

**FUNCTIONAL PLANNING
STUDY**

**COLDSPRINGS PLANNING
AREA**

CITY OF PETERBOROUGH

July 19, 2010



Table of Contents

1.0 INTRODUCTION	3
1.1 Purpose of the Study	3
1.2 Study Team	3
1.3 Study Approach	3
2.0 DESCRIPTION OF STUDY AREA	4
3.0 POLICY FRAMEWORK	6
3.1 Provincial Policy Statement 2005	6
3.2 Provincial Growth Plan	8
3.3 Existing Official Plan Designations	9
3.4 Existing Zoning	9
4.0 LAND USE CONSIDERATIONS	12
5.0 LAND USE CONCEPT AND COMMENTARY	15
6.0 SUMMARY	18

1.0 INTRODUCTION

1.1 Purpose of the Study

The Coldsprings Planning Area is located in the southern limit of the City of Peterborough, south of Highway 7 and east of the Otonabee River. The planning area is approximately 280 hectares in size. These lands were annexed from Otonabee-South Monaghan in 1998 and were amalgamated with the City of Peterborough in 2008. In October, 2003, the City of Peterborough initiated a Functional Planning Study for these lands. The study involves a comprehensive review of the major planning issues which will impact future development in the area. The study will be used by the City as the rationale and basis for the preparation of an Official Plan Amendment for this area. The finalization of the Functional Planning Study was delayed as a result of the need for a detailed transportation analysis of the area.

1.2 Study Team

The Study Team that was assembled to undertake the Coldsprings Functional Planning Study included the following consulting firms:

Meridian Planning Consultants	- land use planning - project management
Ecoplans Limited/McCormick Rankin	- natural environment component - stormwater management analysis
Archaeological Assessments Ltd.	- archaeological evaluation
Peto MaCallum Ltd.	- hydrogeological and geotechnical assessment
D.M. Wills Ltd.	- municipal servicing assessment
EarthTech Ltd.	- transportation study

To better understand the opportunities and constraints of the Study Area, a variety of technical studies were completed. The results of each of these sub-consultant analyses is provided in the various reports prepared by the firms identified above and the reports submitted to the City of Peterborough.

1.3 Study Approach

This Functional Planning Study was undertaken, having regard for:

- Discussions and meetings held with City of Peterborough Staff, from various departments;
- Discussions and meetings with staff from the Otonabee Region Conservation Authority;
- Investigations and reports prepared by other members of the Study Team;
- Comments from two School Boards - the Peterborough Victoria Northumberland and Clarington Roman Catholic Separate School Board, and the Kawartha Pine Ridge District School Board.

2.0 DESCRIPTION OF STUDY AREA

The Coldsprings Study Area totals approximately 280 hectares and is located at the southern limit of the City of Peterborough. The study area is bounded by the Otonabee River and Matchett Line to the west, Highway 7 to the north, Wallace Point Road to the east, and Driscoll Road to the south. Note Figure 1.

The site is dominated by a rolling drumlin topography gradually falling southward. Two parallel irregular ridges divide the site into three drainage areas which ultimately outlet into the Otonabee River. There is a large woodlot/wetland feature in the south-central portion of the study area however, most natural vegetation occurs primarily as isolated woodlots, fence lines, hedgerows/windbreaks, roadways and along the Otonabee River.

Surface water runoff tends to move radially outward from each of the drumlins. The two ridges in the study area act as localized drainage divides, with runoff moving perpendicular to the alignment of the ridges. Much of the runoff from the site concentrates in the low-lying areas and wetland features in the south-central portion of the study area.

Land uses within the Study Area are predominantly rural including scattered agricultural and rural residential land uses. The area is comprised of primarily 11 landowners as shown on Figures 2 and 3.

Figure 1: Location Map

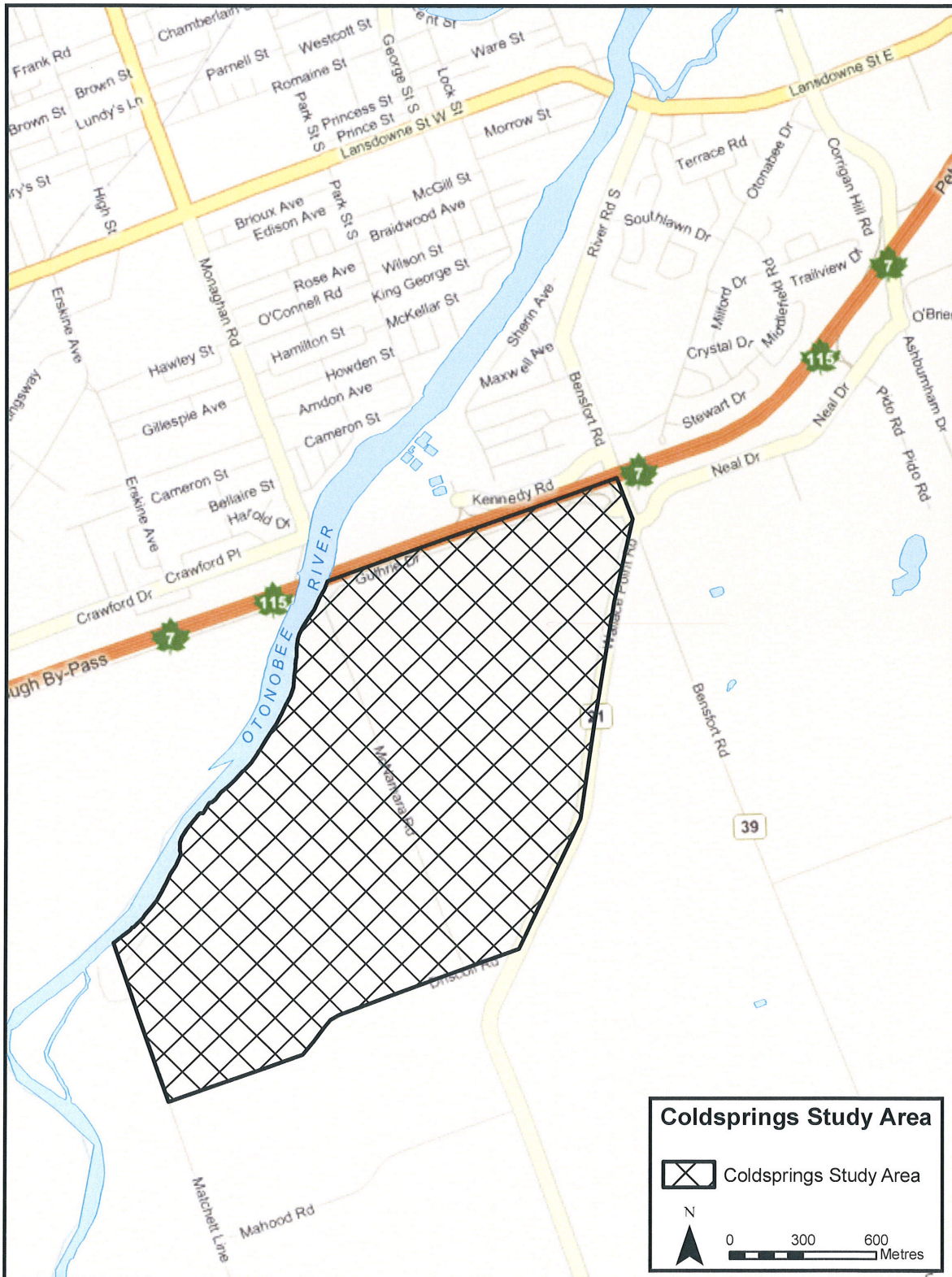


Figure 2: Land Ownership in Coldsprings Study Area

MAP REFERENCE NUMBER	COLDSPRINGS LAND OWNERSHIP	SIZE (Hectares)
1	Ontario Federation of Anglers and Hunters	2.8
2	Johnston	2.2
3	Donnelly	3.4
4	Trafford	2
5,6,9,12,13 14 & 16	AON Inc.	156.4
7	Hoefflerle	5.5
8	Hamlin / Scott	2
10	Ahrens	2.7
11	Stewart	30.6
15	OTL Holdings Ltd.	39.4
17	Simon Bramson Holdings Inc.	18.5
	Other Minor Land Holdings	12.4
	McNamara Road Allowance	3

3.0 POLICY FRAMEWORK

3.1 Provincial Policy Statement 2005

The *2005 Provincial Policy Statement (PPS)* came into effect on March 1, 2005. The Planning Act requires that decisions affecting planning matters must "be consistent with" the Provincial Policy Statement. As a result, the Coldsprings Secondary Plan will need to implement the policies of the PPS. Some of the highlights of the 2005 PPS that will have a direct impact upon development in the Coldsprings Secondary Plan Area are as follows:

1. New development taking place in designated growth areas should occur adjacent to the existing built-up area and shall have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public services.
2. Planning Authorities shall establish and implement phasing policies to ensure the orderly progression of development within designated growth areas and the timely provision of the infrastructure and public service facilities required to meet current and projected needs.

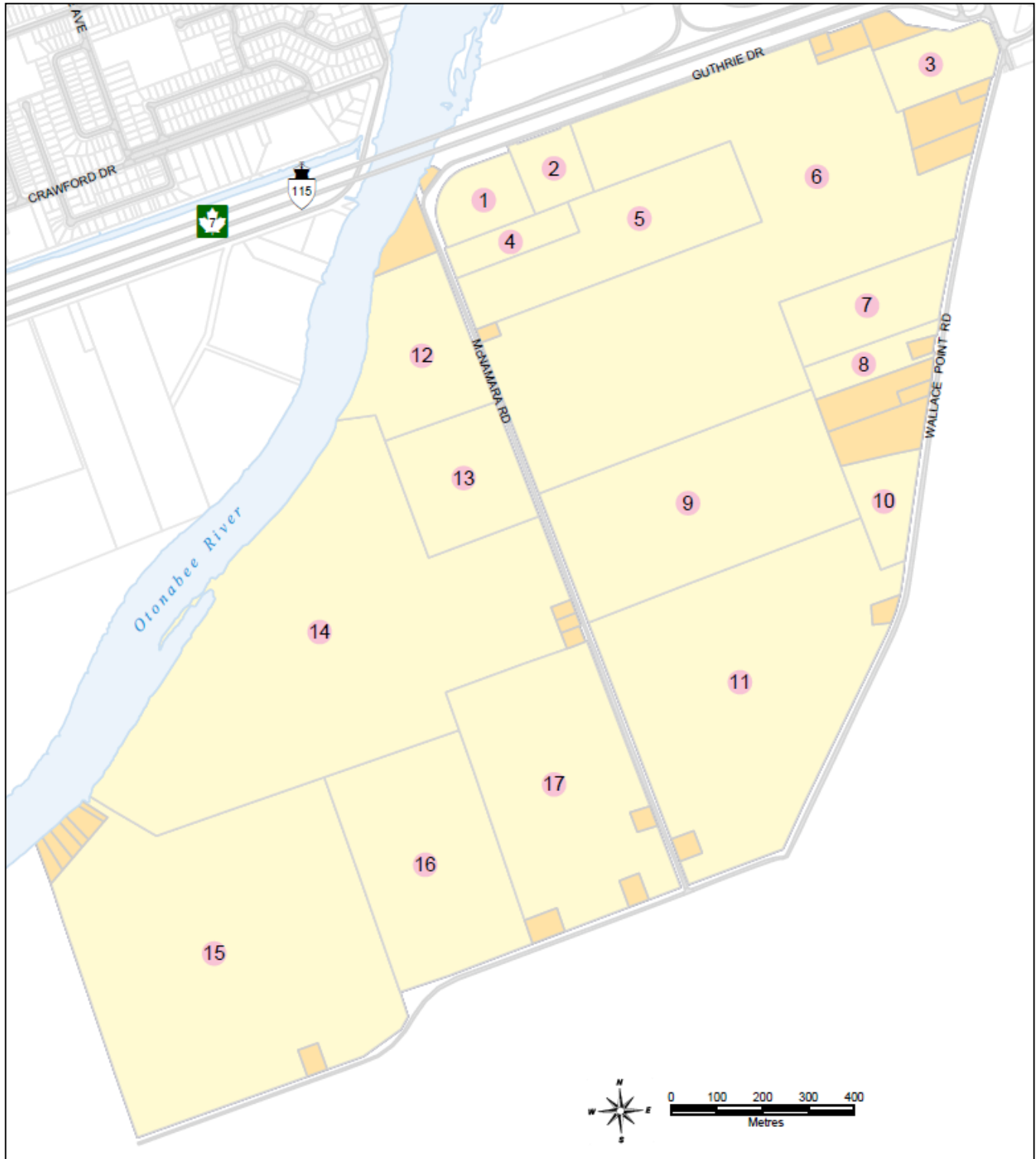


Figure 3: Landholdings in the Coldsprings Study Area

3. Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while maintaining appropriate levels of public health and safety.
4. Planning Authorities will be required to set targets for intensification and minimum densities and facilitate all forms of intensification and redevelopment within built-up areas.
5. Minimum densities will be required to support transit, particularly along transit corridors.
6. Municipalities will be required to set minimum targets for all types of housing, including affordable housing.
7. Watersheds are proposed to be the basis for planning and planning authorities will be required to identify vulnerable areas and consider cross boundary issues.
8. There is much more of a focus on the relationship between natural heritage, surface water and groundwater and an expectation that planning authorities will consider these linkages when preparing Official Plans and Growth Plans.

3.2 Provincial Growth Plan

The City of Peterborough has been identified as an Urban Growth Centre in the *Growth Plan for the Greater Golden Horseshoe (2006)*. This means that the City of Peterborough, along with a number of other prescribed municipalities in the GTA and Central Ontario, is a dedicated location for future growth and development.

Generally, the *Growth Plan for the Greater Golden Horseshoe* contains specifics on where and how the area will grow and the infrastructure that may be needed to support that growth. The Plan establishes policies dealing with the forecasts, intensification, urban growth centres and intensification corridors, employment areas, urban boundaries, and small cities and towns. The Growth Plan distinguishes between policies for intensification of existing built-up areas and policies for greenfield scenarios.

The Provincial Growth Plan provides policies related to development within greenfield scenarios that are directly relevant to the Coldsprings Secondary Plan Area. These policies provide guidance for the development of lands that as yet, have not been developed but are currently within a designated growth area. The intent of the Growth Plan is to ensure that such areas develop at transit supportive densities and transit-supportive street configurations as follows:

1. The gross density of development in the designated growth area will generally be no less than 50 residents and jobs per hectare.
2. New development taking place in growth areas will be designated, zoned and designed in a manner that encourages street configurations that support the early integration of transit services into the new sections of the community.
3. New development taking place in designated growth areas will be designated, zoned and designed in a manner that encourages easy access to local stores and services by alternative transportation modes including cycling and walking.

3.3 Existing Official Plan Designations

According to Schedule A of the City of Peterborough Official Plan, the Coldsprings Study Area, which is formerly within Otonabee Township, is primarily within the Rural designation of the Official Plan. However, lands along the perimeter of the study area have been designated to recognize existing uses and environmental constraints as detailed in the table below and shown on Figure 4:

Location	Official Plan Designation
Guthrie Drive	Agriculture and Residential designations
Wallace Point Road	Hamlet and Village Designations (Otonabee)
Otonabee River	Environmental Constraint and Environmental Protection Designations

3.4 Existing Zoning

Zoning requirements for the majority of the lands within the Coldsprings Study have been carried over from Zoning By-law 12-79 of the former Township of Otonabee. In particular the lands zoned Restricted Agricultural (A1), General Agricultural (A2), Rural Residential (RR), Residential One (R1), Seasonal Residential (RS) and Hazard Lands (HL) have all retained the zoning of the former Township as indicated on Figure 5. It is anticipated that lands will be incorporated into the City's Official Plan and subsequently rezoned as part of applications for subdivisions or site plan approvals with such lands to be incorporated into the City's comprehensive Zoning By-law (97-123).

To date, only the Open Space District Two (OS.2), Development District Two (D.2), Residential District One (R.1), Residential District Two (R.2), and various special district zones from the City of Peterborough Zoning By-law 97-123 have been applied to lands along the northern boundaries of the study area. The lands along Guthrie Drive are zoned as D2 Development District, and a range of Special District zonings to reflect the residential development in this location, as well as several site specific residential zones to permit residential dwellings. Lands along the Otonabee River are zoned Open Space (OS2).

Figure 4: Official Plan Designations

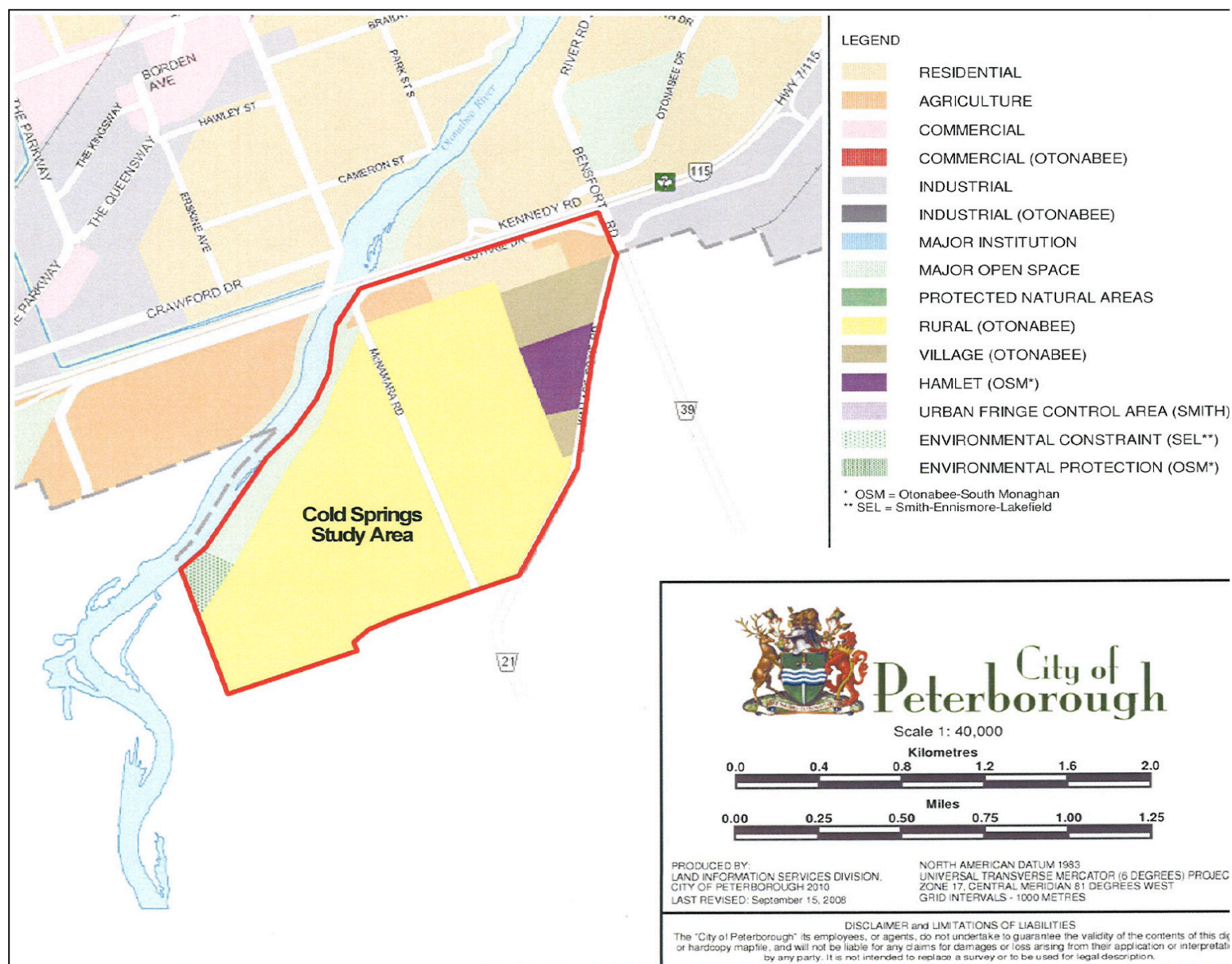
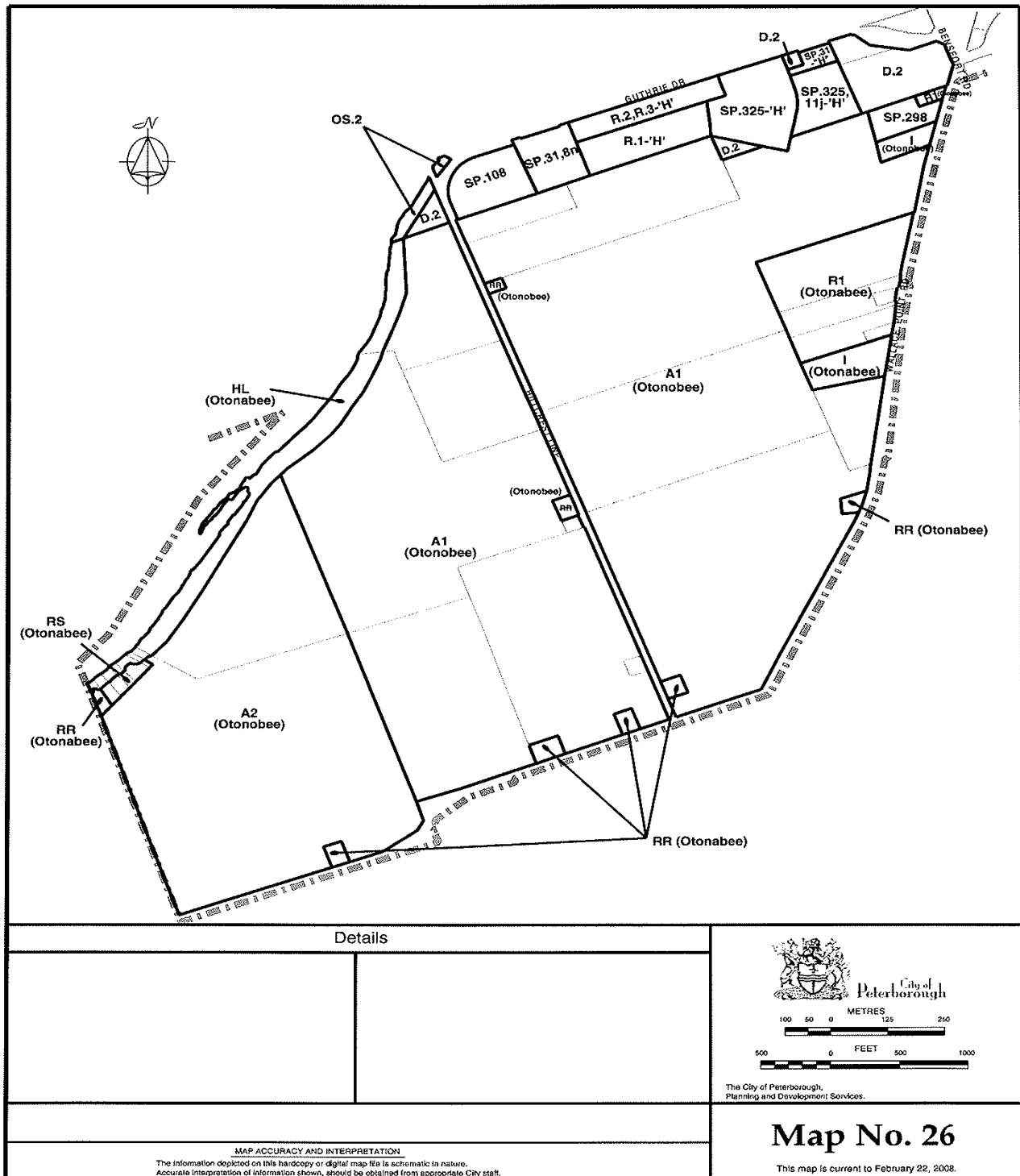


Figure 5: Existing Zoning



4.0 LAND USE CONSIDERATIONS

The technical investigations have resulted in a number of land use considerations. A summary is provided below although reference should be made to each of the individual technical studies for more detail:

Archaeological Significance (Archaeological Assessments Ltd.)

The Stage 1 Archaeological Assessment indicates that the Planning Area has a moderate to high archaeological potential for prehistoric and historic archaeological resources. Approximately 22 percent of the area has a high archaeological potential because it is located within 300 metres of the Otonabee River. A Stage 2 archaeological assessment must be conducted prior to any development occurring. It is suggested that draft approval or site plan conditions for any development application include this requirement.

Environment (Ecoplans Ltd.)

- Highest Ecological Constraint Area (Category 1) will be retained and protected, with no intrusion or road crossing;
- Moderate Ecological Constraint Area (Category 2) lands will be retained where possible, particularly areas along the Otonabee River, for potential park/greenspace linkage system, road crossings to be limited, partial instruction to be considered but not within floodplain of Otonabee River;
- Lower Ecological Constraint Area (Category 3) will look to maintain healthy native mature trees where possible;
- Supporting environmental review (buffer assessment and tree management review) should be undertaken with draft plans of subdivision to ensure that environmental management objectives are implemented;
- Grading plans will be prepared prior to plan registration to implement the subdivision recommendations. At that time, final determination of tree management requirements and protection of natural area edges will be addressed on all grading plans.

Geotechnical/Hydrogeological Considerations (Peto MaCallum Ltd.)

- The plain/drumlin topography covers most of the site with relief in excess of 30m and grades of up to 25% along sides of drumlins, resulting in significant cut/fill operations to achieve final grades;

- There is a low-lying clay/plain/sand environment at the south west section of the site, with relief of 5m, and wet soils which may require subexcavation and replacement with engineered fill;
- A shallow water table is anticipated in the southwest quadrant of the site which may pose difficulties for floor levels and may preclude basements or require the raising of the ground grade;
- The proposed development will reduce the surface area available for recharge and therefore may have some long term effects on the water table; further investigation is required to determine the extent of the impact;
- A well monitoring program should be established as a condition of draft approval/site plan approval for lands in the Coldsprings Planning Area. Wells in the Planning Area and surrounding area should be monitored throughout construction and post-construction to ensure no negative impacts.

Stormwater Management (McCormick Rankin)

- Four stormwater management ponds occupying approximately 10 hectares will be required throughout the study area;
- Further hydrological investigations will need to be undertaken at the proposed stormwater management pond locations as part of submission for draft plan of subdivision;
- Detailed landscape plans should be prepared for the proposed ponds by a qualified biologist or landscape architect to create features that are integrated into the community and will be an amenity to the surrounding development areas.

Servicing (D.M. Wills Ltd.)

- The Coldsprings Planning Area will be developed on the basis of full municipal services including roads with curbs and gutters;
- The entire development falls within the Zone 1 pressure zone;
- There is sufficient volume and pressure to provide water servicing to the area;
- Two pumping stations are recommended to service the Secondary Plan area;

- The area will be serviced by a 600 mm watermain at Johnston Drive to be extended east under the Otonabee River and south under Hwy 115 at South Park Drive;
- The 600 mm trunk watermain will be looped by a connecting to an existing 600 mm watermain on Neal Drive;
- Local watermain service will be looped by extending the existing 300 mm service on Neal Drive to South Park Drive;
- A new pumping station and separate sanitary forcemain will be required to convey sewage to the City of Peterborough Sewage Treatment Plant;
- There is insufficient capacity in the existing 225 mm sanitary sewer on South Park Drive and it will need to be replaced;
- There will be an increase in capacity from 60,000 to 68,000 cubic metres in the sanitary treatment plant which could accommodate approximately 17,700 people;
- No constraints with respect to the provision of electricity, telephone service, cable TV, and natural gas.

Transportation (EarthTech Ltd.)

- Access to the Study Area is provided from the east along Wallace Road, from Bensfort Road; both of which will require widenings to 4 lanes from 2 lanes, to service the development;
- Improved alignment of Wallace Road and Bensfort Road at a 90 degree angle;
- Ramp from Highway 7 onto Guthrie Drive may need to be relocated westerly to prevent stacking on highway ramp for those accessing the development;
- Signal warrant analysis of Bensfort/Wallace Road/Neal Drive indicate signals needed;
- Widening of Lansdowne Street to five lanes west of River Road, and six lanes east of River Road;
- Potential need for four Collectors from Wallace Road into development; traffic signals may be warranted depending on volumes;

- Internal road development will be constrained by topographical challenges, must minimize cul-de-sacs and meandering roadways to provide adequate site lines;
- Roads should be designed in grid pattern to disperse traffic, reduce congestion, and eliminate need for arterials in development;
- Recreational facility/schools should be located on collector roads, close to arterial roads;
- Opportunity for passive traffic calming measures through decrease rights-of-way, shortened residential blocks, roundabouts;
- Truck traffic from landfill on Bensfort Road may increase delays at intersections.

Municipal Objectives

- The establishment of a Community Park/Open space trail system along the Otonabee River;
- The establishment of a Community Park/Natural Environmental Protection area for the 10 hectare low lying area located in the southern quadrant of the area, perhaps in association with the School Boards;
- Improvements to access the Planning Area;
- Given the estimated population range of approximately 13 to 15 thousand people for the Planning Area, two elementary schools are identified. However, given changing demographic forecasts one school site may not be required. In that event, residential use of the lands is recommended.

5.0 LAND USE CONCEPT AND COMMENTARY

In consideration of the technical reports prepared, the planning policy framework and municipal objectives, a land use concept plan has been prepared and is identified as Figure 7.

The table below identifies the recommended land use distribution for the Coldsprings Planning Area. The statistical summary is as follows:

Figure 6: Land Use Distribution

Land Use	Area
Total Study Area	280 hectares
Environmental Protection Area	25.5 hectares
Stormwater Management Ponds	9.8 hectares
Parkland	11.3 hectares
School (possibly 2 elementary)	4.2 hectares
Recreational facility/rink	3.0 hectares
Commercial use	5.0 hectares
Allowance for roads, easements, utilities (approximate)	19.0 hectares
Total	77.8 hectares
Net Developable Area for Residential Purposes	202.2 hectares

It is anticipated that the 10 hectare low lying area which is the most ecologically significant feature in the planning area located in the south central portion of the study area will be maintained as a natural open space area to be incorporated into passive recreational uses and potentially linked to an open space system along the Otonabee River. This passive recreational area will serve the recreational needs of the residents of the Coldsprings Planning Area as well as residents in the southern part of the City. The integration of both passive and active recreational areas, walkways and trails with school sites and with residential uses will be a key feature of this new development area.

A range and diversity of housing types, tenures and densities are expected to make up the Coldsprings Planning Area. The Peterborough Boundary Adjustment Proposal (1993) prepared by the City of Peterborough identified the housing density calculated on a percentage basis to be considered in development proposals, as follows:

Low Density Residential	75%
Medium Density Residential	15%
High Density Residential	5%
Commercial Uses	5%
Total	100%

Population for the Coldsprings Planning Area has been calculated at an overall gross density of 50 persons per hectare as set out in the Growth Plan for the Greater Golden Horseshoe, 2006. Using the land use percentages noted above, estimated number of units and density requirements, the ultimate population for the Coldsprings Planning Area is provided in Figure 8.

Figure 7: Concept Plan

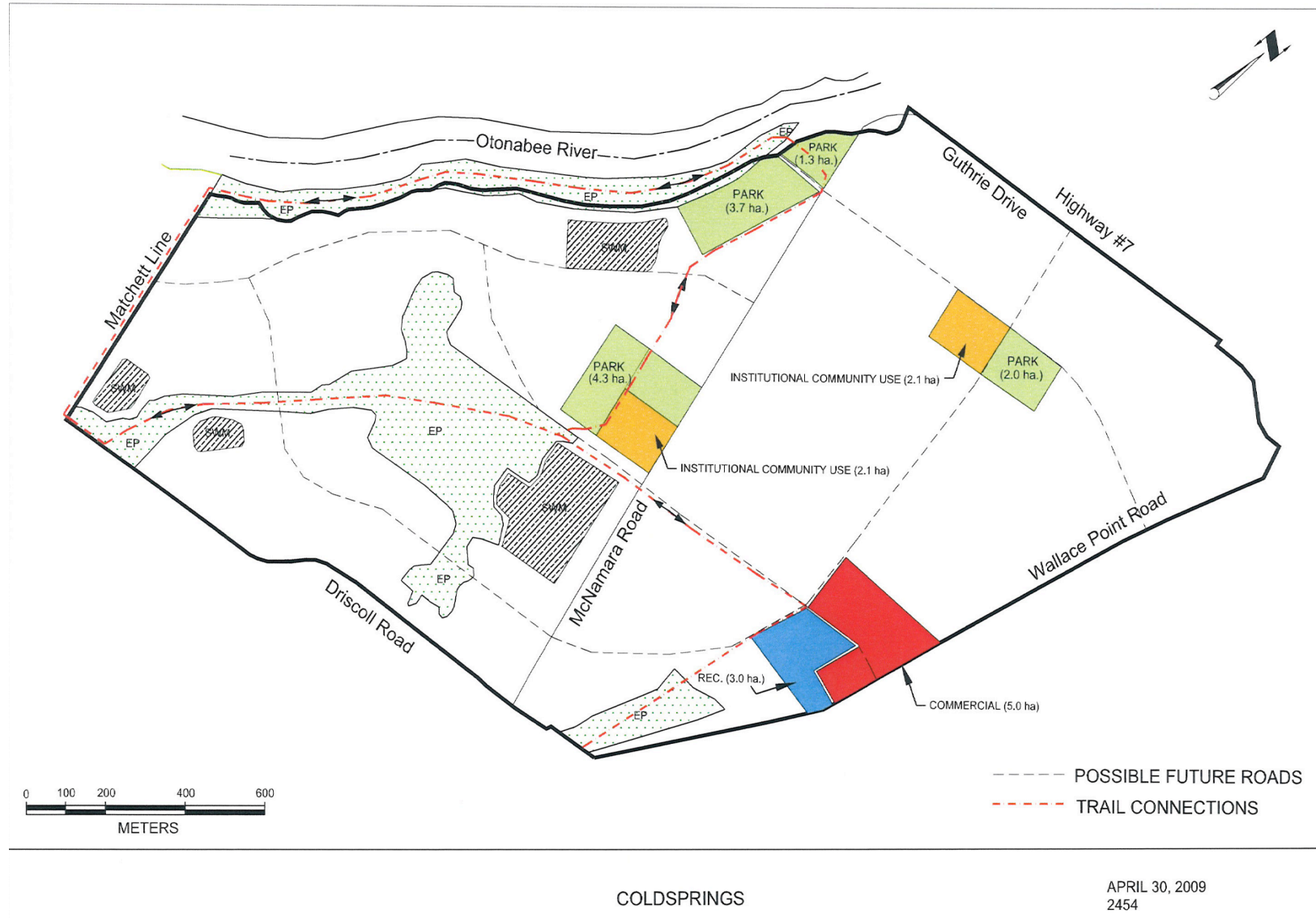


Figure 8: Estimated Dwelling Units and Population

Housing Type	Distribution (Percentage)	Net Area (Hectares)	Density Calculation	Number of Units	Number of persons
Low Density	75%	151.6	20 units/ha	3,032 @ 2.9 persons per unit	8,793 persons
Medium Density	15%	30.3	45 units/ha	1,364 @ 2.5 persons per unit	3,410 persons
High Density	5 %	10.1	85 units/ha	859 @ 1.7 persons per unit	1,460 persons
Employment Uses (Institutional and Commercial)	5%	10.1	50 jobs/ha		505 equivalent population
Total (net)	100%	202 ha		5,255 units	14,168 persons
Total area net of Environmental lands		255 ha	55 persons/jobs per hectare		

6.0 SUMMARY

This Functional Planning Study provides an overview of the opportunities and constraints for the Coldsprings Secondary Plan area. The key findings of the various technical studies completed on the Secondary Plan Area have been identified in this report.

While the current policy analysis and technical studies completed provide a broad overview of development potential, additional studies will be required at such time as more specific development applications are received by the City. In particular, the following additional requirements have been identified through the various technical studies:

- Supporting environmental review (buffer assessment and tree management review) should be undertaken with draft plans of subdivision to ensure that environmental management objectives are implemented;

- Grading plans will be prepared prior to plan registration to implement the subdivision recommendations. At that time, final determination of tree management requirements and protection of natural area edges will be addressed on all grading plans;
- A Stage 2 archaeological assessment must be conducted prior to any development occurring. It is suggested that draft approval or site plan conditions for any development application include this requirement;
- Development in the study area will reduce the surface area available for recharge and therefore may have some long term effects on the water table; further investigation is required to determine the extent of the impact;
- A well monitoring program should be established as a condition of draft approval/site plan approval for lands in the Coldsprings Planning Area. Wells in the Planning Area and surrounding area should be monitored throughout construction and post-construction to ensure no negative impacts;
- Further hydrological investigations will need to be undertaken at the proposed stormwater management pond locations as part of submission for draft plan of subdivision; and,
- Detailed landscape plans should be prepared for the proposed ponds by a qualified biologist or landscape architect to create features that are integrated into the community and will be an amenity to the surrounding development areas.