HALIFAX REGIONAL MUNICIPALITY

MUNICIPAL DESIGN GUIDELINES 2013



DRAWING STANDARDS



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PART C: DRAWING STANDARDS

1.0 PURPOSE AND AUTHORITY

- 1.1 GENERAL
 - The purpose of this document is to standardize and identify requirements for the preparation and delivery of computer aided drafting drawings (CAD) being done by or for the Halifax Regional Municipality (HRM), and drawings requiring the approval of the HRM.
 - These standards are issued under the authority of the HRM.
 - These standards are mandatory for all drawings prepared for and submitted to HRM, including Subdivision drawings, Design Engineering drawings, Right-of-Way infrastructure drawings, any other engineering drawings and Legal drawings.
 - These standards apply to hard copy and digital drawing preparations.
 - These standards define the structure for digital drawing files for the purpose of compiling HRM's Infrastructure GIS database.
 - This procedure is subject to change without notification and the onus is on the user to ensure that they use the latest revised edition.
 - Any deviation from these standards is prohibited unless approved by HRM and must be submitted with documentation detailing the CAD drawing structure so as to facilitate the compilation of HRM's Infrastructure GIS database.

PART C: DRAWING STANDARDS

2.0 DIGITAL STANDARDS

2.1 GENERAL

- The Halifax Regional Municipality creates engineering drawings with AutoCAD Civil 3D.
- All design and record drawings created for submission to HRM shall be compatible with AutoCAD's DWG format.
- The digital standards described in this document are contained within HRMs PROTOTYPE drawings (DWT/DWG) and are available upon request.
- Details regarding the standards are outlined in the remainder of the document.
- Drawings prepared using other CAD packages are acceptable if and only if they meet the requirements defined in this procedure.

PART C: DRAWING STANDARDS

3.0 GEOGRAPHIC REFERENCE

3.1 GENERAL

Nova Scotia Coordinate Survey System: all work shall be referenced using real world coordinates.

3.1.1 Horizontal Datum

All geographic referenced points shall be ATS77 as defined by the control monuments in the Nova Scotia Coordinate Referencing System, 1979 adjustment.

3.1.2 Vertical Datum

All geographic referenced points shall be Canadian Geodetic Datum, as defined by the control monuments in the Nova Scotia Coordinate Referencing System, 1979 adjustment.

3.1.3 Map Projection

All geographic referenced data shall be referred to zone 5 (Central Meridian 64° 30' West Longitude) or zone 4 (Central Meridian 61° 30' West Longitude) of the Nova Scotia 3° Modified Transverse Mercator Projection of horizontal datum (MTM Zone 4 and Zone 5).

3.1.4 Units

All coordinates, measurements and dimensions shall be expressed in metric units.

3.1.5 Unit Accuracy

All coordinates, measurements and dimensions shall be expressed to a minimum of 3 decimal places.

3.2 SURVEY DATA

The surveyor shall:

- 3.2.1 Separate features by layer before the information is transferred to the CAD drawing to simplify the drawing structure as per Section 7.0 Digital CAD Drawing Structure;
- 3.2.2 All features captured via survey shall be identified and coded according to HRM feature codes (FCODES) as defined in the HRM Survey field code library, and Appendix D;
- 3.2.3 The HRM survey field code library is available at <u>http://www.halifax.ca/designcon/design/munservices.html</u> or upon by request;
- 3.2.4 Original Survey shots shall be submitted digitally as per Section 6.0 Submission of Digital CAD files.

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4.0 DESIGN DRAWINGS

4.1 GENERAL

All design drawings, hard copy and digital, shall include (with each specification detailed further in the document):

- Plan
- Profile
- Details as required / project specification
- Overall plan
- Legend
- Scale
- Title block
- North arrow
- Key plan
- Survey control table
- Proposed centerline alignment table and layout

4.2 PRESENTATION

The presentation of the plan and profile components of the engineering design drawing shall be as follows:

- 4.2.1 Units: METRIC;
- 4.2.2 Scale: 1:500, 1:250, 1:200 or as directed by the HRM Engineer in charge or the engineer the CAD technician reports to;
- 4.2.3 Title block the title block is to be located in the lower right hand corner of the sheet as seen in figure DS 02 and is to include key plan, legend, notes, revisions, dates, scales, drawing number, approving signatures, drawing title and company name as seen in figures DS 04, DS 05 and DS 07;
- 4.2.4 Standard notes standard notes must be placed in appropriate sections of the title block as seen in figure DS 24;
- 4.2.5 Key plan the key plan is to be placed in the area provided at the top of the title block for all drawings, which clearly shows the project location within the community;

- 4.2.6 Sheet size drawings comprising a set shall be of uniform size. A standard plan/profile drawing shall be sheet size A1, refer to figure DS 01 for details or as approved by HRM. A1 and A1+ sheet size with layouts are included in the HRMTEMPLATE.dwt;
- 4.2.7 North arrow a north arrow shall be placed in the upper right hand corner of the plan area. A NORTH arrow symbol shall be used for all plans as shown in Figure DS 10;
- 4.2.8 Plan orientation plans shall be drawn to be viewed from the bottom or right hand side only with north arrow pointing upwards (between 9 and 3 o'clock), when possible. All Horizontal and Vertical chainages shall increase from left to right;
- 4.2.9 Plan details see appropriate procedure for details on drafting various types of plans (i.e., survey plan, tentative plan, final plan, street design plan, etc.);
- 4.2.10 Details to be included as required by or as directed by the Engineer.

4.3 PLAN

The engineering design plan shall include:

- 4.3.1 The existing and proposed location and horizontal alignment of:
 - (a) Curbed roads, sidewalks and driveways;
 - (b) Traffic markings and infrastructure;
 - (c) Sanitary and storm sewer systems and appurtenances;
 - (d) Water system and appurtenances;
 - (e) Fencing, retaining walls, guide rails and other barrier infrastructure;
 - (f) Utility systems both above and below ground, including underground power, telecommunication systems or gas lines etc.;
 - (g) All other public services and their appurtenances;
 - (h) Cross-section and details are to be scaled to fully illustrate the subject matter.
- 4.3.2 Street dimensioning and name;
- 4.3.3 Boundary lines of each lot, civic number and PID where available;
- 4.3.4 Chainage at 50m intervals along the centerline of the street and the chainage of all intersecting street centerlines;
- 4.3.5 Any control monuments and bench marks that are within the area of the plan;
- 4.3.6 Limits of the construction;
- 4.3.7 Survey control table as per figure DS 12;
- 4.3.8 Proposed centerline alignment table and layout as per figure DS 12.

4.4 PROFILE

Engineering design drawing profile shall include the existing and proposed location and vertical alignment of:

- (a) The proposed centerline street grade;
- (b) The finished grade;
- (c) The water system, including size, material, elevation/depth, fitting inverts;
- (d) The sanitary sewer and storm sewer systems, including manhole and catch basin lead inverts, material, size, elevation, depth of cover;
- (e) Any other underground services and appurtenanances;
- (f) Profile grid the profile section of a plan must be plotted on Halifax Regional Municipality standard grid. See figures DS 17 and DS 18 for line weights, placement of text, etc.;
- (g) Scale 1:50.

4.5 SIGNING OF DRAWINGS

The engineering design drawing shall be stamped and signed by a Professional Engineer currently registered to practise in Nova Scotia.

4.6 FORMAT

The format of the design drawing shall be:

- 4.6.1 Hard copy on 20 lbs paper;
- 4.6.2 Electronic format as per Section 6.0 Submission of Digital CAD files.

PART C: DRAWING STANDARDS

5.0 RECORD DRAWINGS

5.1 GENERAL

- The record drawing shall include all information on the "Design Drawing" as per Section 4, revised to reflect the "as recorded" information.
- Record Drawings are required upon completion of all engineering projects to reflect "as recorded" information. The parties responsible for the preparation of Record Drawings will be determined and agreed upon prior to the awarding of all contracts.

5.2 FORMAT

Record information submission shall include both of the following formats:

- 5.2.1 Hard Copy: all signed original plots shall be plotted on stable base (minimum) 3 mil film as per Section 9.0 Hard Copy Plots;
- 5.2.2 Electronic format as per Section 6.0 Submission of Digital CAD Files, Section 7.0 Digital CAD Drawing Structure and Section 8.0 Auto CAD Data Entry: Feature Creation.

5.3 SPATIAL DATA DELIVERY FORMAT

All RECORD data must be submitted in ASCII format as described in Section 6 - Submission of Digital CAD Files and within a CAD drawing, conforming to HRM's Drawing Standards defined in this document. Specifically;

- 5.3.1 RECORD data must be placed on "RECORD SURVEY" layers as defined in the HRM Prototype Drawing, described in Section 7 Digital CAD Drawing Structure;
- 5.3.2 Proposed data / future development data shall be removed from the digital record drawing submission;
- 5.3.3 RECORD submission shall include RECORD SURVEY data only.

5.4 FEATURE CODES

All RECORD features shall be identified and coded according to HRM feature codes (FCODES) both in the submitted digital CAD file and the submitted ASCII file as described in Section 6 - Submission of Digital CAD Files.

HRM FCODES are listed in Appendix C of this document.

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6.0 SUBMISSION OF DIGITAL CAD FILES

6.1 GENERAL

The following guidelines must be followed for acceptable delivery of CAD files to Halifax Regional Municipality. Unless otherwise directed CAD files will not be required for legal drawings.

6.2 DELIVERY MEDIA

- (a) Compact disk (CD);
- (b) e-mail;
- (c) as otherwise approved by HRM.
- 6.3 ACCEPTABLE DELIVERY FORMAT
 - (a) AutoCAD Drawing File Format (DWG);
 - (b) Original Survey Field Shots: Data file or Text file in ASCII Format, where:

ASCII files shall contain fields in the following order: Point#, Northing, Easting, Elevation, FCODE (using HRM define FCODES);

(c) If files are compressed, include appropriate software to explode or decompress files.

6.4 DRAWING CLEAN-UP

Prior to drawing submission ensure the following CAD functions have been performed on the digital drawing file (DWG):

- PURGE: removing unused layers and block references, removing PROPOSED or FUTURE Development layers;
- DRAWING CLEANUP: removing and correcting pseudo nodes, undershoots/overshoots, duplicate features and other topological errors;
- ETRANSMIT: automatically including associated XREFS, plot styles and font files with submission.

6.5 DOCUMENTATION

Documentation must accompany all CAD files. This documentation should contain the following information:

- (a) Contract number;
- (b) File name listing with descriptions;
- (c) Drawing name listing (if different from above);
- (d) Revision status and dates of CAD files;

- (e) CAD software name and version number;
- (f) ASCII file data structures, field sites (database information if applicable);
- (g) Data history (source, scale of original map if digitized, operations performed on data).

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7.0 DIGITAL CAD DRAWING STRUCTURE

7.1 GENERAL

The digital CAD drawing structure ensures all drawing files (DWG) are produced with a consistent schema, regardless of producer, so that a single process can be used to migrate infrastructure features created via engineering efforts to a single GIS Infrastructure Database thereby eliminating human error and redundant efforts in the data creation process.

All CAD drawing files must contain a definite structure with respect to layering, linetypes, block references, lettering and dimensions. For specific details, refer to the appropriate template drawing details described in this section.

7.2 LAYERS

Layers have been defined to hold specific features. Each feature must be placed on the correct drawing layer. All layers are defined in the prototype drawings for the specific application:

Engineering Drawings: HRMTEMPLATE.DWT

Subdivision Engineering Drawings: HRMSUBTEMPLATE.DWT

Legal Survey Drawings: LEGAL.DWG

A list of layers (layer name, description, and linetype) is contained in Appendix A for Engineering Drawings and Subdivision Engineering Drawings as they follow the same layer structure as described in this section. See Appendix B for Legal Drawings.

7.3 FCODES

All features identified in the CAD file must be coded according to HRM feature codes (FCODES). FCODES are included in all HRM template drawings and listed in Appendix C.

7.3.1 Block Reference - Point Features

For point features this is accomplished through block references. Point features such as manholes, trees, poles, etc. must be symbolized using HRM block references thereby assigning the correct HRM FCODE. Block references are included in all HRM template drawings.

All RECORD SURVEY symbolized point features are to be placed on layer HE-SYMBOLS-ALL

Ex. a Utility Pole is identified as UTPO therefore

Layer = HE-SYMBOLS-ALL Block Reference = UTPO All Blocks and Symbols listed in this document are contained in the prototype drawings.

Refer to figures DS 10 and DS 11 for commonly used symbols. For the remainder see HRMTEMPLATE.dwt and LEGAL.dwg, or refer to Appendix C for the full block reference library.

All symbols used shall be denoted in the legend.

7.3.2 Linetype - Line Features

For linear features this is accomplished through linetypes. Linear features such as pipes, sidewalk, curb etc. must be symbolized using HRM linetypes thereby assigning the correct HRM FCODE and placed on the appropriate layer. Linetypes are included in all HRM template drawings.

Ex. a Curbed Road is identified as a RRCB therefore,

LAYER = HE-ROAD LINETYPE = RRCB

See figures DS 14, DS 15,(for plan), DS 16 (for record plan) and figures DS 17, DS 18 (for profile) for line weights, placement of text. A partial listing of lines (layer, linetype, description) is contained figure DS 25 of this procedure or refer to Appendix C.

For a complete list print "hrmlinesltscale8.lin".

7.4 PROTOTYPE DRAWINGS

HRM's Design staff have developed the following template drawings to facilitate the production of engineering drawings relating to HRM infrastructure.

They include:

- (a) hrmtemplate.dwt
- (b) assemblies.dwg
- (c) hrmpp. dwt
- (d) hrmmapbook.dwt
- (e) HRMSUBTEMPLATE.dwt
- 7.4.1 Hrmtemplate.dwt

This template drawing contains HRM's drawing standards for typical Design & Record Drawings.

- 7.4.1.1 Layer Structure where:
 - (a) "HE-" layers represent Horizontal Existing (RECORD SURVEY) and hold various line features. See 7.4.1.7 for a complete list of RECORD LAYERS;

- (b) HE-SYMBOLS-All (RECORD SURVEY) containing all symbolized points
- (c) "HP-" layers represent Horizontal Proposed features (point and line). See 7.4.1.8 for a complete list of PROPOSED LAYERS;
- (d) "...from HRM GIS" indicates data extracted from HRM's Infrastructure GIS database (point or line);
- (e) "VE-" layers represent Vertical Existing profile features (point and line);
- (f) "VP-" layers represent Vertical Proposed profile features (point and line)
- (g) "K-" layers represent Key Plan features;
- (h) Where a layer does not exist for a particular feature and a new layer must be added, it must follow HRM's standardized layer naming convention where RECORD SURVEY layers begin with "HE" and PROPOSED layers begin with "HP" and include an appropriate description in the layers' description field.
- 7.4.1.2 Block References defined by HRM Feature Codes (FCODE);
- 7.4.1.3 Linetypes defined by HRM FCODES and listed in "hrmlinesItscale8.lin";
- 7.4.1.4 Standard drawing sheet sizes;
- 7.4.1.5 Civil 3D Styles defined within the template to control the display and design characteristics of drawing objects. Any style defined by HRM is named as such. i.e. Point Label HRM NO DISPLAY turns off the label display for POINT objects.

These styles are applicable to Civil 3D users only;

7.4.1.6 Description Keys - Defined for importing LandXML points by matching the raw Survey description key (FCODE) to the properties specified in that description key, applying the template properties to the point when it is created. The description keys show the code and sets the point style, the point label style, the format, and the layer properties.

Description Keys are applicable to Civil 3D users only;

7.4.1.7 Record Layers are as follows, all begin with "HE":

Layer Name	Description
	RECORD SURVEY: Breaklines for TIN / Back of Curb /
HE-BREAKLINES	
HE-BUILDING	RECORD SURVEY: Building Line
HE-COMBINED	RECORD SURVEY: Combined Sewer Pipe
HE-CONTOUR	RECORD SURVEY: Contour Line
HE-DRIVEWAY	RECORD SURVEY: Driveway-parking-walkway Line
HE-FENCE	RECORD SURVEY: Fence Line
HE-GAS	RECORD SURVEY: Natural Gas Pipe Line
HE-HYDRO	RECORD SURVEY: Ditch-Lake-Stream Coast Line
HE-LABEL-ALL	RECORD SURVEY: All Labels
HE-OTHER	RECORD SURVEY: Miscellaneous Line
HE-PARCEL	RECORD SURVEY: Parcel Line
HE-POINTS-ALL	RECORD SURVEY: All Points
HE-ROAD	RECORD SURVEY: Road Line
HE-SAMPLE	RECORD SURVEY: Section Line of Plan
HE-SANITARY	RECORD SURVEY: Sanitary Sewer Pipe
HE-SIDEWALK	RECORD SURVEY: Sidewalk Line
HE-SLOPES	RECORD SURVEY: Slope Line
HE-STORM	RECORD SURVEY: Storm Sewer Pipe
HE-STREETLINE	RECORD SURVEY: Edge of Right-of-Way
HE-STRUCTURE	RECORD SURVEY: Structure Line
HE-SURFACE	RECORD SURVEY: Surface for TIN Line
HE-SYMBOLS-ALL	RECORD SURVEY: All Symbolized Points
HE-TRAFFIC	RECORD SURVEY: Traffic Line
HE-TREE LINE	RECORD SURVEY: Tree Line
HE-UTILITY	RECORD SURVEY: Utility Line
HE-WATER	RECORD SURVEY: Water Pipe

7.4.1.8 Proposed data must be placed on "PROPOSED" layers as defined below for Design Drawings and is applicable to Design Drawings only and not for Record Drawings.

Proposed Layers are as follows, all begin with "HP".

Layer Name	Description
HP-ASSEMBLY	PROPOSED: Assembly Template
HP-COMBINED	PROPOSED: Combined Sewer Pipe
HP-CORRIDOR	PROPOSED: Corridor
HP-MARKING	PROPOSED: Pavement Markings
HP-LINK	PROPOSED: Assembly Link
HP-CORRIDOR-FLINE	PROPOSED: Corridor
HP-ROAD	PROPOSED: Road Line
HP-SANITARY	PROPOSED: Sanitary Sewer Pipe
HP-SIDEWALK	PROPOSED: Sidewalk Line
HP-STORM	PROPOSED: Storm Sewer Pipe
HP-TABLE	PROPOSED: Alignment Table

7.4.2 assemblies.dwg

For those using Civil 3D's corridor modelling functionality, this template combines horizontal and vertical constraints to generate a proposed roadway cross-section for a typical HRM 9m road with 2% crown. The template accounts for elements along the right-of-way that affect a road design. It has the ability to show changes in road width (following an alignment) and changes to the road crown.

7.4.3 hrmpp.dwt

For those using Civil 3D's Plan-Production Tools, this template contains the content to build a plot according to HRM's hard copy plot standard for 1:500 scale drawings. It contains HRM standard notes, title block, logo, legend, etc. It rotates views and the north arrow; it creates match lines; it generates HRM's standard profile.

7.4.4 hrmmapbook.dwt

This template is set-up to plot cross-sections for "working" drawings using mapbookcreate.

7.4.5 hrmsubtemplate.dwt

This template is set-up for Developers creating subdivision drawings in HRM and is the exact same as HRMTEMPLATE.dwt described in 7.4.1. in terms of layer structure, block reference library, linetype library, C3D styles, description keys, plot style and uses accompanying templates from sections 7.4.2, 7.4.3, 7.4.4.

It differs in TITLEBLOCK layout only.

7.5 AVAILABLE DATA

The following data is available for the preparation of engineering drawings:

- (a) GIS Extracts available if required by consultants preparing drawings initiated by the Halifax Regional Municipality and is released through a data license agreement, to be signed by the Consultant and a Halifax Regional Municipality representative. For a GIS data extraction, contact GEOINFO@halifax.ca
- (b) Survey Field Code Library is available at <u>http://www.halifax.ca/designcon/design/munservices.html</u> or upon request.

7.6 LETTERING AND DIMENSIONS

- 7.6.1 All lettering and dimensions must follow Halifax Regional Municipality standards defined in this document, refer to the standard drawings in Appendix D.
- 7.7 RULES FOR WRITING NUMBERS
 - 7.7.1 Both the point and comma are widely used as the decimal marker. Only one type of marker shall be used in the one text. The decimal marker shall be positioned in line with the base of the associated numerals.
 - 7.7.2 When the triad separator is required to facilitate the reading of long numbers, the separator shall be a space unless there is a compelling reason for it to be otherwise but in no case shall a point or comma be used. A space is not necessary with a four-digit group except when required for consistency, eg. when it is in a column with other numbers having five or more digits.

Examples:

32 453.246 072 5 1245 (1 245 optional) 3.1416 (3.141 6 optional) but 3.141 59

This clause need not apply to monetary values.

- 7.7.3 If a numerical value less than one is written in decimal form, a zero shall precede the decimal.
- 7.7.4 Acceptable formats when showing Length, Area and Volume:

metres: **128.5** or **128.5 m** (in notes and on details) millimetres: **1285** or **1285 mm** (in notes and on details) square metres: **1285 m**² cubic metres: **1285 m**³

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8.0 AUTOCAD DATA ENTRY: FEATURE CREATION

8.1 GENERAL

The following guidelines are recommended for data entry using AutoCAD.

- (a) The PLINE command should be used instead of the LINE command for linear and polygon shaped features. PLINE will create a node/vertex combination which is important for developing topology within a GIS. SPLINE command shall never be used.
- (b) If data is obtained through digitizing, document the scale of the original source map.
- (c) All polygon features must be closed by using OSNAP tools (Near, Int, End, etc.).
- (d) Do not double-digitize boundary lines which separate adjacent polygons. Adjacent polygons (within a thematic layer) should share a common boundary.
- (e) All feature outlines will be captured so that the feature lies to the right of the line (right hand rule).
- (f) All single line features which possesses a direction of flow will be captured in the direction of flow (e.g. Sewer Pipe).

8.2 FEATURE COLLECTION

- 8.2.1 Road
 - For curbed roadways locate face of curb at the gutter (RRCB) elevation to be taken at the top of the curb. Curves PC's plus enough shots in between to properly show curb location. Beginning and end of driveway cuts and pedestrian ramps.
 - Medians and traffic islands will be collected in the same manner.
- 8.2.2 Sidewalk

Front and back edge of sidewalk (RRSW), all walkways (RRWK) and driveways (RRDR) where they intersect the curb and sidewalk.

8.2.3 Fences

Fences (STFE), guiderails (STGR), retaining Walls (STRW) and walls (STWL) - beginning, end and at any point where a change in direction occurs at ground level.

8.2.4 Buildings

Locate the actual corner of the siding of corner boards with sufficient points to create a building polygon (BLDG).

8.2.5 Structures

- For large concrete bases or platforms the corners of that structure should be located, but if the base is 0.3 metres square or less, then locate the centre of the feature.
- Super mailboxes locate as point features (mid point of base nearest the curb).
- Bus shelters with no base pad instead they are located on sidewalks (mid point of feature nearest the curb).
- 8.2.6 Trees, signs, poles

Locate centre of feature on ground nearest the curb.

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9.0 HARD COPY PLOTS

9.1 GENERAL

- The following guidelines must be followed when producing hard copy plots for The HRM.
- Plotting Media: All plots shall be plotted on stable base (minimum) 3 mil film.
- Size of plotting media: Sheet A1 and A1+ sizes can be found in the prototype drawings. See figure DS 01 for details.

9.2 SCALES

Plan scales for other drawings shall be as follows:

- (a) Survey plan shall be:
 - (i) 1:1000
 - (ii) 1:500
 - (iii) 1:250
 - (iv) 1:200 (where warranted for legibility reasons)
 - (v) as directed by HRM.
- (b) Drainage plan shall be:
 - (i) 1:500
 - (ii) 1:1000
 - (iii) as approved by the Engineer in charge.
- (c) Key plan shall be not less than 1:20,000 or greater than 1:2,500.
- (d) Expropriation plan shall be:
 - (i) 1:500; or
 - (ii) 1:200; or
 - (iii) as approved by the HRM.
- (e) Detail plan shall be to a scale that will fully illustrate the subject matter.
- (f) Other plans as directed by the HRM Engineer in charge.

9.3 PLOT STYLE

HRM's plot style must be followed in order to produce standard plots. All entities must be plotted with the correct line thickness as described in the standard drawings included as appendices to this section. See figures DS 14, DS 15 (plan), DS 16 (record plan) and DS 17, DS 18 (profile) for line weights, placement of text, etc..

HRM uses the named plot style HRMplotstyle.stb which is found in template drawing.

The named plot styles refer to traditional pen widths for lines when plotted. For example, the plot style "width 0.15" is a thin faded line used for "HE" record layers while the plot style "width 0.53" is a bold line to highlight and make construction features prominent so is used for "HP" proposed layers for construction drawings to show proposed features.

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10.0 GENERAL CONDITIONS

10.1 STREET NAMES

All streets shall be identified with their proper names and printed outside of the street right-of-way for engineering drawings and inside the street right-of-way for all survey drawings.

10.2 INTERSECTION IDENTIFICATION

At intersecting streets or where the continuation of the streets are on other plans, the following shall be shown on the plan:

For Continuation See Plan No. 00000000

10.3 PERCENT (%) GRADE

Percent (%) grades (slopes) shall be shown for all appropriate services to two decimal places.

10.4 REVISIONS TO PLAN

If plans are revised, amended or altered, the date and the revisers initials shall be noted in the revision area of the Title Block on both the CAD drawing and on the hard copy. The revised hard copy must be updated with the appropriate approval signature. If two plans are retained with the same drawing number (original and revised), then a note must be placed on the original indicating that another plan exists with the same number. However, only one CAD file will be retained (the revised drawing).

10.5 SIGNING OF PLANS

Boundary Plans used in land conveyance, expropriation, subdivision, etc., shall be stamped and/or certified by a Nova Scotia Land Surveyor (N.S.L.S.).

PART C: DRAWING STANDARDS

11.0 LEGAL PLANS DETAILS

See the following drawing standards figures:

- Drawing Sizes: DS 01;
- Titleblock: DS 06, DS 08, DS 09;
- Linetype: DS 18;
- Legend: DS 19;
- Lot Identifier: DS 20;
- Drawing Layers: Appendix B.

PART C: DRAWING STANDARDS

12.0 APPENDICES

Appendix A - Layers for Design Drawings

Appendix B - Layers for Legal Drawings

Appendix C - Feature Code (FCODE) Listing

Appendix D - Drafting Standards Index

APPENDIX 'A'

LAYERS FOR DESIGN DRAWINGS

HRMTEMPLATE.DWT/HRMSUBTEMPLATE.DWT

Layer Name	Description	Linetype	Plot S	Style
0		Continuous	Width	0.20
BASELINE	Alignment	Centerline	Width	0.20
BUILDING FROM HRM GIS	Building Polygon from HRM GIS	Continuous	Width	0.65
	Property Line from HRM GIS: Internal Road			
CDIRB	Boundary	CDIRB	Width	0.15
CDPL	Property Line from HRM GIS: Property Line	cdpl	Width	0.15
	Property Line from HRM GIS: Arbitrary			
CDRRAB	Road Line	CDRRAB	Width	0.15
CDRRRD	Property Line from HRM GIS: Road Parcel	CDRRRD	Width	0.40
CDWACO	Property Line from HRM GIS: Coast Line	CDWACO	Width	0.15
CORRIDORS SURFACE	Corridor	Continuous	Width	0.20
DEFPOINTS	Definition Points	Continuous	Width	0.30
	Property Line from HRM GIS: Management			
DLMG	Units	Continuous	Width	0.15
FINISHED SURFACE	Finished Surface	Continuous	Width	0.30
GRID	PROFILE: Grid Lines for Profile	Continuous	Width	0.15
GSCD	Natural Gas Conduit from HRM GIS	GSPI	Width	0.15
GSPI	Natural Gas Pipeline from HRM GIS	GSPI	Width	0.15
	Natural Gas Transmission Line from HRM			
GSTL	GIS	GSTL	Width	0.20
	RECORD SURVEY: Breaklines for TIN /			
HE-BREAKLINES	Back of Curb/ Centerline	Continuous	Width	0.20
HE-BUILDING	RECORD SURVEY: Building Line	bldg	Width	0.18
HE-COMBINED	RECORD SURVEY: Combined Sewer Pipe	SWPICO	Width	0.18
HE-CONTOUR	RECORD SURVEY: Contour Line	Continuous	Width	0.30
	RECORD SURVEY:	RRDR or RRPA or		
HE-DRIVEWAY	Driveway-Parking-Walkway Line	RRWK	Width	0.18
HE-FENCE	RECORD SURVEY: Fence Line	STFE	Width	0.15
		GSPI / GSTL/		
HE-GAS	RECORD SURVEY: Natural Gas Pipeline	GSLA/ GSPE	Width	0.15
	RECORD SURVEY: Pitch	WADI/ WAOH/		
HE-HYDRO	Lake-Stream-Coast Line	WASL/ WAWM	Width	0.15
HE-LABEL-ALL	RECORD SURVEY: All Labels	Continuous	Width	0.20
HE-OTHER	RECORD SURVEY: Miscellaneous Line	Continuous	Width	0.15
HE-PARCELL	RECORD SURVEY: Parcel Line	CDPL	Width	0.15
HE-POINTS-ALL	RECORD SURVEY: All Points	Continuous	Width	0.20

Layer Name	Description	Linetype	Plot S	tyle
HE-ROAD	RECORD SURVEY: Road Line	RRCB/ RRRD	Width	0.30
HE-SAMPLE	RECORD SURVEY: Section Line of Plan	Continuous	Width	0.20
HE-SANITARY	RECORD SURVEY: Sanitary Sewer Pipe	SWPISA	Width	0.15
HE-SIDEWALK	RECORD SURVEY: Sidewalk Line	RRSW	Width	0.20
HE-SLOPES	RECORD SURVEY: Slope Line	Continuous	Width	0.15
HE-STORM	RECORD SURVEY: Storm Sewer Pipe	SWPIST	Width	0.15
HE-STREETLINE	RECORD SURVEY: Edge of Right-of-Way	Continuous	Width	0.40
HE-STRUCTURE	RECORD SURVEY: Structure Line	Continuous	Width	0.15
HE-SURFACE	RECORD SURVEY: Surface for TIN Lines	Continuous	Width	0.30
HE-SYMBOLS-ALL	RECORD SURVEY: All Symbolized Points	Continuous	Width	0.18
HE-TRAFFIC	RECORD SURVEY: Traffic Line	Continuous	Width	0.15
HE-TREE LINE	RECORD SURVEY: Tree Line	Continuous	Width	0.15
HE-UTILITY	RECORD SURVEY: Utility Line	Continuous	Width	0.15
HE-WATER	RECORD SURVEY: Water Pipe	Continuous	Width	0.18
HP-ASSEMBLY	PROPOSED: Assembly Template	Continuous	Width	0.30
HP-COMBINED	PROPOSED: Combined Sewer Pipe	Continuous	Width	0.65
HP-CORRIDOR	PROPOSED: Corridor	Continuous	Width	0.30
HP-CORRIDOR FLINE	PROPOSED: Corridor	Continuous	Width	0.30
HP-LINK	PROPOSED: Assembly Link	Continuous	Width	0.30
HP-ROAD	PROPOSED: Road Line	Continuous	Width	0.65
HP-SANITARY	PROPOSED: Sanitary Sewer Pipe	Continuous	Width	0.65
HP-SIDEWALK	PROPOSED: Sidewalk Line	Continuous	Width	0.40
HP-STORM	PROPOSED: Storm Sewer Pipe	Continuous	Width	0.65
HP-TABLE	PROPOSED: Alignment Table	Continuous	Width	0.30
HRWC-DIM-AND-TEXT	HALIFAX WATER: Dimenions and Text	Continuous	Width	0.30
HRWC-LOGO	HALIFAX WATER: Logo Line	Continuous	Width	0.30
HRWC-LOGO-TXT	HALIFAX WATER: Logo Text	Continuous	Width	0.30
HRWC HYDRANT FROM HRM				
GIS	HALIFAX WATER: Hydrant from HRM GIS	Continuous	Width	0.15
HRWC PIPE FROM HRM GIS	HALIFAX WATER: Pipe from HRM GIS	Continuous	Width	0.18
HRWC VALVE FROM HRM GIS	HALIFAX WATER: Valve from HRM GIS	Continuous	Width	0.15
K-ROADANNO	KEYPLAN: Annotation	Continuous	Width	0.20
K-STREET	KEYPLAN: Street Line	Continuous	Width	0.30
K-WAOC10	KEYPLAN: Water Line	Continuous	Width	0.30
MATCHLINE	Matchline for series of Plans	Continuous	Width	0.65
	TEMPORARY: Miscellaneous Construction			
MISC	Lines	Continuous	Width	0.30
NATURAL GAS SERVICE				
LATERAL HRM GIS	Natural Gas Service Lateral from HRM GIS	GSLA	Width	0.15
NO PLOT	No Plotting Features	Continuous	Norma	al
POINTS TABLE	Table for Points	Continuous	Width	0.30
Poles	Solid Hatch	Continuous	Poles	
RRCB	Curbed Road from HRM GIS	RRCB	Width	0.30

Layer Name	Description	Linetype	Plot S	tyle
RRDR	Driveway from HRM GIS	RRDR	Width	0.18
RRPA	Parking Area from HRM GIS	RRPA	Width	0.18
RRPW	Pathway from HRM GIS	RRPW	Width	0.18
RRRD	Edge of Asphalt from HRM GIS	RRRD	Width	0.30
RRRR	Railroad from HRM GIS	RRRR	Width	0.20
RRSW	Sidewalk from HRM GIS	RRSW	Width	0.20
RRTR	Trail from HRM GIS	RRTR	Width	0.15
RRWK	Hard Surface Walkway from HRM GIS	RRWK	Width	0.18
SCHEMATIC SEWER FROM				
HRM GIS	Schematic Sewer from HRM GIS	Continuous	Width	0.15
SEWER INLET FROM HRM GIS	Sewer Inlet-Catchbasin from HRM GIS	Continuous	Width	0.15
SEWER MANHOLE FROM HRM				
GIS	Sewer Manhole from HRM GIS	Continuous	Width	0.15
SHADE	Solid Hatch for Pave	Continuous	Shade	
SHEET	Sheet	Continuous	Width	0.8
STFE	Fence Line from HRM GIS	STFE	Width	0.15
STGR	Guiderail Line from HRM GIS	STGR	Width	0.15
STREET CENTRELINE FROM				
HRM GIS	Key Plan Street Name		Width	0.20
STREET FROM HRM G/S	Key Plan Street Line		Width	0.30
STRW	Retaining Wall from HRM GIS	STRW	Width	0.15
STWL	Wall from HRM GIS	STWL	Width	0.15
	Abandoned Sewer Forcemain from HRM			
SWFMAB	GIS	SWFMAB	Width	0.15
	Combined Sewer Forcemain from HRM			
SWFMCO	GIS	SWFMAB	Width	0.15
SWFMSA	Sanitary Sewer Forcemain from HRM GIS	SWFMSA	Width	0.15
SWFMST	Storm Sewer Forcemain from HRM GIS	SWFMST	Width	0.15
SWLACO	Combined Sewer Lateral from HRM GIS	SWLACO	Width	0.15
SWLASA	Sanitary Sewer Lateral from HRM GIS	SWLASA	Width	0.15
SWLAST	Storm Sewer Lateral from HRM GIS	SWLAST	Width	0.15
SWPICL	Catchbasin Lead from HRM GIS	SWPICL	Width	0.15
SWPICO	Combined Sewer Pipe from HRM GIS	SWPICO	Width	0.15
	Combined Trunk Sewer Pipe from HRM			
SWPICOTK	GIS	SWPICOTK	Width	0.15
SWPISA	Sanitary Sewer Pipe from HRM GIS	SWPISA	Width	0.15
SWPISATK	Sanitary Trunk Sewer Pipe from HRM GIS	SWPISATK	Width	0.15
SWPIST	Storm Sewer Pipe from HRM GIS	SWPIST	Width	0.15
SWPIUK	Unknown Sewer Pipe from HRM GIS	SWPIUK	Width	0.15
TREE FROM HRM GIS	Tree Point from HRM GIS	Continuous	Width	0.15
TREE LINE FROM HRM GIS	Tree Line from HRM GIS	Continuous	Width	0.15
UTFO	Fibre Optic Line from HRM GIS	UTFO	Width	0.15
UTILITY POINT FROM HRM GIS	Utility Point Features from HRM GIS	Continuous	Width	0.15

Layer Name	Description	Linetype	Plot S	tyle
UTPI	Pipeline from HRM GIS	UTPI	Width	0.15
UTSS	Utility Substation Line from HRM GIS	UTSS	Width	0.15
UTTK	Utility Tank Line from HRM GIS	UTTK	Width	0.15
UTTR	Utility Transmission Line from HRM GIS	UTTR	Width	0.15
UTWT	Utility Water Tank Line from HRM GIS	UTWT	Width	0.15
	PROFILE-EXISTING: Combined Sewer			
VE-COMBINED	Pipe	Continuous	Width	0.30
VE-PROFILE	PROFILE-EXISTING: Ground	Continuous	Width	0.30
VE-SANITARY	PROFILE-EXISTING: Sanitary Sewer Pipe	Continuous	Width	0.30
	CROSS SECTION-EXISTING: Section			
VE-SECTION	View	Continuous	Width	0.30
	CROSS SECTION-EXISTING: Ground			
VE-SECTION-DATA	Line	Continuous	Width	0.30
VE-SECTION-PIPE	CROSS SECTION-EXISTING: Pipe	Continuous	Width	0.30
VE-STORM	PROFILE-EXISTING: Storm Sewer Pipe	Continuous	Width	0.30
VE-WATER	PROFILE-EXISTING: Water Pipe	waterprof	Width	0.30
VIEW	MODEL VIEW: Polyline for Window	Continuous	Width	0.15
	PROFILE-PROPOSED: Combined Sewer			
VP-COMBINED	Pipe	Continuous	Width	0.53
VP-PROFILE	PROFILE-PROPOSED: Ground	Continuous	Width	0.53
	PROFILE-PROPOSED: Sanitary Sewer			
VP-SANITARY	Pipe	Continuous	Width	0.53
	CROSS SECTION-PROPOSED: Section			
VP-SECTION-DATA	Ground Line	Continuous	Width	0.53
VP-STORM	PROFILE-PROPOSED: Storm Sewer Pipe	Continuous	Width	0.53
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.15	Line Weight 0.15 NOT RECORD	Continuous	Width	0.15
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.2	Line Weight 0.2 NOT RECORD	Continuous	Width	0.20
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.3	Line Weight 0.3 NOT RECORD	Continuous	Width	0.30
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.4	Line Weight 0.4 NOT RECORD	Continuous	Width	0.40
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.8	Line Weight 0.8 NOT RECORD	Continuous	Width	0.80
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.53	Line Weight 0.53 NOT RECORD	Continuous	Width	0.53
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 0.65	Line Weight 0.65 NOT RECORD	Continuous	Width	0.65
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 1.06	Line Weight 1.06 NOT RECORD	Continuous	Width	1.06
	MISCELLANEOUS TEXT-LINE: Plot @			
WIDTH 1.4	Line Weight 1.4 NOT RECORD	Continuous	Width	1.4

APPENDIX 'B'

LAYERS FOR LEGAL DRAWINGS LEGAL.DWG

Layer	Description	Linetype	Color
0	Miscellaneous	Continuou	7
BLDG	Points/Lines from Survey: Building	Continuou	2
BLDGHATCH	Hatch (lines 45° angle) from Survey: Building	Continuou	2
FENCE	Points/Lines from Survey: Fence	Continuou	2
GAS	Points/Lines from Survey: Gas	Varies	2
HYDRO	Points/Lines from Survey: Stream/Lake/Coast	Continuou	7
MONUMENT	NSCM from Survey	Continuou	9
PARCEL	Points/Lines from Survey: Land Parcel	Continuou	2
SHADE	Shading using Solid	Continuou	13
ROAD	Points/Lines from Survey: Curb & Sidewalk	Continuou	2
TRAFFIC	Points/Lines from Survey: Traffic Lights, Lines &	Continuou	9
TREE	Points/Lines from Survey: Tree, Hedge, Tree Line	Continuou	2
UTIL	Points/Lines from Survey: Pole & other Utility features	Continuou	2
WATER	Points/Lines from Survey: Valve, Hydrant, Pipe, etc.	Continuou	2
L100	Text	Continuou	5
L120	Text	Continuou	1
L140	Text	Continuou	1
L175	Text	Continuou	4
L200	Text	Continuou	3
L240	Text	Continuou	3
L290	Text	Continuou	3
L350	Text	Continuou	6
L425	Text	Continuou	6
L500	Text	Continuou	8
L60	Text	Continuou	2
L70	Text	Continuou	9
L80	Text	Continuou	7

APPENDIX 'C' FEATURE CODE (FCODE) LISTING

FCODE	DESCRIPTION	Symbol Type	Symbol	DWG Layer - RECORD SURVEY	DWG Layer - Extracted from HRM GIS
RRCB	Curbed Road	Linetype / Linear	rrcb,	HE-ROAD	RRCB
RRCB-A	Curbed Road - Asphalt	Linetype / Linear	rrcb-a,	HE-ROAD	RRCB
RRCB-C	Curbed Road - Concrete	Linetype / Linear	rrcb-c,	HE-ROAD	RRCB
RRCL	Centerline	Linetype / Linear	RRCL,	HE-BREAKLINES	RRCL
RRDR	Driveway	Linetype / Linear	rrdr,	HE-DRIVEWAY	RRDR
RRDR-G	Driveway - Gravel	Linetype / Linear	RRDR-G,	HE-DRIVEWAY	RRDR
RRDR-A	Driveway - Asphalt	Linetype / Linear	RRDR-A,	HE-DRIVEWAY	RRDR
RRDR-B	Driveway - Brick	Linetype / Linear	RRDR-B,	HE-DRIVEWAY	RRDR
RRDR-C	Driveway - Concrete	Linetype / Linear	RRDR-C,	HE-DRIVEWAY	RRDR
RRGT	Gutter	Linetype / Linear	N/A	N/A	N/A
RRJB	Jersey Barrier	Linetype / Linear	RRJB,	HE-ROAD	RRJB
RRPA	Parking Area	Linetype / Linear	rrpa,	HE-DRIVEWAY	RRPA
RRPA-A	Parking Area - Asphalt	Linetype / Linear	rrpa-a,	HE-DRIVEWAY	RRPA
RRPA-G	Parking Area - Gravel	Linetype / Linear	rrpa-g,	HE-DRIVEWAY	RRPA
RRPW	Pathway	Linetype / Linear	rrpw,	HE-DRIVEWAY	RRPW
RRRD	Edge of Road (no curb)	Linetype / Linear	rrrd,	HE-ROAD	RRRD
RRRD-A	Edge of Road - Asphalt (no curb)	Linetype / Linear	rrrd-a,	HE-ROAD	RRRD
RRRD-G	Edge of Road - Gravel (no curb)	Linetype / Linear	rrrd-g,	HE-ROAD	RRRD
RRRR	Railroad	Linetype / Linear	RRRR,	HE-OTHER	RRRR
RRST	Street Boundary Line	Linetype / Linear	N/A	N/A	N/A
RRSW	Sidewalk	Linetype / Linear	rrsw,	HE-SIDEWALK	RRSW
RRSW-A	Sidewalk - Asphalt	Linetype / Linear	rrsw-a,	HE-SIDEWALK	RRSW
RRSW-B	Sidewalk - Brick	Linetype / Linear	rrsw-b,	HE-SIDEWALK	RRSW
RRSW-C	Sidewalk - Concrete	Linetype / Linear	rrsw-c,	HE-SIDEWALK	RRSW
RRWK	Walkway	Linetype / Linear	rrwk,	HE-DRIVEWAY	RRWK
RRWK-A	Walkway - Asphalt	Linetype / Linear	rrwk-a,	HE-DRIVEWAY	RRWK
RRWK-B	Walkway - Brick	Linetype / Linear	rrwk-b,	HE-DRIVEWAY	RRWK
RRWK-C	Walkway - Concrete	Linetype / Linear	rrwk-c,	HE-DRIVEWAY	RRWK
RRWK-G	Walkway - Gravel	Linetype / Linear	rrwk-g,	HE-DRIVEWAY	RRWK
FENCE	Cuidereil	Lingtung (Linger	STOD OD OD		OTEE
STGR		Linetype / Linear	SIGR, GR GR		SIFE
STEE CH	Fence Fance Chainlink	Linetype / Linear	stie, X X		STEE
STFE-CH		Linetype / Linear	stie-cn, X X		STE
STFE-WR		Linetype / Linear			SIFE
STFE-WD	Pence - Wood	Linetype / Linear	stre-wd, X X	HE-FENCE	STFE
STRW	Retaining Wall	Linetype / Linear	strw, RVV RVV	HE-FENCE	STRW
STRW-C	Retaining Wall - Concrete	Linetype / Linear	strw-c, KVV KVV		STRW
	Retaining Wall - KOCK	Linetype / Linear			SIKW
STRW-WD	Retaining Wall - Wood	Linetype / Linear	strw-wd, RW RW	HE-FENCE	STRW
STRW-B	Retaining Wall - Brick	Linetype / Linear	strw-b, RW RW	HE-FENCE	STRW
STWL	Wall	Linetype / Linear	stwl, W W	HE-FENCE	STWL

STRUCTURE					
STRWFE	Retaining wall with fence on top	Linetype / Linear	strwfe, RW RW	HE-FENCE	STRW
STRWGR	Retaining wall with guiderail on top	Linetype / Linear	strwgr, RW RW	HE-FENCE	STRW
STGP	Gas Pump	Linetype / Linear	STGP,	HE-STRUCTURE	Structure Line from HRM GIS linel
STST	Steps	Linetype / Linear	STST,	HE-STRUCTURE	Structure Line from HRM GIS
STST-C	Steps - Concrete	Linetype / Linear	STST-C,	HE-STRUCTURE	Structure Line from HRM GIS
STST-WD	Steps - Wood	Linetype / Linear	STST-WD,	HE-STRUCTURE	Structure Line from HRM GIS
STDK	Deck	Linetype / Linear	STDK,	HE-STRUCTURE	Structure Line from HRM GIS
STWH	Wharf	Linetype / Linear	STWH,	HE-STRUCTURE	Structure Line from HRM GIS
STBL	Bleachers	Linetype / Linear	STBL,	HE-STRUCTURE	Structure Line from HRM GIS
STFL	Fountain	Linetype / Linear	STFL,	HE-STRUCTURE	Structure Line from HRM GIS
STGT	Gate	Linetype / Linear	STGT,	HE-STRUCTURE	Structure Line from HRM GIS
STUN	Unknown Structure	Linetype / Linear	STUN,	HE-STRUCTURE	Structure Line from HRM GIS
STBB	Billboard	Linetype / Linear	STBB,	HE-STRUCTURE	Structure Line from HRM GIS
STPR	Pier (bridge support)	Linetype / Linear	STPR,	HE-STRUCTURE	Structure Line from HRM GIS
STMO	Monument/Statue	Linetype / Linear	STMO,	HE-STRUCTURE	Structure Line
STMB	Community Mailbox	Linetype / Linear	STMB,	HE-STRUCTURE	Structure Line from HRM GIS
TDEE					
LCTR	Tree Row	Linetype / Linear	I CTR.	HE-TREE LINE	Tree Line from
	Tree Row	Linetype / Linear	LCTR,	HE-TREE LINE	Tree Line from HRM GIS
LCTR LCHG	Tree Row Hedge	Linetype / Linear Linetype / Linear	LCTR,	HE-TREE LINE	Tree Line from HRM GIS Tree Line from HRM GIS
LCTR LCHG LCTA	Tree Row Hedge Tree Area	Linetype / Linear Linetype / Linear Linetype / Linear	LCTR,	HE-TREE LINE HE-TREE LINE HE-TREE LINE	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS
LCTR LCHG LCTA LCSA	Tree Row Hedge Tree Area Scrub Area	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear	LCTR,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS
LCTR LCHG LCTA LCSA LCSA	Tree Row Hedge Tree Area Scrub Area Shrub	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference	LCTR, lchg, H H LCTA, LCSA, LCSA	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A
LCTR LCHG LCTA LCSA LCSA LCSA	Tree Row Hedge Tree Area Scrub Area Shrub Tree	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference	LCTR, lchg, H H LCTA, LCSA, LCSA CON LCTS	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS
LCTR LCHG LCTA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA CONTINUE CONTINUE CONTIN	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC	Tree Line from HRM GISTree Line from HRM GISTree Line from HRM GISTree Line from HRM GISN/ATree from HRM GISN/A
LCTR LCHG LCTA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA \$\circ{\cir{\cir	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A
LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL TFCDTA	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit U/G Fire Alarm Conduit	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA CONTINUE LCSA CONTINUE LCSA LCTS TFCDSL,SL SL tfcdtl,TL tfcdfa,FA	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A
LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL TFCDFA TFDL	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit U/G Fire Alarm Conduit Detector Loop	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA CON LCSA LCSA LCTS TFCDSL,SL SL tfcdtl,TL tfcdfa,FA	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A
LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TFCDSL TFCDSL TFCDTL TFCDFA TFDL TFDL TFMKCW	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit U/C Fire Alarm Conduit Detector Loop Cross Walk	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA \bigcirc LCSA \bigcirc LCSA \bigcirc LCTS TFCDSL,SL SL tfcdtl,TL tfcdfa,FAFA TFDL, tfmkcw,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A
ICEE LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TFCDSL TFCDTL TFCDTL TFCDFA TFDL TFDL TFMKCW TFMKCL	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit U/C Traffic Light Conduit U/G Fire Alarm Conduit Detector Loop Cross Walk Center Line Pavement MarkingLinetype	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A N/A
ICCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL TFCDFA TFDL TFMKCW TFMKCL TFMKCM	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/G Street Light Conduit U/C Traffic Light Conduit U/G Fire Alarm Conduit U/G Fire Alarm Conduit Cross Walk Center Line Pavement MarkingLinetype Channel Marking	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA $& \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\$	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
ICCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL TFCDFA TFDL TFMKCW TFMKCL TFMKCM TFMKSB	Tree Row Hedge Tree Area Scrub Area Shrub Tree U/G Street Light Conduit U/C Traffic Light Conduit U/C Traffic Light Conduit U/G Fire Alarm Conduit U/G Fire Alarm Conduit Cross Walk Center Line Pavement MarkingLinetype Channel Marking	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
ICCTR LCHG LCTA LCSA LCSA LCSA LCSA LCS* TFCDSL TFCDTL TFCDFA TFDL TFMKCW TFMKCL TFMKCM TFMKSB TFMKMM	Tree RowHedgeTree AreaScrub AreaShrubTreeU/G Street Light ConduitU/C Traffic Light ConduitU/G Fire Alarm ConduitU/G Fire Alarm ConduitCross WalkCenter Line Pavement MarkingLinetypeChannel MarkingStop Bar Parking Meter Lines	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA \bigcirc LCSA \bigcirc LCSA \bigcirc LCSA \bigcirc LCTS TFCDSL,SL SL tfcdtl,TL tfcdfa,FAFA tfmkcw, tfmkcw, tfmkcm, tfmksb, tfmkmm,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
IKEE LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCTS* TRAFFIC TFCDSL TFCDTL TFCDFA TFDL TFMKCW TFMKCL TFMKCM TFMKSB TFMKMM TFMK 1.5x1.5	Tree RowHedgeTree AreaScrub AreaShrubTreeU/G Street Light ConduitU/G Street Light ConduitU/G Fire Alarm ConduitU/G Fire Alarm ConduitCross WalkCenter Line Pavement MarkingLinetypeChannel MarkingStop BarParking Meter Lines1.5 x 1.5 Skip Line	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA $& \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\$	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
ICEE ICTR ICHG ICTA ICSA	Tree RowHedgeTree AreaScrub AreaShrubTreeU/G Street Light ConduitU/C Traffic Light ConduitU/G Fire Alarm ConduitU/G Fire Alarm ConduitDetector LoopCross WalkCenter Line Pavement MarkingLinetypeChannel MarkingStop BarParking Meter Lines1.5 x 1.5 Skip Line3.0 x 3.0 Skip Line	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, lchg, H H LCTA, LCSA, LCSA \bigcirc LCSA \bigcirc LCSA \bigcirc LCTS TFCDSL,SL SL tfcdtl,FA tfcdfa,FA tfcdfa,FA tfmkcw, tfmkcw, tfmkch, tfmkch, tfmksb, tfmkmm, TFMK 1.5x1.5, TFMK 3x3,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
ICCTR LCHG LCTA LCSA LCSA LCSA LCSA LCS* TFCDSL TFCDTL TFCDFA TFDL TFMKCW TFMKCL TFMKCM TFMKSB TFMKMM TFMK 1.5x1.5 TFMK 3x3 TFMK 3x6	Tree RowHedgeTree AreaScrub AreaShrubTreeU/G Street Light ConduitU/G Street Light ConduitU/G Fire Alarm ConduitU/G Fire Alarm ConduitDetector LoopCross WalkCenter Line Pavement MarkingLinetypeChannel MarkingStop BarParking Meter Lines1.5 x 1.5 Skip Line3.0 x 3.0 Skip Line3.0 x 6.0 Skip Line	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
INCLE LCTR LCHG LCTA LCSA LCSA LCSA LCSA LCS* TFCDSL TFCDSL TFCDTL TFCDFA TFDL TFDL TFMKCW TFMKCL TFMKCM TFMKSB TFMKMM TFMK 1.5x1.5 TFMK 3x3 TFMK 3x6 TFMKSY	Tree RowHedgeTree AreaScrub AreaShrubTreeU/G Street Light ConduitU/C Traffic Light ConduitU/G Fire Alarm ConduitU/G Fire Alarm ConduitDetector LoopCross WalkCenter Line Pavement MarkingLinetypeChannel MarkingStop BarParking Meter Lines1.5 x 1.5 Skip Line3.0 x 3.0 Skip Line3.0 x 6.0 Skip LineSingle Yellow Line	Linetype / Linear Linetype / Linear Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype Linetype	LCTR, Ichg, H H LCTA, LCSA, LCSA \bigcirc LCSA \bigcirc LCTS TFCDSL,SL SL tfcdtl, FA tfcdta, FA tfcdfa, FA tfmkcw, tfmkcw, TFDL, tfmkcw, tfmkcm, tfmksb, tfmksb, tfmkmm, TFMK 1.5x1.5, TFMK 3x6,	HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-TREE LINE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC HE-TRAFFIC	Tree Line from HRM GIS Tree Line from HRM GIS Tree Line from HRM GIS N/A Tree from HRM GIS N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

TFJB	Traffic Loop Junction Box	Point / Block Reference	tfjb ⊠jb	HE-SYMBOLS-ALL	N/A
TFPM	Parking Meter	Point / Block Reference	M TFPM	HE-SYMBOLS-ALL	TFPM
TFCB	Traffic Cabinet or Controller Box	Point / Block Reference	ТЕСВ	HE-SYMBOLS-ALL	N/A
TFSL	Street Light Standard	Point / Block Reference	TFSL	HE-SYMBOLS-ALL	N/A
TFSLOR	Ornamental Street Light Standard	Point / Block Reference		HE-SYMBOLS-ALL	N/A
TFSP	Sign Post	Point / Block Reference	TFSP	HE-SYMBOLS-ALL	TFSP
TFMKAR3T	Pavement Marking - 3 turn arrow	Point / Block Reference	ТЕМКАВЗТ	HE-SYMBOLS-ALL	N/A
TFMKARRLT	Pavement Marking - right/left arrow	Point / Block Reference	TFMKARRLT	HE-SYMBOLS-ALL	N/A
TFMKARLT	Pavement Marking - left turn only	Point / Block Reference	TFMKARLT	HE-SYMBOLS-ALL	N/A
TFMKARRT	Pavement Marking - right turn only	Point / Block Reference	TFMKARRT	HE-SYMBOLS-ALL	N/A
TFMKARST	Pavement Marking - straight only	Point / Block Reference	TFMKARST	HE-SYMBOLS-ALL	N/A
TFMKARTR	Pavement Marking - straight/right turn	Point / Block Reference	TFMKARTR	HE-SYMBOLS-ALL	N/A
TFTL	Traffic Light Standard	Point / Block Reference	• TFTL	HE-SYMBOLS-ALL	N/A
	Guy Wire	Linetype / Linear			NI/A
UTGW	Guy Wire Anchor	Point / Block Reference		HE-SYMBOLS-ALL	N/A
UTCDTL	U/G Telephone Conduit	Linetype / Linear	UTCDTL,TD TD	HE-UTILITY	N/A
UTCDPW	U/G Electrical Conduit	Linetype / Linear	UTCDPW,ET ET	HE-UTILITY	N/A
UTTK	Tank (oil, propane, etc.)	Linetype / Linear	UTTK,	HE-UTILITY	UTTK
UTTR	Transmission Line	Linetype / Linear	UTTR,	HE-UTILITY	UTTR
UTTB	Telephone Booth	Linetype / Linear	UTTB,	HE-UTILITY	UTTB
UTJB	Junction Box	Linetype / Linear	UTJB,	HE-UTILITY	
UTMHPW	NS Power Manhole or Junction Box	Point / Block Reference		HE-SYMBOLS-ALL	Utility Point from HRM GIS
UTPO	Power Pole	Point / Block Reference	UTPO	HE-SYMBOLS-ALL	Utility Point from HRM GIS
UTFO	Fibre Optic Line	Linetype / Linear	UTFO,	HE-OTHER	UTFO
UTMHTL	Aliant Manhole	Point / Block Reference	UTMHTL	HE-SYMBOLS-ALL	N/A
GSPI	Gas Pipe	Linetype / Linear	GSPI. — G — G —	HE-GAS	GSPI
GSLA	Gas Lateral	Linetype / Linear	GSLA,	HE-GAS	GSLA
GSTL	Gas Transmission Line	Linetype / Linear	GSTL, -GT -GT -	HE-GAS	GSTL

GSMH	Gas Manhole	Point / Block Reference	G	GSMH	HE-SYMBOLS-ALL	N/A
GSVL	Gas Valve	Point / Block Reference	GS GS	VL	HE-SYMBOLS-ALL	Natural Gas Valves from HRM GIS
LFTS	Top of Slope	Linetype / Linear	LFTS,		HE-SLOPES	N/A
LFBS	Bottom of Slope	Linetype / Linear	LFBS,		HE-SLOPES	N/A
BUILDING BLDG	Building	Linetype / Linear	bldg,		HE-BUILDING	Building Polygon from HRM GIS
RECREATION DAPG	Playground	Linetype / Linear	DAPG,		HE-OTHER	Recreation Area from HRM GIS
DASF	Sports Field	Linetype / Linear	DASF,		HE-OTHER	Recreation Area from HRM GIS
	Tennis Court	Linetype / Linear	DATC,		HE-OTHER	Recreation Area from HRM GIS
WADI	Ditch	Linetype / Linear	WADI,		HE-HYDRO	Ditch from HRM GIS
WAOH	Ordinary High Watermark	Linetype / Linear	WAOH,		HE-HYDRO	N/A
WASL	Shore Line	Linetype / Linear	WASL,		HE-HYDRO	N/A
WAWM	Watermark	Linetype / Linear	WAWM,		HE-HYDRO	N/A
IRANSII						
TRBSSH	Bus Shelter	Linetype / Linear	trbssh,		HE-STRUCTURE	N/A
TRBSSH TRBB	Bus Shelter Bus Bench	Linetype / Linear	trbssh, trbb,		HE-STRUCTURE	N/A N/A
TRBSSH TRBB TRBS	Bus Shelter Bus Bench Bus Stop	Linetype / Linear Linetype / Linear Point / Block Reference	trbssh, trbb,	TRBS	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS
TRBSSH TRBB TRBS SURVEY	Bus Shelter Bus Bench Bus Stop	Linetype / Linear Linetype / Linear Point / Block Reference	trbssh,	TRBS	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS
TRBSSH TRBB TRBS SURVEY MNNSCM	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference	trbssh, trbb, trbb,	TRBS	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS
TRBSSH TRBB TRBS SURVEY MNNSCM	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Point / Block Reference	trbssh, trbb, trbb, trbb, trbb, trbb, trbb, trbb, trbb, trbb, trbb,	TRBS MNNSCM SVDH	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A
TRBSSH TRBB TRBS SURVEY MNNSCM SVDH SVIB	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole Iron Bar	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference	trbssh, trbb, trbb, trbb, trbb, D.H.	TRBS MNNSCM SVDH SVIB	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A N/A
TRBSSH TRBS SURVEY MNNSCM SVDH SVIB SVIP	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole Iron Bar Iron Pipe	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference	trbssh, trbb, trbb, trbb, D.H. D.H. O IB O IP	TRBS MNNSCM SVDH SVIB SVIP	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A N/A N/A
TRBSSH TRBB TRBS SURVEY MNNSCM SVDH SVIB SVIB SVIP SVNL	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole Iron Bar Iron Pipe Nail	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference	trbssh, trbb, trbb, D.H. D.H. D.H. D.H. D.H.	TRBS MNNSCM SVDH SVIB SVIP SVNL	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A N/A N/A N/A
TRBSSH TRBB TRBS SURVEY MNNSCM SVDH SVIB SVIB SVIP SVNL SVRP	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole Iron Bar Iron Pipe Nail Rock Post	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference Point / Block Reference	trbssh, trbb,	TRBS TRBS MNNSCM SVDH SVIB SVIP SVNL SVRP	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A N/A N/A N/A N/A
TRBSSH TRBB TRBS SURVEY MNNSCM SVDH SVIB SVIB SVIP SVNL SVRP SVRS	Bus Shelter Bus Bench Bus Stop NS Coordinate Monument Drill Hole Iron Bar Iron Pipe Nail Rock Post Railway Spike	Linetype / Linear Linetype / Linear Point / Block Reference Point / Block Reference	trbssh, trbb, Image: Constraint of the second seco	TRBS MNNSCM SVDH SVIP SVIP SVNL SVRP SVRS	HE-STRUCTURE HE-STRUCTURE HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL HE-SYMBOLS-ALL	N/A N/A Bus Stop from HRM GIS Survey Monument from HRM GIS N/A N/A N/A N/A N/A N/A

WATER WATER	Water Main	Linetype / Linear	WATER,	_··	HE-WATER	HRWC Pipe from HRM GIS
WCHY	HRWC Fire Hydrant	Point / Block Reference	- \ -	WCHY	HE-SYMBOLS-ALL	HRWC Hydrant from HRM GIS
WCVL	HRWC Water Valve	Point / Block Reference	\otimes	WCVL	HE-SYMBOLS-ALL	HRWC Valve from HRM GIS
CNLM	Limits of Construction	Point / Block Reference	• •	CNLM	HE-SYMBOLS-ALL	N/A
* FCODE for T FCODE.	ree was changed from LCTL to LCT	S. Pre-2009 dated DW	/G files may conta	ain LCTL		

ENGINEERING DRAWING STANDARDS

- DRAWING SIZES -----

STANDARD DRAWING SIZES BASIS FOR SIZES

METRIC DRAWING SIZES ARE BASED ON THE A-O SIZE, HAVING AN AREA OF ONE SQUARE METER, AND A LENGTH-TO-WIDTH RATIO OF ONE TO ROOT TWO. EACH SMALLER SIZE HAS AN AREA OF ONE HALF OF THE PRECEDING SIZE, AND THE LENGTH-TO-WIDTH RATIO REMAINS CONSTANT.

INSIDE BORDER: THE INSIDE BORDER ENCLOSES THE WORKING AREA, INCLUDING THE TITLE BLOCK AND OTHER TABLES.

TRIMMED SIZE: TRIMMED SIZE IS THE NOMINAL SIZE OF THE DRAWING WHICH INCLUDES A MARGIN OUTSIDE THE BORDER, AND IS THE SIZE TO WHICH THE FINISHED PRINTS ARE TRIMMED.

			MILLIN	IETERS	
LAYOUT	DRAWING	TRIMME) SIZE	INSIDE	BORDER
NAME	SIZE	Y	v	x	W
	A-3* A-2* A-0*	297 420 841	420 594 1189	277 400 821	400 574 1169
A1 A1+	A-1 A1+	594 594	841 1189	574 574	821 1169
* 	FOR LEGAL IOTE: WHEN A-0 / DRAWI WIDTH LENGT	PLANS DRAWINGS ARE REQUII NGS SHALL (Y) OF 8 'H IN INCR	LARGER RED, THE HAVE A 41 mm / EMENTS (THAN AND A OF 210 1	mm

ALL ENGINEERING DESIGN DRAWINGS ARE TO BE CREATED USING A-1 SIZE SHEET. STANDARD DRAWING SIZES ARE INCLUDED IN HRMTEMPLATE.dwt.



DATE: 2013 REFERENCE SCALE: NTS APPROVED FIG. NO. DS 01



























	COORDIN	SURVEY CON ATE VALUES (197	TROL 79 ADJUSTMENT)	
PT. NO.	NORTHING	EASTING	DESCRIPTION	ELEVATION
1	4 948 004.836	5 574 982.453	NSCM 5466	38.655
2	4 947 992.347	5 575 059.175	NSCM 5573	39.922
3	4 947 975.979	5 575 125.348	NAIL	42.044
4	4 947 992.200	5 575 189.496	NAIL	45.389
5	4 947 959.869	5 575 250.130	NAIL	48.145
6	4 947 938.784	5 575 306.529	NAIL	50.411

		CENTER	RLINE ALIGN	NMENT	
ID #	STATION	RADIUS	NORTHING	EASTING	DEF ANGLE
L1	0+000.00 0+054.14		4949657.905 4949692.696	5573611.410 5573652.896	
C1	BC 0+054.14 EC 0+131.83	90.000	4949692.696 4949704.541	5573652.896 5573664.619	10° 37' 28"
L2	0+131.83 0+201.99		4949704.541 4949829.086	5573664.619 5573766.890	
C2	BC 0+201.99 EC 0+250.87	12.000	4949829.086 4949830.726	5573766.890 5573783.803	90' 08' 41"
L3	0+250.87 0+300.00		4949830.726 4949728.530	5573783.803 5573907.616	



	PAVEMENT M	ARKINGS		
IDENTIFICATION	TYPE	WIDTH	COLOUR	QUANTITY
1	STOP BAR	450 mm	WHITE	N/A
2	CROSSWALK LINE	200 mm x 2	WHITE	N/A
3	SINGLE CENTRELINE	100 mm NOT TO BE PAINTED THROUGH INTERSECTIONS	YELLOW	N/A
4	DOUBLE CENTRELINE	100 mm x 2 NOT TO BE PAINTED THROUGH INTERSECTIONS	YELLOW	N/A
5	SOLID & WITH BROKEN 3x6 LINE	100 mm	YELLOW	N/A
6	LANE & BIKE LINES	100 mm	WHITE	N/A
\bigcirc	BROKEN LINE 3x3	100 mm	WHITE	N/A
8	BROKEN LINE 3x6	100 mm	WHITE	N/A
9	BIKE LANE DASHED LINE 1.5x1.5	100 mm	WHITE	N/A
0	HATCH	100 mm LANE LINES WITH 600 mm HATCH LINES, 6.0 m SPACING	YELLOW	N/A
0	HATCH	100 mm LANE LINES WITH 600 mm HATCH LINES, 6.0 m SPACING	WHITE	N/A
12	ARROW	3/4 TAC SIZE	WHITE	N/A
(3	RESERVED LANE SYMBOL	3/4 TAC SIZE	WHITE	N/A
14	BIKE SYMBOL		WHITE	N/A
15	SHARED USE LANE SYMBOL		WHITE	N/A

REGIO	ALIFA	
DRAW	/ING STAND	ARDS
PAVE	MENT MAF TABLE	RKING
DATE: 2013	REFERENCE	APPROVED
SCALE: NTS		fig. no. DS 13











LINETYPES FOR LEGAL DRAWING

LABEL

LINETYPE NAME

Т	IE LINE			TIELINE	COLOR 9	
R	ADIAL LINE			RADLINE	COLOR 9	
C	O TERMINAL					
B		. <u></u>		PROPLIN	IE COLOR 7	
Å	PPROVED			CDPL	COLOR 9	
R	RIGHT OF WAY			ROW	COLOR 9	
Ε	ASEMENT			— — — CDES	COLOR 9	
P	PARCEL BOUNDARY		-	CDPL	COLOR 4	
0	отсн			DADI	COLOR 9	
۷	WATERCOURSE			WATER	COLOR 9	
S	SEWER			LINE SH	IOULD BE	
-		LABEL		CONSIS	TENT WITH ENG. DWGS.	COLOR 2
Ē	DGE OF D/W, ETC.			CONTINU	JOUS COLOR 2	
F	ENCE	XX	LINK FENCE X	STFE	COLOR 2	
۲	IEDGE	———— H ————	H	LCHG	COLOR 2	
v	VALL	W	W	STWL	COLOR 2	
F	RETAINING WALL	RW	RW			
	ANY LINETYPES THAT ETC.) SHOULD BE CO	ARE DRAWN ON A LEGAL I INSISTENT WITH ENGINEERIN	DRAWING, (EXAMPLE: SEV IG DRAWINGS. THAT ALSO	WER, GUYWIRE, FENCE, D APPLYS TO SYMBOLS	RETAINING WALL	
		Ν	SCM 10158			
		N	N 4 944 124.492		TEXT HEIGHT 1.75	
		E	E 5 565 675.836			
LAYER L	70 7		·			
		S 47 18' 40" F	106 103		TEXT HEIGHT 2.0	
			100.105	* 1	LAYER L80	
				τ L	ANDS DEALT WITH BT ST	JKVET
		C 47 48' 40"	F 100 107		TEXT HEIGHT 1.5	
	<u></u>	5 47 10 40	E 106.103	*	ADIOINING PROPERTIES	
FOR	ALL BEARINGS USE	TEXT STYLE "ROMAN	IH" THIS TEXT STY	LE PLOTS A LAR	GER DEGREE SYMB	IOL.
				GLO	BAL LTSCAL	E
	- ⁵			LINETYPI	E SCALE 16 @ 1:	1000
				LINETYPI	E SCALE 8 @ 1:	500
				LINETYPI	E SCALE 4 @ 1:	250
				LINETYP	E SCALE 3 @ 1:	200
	Ζ.					
	CIV	/IC 15				
					AT IFA	\mathbf{V}
		////&//				$\mathbf{\Lambda}$
				REGIO	NAL MUNICIPA	LITY
				DRAV	VING STANDA	RDS
	HAICH SURVEYEL) BUILDINGS USI	NG :			
	OLOR - 2					
H	ATCH ANGLE 45° T	o the building line	Ξ	FOR	LEGAL DRAW	INGS
				DATE: 2013	REFERENCE	PPROVED
				SCALE:	7	IG. NO.
				NIS		DS 19

<u>LEGEND</u>

	SURVEYED BOUNDARY		
\odot	SURVEY MARKER		
∆ N.S.C.M.	NOVA SCOTIA COORDINATE MONUMENT		
Fd	FOUND		
⊖ IB	IRON BAR		
	IRON PIPE		
• N	NAIL		
● RP	ROCK POST		
\otimes CC	CUT CROSS		
\bigcirc DH	DRILL HOLE		
PID	PARCEL IDENTIFICATION NUMBER		
PC	POINT OF CURVATURE		x
PCC	POINT OF COMPOUND CURVATURE		
PRC	POINT OF REVERSE CURVATURE		
Α	ARC		
R	RADIUS		
m²	SQUARE METRES	NI	NO IDENTIFICATION
Sq.Ft.	SQUARE FEET	OHWM	ORDINARY HIGH WATER MARK
D	DEED	Bk., Pg.	BOOK, PAGE
Р	PLAN	MT&T	MARITIME TEL & TEL
М	MEASURED	x	FENCE
PR	PLAN REFERENCE	•	UTILITY POLE
R-O-W	RIGHT OF WAY	U	GUY WIRE ANCHOR
WIT	WITNESS	¢	TREE
С	CALCULATED		
HRM	HALIFAX REGIONAL MUNICIPALITY		
NSPI	NOVA SCOTIA POWER INCORPORATED		
ROD	REGISTRY OF DEEDS	f	· · · · · · · · · · · · · · · · · · ·
LRO	LAND REGISTRATION OFFICE		
[]	LAND SURVEYOR IDENTIFICATION		- ALIFAX
		R	EGIONAL MUNICIPALITY
IF YOU AR	E PUTTING A SURVEY SYMBOL WITH	D	RAWING STANDARDS
TEXT HEIG	HT 1.75, LAYER L70. EX: IP, M, AC.		LEGEND
ANY SYMB EX: MANH	OLS INSERTED ON A SURVEY DRAWING OLE, TREE, UTILITY POLE, SHOULD BE	FC	OR LEGAL DRAWINGS
CONSISTAN	II WITH ENGINEERING DRAWINGS.	DATE: 2013	REFERENCE APPROVED
		SCALE: NTS	FIG. NO. DS 20

EXAMPLES

SUBJECT LANDS

P.I.D. NO.'S LOT OR PARCEL IDENTIFIER TEXT HEIGHT 5.0 (TEXT HEIGHT MAY VARY ACCORDING TO DRAWING SIZE BUT SHOULD MATCH THE TITLE BLOCK)

> AREA 000 m² PLAN REFERENCE

OWNER(S) NAME(S) BOOK & PAGE REFERENCE

TEXT HEIGHT 2.0

TEXT HEIGHT 2.0 TEXT HEIGHT 2.0

TEXT HEIGHT 3.5 TEXT HEIGHT 2.0

GHOSTED TEXT

PLAN REFERENCE (USUALLY A SUBJECT LOT THAT IS BEING SUBDIVIDED)

ADJOINERS LAND

P.I.D. NO.'S LOT OR PARCEL IDENTIFIER LOT OR PARCEL INDENTIFIER PLAN REFERENCE

> OWNER(S) NAME(S) BOOK & PAGE REFERENCE

TEXT HEIGHT 5.0 TEXT HEIGHT 1.75

TEXT HEIGHT 1.75 TEXT HEIGHT 3.0 - SIZE MAY VARY ACCORDING TO SPACE TEXT HEIGHT 3.5 -TEXT HEIGHT 1.75

TEXT HEIGHT 3.0 TEXT HEIGHT 1.75



– PLAN LEGEND – PROPOSED EXISTING A PT NO SURVEY CONTROL POINT ⊗ WATERVALVE \otimes ф FIRE HYDRANT UTILITY POLE AND GUY WIRE $\bullet \rightarrow$ SIGN POST/BASE - x -FENCE RW ----RETAINING WALL RW CONCRETE CURB PROPERTY LINE BASELINE SEWER MANHOLES $\Box \cap \Box$ **1** CATCHBASIN GAS MAIN G G CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE ____ WATERMAIN €Э TREE STANDARD STREET LIGHT **—** PEDESTRIAN RAMP R BUS STOP AND/OR SHELTER HEDGE - H -·н

H	ALIFA	
DRAW	/ING STAND	ARDS
L TYPICAL	EGEND FOI PLAN & I	R PROFILE
DATE: 2013	REFERENCE	APPROVED
SCALE: NTS		fig. no. DS 22

PT NO SURVEY CONTROL POINT WATERVALVE FIRE HYDRANT UTILITY POLE AND GUY WIRE SIGN POST/BASE SIGN POST/BASE X RETAINING WALL RW CONCRETE CURB
PT NO SURVEY CONTROL POINT WATERVALVE S FIRE HYDRANT UTILITY POLE AND GUY WIRE SIGN POST/BASE
FIRE HYDRANT UTILITY POLE AND GUY WIRE SIGN POST/BASE FENCE RETAINING WALL CONCRETE CURB PROPERTY LINE BASELINE SEWER MANHOLES CATCHBASIN GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER HEDGE
UTILITY POLE AND GUY WIRE SIGN POST/BASE SIGN POST/BASE RETAINING WALL CONCRETE CURB PROPERTY LINE BASELINE CATCHBASIN G GAS MAIN CONCRETE SURFACE ASPHALT SURFACE ASPHALT SURFACE WATERMAIN TREE TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H — HEDGE
 SIGN POST/BASE FENCE RETAINING WALL CONCRETE CURB PROPERTY LINE BASELINE SEWER MANHOLES CATCHBASIN G GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H — HEDGE
 RETAINING WALL CONCRETE CURB PROPERTY LINE BASELINE SEWER MANHOLES CATCHBASIN G GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H — HEDGE
 CUNCRETE CURB PROPERTY LINE BASELINE SEWER MANHOLES CATCHBASIN G GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H — HEDGE
BASELINE SEWER MANHOLES CATCHBASIN GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER HEDGE
CATCHBASIN - G GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H HEDGE
 G — GAS MAIN CONCRETE SURFACE ASPHALT SURFACE EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H — HEDGE
ASPHALT SURFACE
EDGE OF GRAVEL SURFACE WATERMAIN TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER H HEDGE
TREE STANDARD STREET LIGHT PEDESTRIAN RAMP BUS STOP AND/OR SHELTER — H — HEDGE
STANDARD STREET LIGHT PEDESTRIAN RAMP ■ BUS STOP AND/OR SHELTER — H — HEDGE
BUS STOP AND/OR SHELTER H HEDGE
— н — HEDGE

REGIONAL MUNICIPALITY

DRAWING STANDARDS

LEGEND FOR TYPICAL RECORD DRAWING DATE: 2013 APPROVED REFERENCE FIG. NO. DS 23

SCALE: NTS

NOTES

- 1. ALL WORK IS TO BE DONE IN ACCORDANCE WITH HRM CONTRACT DOCUMENTS.
- GRADES SHOWN ARE APPROXIMATE. FINISHED GRADE IS TO BE APPROVED IN 2. THE FIELD BY THE ENGINEER.
- 3. UTILITY INFORMATION IS APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE TO ARRANGE FOR ON SITE LOCATES WITH ALL UTILITIES PRIOR TO START OF WORK.
- CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM 4. WORK AND TO COMPLY WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS. 5. WHERE EXISTING CONDITIONS ARE SHOWN THEY ARE NOT NECESSARILY
- ACCURATE OR COMPLETE. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DIMENSIONS AND LOCATIONS AND REPORT ANY DISCREPANCIES TO THE FNGINFFR
- 6. THE CONTRACTOR SHALL CHECK AND VERIFY ALL PROPOSED DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. ANY ADJUSTMENTS WILL BE MADE BY THE ENGINEER AS NECESSARY.
- CONTRACTOR IS RESPONSIBLE FOR SETTING GRADES AND LAYOUT CONTROL.
- 8. TRAFFIC SIGNS ARE NOT TO BE REMOVED OR REPLACED WITHOUT
- AUTHORIZATION FROM THE TRAFFIC AUTHORITY AND THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF TREES. NOT TO BE REMOVED WITHOUT PERMISSION FROM THE ENGINEER. TREES ARE 9.
- 10. WORK IN THE IMMEDIATE AREA OF A NOVA SCOTIA COORDINATE MONUMENT MUST BE CARRIED OUT BY HAND. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS IF MONUMENTS ARE DISTURBED.
- 11. AT COMPLETION OF WORK REINSTATE ALL DISTURBED SURFACES TO THE SATISFACTION OF THE ENGINEER.
- 12. WATER VALVE BOX EXTENSIONS THE MINIMUM INSIDE DIAMETER OF A VALVE BOX EXTENSION SHALL BE 125 mm AND THE MINIMUM LENGTH OF A VALVE BOX EXTENSION SHALL BE 300 mm. CONTRACTOR TO CONFIRM APPROPRIATE PRODUCT TO BE USED WITH HALIFAX WATER OPERATIONS DEPARTMENT STAFF.

HALIFAX REGIONAL MUNICIPALITY				
DRAWING STANDARDS				
NOTES FOR				
TYPICAL	PLAN	& PROFILE		
DATE: 2013	REFERENCE	APPROVED		
SCALE: NTS		FIG. NO. DS 24		

LINETYPES FOUND IN THE PROTOTYPE DRAWING

LAYER	LINETYPE NAM	-	DESCRIPTION		
HE-ROAD	RRRD RRCB				
HESIDEWALK	RRSW		SIDEWALK		
HEDRIVEWAY	RRDR RRPA RRWK		DRIVEWAY PARKING AREA (ASPHALT) HARD SURFACED WALKWAY		
HE-FENCE	STFE STGR STRW STWL	X X X X GR GR GR GR RW RW RW RW W W RW RW	FENCE GUIDE RAIL RETAINING WALL WALL		
HE-HYDRO	WADI WALA		DITCH LAKE AREA		
HE-STRUCTURE	STST STDK		STEPS DECK		
HE-WATER	WATER	· · · · · · · · ·	WATER MAIN		
HE-COMBINED	SWFMCO SWPICO	FM_COFM_CO C	SEWER FORCE MAIN COMBINED SEWER PIPE COMBINED		
HE-SANITARY	SWPISA SWFMSA	FM_SAFM_SA			
HE-STORM	SWPICL SWCU SWFMST SWPIST	FM_STFM_ST	CATCHBASIN LEAD CULVERT SEWER FORCE MAIN STORM SEWER PIPE STORM		
HEBUILDING	BLDG		BUILDING OUTLINE		
HE-TREE LINE	LCHG	——— н ——— н ——— н —	HEDGE		
HE-TRAFFIC	TFCDSL TFCD TFDL	SL SL SL SL SL			
HE-UTILITY	UTGW UTCDTL UTCDPW	TD TD TD TD TD TD TD TD	GUY WIRE TELECOMMUNICATIONS CONDUIT ELECTRICAL CONDUIT		
HE-GAS	GSPI GSLA	G G G G	GAS MAIN GAS LATERAL		
			HALIFAX REGIONAL MUNICIPALITY		
			DRAWING STANDARDS		
NOTE:			LINETYPES FOR TYPICAL PLAN & PROFILE		
HRMLINES.LIN DATE: 2013 REFERENCE APPROVED					
scale: Fig. no. nts DS 25					