# SECTION I - BARRIER


| SHEET NO. | | NAME |
|---|---|---|
| B-L (2010) | – | BARRIER LEGEND |
| B-1 | – | GUARDRAIL APPLICATIONS (TYPES 1-31, 2-31, AND 3-31) |
| (2017) - 1 | | PLAN VIEWS |
| (2017) - 2 | | ELEVATION VIEWS AND SPLICE DETAIL |
| (2017) - 3 | | SECTION VIEWS |
| B-2 | – | GRADING FOR GUARDRAIL END TREATMENTS (TYPES 1, 2, AND 3) |
| (2013) - 1 | | GUARDRAIL END TREATMENT, TYPE 1 |
| (2013) - 2 | | GUARDRAIL END TREATMENT, TYPE 2 |
| (2010) - 3 | | GUARDRAIL END TREATMENT, TYPE 3 |
| B-3 | – | GUARDRAIL OVER CULVERTS (TYPES 1-31, 2-31, AND 3-31) |
| (2013) - 1 | | GUARDRAIL OVER CULVERTS, TYPE 1-31 |
| (2013) - 2 | | GUARDRAIL OVER CULVERTS, TYPE 2-31 |
| (2013) - 3 | | GUARDRAIL OVER CULVERTS, TYPE 3-31 |
| B-4 (2012) | – | END ANCHORAGE , TYPE 31 |
| B-5 | – | GUARDRAIL TO BARRIER CONNECTION (TYPES 1-31, 2-31, AND EXIT TYPE 31) |
| (2010) - 1 | | GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 1-31 |
| (2010) - 2 | | GUARDRAIL TO BARRIER CONNECTION, TYPE 1 HARDWARE |
| (2010) - 3 | | GUARDRAIL TO BARRIER CONNECTION, BENT PLATE RUB RAIL |
| (2012) - 4 | | GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 2-31 |
| (2010) - 5 | | GUARDRAIL TO BARRIER CONNECTION, TYPE 2 HARDWARE |
| (2010) - 6 | | GUARDRAIL TO BARRIER CONNECTION, EXIT TYPE 31 |
| B-6 | – | BRIDGE RAIL RETROFIT (TYPES 1, 2, 3, AND 4) |
| (2013) - 1 | | BRIDGE RAIL RETROFIT, ENTRANCE AND END APPLICATIONS |
| (2010) - 2 | | BRIDGE RAIL RETROFIT, TYPES 1 AND 2 |
| (2010) - 3 | | BRIDGE RAIL RETROFIT, TYPE 2 HARDWARE |
| (2010) - 4 | | BRIDGE RAIL RETROFIT, TYPE 3 |
| (2010) - 5 | | BRIDGE RAIL RETROFIT, TYPE 4 |
| B-7 (2010) | – | W-BEAM, TYPE 1-27 TO TYPE 1-31 TRANSITION SECTION |
| B-8 | – | RESERVED |
| B-9 | – | RESERVED |
| B-10 | – | RESERVED |
| B-11 | – | RESERVED |
| B-12 | – | RESERVED |
| B-13 | – | HARDWARE |
| (2010) - 1 | | W-BEAM ELEVATION AND SECTION VIEWS |
| (2010) - 2 | | W-BEAM STEEL POST AND OFFSET BLOCK |
| (2010) - 3 | | W-BEAM TERMINAL CONNECTOR |
| (2010) - 4 | | THRIE BEAM AND THRIE BEAM EXPANSION ELEMENT ELEVATION AND SECTION VIEWS |
| (2010) - 5 | | THRIE BEAM STEEL POST AND OFFSET BLOCK |
| (2010) - 6 | | ASYMMETRIC AND SYMMETRIC W-BEAM TO THRIE BEAM TRANSITION SECTION |
| (2010) - 7 | | SHORT AND LONG WOOD BREAKAWAY POSTS, STEEL TUBE, SOIL PLATE, AND OFFSET BLOCKS |
| (2012) - 8 | | SWAGED CABLE ASSEMBLAGE AND HARDWARE |
| (2010) - 9 | | GUARDRAIL DELINEATOR AND W-BEAM BEARING PLATE |
| (2010) - 10 | | GUARDRAIL MOUNTED RAIL |
| B-14 | – | CONCRETE SAFETY BARRIER (F SHAPE) |
| (2012) - 1 | | 32" (960) CONCRETE BARRIER, TYPICAL CAST-IN-PLACE OR SLIP-FORM ELEVATION AND SECTION VIEWS |
| (2009) - 2 | | 32" (960) CONCRETE BARRIER, TYPICAL PRE-CAST ELEVATION AND SECTION VIEWS |
| (2009) - 3 | | 42" (1050) CONCRETE BARRIER, TYPICAL CAST-IN-PLACE OR SLIP-FORM ELEVATION AND SECTION VIEWS |
| (2009) - 4 | | SLOTTED PLATE CONNECTION DETAILS |
| B-15 | – | GUARDRAIL APPLICATIONS (TYPES 1-27, 2-27, AND 3-27) |
| (2010) - 1 | | PLAN VIEWS |
| (2010) - 2 | | ELEVATION VIEWS AND SPLICE DETAIL |
| (2010) - 3 | | SECTION VIEWS |

# SECTION I - BARRIER (CONT'D)


| SHEET NO. | | NAME |
|---|---|---|
| B-16 | – | GUARDRAIL OVER CULVERTS (TYPES 1-27, 2-27, AND 3-27) |
| (2013) - 1 | | GUARDRAIL OVER CULVERTS, TYPE 1-27 |
| (2013) - 2 | | GUARDRAIL OVER CULVERTS, TYPE 2-27 |
| (2013) - 3 | | GUARDRAIL OVER CULVERTS, TYPE 3-27 |
| B-17 (2010) | – | GUARDRAIL END TREATMENT (TYPE 4-27) |
| B-18 (2010) | – | CURVED GUARDRAIL SECTION |
| B-19 (2012) | – | END ANCHORAGE (TYPE 27) |
| B-20 | – | BURIED END SECTION |
| (2010) - 1 | | BURIED END SECTION - SINGLE RAIL |
| (2010) - 2 | | BURIED END SECTION - DOUBLE RAIL |
| (2010) - 3 | | POST, CONCRETE BLOCK, AND RUBRAIL DETAILS |
| B-21 | – | GUARDRAIL TO BARRIER CONNECTION (TYPES 1-27, 2-27, AND EXIT TYPE 27) |
| (2010) - 1 | | GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 1-27 |
| (2010) - 2 | | GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 2-27 |
| (2010) - 3 | | GUARDRAIL TO BARRIER CONNECTION, EXIT TYPE 27 |


# SECTION II - CURB & GUTTER


| SHEET NO. | | NAME |
|---|---|---|
| C-1 | – | P.C.C. CURB AND INTEGRAL P.C.C. CURB & GUTTER |
| (2013) - 1 | | P.C.C. CURB, TYPICAL CURB SECTION, AND TYPICAL TAPER SECTION AT NOSE OF MEDIANS |
| (2012) - 2 | | INTEGRAL P.C.C. CURB & GUTTER |
| (2017) - 3 | | INTEGRAL P.C.C. CURB & GUTTER (FOR USE AT CURB RAMPS ONLY) |
| C-2 | – | CURB RAMPS |
| (2013) - 1 | | TYPE 1 |
| (2013) - 2 | | TYPE 2, 3, AND 4 |
| (2013) - 3 | | TYPE 5 |
| C-3 (2012) | – | ENTRANCES |
| C-4 (2012) | – | CURB OPENING DETAILS |
| C-5 (2017) | – | CURB OPENING WITH SIDEWALK DETAIL |
| C-6 (2017) | – | CURB RETAINING WALL |


# SECTION III - DRAINAGE


| SHEET NO. | | NAME |
|---|---|---|
| D-1 | – | 6:1 SAFETY END STRUCTURE |
| (2001) - 1 | | DETAIL VIEWS |
| (2001) - 2 | | SCHEDULES |
| D-2 | – | 10:1 SAFETY END STRUCTURE |
| (2001) - 1 | | DETAIL VIEWS |
| (2001) - 2 | | SCHEDULES |
| D-3 | – | SAFETY GRATES |
| (2005) - 1 | | SAFETY END STRUCTURE GRATE AND ASSEMBLY DETAIL |
| (2007) - 2 | | PERSONNEL SAFETY GRATE FOR PIPE INLET DETAIL |
| D-R (2017) | – | DRAINAGE INLET REFERENCE SHEET |
| D-4 (2009) | – | INLET BOX DETAILS |
| D-5 | – | DRAINAGE INLET DETAILS |
| (2010) - 1 | | DRAINAGE INLET ASSEMBLY |
| (2014) - 2 | | DRAINAGE INLET FRAME AND GRATES |
| (2012) - 3 | | DRAINAGE INLET TOP UNITS |
| (2010) - 4 | | DRAINAGE INLET COVER SLAB DETAILS |
| (2010) - 5 | | DOUBLE INLET COVER SLAB DETAILS |
| (2012) - 6 | | 34" x 24" DRAINAGE INLET AND COVER SLAB DETAILS |
| (2010) - 7 | | 34" x 18" DRAINAGE INLET DETAILS |
| (2010) - 8 | | DRAINAGE INLET TOP UNIT, TYPE S |
| (2010) - 9 | | DOGHOUSE INLET BOX |

# SECTION III - DRAINAGE (CONT'D)

SHEET NO. NAME


D-6 – MAHOLE DETAILS
(2009) - 1 BOX MANHOLE ASSEMBLY
(2001) - 2 ROUND MANHOLE ASSEMBLY
(2001) - 3 MANHOLE, TOP UNIT, FRAME AND COVER
(2007) - 4 BOX MANHOLE COVER SLAB
D-7 – JUNCTION BOX DETAILS
(2009) - 1 JUNCTION BOX ASSEMBLY
(2007) - 2 JUNCTION BOX COVER SLAB
D-8 (2010) – PIPE BEDDING
D-9 (2008) – PERFORATED PIPE UNDERDRAIN
D-10 (2011) – PIPE PLUGGING DETAIL


# SECTION IV - EROSION

SHEET NO. NAME


E-1 (2014) – CONCRETE WASHOUT
E-2 (2014) – SILT FENCE
E-3 (2014) – SEDIMENT TRAP
E-4 (2014) – INLET SEDIMENT CONTROL, DRAINAGE INLET
E-5 (2014) – INLET SEDIMENT CONTROL, CULVERT INLET
E-6 (2014) – PORTABLE SEDIMENT TANK
E-7 (2014) – SUMP PIT
E-8 (2014) – SKIMMER DEWATERING DEVICE
E-9 (2014) – STONE CHECK DAM
E-10 (2014) – TEMPORARY SLOPE DRAIN
E-11 (2014) – INCREMENTAL STABILIZATION
E-12 (2014) – EROSION CONTROL BLANKET APPLICATIONS
E-13 (2014) – TURF REINFORCEMENT MAT APPLICATIONS
E-14 (2014) – STABILIZED CONSTRUCTION ENTRANCE
E-15 (2014) – SANDBAG DIKE
E-16 (2014) – SANDBAG DIVERSION
E-17 (2014) – GEOTEXTILE-LINED CHANNEL DIVERSION
E-18 (2014) – TURBIDITY CURTAIN
E-19 (2014) – STILLING WELL
E-20 (2014) – RIPRAP ENERGY DISSIPATOR
E-21 (2014) – STONE OUTLET DETAIL

## SECTION V - LANDSCAPING

SHEET NO. NAME

L-1 – PLANTING DETAILS
(2017) - 1 ROADSIDE SHRUB PLANTING DETAIL
(2017) - 2 TREE PLANTING DETAIL
(2017) - 3 PERENNIAL/GROUND COVER PLANTING DETAIL

## SECTION VI - MISCELLANEOUS

SHEET NO. NAME

M-1 (2001) – RIGHT-OF-WAY FENCE
M-2 (2017) – RIGHT-OF-WAY MONUMENTATION
M-3 (2013) – SHARED-USE PATH & SIDEWALK DETAILS
M-4 (2011) – BIKE RACK LAYOUT DETAILS
M-5 (2004) – WOOD RAIL FENCE
M-6 (2011) – PATTERNED HOT-MIX OR CONCRETE & BRICK PAVER DETAILS
M-7 (2006) – CHAIN LINK FENCE DETAILS
M-8 (2014) – P.C.C. PARKING BUMPER
M-9 – BUS STOP PAD DETAILS
(2013) - 1 BUS STOP PAD DETAILS, TYPES 1, 2, & 3
(2013) - 2 BUS STOP PAD WITH SHELTER DETAILS, TYPES 1 & 2
M-10 – BRIDGE SAFETY FENCE
(2014) - 1 BRIDGE SAFETY FENCE, TYPE 1
(2014) - 2 BRIDGE SAFETY FENCE, TYPE 2
(2017) - 3 HARDWARE
M-11 (2017) – STEEL PLATE

## SECTION VII - PAVEMENT

SHEET NO. NAME

P-1 – P.C.C. PAVEMENT
(2001) - 1 SLAB PLAN (WITH DOWEL AND TIE LOCATIONS)
(2004) - 2 JOINT AND SEALANT DETAILS
(2001) - 3 W BOLT, HOOK BOLT, DOWEL AND TIE BAR DETAILS
(2001) - 4 DOWEL SUPPORT BASKET
(2001) - 5 DOWEL AND TIE BAR PLACEMENT TOLERANCES
P-2 – P.C.C. PAVEMENT PATCHING
(2008) - 1 FULL DEPTH PATCH, PLAN VIEW
(2008) - 2 FULL DEPTH PATCH, SECTION VIEWS
(2004) - 3 FULL DEPTH PATCH, SEALANT DETAILS, GROUT RETENTION DISK, AND DOWEL BAR
(2001) - 4 FULL DEPTH PATCH, DOWEL AND TIE BAR PLACEMENT TOLERANCES
(2001) - 5 PARTIAL DEPTH PATCH, PLAN AND SECTION VIEWS
P-3 (2014) – BUTT JOINTS
P-4 (2013) – PERMANENT CROSS-ROAD PATCH OVER PIPE TRENCH DETAIL

# SECTION VIII - TRAFFIC

SHEET NO. NAME


T-1 – CONDUIT JUNCTION WELLS
(2013) - 1 TYPE 1
(2013) - 2 TYPE 4
(2013) - 3 TYPE 5
T-2 (2011) – JUNCTION WELL, GROUNDING & BONDING FOR STEEL FRAMES & LIDS
T-3 – CONDUIT JUNCTION WELLS
(2013) - 1 TYPE 11
(2012) - 2 TYPE 14
(2012) - 3 TYPE 15
T-4 – CABINET BASES
(2013) - 1 TYPES M & F
(2017) - 2 TYPE "P & R"
T-5 – POLE BASES
(2017) - 1 ROUND BASE & ROUND BASE WITH SQUARE FOUNDATION HEADER
(2013) - 2 TYPICAL SECTION AND INSTALLATION (BASES 1, 2, 2A, 2B, 3, 3A, AND 3B)
(2017) - 3 TYPICAL SECTION (BASES 6) AND POLE BASE DATA CHART
(2014) - 4 TYPICAL SECTION (BASE 4A AND 4B) AND ANCHOR DETAIL
T-6 (2011) – SPECIAL POLE BASE
T-7 (2005) – SIGN FOUNDATION
T-8 – LOOP DETECTOR LEAD-IN WIRE INSTALLATION
(2013) - 1 JUNCTION WELL BEHIND CURB OR CURB AND GUTTER WITH GRASS STRIP
(2013) - 2 JUNCTION WELL BEHIND CURB OR CURB & GUTTER WITH SIDEWALK AND JUNCTION WELL DIRECTLY BEHIND CURB OR CURB & GUTTER
(2013) - 3 JUNCTION WELL IN CONCRETE ISLAND
(2013) - 4 JUNCTION WELL WITHOUT CURB OR CURB & GUTTER WITH SIDEWALK AND GRASS STRIPS AND JUNCTION WELL DIRECTLY ADJACENT TO PAVED SURFACE
T-9 – LOOP DETECTOR INSTALLATION
(2013) - 1 LOOP DETECTOR SAWCUT TYPICAL, HOT MIX SURFACE TYPICAL SECTION, AND SPLICE KIT
(2013) - 2 TYPICAL INTERSECTION LAYOUT
(2013) - 3 PEDESTRIAN CROSSING TYPICAL LAYOUT
T-10 – **DETAIL REMOVED IN 2012 REVISION**
T-11 – MESSENGER WIRE ATTACHMENT
(2005) - 1 INTERMEDIATE MESSENGER WIRE ATTACHMENT ON WOOD POLES
(2005) - 2 ANGULAR INTERMEDIATE MESSENGER WIRE ATTACHMENT
T-12 – MESSENGER WIRE ATTACHMENT
(2005) - 1 SPAN WIRE ATTACHMENT BETWEEN POLES
(2005) - 2 DEAD END MESSENGER WIRE ATTACHMENT
T-13 (2013) – CONDUIT JUNCTION WELL, TYPE 7
T-14 – EMERGENCY PREEMPTION RECIEVER
(2006) - 1 UPRIGHT MOUNT
(2005) - 2 INVERTED MOUNT
T-15 (2013) – BREAKAWAY SIGN POST AND PIN ASSEMBLY DETAILS
T-16 (2010) – WOOD BARRICADE DETAILS
T-17 (2013) – ELECTRICAL SERVICE PEDESTAL - LIGHTING, SIGNAL & 'ITMS' COMPONENT INSTALLATIONS