**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# DRAINAGE DETAIL SHEET 2

| STATION | STATION | POS. | ASKEW | PIPE ID | | INLET/OUTLET TYPE | | PIPE ARCH | | | PIPE | | ALLOWABLE OPTIONS | | | | | | PIPE ELBOW | ES | CB | | DEPTH DI | CONC CLASS B | REINF STEEL | DI GRATE | CHAN ELEV | CRM | TRENCH EXCAVATION | | COMM EXC | UNC CHAN EXC | STRUCT EXCAV | GRAN BKFILL STRUCT | GRAN BORR | EROS MATT | STONE FILL | | MARKER POSTS | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | EXISTING | PROPOSED | INLET | OUTLET | SPAN | RISE | L | D | L | PCCSP | CAAP | RCP | CSP | CPEP | PCCSP PI | | | | | | | | | | EARTH | ROCK | | | | | | | | | LT | RT | |
| | | | | | | | | IN | IN | FT | IN | FT | TH | TH | CL | TH | SL | TH | NO. DEG. | EA | EA | | FT | CY | LBS | TYPE | EA | CY | CY | CY | CY | CY | CY | CY | SY | CY | TYPE | EA | EA | |
| 47+67 | 49+99 | LT | | | 17 | CB | CB | | | | 18 | 233 | | | | | X | | | | 1 | | 5.33 | | | B(2) | | | 227.9 | | | | | 161.0 | | | | | 1 | | CLOSED SYSTEM |
| 47+76 | | C/L | | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | 9.1 | | | | | | | | | | REMOVE EXISTING 18" RCP AND DI |
| 48+99 | 49+35 | RT | | | 18 | | | | | | 18 | 36 | | | | | X | | | | | | | | | | | | 19.3 | | | | | 3.3 | | | 1.3 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| 49+41 | 52+00 | RT | | | 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 50+00 | 52+00 | LT | | | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 56+10 | 57+73 | RT | | | 21 | CB | CB | | | | 18 | 164 | | | | | X | | | | 1 | | 4.0 | | | A | | | 148.0 | | | | | | | | | | 1 | | CLOSED SYSTEM |
| 57+77 | 58+33 | RT | | | 22 | CB | | | | | 18 | 57 | | | | | X | | | | 1 | | 4.0 | | | A | | | 22.3 | | | | | | | | 0.7 | I | | 1 | CLOSED SYSTEM, STONE PAD AT OUTLET |
| 59+76 | 60+53 | RT | | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE EXISTING 18" CGMP BY COMMON EXCAVATION |
| 59+88 | 61+15 | RT | | | 23 | CB | | | | | 18 | 128 | | | | | X | | | | 1 | | 5.0 | | | B | | | 97.9 | | | | | | | | 0.7 | I | | | DRIVE, STONE PAD AT OUTLET |
| 65+56 | 65+97 | RT | | 17 | | | | | | | | | | | | | | | | | | | | | | | | | 6.4 | | | | | | | | | | | | REMOVE EXISTING 15" CGMP |
| 65+60 | 66+02 | RT | | | 24 | | | | | | 18 | 42 | | | | | X | | | | | | 17.8 | | | | | | | | | | | 3.3 | | | 2.2 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| 68+45 | 68+91 | RT | | | 25 | | | | | | 18 | 46 | | | | | X | | | | | | 19.5 | | | | | | | | | | | 4.1 | | | 1.3 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| 75+40 | | C/L | | | 26 | HDW/WWS | HDW/WWS | | | | | | | | | | | | | | | | | | | | | | | | | 181 | 102.0 | | | 37.7 | II | | | NEW PRECAST 5'X3'X74' CONC. BOX W/HWS AND WWS |
| 77+00 | 79+00 | LT | | | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 87+19 | 87+60 | LT | | | 28 | | | | | | 18 | 41 | | | | | X | | | | | | 5.0 | | | | | | | | | | | 3.7 | | | 1.3 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| 89+00 | | C/L | | | P1 | CB | CB | | | | 18 | 63 | | | | | X | | | | 1 | | | | | B | | | 49.7 | | | | | | | | | | | 1 | CLOSED SYSTEM |
| 89+00 | 91+40 | LT | | | P2 | CB | CB | | | | 18 | 240 | | | | | X | | | | 1 | | | | | B | | | 330.7 | | | | | | | | | | 1 | | CLOSED SYSTEM |
| 91+40 | 91+62 | RT | | | P3 | CB | CB | | | | 18 | 22 | | | | | X | | | | 1 | | | | | B(2) | | | 37.8 | | | | | | | | | | | 1 | CLOSED SYSTEM |
| 91+40 | 91+60 | LT | | | P4 | CB | CB | | | | 18 | 20 | | | | | X | | | | 1 | | | | | B(2) | | | 46.8 | | | | | | | | | | 1 | | CLOSED SYSTEM |
| 91+62 | | C/L | 2.7 | | P6 | CB | CB | | | | 18 | 97 | | | | | X | | | | 1 | | | | | B(2) | | | 48.6 | | | | | | | | | | | 1 | CLOSED SYSTEM |
| 91+60 | | LT | | | P7 | CB | CB | | | | 18 | 20 | | | | | X | | | | 1 | | | | | B | | | 427.8 | | | | | | | | | | 1 | | CLOSED SYSTEM |
| 91+60 | 93+23 | LT | | | P8 | CB | CB | | | | 24 | 163 | | | | | X | | | | 1 | | | | | B(2) | | | 5.0 | | | | | | | | | | 1 | | CLOSED SYSTEM |
| 92+43 | 92+62 | RT | | 18 | | | | | | | | | | | | | | | | | | | | | | | | | 11.3 | | | | | | | | | | | | REMOVE EXISTING 15" CGMP |
| 93+23 | 93+60 | LT | | | P9 | CB | | | | | 24 | 41 | | | | | X | | | | 1 | | | | | B | | | 63.8 | | | | | | | | | | 2 | | CLOSED SYSTEM, STONE FILL AT OUTLET QUANTIFIED WITH PIPE 29 |
| 20+20 | | C/L | | | P10 | | | | | | 18 | 20 | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | STONE FILL AT INLET & OUTLET |
| 93+58 | | C/L | 17 | | 29 | HDW/WWS | HDW/WWS | | | | 54 | 116 | | | | | X | | | | | | | 54.29 | 10804 | | | | | | | 390 | 201.1 | | | 96.6 | II | 1 | 1 | REMOVE EXISITING 36" ACCMP & HEADWALL, TWO FEET ADDED TO QTYS TO ACCOUNT FOR SKEW |
| 96+00 | 103+00 | LT | | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 98+59 | 98+87 | RT | | 19 | | | | | | | | | | | | | | | | | | | | | | | | | 3.5 | | | | | | | | | | | | REMOVE EXISTING 12" CGMP |
| 99+50 | 103+75 | RT | | | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE STONE FILL TYPE II |
| 106+50 | 108+50 | LT | | | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 108+59 | 109+22 | RT | | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE EXISTING 18" CPEP BY COMMON EXCAVATION |
| 106+60 | 108+48 | RT | | | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GRASS LINED TREATMENT SWALE |
| 108+64 | 109+20 | RT | | | 35 | | | | | | 18 | 56 | | | | | X | | | | | | 18.6 | | | | | | | | | | | 4.9 | | | 3.5 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| 108+64 | 109+16 | LT | | | 36 | | | | | | 18 | 52 | | | | | X | | | | | | 17.4 | | | | | | | | | | | 4.4 | | | 3.2 | I | | | DRIVE, STONE PAD AT INLET & OUTLET |
| **SHEET - 2 SUBTOTAL** | | | | | | | | | | | 18 | 1337 | | | | | X | | | | 10 | | 1552.8 | | | A(2) | | | 1552.8 | | | | | 14.2 | I | | | |
| | | | | | | | | | | | 24 | 204 | | | | | X | | | | 2 | | | | | B(15) | | | 69 | 9 | | | 571 | 487.8 | | | 134.3 | II | 14 | | |
| | | | | | | | | | | | 54 | 116 | | | | | X | | | | | | | 54.29 | 10804 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | 3.5 | | | | | | | | | | | | | | | | | |

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| PROJECT NAME: | CHARLOTTE |
| PROJECT NUMBER: | F EGC 019-4(20) |

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| FILE NAME: d78d062_frm.dgn | PLOT DATE: 15-MAR-2016 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: C. LEACH |
| DESIGNED BY: B. KIPP | CHECKED BY: B. KIPP |
| DRAINAGE DETAIL SHEET 2 | SHEET 27 OF 499 |