

**MAYBERRY HILL SUBDIVISION PHASE 3B
THOMASFIELD HOMES LIMITED**

PLANNING REPORT

**TOWN OF GRAND VALLEY
COUNTY OF DUFFERIN**

April 6, 2020



423 Woolwich Street, Suite 201, Guelph, Ontario, N1H 3X3
Phone (519) 836-7526 Email astrid.clos@ajcplanning.ca

TABLE OF CONTENTS		PAGE
1	INTRODUCTION	1
2	EXISTING CONDITIONS	1
3	DESCRIPTION OF THE PROPOSAL	3
4	PLANNING FRAMEWORK	5
4.1	PLANNING ACT	5
4.2	A PLACE TO GROW 2019	6
4.3	PROVINCIAL POLICY STATEMENT 2020	8
4.4	COUNTY OF DUFFERIN OFFICIAL PLAN	10
4.5	TOWN OF GRAND VALLEY OFFICIAL PLAN	12
4.6	TOWN OF GRAND VALLEY ZONING BY-LAW	14
5	SUMMARY OF SUPPORTING REPORTS	15
5.1	FUNCTIONAL SERVICING REPORT	15
5.2	HYDROGEOLOGICAL REPORT	15
5.3	SCOPED ENVIRONMENTAL IMPACT STUDY	16
5.4	ARCHAEOLOGICAL ASSESSMENT	18
6	CONCLUSION	18

LIST OF FIGURES

Figure 1 – Surrounding Land Uses	2
Figure 2 – Draft Plan of Subdivision (March 2, 2020)	3
Figure 3 – Proposed Uses	4
Figure 4 – Proposed Zoning Map	4
Figure 5 – Planning Act Criteria related to a Draft Plan of Subdivision	5
Figure 6 – Provincial Policy Statement Analysis	8
Figure 7 – County of Dufferin Official Plan	11
Figure 8 – Town of Grand Valley Official Plan	12
Figure 9 – Existing Zoning	14

1 INTRODUCTION

Thomasfield Homes Limited is the owner of the property legally described as Part of Lots 29 and 30, Concession 2 (geographic Township of East Luther) formerly Township of East Luther Grand Valley, Town of Grand Valley in the County of Dufferin. The subject property has an area of 15.095 hectares. Phase 3A of 22T-201501 has been Draft Plan approved and Thomasfield Homes is working toward the registration of Phase 3A.

This report has been prepared in support of a Zone Change and Draft Plan of Subdivision application for Phase 3B of 22T-201501 of the subject property. During pre-consultation with the Town this report was identified as a requirement for a complete application. The Town of Grand Valley is the approval authority for Zone Change and Draft Plan of Subdivision applications. The Town was delegated approval for Draft Plans of Subdivision by the County of Dufferin. County of Dufferin By-law 2015-15 "A by-law to delegate the authority for approval of plans of subdivision and condominium descriptions to the lower tier municipalities" was enacted by County Council on May 14, 2015.

2 EXISTING CONDITIONS

The existing use of the subject property is agriculture. The GM Blue Plan Functional Servicing Report describes the existing conditions of the Mayberry Hill Phase 3B proposal as:

"Under pre-development conditions, Phase 3B and the future development lands (Phase 4) drained in all four directions. The split point occurred at the top of the hill. The area north of the hilltop drained towards the existing roadside ditch on Amaranth Street. Lands south and west of the hilltop generally drained in a southerly direction towards the existing ditch that runs along the rail trail. East of the hilltop, stormwater runoff discharged to the existing swale established at the rear of the houses in Phase 1, ultimately discharging to the Phase 1 stormwater management facility."

The GM Blue Plan Hydrogeological Report describes the topography of the lands subject to the Mayberry Hill Phase 3B proposal as;

"The topographic relief of the Site is that of a gently sloped hillside, and elevations on-site range from about 480 masl down to 470 masl. The high part of the Site is in the northeastern part of Phase 3B and from there the land falls generally southwestward at a slope of about 5%. It appears that most of the Site drains toward a low lying, flat area with small ponds, dugouts, and hummocks in the southern part of the Site. This low-lying area appears not to be cropped, and is bounded on the north by the cropped, upper areas of the Site and on the south by the Upper Grand Trailway. A portion of this low-lying area has been mapped by ecological consultant NRSI to be a wetland area. The wetland boundary was subsequently confirmed by the Grand River Conservation Authority. The nearest surface waterbody to the Site is a stream known as "No. 1 Drain" which is a tributary of Boyne Creek (OMAFRA 2015). No. 1 Drain flows southeastward, crossing the Upper Grand Trailway at a point approximately 115 m west-by-southwest from the southwestern part of the Site."

The land subject to the Draft Plan of Subdivision is located within the west limit of the Grand Valley urban area. To the east of the subject property is Mayberry Hill Phase 1 which is a registered plan that is serviced with homes constructed. Mayberry Hill Phase 1 includes road stubs provided for the future development of the subject property. Located to the west of the property are agricultural lands located outside the urban area. To the south is the rail trail.

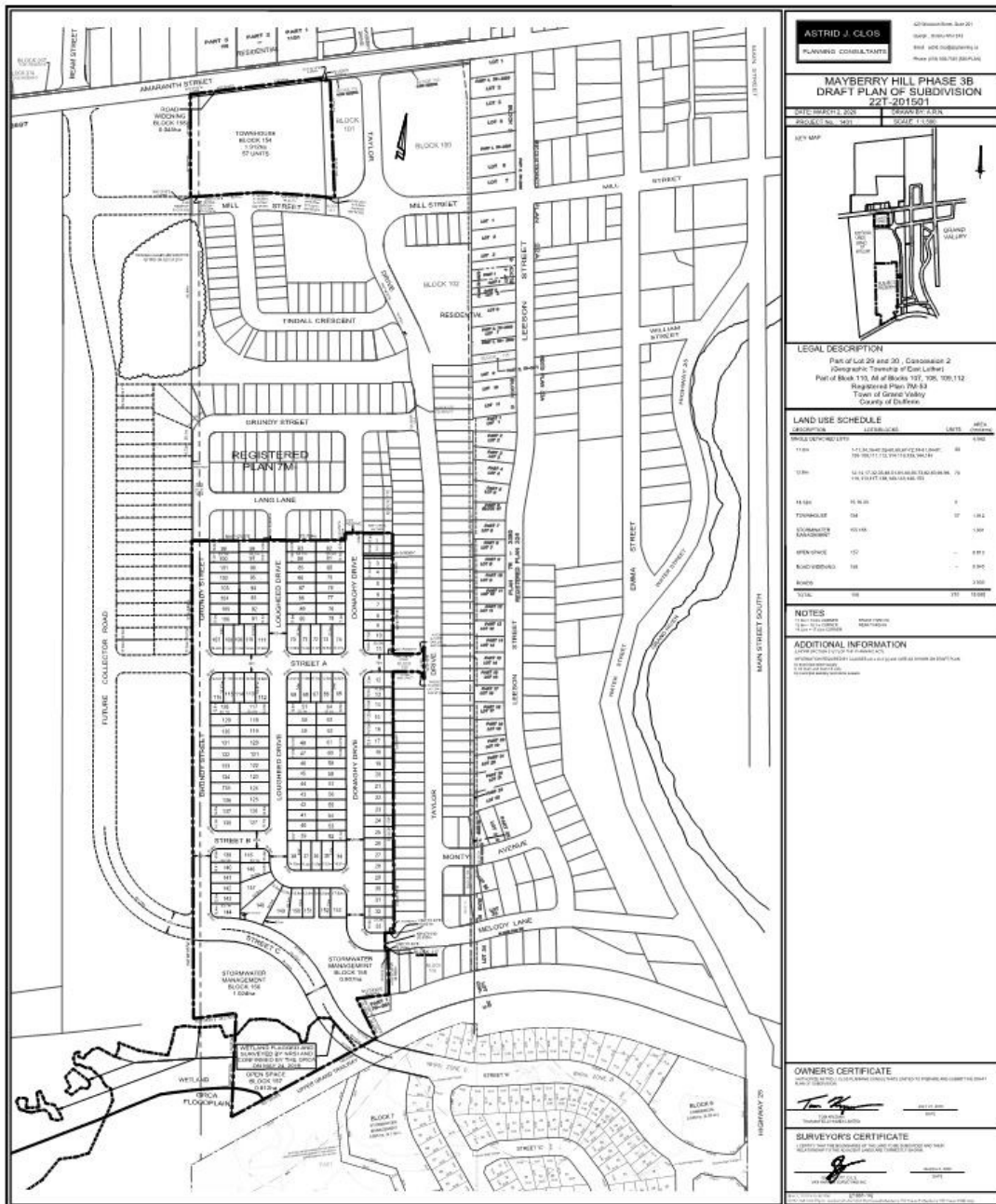
Figure 1 - Surrounding Land Uses



3 DESCRIPTION OF PROPOSAL

Thomasfield Homes Limited is the developer and home builder of Mayberry Hill Phases 1 and 2 which have been registered. Phase 3A of 22T-201501 has been Draft Plan approved and Thomasfield Homes is working toward the registration of Phase 3A. The property subject to this report is referred to as Mayberry Hill Phase 3B. This property is located within the Grand Valley urban boundary and will connect with the road stubs and municipal services provided by Mayberry Hill Phases 1 and 3A.

Figure 2 – Draft Plan of Subdivision (March 2, 2020)

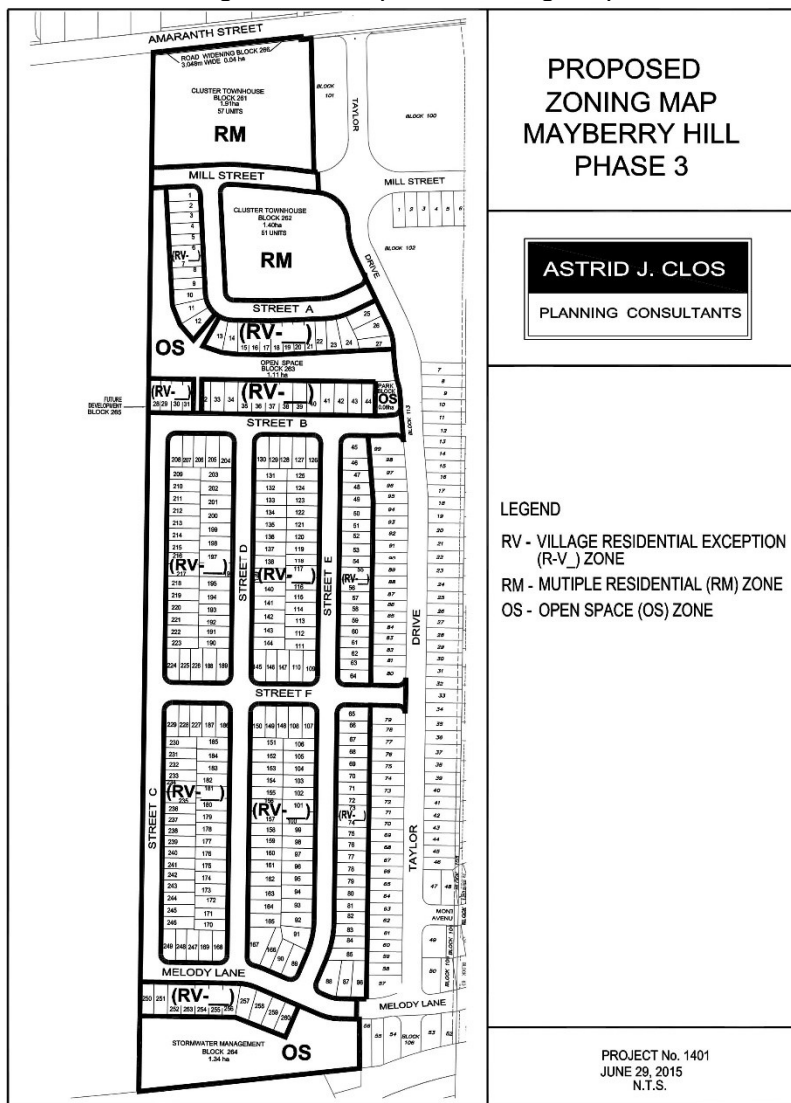


The land uses proposed by the Draft Plan of Subdivision are outlined in the table below.

Figure 3 – Proposed Uses

Description	Number of Units	Area (hectares)
Single Detached Residential (38' 11.6m lots)	85	6.562
Single Detached Residential (42' 12.8m lots)	65	
Single Detached Residential (47' 14.32m lots)	3	
Townhouse	57	1.912
Open Space	---	0.812
Stormwater Management	---	1.831
Road	---	3.933
Road Widening	---	0.045
TOTAL	210	15.095

Figure 4 – Proposed Zoning Map



Village Residential (RV) Zone and the Multiple Residential (RM) Zone are being applied for with no site specific regulations being requested.

4 PLANNING FRAMEWORK

4.1 PLANNING ACT

Section 51(24) of the Planning Act lists criteria to “have regard to” when considering a draft plan of subdivision. The criteria are included in the chart on the following page.

Figure 5 – Planning Act Criteria related to a Draft Plan of Subdivision

Section 51(24) Criteria		How regard has been had to this criteria.
a	The effect of the development of the proposed subdivision on matters of provincial interest as referred to in section 2;	Please refer to section 4.3 of this report.
b	Whether the proposed subdivision is premature or in the public interest;	The land subject to the subdivision is designated “Urban Residential”. The proposed subdivision and zone change will implement this land use designation.
c	Whether the plan conforms to the official plan and adjacent plans of subdivision, if any;	The Draft Plan of Subdivision conforms to the Official Plan. The Mayberry Hill Phase 3B subdivision has been planned to co-ordinate with the Mayberry Hill Phase 1 subdivision. The proposed plan connects with existing road stubs into the abutting residential community and provides the opportunity for future road connections.
d	The suitability of the land for the purposes for which it is to be subdivided;	The location and topography of the land is suitable for the residential land use proposed. The existing grades are shown on the Draft Plan of Subdivision and the Functional Servicing Report prepared by GM BluePlan stormwater management strategy to accommodate the proposal.
e	The number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and adequacy of them;	The property is located in proximity to Highway 25 and Amaranth Street.
f	The dimensions and shapes of the proposed lots;	The dimensions and shapes of the lots and blocks are in keeping with the recently approved zoning by-law and are suitably configured for the proposed residential use for the subject property.

g	The restrictions or proposed restrictions, if any, on the land proposed to be subdivided of the buildings and structures proposed to be erected on it and the restrictions , if any, on adjoining land;	There are no MDS issues.
h	Conservation of natural resources and flood control;	There are no flood control areas located on the subject property. A Scoped Environmental Impact Study has been prepared by Natural Resource Solutions to address the conservation of natural resources.
i	The adequacy of utilities and municipal services	A Functional Servicing Report prepared by GM BluePlan outlines the adequacy of utilities and municipal services for this site.
j	The adequacy of school sites	The application will be circulated to the school boards by the municipality to determine the adequacy of school sites.
k	The area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes;	The stormwater management and open space blocks are proposed to be dedicated to the Town for public purposes.
l	The extent to which the plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy: and	Where possible the east west orientation streets will provide the opportunity for passive solar gain. The site is located in proximity to Amaranth Street, Highway 25 and County Road 109 which provides access to an efficient transportation network.
m	The interrelationship between the design of the proposed plan of subdivision and site plan control matters relating to any development on the land, if the land is also located within a site plan control area designated under subsection 41(2) of this Act.	Prior to the development of the cluster townhouse block, site plan approval will be required.

4.2 A Place to Grow 2019

A Place to Grow May 2019 was approved by the Lieutenant Governor in Council, Order in Council No 641/2019. *“The Growth Plan for the Greater Golden Horseshoe 2019 was prepared and approved under the Places to Grow Act, 2005 to take effect on May 16, 2019. This Plan applies to the area designated by Ontario Regulation 416/05 as the Greater Golden Horseshoe growth plan area. All decisions made on or after May 16, 2019 in respect of the exercise of any authority that affects a planning matter will conform with this Plan, subject to any legislative or regulatory provisions providing otherwise. As provided for in the Places to Grow Act, 2005, this Plan prevails where there is a conflict between this Plan and the PPS. The only exception is where the conflict is between policies relating to the natural environment or human health. In that case, the direction that provides more protection to the natural environment or human health prevails.”*

Excerpts from the Growth Plan are included in this report. **Bolding** has been added for emphasis.

2.1 Context

*Building more compact **greenfield** communities reduces the rate at which land is consumed. Communities in larger urban centres need to grow at transit supportive densities, with walkable street configurations. Compact built form and intensification efforts go together with more effective transit and active transportation networks and are fundamental to where and how we grow. They are necessary to ensure the viability of transit; connect people to homes, jobs and other aspects of daily living for people of all ages; and meet climate change mitigation and adaptation objectives. Moreover, an increased modal share for active transportation and transit, including convenient, multimodal options for intra- and inter-municipal travel, supports reduced air pollution and improved public health outcomes.*

It is important to optimize the use of the existing urban land supply as well as the existing building and housing stock to avoid over-designating land for future urban development while also providing flexibility for local decision-makers to respond to housing need and market demand. This Plan's emphasis on optimizing the use of the existing urban land supply represents an intensification first approach to development and city-building, one which focuses on making better use of our existing infrastructure and public service facilities, and less on continuously expanding the urban area."

"2.2.7 Designated Greenfield Areas

1. *New development taking place in **designated greenfield areas** will be planned, designated, zoned and designed in a manner that:*
 - a) *supports the achievement of complete communities;*
 - b) *supports active transportation; and*
 - c) *encourages the integration and sustained viability of transit services.*

2. *The minimum density target applicable to the **designated greenfield area** of each upper- and single-tier municipality is as follows:*
 - b) *The City of Kawartha Lakes and the **Counties** of Brant, **Dufferin**, Haldimand, Northumberland, Peterborough, Simcoe and Wellington will plan to achieve within the horizon of this Plan a minimum density target that is not less than 40 residents and jobs combined per hectare."*

The proposal for the subject property will assist the Town in meeting the Place to Grow 2019 provisions by building a more compact greenfield community to reduce the rate at which land is consumed. The proposal is at a transit supportive density with a walkable street configuration. The proposal is consistent with the Growth Plan's approach to development and city-building that focuses on making better use of existing infrastructure and public service facilities, and less on continuously expanding the urban area.

The Town of Grand Valley has an approved minimum alternative density target of 44 residents and jobs per hectare for the Greenfield Area. The subject property is located within the Greenfield Area.

Places to Grow Density Calculation

Residents

153 single detached lots and 57 townhouses.

CN Watson Development Charge Background Study
 Low density 3.15 persons per unit (singles and semis)
 Medium density 2.74 persons per unit (townhouses)

153 singles x 3.15 ppu	=	482 people
<u>57 townhouses x 2.74 ppu</u>	=	<u>157 people</u>
210 total units		639 people

Jobs

CN Watson Revised Option B Growth Analysis May 5, 2011 page 2-4, Table 2-2b

79 "work at home" jobs for 600 housing units = 0.13 jobs per unit.

210 units x 0.13 = **28 jobs**

Density

639 people + 28 jobs = 667 people and jobs

14.283 hectares (total 15.095 ha – 0.812 ha open space)

46.7 residents and jobs per hectare.

The Places to Grow density target is a minimum of 44 residents and jobs per hectare. The proposed density of the subdivision is 46.7 people and jobs per hectare which meets the minimum Places to Grow density target for the Town of Grand Valley.

4.3 PROVINCIAL POLICY STATEMENT 2020

The Provincial Policy Statement, 2020 was approved by the Lieutenant Governor in Council, Order in Council No. 229/2020. This Provincial Policy Statement was issued under section 3 of the Planning Act and came into effect May 1, 2020. It replaces the Provincial Policy Statement issued April 30, 2014.

Figure 6 - Provincial Policy Statement Analysis

PPS 2020 excerpt	Policy Analysis
1.1 Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns	
1.1.1 Healthy, liveable and safe communities are sustained by: b) accommodating an appropriate affordable and market-based range and mix of residential types (including single-detached, additional residential	A range and mix of housing types are provided by 11.6m, 12.8 m and 14.32 m wide single detached lots as well as cluster townhouse units. An open space block is proposed abutting the

<p>units, multi-unit housing, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;</p>	<p>existing rail trail located to the south of the subject property.</p>
<p>1.1.3 Settlement Areas</p>	
<p>1.1.3.1 <i>Settlement areas</i> shall be the focus of growth and development.</p>	<p>The proposal is located within a settlement area.</p>
<p>1.1.3.2 a) efficiently use land and resources; b) are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion; e) support active transportation;</p>	<p>The subdivision proposes a density which is appropriate for, and efficiently uses, the municipal infrastructure available. The sidewalks and trails connection to the open space block support active transportation.</p>
<p>1.4 Housing</p>	
<p>1.4.1 Planning authorities shall provide for an appropriate range and mix of housing options and densities to meet projected market-based and affordable housing needs of current and future residents of the regional market area by:</p> <p>d) promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed;</p> <p>f) establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.</p>	<p>The proposal will assist the Town in maintaining the projected requirements of the current and future residents. The proposal implements the established development standards of the Town's zoning by-law.</p>
<p>1.5 Public Spaces, Recreation, Parks, Trails and Open Space</p>	
<p>1.5.1 Healthy, active communities should be promoted by:</p> <p>a) planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate <i>active transportation</i> and community connectivity;</p> <p>b) planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for <i>recreation</i>, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources;</p>	<p>The subdivision has been planned to provide safe public streets, meet the needs of pedestrians, foster social interaction and facilitate <i>active transportation</i> and community connectivity.</p>
<p>1.6.6 Sewage, Water and Stormwater</p>	
<p>1.6.6.2 Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the</p>	<p>The subdivision is proposed to be developed on full municipal services.</p>

environment and minimize potential risks to human health and safety. Within settlement areas with existing municipal sewage services and municipal water services, intensification and redevelopment shall be promoted wherever feasible to optimize the use of the services.	
2.1 Natural Heritage	
2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.	The Scoped Environmental Impact Study prepared by Natural Resource Solutions demonstrates that there will be no negative impacts on the natural features or on their ecological functions.
2.6 Cultural Heritage and Archaeology	
2.6.2 <i>Development and site alteration</i> shall not be permitted on lands containing <i>archaeological resources</i> or <i>areas of archaeological potential</i> unless <i>significant archaeological resources</i> have been <i>conserved</i> .	The Archaeological Survey prepared by Golder and Associates and Amick have confirmed that there are no archaeological resources present on the subject property.

Development applications are required to be consistent with the Provincial Policy Statement 2020 (PPS). The proposed Zone Change and Draft Plan of Subdivision will provide a supply of serviced residential lots. The proposed residential development is within walking distance of the downtown and will support the economic health of downtown Grand Valley. The subject property is located within a settlement area and is proposed to be developed with full municipal services. The proposed Draft Plan of Subdivision and Zone Change applications are consistent with the Provincial Policy Statement 2020.

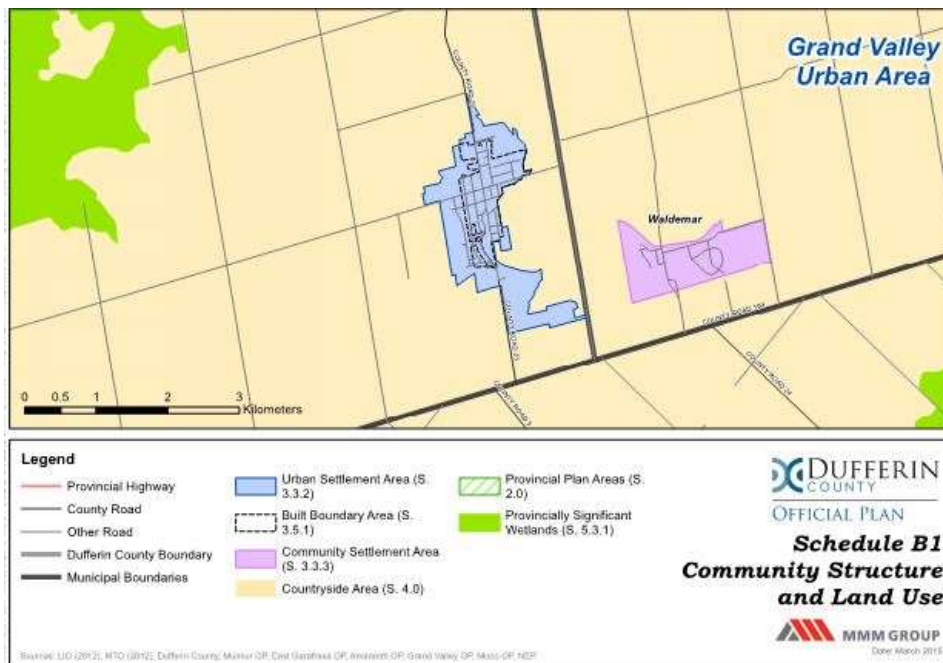
4.4 COUNTY OF DUFFERIN OFFICIAL PLAN

The Official Plan for the County of Dufferin was approved by the Ministry of Municipal Affairs on March 25, 2015, and is now in effect with the exception of Section 5.4, Schedule D and Appendix 2, which are under appeal.

Schedule B1 of the County of Dufferin Official Plan designates the subject property as an “Urban Settlement Area”. Section 3.3.2 states that,

“The urban settlement areas function as the primary centres for growth, development and urban activities. Urban settlement areas will be the focus of residential, commercial, industrial, institutional, cultural recreational and open space uses.”

Figure 7 - County of Dufferin Official Plan



Excerpts from the County of Dufferin Official Plan:

“3.3.2 Urban Settlement Areas

The urban settlement areas function as the primary centres for growth, development and urban activities. Urban settlement areas will be the focus of residential, commercial, industrial, institutional, cultural recreational and open space uses.

It is the policy of the County that:

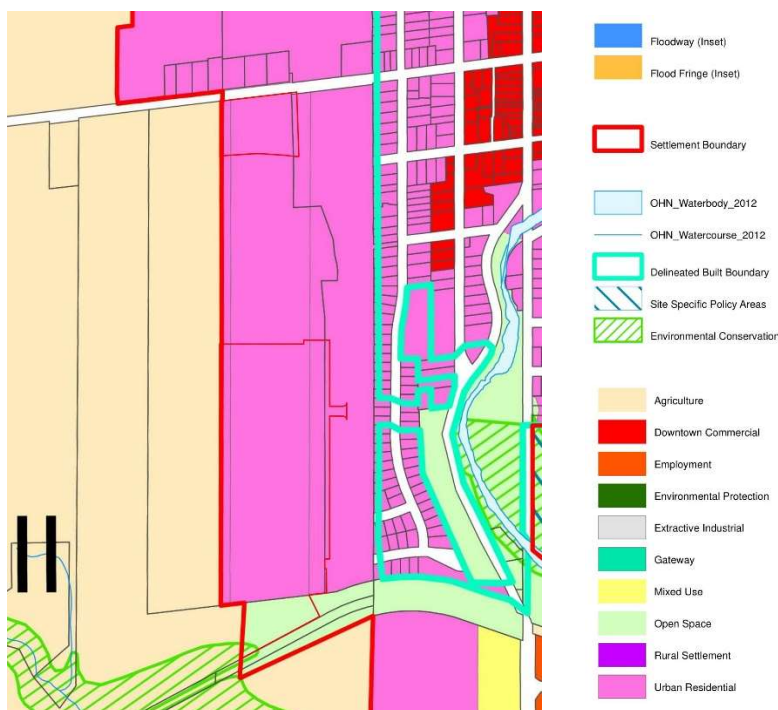
- a) *Urban settlement areas and their boundaries are identified on **Schedule B**, and include the Town of Orangeville, Town of Shelburne and the urban area of Grand Valley.*
- b) *Urban settlement areas will be the focus of growth and will accommodate a broad range of uses. The range of permitted uses and associated land use policies will be established in the local municipal official plans and in accordance with the policies of this Plan.*
- c) *Urban settlement areas will have municipal sewage services, municipal water services, and appropriate stormwater management services, and provide a range of land uses and densities, a mix of housing types including affordable housing options and alternative housing forms for special needs groups, and be designed to be walkable communities with opportunities for public transit.*
- h) *Cost effective development patterns and those which minimize land consumption and reduce servicing costs are encouraged. Land use patterns which may cause environmental, heritage conservation of public health and safety concerns will be avoided”*

The proposed Draft Plan of Subdivision and Zone Change applications to implement residential development providing a mix of housing types and densities on full municipal services and designed to be a walkable community are in conformity with the “Urban Settlement Area” policies of the County of Dufferin Official Plan.

4.5 TOWN OF GRAND VALLEY OFFICIAL PLAN

On June 16, 2015 Ontario Municipal Board approved the Town of Grand Valley Official Plan which included the proposed Phase 3 Mayberry Hill Subdivision within the urban area. Schedule A-2 of the Grand Valley Official Plan. Schedule A-2 of the Grand Valley Official Plan designates the subject property as “Urban Residential” and “Open Space”.

Figure 8 - Town of Grand Valley Official Plan



Town of Grand Valley
Official Plan
Schedule A-2
Land Use (Village)

Excerpts from the Town of Grand Valley Official Plan:

“5.3 URBAN RESIDENTIAL

5.3.1 Identification

The Urban Residential designation applies to lands with a wide variety of housing types. These dwelling units are located within the Urban Area, and are generally connected to full municipal water and wastewater systems.

5.3.2 Objectives

The objective of the Urban Residential designation is:

- a) *to provide for a range of housing forms in order to meet the varied needs of existing and future residents;*
- b) *to ensure the rate of growth is appropriate for the settlement area;*
- c) *to encourage urban design that is in keeping with the character of the existing village; and,*
- d) *to create a compact urban area that can be serviced by municipal water and wastewater systems.*

5.3.3 Permitted Uses

Land in the Urban Residential designation may be used for the following:

- a) *all forms of residential development, including the provision of housing which is affordable to low and moderate income households;*
- b) *assisted and special needs housing, including group homes, nursing homes and homes for the aged;*
- c) *home occupations;*
- d) *institutional uses servicing the immediate community including public schools and places of worship;*
- e) *trails, parks, public open space; and*
- f) *small-scale retail uses such as, convenience stores, service commercial and personal service uses intended to meet the day-to-day needs of residents.*

5.3.4 Development Policies

All new development within the Urban Residential designation shall be on municipal water and wastewater systems, in accordance with section 6 of this plan.

5.3.5 Zoning

Permitted uses and different housing forms and densities will be distinguished through the Zoning By-law. Zone provisions will establish lot sizes and setbacks to ensure compatibility, built form and an acceptable density.”

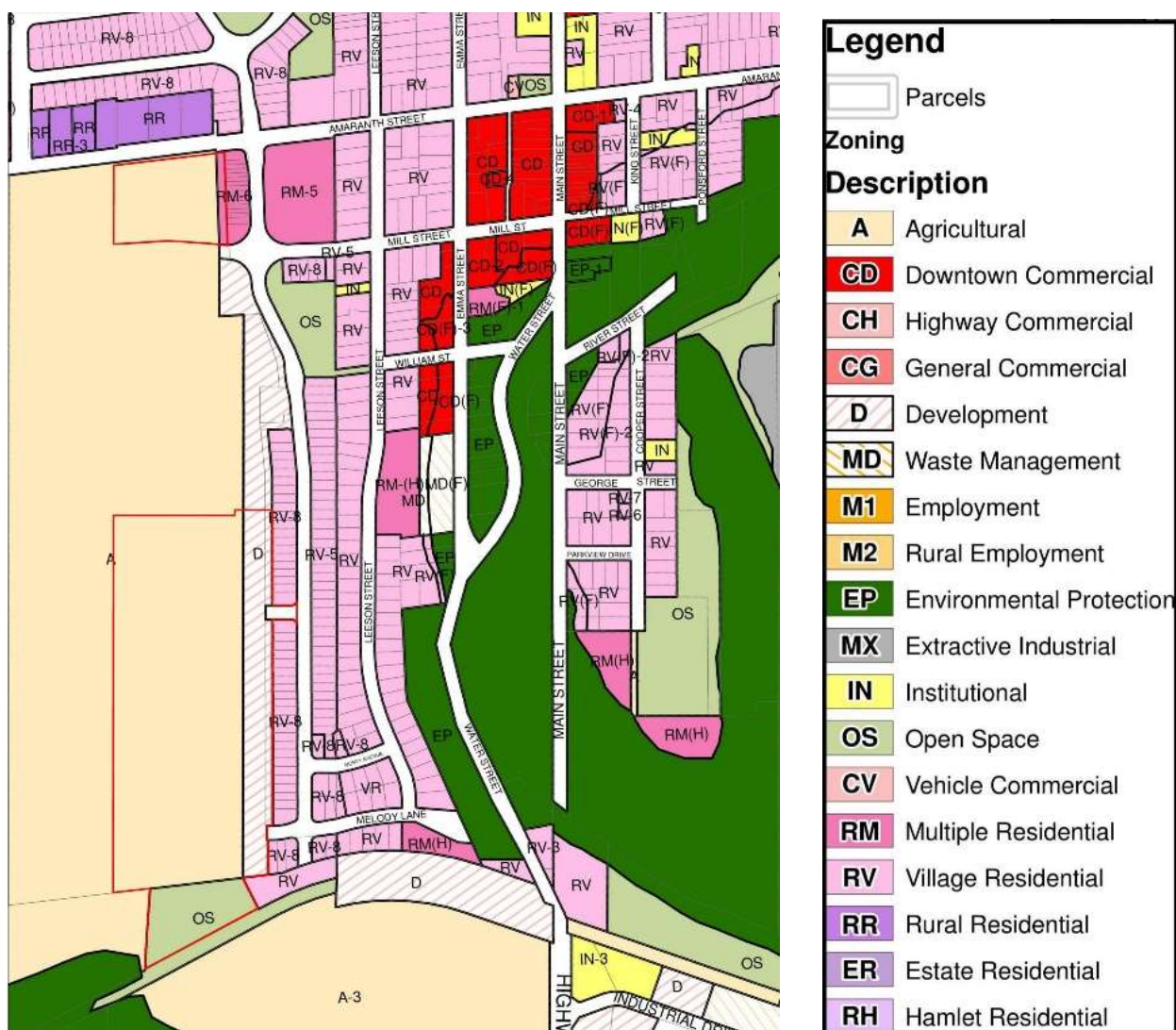
The proposed draft plan of subdivision proposes a modified grid pattern with a housing mix and form which is in keeping with the character of the existing village. Trails are proposed within the Open Space Block connection with the rail trail. The Stormwater Block also provides an opportunity to provide trails which connect to the existing rail trail located to the south of the property. The parkland dedication for this subdivision has been provided by Thomasfield Homes through a previous agreement with the Town which provided extensive lands located outside the urban boundary. The proposed development will proceed on municipal water and wastewater

systems in accordance with the Official Plan. The proposed zone change application will establish lot sizes and setbacks to ensure compatibility of the proposed development and an acceptable built form and density in conformity with the Official Plan.

4.6 TOWN OF GRAND VALLEY ZONING BY-LAW

The subject property is within the “Agricultural A Zone” and “Development D Zone” of Zoning By-law No. 09-10. The Development Zone essentially permits existing uses and agricultural uses. A zone change has been submitted to permit the proposed residential development. The requested zoning is outlined in section 2 of this Planning Report.

Figure 9 - Existing Zoning



5 SUMMARY OF REPORTS

5.1 FUNCTIONAL SERVICING REPORT

The Functional Servicing Report dated March 2020 prepared by GM Blue Plan concludes that,

- “1. *The local storm sewer system will be designed to convey the flow rates from the 5-year design storm event. Runoff from the southern portion of the site will be conveyed to the proposed stormwater management facility, ultimately discharging into Boyne Creek. Runoff from an eastern portion of the site will be conveyed to the Melody Lane right-of-way, ultimately discharging to Grand River via an existing storm sewer. Runoff from a northern portion of the site will be conveyed to the proposed super-pipe in the Amaranth Street right-of-way, ultimately discharging to Grand River via an existing storm sewer.*
2. *A 200 mm diameter watermain on all streets will supply the proposed development. Hydrants will be placed at a minimum distance of 100m to provide fire protection.*
3. *Sanitary servicing for the development will be provided by extending a 200 mm diameter sanitary sewer on all internal streets which will connect to the existing stubs on Street F and Melody Lane.”*

5.2 HYDROGEOLOGICAL REPORT

The Hydrogeological Report prepared by GM Blue Plan dated March 2020 is summarized below:

“A hydrogeological study has been undertaken to support the proposed development of a residential subdivision on a Site forming Parts of Lots 29 and 30, Concession 2 of the Geographic Township of East Luther, Ontario. The hydrogeological system and regulatory setting have been characterized and a hydrogeological impact assessment has been completed. A summary of findings is as follows:

- *The Site lies in the western portion of the settlement area of Grand Valley and varies in elevation from about 480 masl (central part) to 470 masl (southern part).*
- *Groundwater flow in the horizontal plane has been interpreted to be generally westward in the western part of the Site and southward in the southern part of the Site.*
- *Most of the Site area proposed to be developed with houses is identified as having a high runoff to recharge ratio, mainly due to the topography and the fine-textured surficial soils. This is in contrast to the southernmost part of the Site (just north of the railway) which has a low runoff to recharge ratio by virtue of its flat overall slope and hummocky topography.*
- *A small portion of the northern part of the Site is designated Wellhead Protection Area “D”, Vulnerability 2.*
- *The geology of the Site consists of a thick deposit of fine-textured (i.e. silt) till overlying bedrock of the Guelph Formation. The till unit features occasional coarse (i.e. silty sand and gravel) seams and/or pockets.*
- *Groundwater levels on-Site were observed to rise as high as 0.2 m below ground surface (mbgs) at BH-07-15, but at BH-04-15 it remained deeper than 4.0 mbgs.*
- *Laboratory testing for groundwater quality indicated that groundwater on-Site is typical of the natural geological conditions encountered at the Site.*
- *A scoped door-to-door well survey was conducted but no response was received from the residence in question. • A review of Source Protection Policies was conducted, and no*

“Significant” drinking water threats were identified relevant to the land use in the context of the policy areas in place at the Site. No Risk Management Plans are expected to be required.

- *The stormwater management design should include provisions that will mitigate water quality and water quantity impacts to the wetland and floodplain areas downgradient (i.e. in the southernmost portion of the Site). The stormwater management block should be designed and constructed in such a way as to preserve the recharge functionality of the wetland area in the southern part of the Site*
- *To detect potential groundwater quality or quantity impacts, it is recommended that a well monitoring program be undertaken at 133181 28-29th Side Road East on the condition that the resident/well owner consents to join the program and that the property is using an overburden well.*
- *Construction dewatering is expected to exceed 50,000 L/d and an EASR water-taking approval will be required from the MECP.*
- *Foundation drainage is expected to provide effective protection against groundwater seepage or moisture ingress to basements where till soils predominate. However, where sand and gravel seams are encountered, waterproofing may be advantageous to reduce risk and reduce reliance on sump pumps.*

Regarding the hydrogeological conditions and impact assessment of the Site, GMBP make the following recommendations for consideration in design and construction of the development:

- *To support construction dewatering, a water-taking approval is recommended to be obtained in the form of a registration via the Environmental Activity and Sector Registry (EASR).*
- *All monitoring wells and piezometers on-Site are recommended to be decommissioned prior to construction unless they are identified to be of use in future work related to an Environmental Impact Study or ecological monitoring.*
- *Stormwater management facilities should be designed and constructed in such a way as to preserve the recharge functionality of the wetland area in the southern part of the Site. Stormwater quality and quantity controls should be incorporated into the stormwater management design to mitigate against potential impacts to the wetland area. This may include, but is not limited to, providing erosion control features and flow dispersion structures to minimize channelization and drainage by runoff and thus encourage recharge in the area.*
- *Waterproofing (per Ontario Building Code) may be required where excavations for basements intersect sand and gravel layers (or seams within the till) below the seasonal high groundwater level.*
- *To detect potential groundwater quality or quantity impacts, it is recommended that a well monitoring program be undertaken at 133181 28-29th Side Road East on the condition that the resident/well owner consents to join the program and that the property is using an overburden well.”*

5.3 ENVIRONMENTAL IMPACT STUDY

An Environmental Impact Study was prepared by Natural Resource Solutions Inc. dated March 2020 which concluded that;

*“This report characterizes the natural heritage features within and adjacent to the subject property and assesses potential impacts arising from the proposed residential development. Additionally, this report addresses potential impacts within the subject property relating to the construction of a collector road as shown in the **Town of Grand Valley Transportation Master Plan (2017a)**. Mitigation measures to reduce impacts associated with the development are summarized, as well as recommendations for naturalization plantings and monitoring.*

NRSI was retained by Thomasfield Homes to prepare a Scoped EIS for the Mayberry Hill Phase 3B subdivision development in Grand Valley, Ontario. Natural features within the property are limited to an area of cultural meadow and wetland in the southern extent of the property. This report summarizes the natural heritage features that are present, their significance, and provides an assessment of the impacts associated with the proposed development and collector road. Mitigation and enhancement measures are identified to minimize the impacts and protect sensitive natural features.

Surveys conducted in 2019 did not identify any SAR or SCC within the subject property. Two grassland bird species; Bobolink and Eastern Meadowlark have been observed in the study area, on adjacent properties. The cultural meadow and wetland within the property provide suitable habitat for these species; however, no signs of foraging or nesting were documented. In support of other development projects, Thomasfield is currently managing a hayfield to the west of the subject property as grassland bird habitat where Bobolink have been confirmed to be utilizing the managed habitat.

Although several SWH types were identified through a screening exercise conducted as part of the TOR (Appendix I), none of these habitats were confirmed to be present during the 2019 surveys.

Direct impacts with the project focus on the removal of wetland (and a portion of cultural meadow) to allow for the construction of a collector road linking the Mayberry development with the proposed Corseed subdivision and Water Street to the southeast of the rail trail corridor. This will require extensive grading and vegetation removal.

Potential indirect impacts associated with the development include alterations to the wetland hydrology as an existing erosion control pond which directs surface water from the project footprint into the wetland will be removed and a SWM feature constructed. There is also potential for temporary disturbance to wildlife during construction.

The development may have induced impacts to the retained natural features, including the establishment of non-native invasive species during construction or through yard waste dumping from residents. The open and seasonally dry nature of the wetland may result in the creation of informal trails and dumping of garbage.

In order to mitigate these impacts, it is recommended that the southern extent of grading (the collector road and western SWM pond) be delineated with paige wire fence with keyed-in Erosion and Sediment Control (ESC) fence affixed. The ESC fence should also extend at least 100m up the western boundary of the Phase 3B lands to prevent wildlife entry into the work site. An Erosion and Sediment Control Plan should be developed by the project engineer at the detailed design or site plan stage. The ESC fence will act to prevent machinery encroachment into the wetland and limit the potential for sediment and on-site materials to reach the retained natural feature.

As construction of the SWM features may encourage wildlife movement across the collector road, the erection of wildlife crossing signs where the collector road bisects the SWM ponds should be considered. A pedestrian crossing with curb cuts will also alleviate the stranding of wildlife on the road due to curbs.

A robust buffer planting of native species should be installed along the southern edge of the collector road. The dense planting of trees and shrubs will serve as a screen to limit light, noise and human access from impacting the retained wetland. As these plantings will occur within the retained wetland, low-impact machinery or hand-planting are recommended. A planting plan, which utilizes native tree and shrub species known to occur in the vicinity of Grand Valley, should be developed for the SWM feature and any landscaping trees should consider the use of native species. The establishment of the buffer planting should be monitored for a period of 2 years following installation with a target of 100% herbaceous groundcover at the end of the first year, and a minimum survival of 70% of planted woody species at the end of the second year and subject to replacement, as necessary.

The impact of vegetation clearing on birds protected under the MBCA can be minimized by completing site grading for the collector road outside of a late March to late August timing window when birds will be nesting.

In order to prevent the establishment of aggressive invasive species like Common Reed, all heavy machinery should arrive on site clean and free of plant materials and mud. All areas of bare soil within the SWM pond and adjacent to the collector road should be seeded with a nurse crop to discourage invasive species establishment and reduce the potential for soil erosion. This seeding should occur where the bare soils are inactive for greater than 30 days or within 30 days of completion of final grading.

The provided recommendations are intended to minimize the direct, indirect, induced and cumulative impacts that may arise during the proposed development and to ensure that mitigation measures are effective.”

5.4 ARCHAEOLOGICAL ASSESSMENT

The Stages 1, 2 and 3 archaeological assessments were conducted for the entire Taylor property by Archaeologix, now Golder and Associates, in 2008. The Taylor property includes Mayberry Hill Phase 1, the subject property and additional lands located outside the urban boundary. The Ministry of Culture clearance letter has been received for the entire Taylor property.

In addition, the south portion of the property has had a Stage 1 and 2 archaeological assessment prepared by Amick Consultants Limited dated March 27, 2020.

6 CONCLUSION

Thomasfield Homes Limited is the owner of the property legally described as Part of Lots 29 and 30, Concessions 2 (geographic Township of East Luther) formerly the Township of East Luther Grand Valley, Town of Grand Valley in the County of Dufferin. The subject property has an area of 15.095 hectares.

The proposed Draft Plan of Subdivision has been evaluated and has had regard to section 51(24) of the Planning Act. The Draft Plan of Subdivision and Zone Change have been evaluated based on the Places to Grow 2019 density target approved for the Town of Grand Valley. The proposed development applications are consistent with the Provincial Policy Statement 2020 (PPS). The proposed Draft Plan of Subdivision and Zone Change applications are in conformity with the County of Dufferin and the Grand Valley Official Plans.

This report has been respectfully submitted by,

[Original Report Signed and Sealed]

Astrid Clos, MCIP, RPP

April 6, 2020

Date