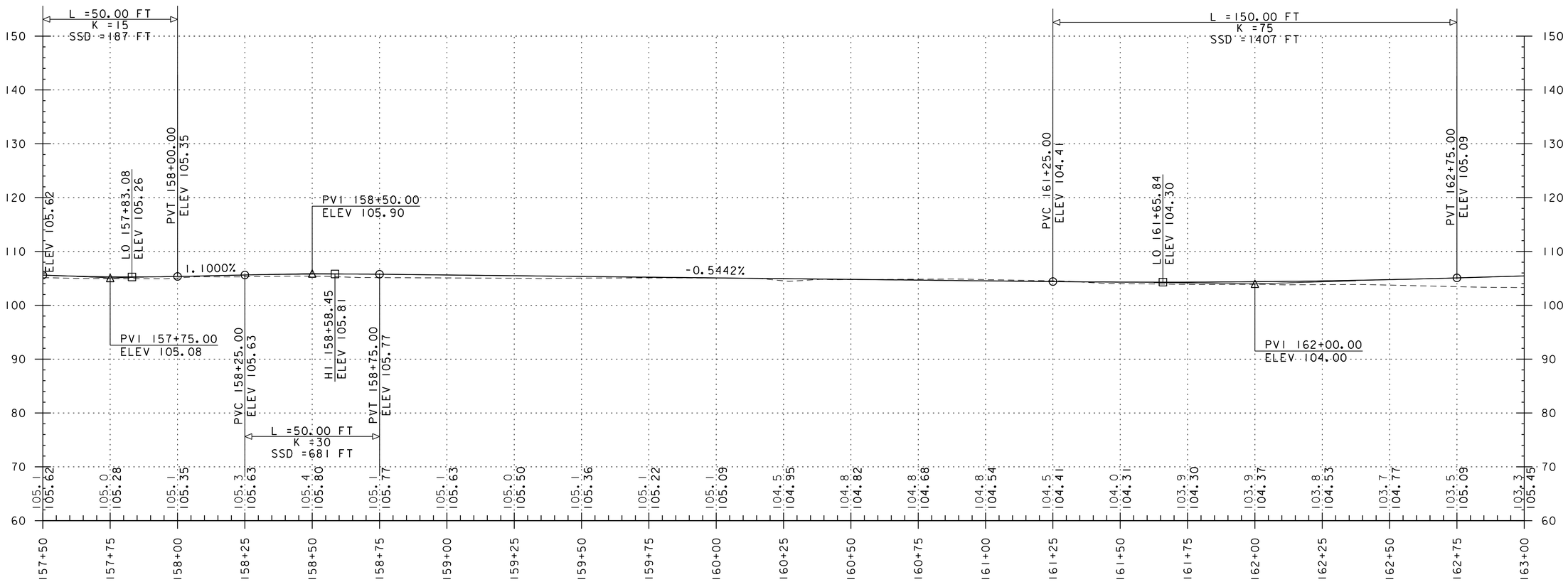
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (5 OF 11) | SHEET 48 OF 116 |




PROFILE KEY

——— = PROPOSED FINISHED GRADE

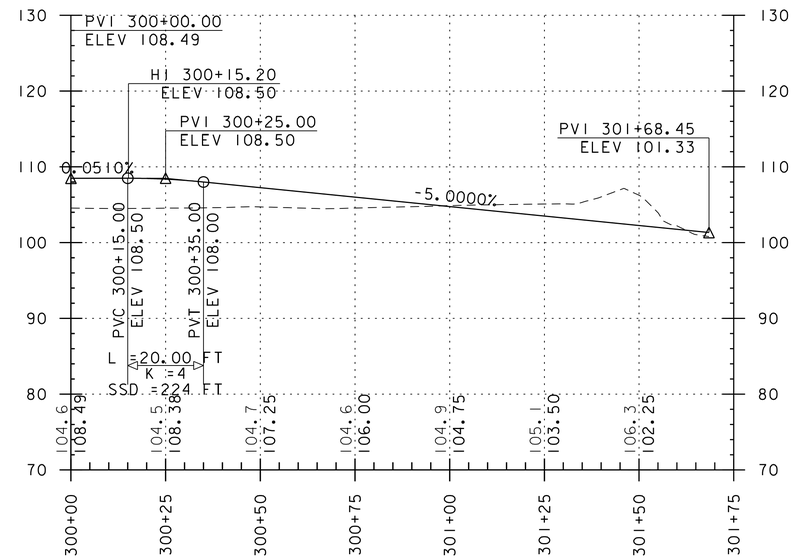
- - - - = EXISTING GROUND

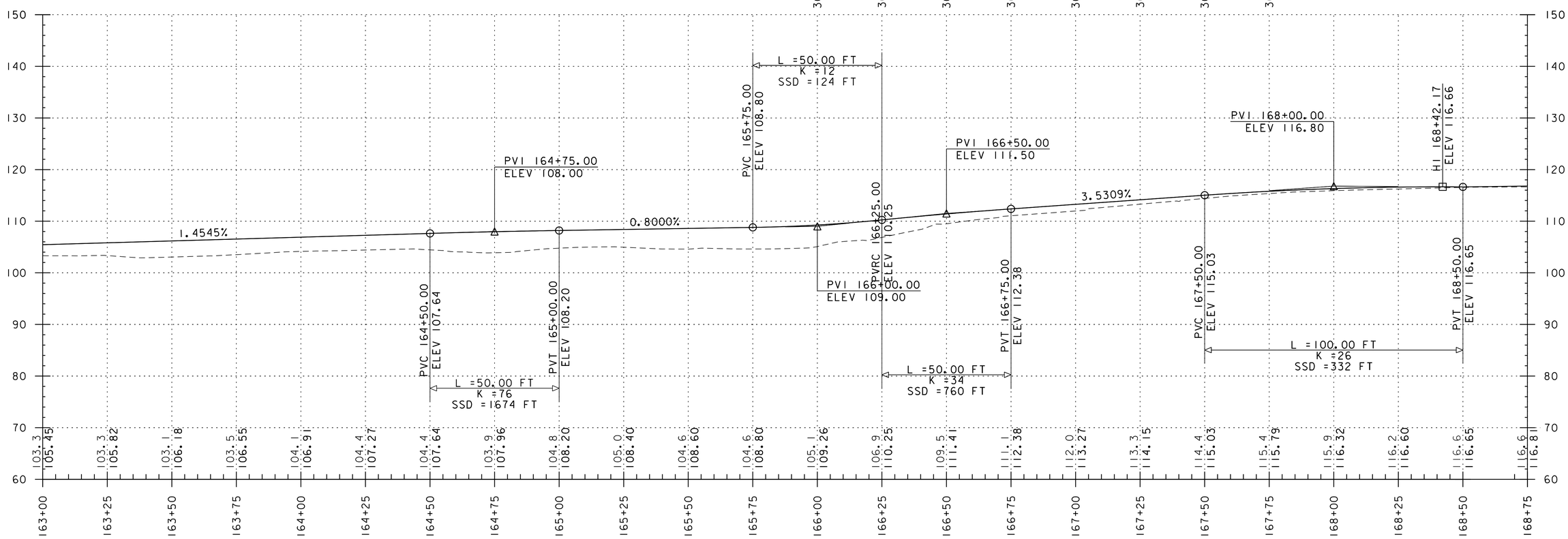
NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: D.A. GINGRAS |
| DESIGNED BY: D.A. GINGRAS | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (6 OF 11) | SHEET 49 OF 116 |

# TEXACO BEACH WALKWAY




NOTE:

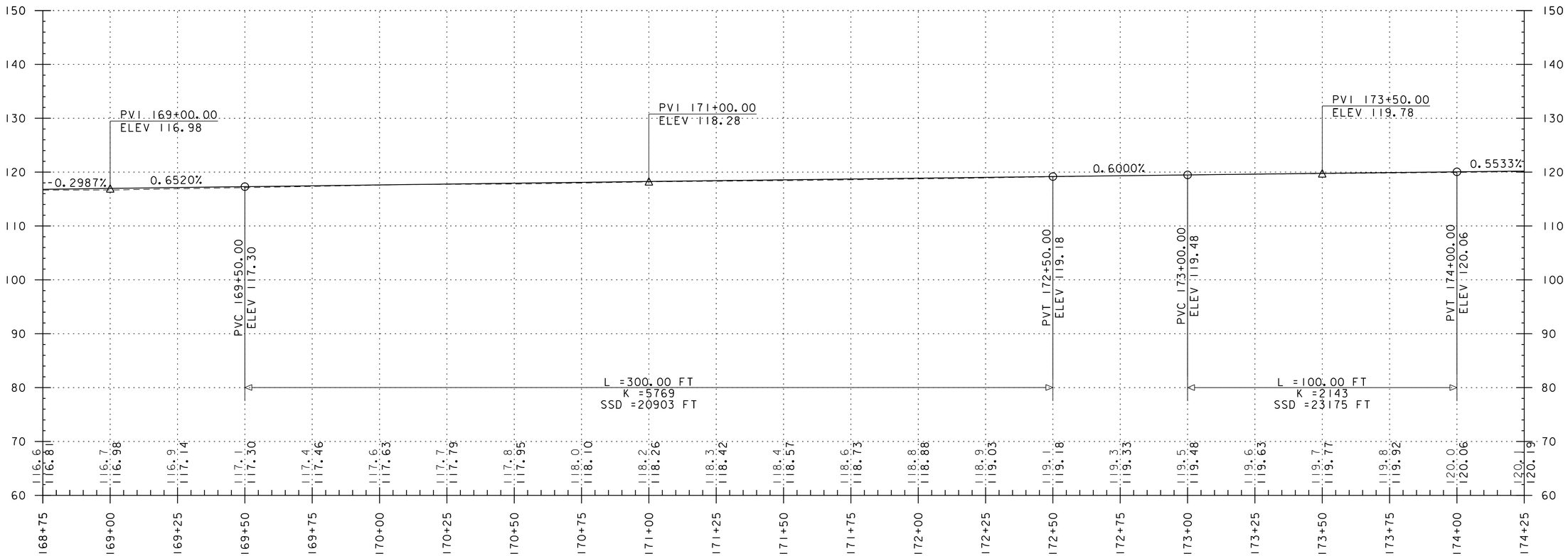
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG ℄

PROFILE KEY

——— = PROPOSED FINISHED GRADE
- - - - = EXISTING GROUND

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (7 OF 11) | SHEET 50 OF 116 |




PROFILE KEY

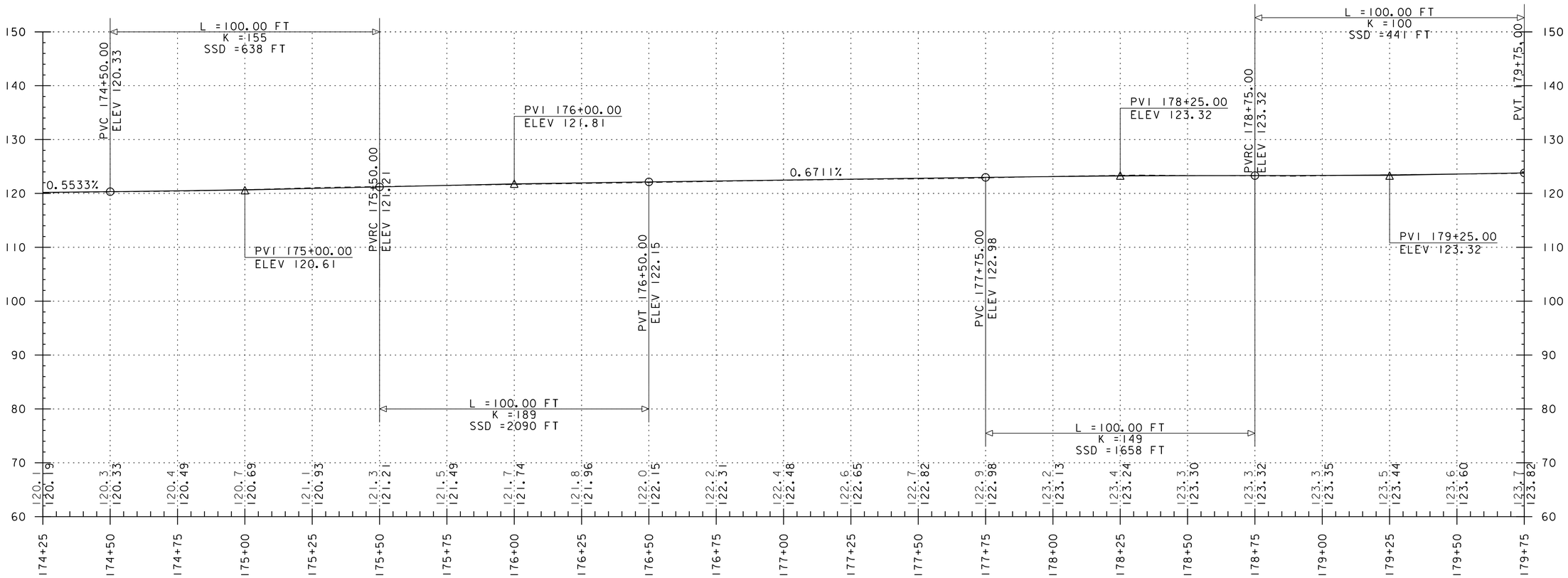
——— = PROPOSED FINISHED GRADE

- - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG C
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG C

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (8 OF 11) | SHEET 51 OF 116 |




PROFILE KEY

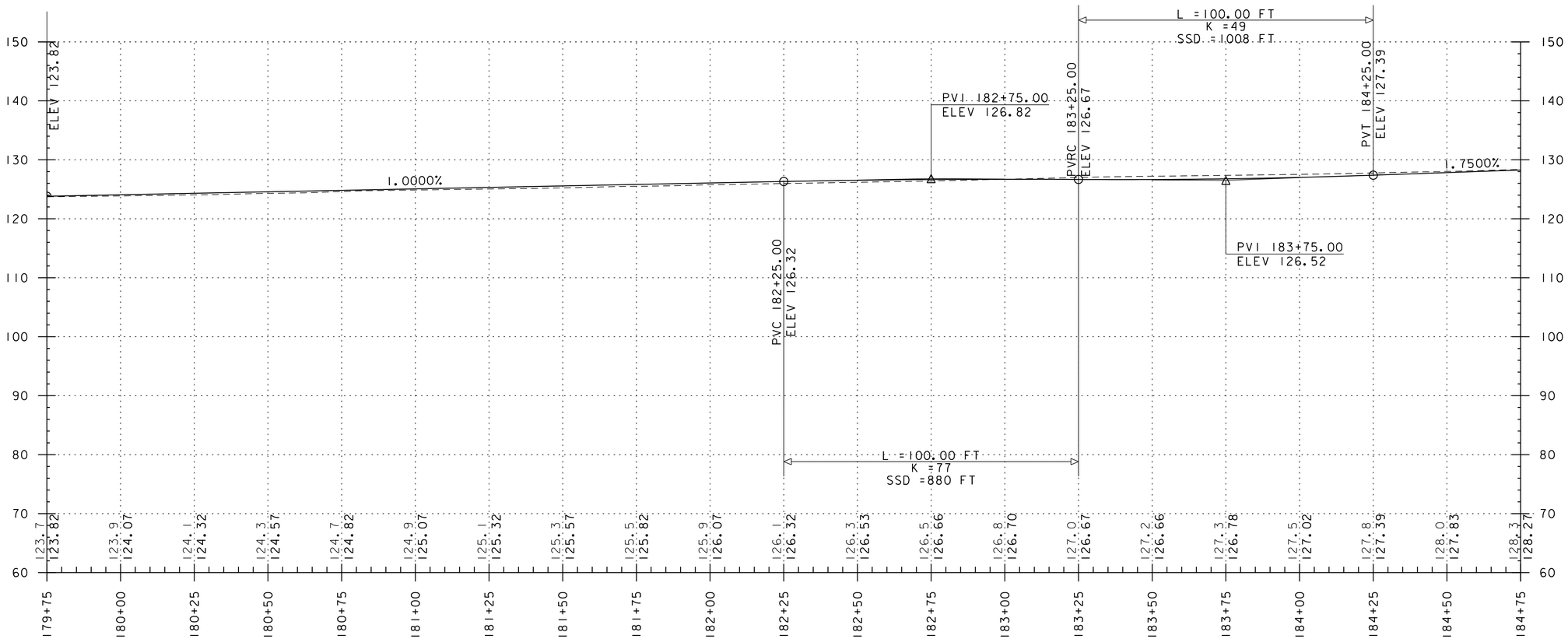
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG C
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG C

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (9 OF 11) | SHEET 52 OF 116 |




PROFILE KEY

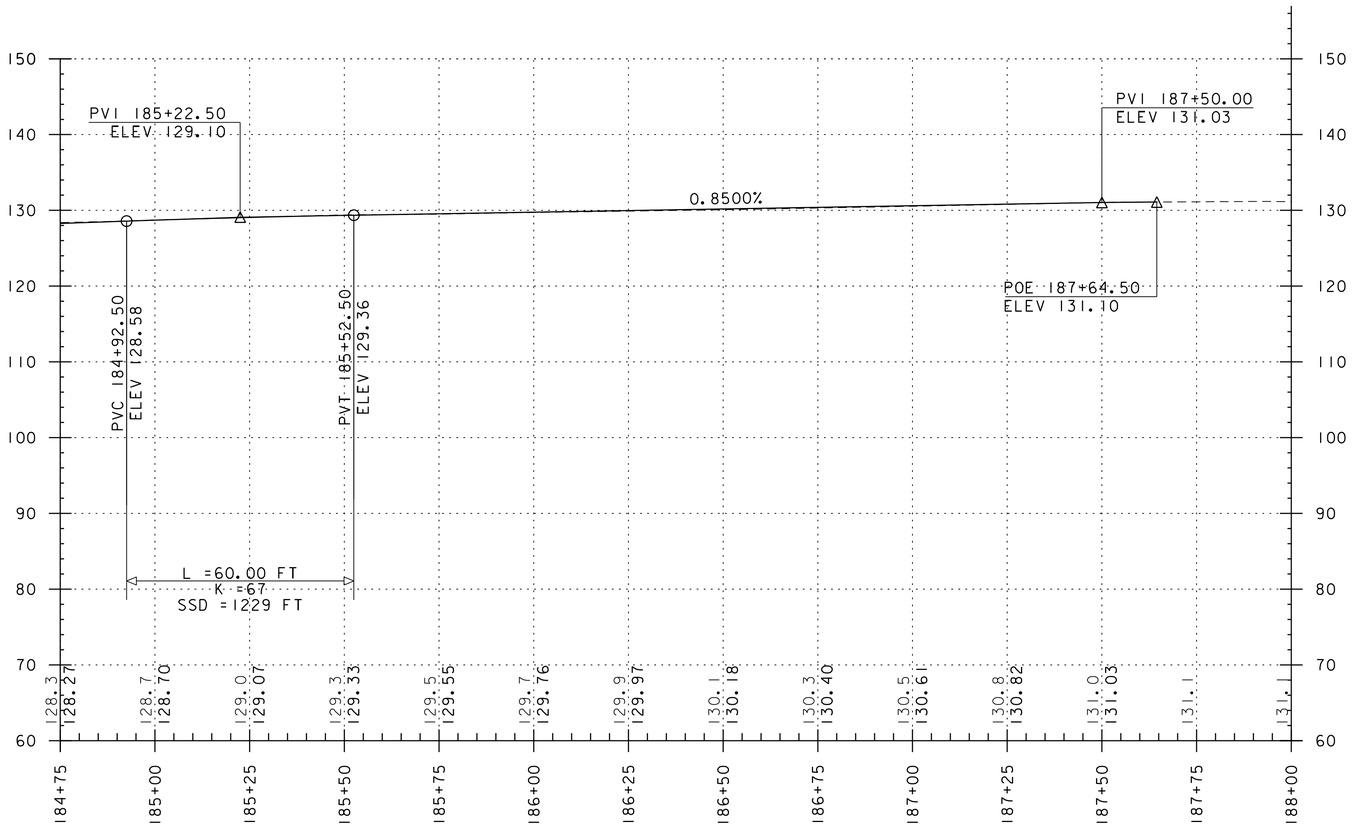
——— = PROPOSED FINISHED GRADE

- - - - = EXISTING GROUND

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG C
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG C

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (10 OF 11) | SHEET 53 OF 116 |




PROFILE KEY

——— = PROPOSED FINISHED GRADE

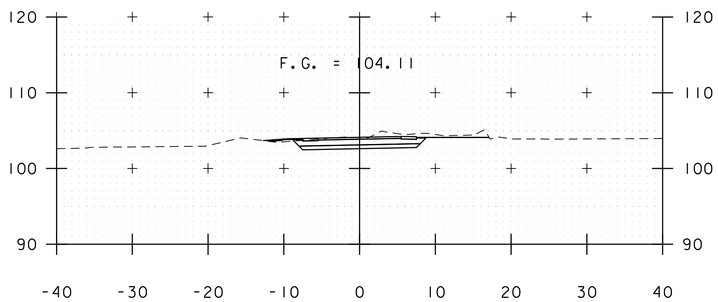
- - - - = EXISTING GROUND

NOTE:

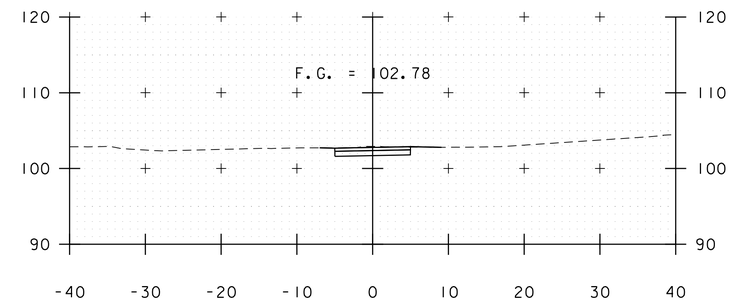
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF PAVEMENT ALONG C
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF PAVEMENT ALONG C

vhb

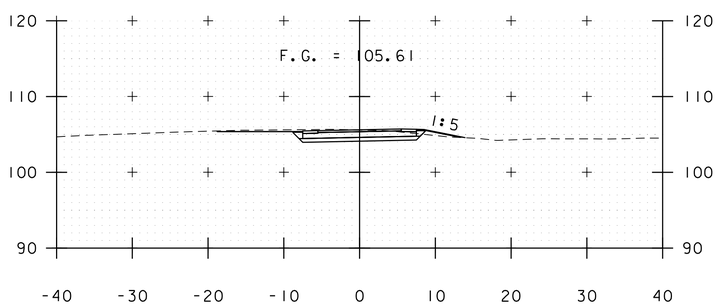
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634pro.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH PROFILE SHEET (11 OF 11) | SHEET 54 OF 116 |



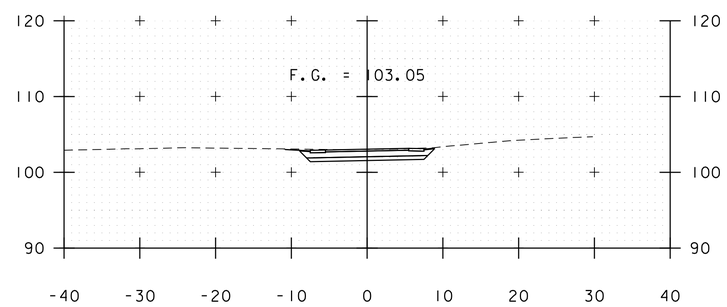

130+50



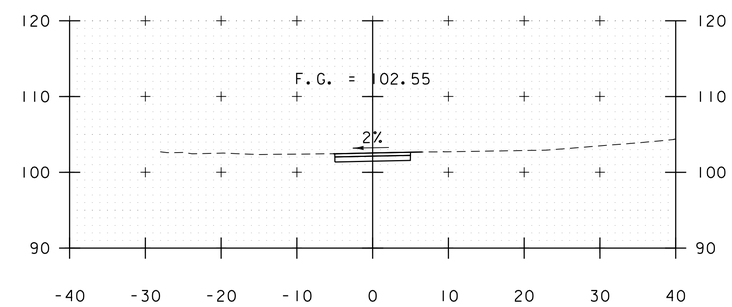

204+00



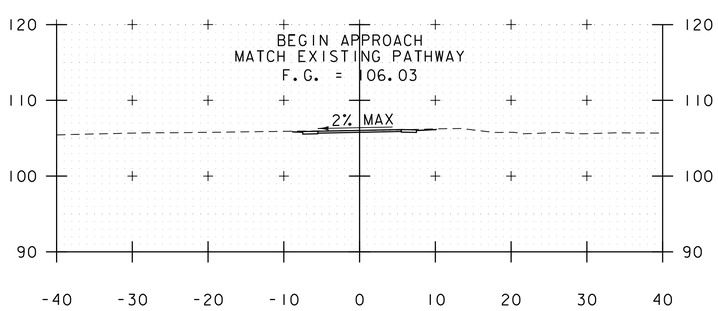

130+00



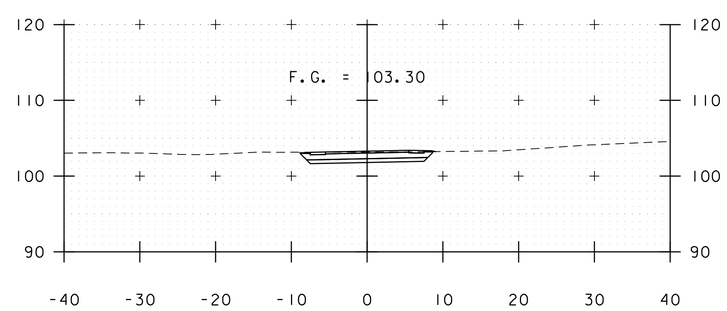

131+19



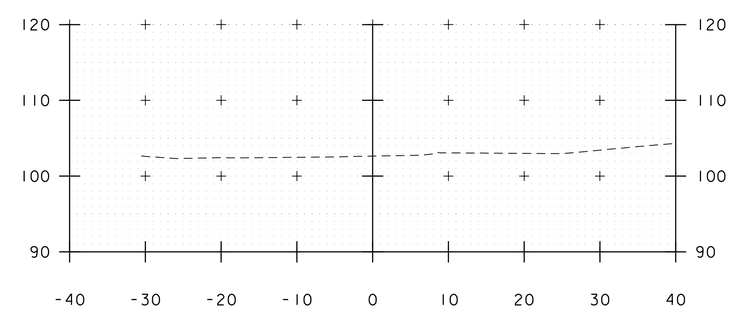

203+75




129+50

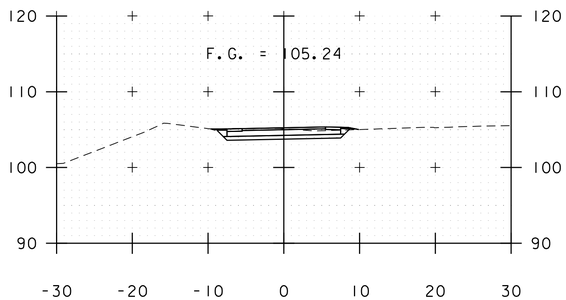



131+00

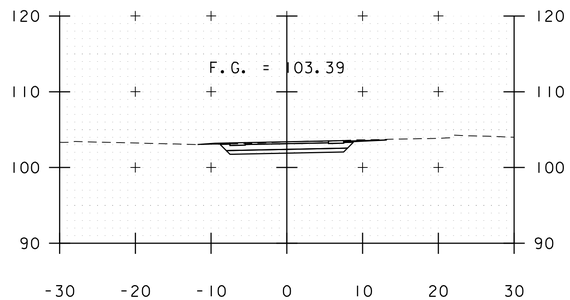


203+50

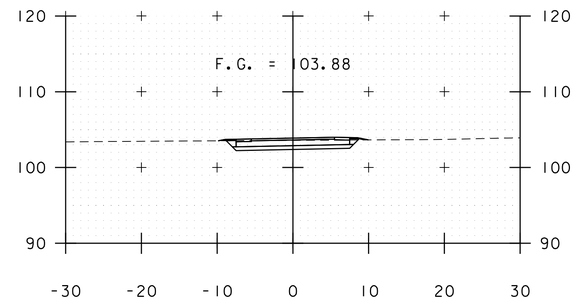
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (1 OF 18) | SHEET 55 OF 116 |



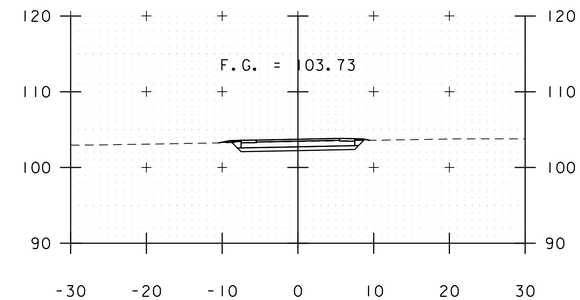

142+50



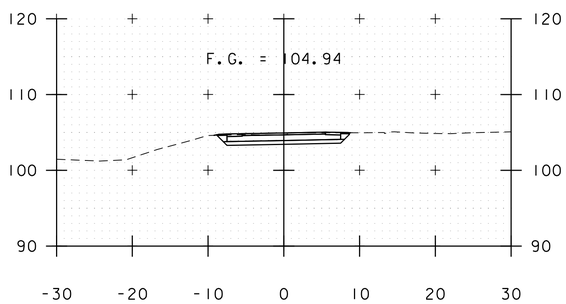

144+00



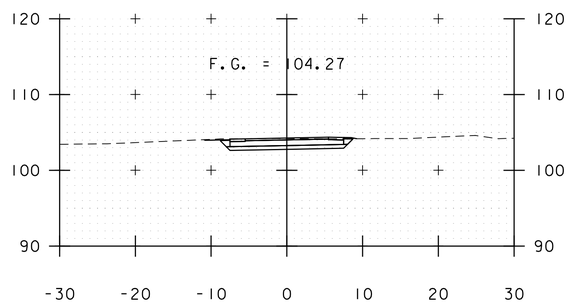

145+50



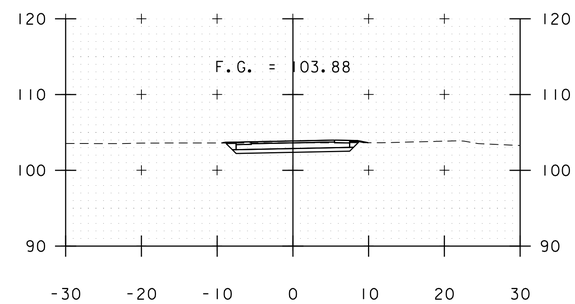

147+00



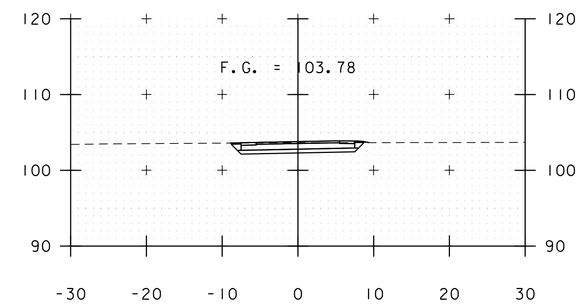

142+00



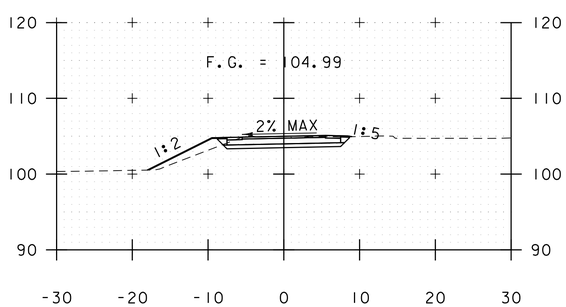

143+50



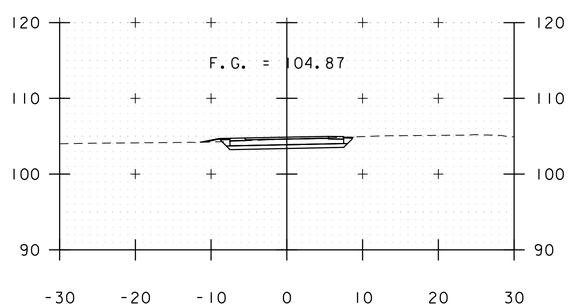

145+00



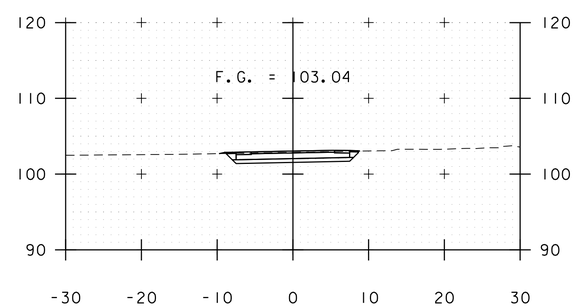

146+50



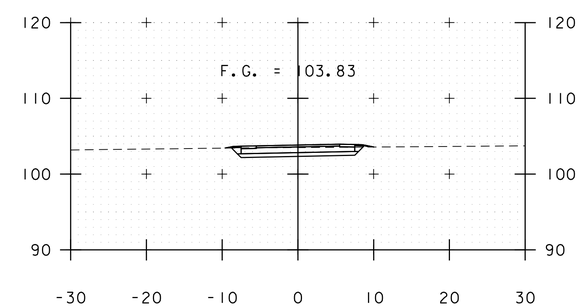

141+50




143+00



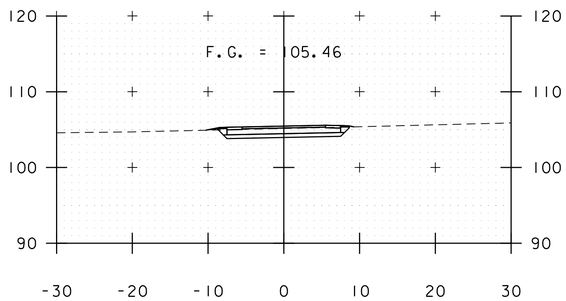

144+50



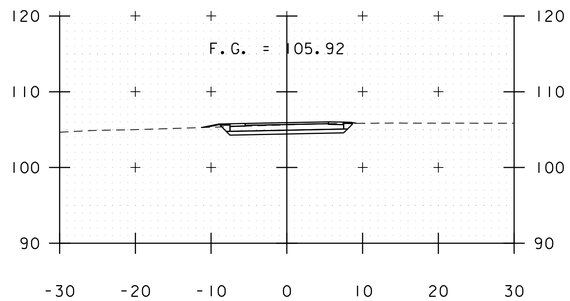

146+00

STA. 141+50 TO STA. 147+00

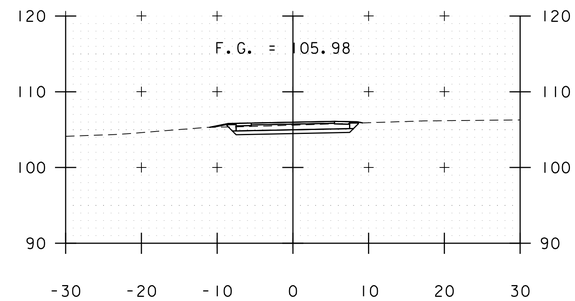
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (2 OF 18) | SHEET 56 OF 116 |



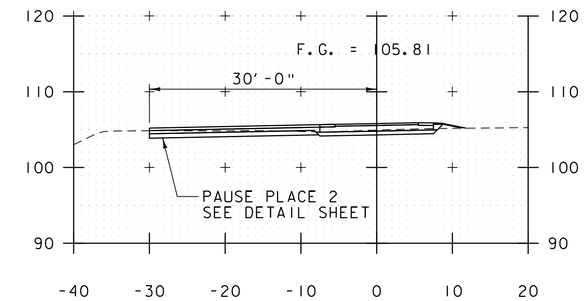

148+50




150+00

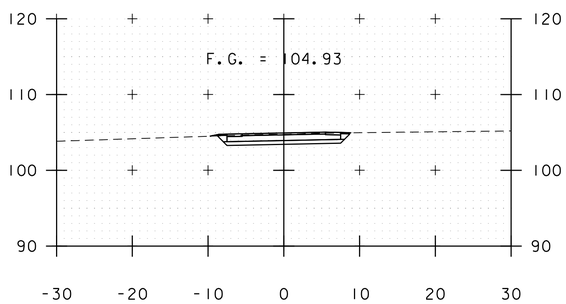



151+50

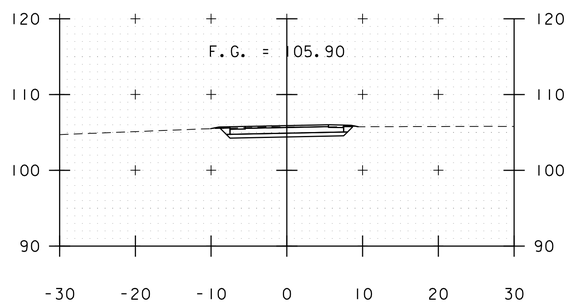



BEGIN PAUSE PLACE 2
STA. 152+73, LT

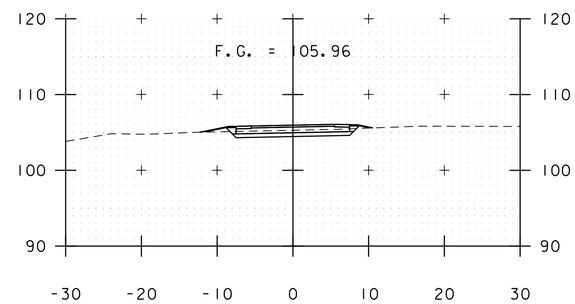
153+00



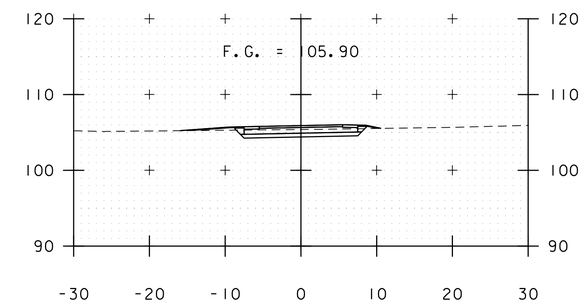

148+00



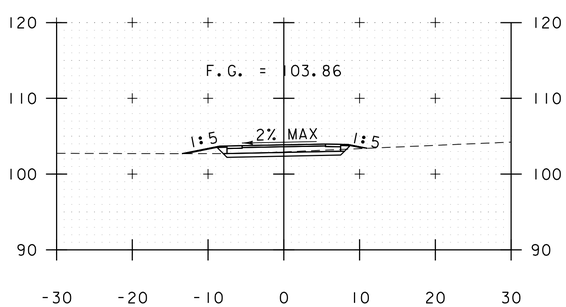

149+50



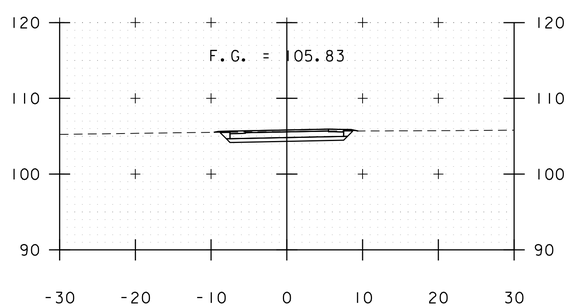

151+00



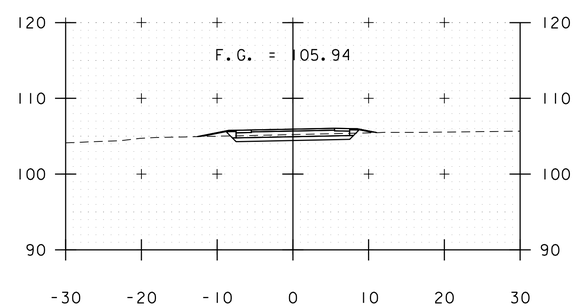

152+50



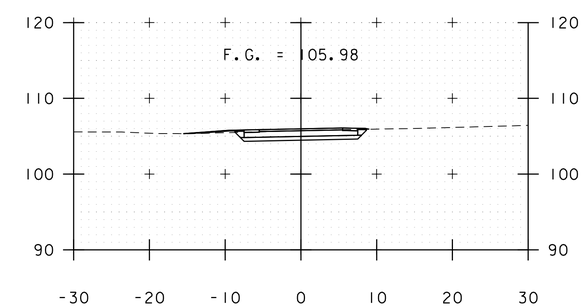

147+50




149+00



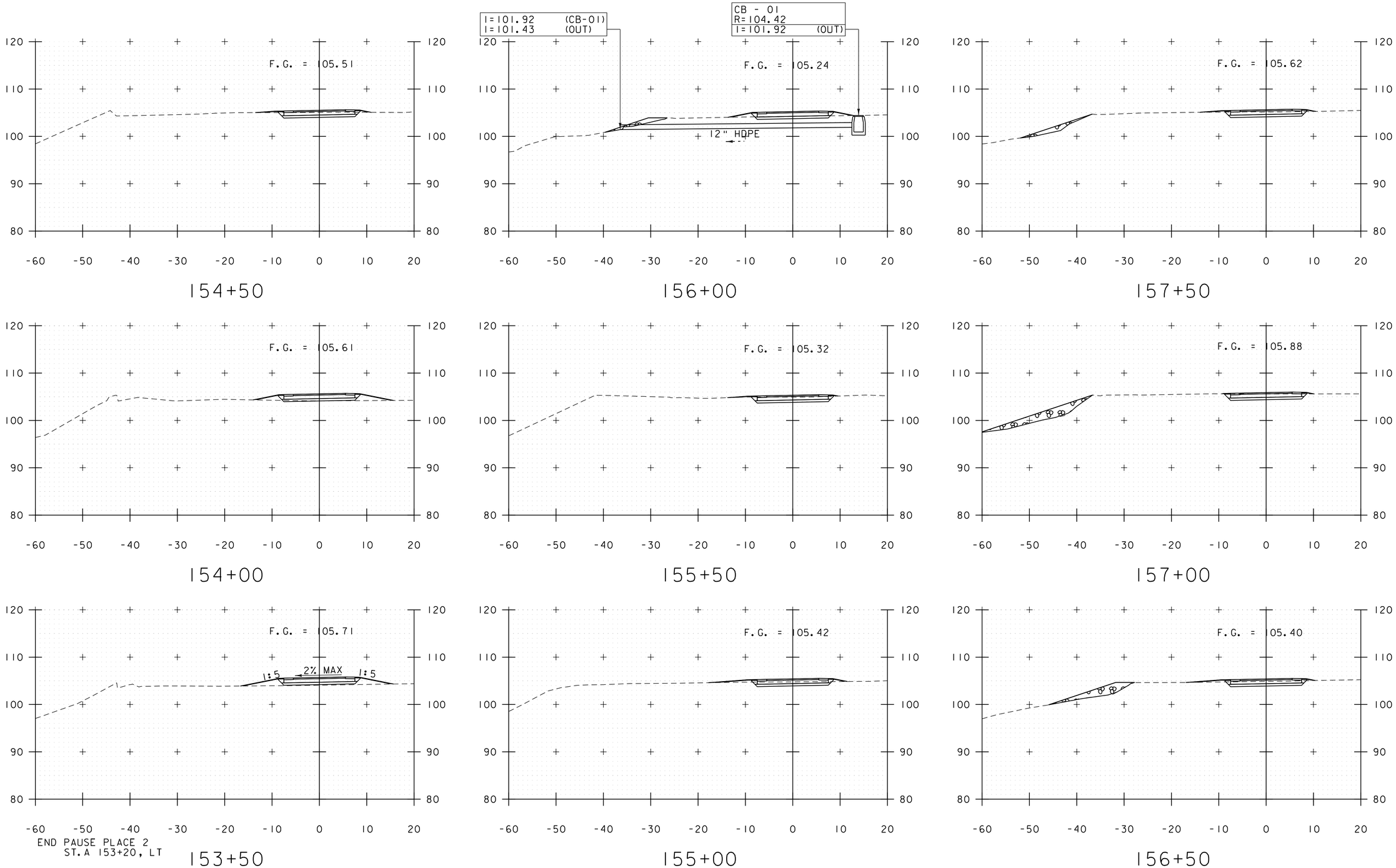

150+50




152+00

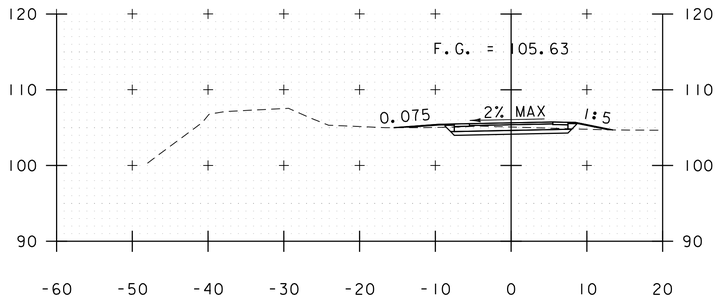
STA. 147+50 TO STA. 153+00

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (3 OF 18) | SHEET 57 OF 116 |

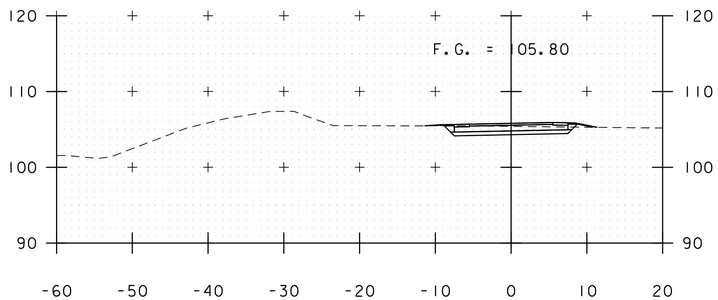



STA. 153+50 TO STA. 157+50

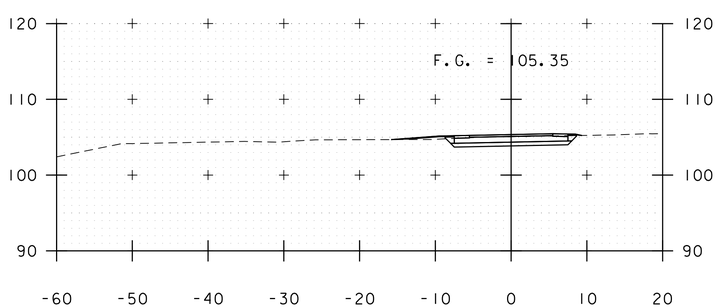
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (4 OF 18) | SHEET 58 OF 116 |



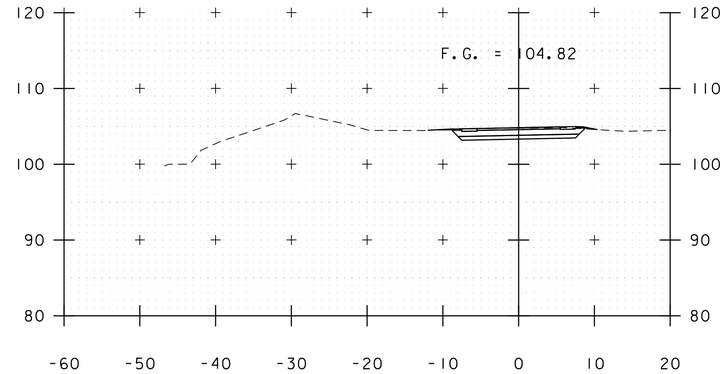

159+00



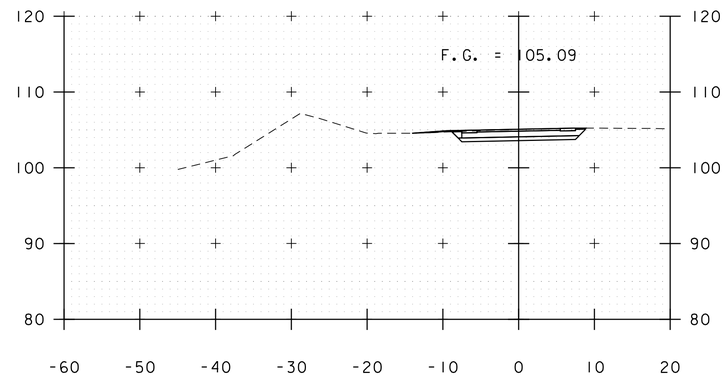

158+50



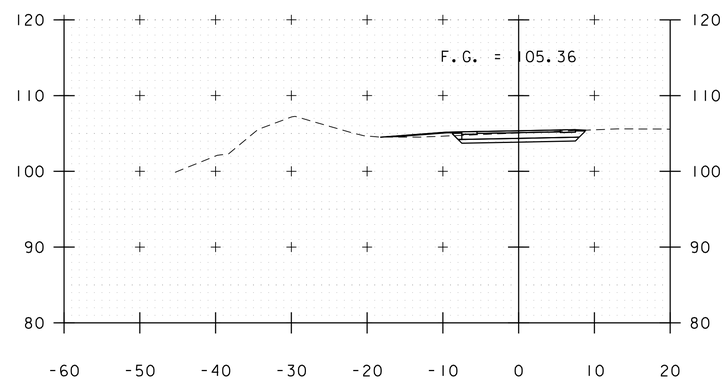

158+00



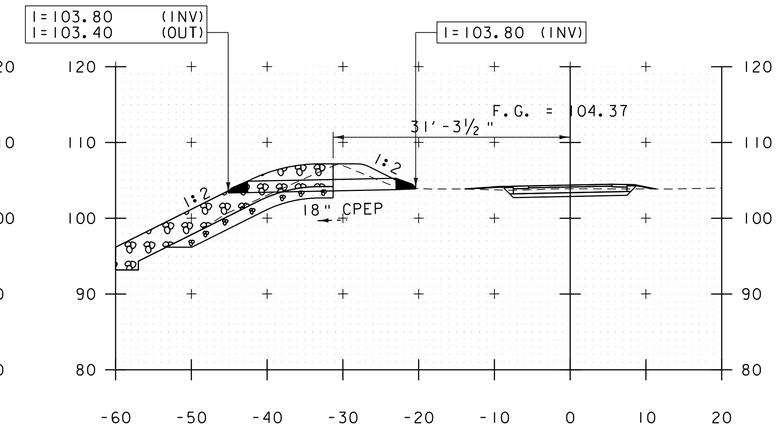

160+50



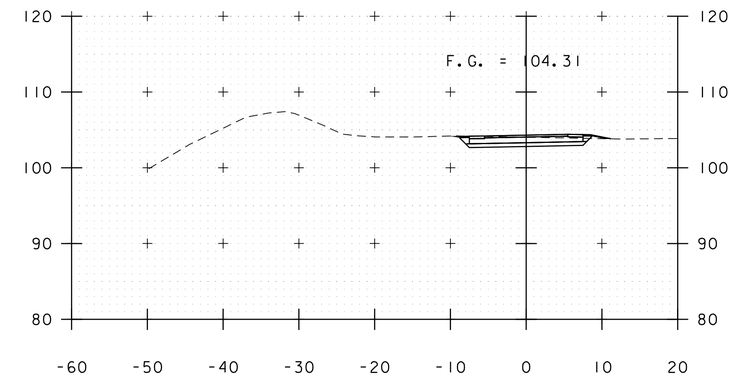

160+00



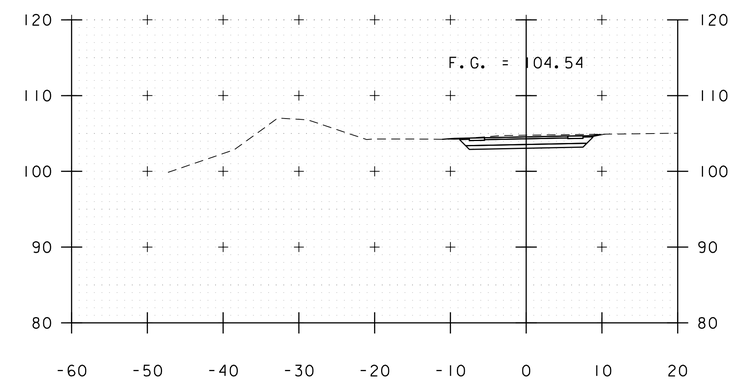

159+50




162+00



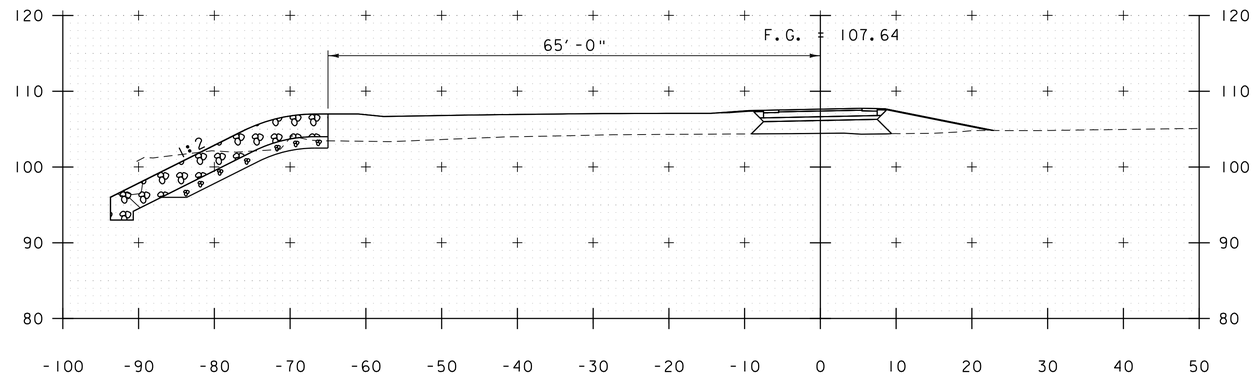

161+50



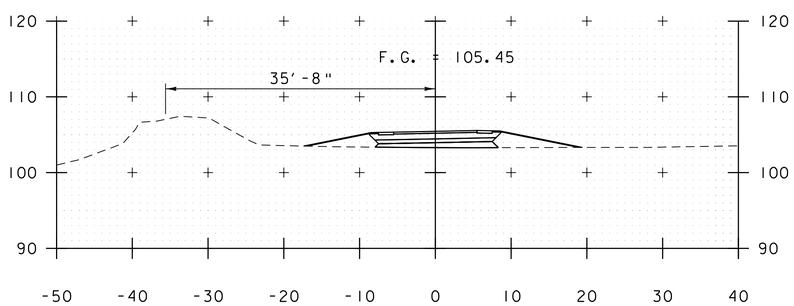

161+00

STA. 158+00 TO STA. 162+00

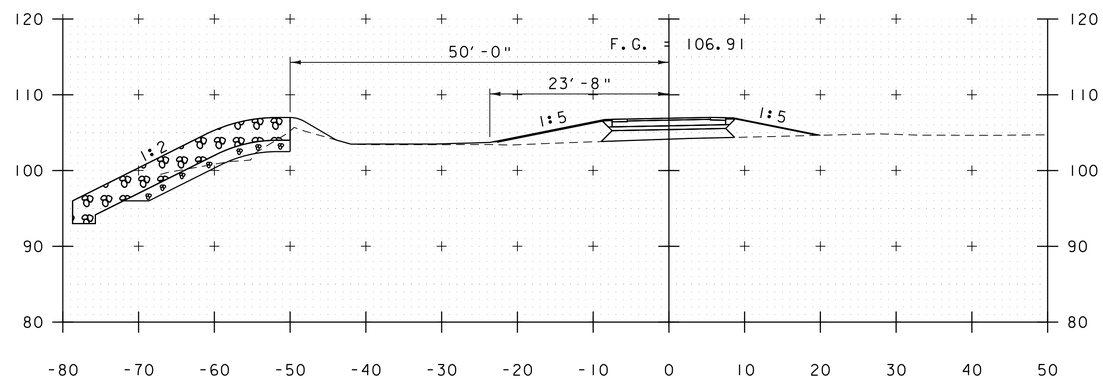
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (5 OF 18) | SHEET 59 OF 116 |



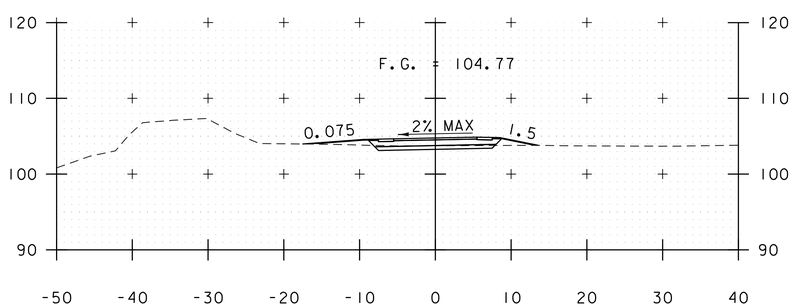

164+50



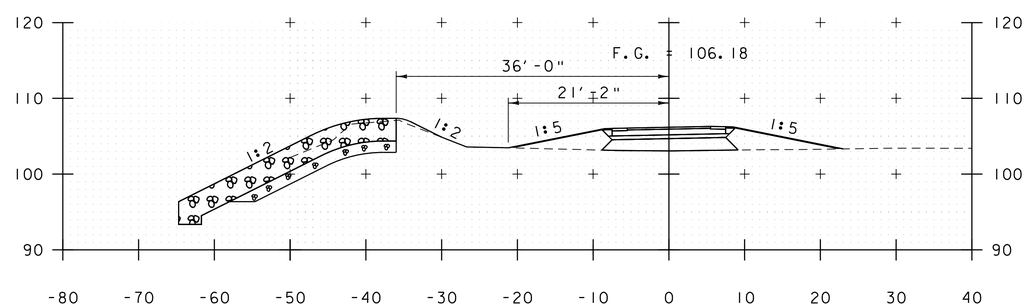

163+00




164+00



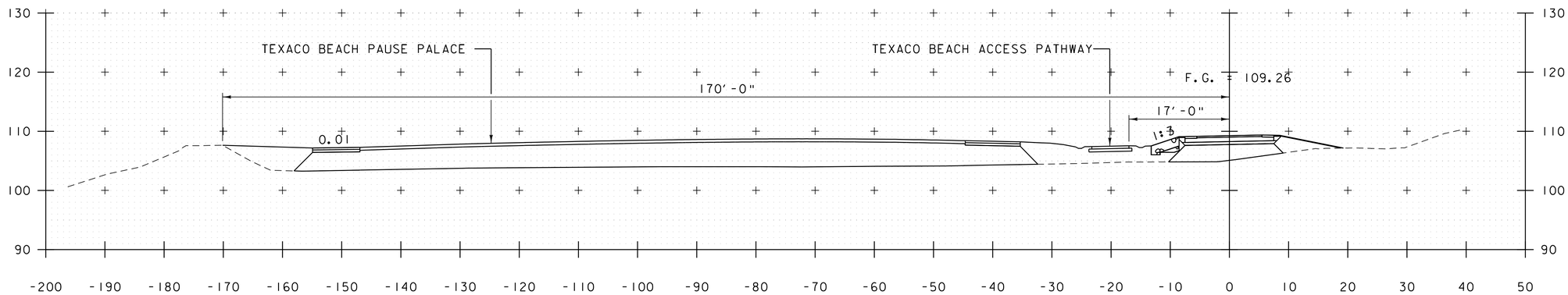

162+50



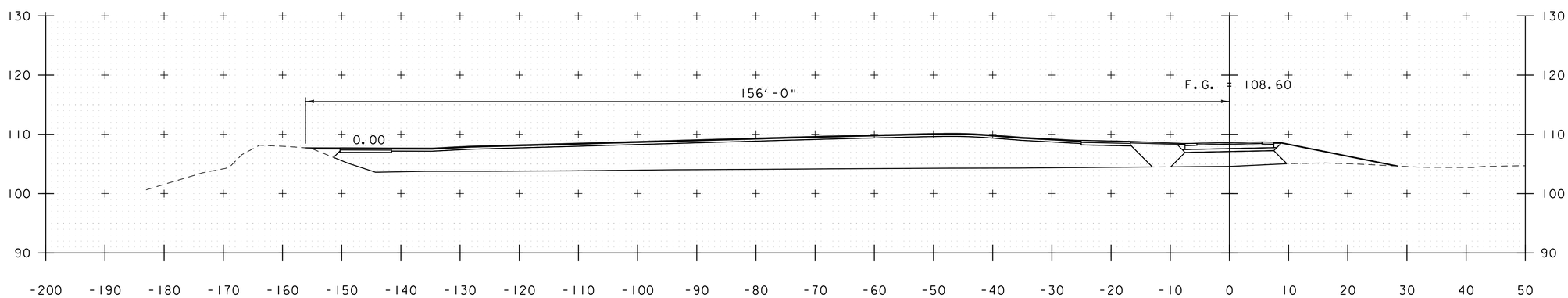

163+50

STA. 162+50 TO STA. 164+50

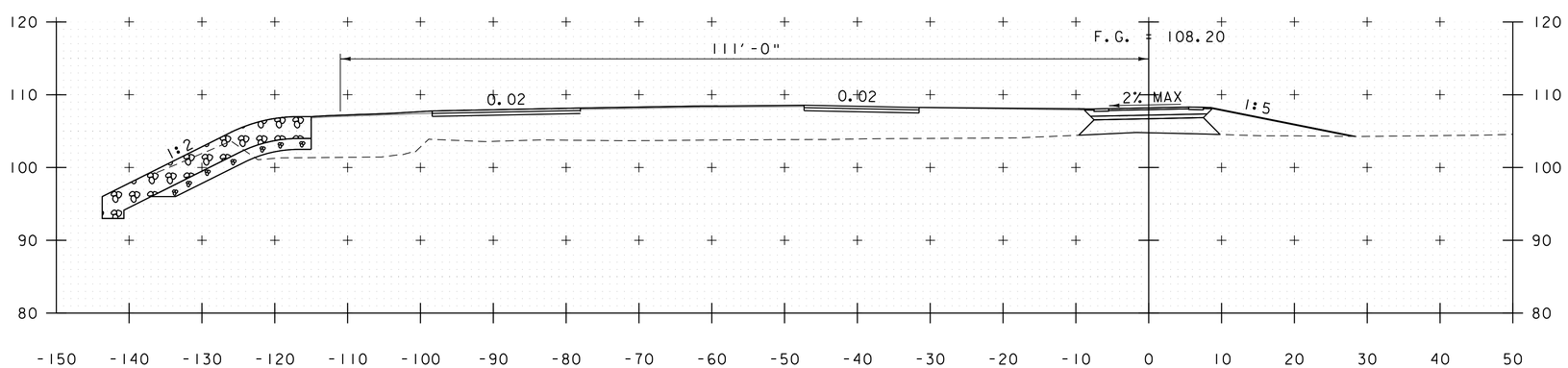
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (6 OF 18) | SHEET 60 OF 116 |




166+00



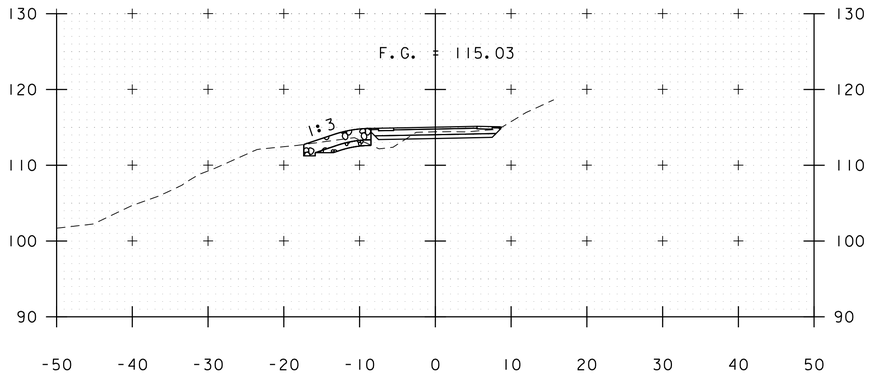

165+50



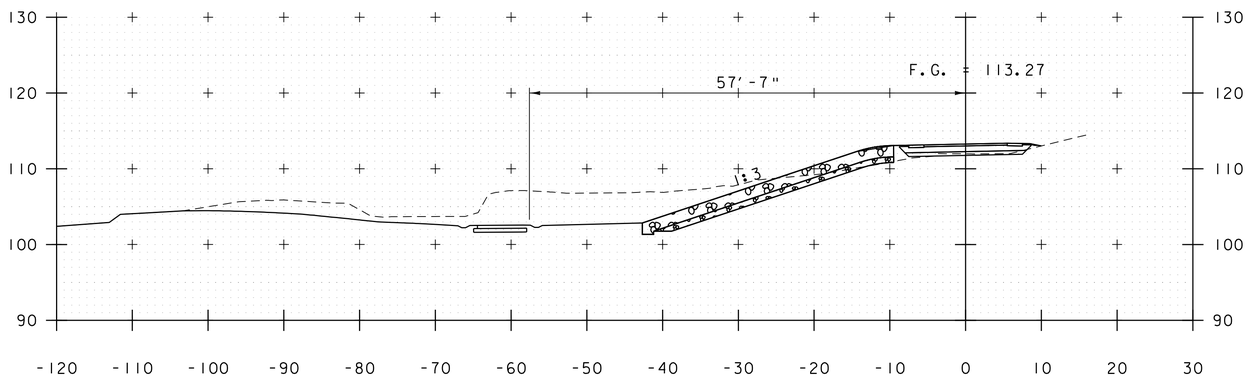

165+00

STA. 165+00 TO STA. 166+00

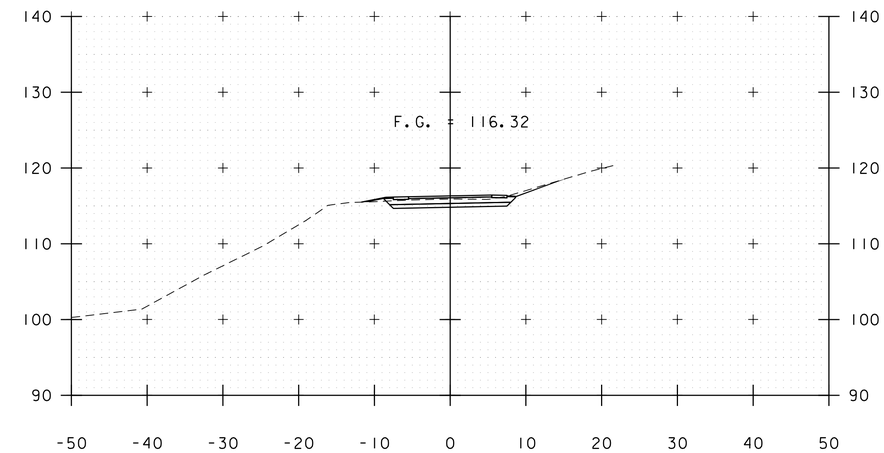
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (7 OF 18) | SHEET 61 OF 116 |



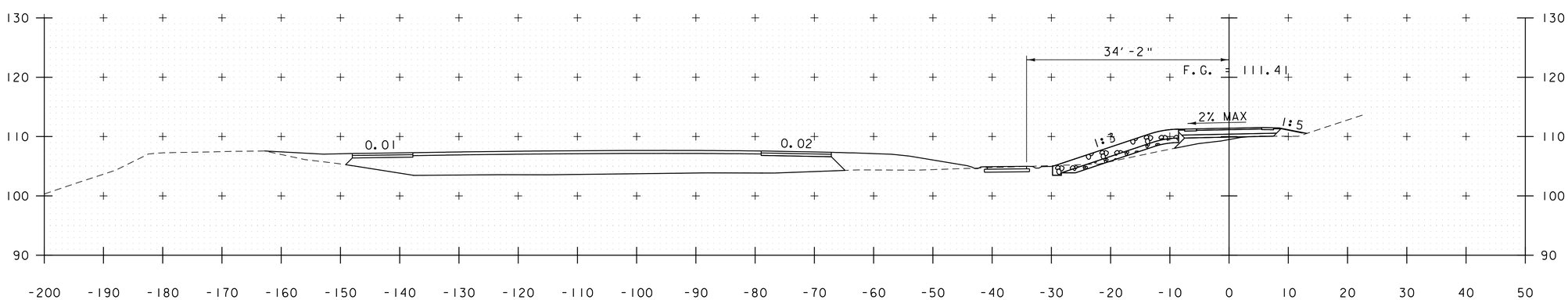

167+50




167+00



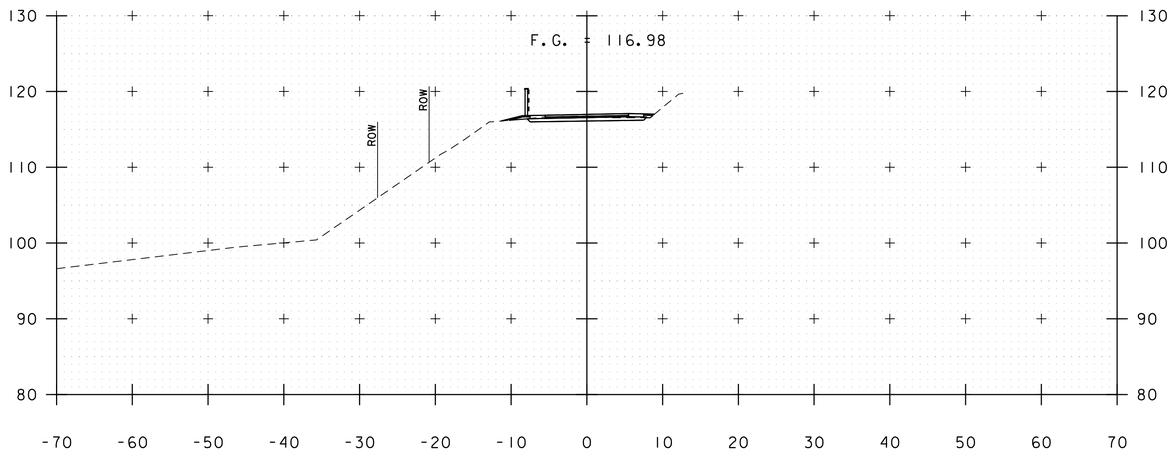

168+00



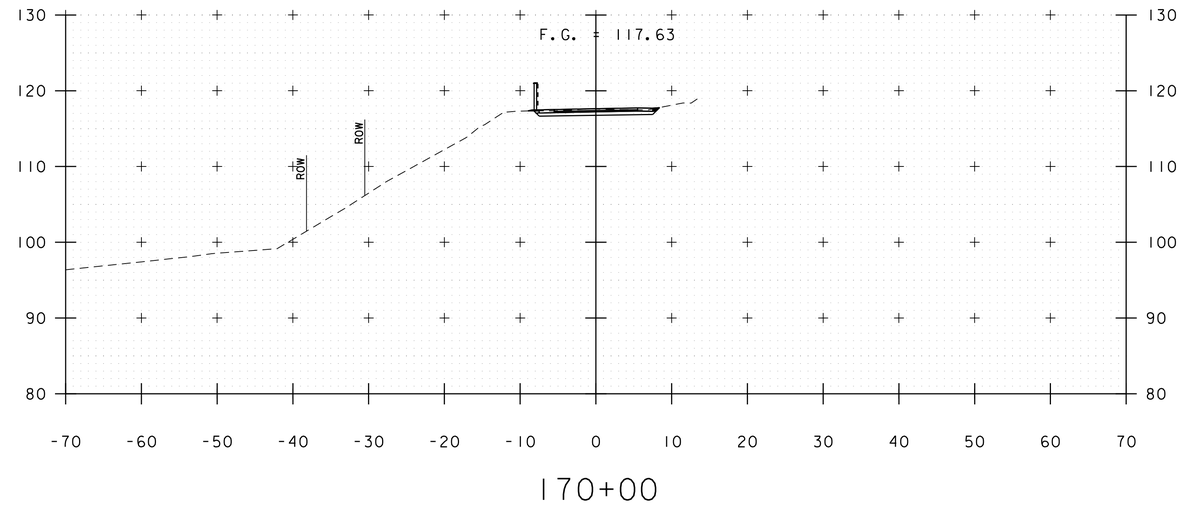

166+50

STA. 166+50 TO STA. 168+00

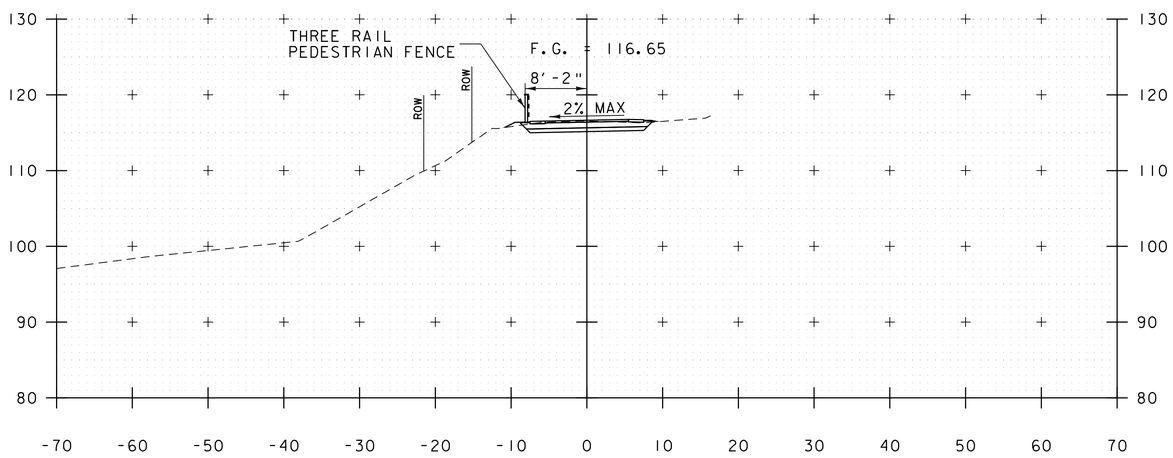
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (8 OF 18) | SHEET 62 OF 116 |



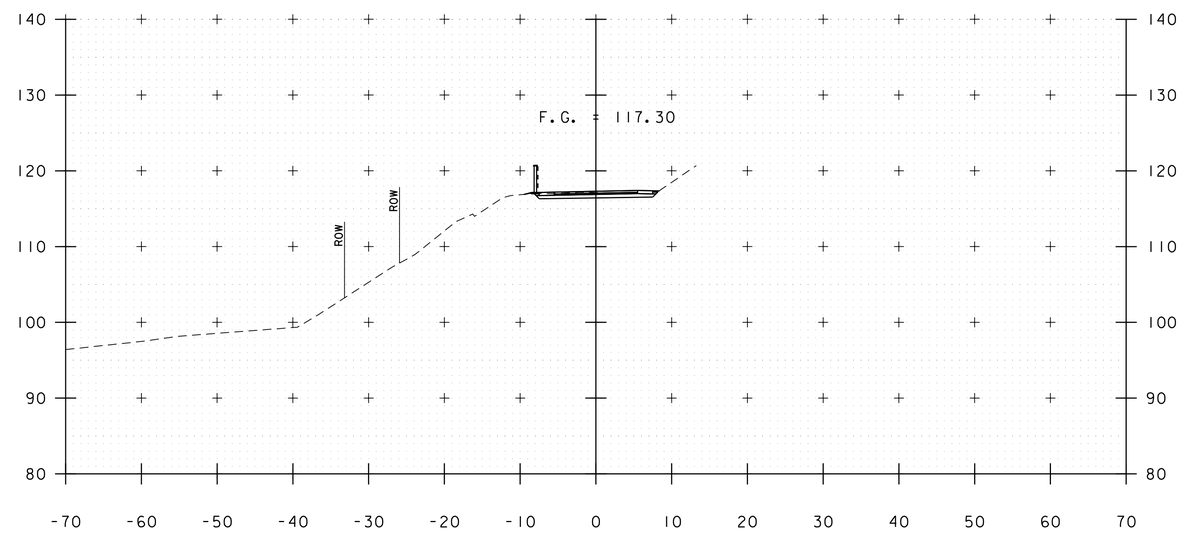

169+00




170+00



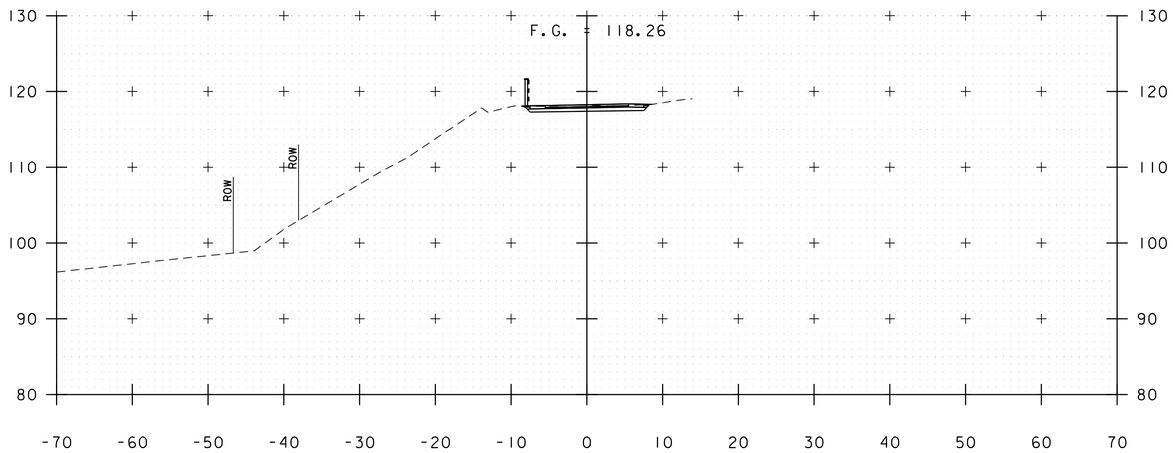

168+50



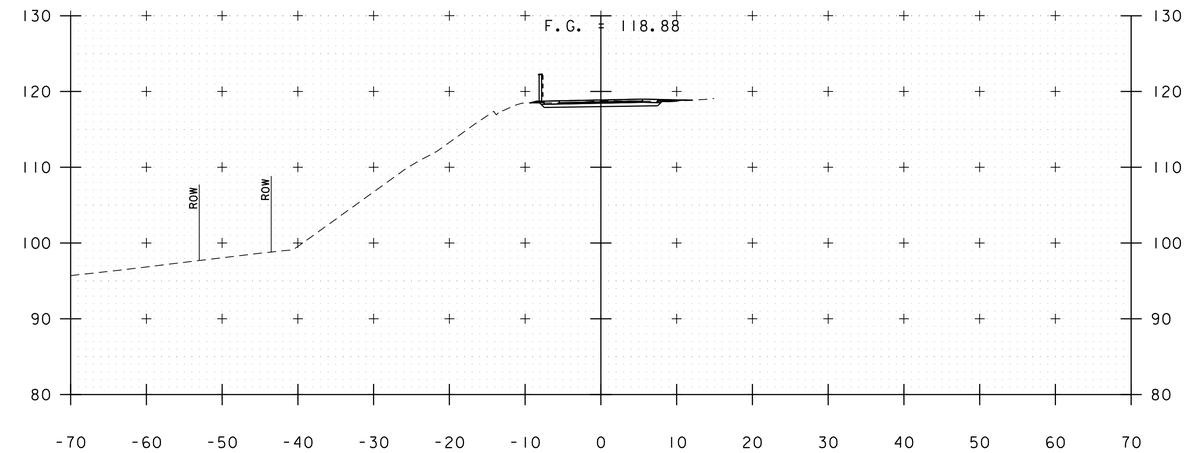

169+50

STA. 168+50 TO STA. 170+00

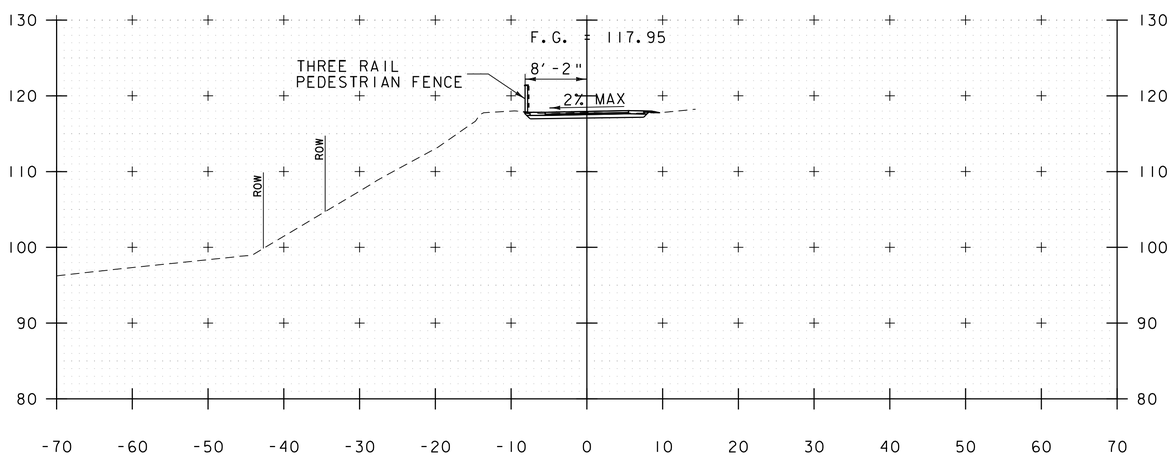
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (9 OF 18) | SHEET 63 OF 116 |



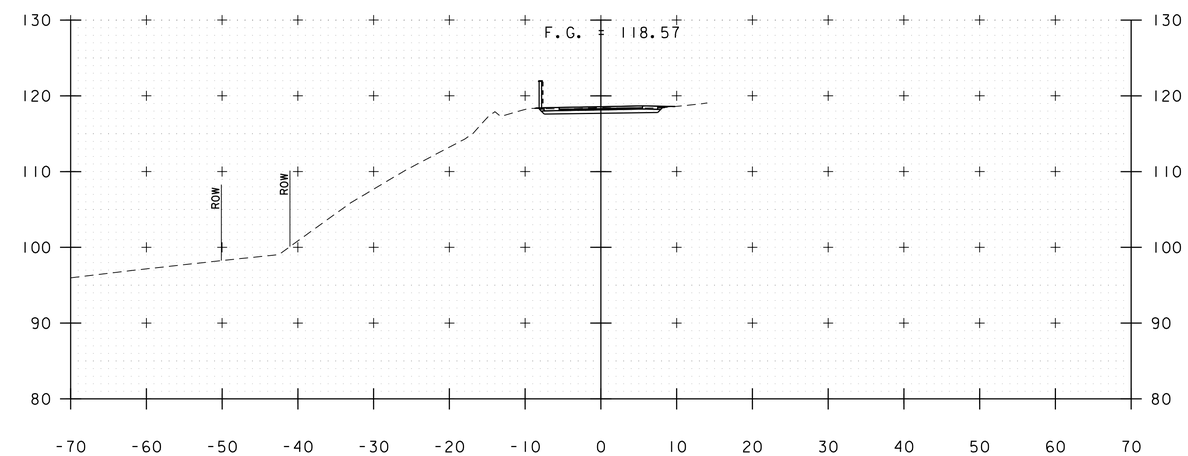

171+00




172+00



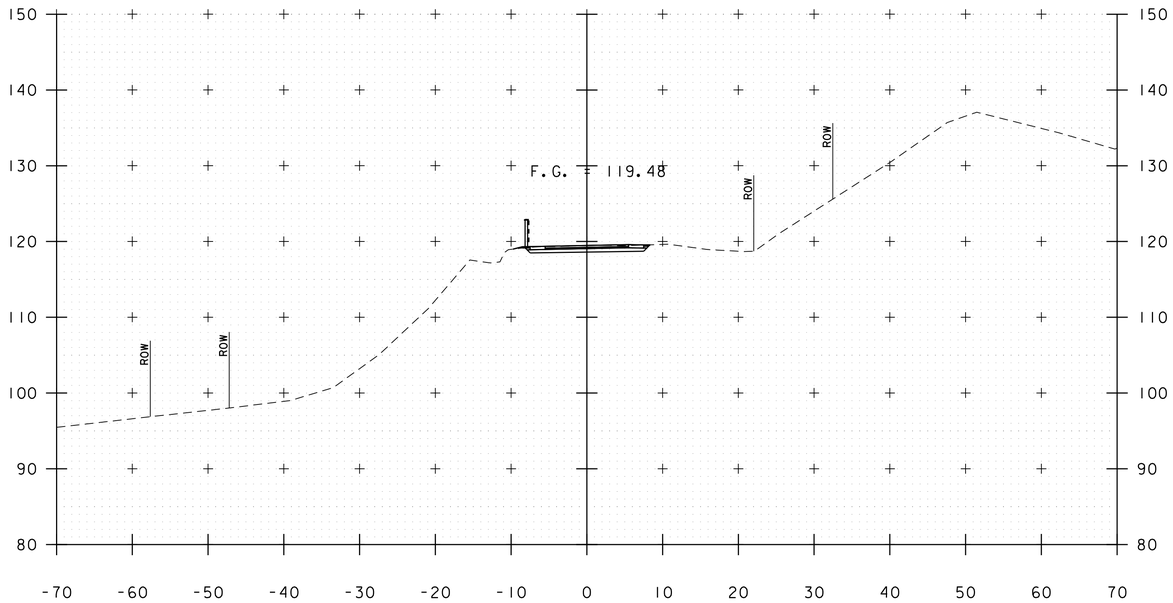

170+50



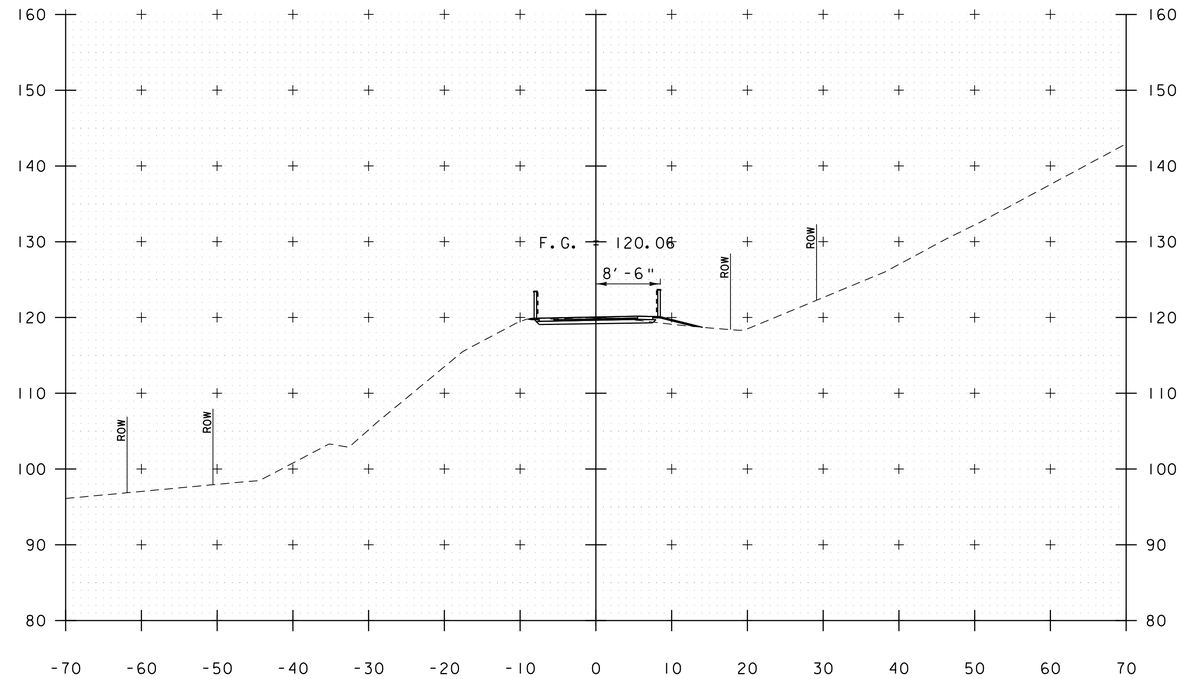

171+50

STA. 170+50 TO STA. 172+00

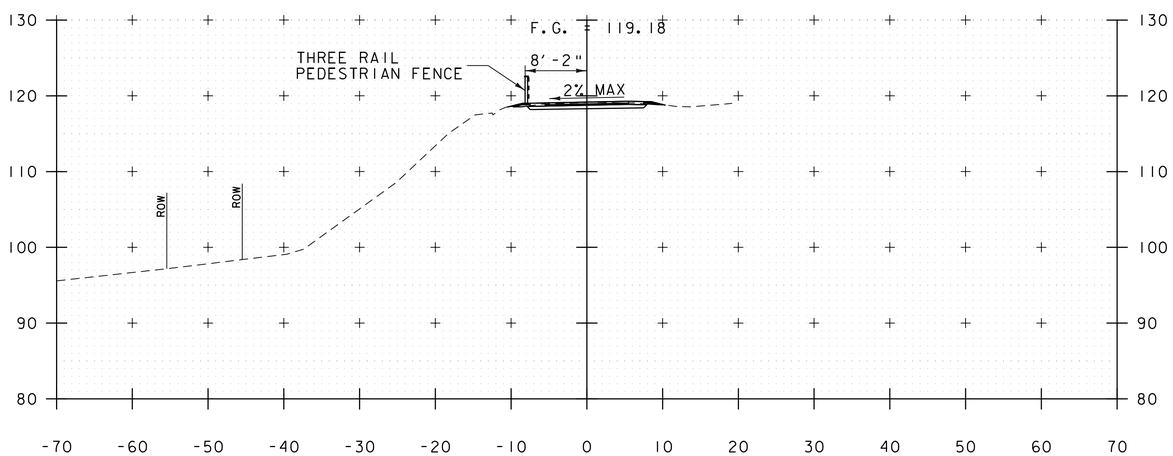
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (10 OF 18) | SHEET 64 OF 116 |



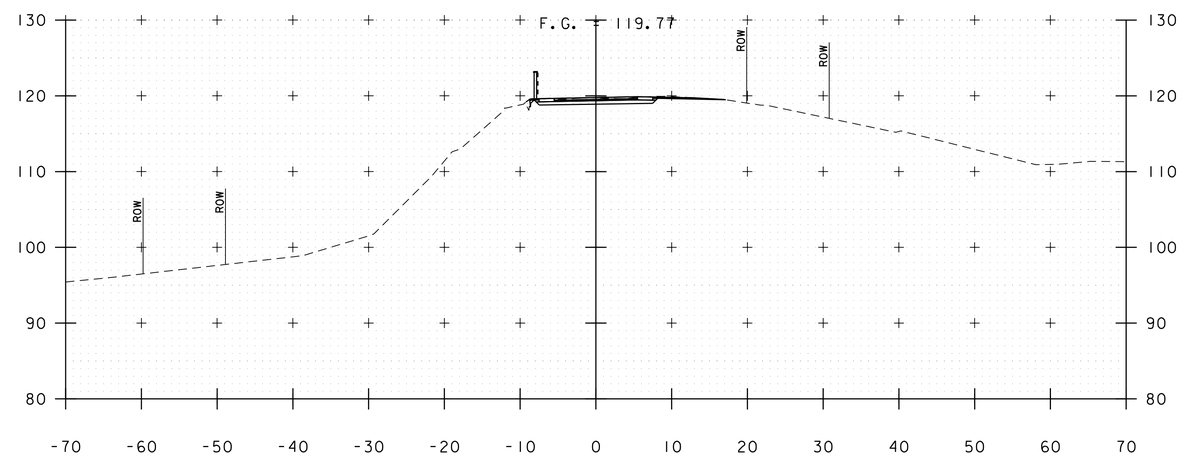

173+00




174+00



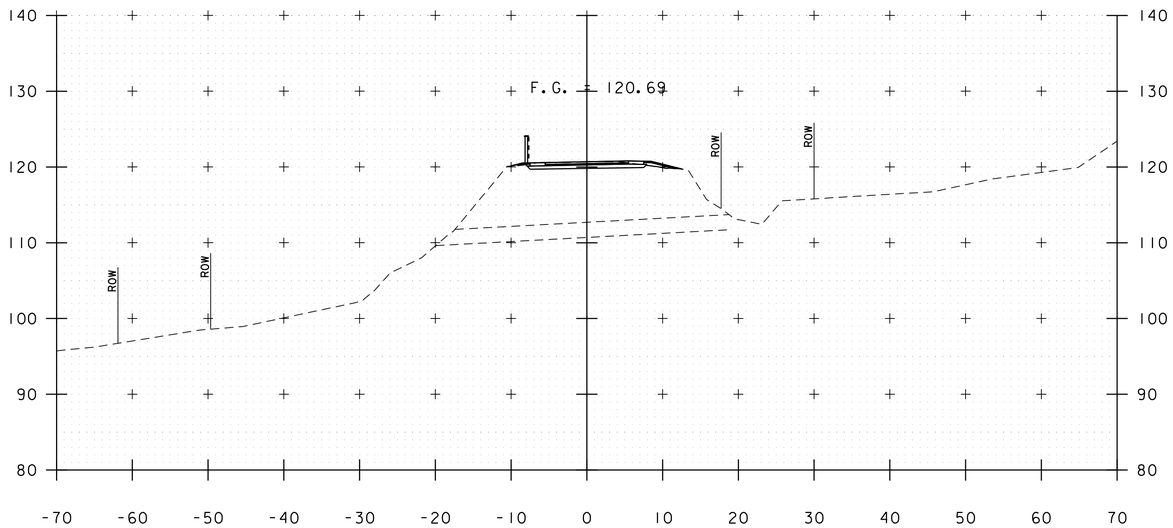

172+50



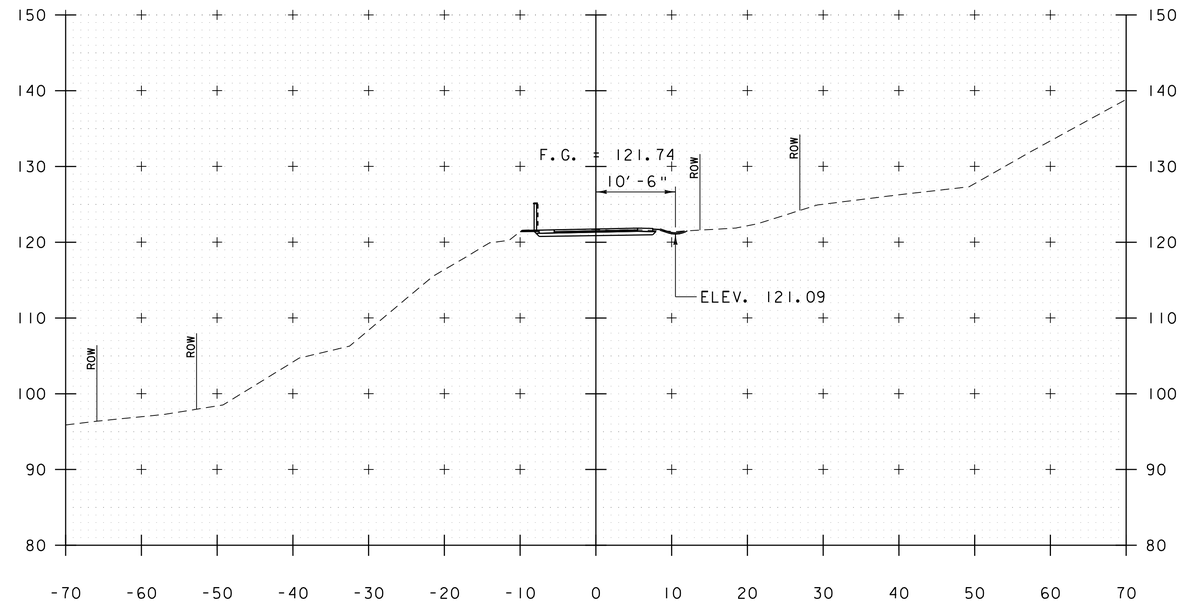

173+50

STA. 172+50 TO STA. 174+00

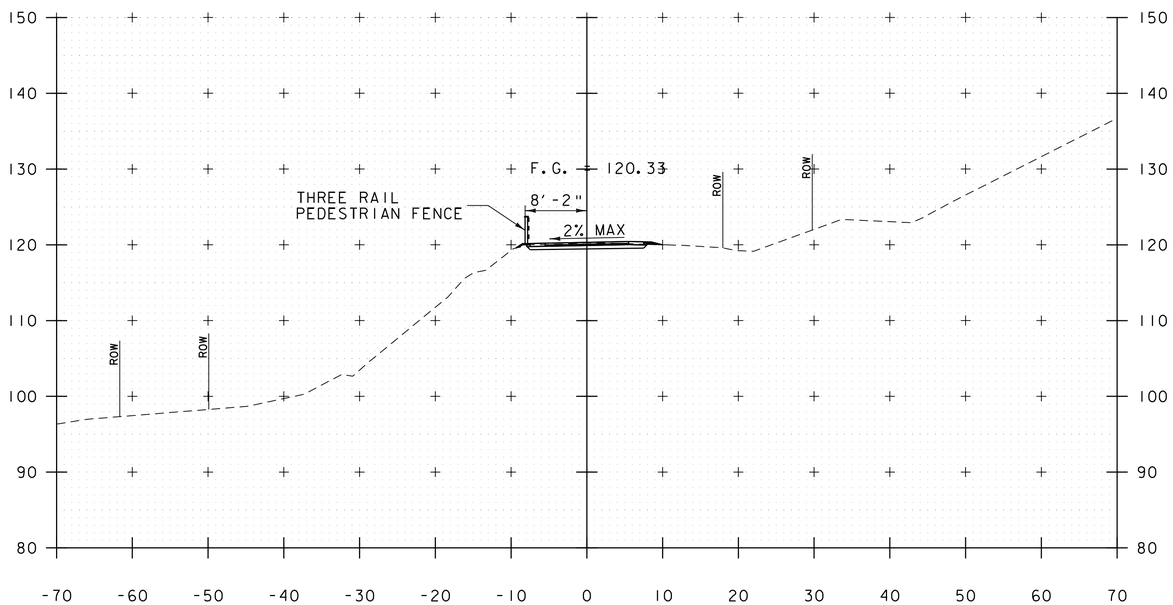
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (11 OF 18) | SHEET 65 OF 116 |



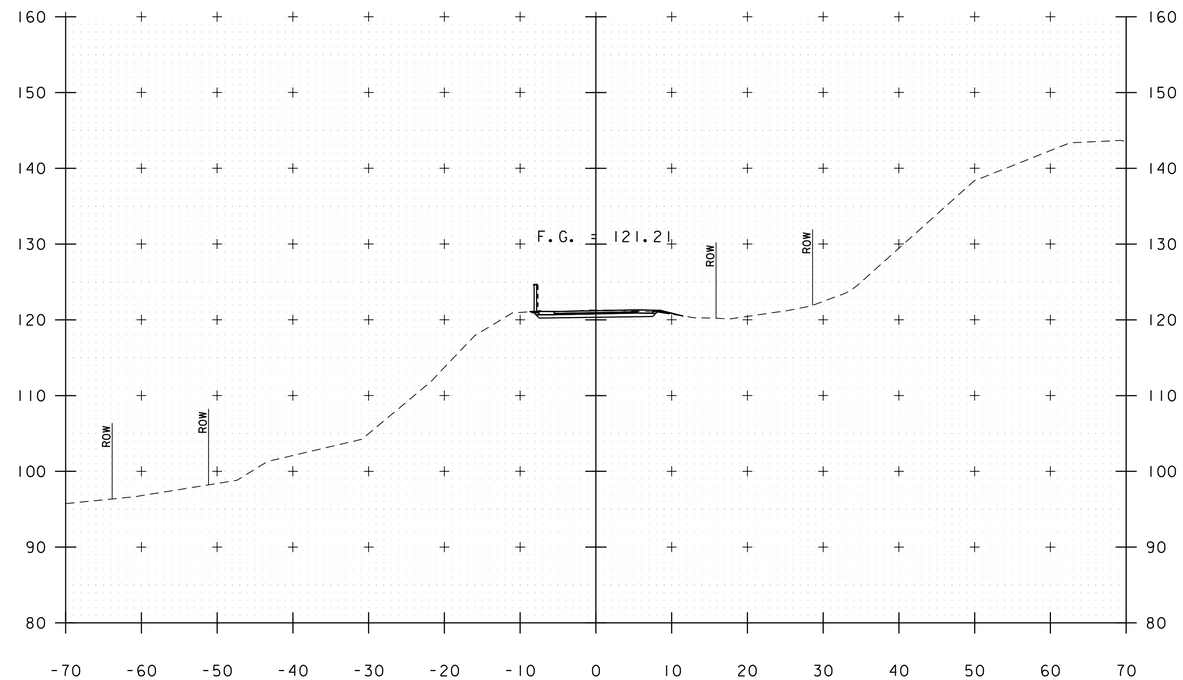

175+00




176+00



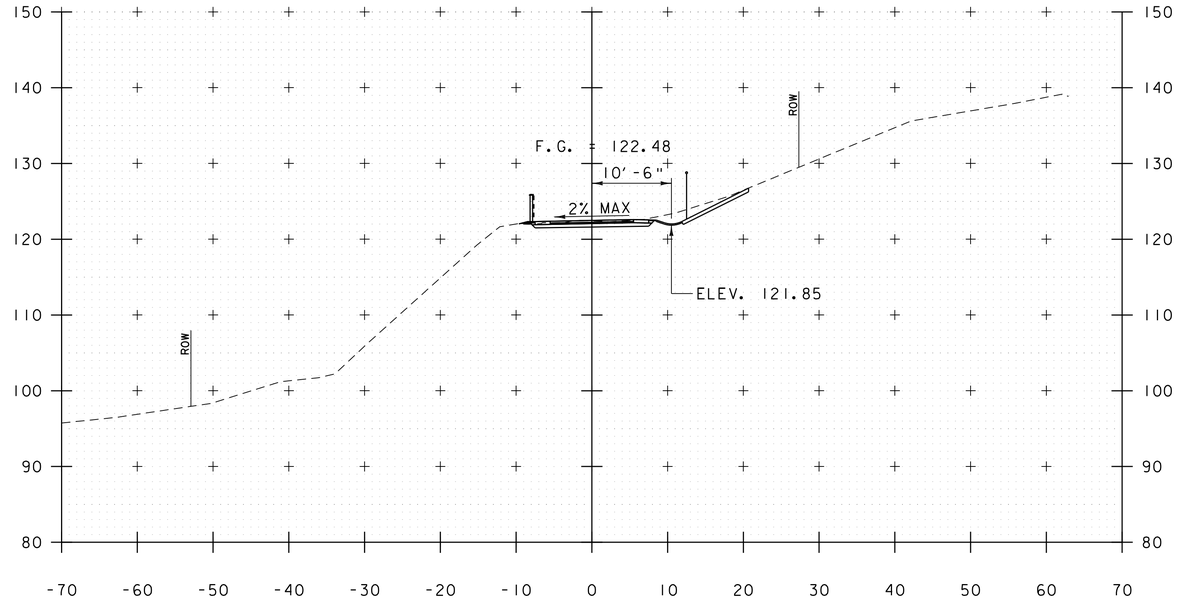

174+50



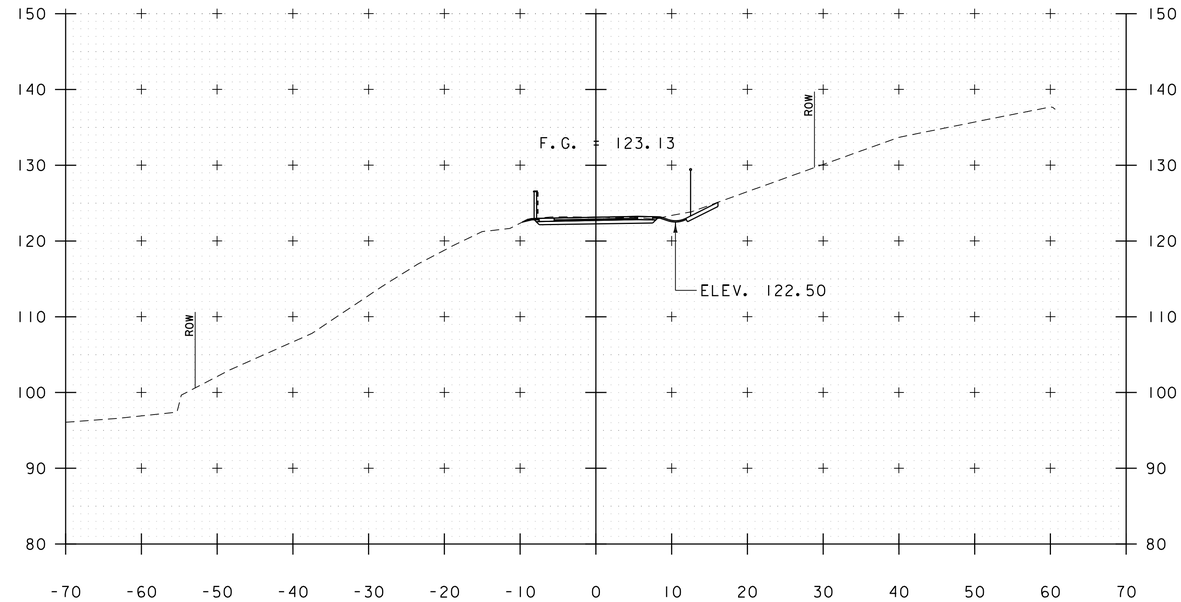

175+50

STA. 174+50 TO STA. 176+00

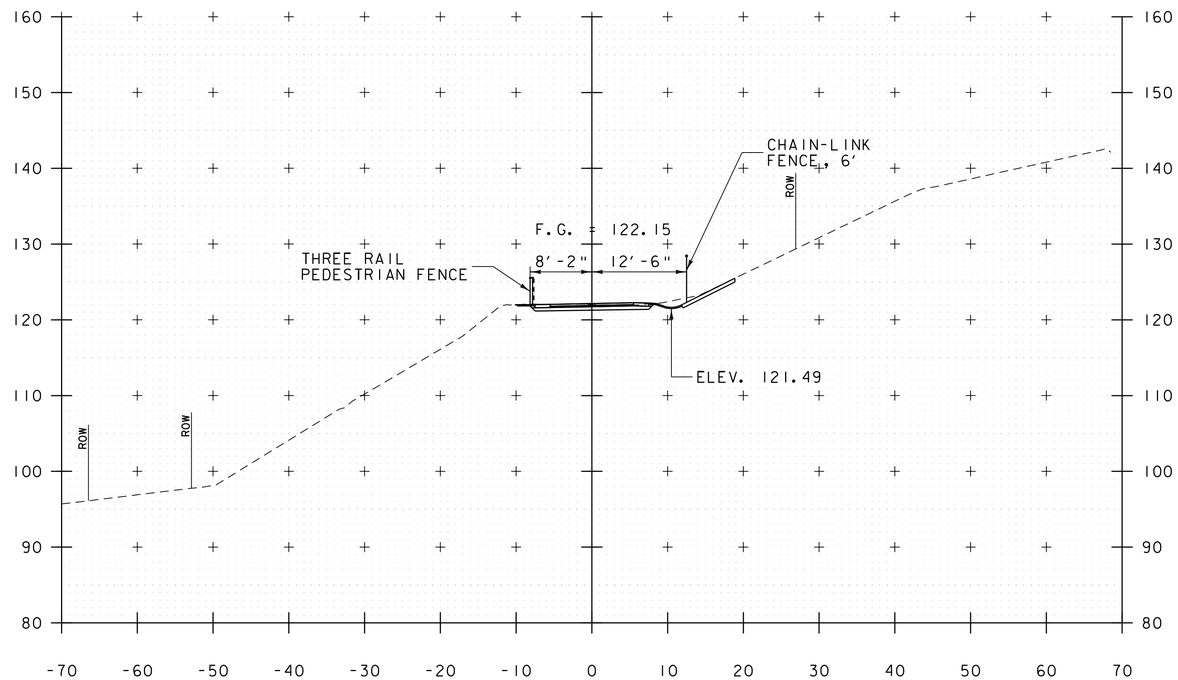
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (12 OF 18) | SHEET 66 OF 116 |



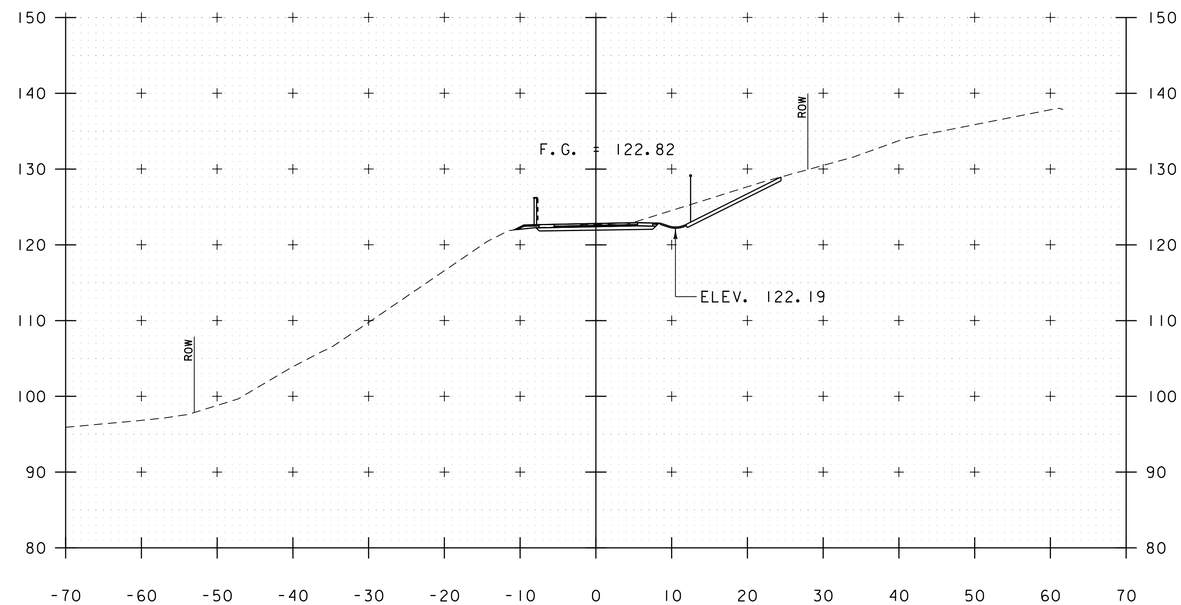

177+00




178+00



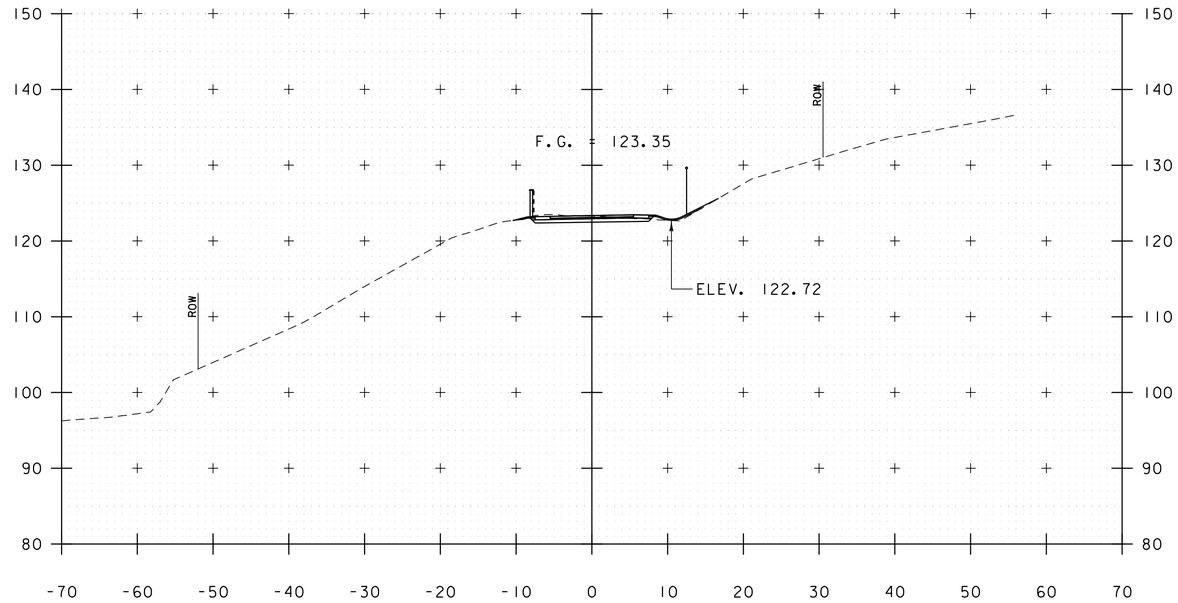

176+50



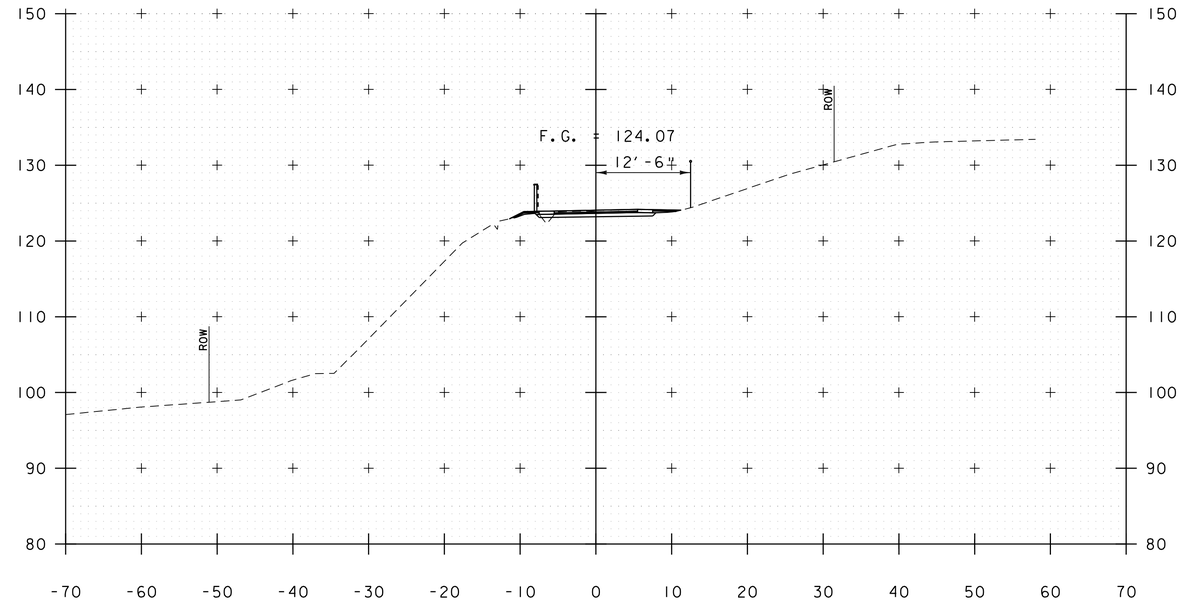

177+50

STA. 176+50 TO STA. 178+00

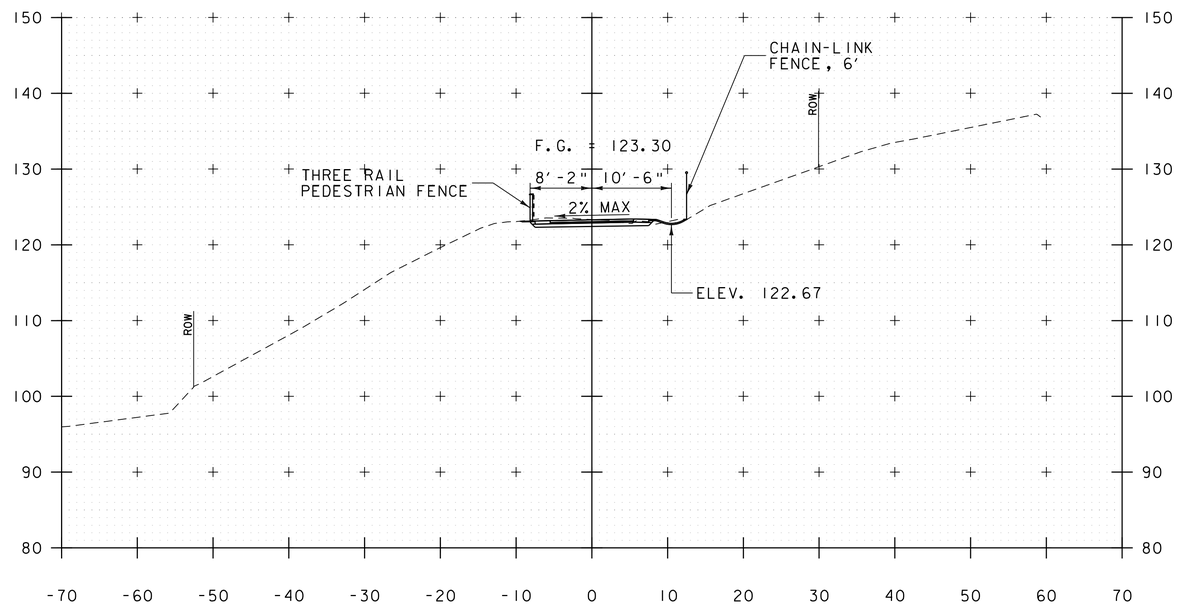
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (13 OF 18) | SHEET 67 OF 116 |



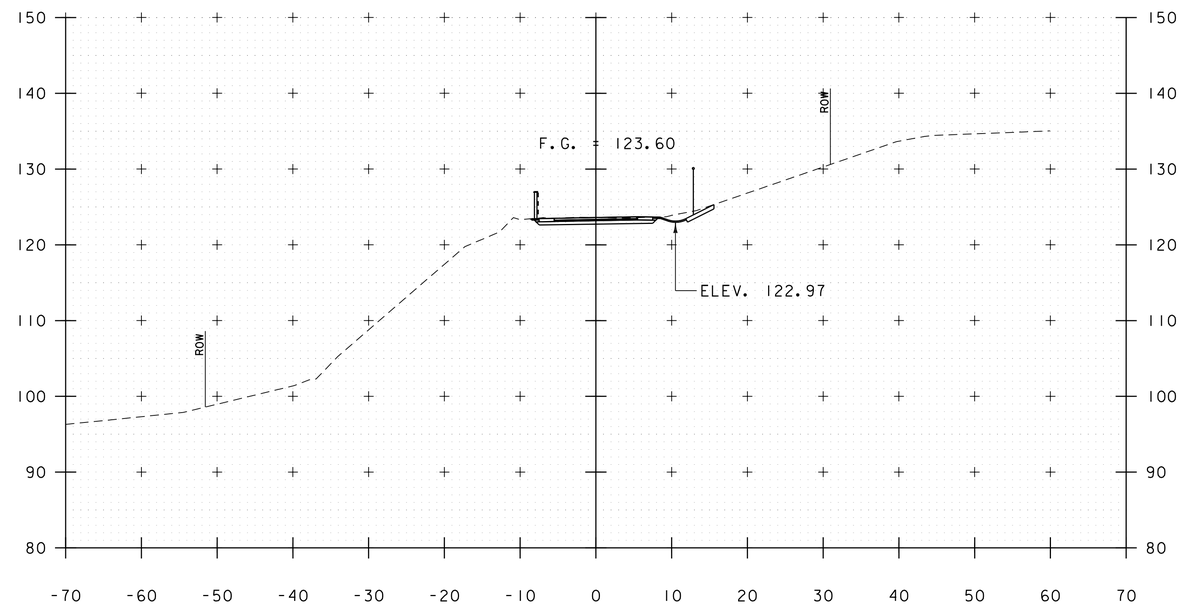

179+00




180+00



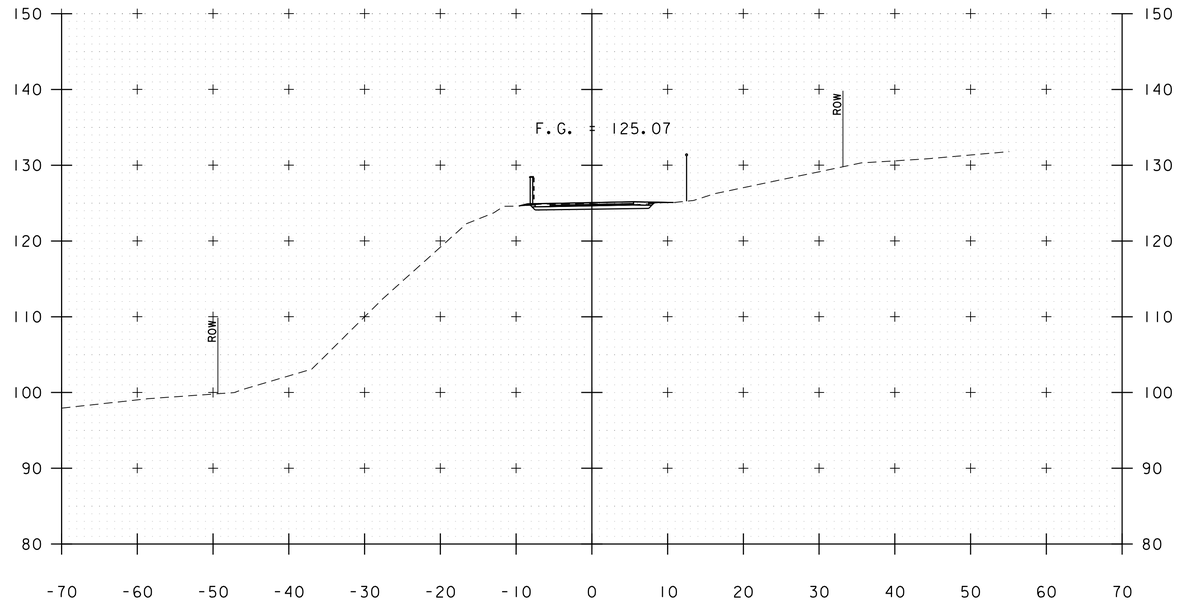

178+50



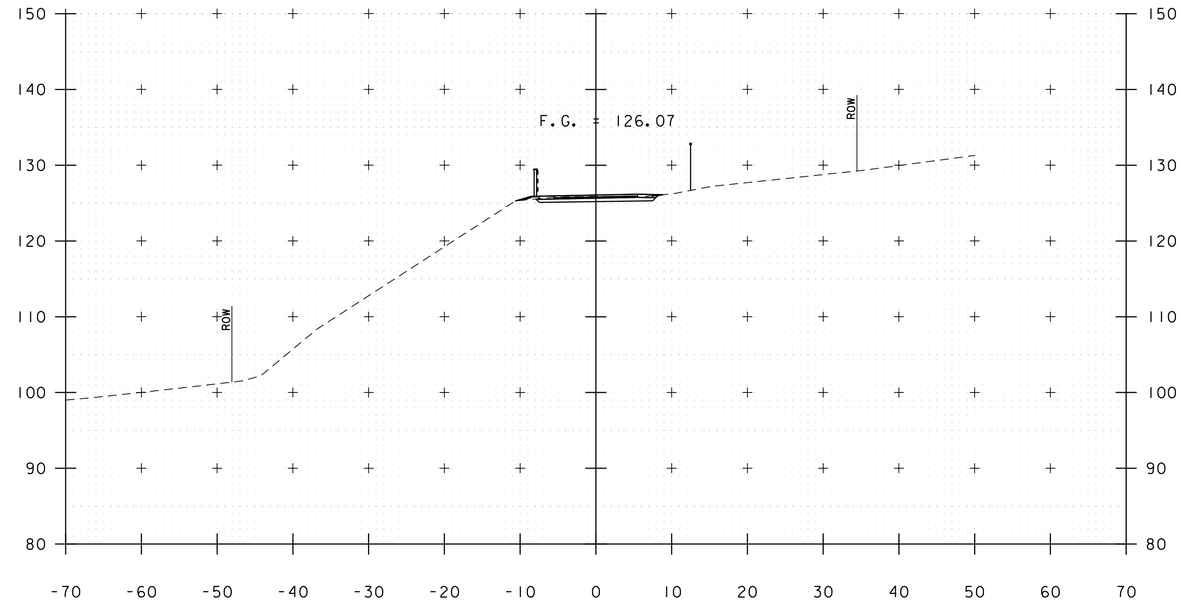

179+50

STA. 178+50 TO STA. 180+00

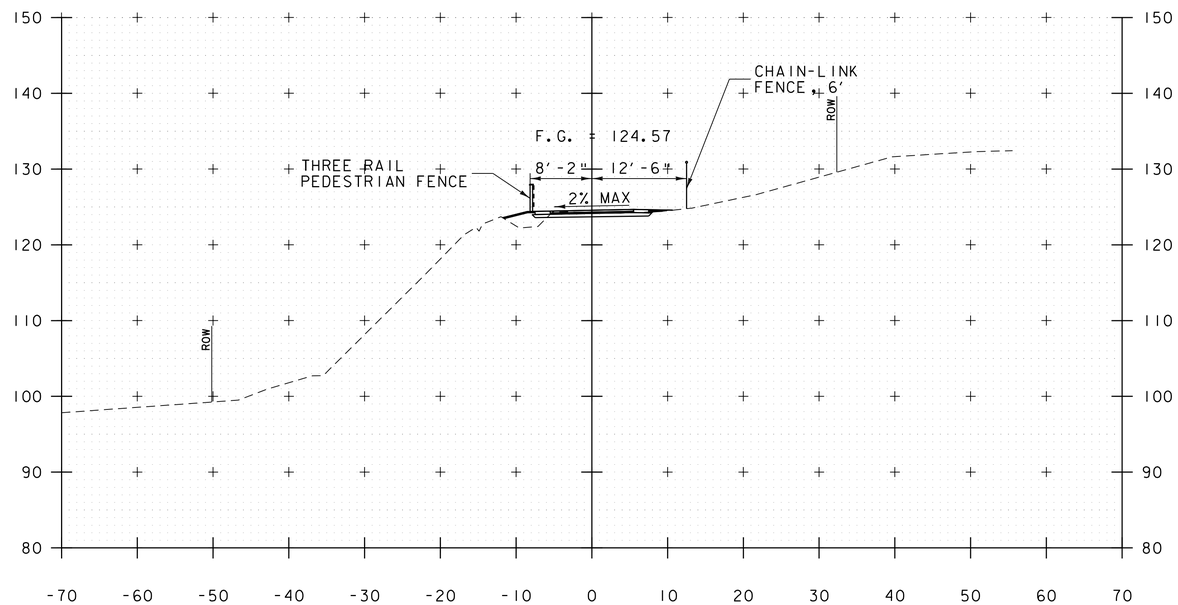
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (14 OF 18) | SHEET 68 OF 116 |



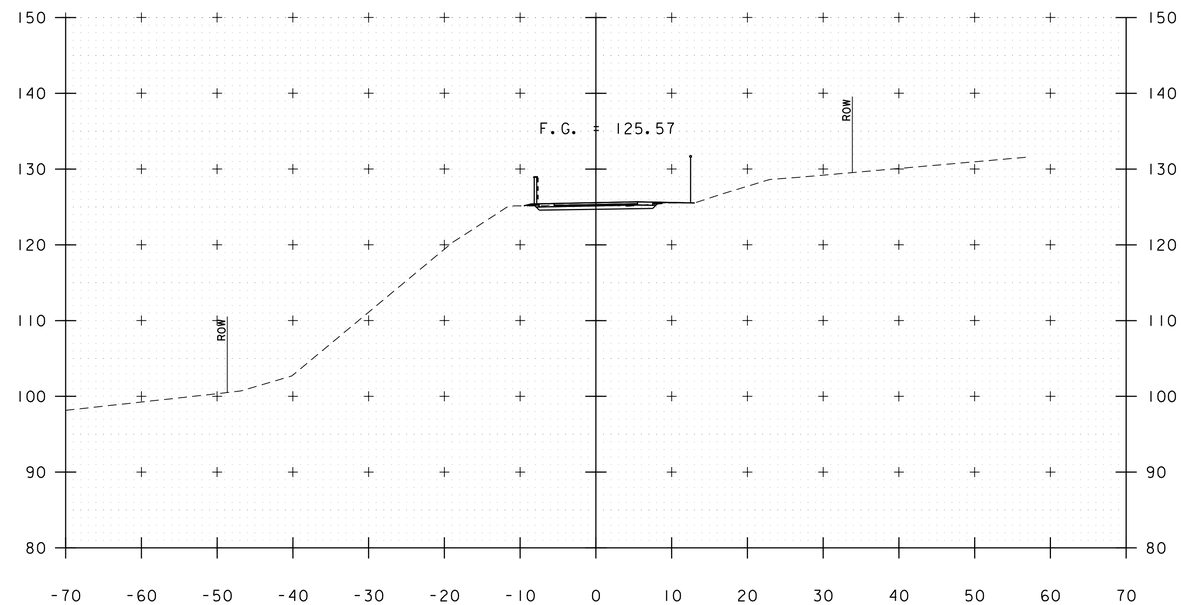

181+00




182+00



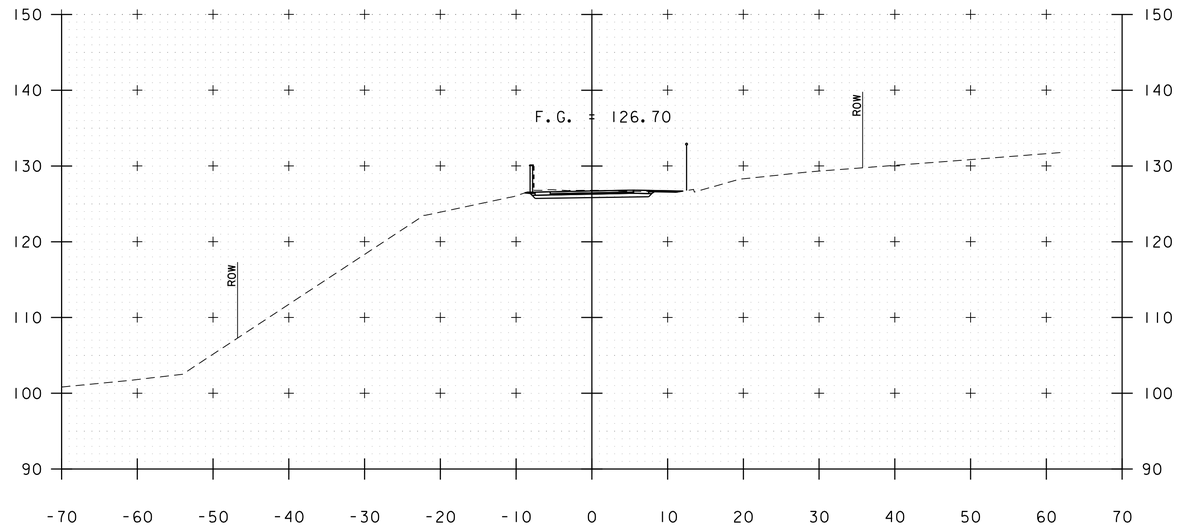

180+50



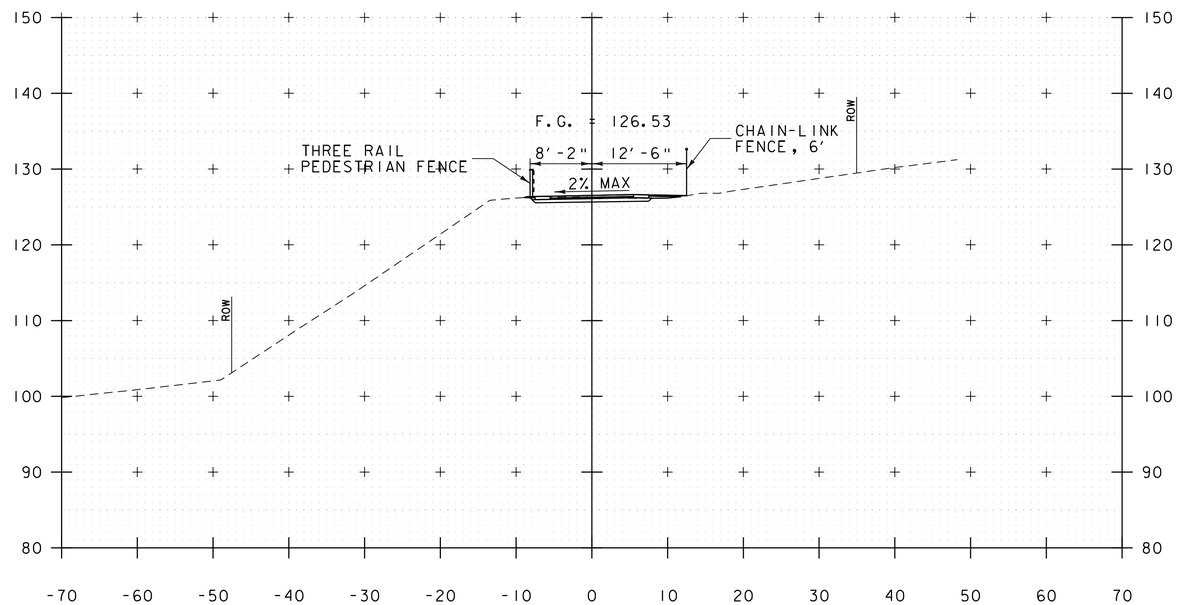

181+50

STA. 180+50 TO STA. 182+00

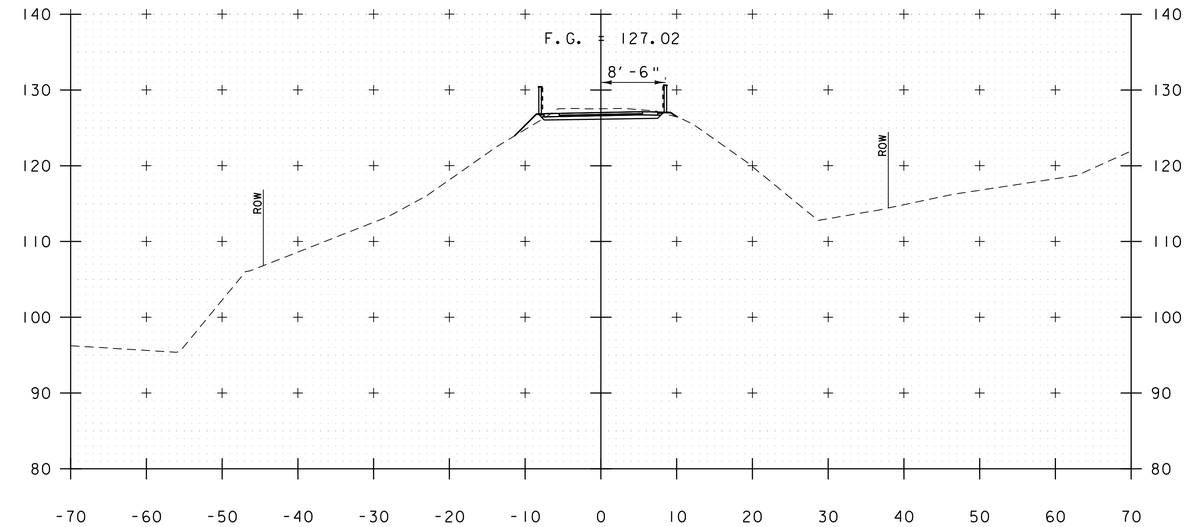
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (15 OF 18) | SHEET 69 OF 116 |



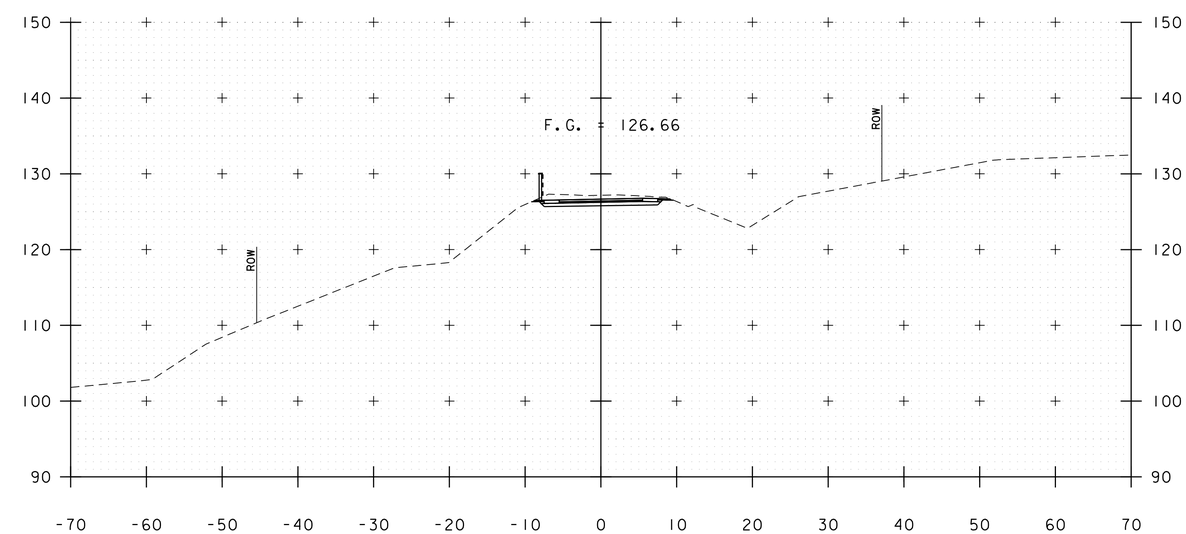

183+00




182+50



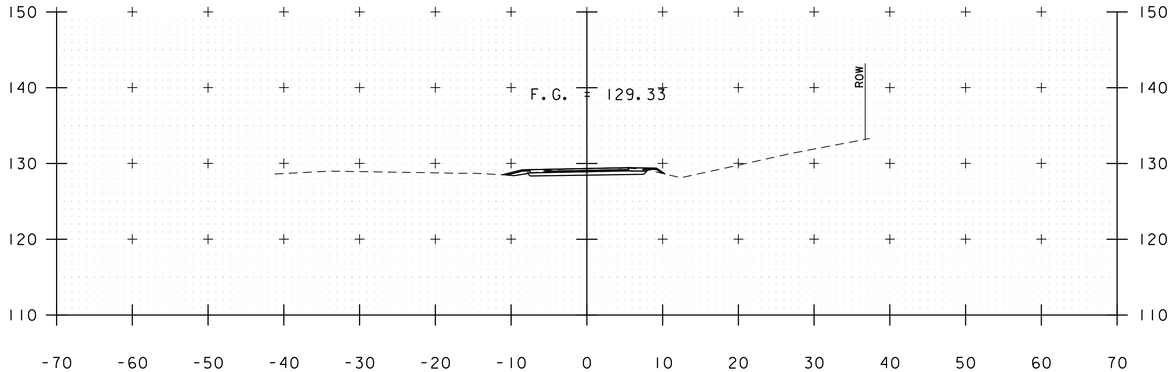

184+00



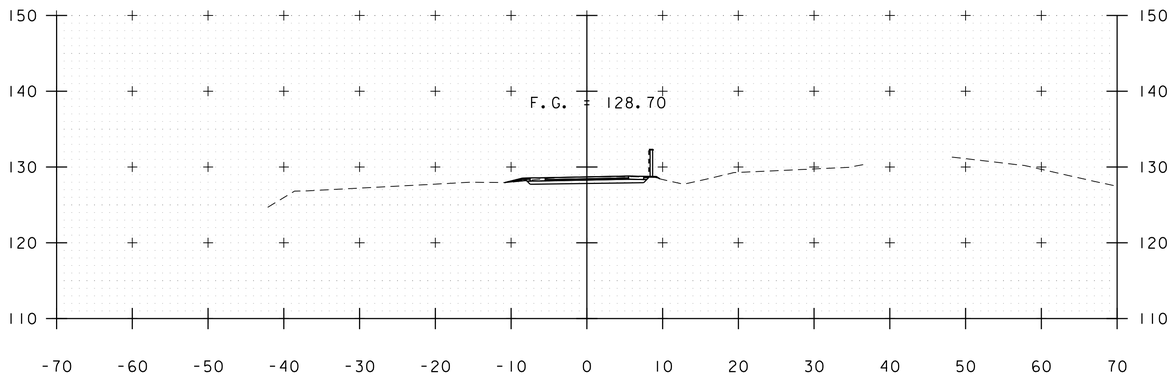

183+50

STA. 182+50 TO STA. 184+00

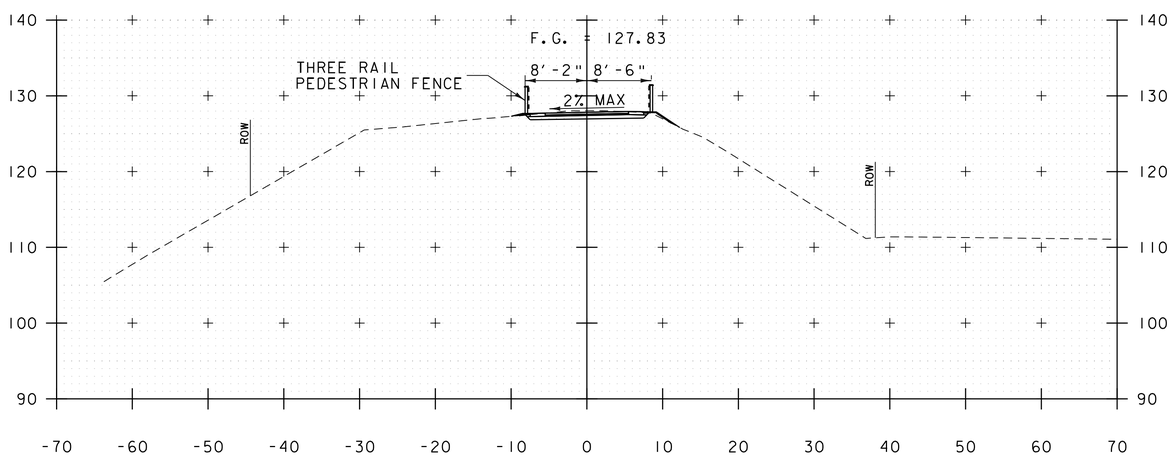
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (16 OF 18) | SHEET 70 OF 116 |



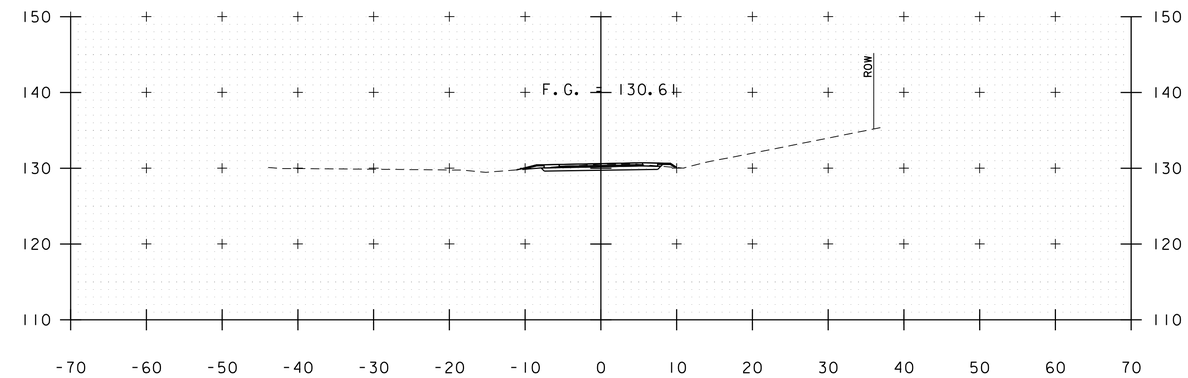

185+50



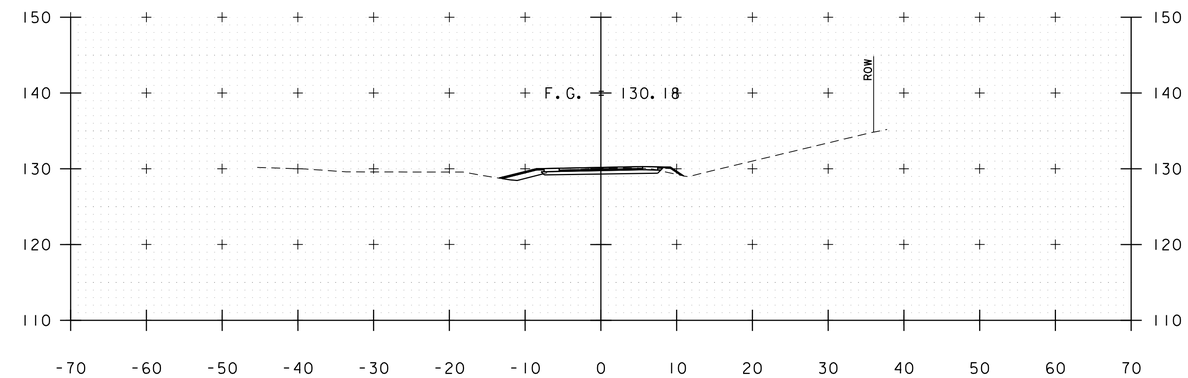

185+00



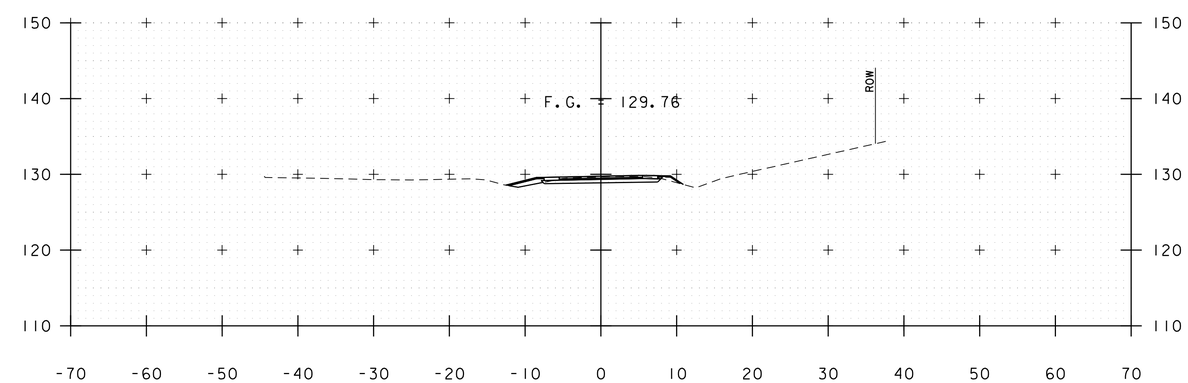

184+50




187+00



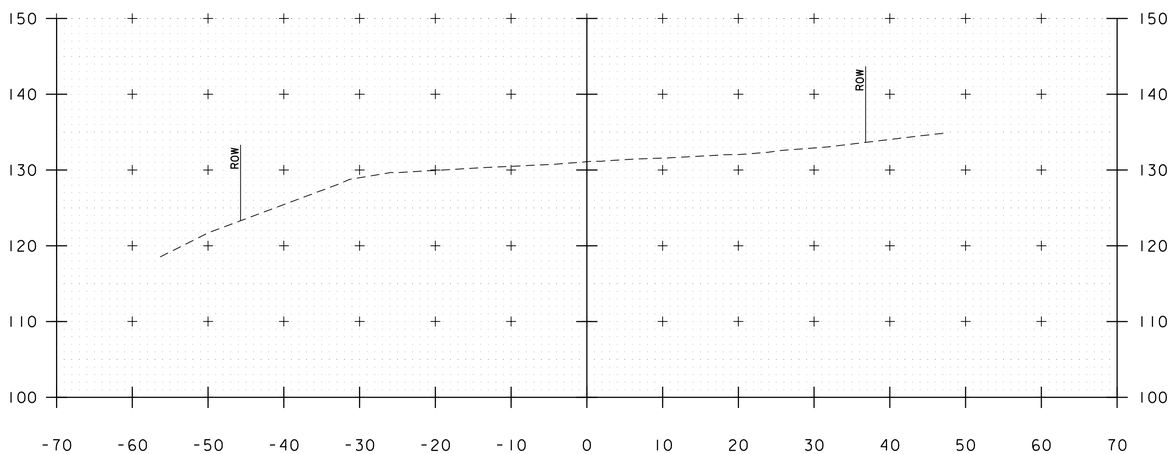

186+50



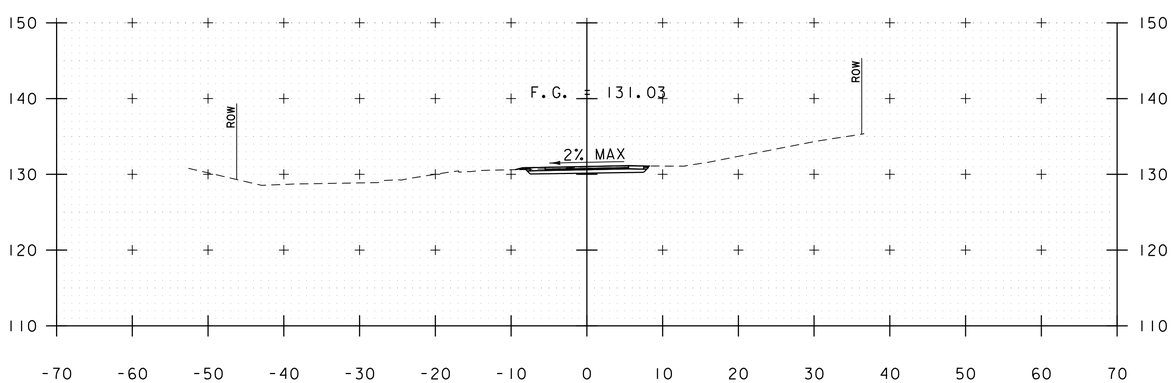

186+00

STA. 184+50 TO STA. 187+00

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (17 OF 18) | SHEET 71 OF 116 |



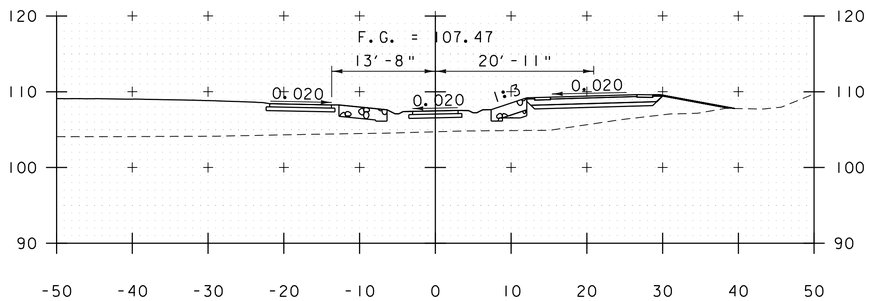

188+00



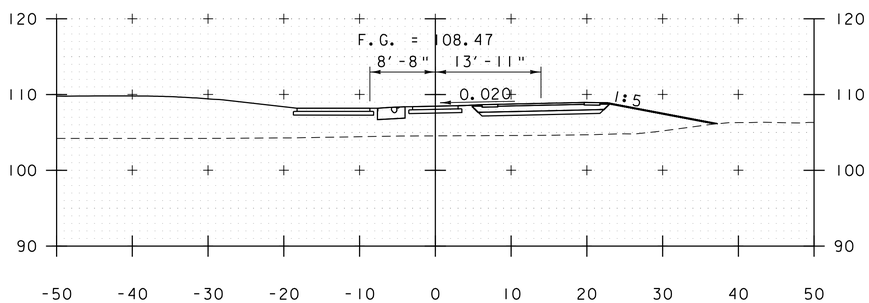

187+50

STA. 187+50 TO STA. 188+00

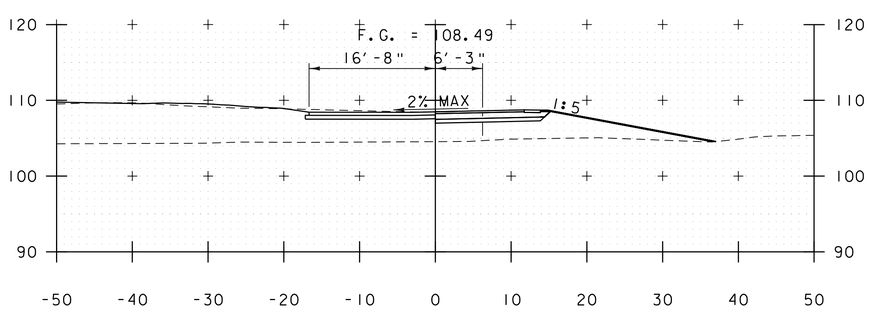
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| PATH CROSS SECTIONS (18 OF 18) | SHEET 72 OF 116 |



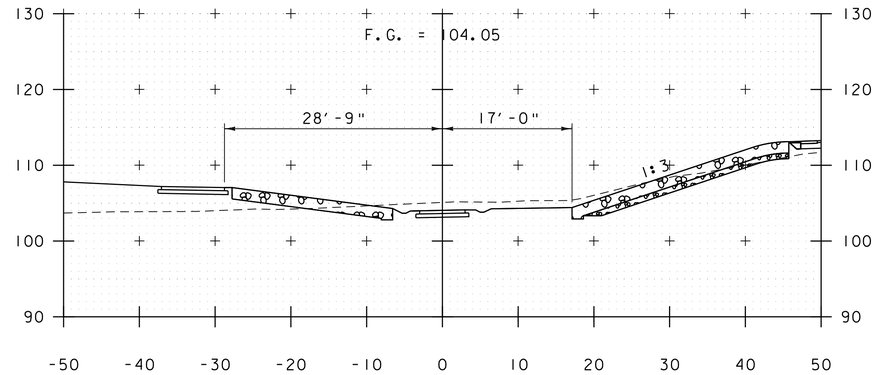

300+50



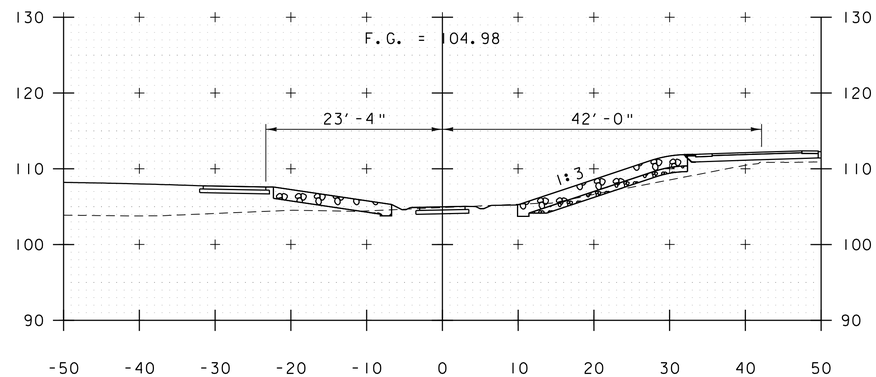

300+25



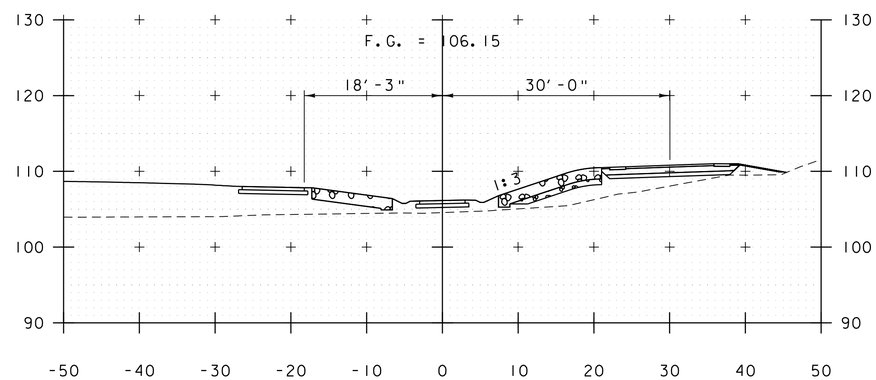

300+00




301+25



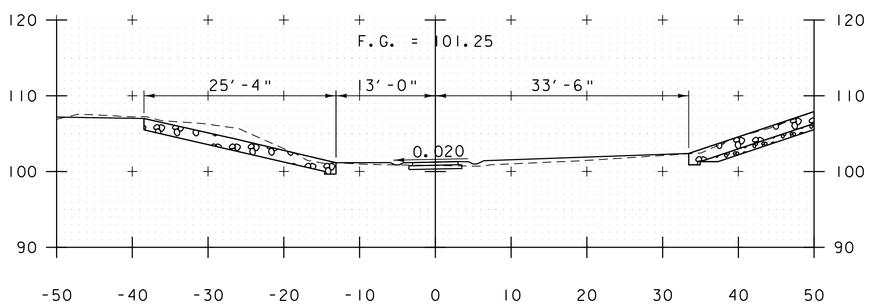

301+00



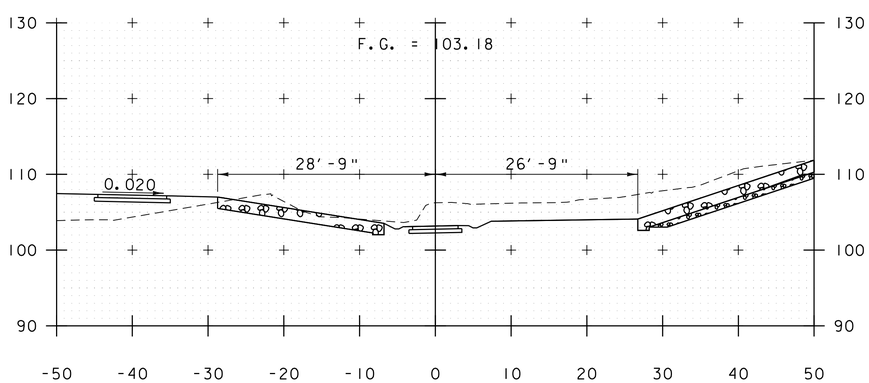

300+75

STA. 300+00 TO STA. 301+25

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| TEXACO WALKWAY CROSS SECTIONS (1 OF 2) | SHEET 73 OF 116 |



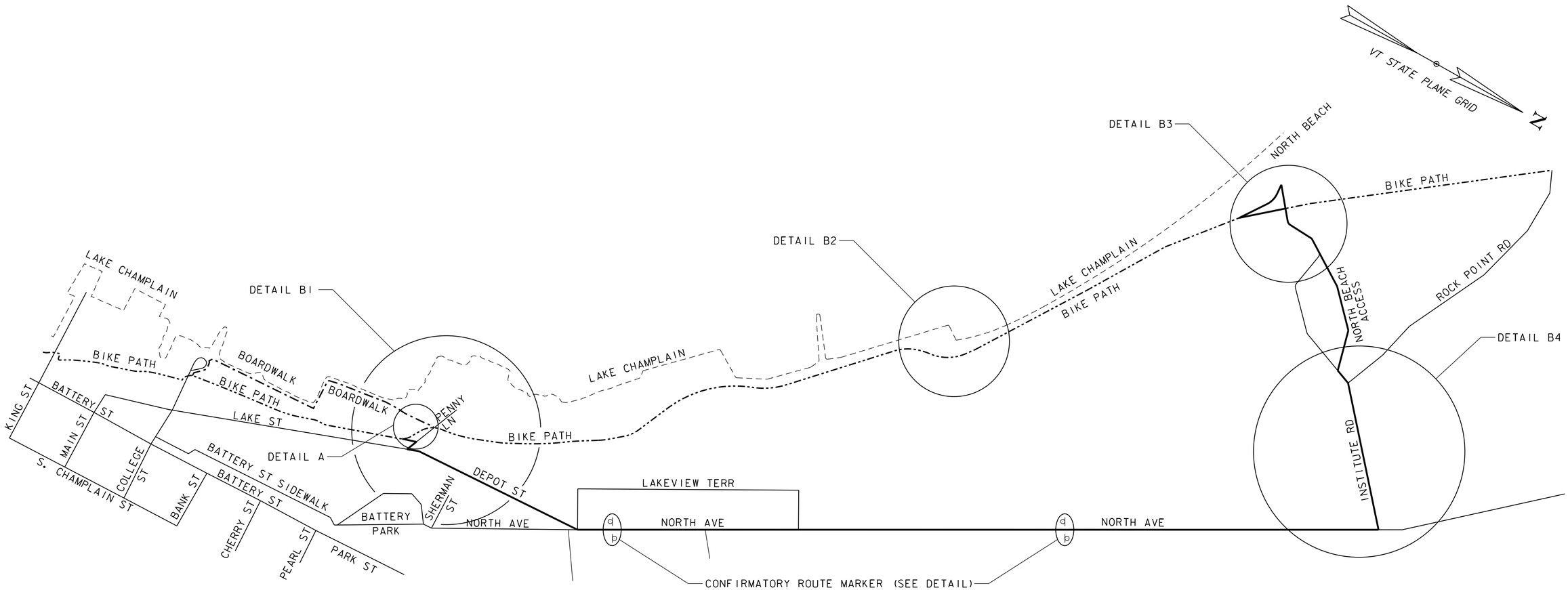

301+68

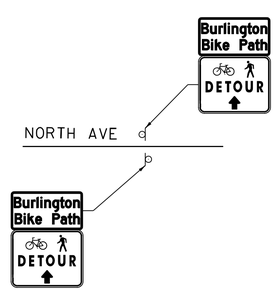



301+50

STA. 301+50 TO STA. 301+68

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634xs.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: P.A. MILLER |
| DESIGNED BY: D.M. PECK | CHECKED BY: M.A. COLGAN |
| TEXACO WALKWAY CROSS SECTIONS (2 OF 2) | SHEET 74 OF 116 |




CONFIRMATORY ROUTE MARKER DETAIL

NOTE: THE SIGN PACKAGE SHOWN IN THE ABOVE DETAIL SHALL BE INSTALLED ALONG NORTH AVENUE EVERY 1,000 FEET BEGINNING AT DEPOT ST.

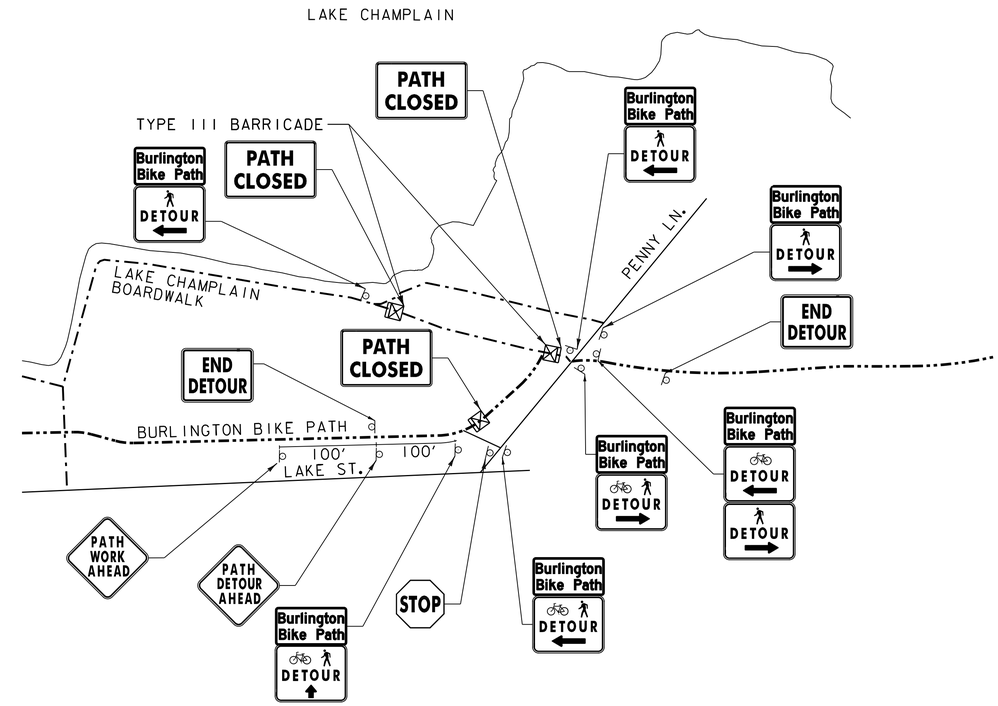
TRAFFIC CONTROL NOTES

1. SEE TRAFFIC CONTROL PLAN (2 OF 4), (3 OF 4), AND (4 OF 4) FOR DETAILS.
2. ALL SIGNS SHALL BE LOCATED SO THEY ARE VISIBLE AND ABLE TO BE READ BY THE TRAVELING PUBLIC. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.
3. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
4. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
5. THE COSTS OF ALL DETOUR SIGNS AND REQUIRED SIGN POSTS AND INSTALLATION SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL".
6. ALL DETOUR SIGNS SHALL BE COVERED COMPLETELY WHEN NOT APPLICABLE FOR THE SPECIFIED DETOUR.

# LOCAL DETOUR & TRAFFIC CONTROL PLAN

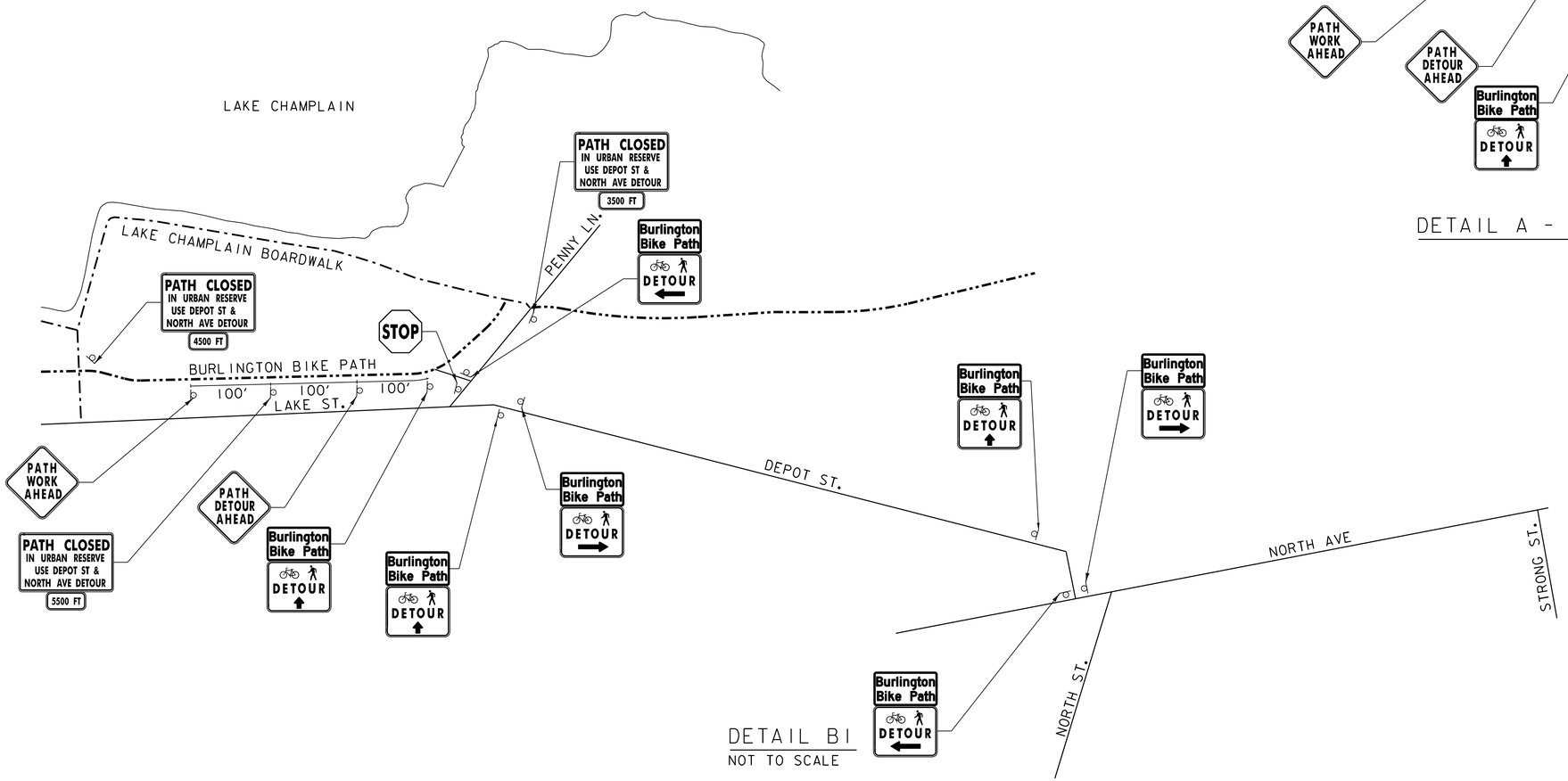
NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634tcp.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: G.A. GOMEZ | CHECKED BY: D.A. GINGRAS |
| TRAFFIC CONTROL PLAN (1 OF 4) | SHEET 75 OF 116 |




DETAIL A - PENNY LANE TIE-IN CLOSURE

NOT TO SCALE



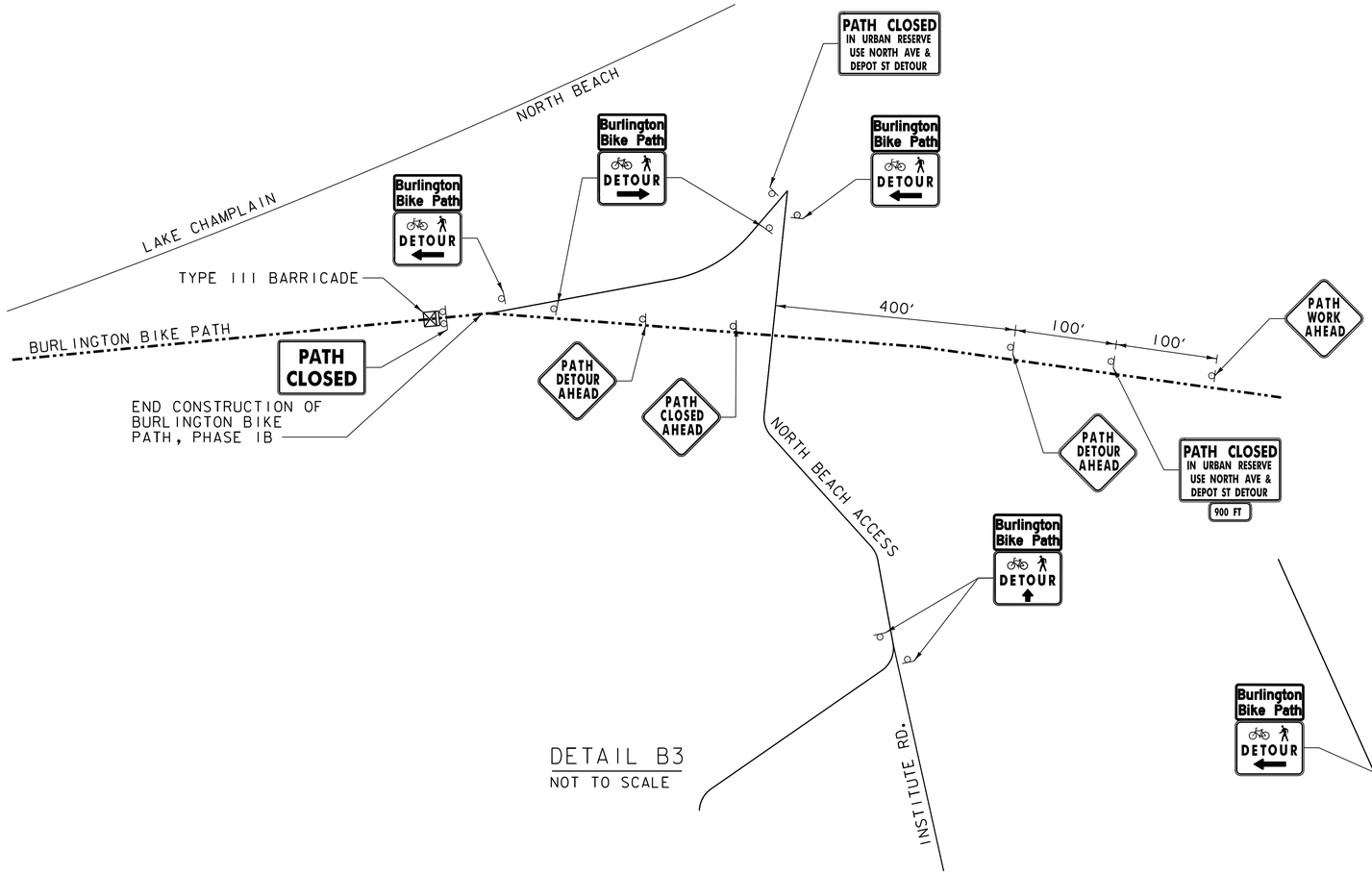

DETAIL BI

NOT TO SCALE

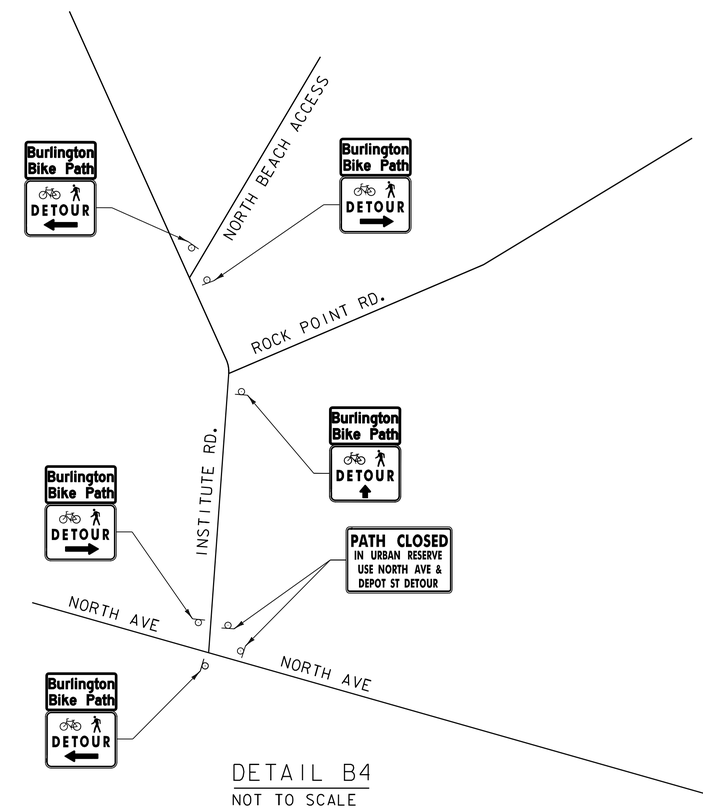
LOCAL DETOUR & TRAFFIC CONTROL PLAN

NOT TO SCALE

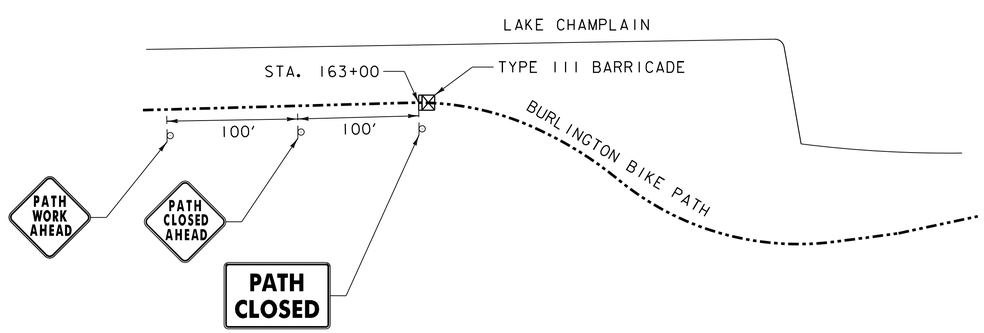
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634tcp.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: G.A. GOMEZ | CHECKED BY: D.A. GINGRAS |
| TRAFFIC CONTROL PLAN (2 OF 4) | SHEET 76 OF 116 |




DETAIL B3
NOT TO SCALE




DETAIL B4
NOT TO SCALE



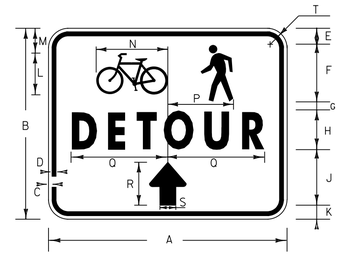

DETAIL B2
NOT TO SCALE

LOCAL DETOUR & TRAFFIC CONTROL PLAN
NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634tcp.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: G.A. GOMEZ | CHECKED BY: D.A. GINGRAS |
| TRAFFIC CONTROL PLAN (3 OF 4) | SHEET 77 OF 116 |

| IDENTIFICATION NUMBER | SIZE OF SIGN WIDTH (IN) | SIZE OF SIGN HEIGHT (IN) | TEXT | NUMBER OF SIGNS REQ'D | REMARKS |
|---|---|---|---|---|---|
| M4-9AL | 30 | 24 | DETOUR ← | 7 | MOUNT BELOW THE SP-5 |
| M4-9AR | 30 | 24 | DETOUR → | 7 | MOUNT BELOW THE SP-5 |
| M4-9BL | 30 | 24 | DETOUR ← | 2 | MOUNT BELOW THE SP-5 |
| M4-9BR | 30 | 24 | DETOUR → | 2 | MOUNT BELOW THE SP-5 |
| SP-1 | 30 | 24 | DETOUR ↑ | 12* | MOUNT BELOW THE SP-5 |
| SP-2 | 18 | 18 | PATH WORK AHEAD | 4 | MOUNT ON SINGLE POST |
| SP-3 | 18 | 18 | PATH CLOSED AHEAD | 3 | MOUNT ON SINGLE POST |
| SP-4 | 18 | 18 | PATH DETOUR AHEAD | 4 | MOUNT ON SINGLE POST |
| SP-5 | 30 | 16 | Burlington Bike Path | 31* | MOUNT ON SINGLE POST |
| SP-6 | 48 | 30 | PATH CLOSED | 5 | MOUNT ON TRIPOD |
| SP-7 | 48 | 30 | PATH CLOSED IN URBAN RESERVE USE DEPOT ST & NORTH AVE DETOUR | 3 | MOUNT ON TRIPOD |
| SP-8 | 48 | 30 | PATH CLOSED IN URBAN RESERVE USE NORTH AVE & DEPOT ST DETOUR | 4 | MOUNT ON TRIPOD |
| W16-2aP | 18 | 12 | ### FT | 3 | MOUNT BELOW SP-7 OR SP-8 |

* - NUMBER OF SIGNS REQUIRED ASSUMING APPROXIMATELY 6 LOCATIONS OF CONFIRMATORY ROUTE MARKER ASSEMBLY DETAIL

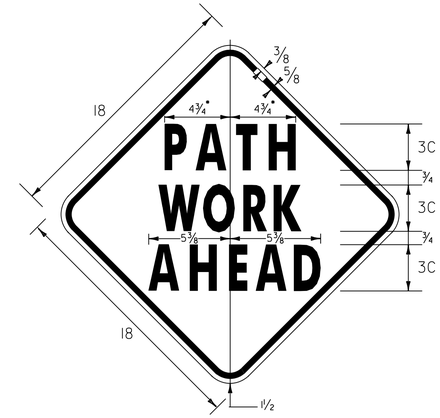



SP-1

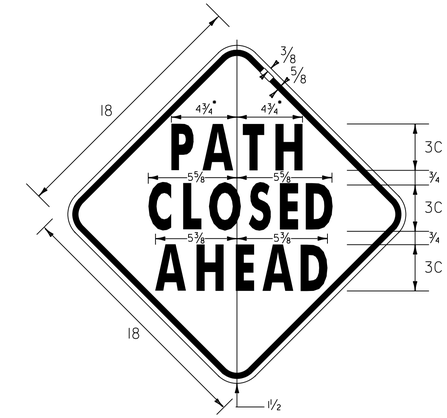
COLORS: LEGEND - BLACK
BACKGROUND - ORANGE (REFLECTIVE)

| SIGN | A | B | C | D | E | F | G | H | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|
| STD. | 30 | 24 | 1/2 | 3/4 | 2 | 7 1/4 | 1 | 5D | 6 3/4 | 2 | 5 3/8 |

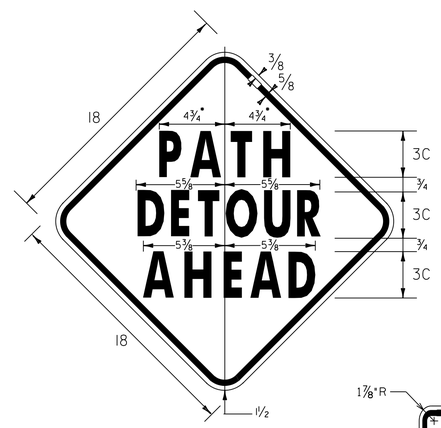
| M | N | P | Q | R | S | T |
|---|---|---|---|---|---|---|
| 3 1/4 | 9 | 8 1/2 | 12 1/8 | 5 1/2 | 2 | 1 7/8 |




SP-2

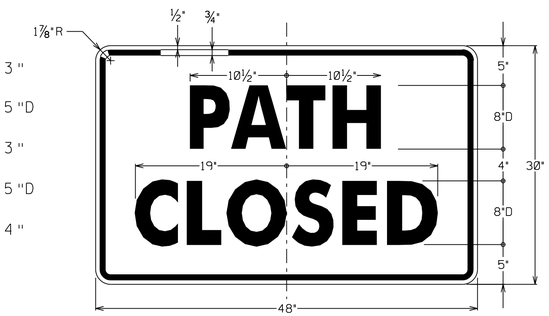



SP-3




SP-4

BORDER
R=1.25"
TH=0.75"




SP-6

SP-5

SP-7

SP-8

NOTES:

1. COLORS FOR THE M4-9 SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
2. COLORS FOR THE SP-1 TO SP-4 SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
3. COLORS FOR THE SP-5 TO SP-8 SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT WHITE BACKGROUND.
4. COLORS FOR THE W16-2aP SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT WHITE BACKGROUND.
5. ALL SIGNS SHOWN ON THIS PLAN SHALL BECOME THE PROPERTY OF THE CITY OF BURLINGTON AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE CITY. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE CITY SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM WITH THE CITY WHAT SIGNS, IF ANY, ARE CURRENTLY IN POSSESSION OF THE CITY AHEAD ANY ADDITIONAL SIGNS BEING ORDERED.

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634tcp.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: G.A. GOMEZ
TRAFFIC CONTROL PLAN (4 OF 4)

PLOT DATE: 3/25/2016
DRAWN BY: G.A. GOMEZ
CHECKED BY: D.A. GINGRAS
SHEET 78 OF 116

## DOCUMENT USE

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.

## EROSION PREVENTION AND SEDIMENT CONTROL NOTES:

1. CONTRACTOR ACTIVITIES SHALL ADHERE TO THIS SITE PLAN, THE CONDITIONS OF A MODERATE RISK GENERAL PERMIT 3-9020, THE VERMONT EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE (2006), THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL (2006, AMENDED 2008), AND FILE A CITY STANDARD EPSC PLAN
2. EPSC MEASURES SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITH THE EXCEPTION OF LAND DISTURBANCE THAT MAY RESULT FROM ACCESSING THE AREA(S) WITH EQUIPMENT IN ORDER TO INSTALL THOSE EPSC MEASURES. TEMPORARY EPSC MEASURES INTENDED TO TRAP SEDIMENT SHALL BE INSTALLED AS A FIRST STEP IN LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE, WITH THE EXCEPTION OF THOSE LAND DISTURBING ACTIVITIES THAT ARE NECESSARY TO INSTALL MEASURES.
3. PROPOSED CHANGES TO THE EPSC PLAN SHALL BE APPROVED BY THE PERMITTEE OR HIS/HER DESIGNEE PRIOR TO IMPLEMENTATION.
4. PERMISSION MUST BE GRANTED BY VT DEC PRIOR TO USE OF ANY SUPPORT ACTIVITIES OCCURRING OUTSIDE OF THE APPROVED PROJECT BOUNDARIES. THIS INCLUDES USE OF OFF-SITE WASTE AND BORROW AREAS.
5. ALL PARTIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHO MEET EITHER OF THE FOLLOWING TWO CRITERIA OF "PRINCIPAL OPERATOR" MUST OBTAIN COVERAGE UNDER THE CONSTRUCTION STORMWATER DISCHARGE PERMIT FOR THE PROJECT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES BY THAT OPERATOR:
   a. THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS; OR
   b. THE PARTY HAS CONTINUOUS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE PROJECT THAT ARE NECESSARY TO ENSURE COMPLIANCE WITH AN EPSC PLAN FOR THE SITE OR OTHER PERMIT CONDITIONS (E.G., THEY ARE AUTHORIZED TO DIRECT WORKERS AT A SITE TO CARRY OUT ACTIVITIES REQUIRED BY THE EPSC PLAN OR COMPLY WITH OTHER PERMIT CONDITIONS).

## CONSTRUCTION EPSC NOTES:

1. EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.
2. A VEGETATED BUFFER SHALL BE MAINTAINED FOR WATER RESOURCES (E.G., WETLANDS AND STREAMS) TO THE EXTENT PRACTICABLE.
3. TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS AND WATER RESOURCES.
4. RESOURCE AREAS (E.G. STREAMS) WITHIN THE PROJECT AREA SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE AREAS.
5. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH A SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT RESULT IN IMPACTS TO WATER QUALITY OR CONTRIBUTE TO EROSION. SEE DETAILS FOR MORE INFORMATION.
6. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO THE OTHER APPLICABLE CRITERIA:
   a. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
   b. EXCAVATED MATERIAL SHALL BE PLACED IN UPLAND AREAS ON THE UPHILL SIDE OF THE TRENCHES, WHERE FEASIBLE.
10. SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES SHALL BE DISPOSED OF IN AN UPLAND AREA WITH STABILIZATION FOLLOWING DISPOSAL OF MATERIAL.
11. IN ADVANCE OF FORECASTED RAINFALL OR SNOWMELT, EPSC MEASURES THAT ARE LOCATED IN AREAS OF ACTIVE EARTH DISTURBANCE SHALL BE INSPECTED AND REPAIRED, AS NEEDED.
12. DUST CONTROL SHALL BE HANDLED VIA WATER OR CALCIUM CHLORIDE APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.
13. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REGULARLY MAINTAINED TO CONTROL EQUIPMENT AND VEHICLES FROM TRACKING MATERIAL OFF SITE.
14. PUBLIC ROADWAY ACCESS LOCATIONS SHALL BE INSPECTED DAILY AND SWEPT AS NEEDED TO PREVENT SEDIMENT TRANSPORT.
15. PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS WHERE THERE IS POTENTIAL FOR SOIL EROSION AND/OR SEDIMENT RUNOFF. IN SOME AREAS WHERE THE GROUND SURFACE IS LEVEL AND THERE ARE NO PATHWAYS (E.G., DITCHES OR RUTS) THAT COULD TRANSPORT RUNOFF FROM THE PROJECT AREA, INSTALLATION OF PERIMETER CONTROLS MAY NOT BE NECESSARY PER APPROVAL BY THE ON-SITE PLAN COORDINATOR (OSPC).
16. PRIOR TO STUMPING AND GRUBBING, LOGGING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ACCEPTABLE MANAGEMENT PRACTICES FOR MAINTAINING WATER QUALITY ON LOGGING JOBS IN VERMONT (AMPS, 2006). CONSTRUCTION MATS AND MAT BRIDGES SHALL BE IN PLACE IN WETLANDS AND STREAM CROSSINGS PRIOR TO ACCESS BY ANY TREE CLEARING EQUIPMENT.
17. STUMPING AND GRUBBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECTS CONSTRUCTION STORMWATER DISCHARGE PERMIT AND EPSC PLAN.
18. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS SHALL COMPLY WITH THE FOLLOWING:

    CONSTRUCTION DEMARCATION:
    a. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLANS
    b. PROJECT DEMARCATION FENCE SHOWN ON THESE PLANS INCLUDES ALL FENCE REQUIRED FOR THE PROJECT. ALL THE FENCE SHOWN IS NOT TO BE ERECTED SIMULTANEOUSLY. CONTRACTOR SHALL ERECT AND DECONSTRUCT FENCE AS NEEDED FOR CONSTRUCTION SEQUENCING.
    c. WITHIN 50 FEET OF RESOURCE AREA, DEMARCATION MUST INCLUDE:
       - 2 TO 3 ROWS OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
       - ORANGE CONSTRUCTION FENCE, OR
       - ORANGE SNOW FENCE
    d. WHEN GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, DEMARCATION MAY INCLUDE:
       - ONE ROW OF STAKED (OR STAPLED)3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
       - ORANGE CONSTRUCTION FENCE, OR
       - ORANGE SNOW FENCE

    PERIMETER CONTROLS:
    a. PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION.
    b. PERIMETER CONTROLS ARE NOT TO CROSS ACTIVE ACCESS ROUTES OR PERENNIAL FLOW PATHS (E.G. A STREAM).
    c. PARTICULAR CARE IS TO BE TAKEN WHEN INSTALLING PERIMETER CONTROLS IN A WETLAND.
    d. WITHIN 50 FEET OF A WATER RESOURCE AREA, PERIMETER CONTROLS MUST INCLUDE:
       - REINFORCED SILT FENCE – TO BE REINFORCED WITH WIRE MESH, STAKED HAYBALES, STAKED FIBER ROLLS, EROSION CONTROL MIX BERMS, OR WOOD CHIP BERMS
    e. WHEN GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, PERIMETER CONTROLS MAY INCLUDE:
       - SILT FENCE (NON-REINFORCED),
       - STAKED FIBER ROLLS,
       - EROSION CONTROL MIX BERMS, OR
       - WOOD CHIP BERMS
19. PROJECT DEMARCATION OF AN AREA SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITHIN THAT AREA. AN EXCEPTION IS LAND DISTURBANCE THAT MAY BE NEEDED TO ACCESS THE AREA WITH EQUIPMENT IN OR TO INSTALL THE EPSC MEASURES.

## PRE-CONSTRUCTION AND PERMITTING NOTES:

1. THE NAME AND DAYTIME PHONE NUMBER OF THE ON-SITE PLAN COORDINATION (OSPC) SHALL BE PROVIDED IN WRITING TO VT DEC PRIOR TO THE START OF CONSTRUCTION.
2. THE NOTICE OF AUTHORIZATION (NOA) ISSUED BY VT DEC SHALL BE POSTED IN A LOCATION THAT IS VISIBLE TO THE PUBLIC (E.G., NEAR THE CONSTRUCTION ENTRANCE). THE CITY STORMWATER PROGAM SHALL ALSO BE NOTIFIED OF THE NOA.
3. A COPY OF THE EPSC PLAN SHALL BE MAINTAINED ON-SITE DURING NORMAL WORKING HOURS FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF FINAL STABILIZATION. THE EPSC PLAN SHALL BE MADE AVAILABLE TO VT DEC UPON REQUEST.

## WINTER CONSTRUCTION NOTES:

1. WINTER CONSTRUCTION SEASON IS DEFINED BY VT DEC AS OCTOBER 15 TO APRIL 15.
2. THE FOLLOWING WINTER CONSTRUCTION CONDITIONS APPLY TO THOSE CONSTRUCTION ACTIVITIES INVOLVING EARTH DISTURBANCE BETWEEN OCTOBER 15 AND APRIL 15:
   a. FOR AREAS STABILIZED BY VEGETATION, SEED SHALL BE APPLIED NO LATER THAN SEPTEMBER 15.
   b. MULCH SHALL BE APPLIED AT DOUBLE THE REGULAR CONSTRUCTION SEASON RATE OR ROUGHLY 2 INCHES OF MULCH WITH 80 TO 90% COVER (SEE MULCH DETAIL). MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.
   c. ENLARGE ACCESS POINTS AS PERMITTABLE TO PROVIDE SPACE FOR SNOW STOCKPILING..
   d. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK, AS NEEDED.
   e. CLEARED SNOW SHALL BE PLACED DOWN GRADIENT OF ALL AREAS OF DISTURBANCE WHERE FEASIBLE.
   f. SNOW SHALL NOT BE PLACED IN STORMWATER TREATMENT STRUCTURES. (E.G. BASINS)
   g. TO THE EXTENT PRACTICABLE, A MINIMUM 25-FOOT BUFFER FROM PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE MAINTAINED TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
   h. FOR AREAS OF DISTURBANCE WITHIN 100 FEET OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
   i. DRAINAGE STRUCTURES ARE TO BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS AS DETERMINED BY THE ON SITE PROJECT COORDINATOR.
   j. EPSC MEASURES THAT REQUIRE SOIL DISTURBANCE TO INSTALL (E.G., SILT FENCE) SHALL BE INSTALLED PRIOR TO GROUND FREEZING.
   k. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1 INCH THICKNESS PRIOR TO STABILIZATION.
   l. A 10 TO 20-FOOT WIDE STONE PAD SHALL BE USED IN AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED (E.G., AROUND THE PERIMETER OF A BUILDING, WHERE APPLICABLE.
   m. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A SNOWMELT EVENT, AREAS OF DISTURBED SOIL SHALL BE STABILIZED AT THE END OF EACH WORKDAY, UNLESS
      I. WORK IS TO CONTINUE WITHIN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST OF THE NEXT 24 HOURS OR
      II. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UTILITY TRENCHES).

## TEMPORARY AND FINAL STABILIZATION NOTES:

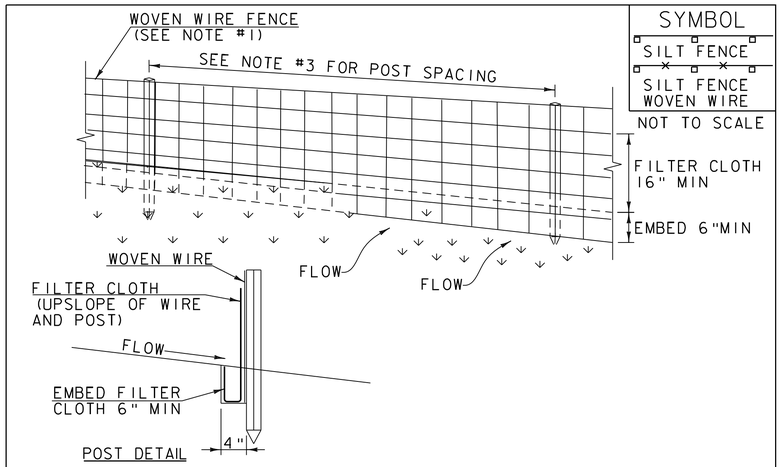
1. DURING REGULAR CONSTRUCTION SEASON, ALL AREAS OF EARTH DISTURBANCE MUST BE STABILIZED WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS INITIAL 14-DAY PERIOD, ALL EARTH DISTURBANCE AREAS MUST BE STABILIZED ON A DAILY BASIS, WITH THE FOLLOWING EXCEPTIONS:
   a. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE WITHIN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
   b. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND UTILITY INSTALLATION).
2. DISTURBANCE ACTIVITIES MUST BE COORDINATED TO ENSURE THAT THE ALLOWABLE CONCURRENT EARTH DISTURBANCE IS NOT EXCEEDED. THE MAXIMUM AREA OF EARTH DISTURBANCE THAT IS ALLOWED AT ANY ONE TIME IS 2.77 ACRES.
3. WORK IS TO PROCEED INCREMENTALLY, WITH STABILIZATION OCCURRING IMMEDIATELY FOLLOWING COMPLETION OF AN INDIVIDUAL AREA (E.G. UPON COMPLETINO OF A CONSTRUCTION PHASE).
4. TEMPORARY SOIL STABILIZATION SHALL BE ACHIEVED BY MULCH, SEED AND MULCH, HYDROSEEDING WITH MULCH TACKIFIER, SOD, STONE, AND/OR ROLLED EROSION CONTROL PRODUCTS (E.G., EROSION CONTROL BLANKET). MULCH SHALL BE COMPRISED OF STRAW, HAY, COMPOST, WOOD CHIPS, WOOD STUMP GRINDINGS, AND/OR EROSION CONTROL MIX.
5. PERMANENT STABILIZATION SHALL BE ACHIEVED BY 80% VEGETATION COVER, STONE, ASPHALT, BEDROCK, OR OTHER PERMANENT MATERIAL THAT PROVIDES COMPLETE COVER OF EXPOSED SOILS.
6. AREAS THAT HAVE REACHED TEMPORARY OR FINAL STABILIZATION SHALL NOT BE CONSIDERED PART OF TOTAL AREA OF EARTH DISTURBANCE.
7. APPROPRIATE SEED MIX SHALL BE APPLIED TO DESIGNATED AREAS PER THE SEED DETAIL SPECIFICATIONS. FOR AN AREA TO BE STABILIZED FOR WINTER BY VEGETATED COVER, SEEDING MUST BE COMPLETED BY SEPTEMBER 15.
8. AREAS TO BE STABILIZED FOR WINTER THAT DO NOT HAVE ESTABLISHED VEGETATION BY OCTOBER 15 SHALL BE STABILIZED BY ANCHORED MULCH AT THE WINTER APPLICATION RATE, OR OTHER APPROVED STABILIZATION MEASURES (E.G., ROLLED EROSION CONTROL PRODUCT). DORMANT SEEDING WITH WINTER RYE IS RECOMMENDED.
9. ALL FINAL GRADE SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH BIODEGRADABLE EROSION CONTROL MATTING, UNLESS SHOWN OTHERWISE ON THE SITE STABILIZATION PLAN.
10. ALL TEMPORARY EPSC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY EPSC MEASURES ARE NO LONGER NEEDED.

## INSPECTION REQUIREMENTS:

1. EPSC INSPECTION, MONITORING, AND REPORTING ARE REQUIRED PER THE CONDITIONS OF GENERAL PERMIT 3-9020 STIPULATIONS FOR MODERATE RISK SITES. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROLS THAT MINIMIZE OR ELIMINATE POLLUTANTS IN STORMWATER DISCHARGE.
2. INSPECTIONS BY THE ON-SITE PLAN COORDINATOR (OSPC) SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, WITH ADDITIONAL INSPECTION FREQUENCY REQUIRED FOR RAIN EVENTS, WINTER CONSTRUCTION, AND VISIBLE DISCHARGES PER THE CONDITIONS OF PART 6 OF GENERAL PERMIT 3-9020. A WRITTEN REPORT SHALL BE COMPLETED FOR EACH INSPECTION AND SIGNED BY THE OSPC. ALL REPORTS ARE TO BE MAINTAINED ON SITE AND MADE AVAILABLE TO STATE DEC REPRESENTATIVES UPON REQUEST. SEE SECTION 6.2 (G) OF GENERAL PERMIT 3-9020 FOR INSPECTION REPORT REQUIREMENTS.
3. IF VISIBLY DISCOLORED STORMWATER RUNS OFF THE CONSTRUCTION SITE OR RUNS OFF THE CONSTRUCTION SITE AND DISCHARGES TO RECEIVING WATERS, THE CONTRACTOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION TO CORRECT THE DISCHARGE, INCLUDING MAINTAINING EXISTING EPSC MEASURES, AND INSTALLING SUPPLEMENTAL EPSC MEASURES. THE CONTRACTOR SHALL ALSO NOTIFY THE BURLINGTON STORMWATER PROGRAM AT stormwater@burlington.gov OR 802-863-4501.
4. THE OSPC IS RESPONSIBLE FOR MONITORING, INSPECTING, AND SAMPLING DISCHARGES FROM THE SITE TO MAINTAIN COMPLIANCE WITH GENERAL PERMIT 3-9020. THIS INCLUDES VISUAL MONITORING OF EPSC MEASURES AND DISCHARGES, DISCHARGE SAMPLING, TURBIDITY MONITORING, AND REPORTING. THE MAXIMUM TURBIDITY PERMISSIBLE FOR CONSTRUCTION SITE DISCHARGE IS 25 NTU.
5. SEE PARTS 6, 6.2, AND 6.3 OF GENERAL PERMIT 3-9020 AT HTTP://WWW.VTWATERQUALITY.ORG/STORMWATER/DOCS/CONSTRUCTION/SW_CGP_AMENDED_FINAL.PDF FOR MORE INFORMATION.

## ON-SITE PLAN COORDINATOR (OSPC) NOTES:

1. THE OSPC DESIGNATED TO THE PROJECT (AND HIS/HER DESIGNEE) SHALL:
   a. REVIEW VT DEC'S "ON-SITE PLAN COORDINATOR MANUAL",
   b. BE ON-SITE ON A DAILY BASIS (OR HAVE A DESIGNEE THAT IS ON SITE WHEN HE/SHE CANNOT BE),
   c. BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC PLAN,
   d. BE KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EPSC,
   e. POSSESS THE SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY,
   f. POSSESS THE SKILLS TO ASSESS THE EFFECTIVENESS OF EPSC MEASURES SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY,
   g. POSSESS THE SKILLS AND EQUIPMENT TO CONDUCT TURBIDITY MONITORING PURSUANT TO THE CONSTRUCTION STORMWATER DISCHARGE PERMIT, AND
   h. HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE EPSC PLAN AND THE CONSTRUCTION STORMWATER DISCHARGE PERMIT.
2. ALL PROPOSED CHANGES TO THE EPSC PLAN MUST BE APPROVED BY THE OSPC OR HIS/HER DESIGNEE, THE PLAN DESIGNER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) PRIOR TO IMPLEMENTATION, AND BE CONSIDERED MINOR AMENDMENTS AS DEFINED IN THE OSPC HANDBOOK. ALL MINOR AMENDMENTS ARE TO BE RECORDED USING THE MINOR AMENDMENT RECORD FORM AND MARKED ON THE MASTER OSPC PLAN SET. ALL MODIFICATIONS THAT FALL OUTSIDE OF THE MINOR AMENDMENT DEFINITION MUST BE APPROVED BY VT-DEC.
3. DURING THE REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCT 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HRS FOLLOWING A STORM EVENT RESULTING IN DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.
4. DURING THE WINTER CONSTRUCTION SEASON (OCT 15 TO APRIL 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS ON A DAILY BASIS DURING ACTIVE EARTHWORK.
5. THE OSPC AND HIS/HER DESIGNEE(S) SHALL FOLLOW TURBIDITY MONITORING PROTOCOLS OUTLINED IN VT DEC'S MONITORING OF TURBIDITY IN STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES MANUAL.
6. INSPECTIONS CONDUCTED BY THE OSPC OR HIS/HER DESIGNEE SHALL COVER ALL AREAS OF THE SITE THAT ARE BEING ACTIVELY DISTURBED BY CONSTRUCTION OR CONSTRUCTION-RELATED ACTIVITIES, INCLUDING AREAS THAT HAVE BEEN TEMPORARILY STABILIZED.
7. OSPC INSPECTIONS SHALL BE DOCUMENTED USING THE VT DEC INSPECTION REPORT FORM OR A VT DEC-ACCEPTED INSPECTION REPORT FORM.
8. OSPC INSPECTION REPORTS SHALL BE MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT AND MADE AVAILABLE TO VT DEC OR CITY STORMWATER PROGRAM UPON REQUEST.




## CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

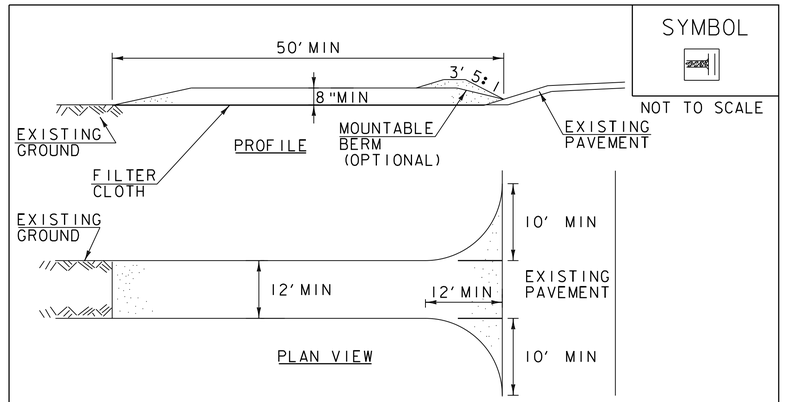
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## REINFORCED SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

| REVISIONS | |
|---|---|
| MARCH 21, 2008 | WHF |
| DECEMBER 11, 2008 | WHF |
| JANUARY 13, 2009 | WHF |




## CONSTRUCTION SPECIFICATIONS

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

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

| REVISIONS | |
|---|---|
| MARCH 24, 2008 | WHF |
| JANUARY 13, 2009 | WHF |

**VAOT RURAL AREA MIX**

| % WEIGHT | LBS/AC BROADCAST | LBS/AC HYDROSEED | NAME | GERM % | PURITY % |
|---|---|---|---|---|---|
| 37.5% | 22.5 | 45 | CREEPING RED FESCUE | 85% | 98% |
| 37.5% | 22.5 | 45 | TALL FESCUE | 90% | 95% |
| 5.0% | 3 | 6 | RED TOP | 90% | 95% |
| 15.0% | 9 | 18 | BIRDSFOOT TREFOIL | 85% | 98% |
| 5.0% | 3 | 6 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 60 | 120 | | | |

**VAOT URBAN AREA MIX**

| % WEIGHT | LBS/AC BROADCAST | LBS/AC HYDROSEED | NAME | GERM % | PURITY % |
|---|---|---|---|---|---|
| 42.5% | 34 | 68 | CREEPING RED FESCUE | 85% | 98% |
| 10.0% | 8 | 16 | PERENNIAL RYE GRASS | 90% | 95% |
| 42.5% | 34 | 68 | KENTUCKY BLUE GRASS | 85% | 85% |
| 5.0% | 4 | 8 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 80 | 160 | | | |

**SOIL AMENDMENT GUIDANCE**

| FERTILIZER BROADCAST | FERTILIZER HYDROSEED | LIME BROADCAST | LIME HYDROSEED |
|---|---|---|---|
| 10-20-10 | *FOLLOW* | PELLETIZED | *FOLLOW* |
| 500 LBS/AC | *MANUFACTURER* | 2 TONS/AC | *MANUFACTURER* |

1000 4

## CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

## TURF ESTABLISHMENT

| REVISIONS | |
|---|---|
| JUNE 23, 2009 | WHF |
| JANUARY 15, 2010 | WHF |
| FEBRUARY 16, 2011 | WHF |

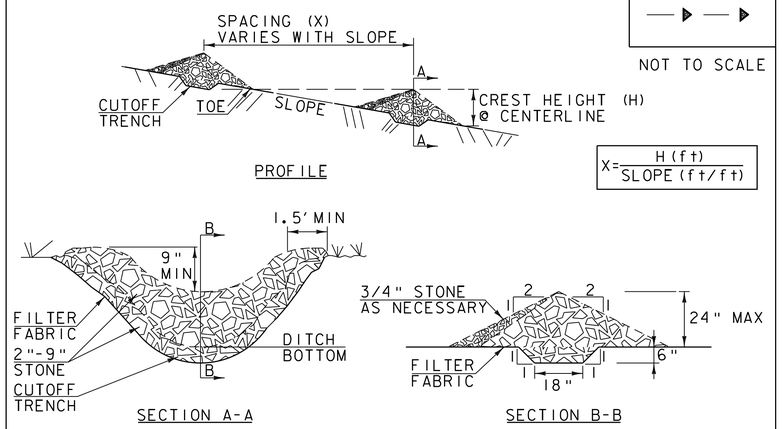
PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (SHEET 1 OF 4)

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: C. HAKEY
SHEET 80 OF 116

SYMBOL

NOT TO SCALE




## CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# CHECK DAM

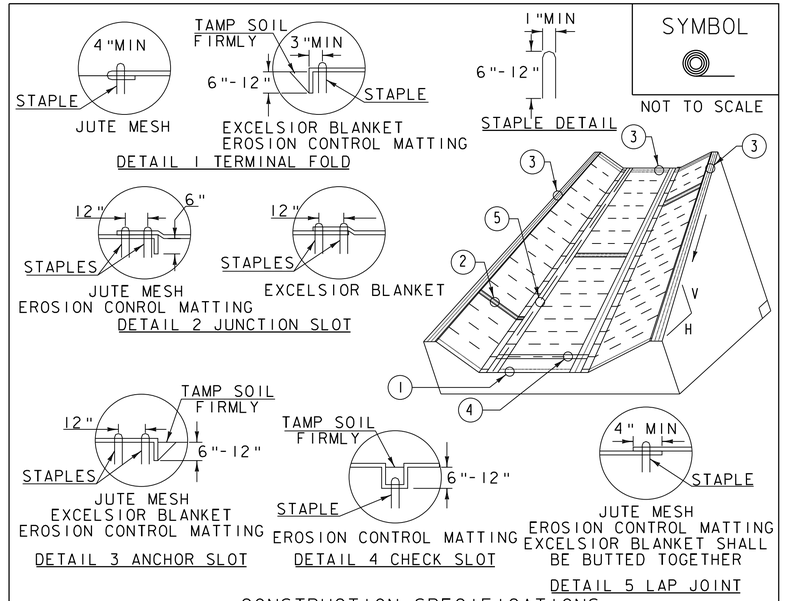
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

| REVISIONS | |
|---|---|
| MARCH 21, 2008 | WHF |
| JANUARY 8, 2009 | WHF |

SYMBOL

NOT TO SCALE




## CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

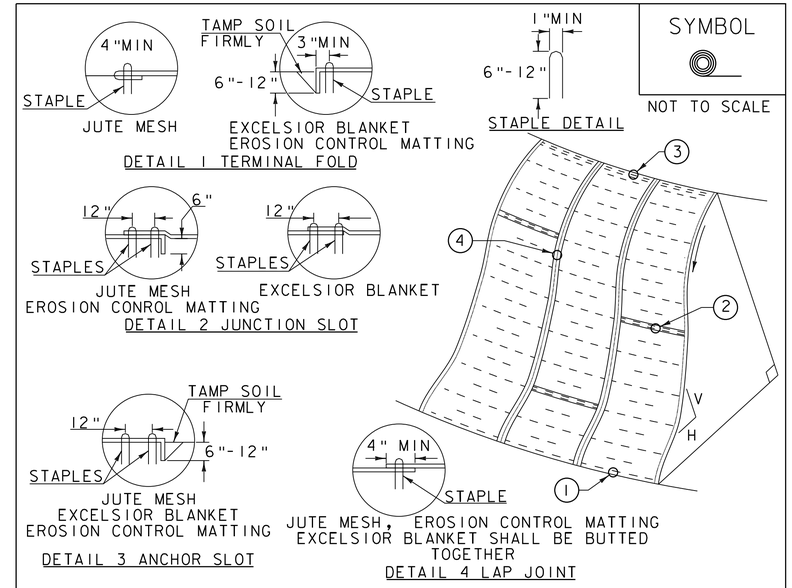
# ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

| REVISIONS | |
|---|---|
| MARCH 8, 2007 | JMF |
| APRIL 16, 2007 | WHF |
| JANUARY 13, 2009 | WHF |

SYMBOL

NOT TO SCALE




## CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

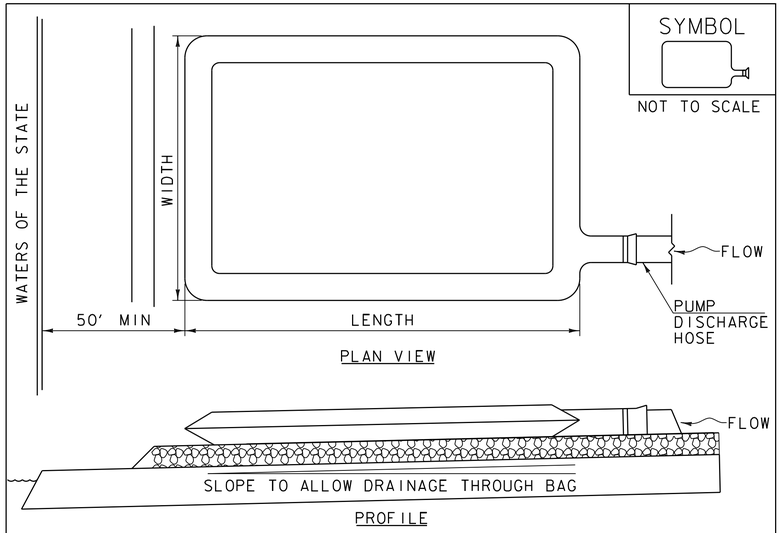
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

| REVISIONS | |
|---|---|
| APRIL 16, 2007 | JMF |
| JANUARY 13, 2009 | WHF |

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (SHEET 2 OF 4)

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: C. HAKEY
SHEET 81 OF 116




## CONSTRUCTION SPECIFICATIONS

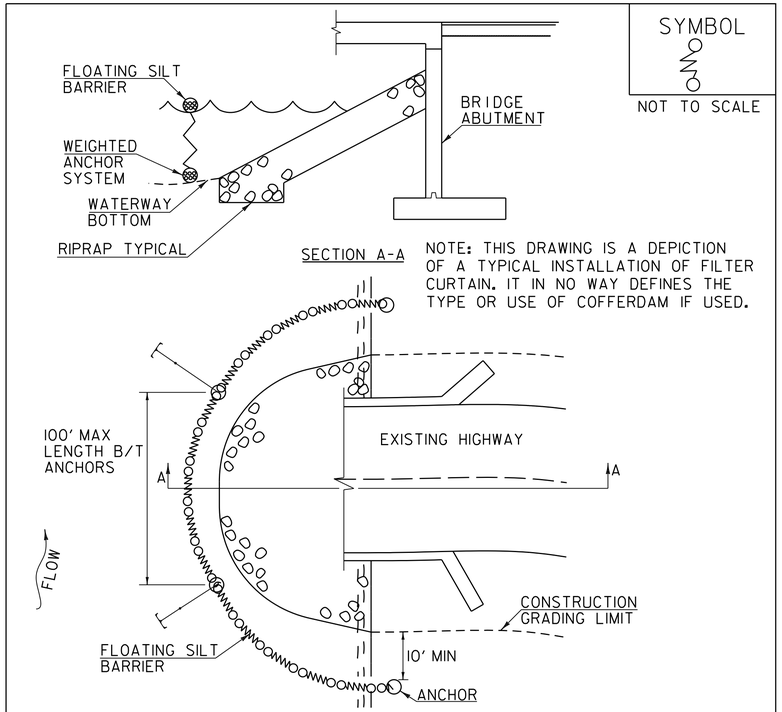
1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

# FILTER BAG

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

| REVISIONS | |
|---|---|
| MARCH 24, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
| | |
| | |
| | |




## CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

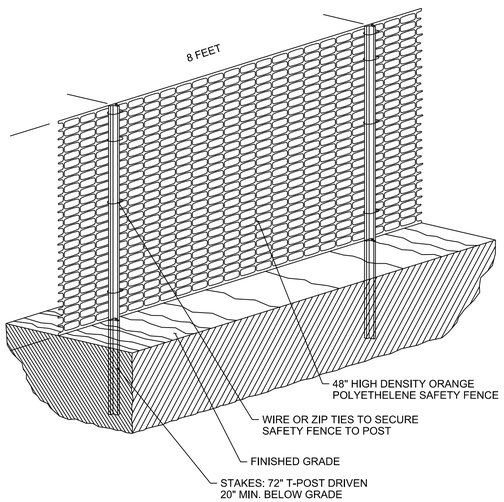
# FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

| REVISIONS | |
|---|---|
| APRIL 1, 2008 | WHF |
| JANUARY 13, 2009 | WHF |
| SEPTEMBER 4, 2009 | WHF |
| | |
| | |

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634ero_details.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: E.B. PARIZO |
| DESIGNED BY: VTRANS | CHECKED BY: C. HAKEY |
| EPSC DETAILS (SHEET 3 OF 4) | SHEET 82 OF 116 |



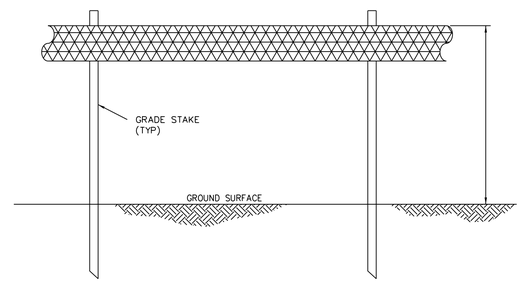

**Notes:**

1. CONSTRUCTION/SNOW FENCE SHALL BE INSTALLED WITHIN 50' OF A WATER RESOURCE, (STREAM, BROOK, LAKE, POND, ETC.) UNLESS THE AREA IS DENSELY WOODED, IN WHICH CASE 2 TO 3 ROWS OF ORANGE BARRIER MESH TAPE OR ROPE MAY BE USED.
2. CONSTRUCTION/SNOW FENCE SHALL NOT CROSS ACTIVE ACCESS ROUTES (E.G. ROADS). CONSTRUCTION/SNOW FENCE MAY CROSS RESOURCE AREAS WITH THE EXCEPTION OF LARGER WATER BODIES WHERE IT IS NOT FEASIBLE OR ADVISABLE.
3. CONSTRUCTION/SNOW FENCE SHALL REMAIN IN PLACE AND BE MAINTAINED/REPLACED AS NEEDED UNTIL FINAL STABILIZATION IN THE AREA HAS BEEN ACHIEVED.

## 5 Construction/Snow Fence

12/12

N.T.S. Source: VHB LD_651




**Notes:**

1. BARRIER MESH TAPE OR ROPE SHALL BE INSTALLED ALONG THE PERIMETER OF THE PROJECT AREA TO DEMARCATE THE LIMIT OF DISTURBANCE. NO EARTHWORK OR STORAGE OF MATERIALS SHALL BE CONDUCTED BEYOND THIS LIMIT WITHOUT PRIOR APPROVAL FROM THE OSPC.
2. USE 3" ORANGE BARRIER MESH TAPE OR 1/2" YELLOW POLYPROPYLENE ROPE.
3. WITHIN 50' OF WATER RESOURCE AREAS, USE 2–3 ROWS OF TAPE OR ROPE. BEYOND 50' OF WATER RESOURCE AREAS USE 1 ROW OF TAPE OR ROPE.
4. TAPE OR ROPE MAY BE FASTENED TO STAKES, TREES, OR OTHER APPROPRIATE FIXED OBJECTS.
5. PROJECT DEMARCATION SHALL NOT CROSS ACTIVE ACCESS ROUTES (E.G. ROADS). PROJECT DEMARCATION MAY CROSS RESOURCES AREAS WITH EXCEPTION OF LARGER WATER BODIES WHERE IT IS NOT FEASIBLE OR ADVISABLE.
6. PROJECT DEMARCATION SHALL REMAIN IN PLACE AND BE MAINTAINED/REPLACED AS NEEDED UNTIL FINAL STABILIZATION IN THE AREA HAS BEEN ACHIEVED.

## 3 Barrier Mesh Tape or Rope

12/12

N.T.S. Source: VHB LD_

MULCH MATERIAL AND APPLICATION

| MULCH MATERIAL | QUALITY STANDARDS | PER 1,000 SQ–FT | PER ACRE | DEPTH OF APPLICATION |
|---|---|---|---|---|
| WOOD CHIPS OR SHAVINGS | AIR DRIED, FREE OF OBJECTIONABLE MATERIAL | 500 – 900 LBS | 10 – 20 TONS | 2" – 7" |
| WOOD FIBER CELLULOSE (PARTIALLY DIGESTED WOOD FIBERS) | MADE FROM NATURAL WOOD USUALLY WITH GREEN DYE AND DISPERSING AGENT | 50 LBS | 2,000 LBS | N/A |
| GRAVEL, CRUSHED STONE OR SLAG | WASHED; SIZE 2B OR 3A – 1 1/2" | 9 CY | 405 CY | 3" |
| HAY OR STRAW | AIR–DRIED; FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS | 90 – 100 LBS, 2–3 BALES | 2 TONS (100–120 BALES) | COVER ABOUT 90% SURFACE |
| COMPOST | UP TO 3" PIECES, MODERATELY TO HIGHLY STABLE | 3 – 9 CY | 3 – 9 CY | 1–3" |
| Erosion Control Mix | WELL–GRADED MIXTURE OF PARTICLE SIZES. ORGANIC CONTENT BETWEEN 80–100% DRY WEIGHT. PARTICLE SIZE SHALL PASS 6" SCREEN (100%) | *Slopes 3(Hz.):1(Vert.) = 2 inch depth plus additional 1/2 inch depth per 20 ft. of slope up to 100 ft. **Slopes between 3(Hz.):1(Vert.) and 2(Hz.):1(Vert.) = 4 inch depth plus additional 1/2 inch per 20 ft. of slope up to 100 ft. ***Slopes steeper than 2(Hz.):1(Vert.) applicability to specific site and mulch depth to be reviewed and approved prior to use by OPSC or EPSC Specialist | | |

**Notes:**

1. APPLY TACKIFIER AS NEEDED TO MINIMIZE POTENTIAL FOR MULCH TO BLOW AWAY.
2. MULCH MUST NOT CONTAIN INVASIVE PLANT SPECIES. (SEEDS OR SEEDLINGS)
3. TACKIFIER MAY BE WATER, NETTING, OR SIMILAR.
4. OTHER THAN EROSION CONTROL MIX, MULCH IS NOT TO BE INSTALLED ON SLOPES > 3:1.

## 2 Mulch Table

12/12

N.T.S. Source: VHB LD_

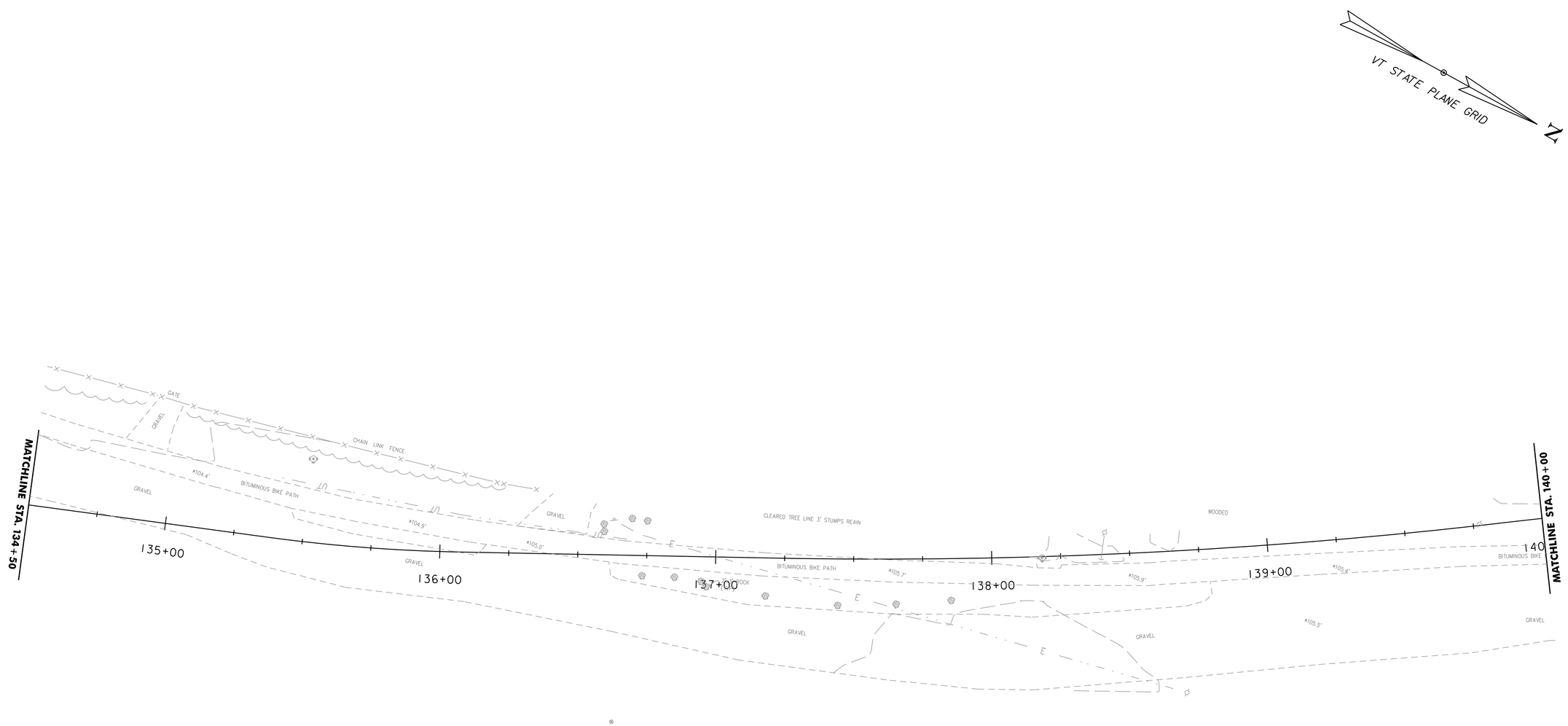
PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (SHEET 4 OF 4)

PLOT DATE: 3/25/2016
DRAWN BY: E.B. PARIZO
CHECKED BY: C. HAKEY
SHEET 83 OF 116

SCALE 1" = 20'-0"
20 0 20

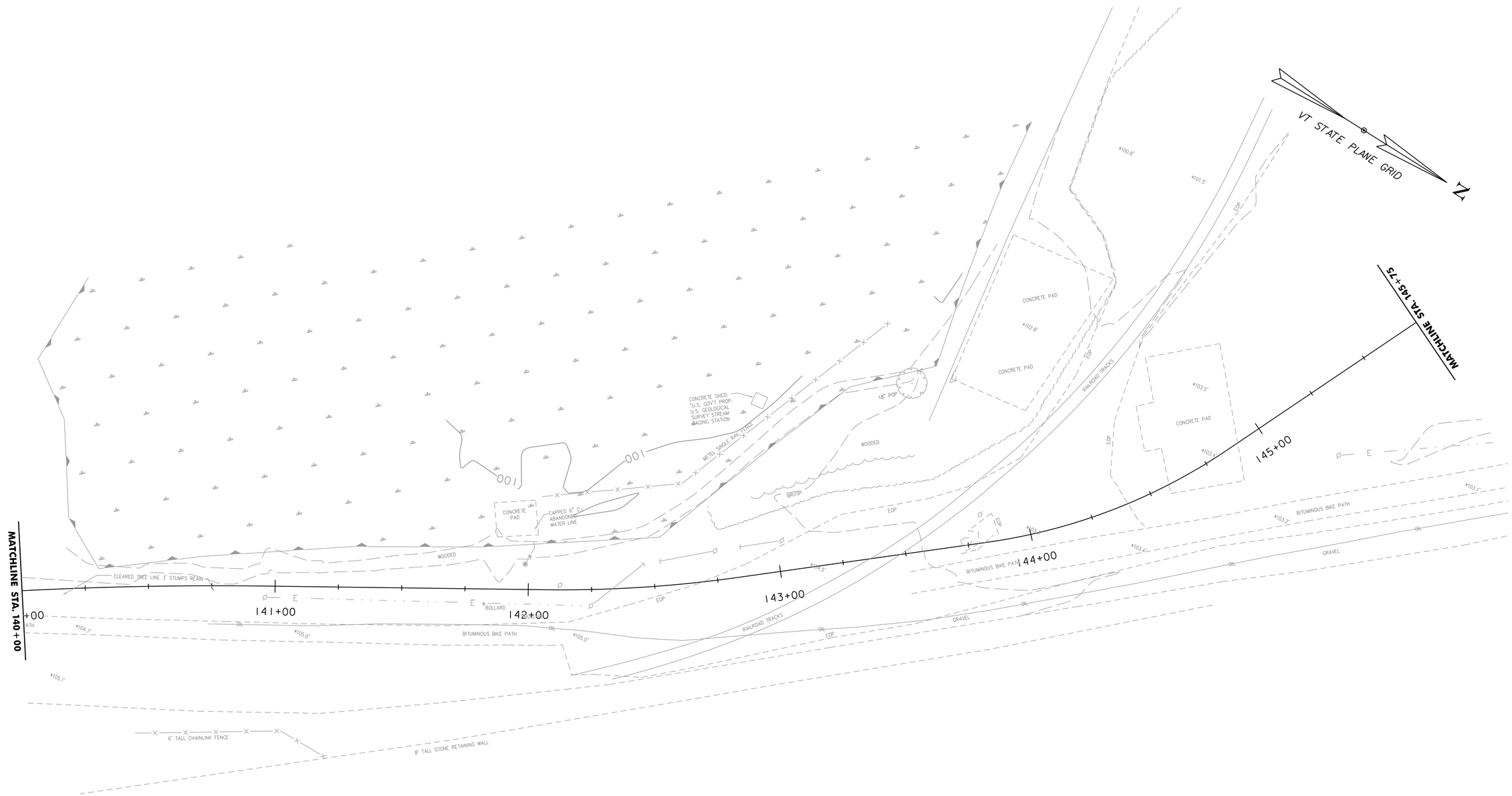
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (1 OF 11) | SHEET 84 OF 116 |



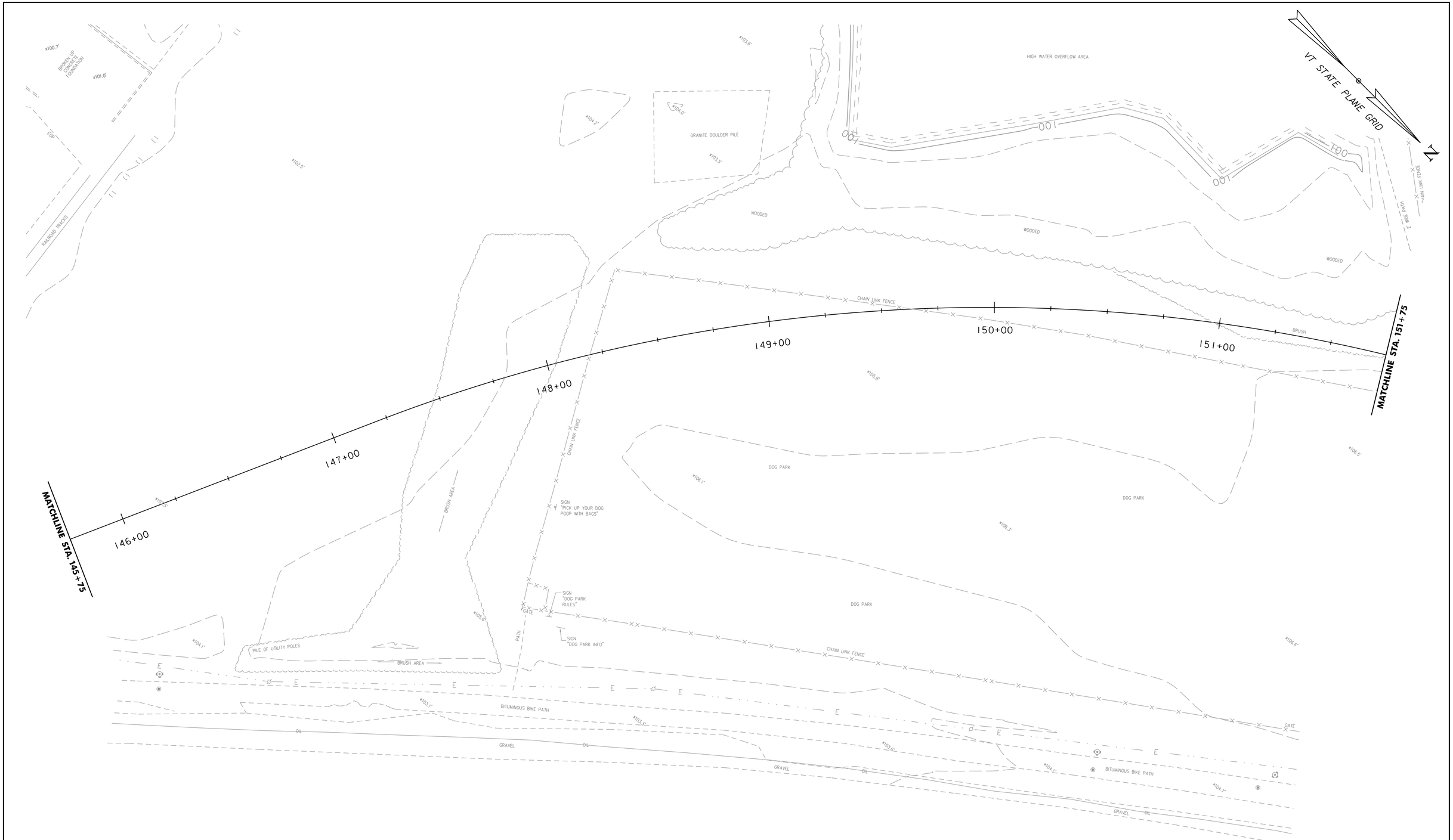

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (2 OF 11) | SHEET 85 OF 116 |

VHB 57634.00

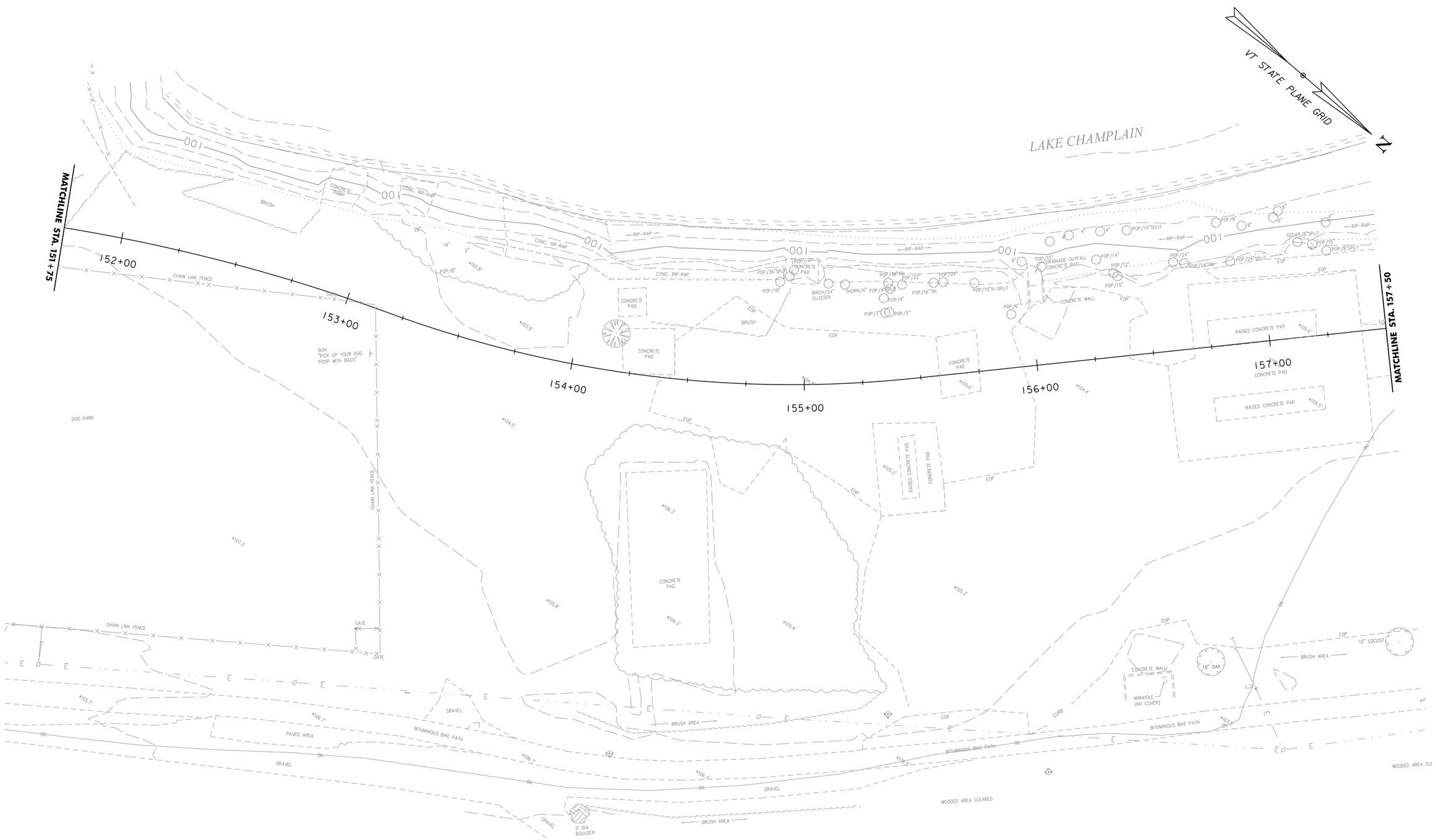



| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (3 OF 11) | SHEET 86 OF 116 |



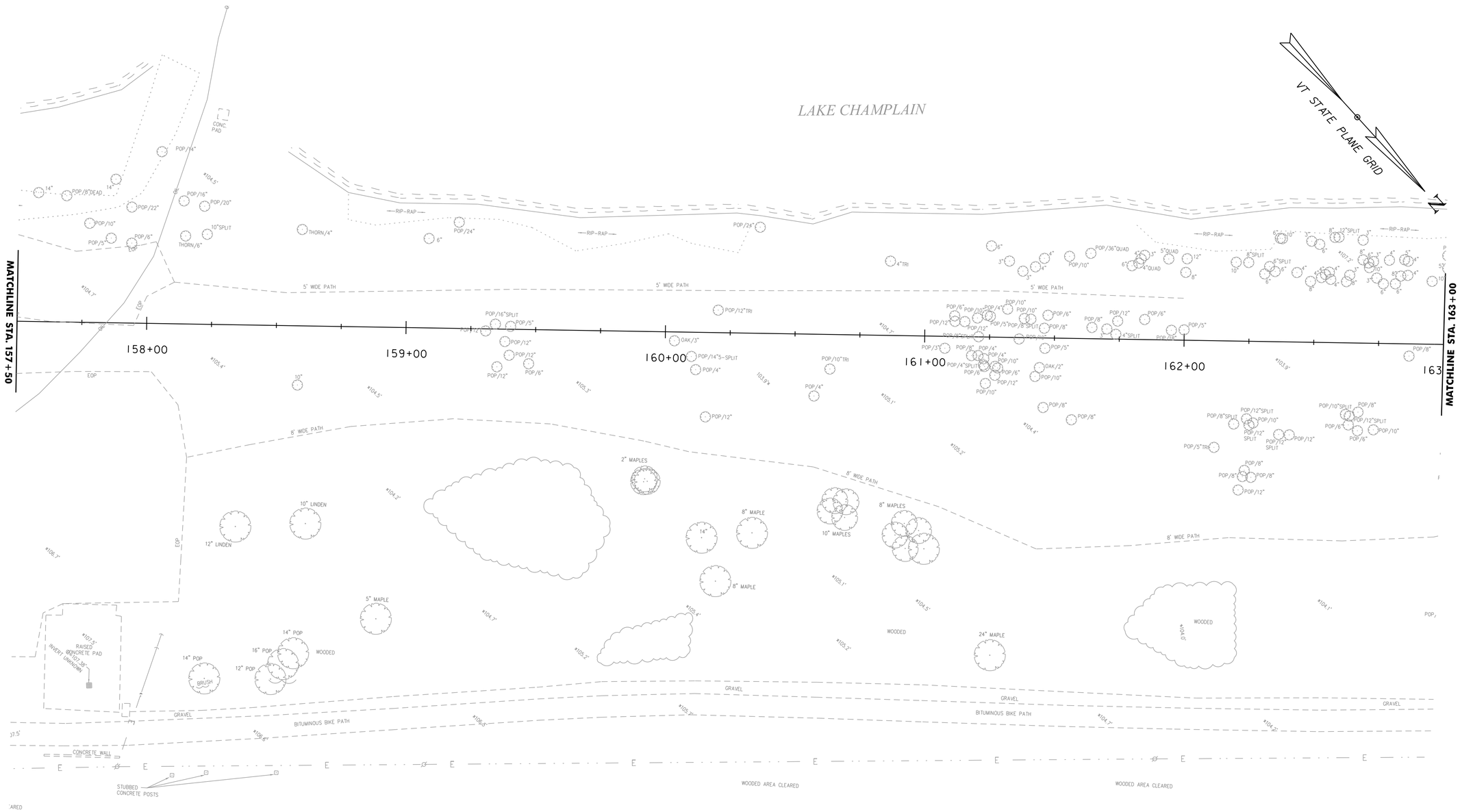

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (4 OF 11) | SHEET 87 OF 116 |



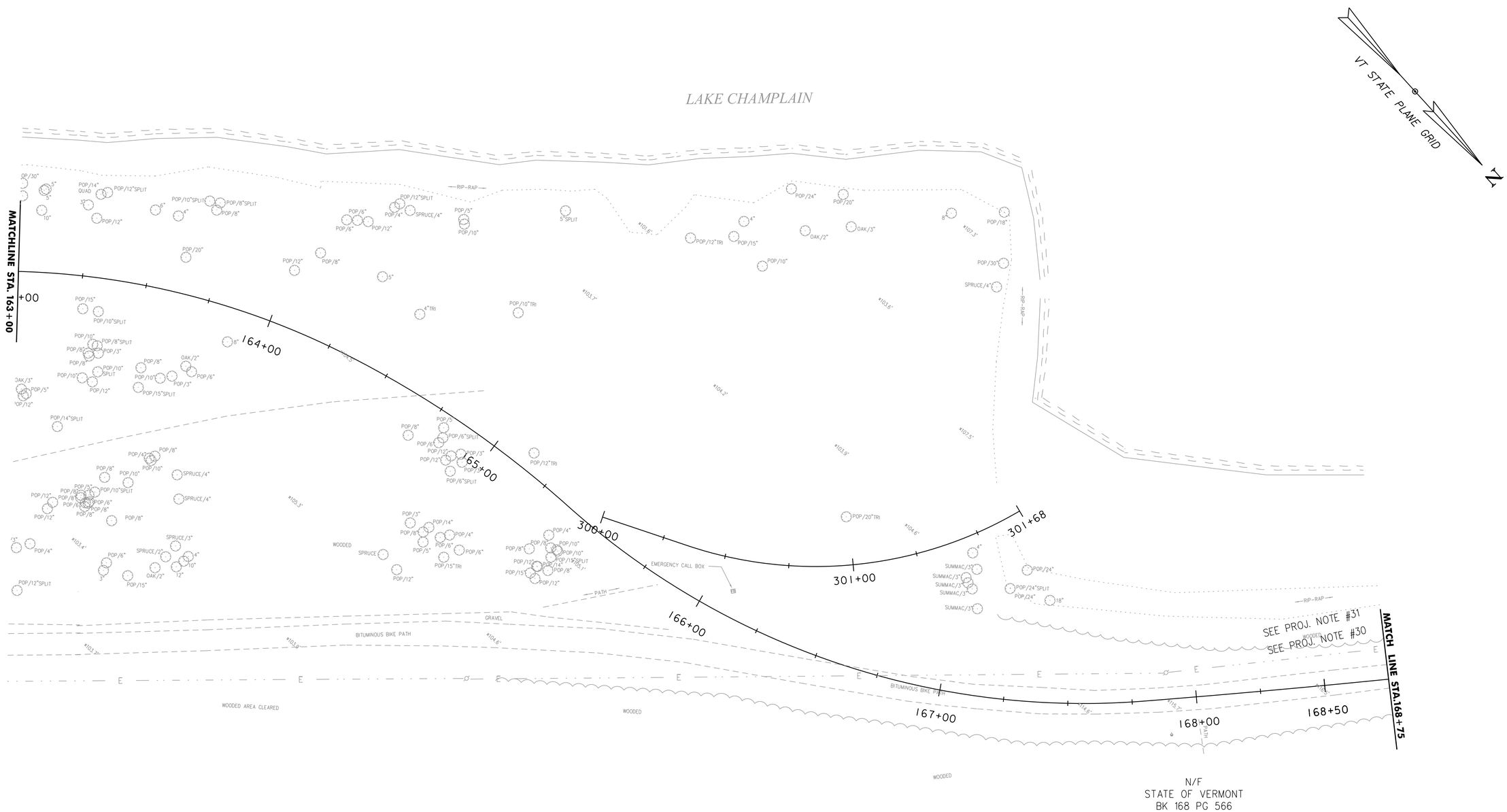

SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (5 OF 11) | SHEET 88 OF 116 |




SCALE 1" = 20'-0"
20 0 20

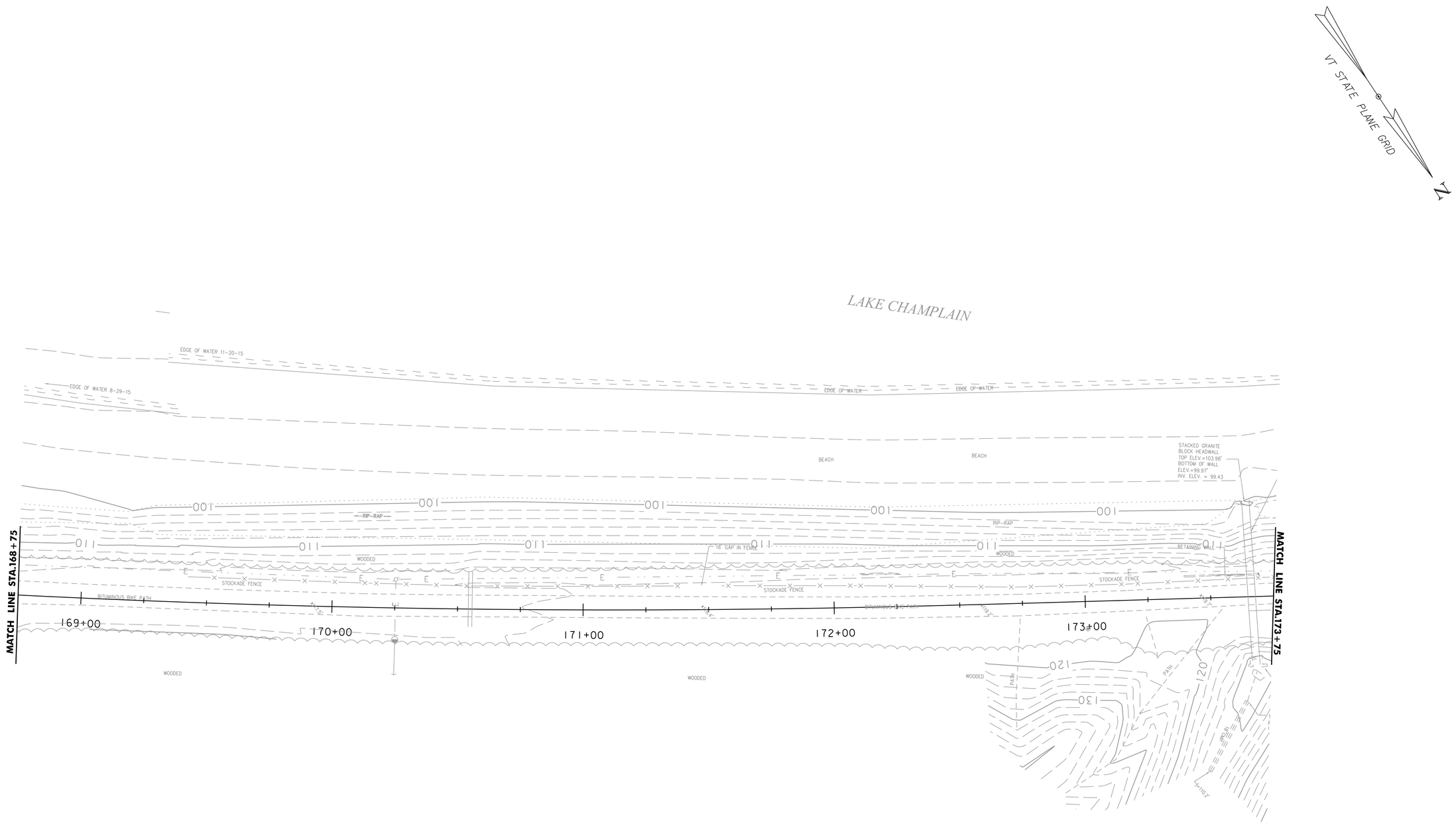
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (6 OF 11) | SHEET 89 OF 116 |




R.O.W. (SEE PROJ. NOTE #31)
R.O.W. (SEE PROJ. NOTE #30)

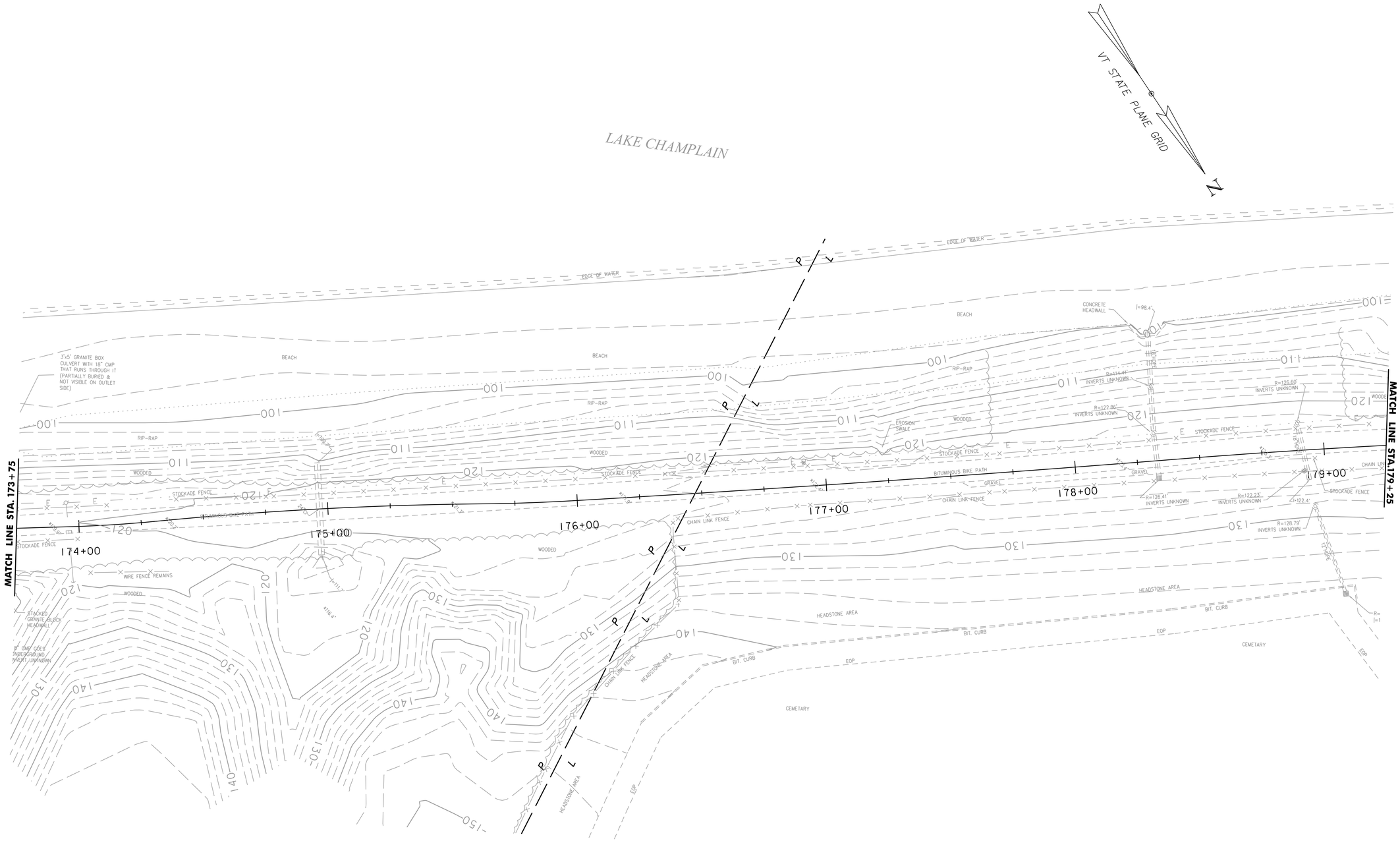
SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC EXIST. CONDITIONS PLAN (7 OF 11) | SHEET 90 OF 116 |




SCALE 1" = 20'-0"
20 0 20

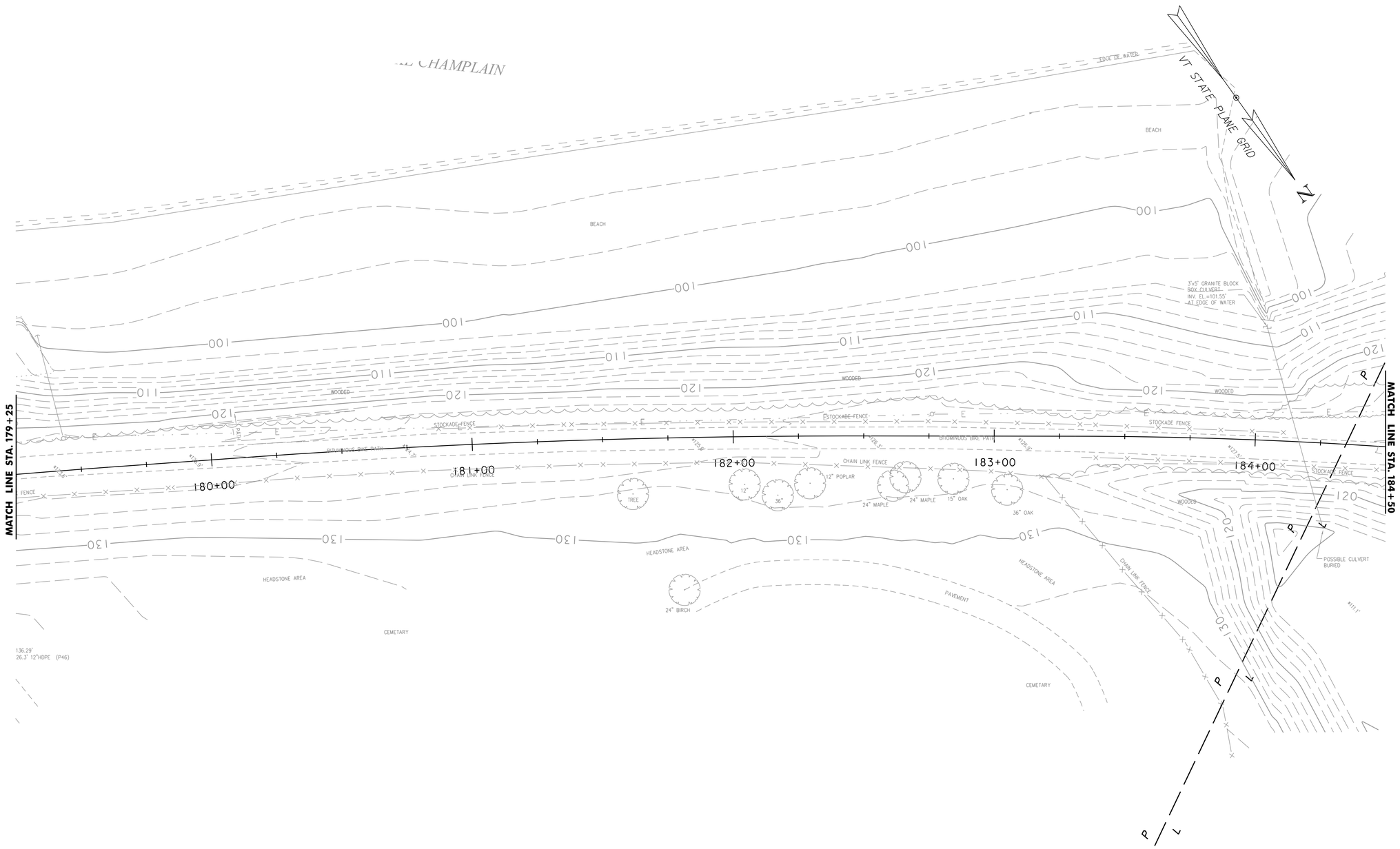
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC EXIST. CONDITIONS PLAN (8 OF 11) | SHEET 91 OF 116 |




SCALE 1" = 20'-0"

20 0 20

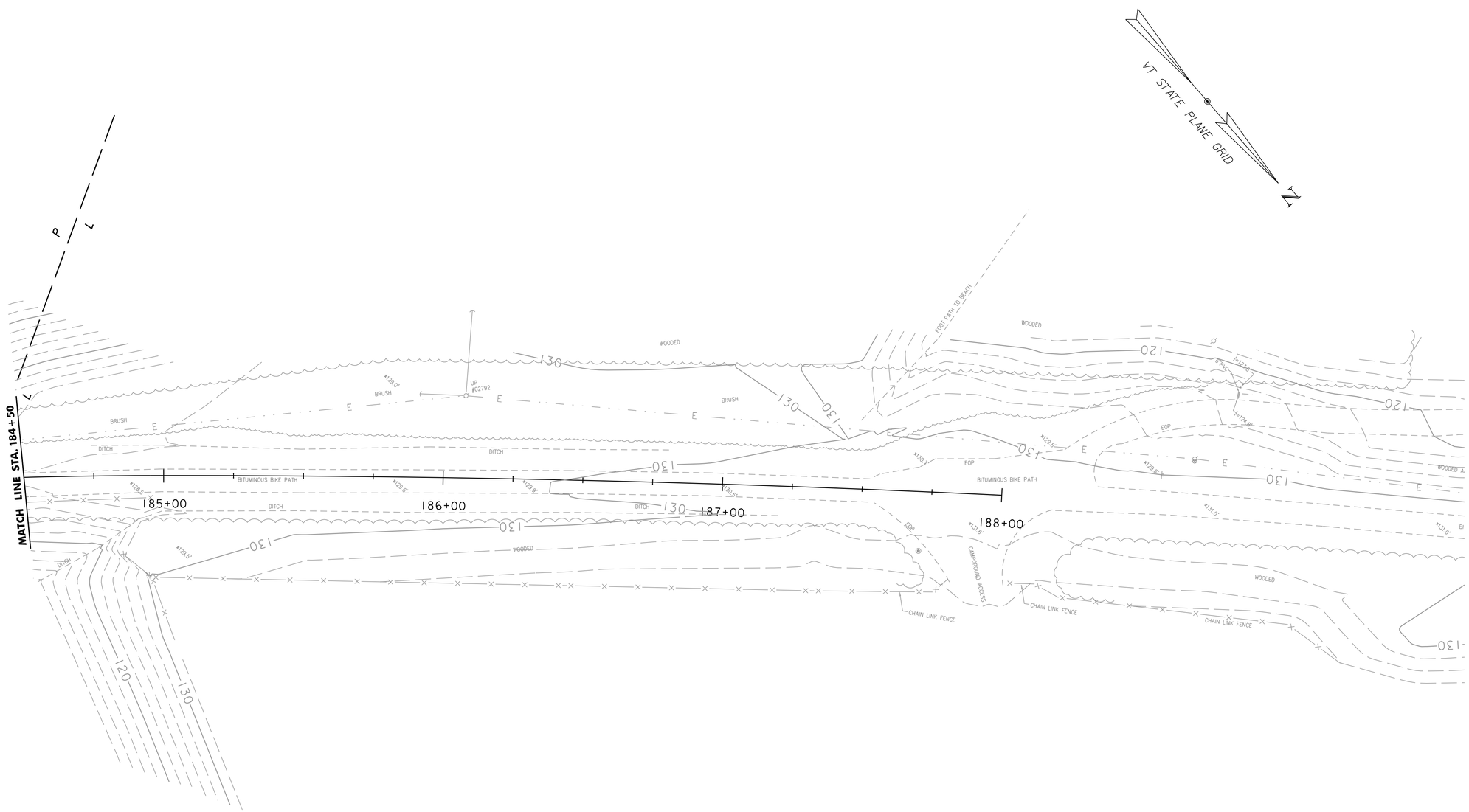
| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC EXIST. CONDITIONS PLAN (9 OF 11) | SHEET 92 OF 116 |




SCALE 1" = 20'-0"

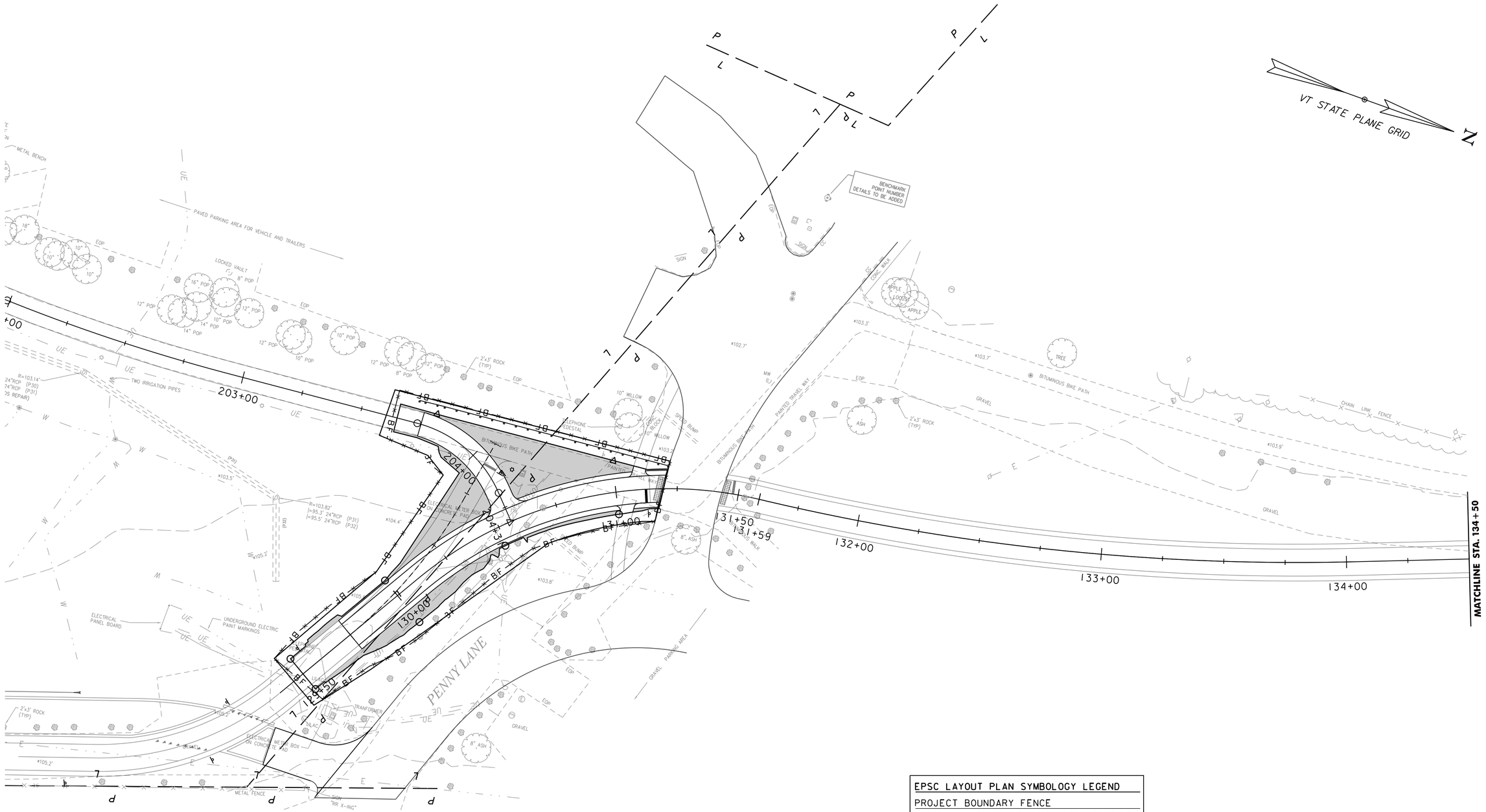
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC EXIST. CONDITIONS PLAN (10 OF 11) | SHEET 93 OF 116 |




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC EXIST. CONDITIONS PLAN (11 OF 11) | SHEET 94 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

### CONSTRUCTION FEATURES

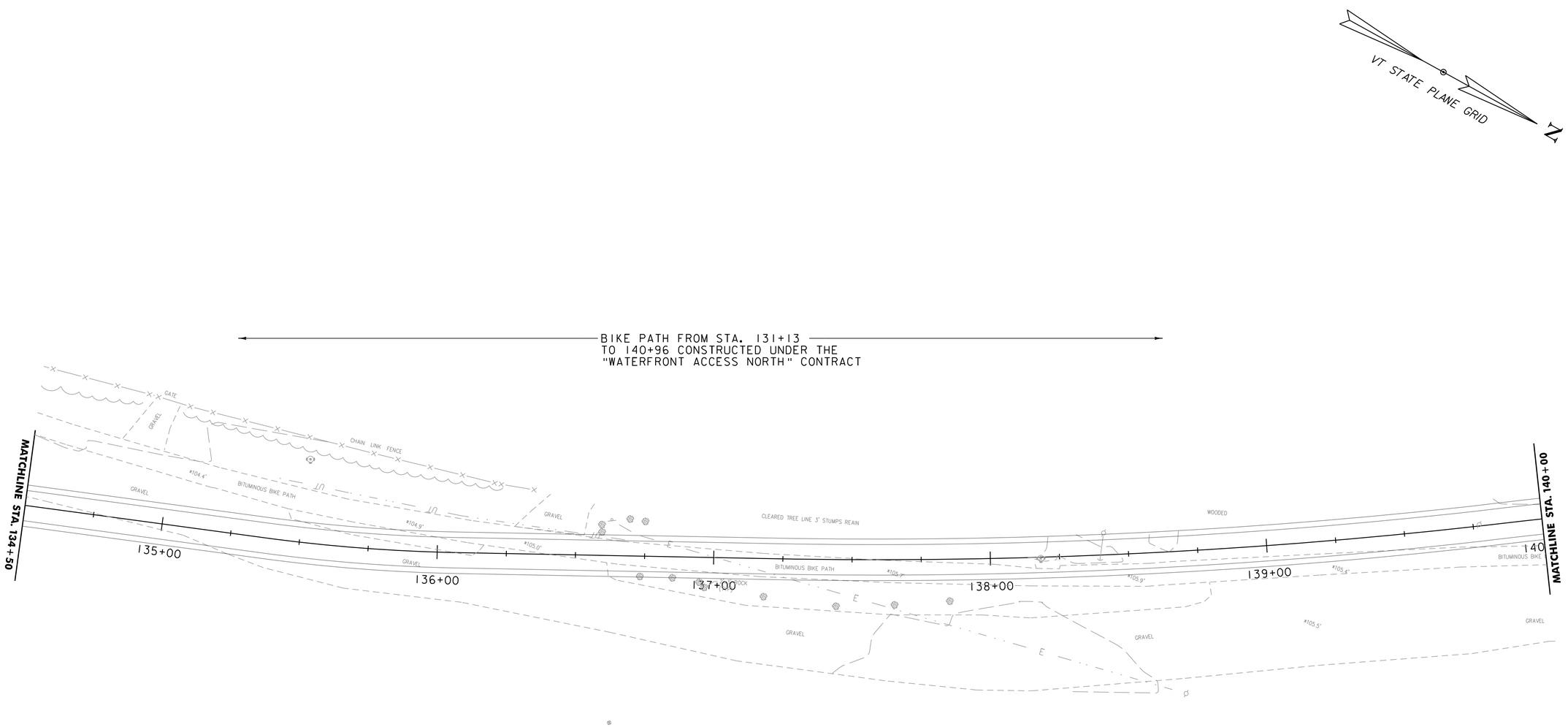
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | 57634.00 |

| | |
|---|---|
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (1 OF 11) | SHEET 95 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

### CONSTRUCTION FEATURES

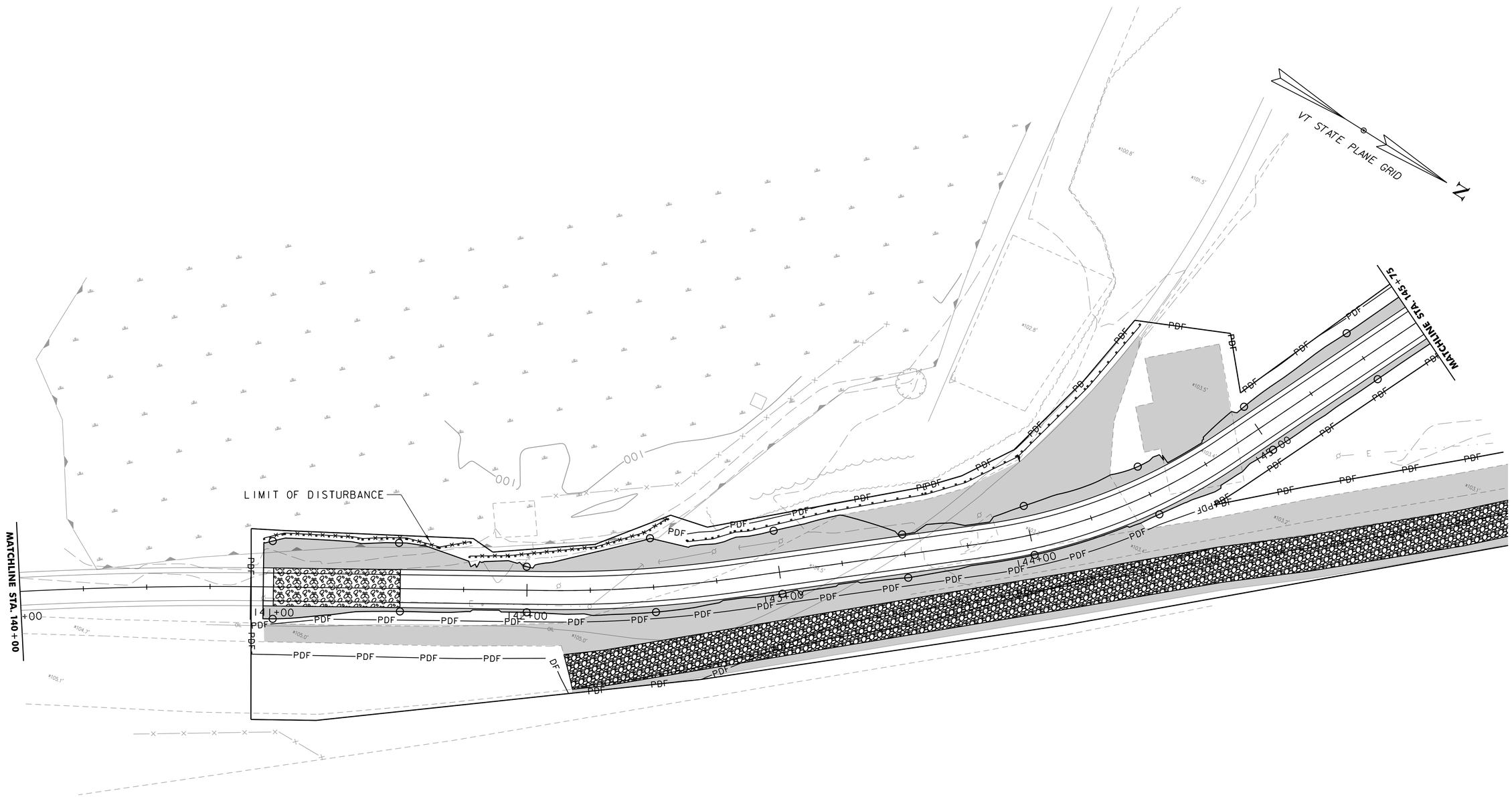
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (2 OF 11) | SHEET 96 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

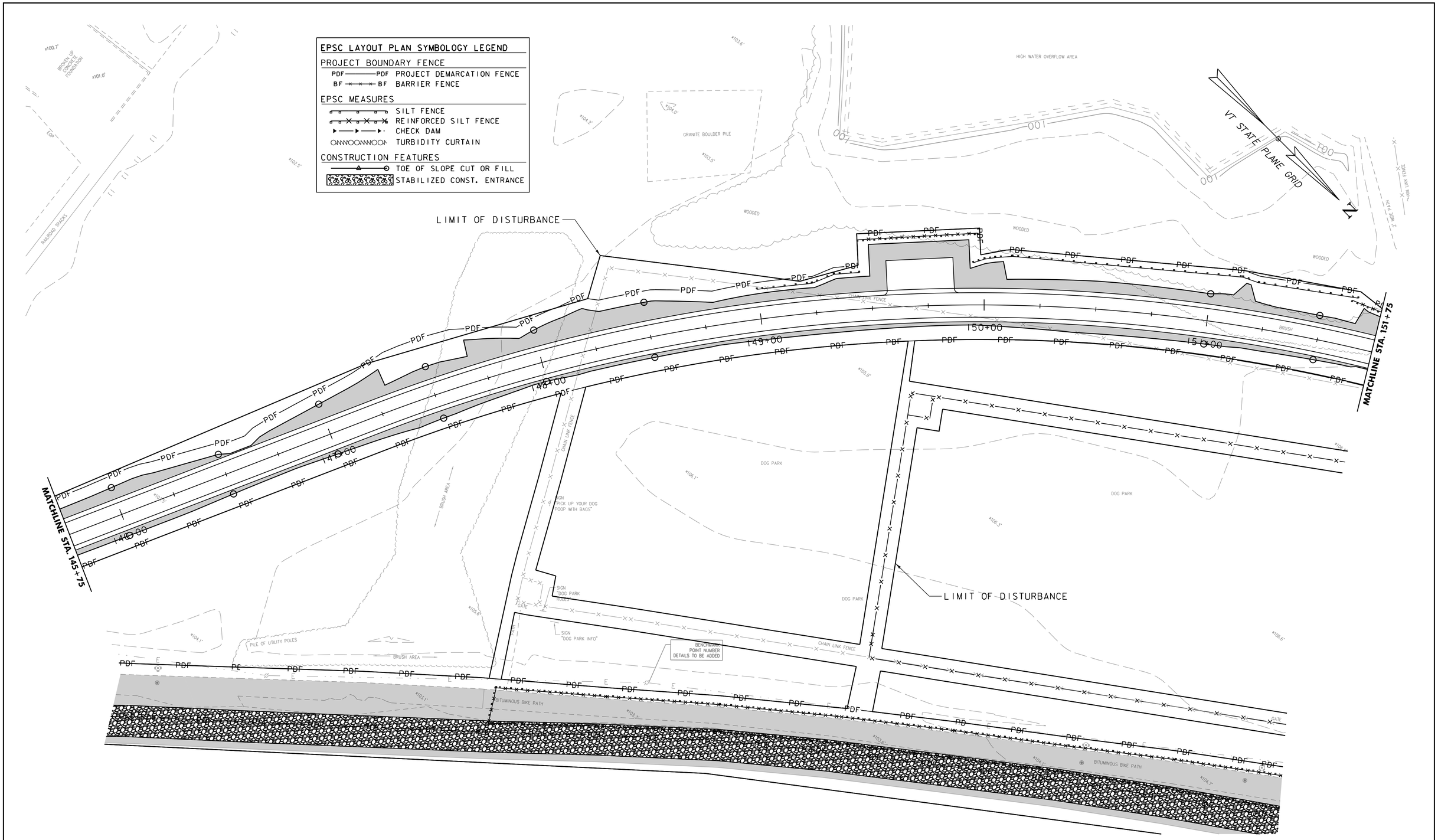
- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (3 OF 11) | SHEET 97 OF 116 |




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (4 OF 11) | SHEET 98 OF 116 |

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

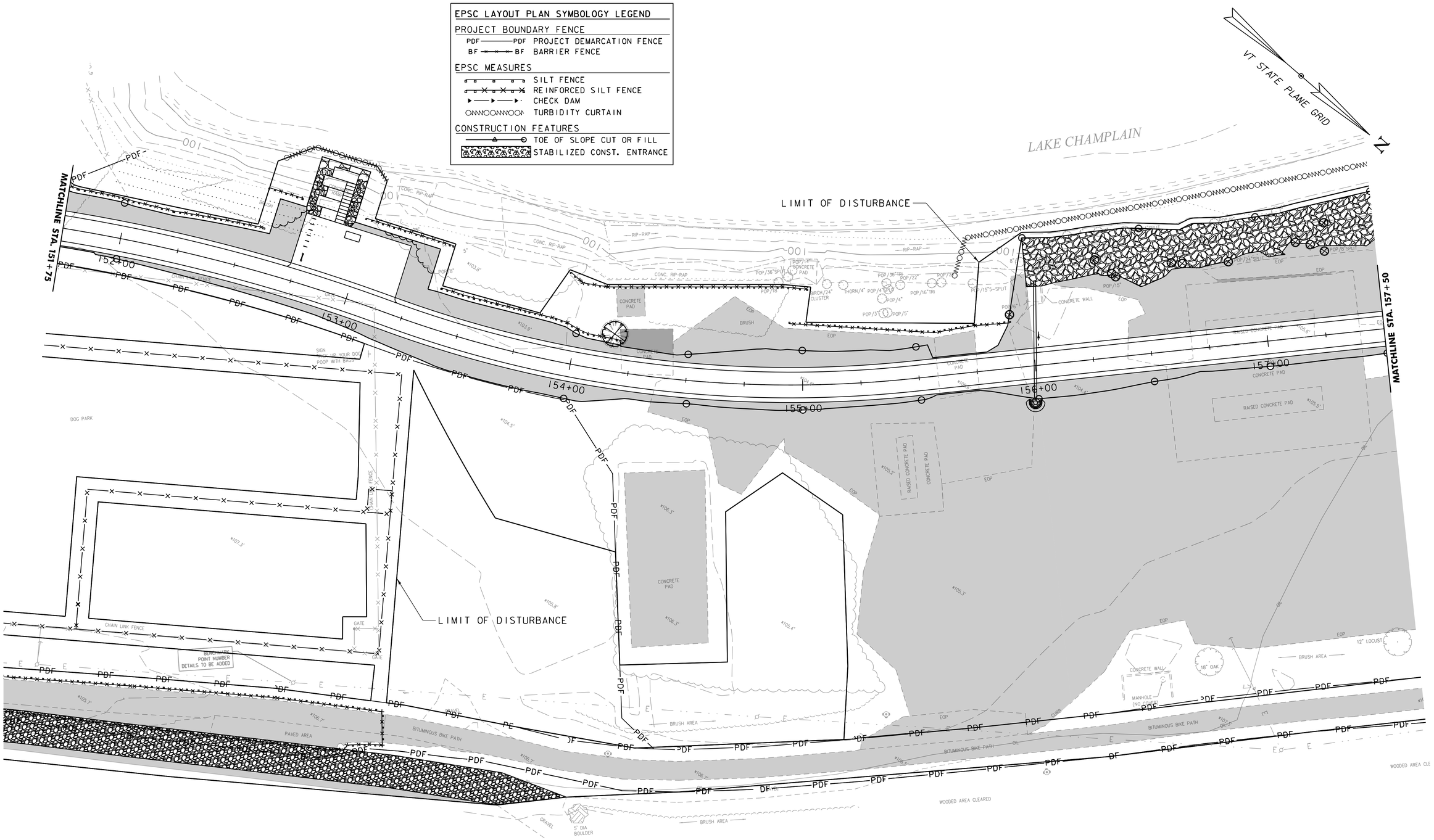
- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

**CONSTRUCTION FEATURES**

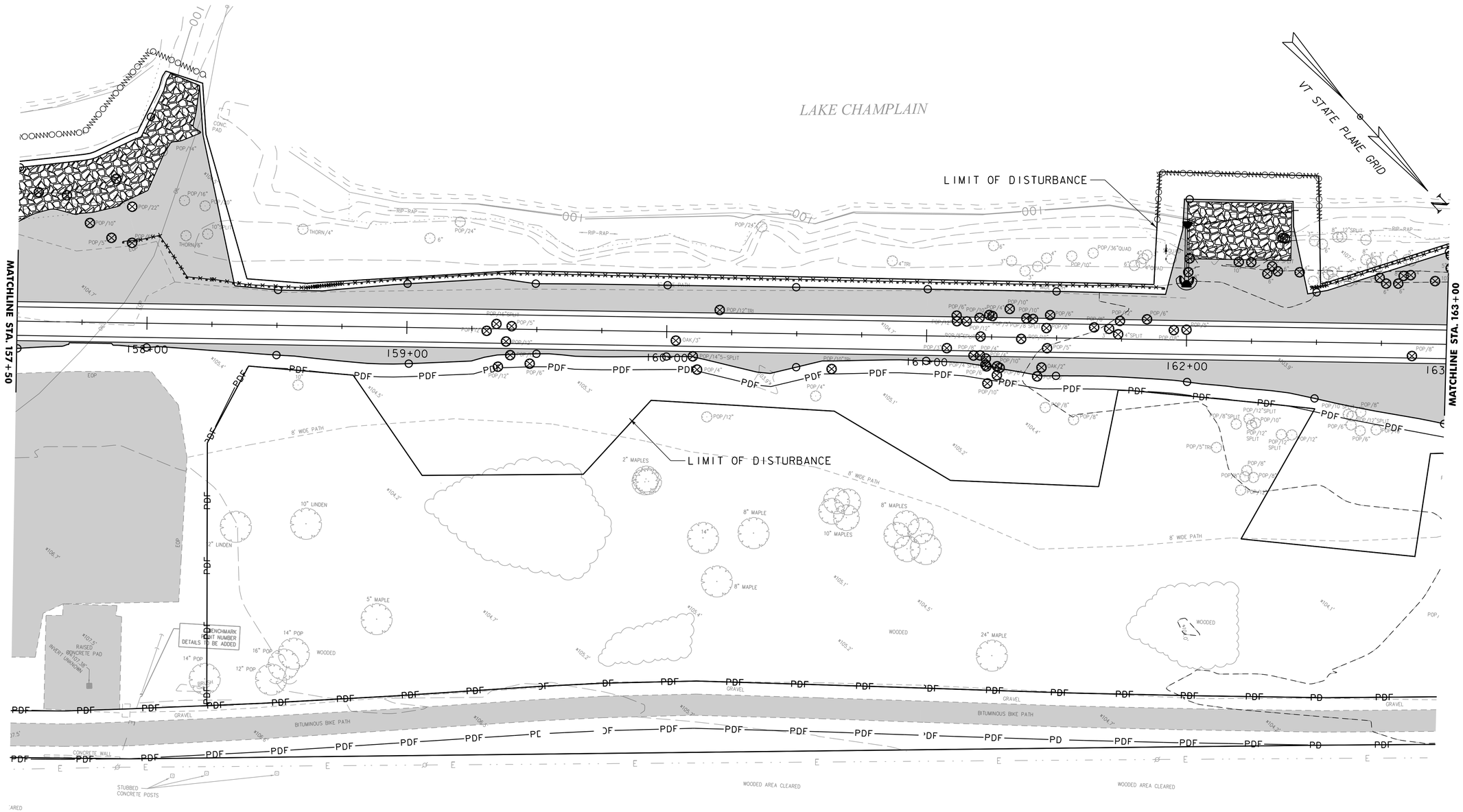
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | 57634.00 |

| | |
|---|---|
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (5 OF 11) | SHEET 99 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

**CONSTRUCTION FEATURES**

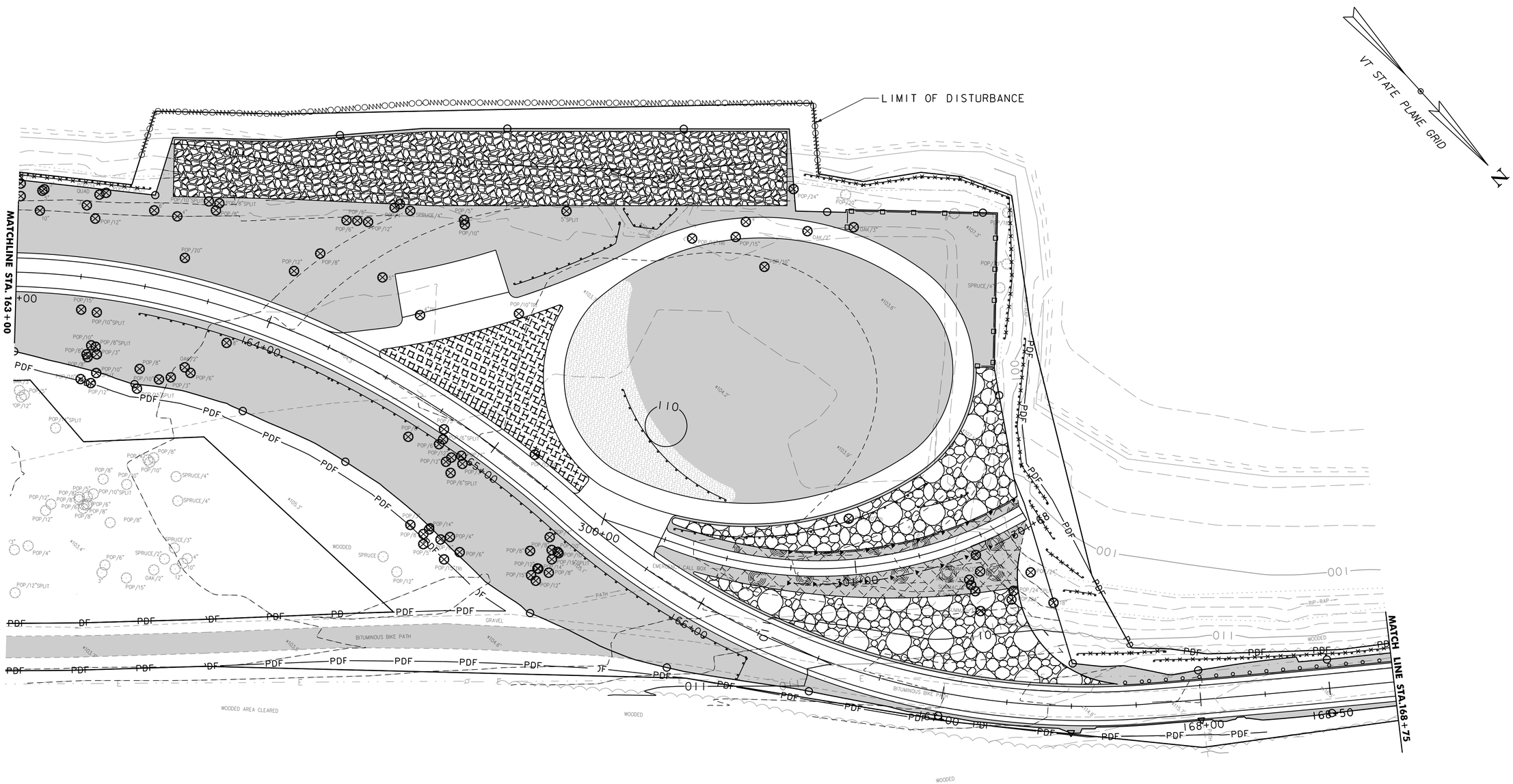
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (6 OF 11) | SHEET 100 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

**CONSTRUCTION FEATURES**

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

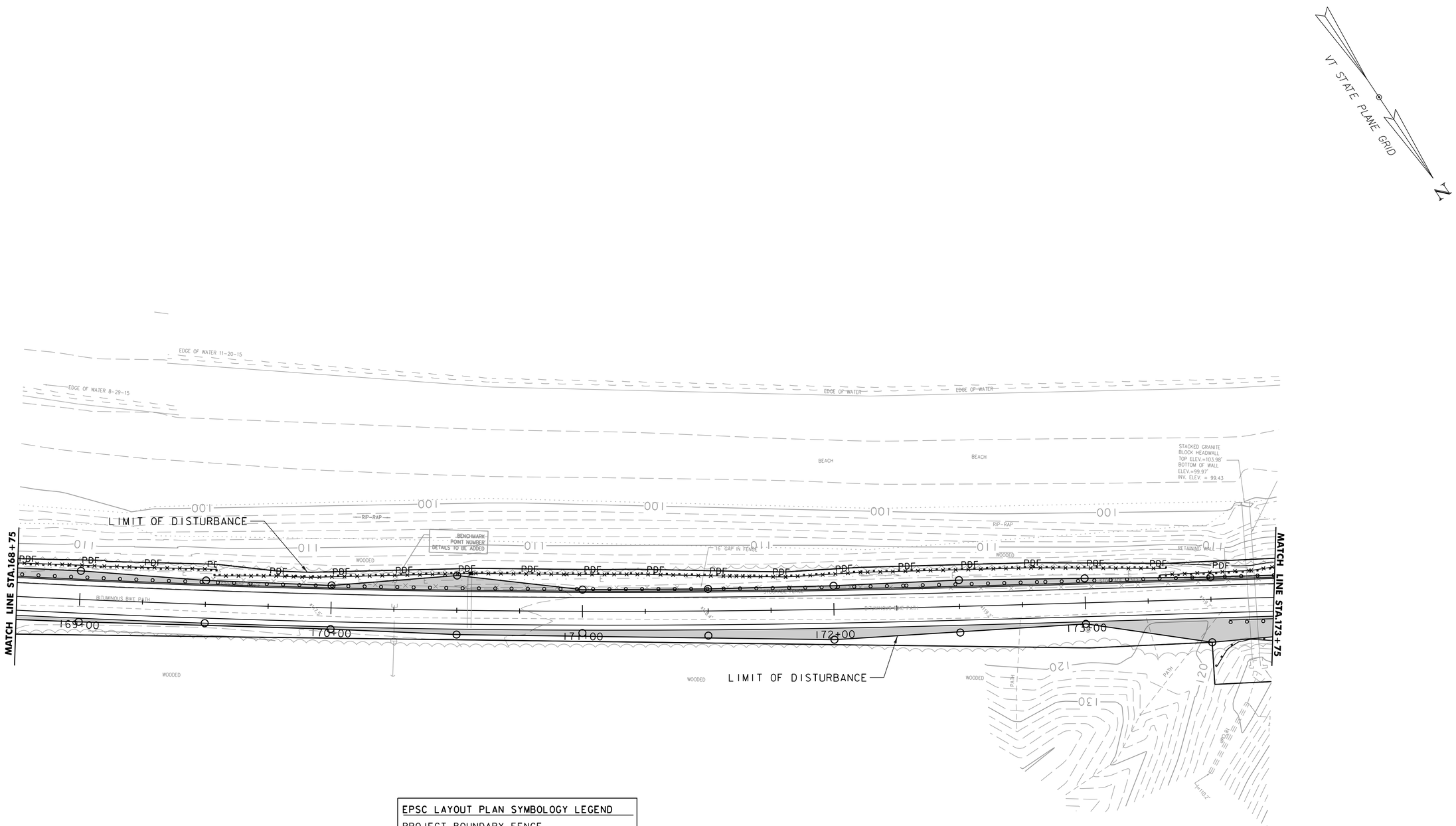
SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | 57634.00 |

| | |
|---|---|
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC PLAN (7 OF 11) | SHEET 101 OF 116 |

VHB 57634.00




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

| | |
|---|---|
| PDF ——— PDF | PROJECT DEMARCATION FENCE |
| BF —×—×— BF | BARRIER FENCE |

### EPSC MEASURES

| | |
|---|---|
| | SILT FENCE |
| | REINFORCED SILT FENCE |
| | CHECK DAM |
| | TURBIDITY CURTAIN |

### CONSTRUCTION FEATURES

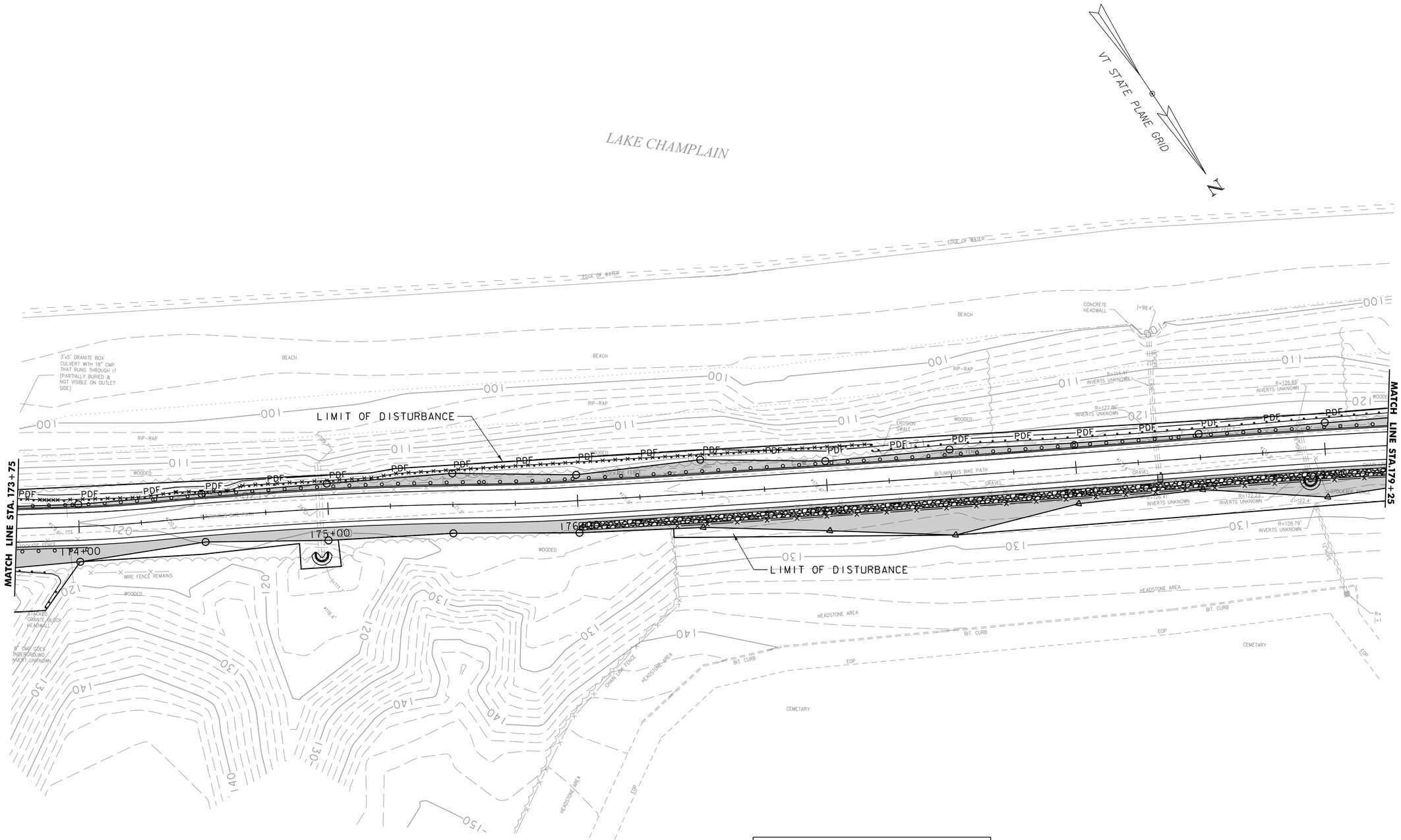
| | |
|---|---|
| | TOE OF SLOPE CUT OR FILL |
| | STABILIZED CONST. ENTRANCE |

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC PLANS (8 OF 11) | SHEET 102 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

**CONSTRUCTION FEATURES**

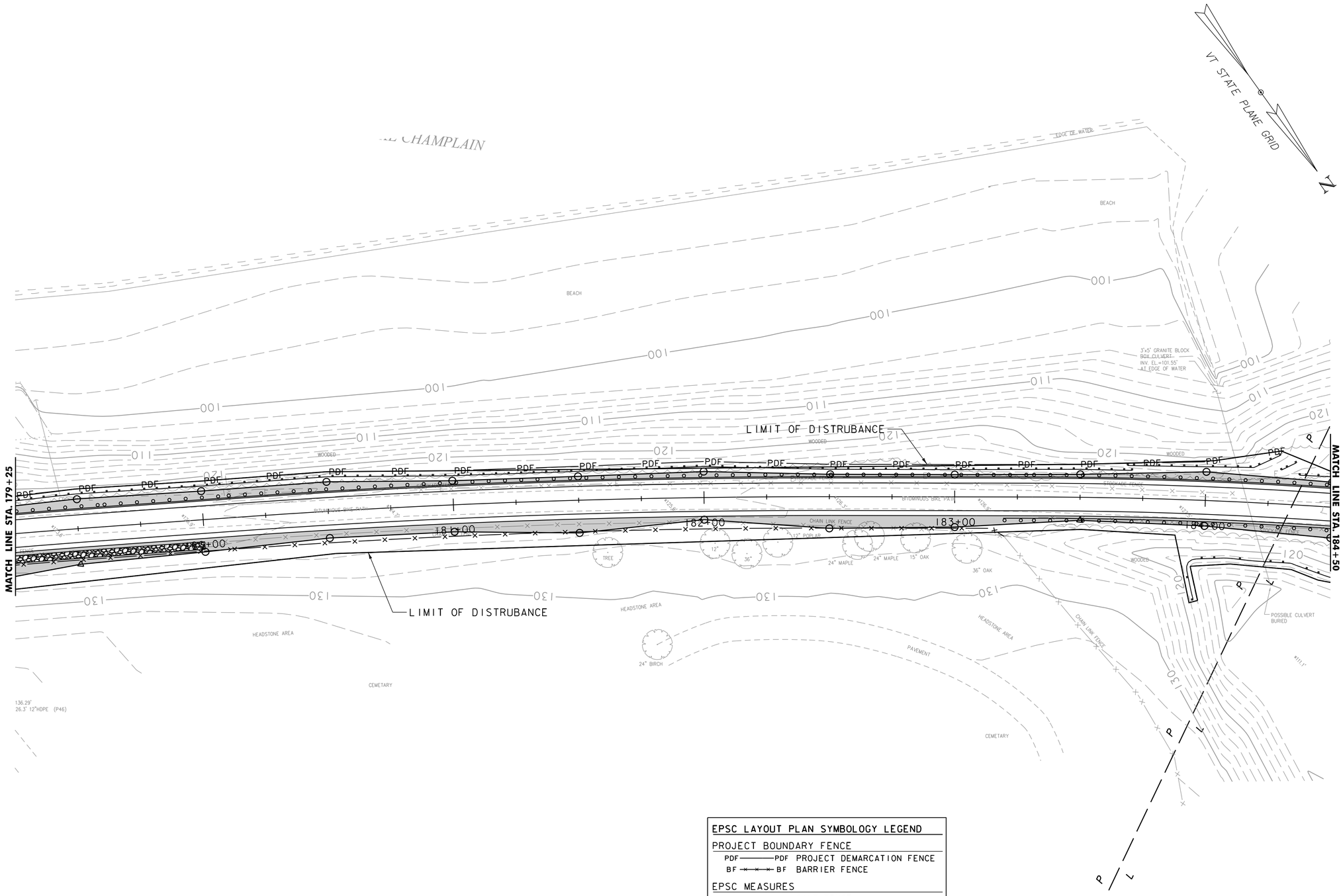
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC PLANS (9 OF 11) | SHEET 103 OF 116 |




SCALE 1" = 20'-0"

20 0 20

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

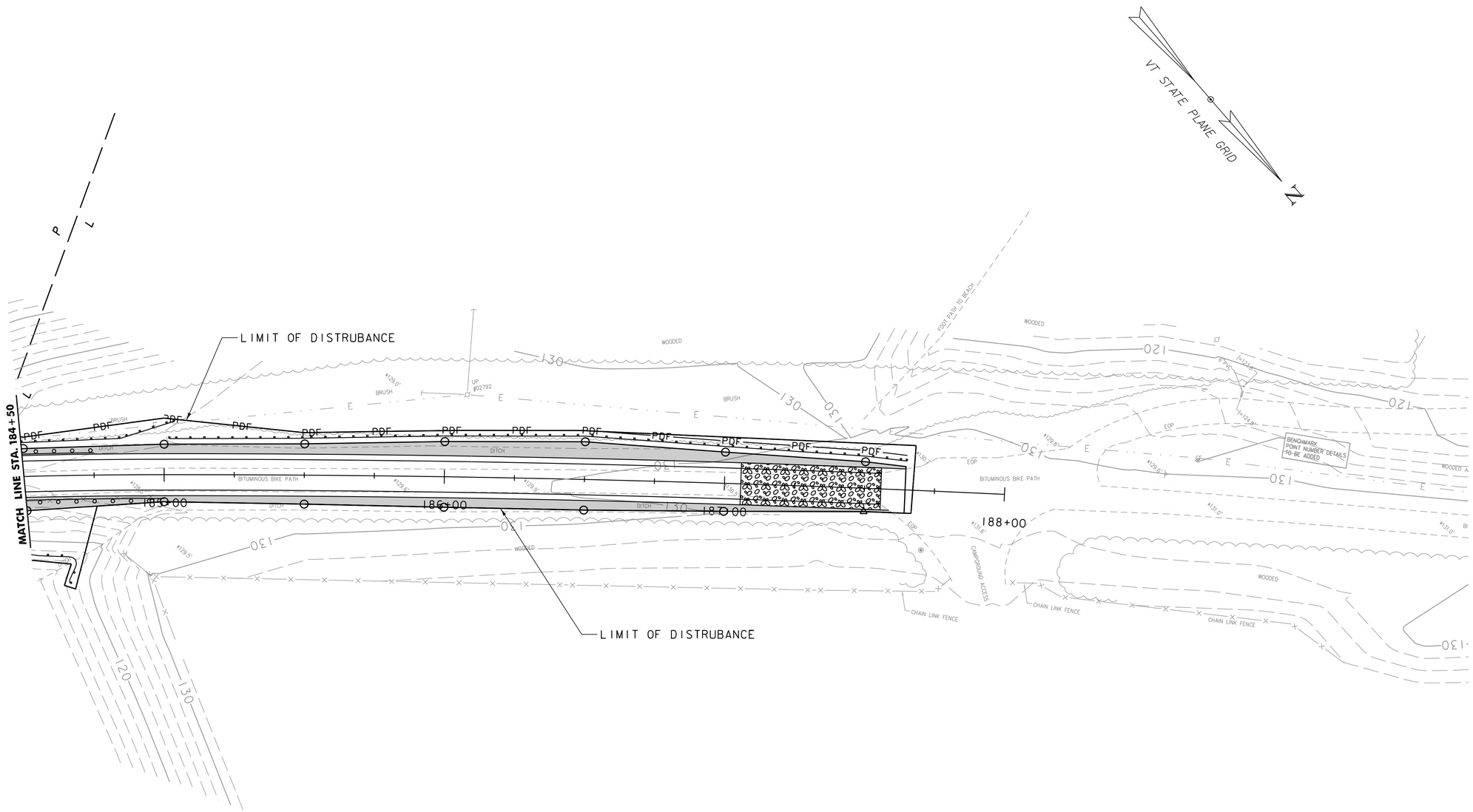
- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC PLANS (10 OF 11) | SHEET 104 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

- PDF——PDF PROJECT DEMARCATION FENCE
- BF—×—×—×—BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- TURBIDITY CURTAIN

**CONSTRUCTION FEATURES**

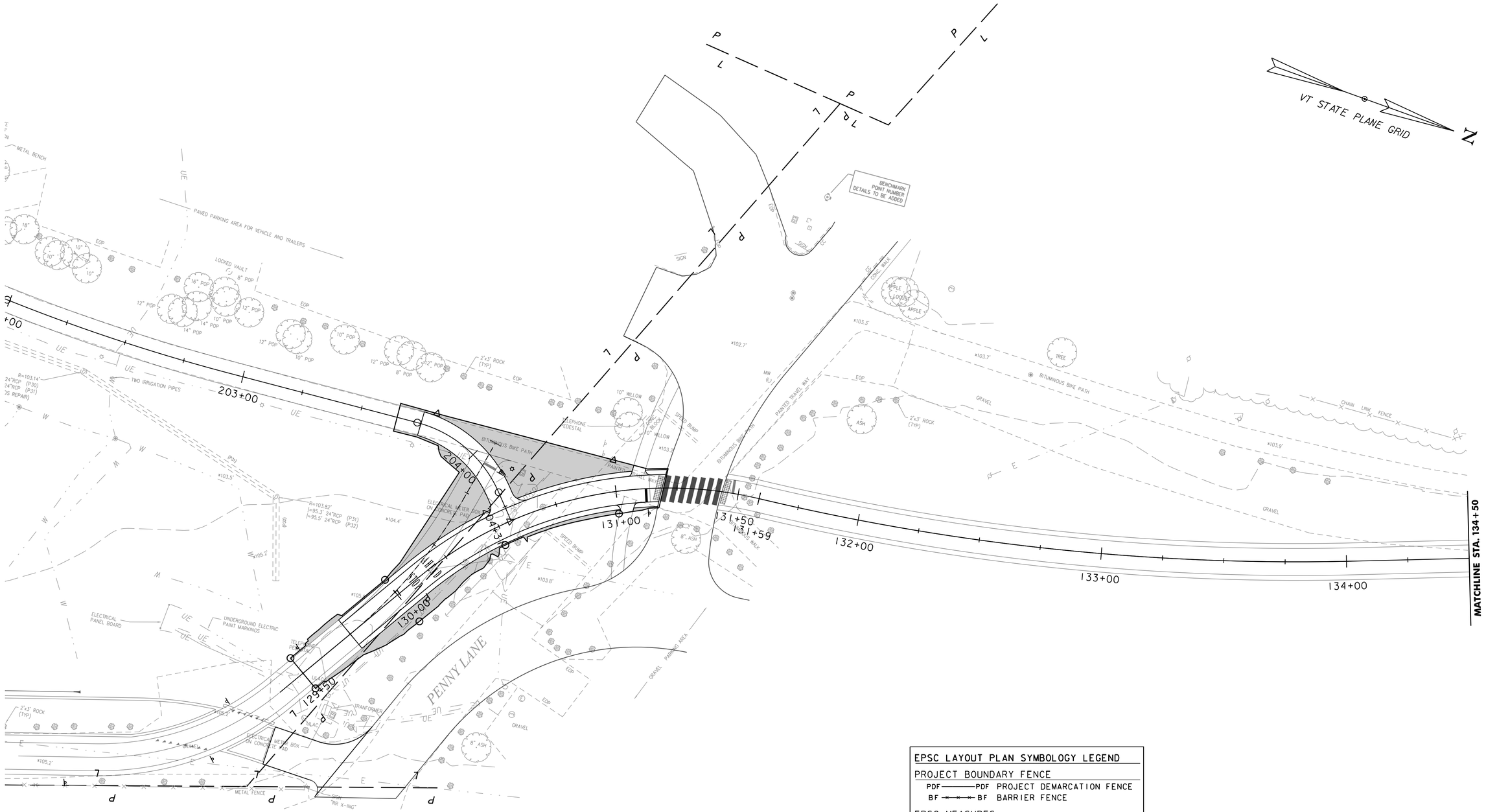
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC PLANS (11 OF 11) | SHEET 105 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF——PDF PROJECT DEMARCATION FENCE
- BF — — — BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

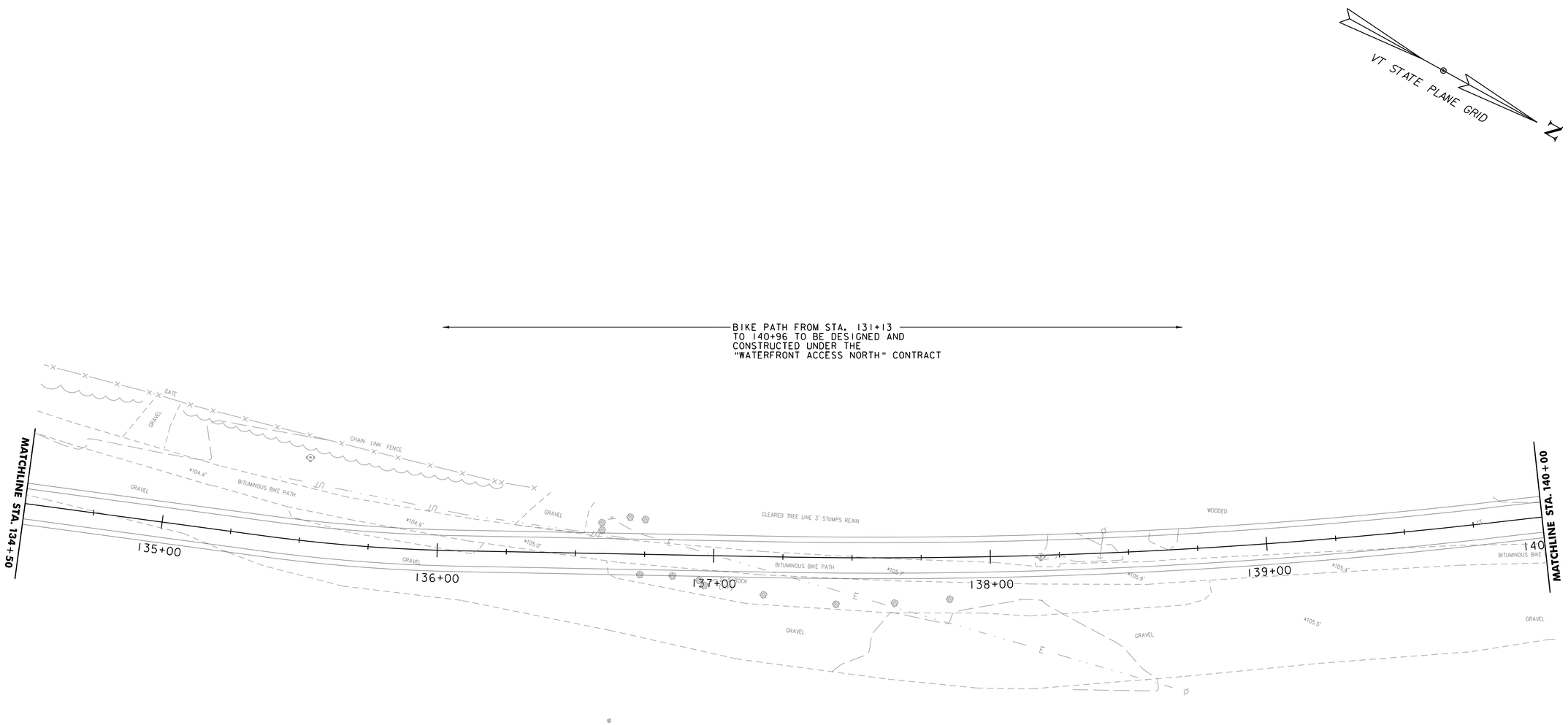
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (1 OF 11) | SHEET 106 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

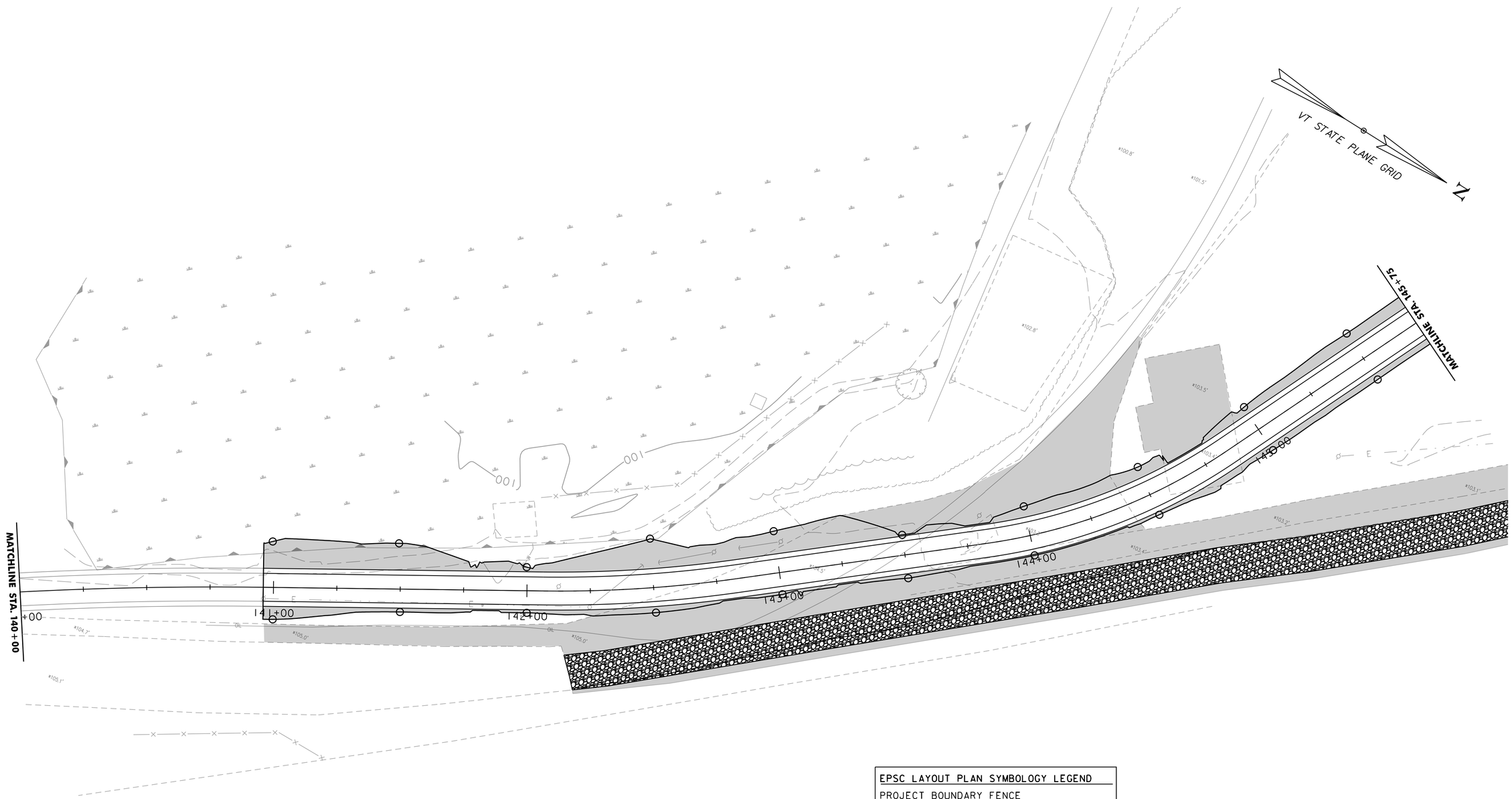
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (2 OF 11) | SHEET 107 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (3 OF 11) | SHEET 108 OF 116 |

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

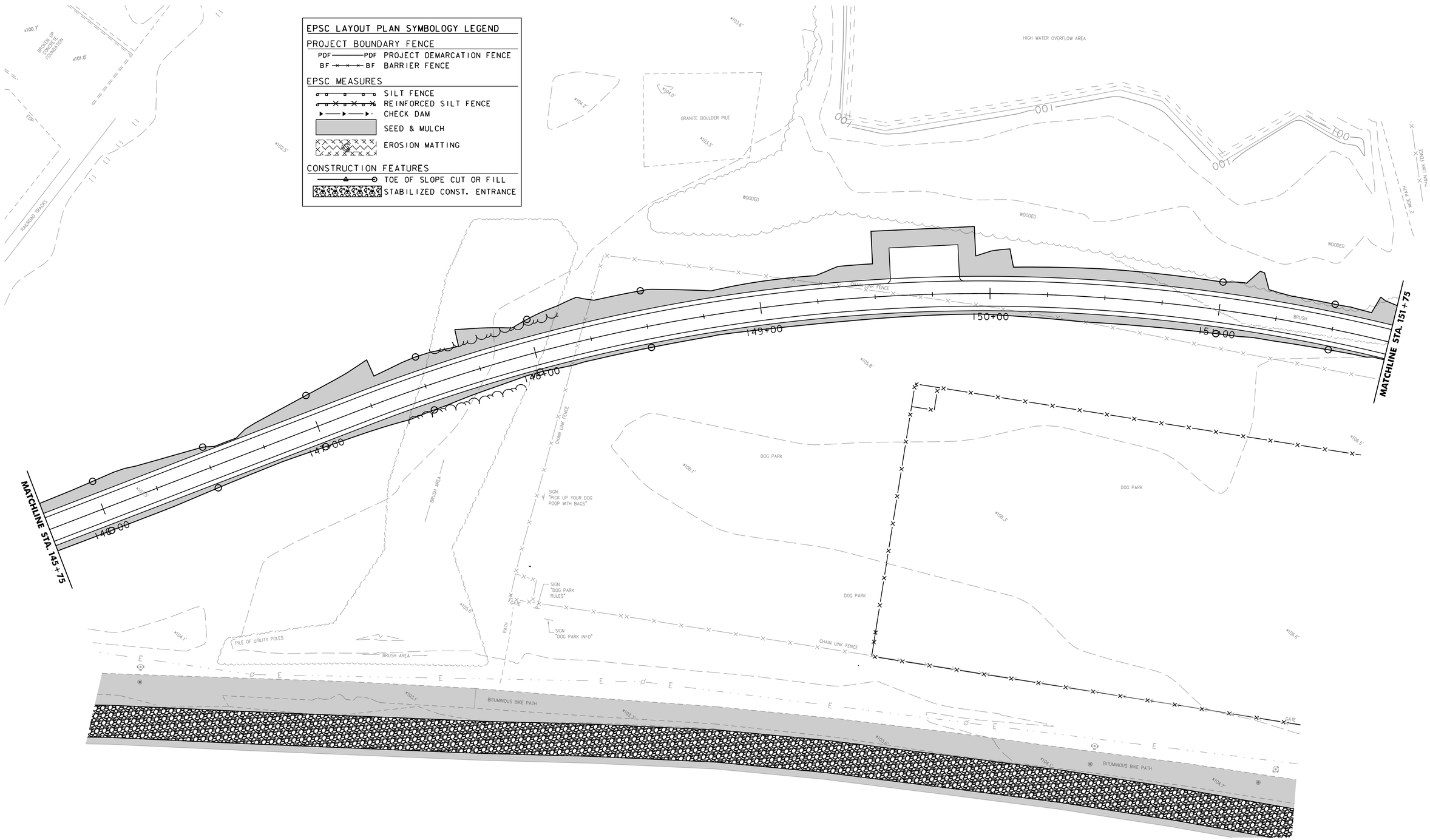
- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

**CONSTRUCTION FEATURES**

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE




SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (4 OF 11) | SHEET 109 OF 116 |

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

**PROJECT BOUNDARY FENCE**

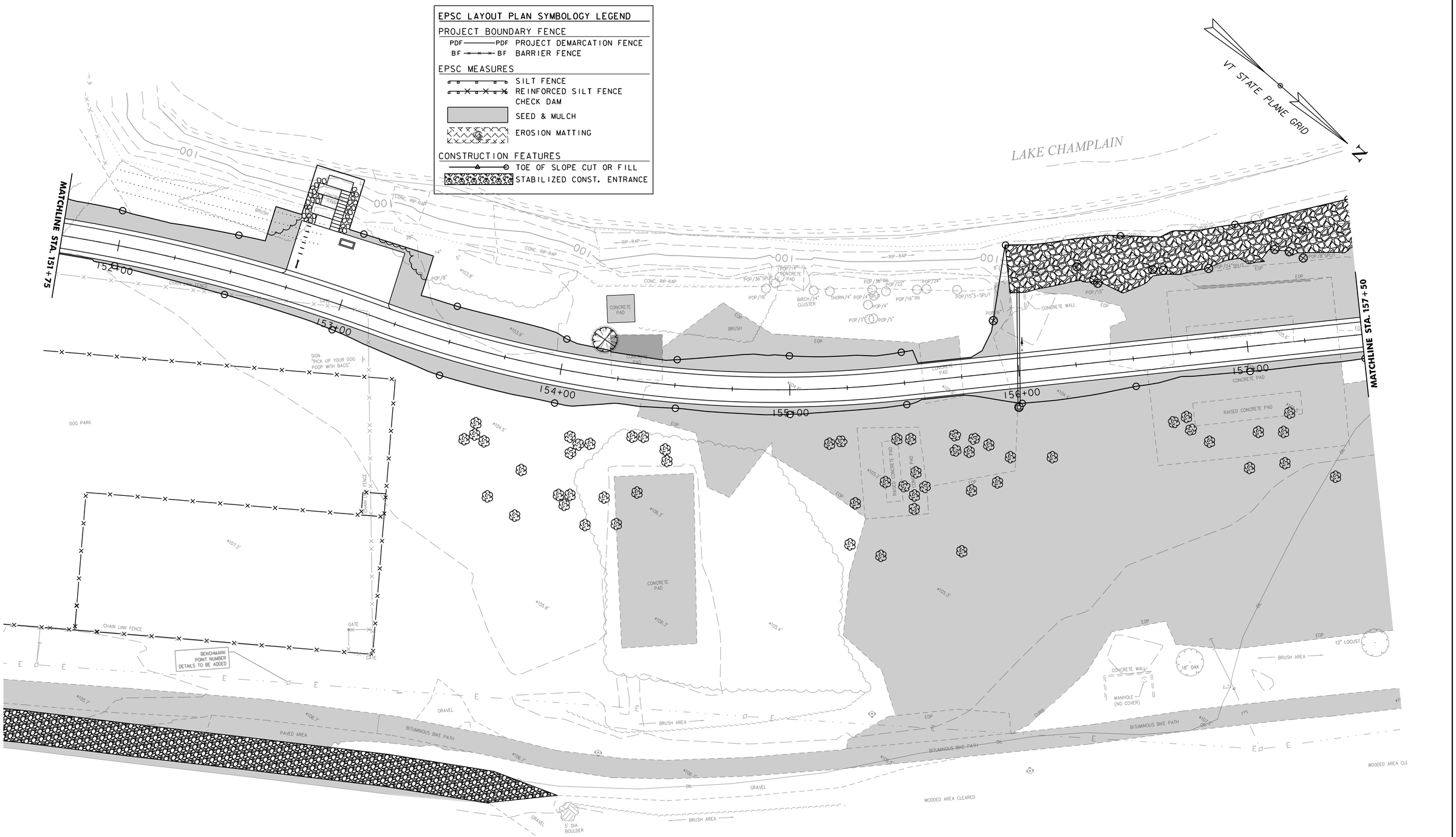
- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

**EPSC MEASURES**

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

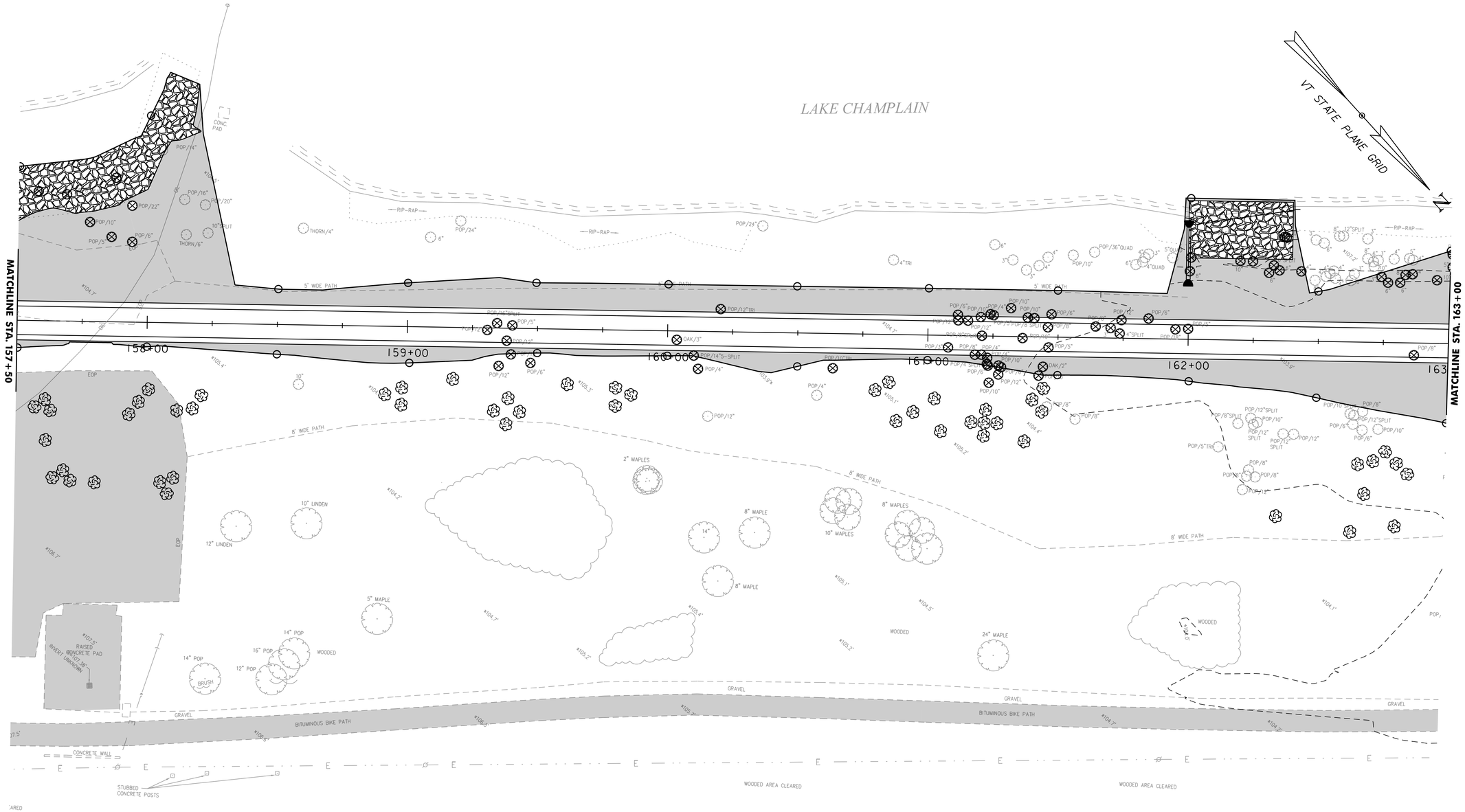
**CONSTRUCTION FEATURES**

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE




SCALE 1" = 20'-0"
20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (5 OF 11) | SHEET 110 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF — × — × — BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

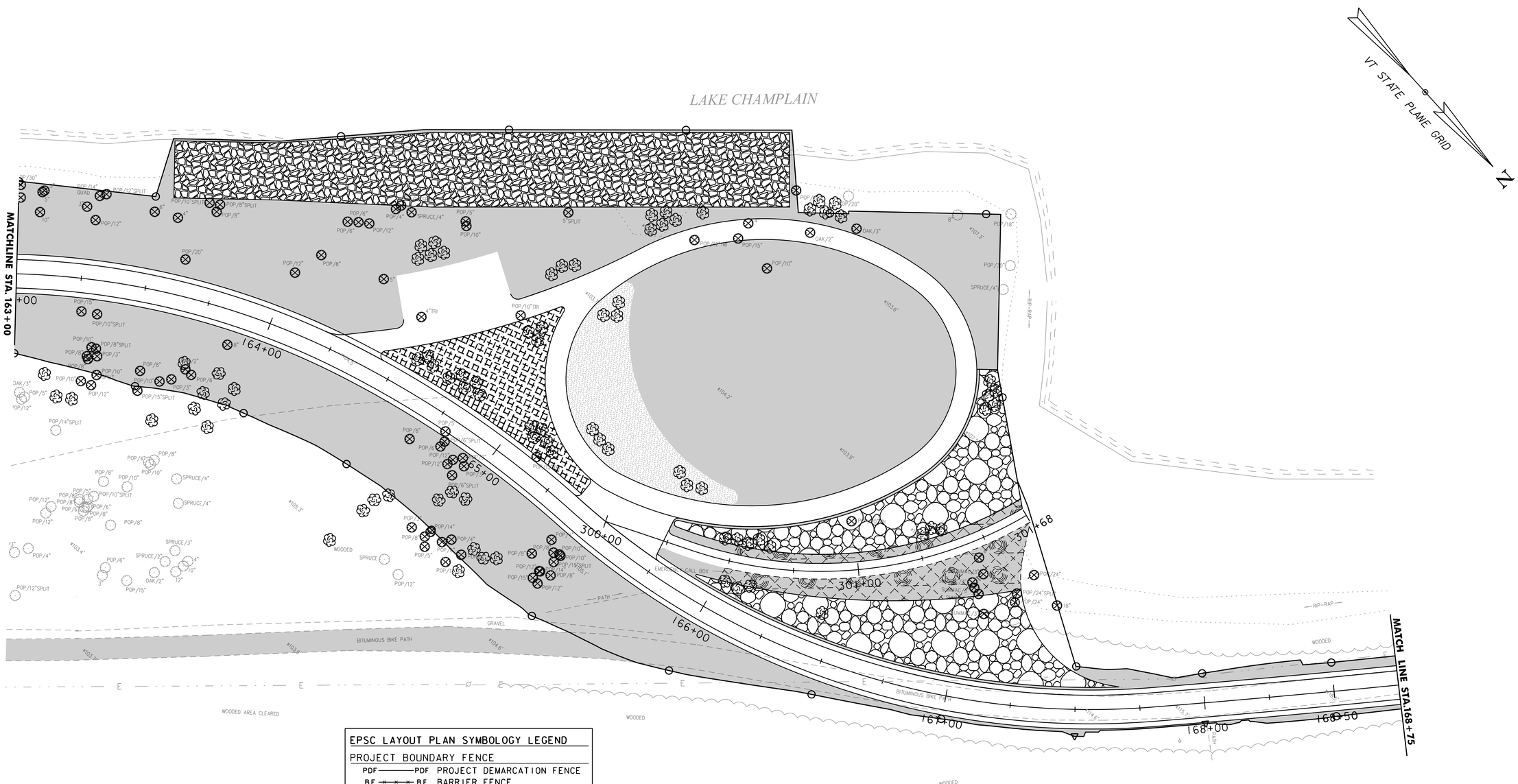
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (6 OF 11) | SHEET 111 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

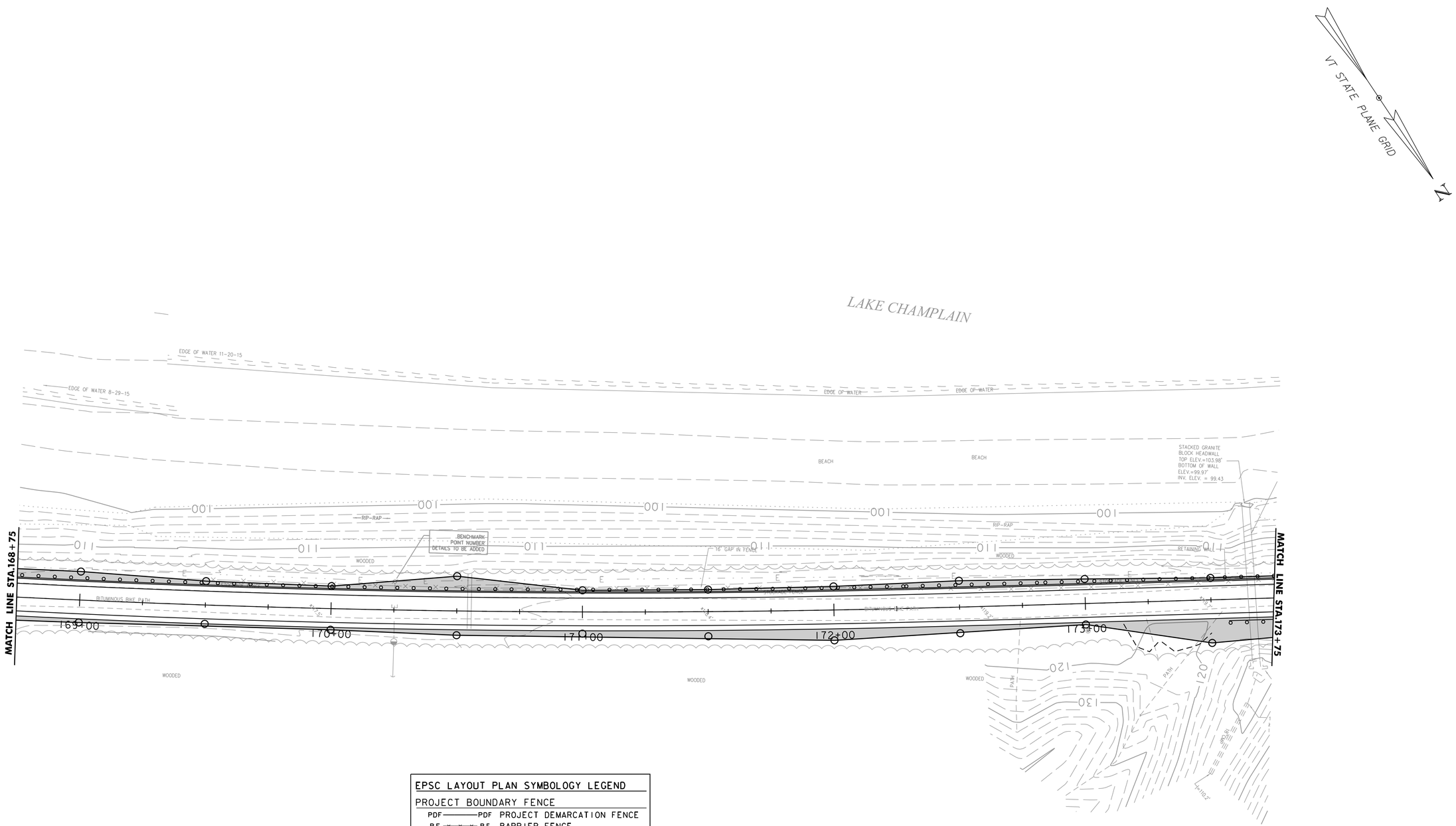
### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE
- ERNST SEED MIX & MULCH
- MULCH

SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: G.A. GOMEZ |
| DESIGNED BY: C. HAKEY | CHECKED BY: M.A. COLGAN |
| EPSC FINAL CONDITIONS (7 OF 11) | SHEET 112 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

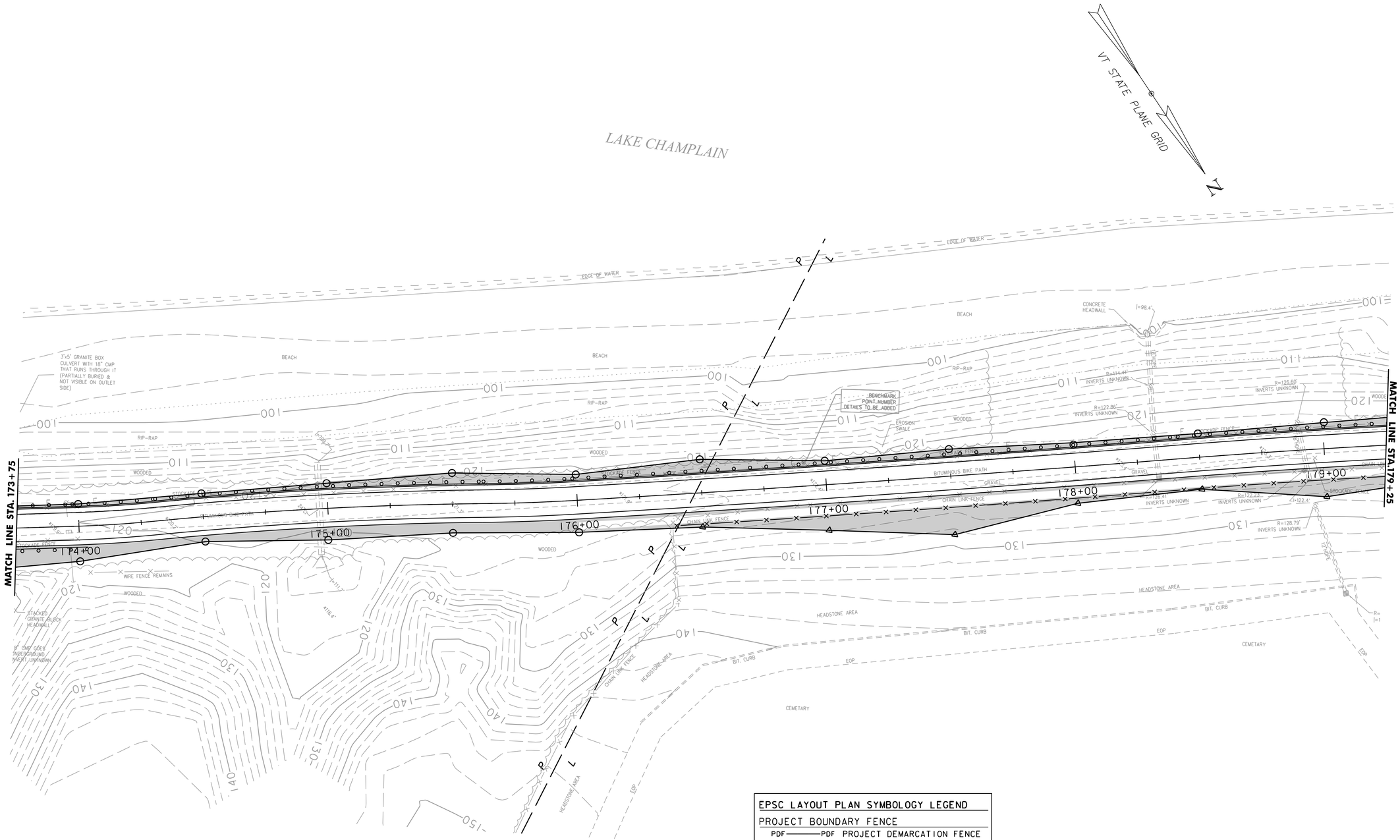
- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC FINAL CONDITIONS (8 OF 11) | SHEET 113 OF 116 |




## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF — × — × — BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

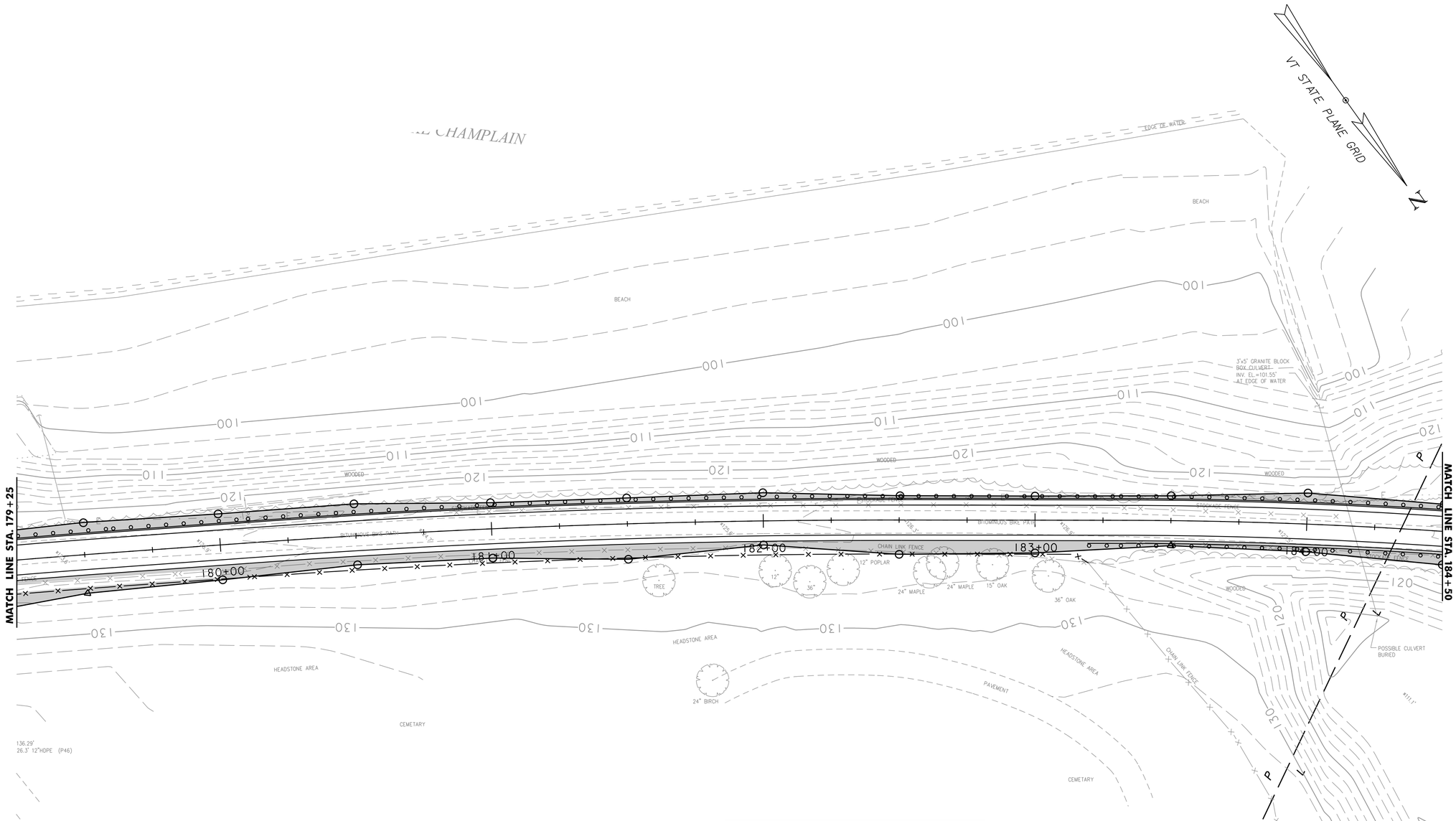
SCALE 1" = 20'-0"

20 0 20

vhb

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | 57634.00 |

| | |
|---|---|
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A. COLGAN | DRAWN BY: M.F. SUFFEL |
| DESIGNED BY: D. M. PECK | CHECKED BY: E.B. PARIZO |
| EPSC FINAL CONDITIONS (9 OF 11) | SHEET 114 OF 116 |




SCALE 1" = 20'-0"

20 0 20

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF —×—×—×— BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

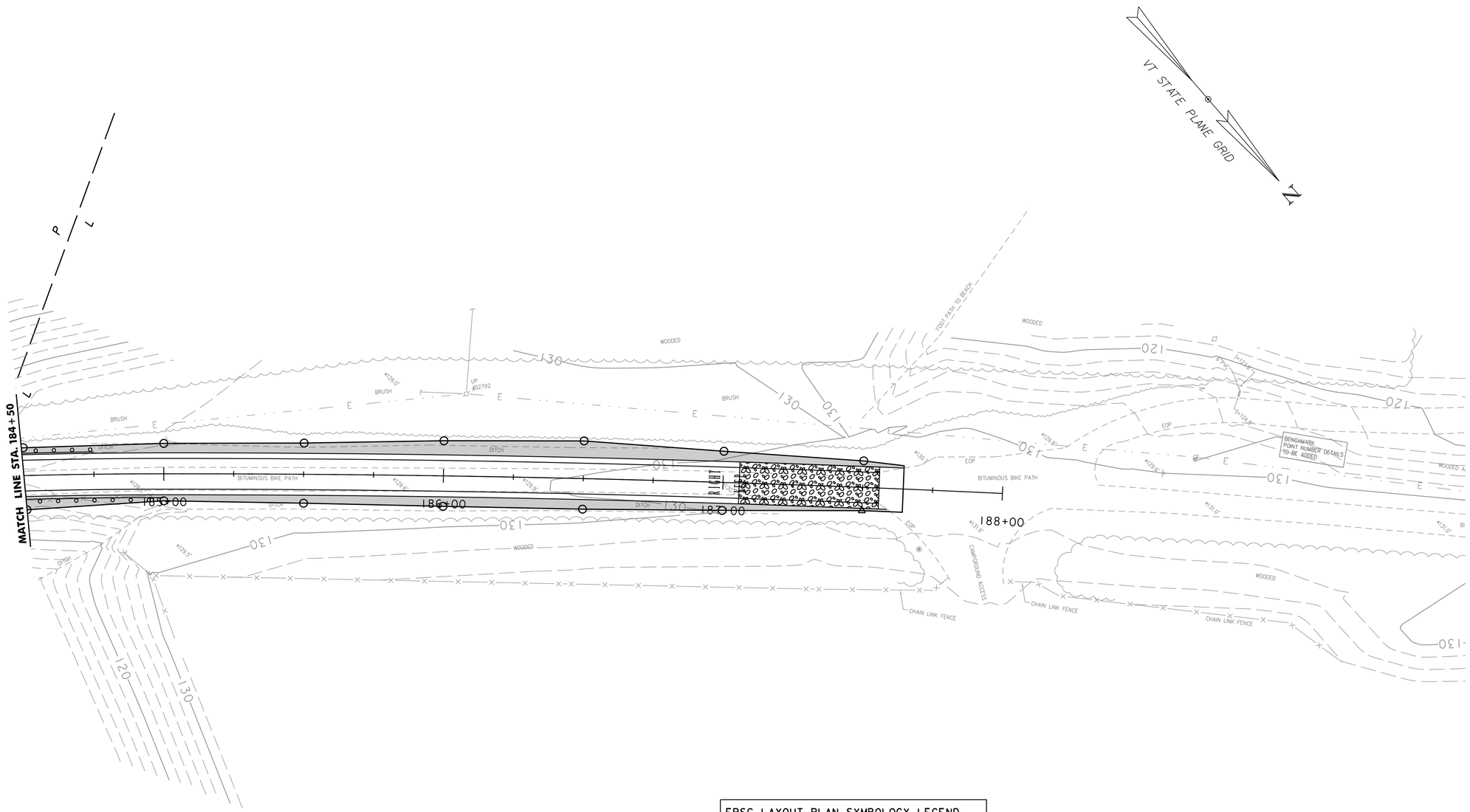
### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

vhb

| | |
|---|---|
| PROJECT NAME: | BURLINGTON BIKE PATH |
| PROJECT NUMBER: | 57634.00 |

| | |
|---|---|
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC FINAL CONDITIONS (10 OF 11) | SHEET 115 OF 116 |




SCALE 1" = 20'-0"

20 0 20

## EPSC LAYOUT PLAN SYMBOLOGY LEGEND

### PROJECT BOUNDARY FENCE

- PDF ——— PDF PROJECT DEMARCATION FENCE
- BF — — — BF BARRIER FENCE

### EPSC MEASURES

- SILT FENCE
- REINFORCED SILT FENCE
- CHECK DAM
- SEED & MULCH
- EROSION MATTING

### CONSTRUCTION FEATURES

- TOE OF SLOPE CUT OR FILL
- STABILIZED CONST. ENTRANCE

vhb

| | |
|---|---|
| PROJECT NAME: BURLINGTON BIKE PATH | |
| PROJECT NUMBER: 57634.00 | |
| FILE NAME: z57634bdr_ero.dgn | PLOT DATE: 3/25/2016 |
| PROJECT LEADER: M.A.COLGAN | DRAWN BY: M.F.SUFFEL |
| DESIGNED BY: D.M.PECK | CHECKED BY: E.B. PARIZO |
| EPSC FINAL CONDITIONS (II OF II) | SHEET 116 OF 116 |