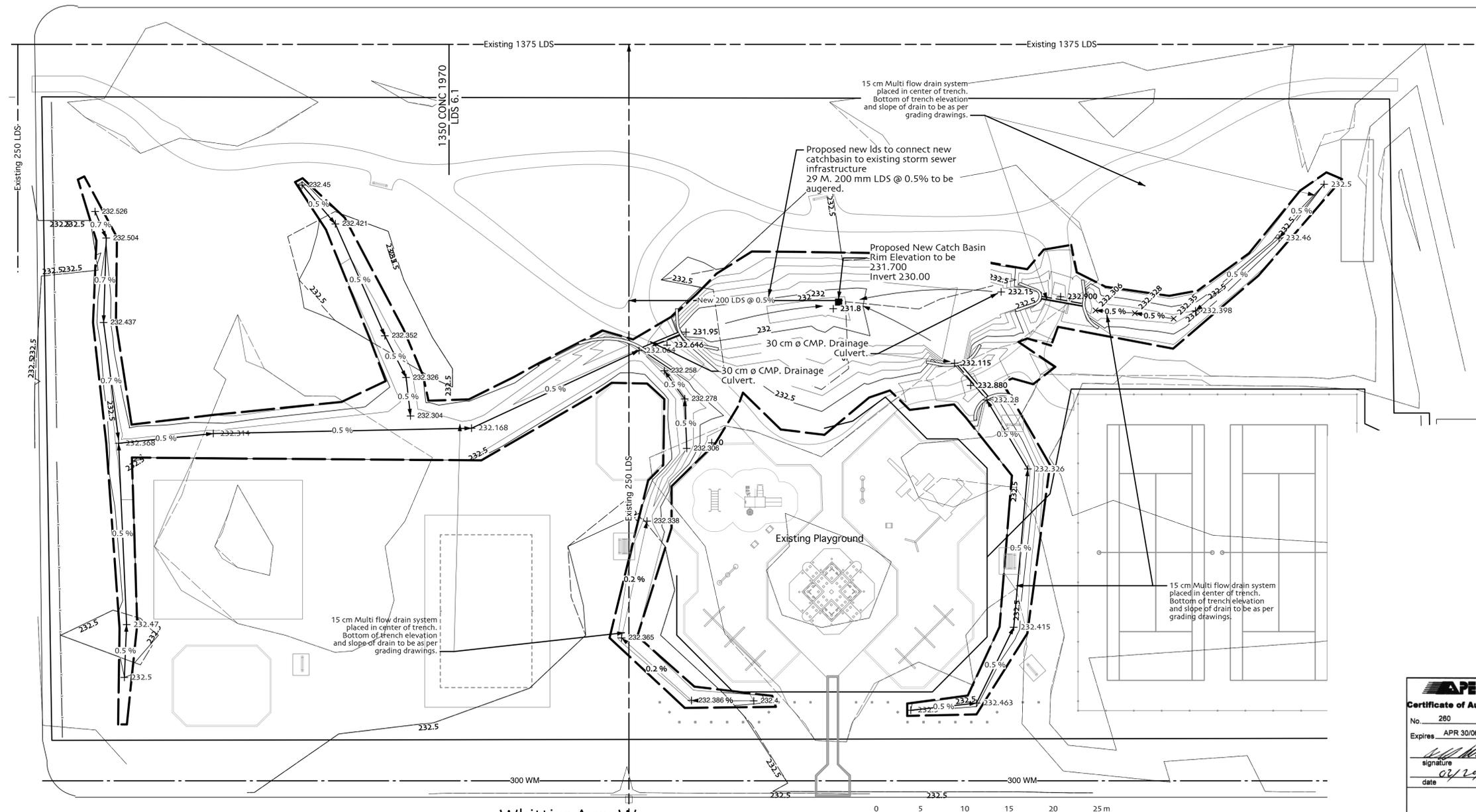
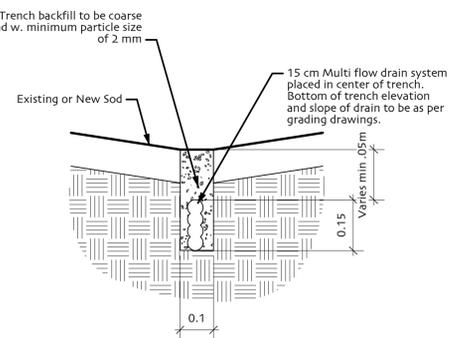


Kildare Ave. W

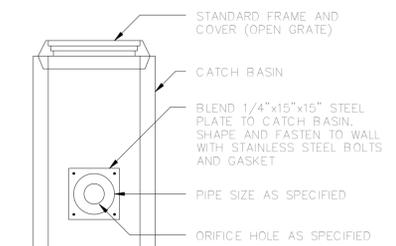


1 Grading Plan
Scale: 1:250



2 Multi-Flow Drain in Turf Area
Scale: 1:10

100 mm Ø	WATERMAIN	100 mm Ø
○	HYDRANT	●
⊗	VALVE	⊗
—	LAND DRAINAGE SEWER	—
—	WASTE WATER SEWER	—
○	MANHOLE	●
□	CATCH BASIN	■
▽	CURB INLET	▲
—	JUNCTIONS	—
—	CULVERT	—
—	PROPERTY LINE	—
—	SURVEY BAR	—
—	SERVICE VALVE	—
—	SIDEWALK RAMP	—
—	RIDGE	—
39.37	ELEVATION	39.37
—	DRAINAGE FLOW	—
---	EXISTING	---
---	LEGEND-PLAN	---
---		---



ORIFICE DETAIL
NTS

- General Notes**
- All dimensions are in meters unless otherwise noted.
 - All existing trees, sidewalks, curbs, catch basins, culverts, survey markers, to remain are to be protected during construction. Any damage to them is to be made good by the Contractor. Maintain positive drainage into all catch basins and curb inlets.
 - Contractor is to limit operations to the area within the area of work shown on the drawing. Should areas outside of this limit be damaged during the course of construction, Contractor is to make good the damage at his own expense.
 - Contractor is to obtain location of all utilities prior to construction. If using power equipment to excavate contractor must notify Hydro and Gas and telephone utilities and take steps to avoid damaging their installations.
 - Contractor to confirm all dimensions and report any discrepancies to Contract Administrator prior to construction.
 - Layout is to be approved by Contract Administrator prior to any construction or demolition/removals.
 - Where demolition/removal of items is called for all items removed from the Site are to be disposed of in a safe and legal manner.
 - Contractor is responsible for ensuring that items not scheduled to be removed or demolished are protected from damage. Any damage to said items is to be made good by contractor at his cost.

- 1.0 CONSTRUCTION NOTES**
- ALL CONSTRUCTION TO CONFORM WITH APPROPRIATE CITY OF WINNIPEG CONSTRUCTION SPECIFICATIONS.
 - CONTRACTOR TO OBTAIN ALL PERMITS.
 - CONTRACTOR TO CLEAR UTILITIES BEFORE EXCAVATING.
 - AUGER UNDER STREET PAVEMENT.
 - BACKFILL ALL TRENCHES IN PARKING LOTS WITH GRANULAR MATERIALS.
 - BACKFILL IN LANDSCAPED AREAS TO BE CLASS 5.
 - MATERIALS**

- 2.0 DRAINAGE DESIGN NOTES**
- RATIONAL FORMULA WAS USED.
 $Q = CIA$ FOR 5 YEAR STORM $I = \frac{47.2}{(t+8)^{0.28}}$
 $Q = CIA$ $A = 2.39$ AC
 $t = 20$ MINUTES $I = 3.0/HR$
 - ASSUMED MAXIMUM ALLOWABLE RUNOFF COEFFICIENT: $C = 0.15$
 - MAXIMUM CALCULATED OUTFLOW: 1.076 CFS
 - CALCULATED RUNOFF COEFFICIENT IS 0.15
 - ORIFICE NOTE REQUIRED

- 3.0 MISCELLANEOUS NOTES**
- TOPOGRAPHIC SURVEY BY DEAN SPEARMAN LANDSCAPE ARCHITECT
 - BACKGROUND DRAWING BY DEAN SPEARMAN LANDSCAPE ARCHITECT
 - EXISTING UTILITY INFORMATION COMPILED FROM GEO. ENGINEERING DRAWINGS.
 - GEODETIC BENCH MARK 30-016, ELEVATION 233.396

- This drawing shall not be used for construction unless signed and sealed by Landscape Architect.
- Variations and modifications to the work shown will not be allowed without prior written consent of Landscape Architect.
- Drawing and Specifications, as instruments of service, are the property of the Landscape Architect. The copyright is reserved in the name of the Landscape Architect. No reproduction may be made without the prior written consent of the Landscape Architect.
- Contractors/bidders are hereby granted a limited licence to reproduce these drawings for the purposes of bidding. Such reproductions are not to be used for construction.

APEN
Certificate of Authorization
No. 260
Expires APR 30/06
signature
date

MARK	DATE	DESCRIPTION
0	12/30/05	For Bid Opp



PROJECT TITLE
Maple Leaf Park

SHEET TITLE
Site Drainage - Civil