

## **APPENDIX B – AS-BUILT DRAWING REQUIREMENTS FOR PUBLIC WORKS PROJECTS (PART F1)**

## PART F - SPECIFICATIONS

### F1. AS-BUILT DRAWING REQUIREMENTS FOR PUBLIC WORKS PROJECTS (2019)

F1.1 AS-BUILT drawings are required for all Public Works construction projects except for Regional Street Mill & Fill projects and TBO projects, unless specifically declined, in writing, by the Project Manager. AS-BUILT drawing submissions are required for ALL Regional Street renewals, Local Street reconstructions, and any addition to infrastructure inventory such as new streets, street widening's and/or realignments as well as new multi-use paths.

F1.1.1 Though drawings may not be required, please note the location of any new or relocated sidewalks, approaches, curb inlets, or bus stops, or any other modifications, on existing streets or intersection improvements in the final project report.

F1.2 Initial submission of AS-BUILT drawings must be received no later than three months after Substantial Performance.

F1.2.1 If Substantial Performance will not be granted prior to year-end, contact Public Works to establish drawing submission requirements (i.e. for snow clearing updates).

F1.3 The drawings are to contain the following information, and be in the format specified below.

F1.4 Drawings are to:

- (a) Be in the AutoCAD format and indicate the version used;
- (b) Be AS-BUILT with dimensions corrected in both TEXT and GRAPHICS;
- (c) Show pavement dimensions to the "back of curb" (edge of pavement);
- (d) Be produced in the NAD 83, UTM, ZONE 14, (Global co-ordinate system) **NOTE: aerial/assessment data is available at <https://data.winnipeg.ca/> ;**
- (e) Indicate whether a scale factor was used, and if used the scale factor will be provided;
- (f) Show all bore holes and their UTM coordinates;
- (g) Include, where applicable:
  - (i) Pavement cross-section(s)
  - (ii) Asphalt Supplier
  - (iii) Concrete Supplier
  - (iv) Geotextile used – type, manufacturer & supplier
  - (v) Sub-drains used – type, manufacturer & supplier
  - (vi) Other materials– type, manufacturer & supplier
  - (vii) Contractor and construction date.

F1.5 The files are to be separate drawing in AutoCAD format with the following (8) basic layers (none of which are to include text) and a list describing additional layers used:

Layer Names:

- |                   |  |
|-------------------|--|
| 1) Street Surface | 5) Ramp Curb   |
| 2) Walk           | 6) Dimensions (to include all dimensions in the drawing) |
| 3) Alley          | 7) Drainage Inlets                                       |
| 4) Approach       | 8) Elevations (min. all hi & low points)                 |

F1.6 Consultant to provide and submit separately a borehole .SHP File showing an updated Pavement Core/Test Hole Location Plan and for each location update the soil log to show the actual pavement structure constructed next to the existing.

- (a) The provided .SHP file will:
  - (i) Show all bore holes and their UTM coordinates.
  - (ii) Include as attributes for each bore hole location:

◆ NORTHING

- ◆ EASTING
- ◆ PDF\_FILE\_NAME
- ◆ BH\_ID
- ◆ BID\_OPP
- ◆ CITY\_FILE\_KEY

- F1.7 The PDF provided will be a marked-up version of the original soil log provided in the geotechnical report. The mark-up will:
- (a) Be created for each borehole location
  - (b) Show the original soil log unobstructed
  - (c) Show the new pavement structure accurately located vertically next to the existing soil log
  - (d) Show UTM coordinates of the soil log location
  - (e) Be labeled with a unique bore hole identification number
  - (f) Have a unique file name
- F1.8 Include a PDF copy of all as-built drawings
- F1.9 Two (2) copies of the AutoCAD Digital Drawings, borehole logs and PDF copies shall be submitted by either of the following ways;
- (a) USB flash drive. Both copies shall be clearly labelled identifying the Project number.
  - (b) Consultant FTP site.
- F1.10 As-built hard copy on Mylar or paper not required.
- F1.11 Draft as-builts to be sent to the appropriate Project Manager for review and approval. Final copies to be sent to;

Permits & Plan Approval – GIS Support Services  
City of Winnipeg  
Public Works Department  
106-1155 Pacific Avenue  
Winnipeg, MB R3E #P1