

Texas Department of Transportation Digital Delivery Program

Template Point Naming Convention

DRAFT - February 2025





This documentation is in draft form and is currently being piloted by TxDOT's Digital Delivery Program. For any questions, comments, or feedback please send to digital-delivery@txdot.gov.



TEMPLATE POINT NAMING CONVENTION

ML-FC-HMA-EOP-NB-###-RT

1) SURFACE IDENTIFIER -

2) MATERIAL/INTERMEDIATE SURFACE IDENTIFIER - 4) OFFSET IDENTIFIER

ADDITIONAL IDENTIFIER (IF NEEDED)

DIRECTIONAL IDENTIFIER (IF NEEDED)

3) GEOMETRY/FEATURE NAME IDENTIFIER

THE PRIMARY PURPOSE OF ASSIGNING NAMES TO POINTS IN A TEMPLATE IS TO GIVE EACH POINT A UNIQUE IDENTIFIER. OPENROADS DESIGNER UTILIZES THE POINT NAMES TO DETERMINE WHICH TEMPLATE POINTS SHOULD BE CONNECTED BETWEEN EACH TEMPLATE DROP. THESE CONNECTIONS, MADE WITH 3D LINEAR ELEMENTS (3D MODEL BREAKLINES), FORM THE FOUNDATION FOR SOFTWARE TO GENERATE SURFACES.

A CLEAR POINT NAMING CONVENTION IS CRUCIAL FOR CONSISTENT, ACCURATE MODELING AND CLEAR COMMUNICATION AMONG ALL STAKEHOLDERS. IT WILL ASSIST IN REDUCING ERRORS AND MAKE MODEL MODIFICATIONS MORE EFFICIENT.

FEATURE DEFINITION NAMING CONVENTION

ML-SB-CONC-EOP

── 3) GEOMETRY/FEATURE NAME IDENTIFIER

1) SURFACE IDENTIFIER -

LEVEL FILTER

- 2) MATERIAL/INTERMEDIATE SURFACE IDENTIFIER

THE MAIN ROLE OF TEMPLATE POINT FEATURE DEFINITIONS IS TO SET PRIMARY ATTRIBUTES SUCH AS LEVEL, COLOR, WEIGHT, AND STYLE FOR THE 3D MODEL BREAKLINES CREATED DURING MODELING. THESE DEFINITIONS, TOGETHER WITH OTHER WORKSPACE COMPONENTS, INFLUENCE THE REPRESENTATION OF ELEMENTS IN DIFFERENT VIEWS WITHIN THE MODELING SOFTWARE.

TXDOT HAS CRAFTED AN EXTENSIVE SET OF POINT FEATURE DEFINITIONS TO ENABLE PRECISE DETAILING IN THE CREATION OF PROPOSED SURFACES FOR TOP, BOTTOM, AND INTERMEDIATE DESIGN LAYERS. BY FOLLOWING THESE DEFINITIONS, MODELERS CAN WORK AUTONOMOUSLY WHILE SEAMLESSLY INTEGRATING FINAL SURFACES FOR VARIOUS DESIGN ASPECTS AND LAYERS.

Texas Department of Transportation

DIGITAL DELIVERY PROGRAM

TEMPLATE POINT AND FEATURE DEFINITION NAMING CONVENTIONS

(1) SURFACE IDENTIFIER		
ВС	BASE COURSE	
BI	BINDER COURSE	
BT	BOTTOM SURFACE	
EG	EXISTING GROUND	
FC	FINISH COURSE	
GD	GRADING	
NS	NO SURFACE	
OV	OVERBUILD	
RMV	REMOVALS	
SG	SUBGRADE	
SP	SPECIAL SURFACE	
SU	SUBBASE	
UN	UNSUITABLE MATERIAL	

	(2) MATERIAL IDENTIFIER
ASB	ASPHALT STABILIZED BASE
ВОТ	BOTTOM BREAKLINES
ВОТТОР	BOTTOM AND TOP BREAKLINE
CAM	CRACK ATTENUATING MIXTURE
CLAY	CLAY
CONC	CONCRETE
СТВ	CEMENT TREATED BASE
CTS	CEMENT TREATED SUBGRADE
FATB	FLY ASH TREATED BASE
FB	FLEX BASE
GEN	GENERIC
GEOGRID	GEOGRID
GRAVEL	GRAVEL
HMA	HOT MIX ASPHALT
LABEL	LABEL ANCHOR
LTB	LIME TREATED BASE
LTS	LIME TREATED SUBGRADE
NONE	NO MATERIAL
NULL	GENERAL NULL POINTS
PAV	GENERIC PAVEMENT
PFC	PERMEABLE FRICTION COURSE
ROCK	ROCK
RRAP	RIPRAP
RWALL	RETAINING WALL
SEARCH	TEMPLATE SEARCH NULL POINTS
SMA	STONE MATRIX ASPHALT
SMAR	STONE MATRIX ASPHALT RUBBER
SOIL	TOPSOIL
SPCL	SPECIAL ITEM
SPR	SUPERPAVE
SWITCH	TEMPLATE SWITCHES NULL POINTS
TBPFC	THIN BONDED PERMEABLE FRICTION COURSE
TBWC	THIN BONDED WEARING COURSE
TOM	THIN OVERLAY MIXTURES

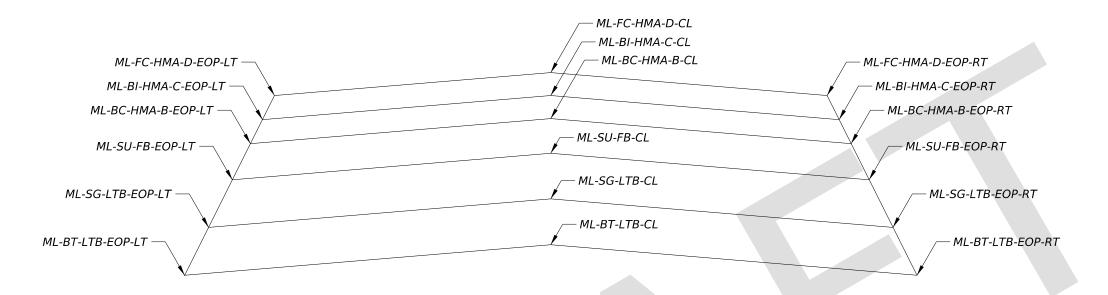
(3) GEOMETRY/FEATURE NAME IDENTIFIER		
AUX	AUXILIARY	
BAR	BARRIER	
BARFACE	BARRIER FACE	
BARFLNG	BARRIER FLANGE	
BARFLOW	BARRIER FLOWLINE	
BARTOP	BARRIER TOP	
BERMBACK	BERM BACK	
BERMBACKBNK	BERM BACK OF BANK	
BERMBOT	BERM BOTTOM	
BERMBRK	BERM GENERIC BREAKLINE	
BERMCL	BERM CENTERLINE	
BERMFL	BERM FLOWLINE	
BERMFRONT	BERM FRONT	
BERMFRONTBNK	BERM FRONT OF BANK	
BERMTOP	BERM TOP	
BOTTOM	BOTTOM	
BRK	GENERIC BREAKLINE	
CHAN	CHANNEL	
CHANBACKBNK	CHANNEL BACK OF BANK	
CHANBOT	CHANNEL BOTTOM	
CHANBRK	CHANNEL GENERIC BREAKLINE	
CHANCL	CHANNEL CENTERLINE CHANNEL CENTERLINE	
CHANFL	CHANNEL FLOW LINE	
CHANFRONTBNK	CHANNEL FRONT OF BANK	
CHANTOP	CHANNEL TOP	
CURB	CURB	
CURBFACE	CURB FACE	
CURBFLNG	CURB FLANGE	
CURBFLOW	CURB FLOWLINE	
CURBTOP CUT	CURB TOP BACK CUT	
CUTBERM	CUT SLOPE BERM	
CUTTIE	CUT TIE OF SLOPE	
CUTTOE	CUT TOE OF SLOPE	
CZONE	CLEARZONE	
DAYLT	DAYLIGHT POINT	
DITCH	DITCH	
DITCHBACK	DITCH BACKSLOPE	
DITCHBOT	DITCH BOTTOM	
DITCHCL	DITCH CENTERLINE	
DITCHFL	DITCH FLOWLINE	
DITCHFRONT	DITCH FRONT	
DITCHIN	DITCH INSIDE EDGE	
DITCHOUT	DITCH OUTSIDE EDGE	
EOL	EDGE OF LANE	
EOP	EDGE OF PAVEMENT	
EOS	EDGE OF SHOULDER	
FILL	FILL	
FILLTIE	FILL SLOPE TIE	
FILLTOE	FILL SLOPE TOE	
HANDRAIL	HAND RAIL	
HANDRAILBOT	HAND RAIL BOTTOM	
HANDRAILTOP	HAND RAIL TOP	
LANE	GENERIC LANE	

(3) Geometry/Fea	nture Name Identifier (continued)
LINER	LINER
LINERBACKBNK	LINER BACK OF BANK
LINERBOT	LINER BOTTOM
LINERBRK	LINER GENERIC BREAKLINE
LINERCL	LINER CENTERLINE
LINERFL	LINER FLOWLINE
LINERFRONTBNK	LINER FRONT OF BANK
LINERTOP	LINER TOP
MBGF	METAL BEAM GUARD FENCE
MBGFBACK	METAL BEAM GUARD FENCE BACK
MBGFBLOCK	METAL BEAM GUARD FENCE BLOCK
MBGFBLOCKBOT	METAL BEAM GUARD FENCE BLOCK BOTTOM
MBGFBLOCKTOP	METAL BEAM GUARD FENCE BLOCK TOP
MBGFBOT	METAL BEAM GUARD FENCE BOTTOM
MBGFFRONT	METAL BEAM GUARD FENCE FRONT
MBGFGRADE	METAL BEAM GUARD FENCE GRADE TARGET
MBGFTOP	METAL BEAM GUARD FENCE TOP
MED	MEDIAN
PEDRAIL	PEDESTRIAN RAILING
PEDRAMP	PEDESTRAIN RAMP
PONDBACKBNK	POND BACK OF BANK
PONDBOT	POND BOTTOM
PONDBRK	POND GENERIC BREAKLINE
PONDCL	POND GENERIC BREAKLINE POND CENTERLINE
PONDFL	POND FLOWLINE
PONDFRONTBNK	POND FRONT OF BANK
PONDTOP	POND TOP
RIPRAP	RIP RAP
RWALLBOT	RETAINING WALL BOTTOM POINTS
RWALLBRK	RETAINING WALL GENERIC BREAKLINE
RWALLCOPING	RETAINING WALL COPING
RWALLCTR	RETAINING WALL CENTER
RWALLEDGE	RETAINING WALL EDGE
RWALLFLANGE	RETAINING WALL FLANGE
RWALLTOP	RETAINING WALL TOP
SHLDR	SHOULDER
SLOPEBACKBNK	BACK OF BANK
SLOPEBOTBNK	BOTTOM OF BANK
SLOPEFRONTBNK	FRONT OF BANK
SLOPETOPBNK	TOP OF BANK
STAB	SOIL STABILIZATION
STABBACKBNK	SOIL STABILIZATION BACK OF BANK
STABBOT	SOIL STABILIZATION BOTTOM
STABBRK	SOIL STABILIZATION GENERIC BREAKLINE
STABCL	SOIL STABILIZATION CENTERLINE
STABFL	SOIL STABILIZATION FLOWLINE
STABFRONTBNK	SOIL STABILIZATION FRONT OF BANK
STABTOP	SOIL STABILIZATION TOP
SW	SIDEWALK
SWBRK	SIDEWALK GENERIC BREAKLINE
SWCRAMP	SIDEWALK OUTSIDE CURB RAMP
SWIN	SIDEWALK INSIDE (FRONT OF WALK)
SWOUT	SIDEWALK OUTSIDE (BACK OF WALK)

(4) OFFSET IDENTIFIER		
BACK	BACK	
BASELINE	BL	
ВОТТОМ	ВОТ	
CENTERLINE	CL	
FLOWLINE	FL	
FRONT	FR	
INSIDE	IN	
LEFT	LT	
MEDIAN	MED	
MIDDLE	MID	
OUTSIDE	OUT	
RIGHT	RT	
TOP	TOP	

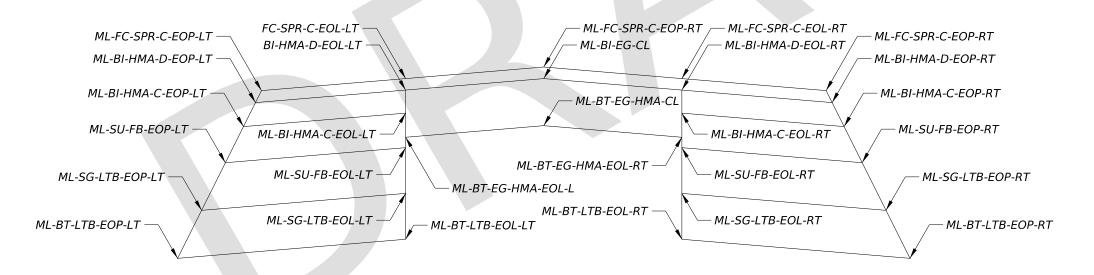


TEMPLATE POINT NAME AND FEATURE DEFINITION IDENTIFIERS



SINGLE SLOPE PAVEMENT SECTION - UNDIVIDED

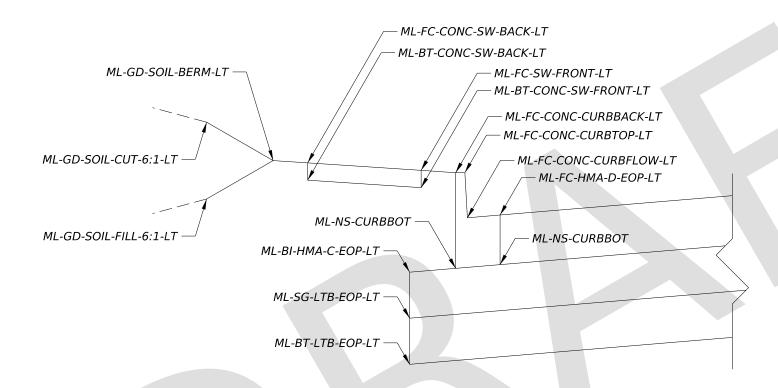
TEMPLATE POINT NAMING CONVENTION



SAWCUT PAVEMENT SECTION - UNDIVIDED

TEMPLATE POINT NAMING CONVENTION

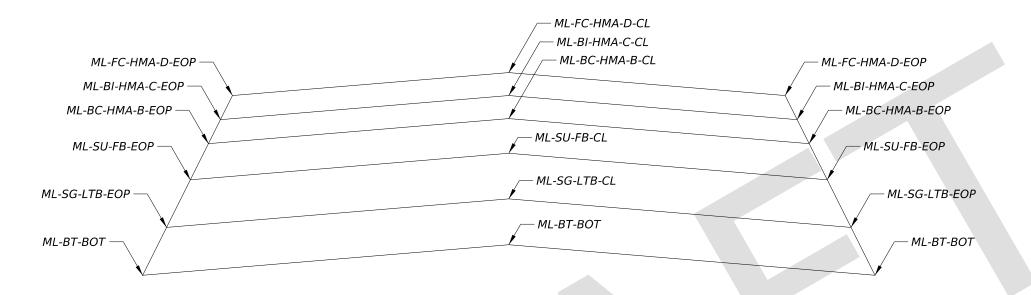




CURBED PAVEMENT SECTION WITH SIDEWALK

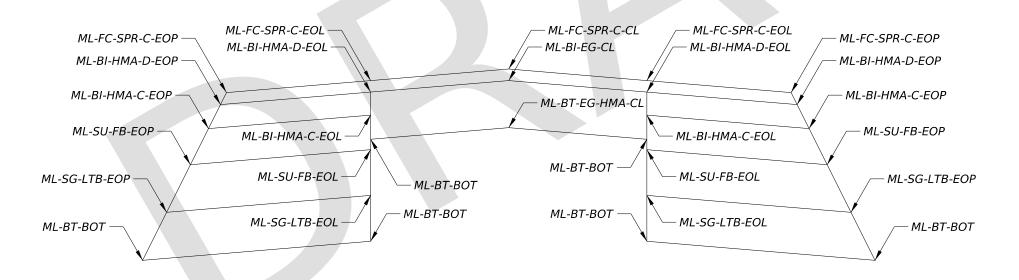
TEMPLATE POINT NAMING CONVENTION





SINGLE SLOPE PAVEMENT SECTION - UNDIVIDED

FEATURE DEFINITION NAMING CONVENTION

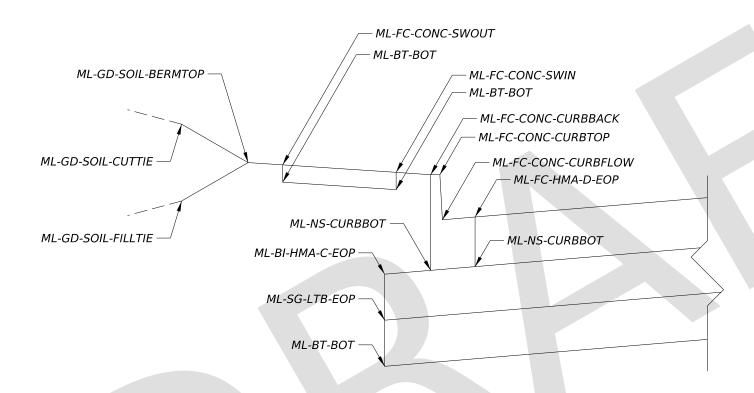


SAWCUT PAVEMENT SECTION - UNDIVIDED

FEATURE DEFINITION NAMING CONVENTION



FEATURE DEFINITION NAMING
EXAMPLES



CURBED PAVEMENT SECTION WITH SIDEWALK

FEATURE DEFINITION NAMING CONVENTION



FEATURE DEFINITION NAMING EXAMPLES