



CONTROL MONUMENT REPORT



This document was prepared by Altus Geomatics for use by City of Yorkton staff and contractors working in and for the City of Yorkton. This document is meant to inform readers about the City of Yorkton Transverse Mercator coordinate system, the monument locations, and coordinate establishment. This document does not discuss surveying procedures and best practices, those items are the responsibility of the contractor(s). Altus Geomatics takes no responsibility for the misuse of the information contained within this report.



CITY OF YORKTON TRANSVERSE MERCATOR COORDINATE SYSTEM (YORKTON2)

The City of Yorkton has established a survey coordinate system to cover the City of Yorkton and surrounding area. The coordinate system is called Yorkton2. The Yorkton2 parameters are located below in Table 1.

LATITUDE OF ORIGIN	49°00′00.00000″ N		
CENTRAL MERIDIAN	102° 37′ 00.00000″ W		
FALSE NORTHING	0.000 m		
FALSE EASTING	30,000.000 m		
SCALE FACTOR AT ORIGIN	1.00008090199		
ZONE WIDTH	0° 30′ 00″		

Table 1: Yorkton2 Zone Parameters

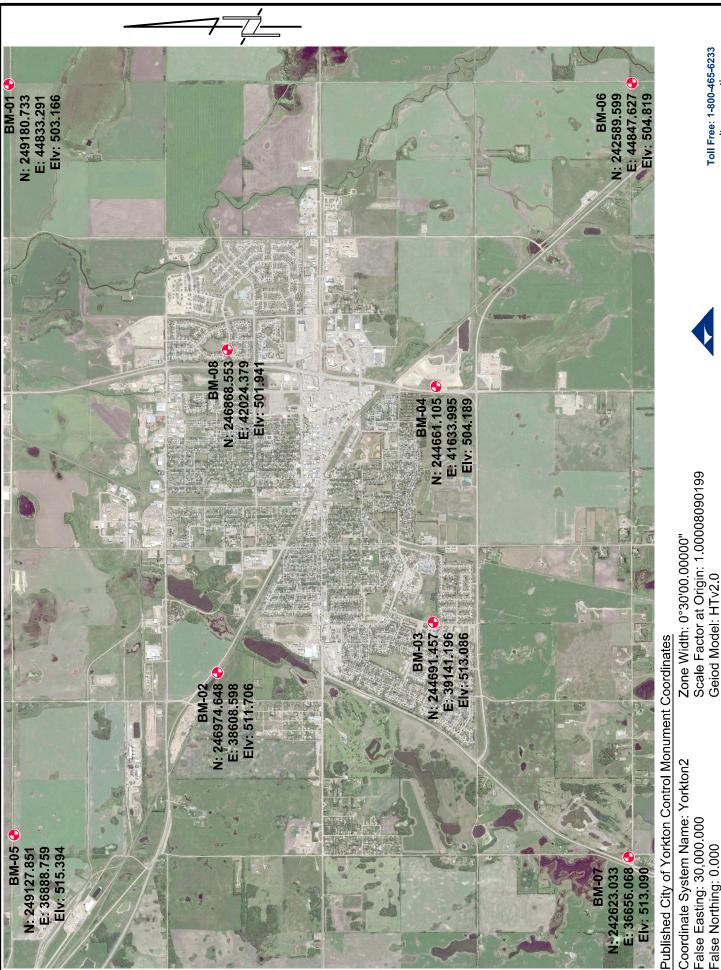
A Transverse Mercator map projection was selected for this project because it allows the local coordinates to be derived at ground level. When using GPS surveying equipment, the information contacted within Table 1 needs to be created in the software to work in local coordinates.

CONTROL MONUMENT COORDINATES

After the control monuments were constructed, Altus Geomatics on November 25, 2016 conducted a static GPS survey at each control monument.

MONUMENT ID	NORTHING (m)	EASTING(m)	ELEVATION (m)	DESCRIPTION
BM-01	249180.733	44833.291	503.166	ALUMINUM CAP
BM-02	246974.648	38608.598	511.706	ALUMINUM CAP
BM-03	244691.457	39141.196	513.086	ALUMINUM CAP
BM-04	244661.105	41633.995	504.189	ALUMINUM CAP
BM-05	249127.851	36888.759	515.394	ALUMINUM CAP
BM-06	242589.599	44847.627	504.819	ALUMINUM CAP
BM-07	242623.033	36656.068	513.090	ALUMINUM CAP
BM-08	246868.553	42024.379	501.941	ALUMINUM CAP

^{*}ELEVATIONS SHOWN ARE REFERENCED TO CGVD28 (HTv2.0 GEOID)



www.altusgeomatics.com Toll Free: 1-800-465-6233

Altus Geomatics

Vertical Datum: CGVD28

Ellipsoid: GRS 1980

Latitude of Origin: 49°00'00.00000" N Central Meridian: 102°37'00,00000" W

Job No.: 185909

Revision 1



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-01 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00' 00.00000" N CENTRAL MERIDIAN: 102° 37' 00.00000" W

ZONE WIDTH: 0° 30' 00.00000"

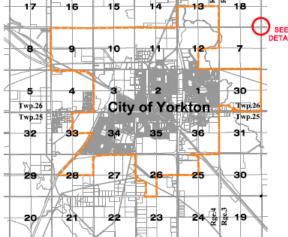
SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0



YORKTON2 COORDINATES:

NORTHING: 249180.733 EASTING: 44833.291 ORTHOMETRIC ELEVATION: 503.166



NAVIGATION COORDINATES:

LATITUDE: 51° 14′ 23" N LONGITUDE: 102° 24' 15" W *FOR NAVIGATIONAL PURPOSES ONLY



Location Description: Adjacent to the S.E. ¼ Sec. 18-26-3 W2M. Located approximately 3m East of the East Boundary S.E. ¼ Sec. 18-26-3 W2M and 25m North of the centerline of the East/West High Grade Gravel Road.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-02 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0

YORKTON2 COORDINATES: NAVIGATI

NORTHING: 246974.648 EASTING: 38608.598

ORTHOMETRIC ELEVATION: 511.706





NAVIGATION COORDINATES:

LATITUDE: 51° 13' 12" N LONGITUDE: 102° 29' 36" W *FOR NAVIGATIONAL PURPOSES ONLY



Location Description: Located within the N.W. ¼ Sec. 3-26-4 W2M. Located approximately 0.5m inside the vehicle turnaround, at the old City of Yorkton Information turnaround on Highway 16A.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-03 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0

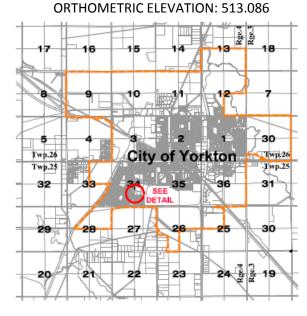


NAVIGATION COORDINATES:

LATITUDE: 51° 11′ 59″ N LONGITUDE: 102° 29′ 09″ W *FOR NAVIGATIONAL PURPOSES ONLY

YORKTON2 COORDINATES:

NORTHING: 244691.457 EASTING: 39141.196





Location Description: Located at the intersection of Allan Bay and Allanbrooke Drive. East of the North edge of Allan Bay and approximately 17m East of the centerline of Allanbrooke Drive.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-04 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0



COORDINATES: NAVIGATION COORDINATES:

LATITUDE: 51° 11′ 57″ N LONGITUDE: 102° 27′ 01″ W *FOR NAVIGATIONAL PURPOSES ONLY

YORKTON2 COORDINATES:

NORTHING: 244661.105 EASTING: 41633.995

ORTHOMETRIC ELEVATION: 504.189





Location Description: Located at the City of Yorkton Tourism Centre adjacent to Highway #9 South. Located approximately 13m south of the centerline of the North entrance, inside the turnaround.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-05 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

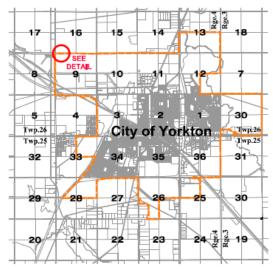
GEOID MODEL: HTv2.0



YORKTON2 COORDINATES:

NORTHING: 249127.851 EASTING: 36888.759

ORTHOMETRIC ELEVATION: 515.394



NAVIGATION COORDINATES:

LATITUDE: 51° 14' 22" N LONGITUDE: 102° 31' 05" W *FOR NAVIGATIONAL PURPOSES ONLY



Location Description: Adjacent to the N.W. ¼ Sec. 9-26-4 W2M. Located approximately 255m East of the centerline of the North/South Medium Grade Gravel Road, and 14m South of the centerline of the East/West High Grade Gravel Road.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-06 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0

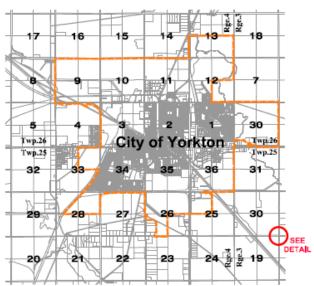


NAVIGATION COORDINATES:

LATITUDE: 51° 10′ 50″ N LONGITUDE: 102° 24′ 16″ W *FOR NAVIGATIONAL PURPOSES ONLY

YORKTON2 COORDINATES:

NORTHING: 242589.599
EASTING: 44847.627
ORTHOMETRIC ELEVATION: 504.819





Location Description: Adjacent to the N.E. ¼ Sec. 19-25-3 W2M. Located approximately 14m West of the centerline of the North/South Medium Grade Gravel Road and 18m South of the centerline of the East/West Low Grade Gravel Road.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-07 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0

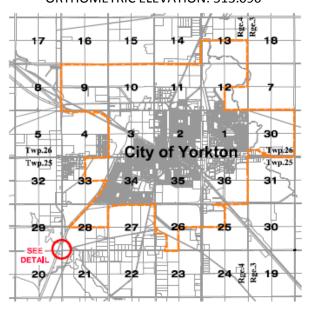


NAVIGATION COORDINATES:

LATITUDE: 51° 10′ 52″ N LONGITUDE: 102° 31′ 17″ W *FOR NAVIGATIONAL PURPOSES ONLY

YORKTON2 COORDINATES:

NORTHING: 242623.033
EASTING: 36656.068
ORTHOMETRIC ELEVATION: 513.090





Location Description: Located within the S.E. ¼ Sec. 29-25-4 W2M. Located approximately 0.5m outside the vehicle turnaround, at the old City of Yorkton Information turnaround on Highway 10, adjacent to Yorkton Lake Golf Club and the Westshore Greens Trailer Court.



ALTUS JOB NUMBER: 185909 CLIENT: CITY OF YORKTON

STATION NUMBER: BM-08 MONUMENT TYPE: ALUMINUM CAP WITH

PROTECTIVE COVER

COORDINATE SYSTEM: YORKTON2

FALSE EASTING: 30,000.000 FALSE NORTHING: 0.000

LATITUDE OF ORIGIN: 49° 00′ 00.00000″ N CENTRAL MERIDIAN: 102° 37′ 00.00000″ W

ZONE WIDTH: 0° 30′ 00.00000″

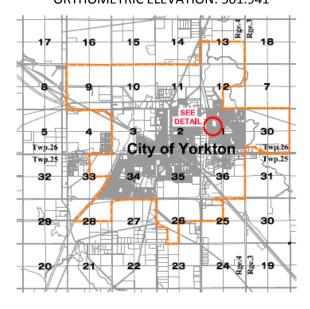
SCALE FACTOR: AT ORIGIN: 1.00008090199

GEOID MODEL: HTv2.0



YORKTON2 COORDINATES:

NORTHING: 246868.553
EASTING: 42024.379
ORTHOMETRIC ELEVATION: 501.941



NAVIGATION COORDINATES:

LATITUDE: 51° 13′ 09″ N LONGITUDE: 102° 26′ 40″ W *FOR NAVIGATIONAL PURPOSES ONLY



Location Description: Located at the intersection of McBurney Drive and McNeil Crescent. Approximately 12m North of the centerline of McBurney Drive.