CONSULTING ENGINEERS
GENERAL MEMORANDUM 09-08

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND
CONSTRUCTION
OFFICE OF ENGINEERING

October 20, 2009

To: CONSULTING ENGINEERS

The Department of Transportation has migrated existing FHWA Standard Drawings to CTDOT Standard sheets. Additionally, the Department will now provide newly issued CTDOT Standard Sheets previously described as frequently used non-standard detail sheets. The following is guidance regarding the use of these newly issued CTDOT Standard Sheets/CTDOT Guide Sheets.

CTDOT Standard Sheets (CTDOT Signed and Approved for Projects)

- Are in Adobe PDF format and digitally signed by the Principal Engineer and Manager from the discipline issuing the standard sheet.
- The new CTDOT Standard Sheets will reside at the end of the contract plan set as they are today. The discipline's CTDOT Standard Sheet Index will be used as a Project Standard Sheet Index for that discipline. For more information on contract plan set format see workflow link below.
- The CTDOT Standard Sheets can be obtained by the engineer from the internet at (http://www.ct.gov/dot/CTDOT_Standard_Drawings). A workflow for inserting CTDOT Standard Sheets into CTDOT projects is here: http://www.ct.gov/dot/lib/dot/documents/deng/2007_using_standard_sheets.pdf
- The CTDOT Standard Sheets should be included with the semifinal design submissions.

CTDOT Guide Sheets (CTDOT recommended details and methods)

- CTDOT Guide Sheets have associated details needing modifications per project requirements
- The CTDOT Guide Sheets can be obtained by the engineer from the internet (http://www.ct.gov/dot/CTDOT_Standard_Drawings) and will be inserted into the main body of the contract plans within the discipline's drawing set. The Engineer of Record assumes responsibility for the content of this sheet. CTDOT Guide Sheets from Bridge Design, Traffic and Facilities design disciplines will require signatures (PE Seal for Consultants) by the Engineer of Record per Consumer Protection Regulations.

- CTDOT Guide Sheets are provided in the form MicroStation Sheet Models along with accompanying PDF files.

All projects with an anticipated FDP date of November 2, 2009 or later shall incorporate the new standard sheets.

Attached for reference is a Table listing the new CTDOT Standard Drawings with the FHWA cross reference, as well as the CTDOT Guide Sheets.

Very truly yours,

for Manager of Consultant Design
Bureau of Engineering and
Highway Operations

CTDOT STANDARD SHEETS			
FHWA STD #	CTDOT STD #	HIGHWAY DESIGN Description	COMMENT
201	N/A	DISPOSAL OF UNSUITABLE MATERIAL	Removed
202	N/A	TYPICAL TEMPORARY EARTH MOUND BARRICADE	Removed
202-A	N/A	PIEZOMETERS, SETTLEMENT PLATFORM FILL CONTROL STAKES	Removed
401-A	N/A	PAVING DETAILS FOR REINFORCED CONCRETE PAVEMENT	Removed
401-B	N/A	FABRIC REINFORCEMENT FOR CONCRETE PAVEMENT	Removed
401-E	N/A	LOAD TRANSFER UNIT TYPE "B" FOR REINFORCED CONCRETE PAVEMENT	Removed
415-A	N/A	PRESSURE RELIEF JOINT FOR REINFORCED CONCRETE PAVEMENT	Removed
506	HW-506_01	ENDWALLS, SLOPE PAVED INLETS AND OUTLETS	
506-A	HW-506_02	TYPE "D-G" & "L" ENDWALLS	
506-B	HW-506_03	ENDWALLS FOR PIPE-ARCH	
N/A	HW-507_01	TYPE "C", "C-L" AND DROP INLET CATCH BASINS	NEW
N/A	HW-507_02	TYPE "C" AND"C-L" CB DOUBLE GRATE TYPE - I	NEW
N/A	HW-507_03	TYPE "C" AND"C-L" CB DOUBLE GRATE TYPE - II	NEW
N/A	HW-507_04	TYPE "C", "C-L" AND ROUND PRECAST CONCRETE CB	NEW
N/A	HW-507_05	TYPE "C" AND"C-L" PRECAST CONCRETE CB DOUBLE GRATE TYPE - I	NEW
N/A	HW-507_06	TYPE "C" AND"C-L" PRECAST CONCRETE CB DOUBLE GRATE TYPE - II	NEW
N/A	HW-507_07	TYPE "C" AND "C-L" CATCH BASIN TOPS AND CURBS	NEW
507-K	HW-507_08	CATCH BASIN FRAMES AND GRATES	
N/A	HW-507_09	HEAVY DUTY LOCK DOWN TOPS	NEW
507-A	HW-507_10	MANHOLE - FRAME & COVER	
601-A	HW-601_01	FIGURES FOR DATES ON BRIDGE PARAPETS	
651-A	HW-651_01	TYPICAL C.C.M. PIPE INSTALLATION IN EARTH & ROCK SLOPE & BEDDING FOR CULVERTS	
651-B	HW-651_02	SLOTTED DRAIN PIPE 12"-15"-18"-24"-30" (305-381-457-610-762)	
652-A	HW-652_01	CULVERT ENDS	
751-B	HW-751_01	UNDERDRAINS - OUTLETS - PAVEMENT EDGE DRAIN	
803	HW-803_01	PAVED DITCH AND PAVED APRON	

811-A	HW-811_01	CURBING	
821-A	N/A	32" Jersey Shape PRECAST CONCRETE BARRIER CURB	Removed
N/A	HW-821_02	45" (1145) F-SHAPE PRECAST CONCRETE BARRIER CURB	NEW
822-A	HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB	
905-8A	HW-905_01	FENCES AND BARWAYS	
910-B	HW-910_10	METAL BEAM RAIL 8" (203) X 6" (152) BOX BEAM	
910-C	N/A	METAL BEAM RAIL (TYPE R-I) & (TYPE MD-I)	Removed
913-A	HW-913_01	CHAIN LINK FENCE	
916-B	N/A	TIMBER NOISE BARRIER WALL TYPE 2	Removed
916-C	N/A	HARD NOISE BARRIER WALL TYPE 1	Removed
916-D	N/A	HARD NOISE BARRIER WALL TYPE 2	Removed
916-F1	N/A	MASONRY NOISE BARRIER WALL	Removed
916-F2	N/A	MASONRY NOISE BARRIER WALL	Removed
921-A	HW-921_01	DRIVEWAY RAMPS	Removed
N/A	HW-921_02	SIDEWALK RAMPS	NEW
925-A	HW-925_01	PAVEMENT FOR RAILING	
949-A	HW-949_01	PLANTING DETAILS FOR TREES	
949-B	HW-949_02	PLANTING DETAILS FOR SHRUBS	

CTDOT STANDARD SHEETS			
FHWA STD #	**CTDOT STD #**	**TRAFFIC ENGINEERING**	
		Description	**COMMENT**
N/A	TR-1000_01	GENERAL CLAUSES (TEST PROCEDURES) [7]	NEW
N/A	TR-1001_01	TRENCHING & BACKFILLING, ELECTRICAL CONDUIT [3]	NEW
N/A	TR-1002_01	TRAFFIC CONTROL FOUNDATIONS [5]	NEW
N/A	TR-1010_01	CONCRETE HANDHOLE [4]	NEW
N/A	TR-1101_01	POLE ANCHOR, CONTROL CABLE AND MESSENGER & SPAN WIRE [13]	NEW
N/A	TR-1102_01	PEDESTALS, PEDESTRIAN SIGNALS [9]	NEW
N/A	TR-1103_01	SPAN POLE, ALTERNATE FLASHING SIGNALS FOR WARNING SIGNS [14]	NEW
N/A	TR-1105_01	TRAFFIC SIGNALS AND CABLE ASSIGNMENTS [11]	NEW

N/A	TR-1107_01	PEDESTRIAN PUSH BUTTON [10]	NEW
N/A	TR-1107_02	AUDIBLE PEDESTRIAN SIGNAL, "Y" CLAMP, SIGN HANGER [12]	NEW
N/A	TR-1108_01	CONTROLLERS [10A]	NEW
N/A	TR-1111_01	LOOP VEHICLE DETECTOR AND SAWCUT [6]	NEW
N/A	TR-1111_02	VEHICLE DETECTION SYSTEMS [8]	NEW
N/A	TR-1116_01	OVERHEAD ILLUMINATED "STOP AHEAD" SIGN & INTERNALLY ILLUMINATED SIGN [15]	NEW
N/A	TR-1205_01	DELINEATION, DELINEATOR AND OBJECT MARKER DETAILS [7]	NEW
N/A	TR-1208_01	SIGN SUPPORT AND SIGN PLACEMENT DETAILS, GORE EXIT SIGN [8]	NEW
N/A	TR-1208_02	METAL SIGN POSTS AND SIGN MOUNTING DETAILS [9]	NEW
N/A	TR-1210_01	PAVEMENT MARKINGS (DURABLE MARKINGS) FOR DIVIDED HIGHWAYS [21A]	NEW
N/A	TR-1210_02	PAVEMENT MARKINGS (DURABLE MARKINGS) FOR DIVIDED HIGHWAYS [22A]	NEW
N/A	TR-1210_03	SPECIAL DETAILS & TYPICAL PAVEMENT MARKINGS FOR TWO-WAY HIGHWAYS [25]	NEW
N/A	TR-1220_01	SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS [23]	NEW
N/A	TR-1220_02	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES [23A]	NEW

CTDOT GUIDE SHEETS
HIGHWAY DESIGN
SEDIMENTATION CONTROL SYSTEM DETAILS
SEDIMENTATION CONTROL TREATMENT DETAILS
CONCRETE STEPS
MERRITT PARKWAY MEDIAN BARRIER
PCBC TRANSITION F-SHAPE TO VERTICAL SHAPE SHEET 1
PCBC TRANSITION F-SHAPE TO VERTICAL SHAPE SHEET 2
PCBC TRANSITION F-SHAPE TO VERTICAL SHAPE SHEET 3
TRANSITION JERSEY SHAPE TO VERTICAL SHAPE 1
TRANSITION - JERSEY SHAPE TO VERTICAL SHAPE 2
TRANSITION - JERSEY SHAPE TO VERTICAL SHAPE 3
TRANSITION - JERSEY SHAPE TO VERTICAL SHAPE 4
W-BEAM METAL BEAM RAIL HARDWARE
METAL BEAM RAIL (TYPE R-B 350 and MD-B 350) GUIDERAIL
METAL BEAM RAIL TYPE R-B 350 SYSTEMS 5, 5A and 6
METAL BEAM RAIL R-B 350 SPAN TYPE I, II, and III SECTIONS
R-B 350 BRIDGE ATTACHMENT - JERSEY SHAPE PARAPET
R-B 350 BRIDGE ATTACHMENT - VERTICAL SHAPE PARAPET
R-B 350 BRIDGE ATTACHMENT TRAILING END

MISCELANEOUS GUIDERAIL TRANSITIONS
CURVED GUIDERAIL TREATMENT DETAIL
MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENT- SYSTEM 2 AND 3
MERRITT PARKWAY GUIDERAIL
MERRITT PARKWAY GUIDERAIL TRAILING END AND MEDIAN ATTACHMENTS
MERRITT PARKWAY GUIDERAIL END ANCHORS
MD-B 350 MEDIAN BARRIER JERSEY SHAPE ATTACHMENT TYPE I
MD-B 350 MEDIAN BARRIER JERSEY SHAPE ATTACHMENT TYPE II
THRIE-BEAM TRANSITION TO R-B 350 GUIDERAIL
THRIE-BEAM BRIDGERAIL TRANSITION
THRIE-BEAM PEDESTAL POST TRANSITION TO HEADWALL
R-B END ANCHORAGE TYPE I and II - MD-B END ANCHORAGE TYPE I
ANCHOR IN EARTH CUT SLOPE and ANCHOR IN ROCK CUT SLOPE
THREE CABLE GUIDERAIL (I-BEAM POSTS) - SHEET 1
THREE CABLE GUIDERAIL (I-BEAM POSTS) - SHEET 2
GRADING PLAN FOR FLARED IMPACT ATTENUATION SYSTEM
GRADING PLAN FOR MEDIAN AND GORE IMPACT ATTENUATION SYSTEM
GRADING PLAN FOR TANGENTIAL IMPACT ATTENUATION SYSTEM
CONNECTICUT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 1
CONNECTICUT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 2
CONNECTICUT TRUCK MOUNTED IMPACT ATTENUATOR SHEET 3
GRANITE STONE TRANSITION CURBING
TYPICAL GRADING PLAN FOR PLACEMENT OF GUIDERAIL END ANCHOR

CTDOT GUIDE SHEETS
TRAFFIC ENGINEERING
Description
TR_GDS_X R
TR_GDS_Z S & W
TR_GDS_Y D, E, I, & M

CTDOT GUIDE SHEETS
STRUCTURE/BRIDGE DESIGN
Description
CP-1 CAMERA POLE GENERAL PLAN

CP-2 CAMERA POLE FOUNDATION TYPE-C
CP-3 CAMERA POLE FOUNDATION TYPE-D
CP-4 CAMERA POLE DETAILS
CP-5 6" X 2' -3" HANDHOLE DETAILS
CP-6 6" X 9" HANDHOLE DETAILS
CP-7 SUGGESTED CAMERA POLE INSTALLATION SEQUENCE
PVMS-1 PORTABLE VMS SUPPORT FOOTING DETAILS
PVMS-2 PORTABLE VMS SUPPORT FOOTING REINFORCEMENT
PVMS-3 PORTABLE VMS SUPPORT FOUNDATION DETAILS
PVMS-4 PORTABLE VMS SUPPORT ISOMETRIC VIEW
BSM-1 BREAKAWAY SIGN SUPPORT GENERAL NOTES
BSM-2 BREAKAWAY SIGN SUPPORT POST SELECTION TABLE 1
BSM-3 BREAKAWAY SIGN SUPPORT POST SELECTION TABLE 2
BSM-4 BREAKAWAY SIGN SUPPORT FOUNDATION DETAILS
BSM-5 BREAKAWAY SIGN SUPPORT BRACKET DETAILS
BSM-6 BREAKAWAY SIGN SUPPORT HINGE DETAILS
ASPHALTIC PLUG JOINT DETAILS 1
ASPHALTIC PLUG JOINT DETAILS 2
METAL BRIDGE RAIL (HANDRAIL)
THREE TUBE BRIDGE RAIL
METAL BEAM RAIL ATTACHMENT
TYPICAL PROTECTIVE FENCE

CTDOT GUIDE SHEETS
FACILITIES DESIGN
Description
FACILITIES ARCHITECTURAL GUIDE SHEETS
STRUCTURES GENERAL NOTES
MASONRY DETAILS
FACILITIES CIVIL GUIDE SHEETS
MISCELLANEOUS DETAILS
MISCELLANEOUS DRAINAGE
FACILITIES ELECTRICAL GUIDE SHEETS
SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

GROUNDING AND BONDING DETAILS
CCTV DETAILS
ELECTRICAL DETAILS-1
ELECTRICAL DETAILS-2
FACILITIES ILLUMINATION GUIDE SHEETS
BRIDGE INSPECTION RECEPTACLES
CONCRETE HANDHOLE TYPE W
CONNECTIONS
CONDUIT EXPANSION FITTINGS
HANDHOLES
LIGHT STANDARDS
MEDIAN ELECTRICAL DETAILS 1
MEDIAN ELECTRICAL DETAILS 2
NAVIGATION LIGHTS
FACILITIES MECHANICAL GUIDE SHEETS
FACILITIES STRUCTURAL GUIDE SHEETS
STRUCTURES GENERAL NOTES
MISCELLANEOUS CONCRETE DETAILS
MASONRY DETAILS
ROOF DIAPHRAGM TO MASONRY WALL DETAILS

CTDOT GUIDE SHEETS
HIGHWAY OPERATIONS
Description
IMS-01 TYPICAL SECTIONS - GENERAL NOTES
IMS-02 U-TYPE & FLARED WINGWALL CONDUIT, PARAPET MOUNTING CONDUIT SUPPORT & ATTACHMENTS
IMS-03 TS CONDUIT SUPPORT, CANTILEVER CHANNEL CONDUIT SUPPORT, U-BOLTS, CONDUIT RACK HANGER, CONNECTION PLATE
IMS-04 RMC EXPANSION FITTING, WALL PENETRATION, FLEXIBLE SWEEP & STRUCTURE MOUNT DETAILS
IMS-05 IMS TRENCHING DETAILS
IMS-06 IDENTIFICATION POST & IMS ILLUMINATION DETAILS
IMS-07 TYPICAL IMS CONDUIT CROSSING DETAILS

IMS-08	TYPICAL IMS CONDUIT MEDIAN DETAILS
IMS-09	CONCRETE HANDHOLE DETAILS
IMS-10	PULLBOX AND VAULT DETAILS
IMS-11	LOWERING DEVICE & CAMERA LOCATION SCHEMATICS
IMS-12	RTMS DETAILS
IMS-13	CAMERA CABINET DETAILS
IMS-14	VIDEO & DATA INTERFACE WIRING PANEL ASSEMBLY
IMS-15	TYPICAL ELECTRICAL & ATC DETAILS
IMS-16	VMS CONTROLLER CABINET & FOUNDATION
IMS-17	STAGE CONSTRUCTION DETAILS
IMS-18	REMOTE CONTROL FLASSHING LIGHT & HAR SIGN LAYOUT PLAN
IMS-19	INSTALLATION OF HAR STATIONS, HAR STATION DETAILS
IMS-20	UTILITY AND WOOD POLE INSTALLATION DETAILS