

# **TOWN OF AJAX GEODETIC** **BENCHMARKS**

**2019 EDITION**

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## NOTES:

1. Series 100 to 400 Benchmarks were established in 1980 by the Firm of Horton, Wallace and Davies Limited from first order benchmarks 67-U-039 and 180-A-2 of the Geodetic Survey of Canada (GSC) and from benchmarks 405-69 and 407-69 of the Ministry of Transportation - Ontario (MTO).
2. Series 500 Benchmarks were established in 1988 by the Firm of Marshall, Macklin, Monaghan. Series 100 to 400 benchmarks were checked at this time as a maintenance procedure and were found to be acceptable, with minor changes to benchmarks 180-A-2, 109, 111, 242 and 334 incorporated at that time. Previously published values would be acceptable for most applications.
3. Series 600-606 Benchmarks were installed by J.D. Barnes Limited in the fall of 1993, and form the latest additions/revisions to this document.
4. Series 610-622 Benchmarks were installed by Ivan B. Wallace (O.L.S) in 2005, and form the latest additions/revisions to this document.
5. Series 700-709 Benchmarks were installed by Donevan Fleischman Petrich Limited in September 2007, and form the latest additions to this document.
6. Benchmark No. 710 was installed by Donevan Fleischman Petrich Limited in 2015, and form the latest additions/revisions to this document.
7. Benchmark No. 710A and 711 were installed by Ivan B. Wallace in 2017, and form the latest additions/revisions to this document.
8. Benchmark No. 712 and 713 were installed by Donevan Fleischman Petrich Limited in 2019, and form the latest additions/revisions to this document.
9. The installation of Benchmark No. 720 was coordinated by R.V. Anderson Associates Limited in 2019, and form the latest additions/revisions to this document.
10. Benchmark No. 721 was installed by J.D. Barnes Ltd. in February 2020, and form the latest additions/revisions to this document.
11. The values used and noted in the benchmark descriptions are from the 1978 adjustment of the Southern Ontario net of the Geodetic Survey of Canada.
12. Town of Ajax Benchmarks were established as second order monuments in accordance with the criteria as established by the Ministry of Energy, Mines and Resources.
13. Benchmarks are all Brass Plaques, tablets or caps with the series number stamped

into them (see Appendix A for Ajax Standard AS-360 Benchmark Tablet and Ministry of Natural Resources detail No. D Monument Cap).

## PRIMARY BENCHMARK SOURCES

### **67-U-039 (GSC 1967)**

**ELEVATION 86.4727**

Deep benchmark in manhole on west side of Church Street S. (former Village of Pickering), 0.3 km south of Highway #2 (Kingston Road W.), 11.6m east of the north-east corner of St. Francis de Sales School, 10.4m west of centreline of road, 3.9m south of wire fence, 5.4m south-west of power pole #53.

### **180-A-2 (GSC 1967)**

**ELEVATION 89.363m**

C.N. Railway Bridge over Duffins Creek, just south of the intersection of Church Street S. and Highway #401, bolt in north face of north stone retaining wall at east end of bridge, 1.2m from east end of wall and in first course below coping.

(Note: original elevation from GSC-1967 was 89.380m).

### **405-69 (MTC 1969)**

**ELEVATION 97.612m**

One storey brick factory (359 Station Street), south side of C.N.R. Tablet set horizontally in west face of concrete loading ramp, being 1.2m south of south west corner of factory and 0.4m below top of ramp.

### **407-69 (MTC 1969)**

**ELEVATION 89.512m**

Large stone and concrete culvert carrying C.N.R. over small creek 1.6km east of Harwood Avenue. Tablet set vertically in top of north concrete wall, being 1.8m east of west end above top of stonework.

# TOWN OF AJAX BENCHMARKS

## **109 ELEVATION 85.935m**

Concrete box culvert over Carruthers Creek under Highway #2 (Kingston Road E.), 0.87km east of Salem Road S. Tablet set horizontally, 0.2m north and 0.2m east from south-west corner of box culvert on the south side of Highway #2.

## **111 ELEVATION 107.568m**

One storey concrete block building (36 Harwood Avenue S.), 46.0m south of centreline of Brock Street. Tablet set vertically in northerly wall 1.8m east of north west corner and 0.33m above asphalt parking lot.

## **217 ELEVATION 96.755m**

Concrete block building (221 Church Street S.) located on the east side of Church Street S., south of Highway #401. Tablet set vertically in west brick wall 1.1m north of south west corner and 0.5m above ground.

## **219 ELEVATION 104.333m**

Brick factory building (274 Mackenzie Avenue) on the north side of Bayly Street W. opposite Finley Avenue. Tablet set vertically in the brick facing on the east wall, 0.15m north of the south-east corner and 0.27m above ground.

## **220 ELEVATION 95.983m**

St. Bernadette's Catholic Church (21 Bayly Street E.) on the south east corner of Harwood Avenue S. and Bayly Street E. Tablet set vertically in north east foundation wall, 5.6m south east of the most northerly corner and 0.1m below first course of brick.

## **240 ELEVATION 89.401m**

One storey concrete block and brick building (214 Bayly Street E.) on the north side of Bayly Street E., 48.0m east of the centreline of Pickering Beach Road (second building easterly, now a convenience store). Tablet set vertically in brick facing on west wall, 0.4m north of south-west corner and 0.2m above asphalt parking lot.

## **324 ELEVATION 76.892m**

Concrete bridge over Carruthers Creek on Shoal Point Road, 96.5m north of the centreline of Range Line Road. Tablet set vertically in east face of bridge, 0.25m north of south east corner and 0.1m below bridge floor.

**327 ELEVATION 84.316m**

Lake Drive Christian Assembly Hall (90 Lake Driveway E.) on the east side of McClarnan Road, 36.0m north of the centreline of Lake Driveway E. Tablet set vertically in south concrete foundation wall, 1.80m west of south-east corner and 0.1m above ground.

**330 ELEVATION 91.552m**

Clover Ridge Plaza, brick retail sales building at the north west corner of Harwood Avenue S. and Westney Road S. Tablet set vertically in easterly brick wall 0.85m south of north-east corner and 0.33m above sidewalk.

**333 ELEVATION 97.081m**

Brick factory building (655 Finley Avenue) on the south-east corner of Finley Avenue and Clements Road W. Tablet set vertically in north concrete foundation wall, 0.45m west of north-east corner and 0.65m below first course of brick.

**334 ELEVATION 83.910m**

Southwood Park Public School (28 Lambard Crescent) located on the north side of Lambard Crescent. Tablet set vertically in the west concrete foundation wall, 8.8m north of south-west corner and 0.3m above asphalt play area.

**346 ELEVATION 83.364m**

Two storey brick townhouse (#17 Jacques Lane) on the north side of Clover Ridge Drive E. and on the east side of Jacques Lane, 59.0m east of the east limits of Harwood Avenue S. Tablet set vertically in the south concrete foundation wall, 3.1m east of south-west corner and 0.1m below first course of brick.

**403 ELEVATION 91.872m**

Two storey building at the north-west corner of Kingston Road W. (Highway #2) and Church Street N. (2 Old Kingston Road). Tablet set vertically in easterly brick wall, 0.8m north of south-east corner and 0.4m above sidewalk.

**406 ELEVATION 94.697m**

Village Community Centre - former Provincial Court Building (22 Sherwood Road W.) located on the north-east corner of Linton Avenue and Sherwood Road W. Tablet set vertically in west building wall, 0.12m south of north-west corner and 0.22m above ground.

**438 ELEVATION 108.037m**

Christian Life Centre building (1030 Ravenscroft Road) at the north-west corner of Rossland Road W. and Ravenscroft Road. Tablet set vertically in the south concrete foundation wall, 0.3m east of Southerly door entrance and 0.1m below first course of brick.

**500 ELEVATION 120.928m**

Pine Ridge Memorial Gardens on Church Street N. approximately 200.0m south of the centreline of Taunton Road W. Tablet set vertically in south pier of entrance, 0.05m south on west face of pier.

**502 ELEVATION 113.088m**

Railway Bridge over Taunton Road E., approximately 130.0m east of the centreline of Harwood Avenue N. Tablet set vertically in south wall on south-west side 0.8m east and 0.3m above grade.

**503 ELEVATION 129.439m**

Regional Municipality of Durham Works Department Depot (2020 Salem Road N.) on the north-west corner of Taunton Road E. and Salem Road N., concrete foundation of light standard 20.0m west and 10.0m north of entrance. Tablet set horizontally on top of the east side of the concrete foundation 0.5m above ground level.

**505 ELEVATION 100.075m**

Railway Bridge over Lake Ridge Road N., 1.1km south of Taunton Road E. Tablet set vertically in west wall, 0.8m south from north-west corner and 0.3m above grade.

**506 ELEVATION 91.455m**

Concrete foundation of Hydro box located on the south-west corner of Lake Ridge Road S. and Highway #2 (Kingston Road E.). Tablet set horizontally on south-east corner of concrete foundation.

**507 ELEVATION 85.368m**

Concrete pier supporting light standard at the north-west corner of Lake Ridge Road S. and Bayly Street E. Tablet set horizontally on south side of concrete pier, 0.15m above grade.

**509 ELEVATION 78.428m**

Stormwater outfall to Lake Ontario 68.0m south of Pickering Beach Road and Lakeview Boulevard. Tablet set horizontally on east end of concrete headwall.

**510 ELEVATION 76.692m**

Rollo Drive and Hewitt Crescent, stormwater outfall behind house #87 Rollo Drive. Tablet set vertically in middle of concrete headwall, 0.10m below top of wall.

**511 ELEVATION 77.340m**

Caldicott Court stormwater outfall behind houses #5 and #6 Caldicott Court. Tablet set vertically in middle of concrete headwall 0.15m below top of wall.

**512 ELEVATION 78.036m**

Barbour Crescent stormwater outfall, east of house #18 Barbour Crescent. Tablet set vertically in concrete headwall, 0.20m below top of wall.

**513 ELEVATION 79.463m**

Lake Driveway W., 69.0m west of Cadby Road on fenced pumping station opposite of house #74 Lake Driveway W. Tablet is set on top of 2.5m rod set flush at grade 0.75m East of North-West fence corner.

**514 ELEVATION 76.822m**

Stormwater outfall at Lake Driveway W. and Garnett Drive, 50m West of Garnett Drive, and 40.0m south of Lake Driveway W. Tablet set vertically on south face at south-east corner of concrete headwall structure.

**515 ELEVATION 79.151m**

Underground pumping station opposite the intersection of Westney Road S. and Shaw Court, located 100m west of Westney Road S. and 300m north of Green Court. Tablet set horizontally on south-west corner of 4x5m concrete chamber.

**516 ELEVATION 81.724m**

Bridge over Duffins Creek on Church Street S., approximately 100.0m north of the westbound lanes of Highway #401 and 100.0m south of Mill Street. Tablet set vertically in the east face of the east wall on the north-east corner of the bridge.

**517 ELEVATION 88.995m**

Stormwater outfall at the south-east corner of the intersection of Highway #2 (Kingston Road W.) and Westney Road S., 50.0m east of Westney Road S. and 50.0m south of Highway #2 (Kingston Road W.), 37.0m west of the pedestrian bridge over Miller Creek. Tablet set horizontally on top of concrete wall on east side.

**519 ELEVATION 92.819m**

Firehall #1 (40 Westney Road N.) on the south-east corner of Hetttersley Drive and Lachlan Drive. Tablet set vertically on west face on south-west corner of building, 0.20m above ground level.

**520 ELEVATION 99.382m**

Food Basics (475 Westney Road N.) in shopping plaza at the north-east corner of Westney Road N. and Magill Drive. Tablet set on south wall of Food Basics building, 0.40m east from the south-west corner and 0.10m above ground level.

**521 ELEVATION 100.992m**

Westney Heights Public School (45 Brennan Road) located on the south side of Brennan Road at the intersection of Nicholls Court. Tablet set horizontally on concrete foundation of light standard 10m north of north-west corner of school building.

**522 ELEVATION 98.488m**

Aboveground pumping station located south of house #119 Angus Drive. Tablet set horizontally on top of 3.0m diameter manhole 0.15m above ground.

**523 ELEVATION 103.881m**

One storey commercial building (75 Chambers Drive) at the south-east corner of Chambers Drive and Beck Crescent. Tablet set vertically in west face of brick wall, 30m south from the north-west corner of the building and 0.50m above ground.

**524 ELEVATION 91.474m**

Roland Mitchener Public School (95 Ritchie Avenue) at the intersection of Ritchie Avenue and Plowman Drive. Tablet set vertically in north face of the wall at the north-east corner of the school, 0.10m above ground.

**527 ELEVATION 131.222m**

Bridge over railway on Westney Road N., 300.0m north of Taunton Road W. Tablet set vertically on the west face of the south-east wing wall, 0.10m above the sidewalk.

**601 ELEVATION 99.824m**

Applecroft Public School (55 Coles Avenue) located on the east side of Coles Drive and south of Magill Drive. Tablet set vertically in west foundation wall, 10.0m north of the main entrance to the school and 0.05m above interlocking brick wall.

**602 ELEVATION 99.471m**

Concrete bridge over Millers Creek at Sullivan Drive. Tablet set vertically in west face of the south west wing wall, 0.31m north of the south west corner and 0.12m above grade.

**603 ELEVATION 91.466m**

Steel and lumber Pedestrian Bridge over Millers Creek on west side of Chapman Drive, 200.0m north of Highway #2 (Kingston Road W.) Tablet set vertically in west face of the south east wing wall, 0.14m north of the south west corner and 0.12m above grade.

**604 ELEVATION 111.589m**

Small brick building for washroom facilities located in Hermitage Park south-west of intersection of Griffiths Drive and Leah Crescent. Tablet set vertically in brick on east wall 2.80m south of the north east corner and 0.24m above asphalt.

**605 ELEVATION 105.125m**

St. Patrick Catholic School (280 Delaney Drive) at the intersection of Delaney Drive and Griffiths Drive. Tablet set vertically in the north face of the north foundation wall, 0.45m west of the north east corner and 0.14m above grade.

**606 ELEVATION 103.505m**

Brick pillar for wood fence at the south east corner of Church Street N. and Rossland Road W. Tablet set vertically in the north face of the north concrete foundation wall of the 3rd. pillar from the east. Tablet is 0.36m south west of the north-west corner and 0.11m above grade.

**610 ELEVATION 92.705m**

500.0m west of intersection of Kerrison Drive E. and Audley Road N., also being at the intersection of Ainsbury Avenue and Kerrison Drive E. Tablet is set vertically 0.4m from top of headwall and 0.4m south of the northeast corner.

**611 ELEVATION 98.978m**

800.0m west of the intersection of Audley Road North and Rossland Road East, on the north side of Rossland Road East. Tablet is set vertically on the north wall, 37.0cm east of the west corner and 77.0cm from the top.

**612 ELEVATION 106.117m**

Approximately 100.0m south of the intersection of Rushbrooke Way and Gallagher Court. Tablet is set vertically at the easterly headwall on the north face, 50.0cm west of the southeast corner and 46.0cm from the top.

**613 ELEVATION 103.640m**

200.0m east of the intersection of Rossland Road W. and Ravenscroft Road on the north side of Rossland Road W. Tablet is set on easterly headwall, 60.0cm west of the southeast corner, 15.0cm from the top.

**614 ELEVATION 116.744m**

400.0m west of the intersection of Salem Road N. and Williamson Drive E. at the intersection of Williamson Drive E. and Thackery Drive. Tablet is set vertically on the outside of the easterly headwall 40cm west of the southeast corner, 12.0cm from the top.

**615 ELEVATION 122.838m**

Harwood Pumping Station building at the north-east corner of Rossland Road E. and Harwood Avenue N. Tablet is set vertically at the southwest corner of the building along the curved wall, 10.0cm above ground level.

**616 ELEVATION 103.888m**

250.0m south of the intersection of Williamson Drive W. and Harwood Avenue N. on the west side of Harwood Avenue N. Tablet is set vertically on the northerly headwall on the outside face, 2.0m south of the northeast corner, 15.0cm from the top.

**617 ELEVATION 160.922m**

1.7km north of Taunton Road on the west side of Westney Road also being 78.0m north from the driveway of 2832 Westney Road N. Tablet is set vertically on the east face of the box culvert, 73.0cm from the top and 30.0cm north of the southerly wing.

**618 ELEVATION 110.580m**

600.0m south of the intersection of Taunton Road W. and Westney Road N. or 102.0m north of Atherton Avenue and Curtis Gate, on the west side of Westney Road. Tablet is set vertically on the inside wall of the southeast headwall, 25.0cm north of the southeast corner and 31.0cm from the top.

**619 ELEVATION 107.544m**

200.0m east of the intersection of Williamson Drive W. and Westney Road N. on the north side of the bridge. Tablet is set vertically in the north face, 45.0cm east of the northwest corner, 1.33m from the top.

**620 ELEVATION 101.878m**

500.0m west of the intersection of Harwood Avenue N. and Rossland Road W. on the south side of the bridge. Tablet is set vertically in the south face of the bridge, 40.0cm east of the west end of the bridge, and 1.52m from the top.

**621 ELEVATION 112.252m**

Westney Heights Baptist Church (1201 Ravenscroft Avenue), 1.0km north of the intersection of Rossland Road W. and Ravenscroft Avenue. Tablet is set vertically in the south face of the church, 15.0cm east of the south-west corner of the building and 15.0cm above the ground level.

**622 ELEVATION 108.316m**

1.1km east of Salem Road N. on the south side of Taunton Road E. Tablet is set on top of the box culvert over Carruthers Creek, 20.0cm east and 12.0cm north of the southwest corner.

**700 ELEVATION 79.599m**

17.5m west of centreline of Shoal Point Road South and 58.0m south of centreline of Salt Drive. Tablet is set on top of north-west corner of concrete outfall structure. See Appendix A location sketch.

**701 ELEVATION 77.691m**

26.0m south of centreline of Hoppe Street, 36.2m west of centreline of Audley Road S. and opposite of house No.971 Audley Road S. Tablet is set vertically in east face of concrete outfall structure. See Appendix A for location sketch.

**702 ELEVATION 80.217m**

13.85m west of west edge of concrete sidewalk, 10.0m north of chain link fence on north side of house No. 804 Audley Road S. and 51.0m south of chain link fence on south side of house No. 798 Audley Road S. Tablet is set on top of north east corner of concrete outfall structure on the west side of Audley Road S. See Appendix A for location sketch.

**703 ELEVATION 102.595m**

11.1m west of west face of concrete curb on Salem Road N., 22.0m north of centreline of entrance to Costco and 185.0m south of centreline of Ringer Road. Tablet is set on top of south east corner of concrete outfall structure. See Appendix A for location sketch.

**704 ELEVATION 102.831m**

19.0m west of back of concrete curb on Salem Road N., 525.0m south of centreline of Rossland Road E. and 4.7m north of hydro pole No. P32722. Tablet is set on top of south-east corner of concrete outfall structure. See Appendix A for location sketch.

**705 ELEVATION 85.634m**

28.3m south of back of concrete curb on Achilles Road and 222.6m east of centreline of Salem Road N. Tablet is set on top of east end of concrete structure on the south side of Achilles Road. See Appendix A for location sketch.

**706 ELEVATION 83.542m**

71.0m north of centreline of Bayly Street E. and 66.0m east of centreline of Shoal Point Road. Tablet is set on top of sound end of concrete outfall structure. See Appendix A for location sketch.

**707 ELEVATION 109.845m**

12.1m south from the chain link fence on the south side of 64 Carpendale Crescent and 79.0m west of centreline of Audley Road N. Tablet is set on top of west end of concrete outfall structure. See Appendix A for location sketch.

**708 ELEVATION 107.119m**

18.8m west of back of curb on west side of Warner Drive, 183.0m south of centreline of Taunton Road E. and 24.7m south of production of centreline of Fenton Street, opposite to house No. 1 Fenton Street. Tablet set on top of concrete outfall structure. See Appendix A for location sketch.

**709 ELEVATION 108.660m**

21.4m north of centreline of Taunton Road E. and 113.0m west of production of centreline of Warner Drive. Tablet set on top of north east corner of concrete box culvert over Carruthers Creek on the north side of Taunton Road E. See Appendix A for location sketch.

**710 ELEVATION 104.316m**

North east of Harwood Avenue South and Kings Crescent on south westerly concrete abutment surrounding ornamental art work in front of Town Hall (65 Harwood Avenue South). Specifically 14.5m north from centreline of Kings Crescent, 177.6m south from centreline of Achilles Road and 4.0m east from easterly curb of the northbound lane of Harwood Avenue South. Tablet set vertically on the northerly face of the south westerly abutment and is located 0.40m above grade level and 0.37m east from the westerly edge of the abutment.

**710A ELEVATION 90.135m**

Tablet set on south concrete wall of covered stairs 38.0m south of C.N.R. bridge on the west side of Westney Road S. Tablet is 0.30m above ground and 0.20m west of south east corner of structure.

**711 ELEVATION 88.821m**

Tablet on Top of concrete box culvert at the south west intersection of Audley Road N. and Highway #2 (Kingston Road E.), Tablet is 0.20m north and 0.20m east of south west corner of box culvert.

**712 ELEVATION 85.206m**

6 Foot long rod with brass cap set 1.3m behind retaining wall abutting asphalt sidewalk, 22.9m East from centre of Kidd Court. See Appendix A for location sketch.

**713 ELEVATION 115.526m**

180.3m East from centreline of Harwood Avenue North, 381.9m South from centreline of Rossland Road East and 286.4m North from centreline of Keensford Court. Brass tablet set on south west corner of concrete headwall of stormwater management pond located 0.15m below top of wall. See Appendix A for location sketch.

**720 ELEVATION 95.354m**

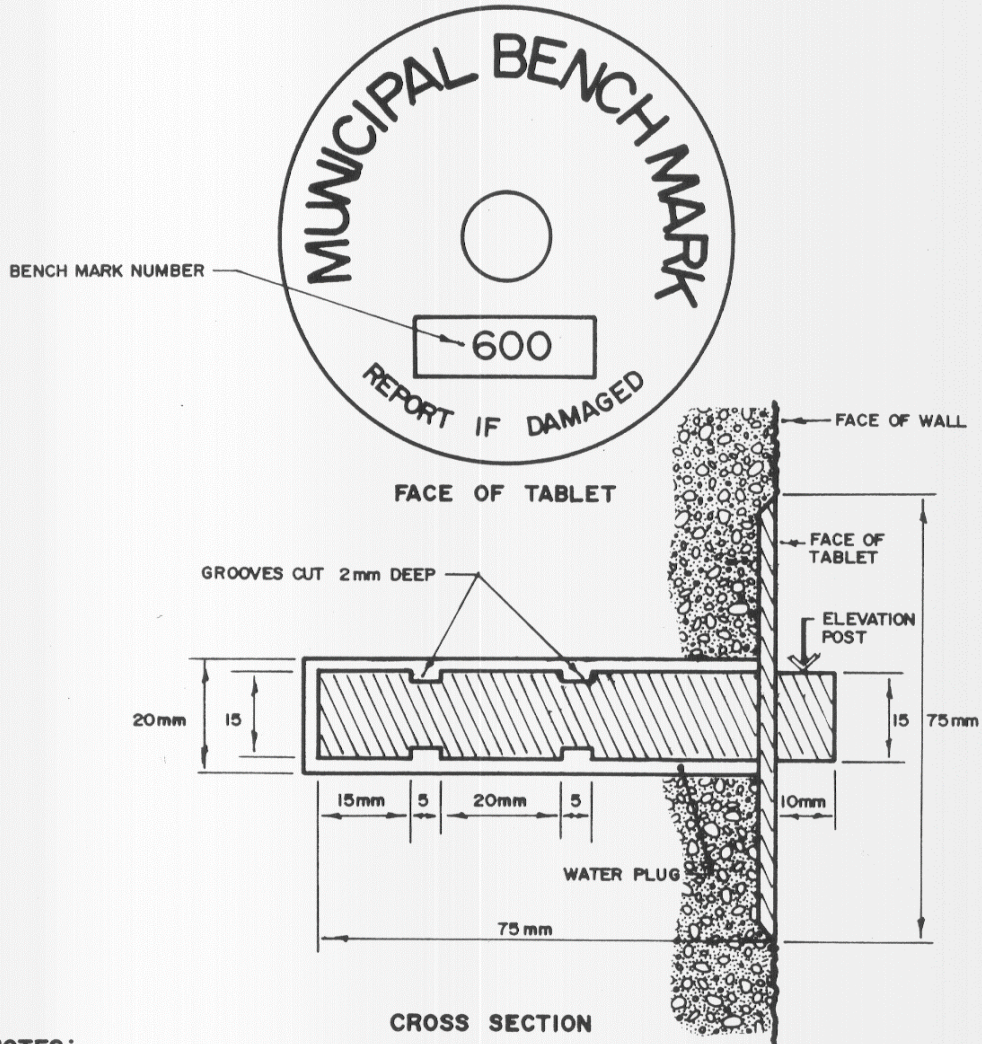
Concrete bridge over Urfe Creek on Rossland Road East approximately 915.0m west from the intersection Church Street N and Rossland Road West. Tablet set vertically on east face of parapet wall at the south east corner 0.60m above the sidewalk.

**721 ELEVATION 88.886**

Concrete bridge over Duffins Creek on Riverside Drive, 1.6km north of Kingston Road and 0.5km south of the centreline of Rossland Road West. Tablet set horizontally in north face of bridge headwall, 1.85m southeast of hydro pole, 6.22m northwest of centreline of Riverside Drive and 0.92m above the sidewalk. See Appendix A for location sketch.

**APPENDIX A: BENCHMARK STANDARD DETAILS**

ALL DIMENSIONS IN MILLIMETRES AND/OR METRES, DRAWING NOT TO SCALE.



**NOTES:**

1. TABLET TO BE CAST IN BRASS.
2. TABLET TO BE MOUNTED VERTICALLY IN A CONCRETE STRUCTURE APPROVED BY THE TOWN ENGINEER.
3. TABLET TO BE NUMBERED BEFORE INSTALLATION BY A TOWN APPROVED PUNCH.
4. TABLET TO BE GROUTED IN PLACE WITH A WATER PLUG.

THE CORPORATION OF THE TOWN OF AJAX

ENGINEERING DEPARTMENT

APPROVED

REVISION No. 0

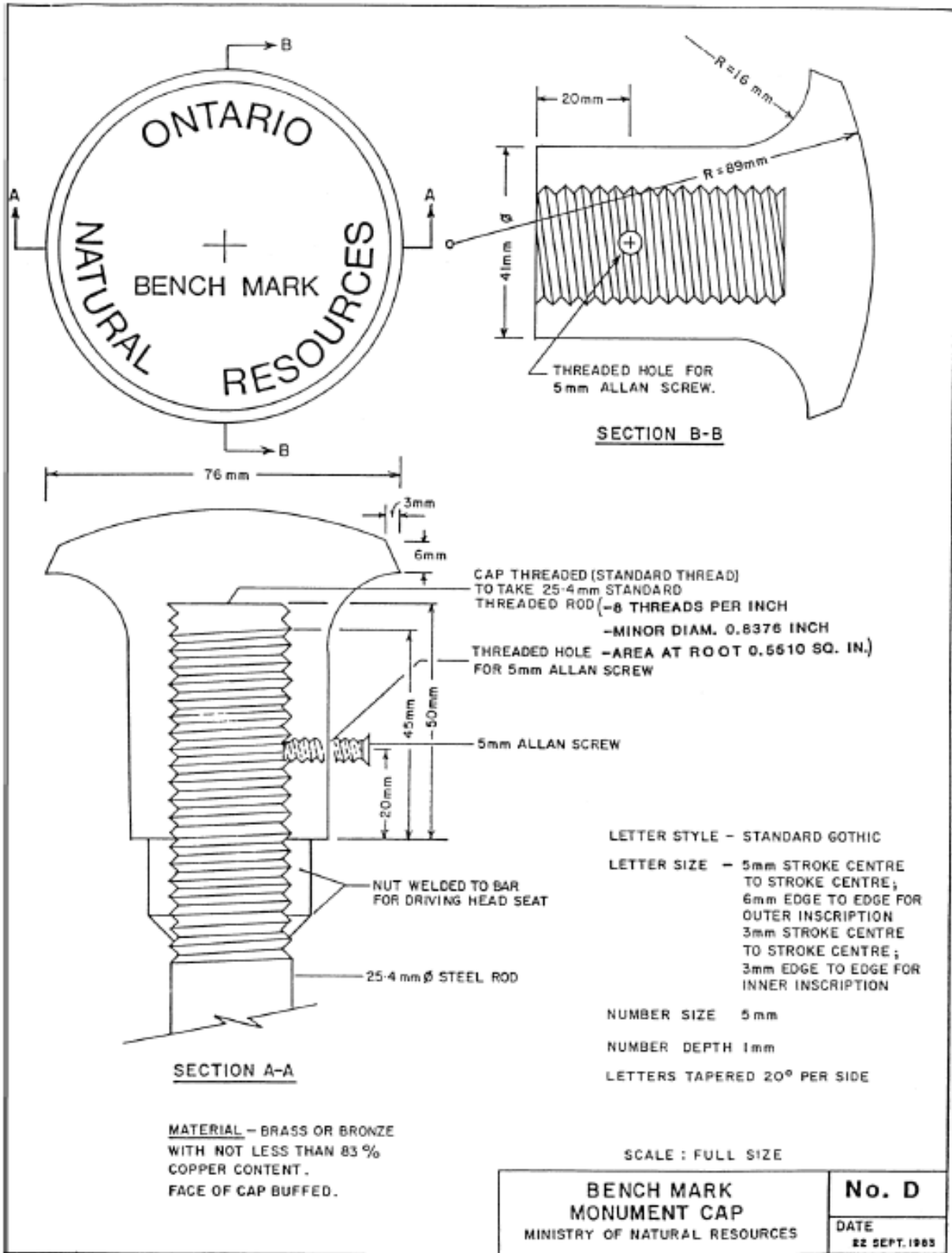
DATE SEPT. 11, 1992

BENCH MARK TABLET

DWG. No.

AS-360

Translar

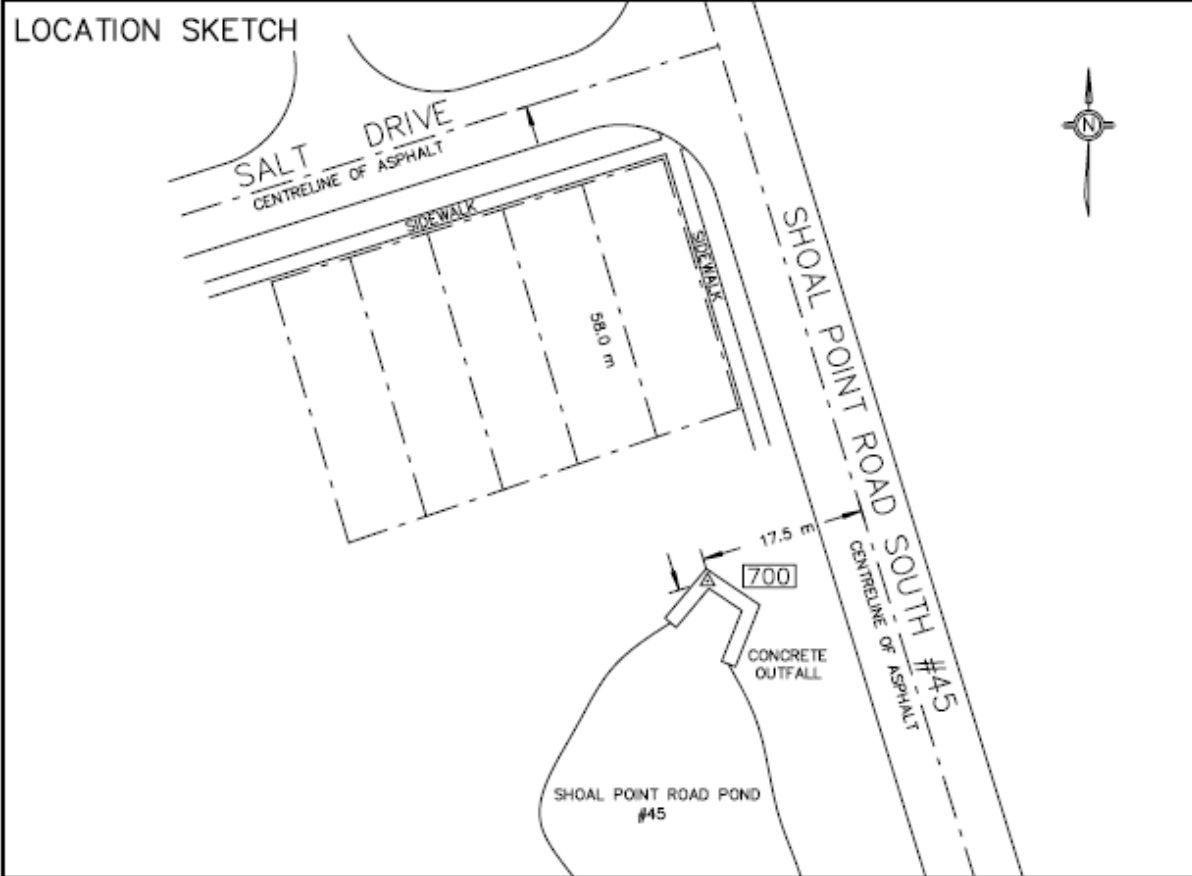


Ministry of Natural Resources and Forestry, Ontario Monumentation Specifications for Horizontal and Vertical Control Survey, October 21, 2015

**APPENDIX B: BENCHMARK LOCATION SKETCH**

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

BENCH MARK  ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	NUMBER	<u>700</u>	
	ELEVATION	<u>79.599</u> m	<u>261.152</u> ft
	DATE	<u>2007</u> YEAR	<u>SEPT</u> MONTH



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF NORTH WEST CORNER OF CONCRETE OUTFALL STRUCTURE IN THE SHOAL POINT ROAD POND #45 AT 17.5 m WEST OF CENTRELINE OF SHOAL POINT ROAD SOUTH AND 58.0 m SOUTH OF CENTRELINE OF SALT DRIVE.

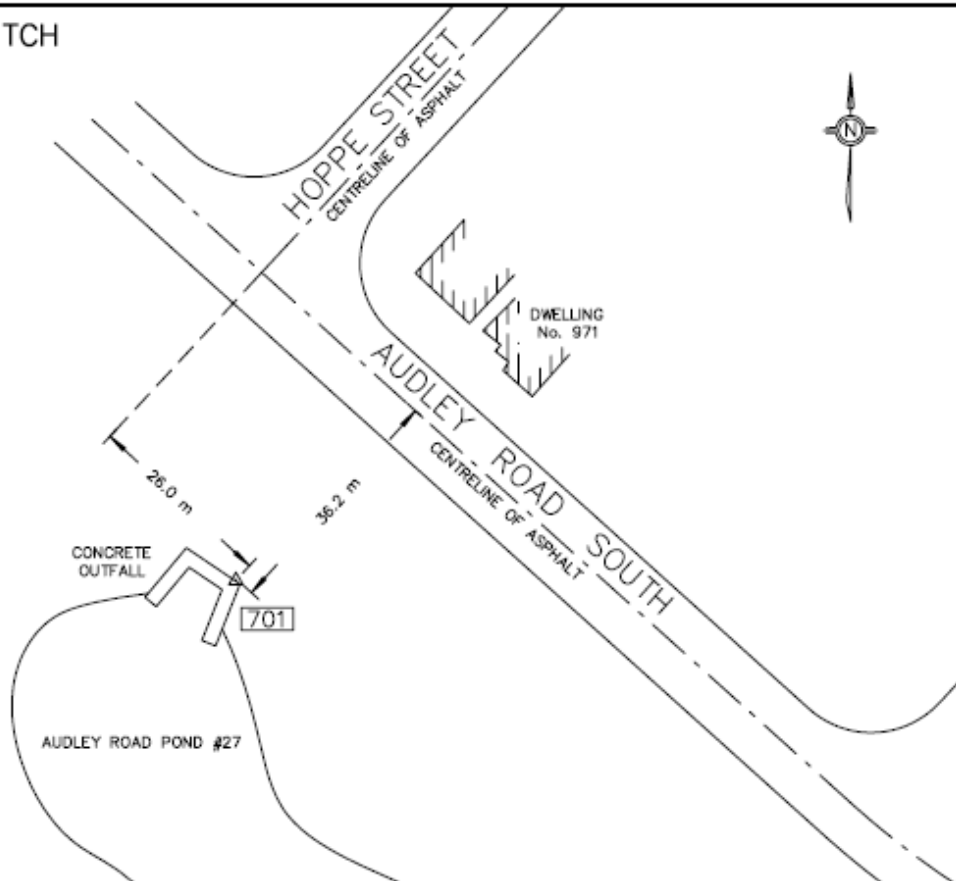
MONUMENT ESTABLISHED BY: DONEVAN FLEISCHMANN PETRICH LTD.

LOCATION SKETCH AND SECOND ORDER LEVELING BY: DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>701</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>77.691</u> m	<u>254.892</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

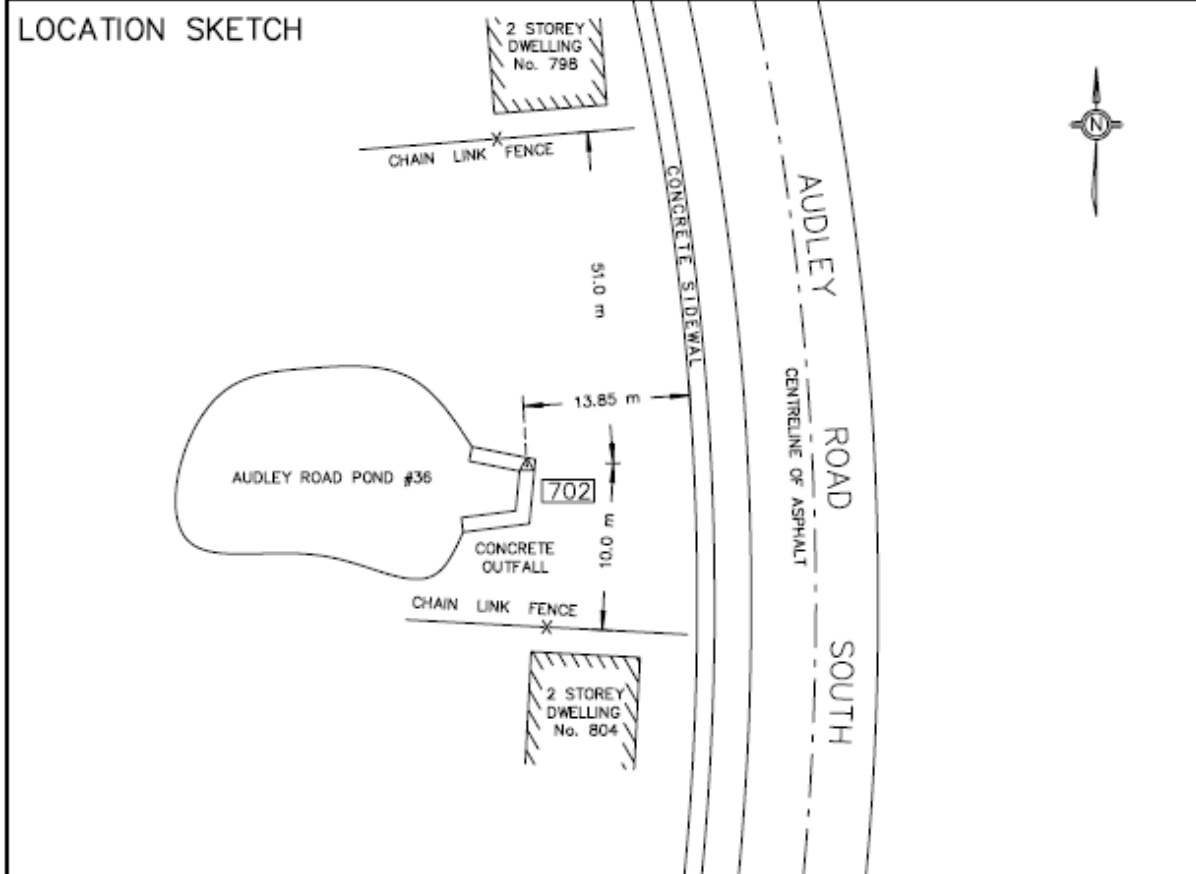
PLAQUE IS PLACED VERTICALLY IN EAST FACE CONCRETE OUTFALL STRUCTURE AT AUDLEY ROAD POND #27. 26.0 m SOUTH OF CENTRELINE OF HOPPE STREET, 36.2 m WEST OF CENTRELINE OF AUDLEY ROAD SOUTH AND OPPOSITE OF DWELLING No. 971, AUDLEY ROAD SOUTH.

**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>702</u>
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>80.217</u> m <u>263.179</u> ft
	<b>DATE</b>	<u>2007</u> <u>SEPT</u> YEAR                      MONTH



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF NORTH EAST CORNER OF CONCRETE OUTFALL STRUCTURE WEST SIDE OF AUDLEY ROAD SOUTH. 13.85 m WEST OF WEST EDGE OF CONCRETE SIDEWALK, 10.0 m NORTH OF CHAIN LINK FENCE ON NORTH SIDE OF DWELLING No. 804 AND 51.0 m SOUTH OF CHAIN LINK FENCE ON SOUTH SIDE OF DWELLING No. 798.

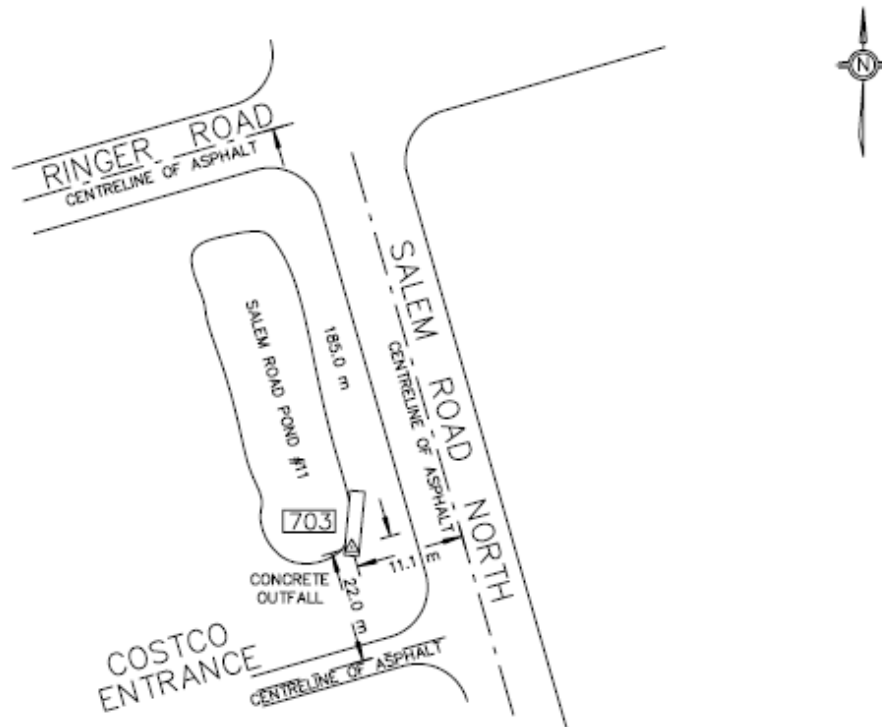
MONUMENT ESTABLISHED BY: DONEVAN FLEISCHMANN PETRICH LTD.

LOCATION SKETCH AND SECOND ORDER LEVELING BY: DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>703</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>102.595</u> m	<u>336.598</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE IN TOP OF NORTH EAST CORNER OF CONCRETE OUTFALL STRUCTURE WEST SIDE OF AUDLEY ROAD SOUTH. 13.85 m WEST OF WEST EDGE OF CONCRETE SIDEWALK, 10.0 m NORTH OF CHAIN LINK FENCE ON NORTH SIDE OF DWELLING No. 804 ANS 51.0 m SOUTH OF CHAIN LINK FENCE ON SOUTH SIDE OF DWELLING No. 798.

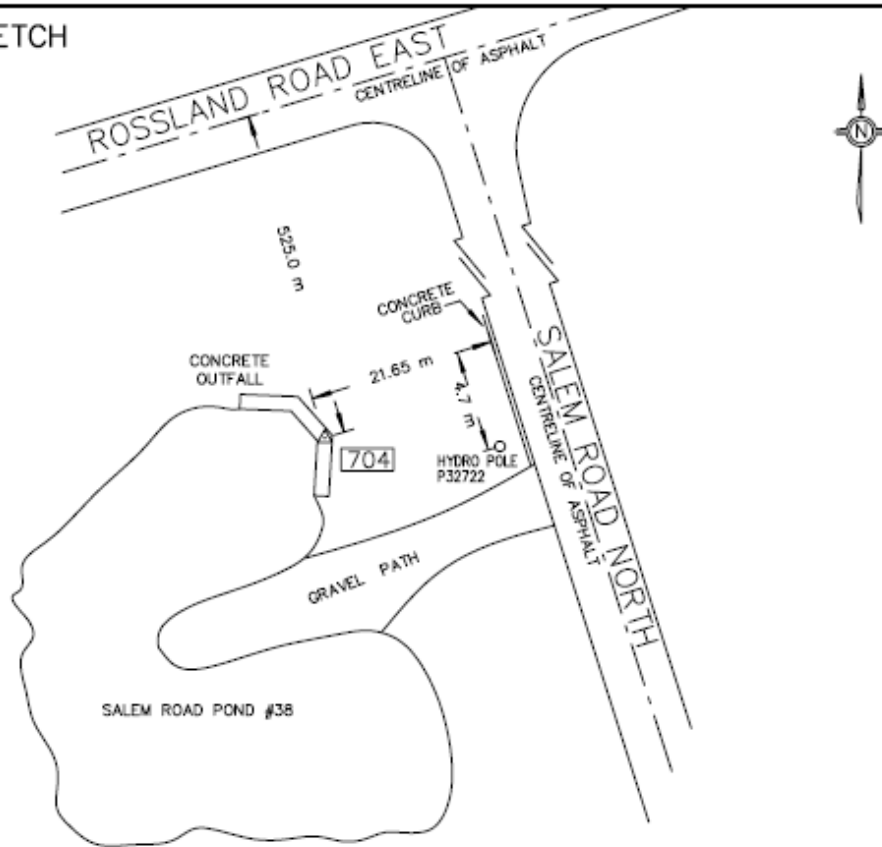
**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>704</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>102.831</u> m	<u>337.372</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF SOUTH EAST CORNER OF CONCRETE OUTFALL STRUCTURE AT NORTH END SALEM ROAD POND #38. 21.65 m WEST OF BACK OF CONCRETE CURB ON SALEM ROAD NORTH, 525.0 m SOUTH OF CENTRELINE OF ROSSLAND ROAD EAST AND 4.7 m NORTH OF HYDRO POLE No. P32722

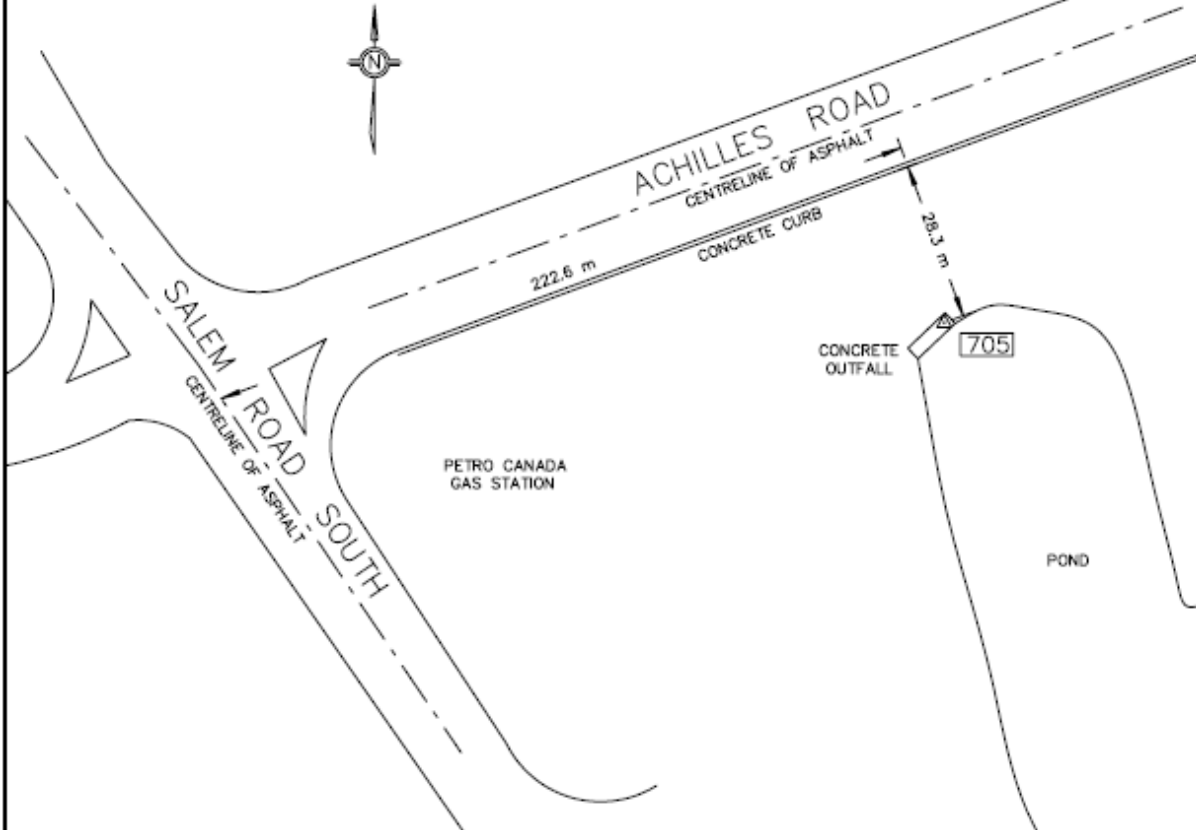
MONUMENT ESTABLISHED BY: DONEVAN FLEISCHMANN PETRICH LTD.

LOCATION SKETCH AND SECOND ORDER LEVELING BY: DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>705</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>85.634</u> m	<u>280.951</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

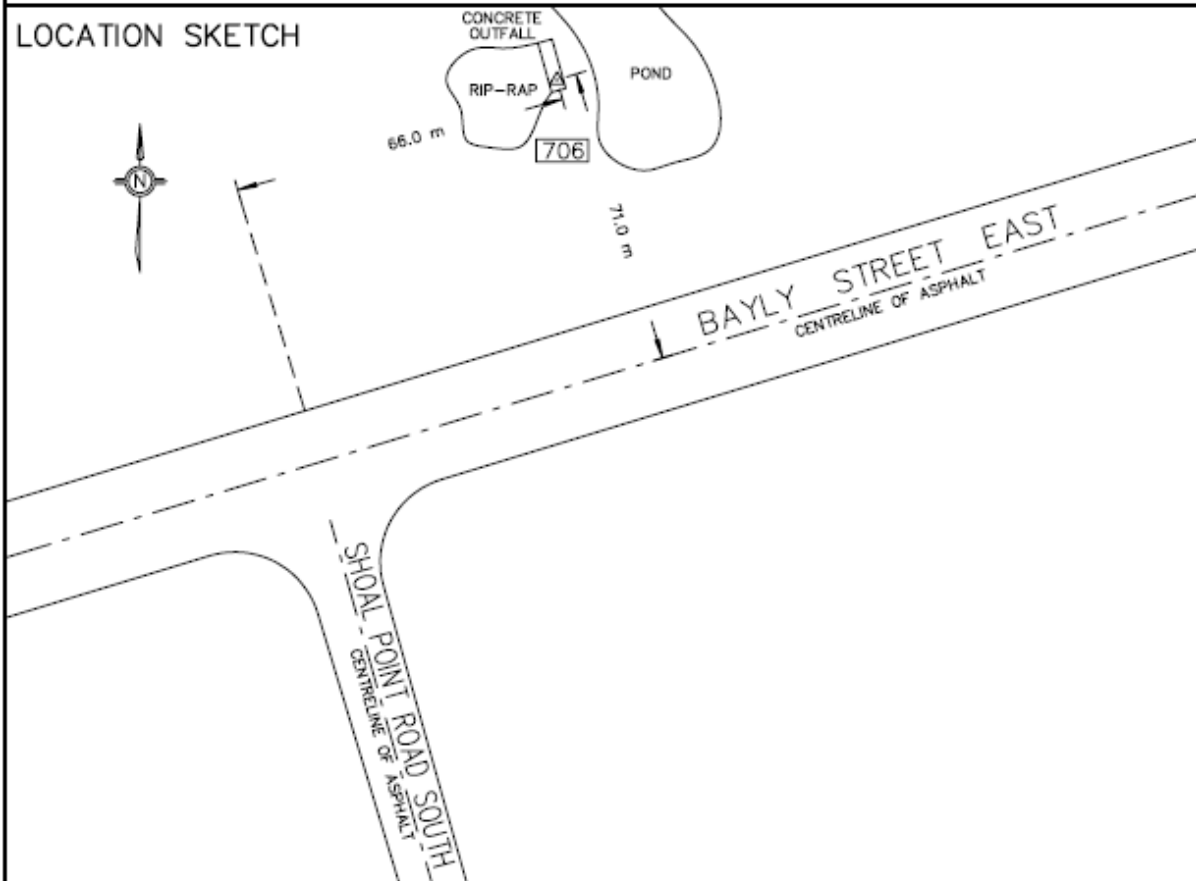
PLAQUE ON TOP OF EAST END OF CONCRETE OUTFALL STRUCTURE, SOUTH SIDE OF ACHILLES ROAD.  
28.3 m SOUTH OF BACK OF CONCRETE CURB ON ACHILLES ROAD AND 222.6 m EAST OF CENTRELINE OF  
SALEM ROAD SOUTH.

**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<p style="text-align: center;"><b>BENCH MARK</b></p> <p style="font-size: small;">ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><b>NUMBER</b></td> <td style="width: 50%; text-align: right;"><u>706</u></td> </tr> <tr> <td><b>ELEVATION</b></td> <td style="text-align: right;"><u>83.542</u> m <u>274.088</u> ft</td> </tr> <tr> <td><b>DATE</b></td> <td style="text-align: right;"><u>2007</u> <u>SEPT</u> YEAR MONTH</td> </tr> </table>	<b>NUMBER</b>	<u>706</u>	<b>ELEVATION</b>	<u>83.542</u> m <u>274.088</u> ft	<b>DATE</b>	<u>2007</u> <u>SEPT</u> YEAR MONTH
<b>NUMBER</b>	<u>706</u>						
<b>ELEVATION</b>	<u>83.542</u> m <u>274.088</u> ft						
<b>DATE</b>	<u>2007</u> <u>SEPT</u> YEAR MONTH						



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF SOUTH END OF CONCRETE OUTFALL STRUCTURE AT 71.0 m NORTH OF CENTRELINE OF BAYLY STREET EAST AND 66.0 m EAST OF CENTRELINE OF SHOAL POINT ROAD SOUTH

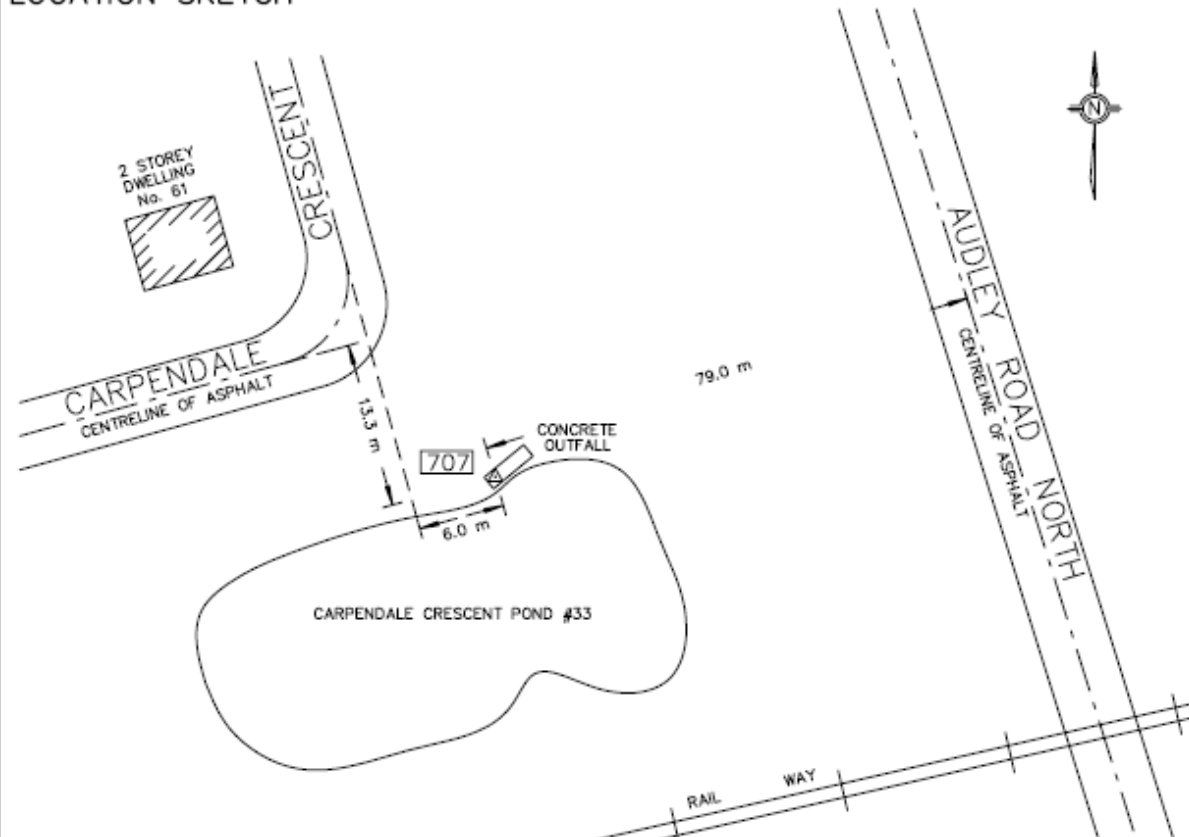
**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>707</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>109.845</u> m	<u>360.384</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF WEST END OF CONCRETE OUTFALL STRUCTURE AT 13.3 m SOUTH OF CENTRELINE OF CARPENDALE CRESCENT, 6.0 m EAST OF CENTRELINE OF CARPENDALE CRESCENT AND 79.0 m WEST OF CENTRELINE OF AUDLEY ROAD NORTH

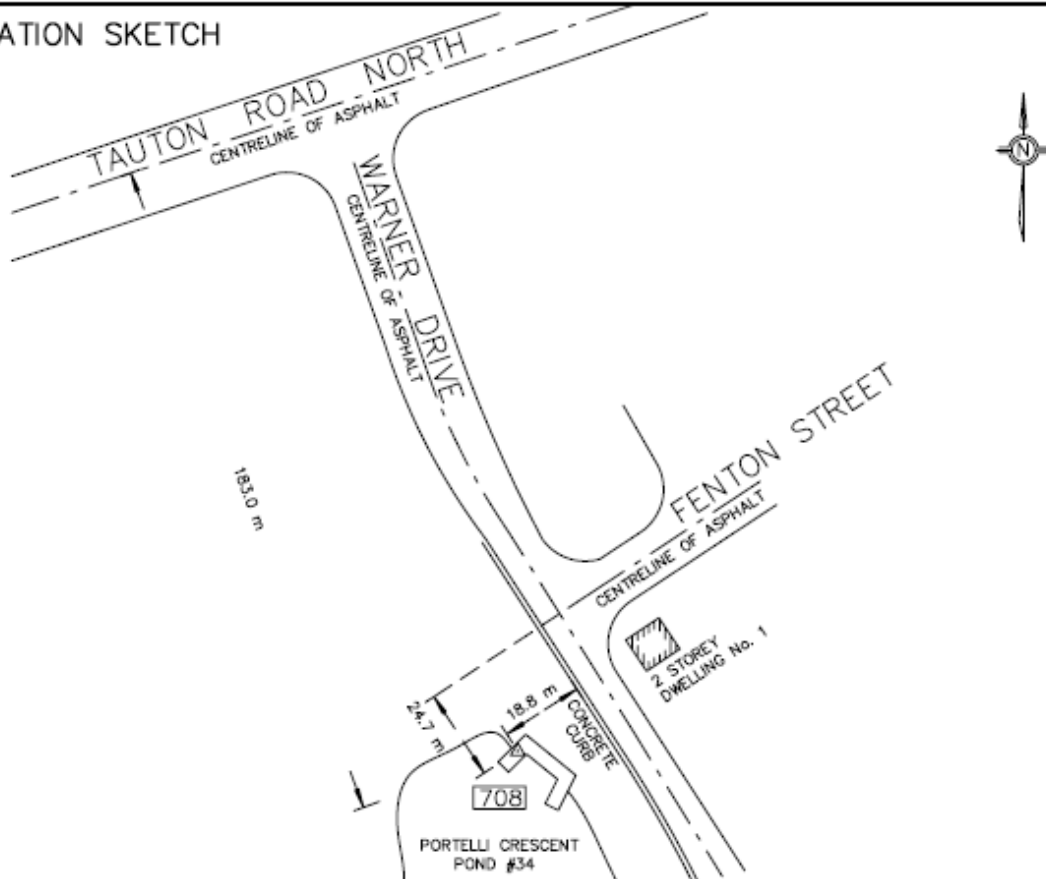
**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>708</u>	
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>107.119</u> m	<u>351.440</u> ft
	<b>DATE</b>	<u>2007</u> YEAR	<u>SEPT</u> MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

PLAQUE ON TOP OF CONCRETE OUTFALL STRUCTURE AT 18.8 m WEST OF BACK OF CURB ON WEST SIDE OF WARNER DRIVE, 183.0 m SOUTH OF CENTRELINE OF TAUTON ROAD EAST AND 24.7 m SOUTH OF PRODUCTION OF CENTRELINE OF FENTON STREET, OPPOSITE TO DWELLING No. 1

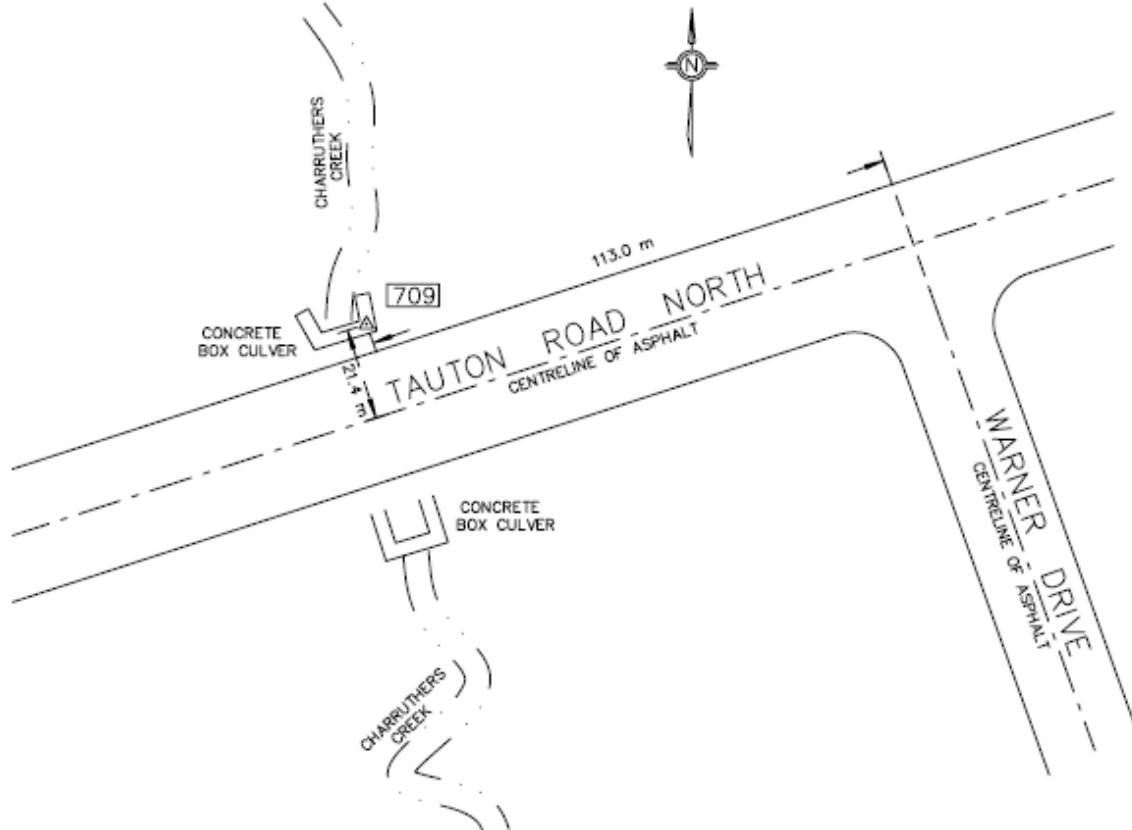
**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

<b>BENCH MARK</b>	<b>NUMBER</b>	<u>709</u>
ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 00819698408 (ELEVATION 85.989 m) AND FIRST ORDER VERTICAL BENCH MARK 67-U-039 (ELEVATION 86.473 m)	<b>ELEVATION</b>	<u>108.660</u> m <u>356.496</u> ft
	<b>DATE</b>	<u>2007</u> <u>SEPT</u> YEAR                      MONTH

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

BRASS CAP SET ON TOP OF NORTH EAST CORNER OF CONCRETE BOX CULVER OVER CARRUTHERS CREEK AT 21.4 m NORTH OF CENTRELINE OF TAUTON ROAD EAST AND 113.0 m WEST OF PRODUCTION OF CENTRELINE OF WARNER DRIVE

MONUMENT ESTABLISHED BY: DONEVAN FLEISCHMANN PETRICH LTD.

LOCATION SKETCH AND SECOND ORDER LEVELING BY: DONEVAN FLEISCHMANN PETRICH LTD.

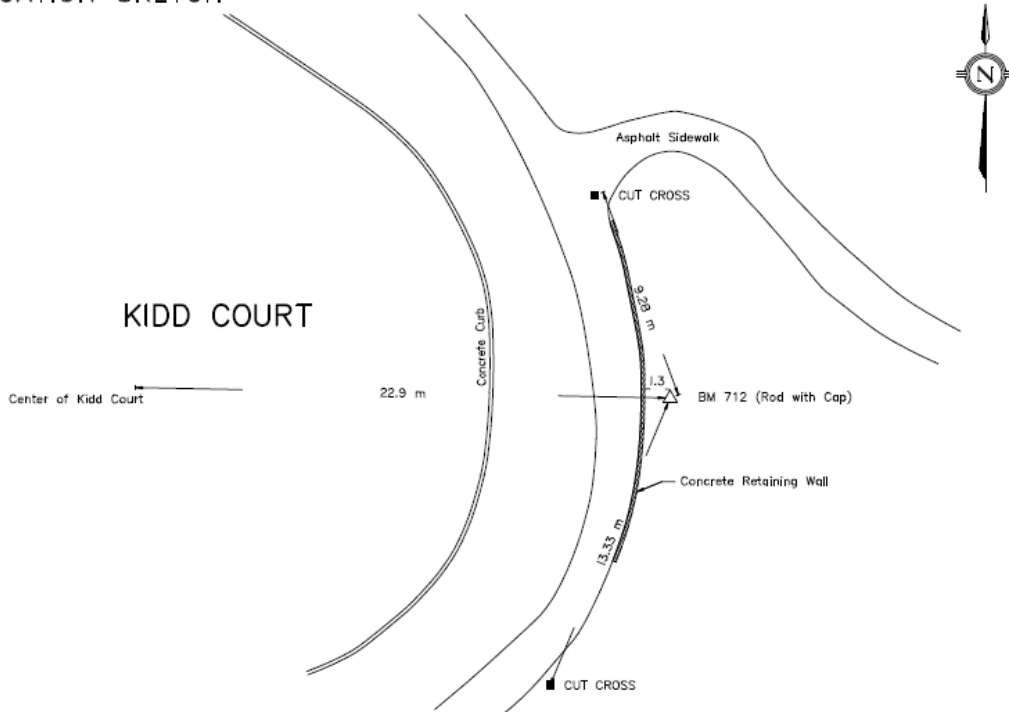
**THE CORPORATION OF THE TOWN OF AJAX**  
**Vertical Geodetic Benchmark Program**

**BENCHMARK**

ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 333  
 (ELEVATION 97.018 m) AND FIRST ORDER VERTICAL BENCH MARK 330  
 (ELEVATION 91.552 m)

<b>NUMBER</b>	712		
<b>ELEVATION</b>	85.206 (m)	279.547	(ft)
<b>DATE</b>	2019	NOV	
	YEAR	MONTH	

**LOCATION SKETCH**



**MONUMENT TYPE AND LOCATION DESCRIPTION**

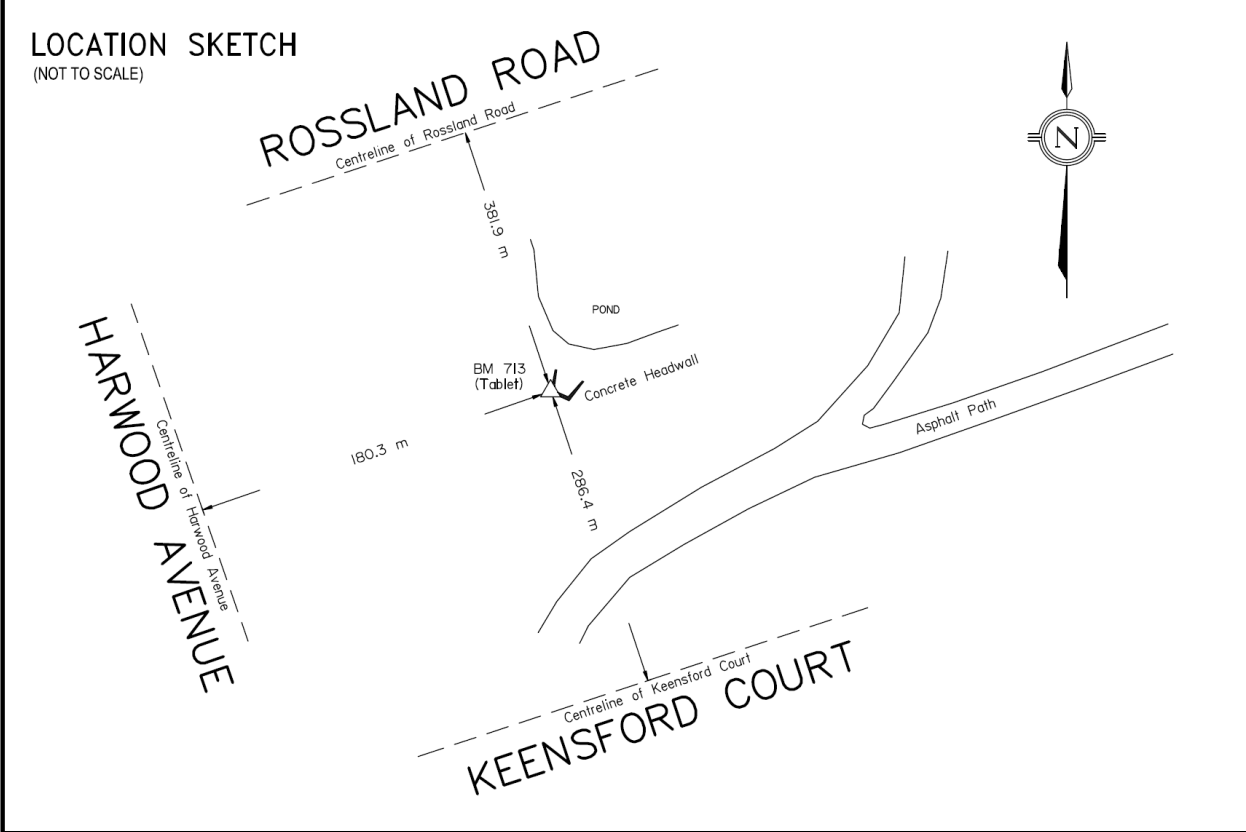
6 FOOT LONG ROD WITH BRASS CAP SET 1.3 m BEHIND RETAINING WALL ABUTTING ASPHALT SIDEWALK, 22.9 m FROM CENTRE OF KIDD COURT.

**MONUMENT ESTABLISHED BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**LOCATION SKETCH AND SECOND ORDER LEVELING BY:** DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
**Vertical Geodetic Benchmark Program**

<b>BENCHMARK</b> <small>ELEVATION BASED ON FIRST ORDER VERTICAL BENCH MARK 615          (ELEVATION 122.838 m)</small>	<b>NUMBER</b>	713	
	<b>ELEVATION</b>	115.526 (m)	379.022 (ft)
	<b>DATE</b>	2019 YEAR	NOV MONTH



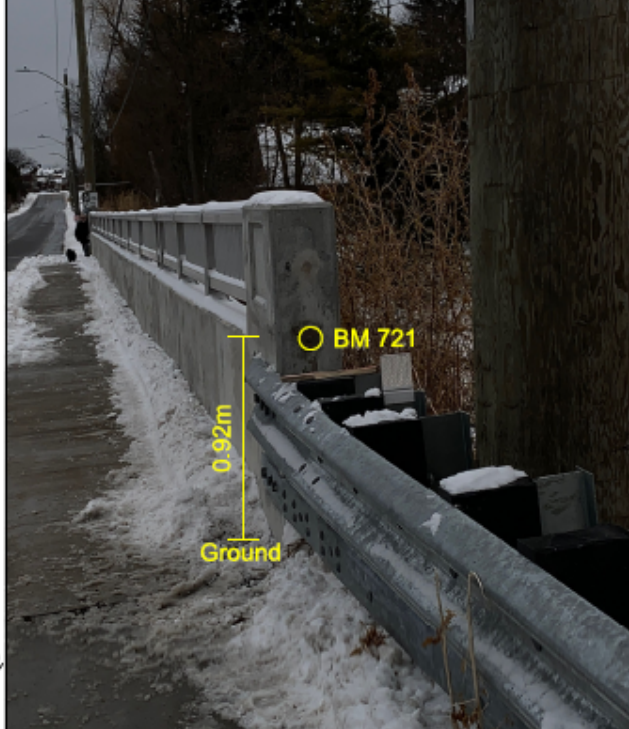
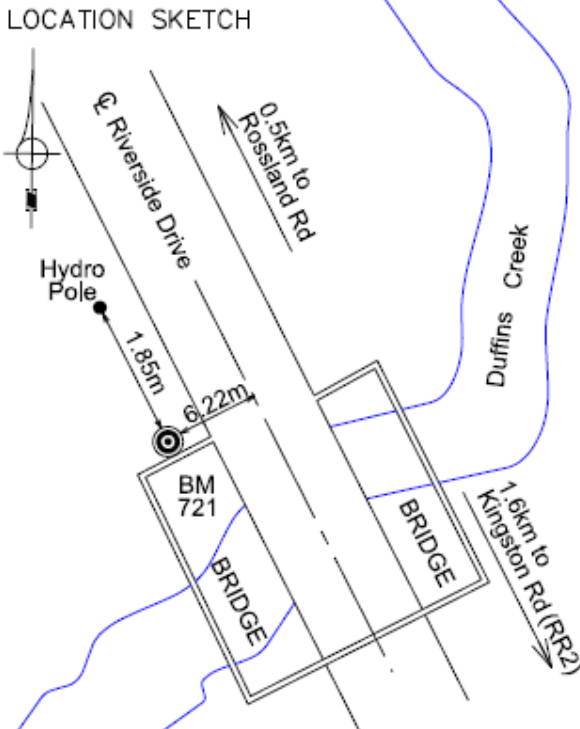
**MONUMENT TYPE AND LOCATION DESCRIPTION**

BRASS TABLET SET ON SW CORNER OF CONCRETE HEADWALL 0.15 m BELOW TOP AND 0.70 ACL.

<b>MONUMENT ESTABLISHED BY:</b>	DONEVAN FLEISCHMANN PETRICH LTD.
<b>LOCATION SKETCH AND SECOND ORDER LEVELING BY:</b>	DONEVAN FLEISCHMANN PETRICH LTD.

**THE CORPORATION OF THE TOWN OF AJAX**  
Vertical Geodetic Benchmark Program

BENCH MARK	NUMBER	<u>721</u>	
ELEVATION BASED ON TOWN OF AJAX VERTICAL BENCH MARK 438 (ELEVATION 108.037 m) AND TOWN OF AJAX VERTICAL BENCH MARK 720 (ELEVATION 95.354 m)	ELEVATION	<u>88.886</u> m	<u>291.62</u> ft
	DATE	<u>2020</u> YEAR	<u>FEB</u> MONTH



**MONUMENT TYPE AND LOCATION DESCRIPTION**

CONCRETE BRIDGE OVER DUFFINS CREEK ON RIVERSIDE DRIVE, 1.6km NORTH OF KINGSTON ROAD (RR2) AND 0.5km SOUTH OF THE CENTRELINE OF ROSSLAND ROAD.  
TABLET SET HORIZONTALLY IN NORTH FACE OF BRIDGE HEAD WALL, 1.85m SOUTHEAST OF HYDRO POLE AND 6.22m NORTHWEST OF THE CENTRELINE OF RIVERSIDE DRIVE.

FOR LOCATION ONLY:	NORTHING: 4 858 702 EASTING: 654 989	LAT: N 43°51'54.49" LONG: W 79°04'16.40"
MONUMENT ESTABLISHED BY:	<u>J. D. BARNES LTD.</u>	
LOCATION SKETCH AND THIRD ORDER LEVELING BY:	<u>J. D. BARNES LTD.</u>	