Enfield Secondary Plan

Phase 1 Report

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Prepared for

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1.0 Introduction

1.1 — Project Overview

The Municipality of East Hants has initiated the Enfield Secondary Planning Strategy to better understand how future growth could be accommodated in the lands northwest of Highway 102 within the community of Enfield. The study is focused on the Grand Lake/ Horne Settlement Growth Reserve Area and nearby lands that may have long-term potential to support new residential, commercial, employment, open space, and community uses.

The Municipality has continued to experience strong growth, particularly in the South Corridor communities of Enfield, Elmsdale, and Lantz. These communities benefit from highway access, proximity to Halifax Stanfield International Airport, access to municipal water and wastewater infrastructure, and an established pattern of residential and commercial development. As available serviced land becomes more limited, the Municipality is considering where future growth can be directed in a way that makes efficient use of infrastructure, supports complete communities, and avoids areas where development could both impact sensitive environmental features and be prone to risk of damage through environmental conditions.

The Enfield study area is located near existing development, transportation corridors, and municipal services. However, the area also contains a range of natural and physical conditions that must be understood before more detailed planning can occur.

1.2 — Phase 1 Overview

Phase 1 of the Enfield Secondary Planning Strategy is intended to provide an initial understanding of the study area's development potential before more detailed planning, engagement, and design work is undertaken. This phase focuses on desktop analysis and mapping to identify the various factors that may influence future development. The intent of Phase 1 is to take the analysis to a point where it can be determined whether the study area contains constraints that are significant enough to materially affect the next phase of work.

The findings from Phase 1 will help determine whether it is feasible to continue to Phase 2, while also assessing the current study area boundary to determine if it is appropriate and whether any lands should be added, removed, or flagged for further review.

1.3 — Scope and Limitations

This report provides a high-level assessment of the study area's existing conditions, environmental and physical constraints, development suitability, and potential boundary considerations. The analysis is entirely desktop-based, utilizing existing GIS mapping, available municipal and provincial datasets, and a preliminary interpretation of land use, parcel fabric, transportation access, and servicing considerations.

The findings in this report are intended to support early planning decisions and should not be interpreted as a final determination of development potential, regulatory approval, or infrastructure capacity. The constraint mapping and suitability analysis provide a comparative planning tool that helps identify patterns across the study area; they do not replace detailed site-specific studies, engineering design, environmental assessments, or regulatory review.

No fieldwork was completed as part of Phase 1. Wetlands, watercourses, drainage features, and other environmental conditions identified in this report are based on available desktop information and should be verified in the field at a later stage. Similarly, the slope, flood risk, and drainage analysis should be understood as a planning-level assessment rather than a substitute for detailed grading, stormwater, geotechnical, or flood hazard studies.

The transportation and servicing considerations included in this report are preliminary and provided as context to support the Phase 1 stage gate decision. These matters are expected to be explored in greater detail in Phase 2, should the Municipality proceed with the next stage of the Secondary Planning Strategy.



2.0 Background

2.1 — Municipal Growth Context

East Hants is a key growth area within central Nova Scotia, supported by its location near Halifax Regional Municipality, Halifax Stanfield International Airport, the provincial highway network, and the connections to communities between Truro and Halifax. Within the Municipality, much of the recent urban growth has been concentrated in the South Corridor communities of Enfield, Elmsdale, and Lantz. The Municipality's Official Community Plan establishes a growth management framework intended to direct urban development toward areas where services and infrastructure can be provided efficiently.

This framework distinguishes between Growth Management Areas, where urban development is intended to be focused in the near term, and Growth Reserve Areas, which identify lands that may be appropriate for future urban expansion when additional serviced land is required.

This approach is intended to support orderly development, reduce inefficient land consumption, and help the Municipality plan for the long-term costs and benefits of extending infrastructure.

As lands within established serviced areas are developed, the Municipality is considering how surrounding growth reserve lands can accommodate future growth in a way that is coordinated, financially responsible, and consistent with the broader vision of the Official Community Plan.

The Grand Lake/Horne Settlement Growth Reserve Area forms part of this long-term growth framework. Its location within Enfield, north of Highway 102 and near existing developed areas, makes it an important area to study before more detailed land use decisions are made.

Rather than focusing only on individual properties or short-term development interest, a secondary planning project considers how the area could function as part of the broader community over time.

Done well, secondary plans are effective tools for assessing the relationship between land use, infrastructure, mobility, environmental systems, and community design so that future planning decisions can support a more complete, resilient, and sustainable pattern of growth.



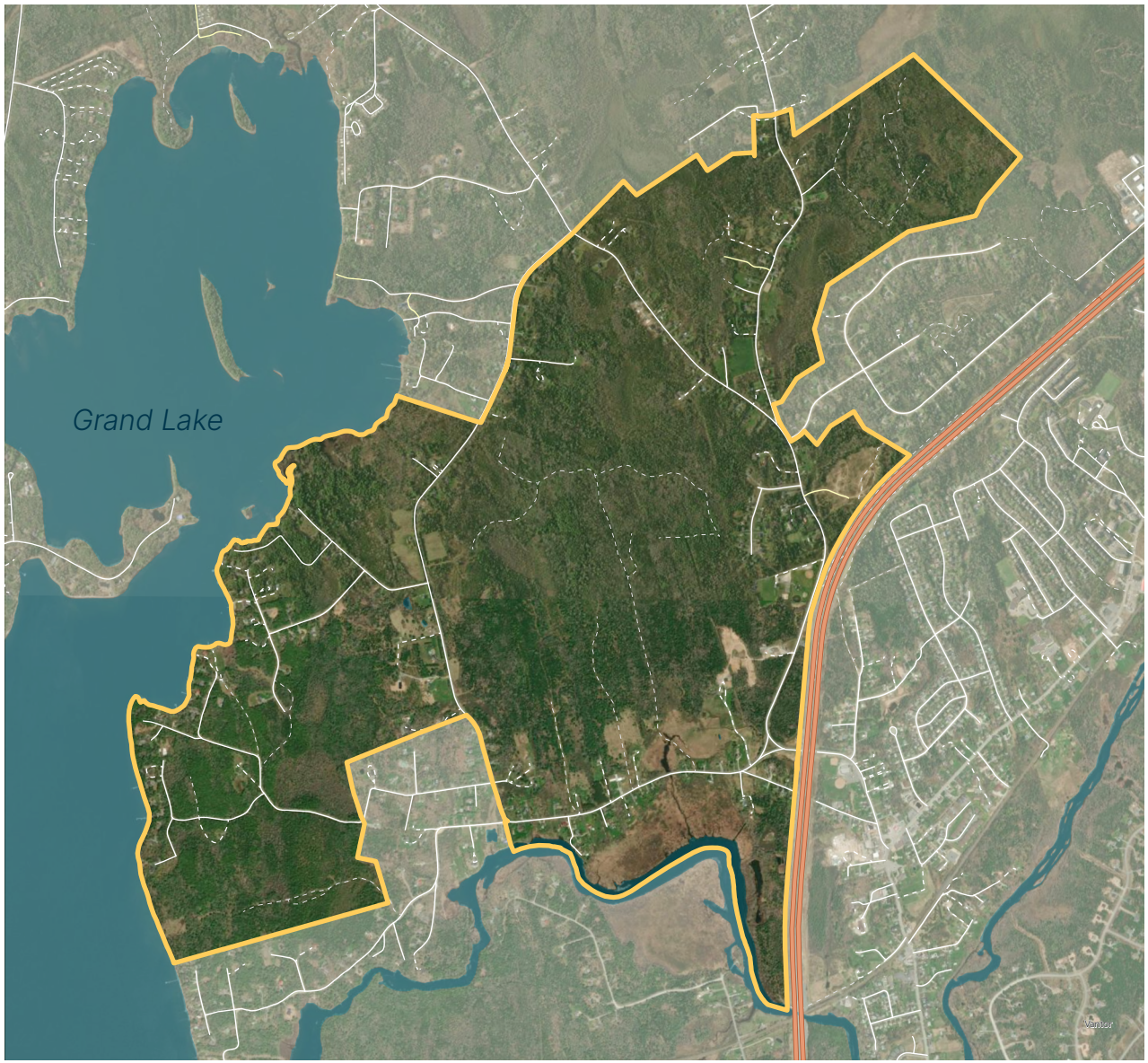
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2.2 — Study Area Description

The study area includes the Grand Lake/Horne Settlement Growth Reserve Area, as identified in the East Hants Official Community Plan, as well as additional lands to the east that were included to allow for a broader review of future growth potential, servicing opportunities, and boundary refinement.

It is approximately 724 hectares and is generally characterized by large undeveloped parcels, rural and low-density residential land uses, forested areas, wetlands, and watercourses. The study area is located northwest of Highway 102 and generally follows the highway corridor along its eastern edge.

The existing residential subdivision around Edmund Road and Whitney Maurice Drive is excluded from the study area, as is the large private road subdivision accessed from Arrowhead Drive. These exclusions reflect the project's focus on lands with broader future planning potential rather than established residential areas that are already subdivided and developed.



2.3 — Planning Policy Context

The Enfield Secondary Planning Strategy is being prepared within the broader policy framework of the East Hants Official Community Plan. The Official Community Plan is made up of the Municipal Planning Strategy, Land Use Bylaw, and Subdivision Bylaw. Together, these documents establish the Municipality's direction for growth, land use, infrastructure, environmental protection, transportation, subdivision, and development control.

The Official Community Plan places a strong emphasis on managing growth in a way that is compact, connected, fiscally responsible, and environmentally sustainable. Several of the Plan's community priorities are directly relevant to the Enfield Secondary Planning Strategy, including the development of parks and open space, pedestrian-friendly communities, healthy transportation networks, compact development, compatible mixed uses, protection of natural features, and a range of housing options appropriate to the form and intensity of each neighbourhood.

These directions provide an important foundation for evaluating whether and how the study area could support future growth.

The study area is primarily influenced by the Municipality's growth management framework. The Official Community Plan distinguishes between Growth Management Areas, where urban development is generally intended to be focused, and Growth Reserve Areas, which are identified as lands that may accommodate future urban growth when additional development land is required.

Growth Reserve Areas are not intended to function as immediate urban expansion areas; rather, they are intended to be protected from development patterns that could undermine future servicing, road connections, or comprehensive planning. This is particularly important in areas with large parcels, where premature subdivision or poorly coordinated access could make future municipal servicing and connected road networks more difficult.

The Grand Lake/Horne Settlement Growth Reserve Area is identified in the Municipal Planning Strategy. This designation establishes the long-term planning intent for the area, but does not on its own determine the timing, form, density, servicing approach, or final development pattern. Before lands within the Growth Reserve Area are urbanized, the Municipality must consider whether development can be supported by appropriate municipal services, transportation infrastructure, environmental protection, open space, and community facilities.

This policy context is a key rationale for this Phase 1 report.

The Municipal Planning Strategy also includes policies that allow Council to review and modify Growth Management Area and Growth Reserve Area boundaries when necessary. Any expansion, reduction, or creation of growth-related boundaries must be supported by a detailed assessment of municipal, financial, environmental, transportation, agricultural, infrastructure, servicing, recreation, open space, and development pattern considerations. This policy direction is directly relevant to the Enfield Secondary Planning Strategy, as one of the key purposes of Phase 1 is to determine whether the current study area boundary remains appropriate or should be refined before more detailed planning proceeds.

3.0 Environmental and Physical Constraints

3.1 — Overall Approach and Methodology

The environmental and physical constraints analysis was completed as a desktop-based land suitability assessment using ArcGIS Pro. The purpose of the analysis was to identify areas within the study area that are likely to be more or less constrained for future development based on available environmental, hydrologic, flood risk, and topographic information. The analysis is intended to support the Phase 1 review of the study area boundary and to identify areas where further field verification, technical study, or avoidance may be warranted before advancing to more detailed planning in Phase 2.

The methodology involved compiling relevant spatial datasets, standardizing them within a common GIS environment, and reviewing how different environmental and physical features overlap across the study area. The primary inputs included Wet Area Mapping, predictive wetland mapping, mapped flood risk areas, slope, open waterbodies, and related hydrologic features. Together, these datasets provide a planning-level understanding of where natural systems, drainage patterns, flood exposure, and terrain conditions may affect future development suitability.

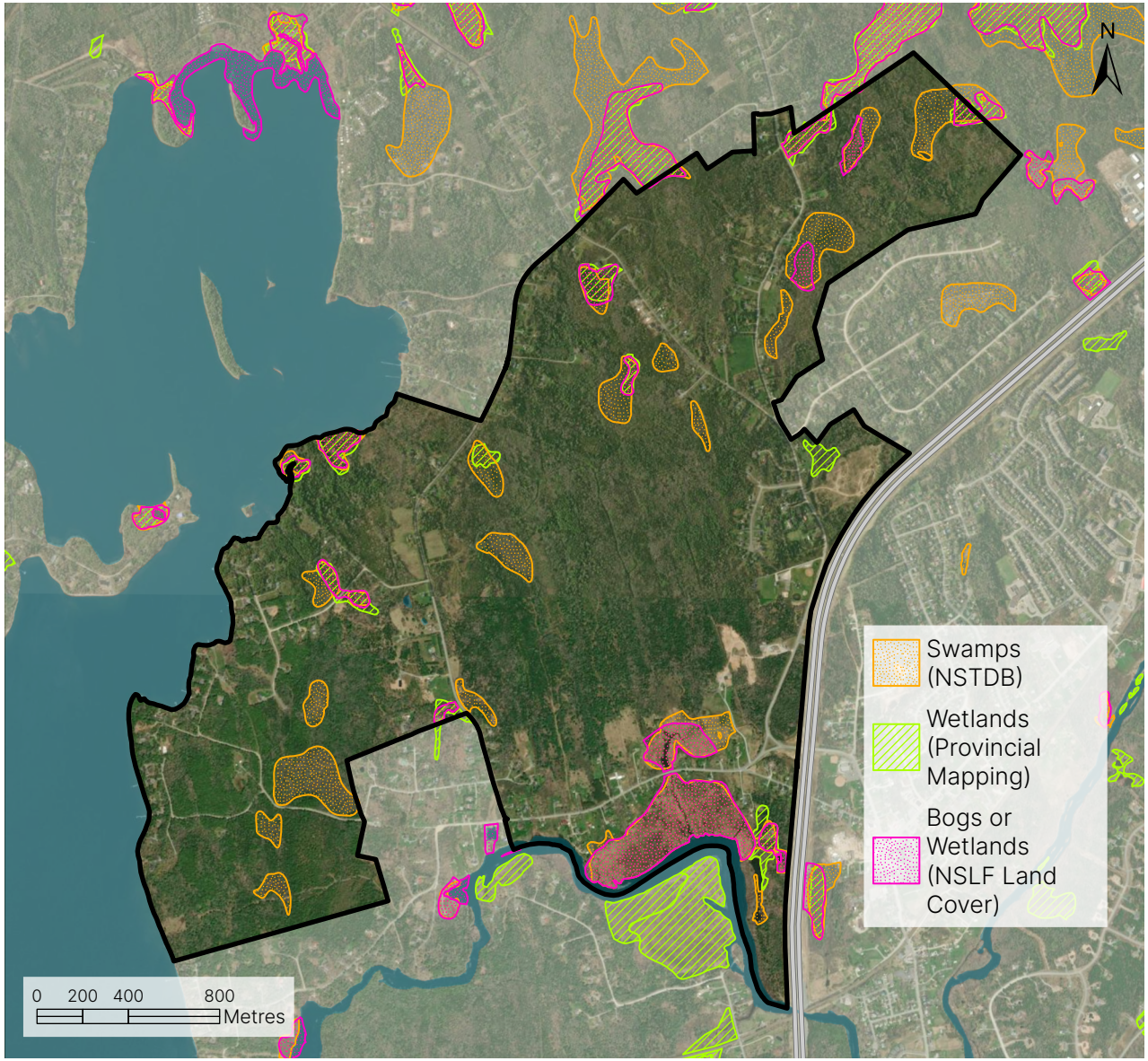
The analysis uses a relative constraint scoring approach to compare conditions across the study area. Individual constraint indicators were assigned values and combined into a composite constraint map, which is summarized in Section 3.6. The resulting mapping is not intended to determine whether development can or cannot occur on a specific property. Rather, it provides a decision-support tool to help identify lower-constraint areas, higher-constraint areas, and locations where future development planning should be supported by additional fieldwork, engineering review, or environmental study.

3.2 — Wetland and Watercourse Identification

Wetland and watercourse identification was completed through a desktop review of available provincial and municipal GIS datasets, supported by a review of available aerial imagery. The purpose of this work was to develop a consolidated understanding of known and potential wetlands, mapped watercourses, and related hydrologic features within the study area. This analysis is intended to support Phase 1 constraint mapping and should not be interpreted as a field-verified wetland delineation or a final determination of wetland boundaries.

Three primary wetland datasets were used to inform the wetland mapping. The first was the provincial wetland dataset available through provincial mapping tools such as the Provincial Landscape Viewer. The second was a provincial swamps dataset provided by East Hants, which appears to have been created by or for the Nova Scotia Topographic Database. The third was the “Bogs or Wetlands (NSLF Land Cover)” dataset, also provided by East Hants. Together, these layers provided the most relevant and reliable desktop wetland inputs available for the study area.

None of these datasets represent field-delineated wetlands. Rather, they are understood to be based on desktop interpretation, aerial imagery analysis, land cover classification, or predictive mapping. As a result, the mapped features should be treated as indicators of potential wetland presence rather than confirmed regulatory wetland boundaries. However, a review of available aerial imagery appeared to corroborate many of the wetland features identified in these datasets. In several locations, mapped wetland areas corresponded with visible changes in vegetation, low-lying terrain, drainage patterns, open water, or other characteristics commonly associated with wet or poorly drained areas. This provided additional



confidence in using these layers as inputs to the Phase 1 suitability analysis.

Mapped watercourses were also reviewed as part of the wetland and watercourse identification process. These features were used to understand the broader drainage network within the study area and to help interpret the relationship between wetlands, wet areas, and surface water systems. The mapped watercourses generally correspond with drainage corridors identified through Wet Area Mapping, which provides additional support for the interpretation of the site's hydrologic network. Watercourses were reviewed as important environmental features but were not assigned a separate constraint score in the composite suitability mapping, as their mapped locations were already closely reflected in the WAM drainage channels.

In addition to the three primary wetland datasets, East Hants provided a wetland-related dataset associated with a Wetland Vulnerability Study written by Strum Consulting for the Shubenacadie Watershed. This study assessed environmental stressors and their potential effects on wetlands. The underlying wetland layer used for that work appeared, when compared against the Phase 1 slope mapping, to correlate very closely with flat areas across the study area. In some cases, polygons from this layer appeared to match flat terrain almost one-for-one, including areas where no clear wetland indicators were visible in the aerial imagery. For this reason, the wetland features from this layer were not carried forward into the composite suitability mapping for the Enfield Secondary Planning Strategy.

This does not mean that the Wetland Vulnerability Study is not useful. The study provides important watershed-scale context regarding wetland vulnerability, environmental stressors, and the broader role of wetlands in flood mitigation and watershed function. However, for the purposes of this site-specific Phase 1 constraint analysis, the associated wetland layer was considered less appropriate for identifying potential wetland boundaries within the study area. Excluding this layer helped reduce the risk of overstating wetland constraints in areas where the mapped feature appeared to reflect broad topographic flatness rather than clear wetland conditions.

There was some overlap among the wetland layers that were retained for the analysis. This is expected, as the datasets likely rely on similar input information or interpretive methods, including aerial imagery, land cover patterns, terrain, and hydrologic indicators. To avoid double-counting overlapping wetland features and artificially increasing the constraint score in areas where multiple datasets identified the same general wetland, the selected wetland polygons were merged into a single consolidated wetland layer before being used in the constraint mapping.

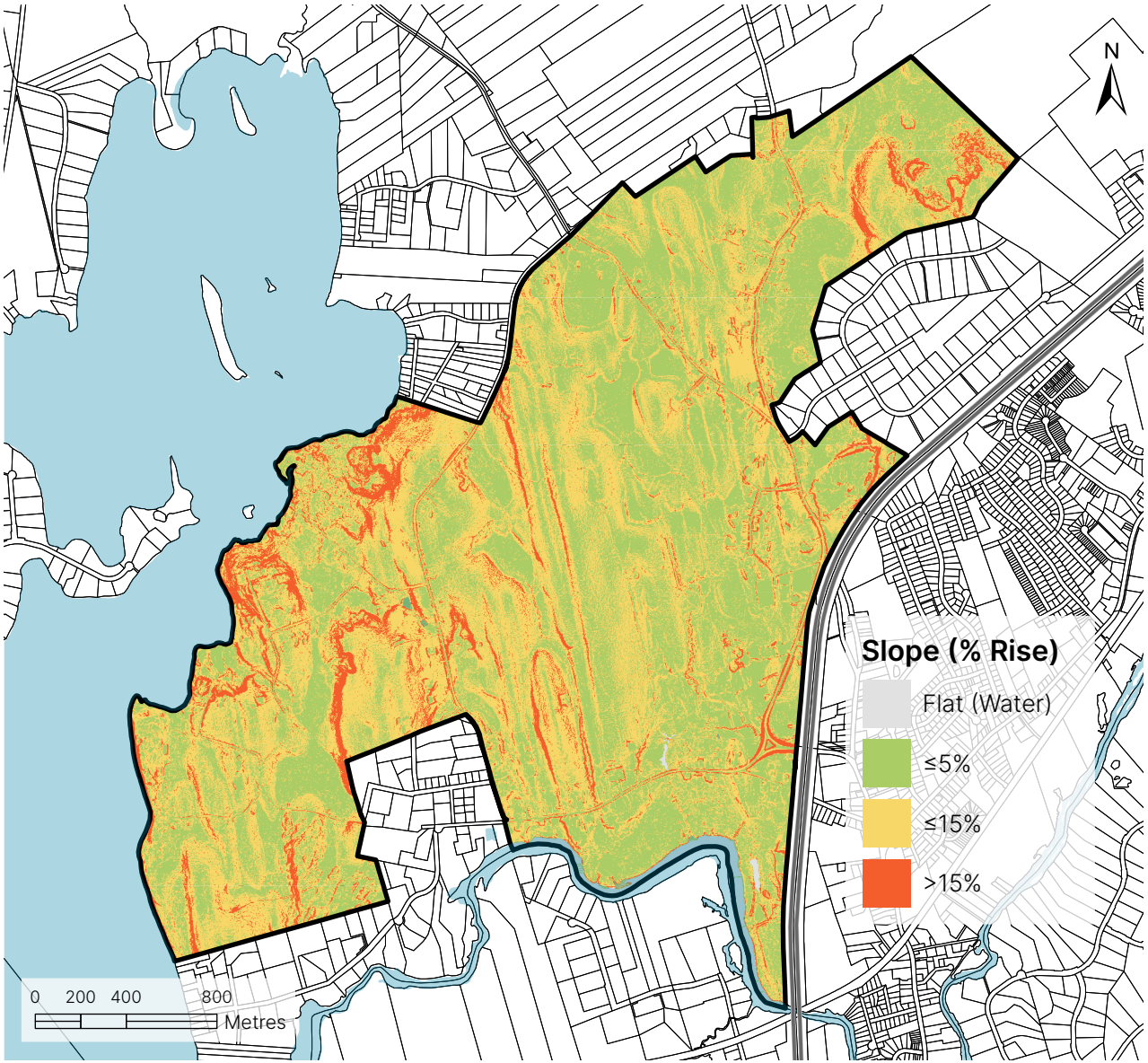
The resulting wetland and watercourse mapping provides a planning-level indication of where wetland features, wet ground, and drainage systems are likely to influence development suitability. Areas identified through the consolidated wetland layer should be treated as environmentally sensitive and should be subject to field verification before any development, infrastructure, or land alteration decisions are made. The findings also reinforce the need to consider wetlands, watercourses, Wet Area Mapping, slope, and flood risk together, as these features form an interconnected environmental system across the study area.

3.3 — Topography and Slope

Topography and slope are important considerations in determining the suitability of land for future development. Slope affects the feasibility and cost of construction, the design of roads and servicing infrastructure, the movement of stormwater across the landscape, and the potential for erosion or localized drainage issues. For the purposes of this analysis, slope was calculated across the study area using provincial LiDAR-derived elevation data and grouped into three classes: lands with slopes less than or equal to 5%, lands with slopes greater than 5% and less than or equal to 15%, and lands with slopes greater than 15%.

Lands with slopes of 5% or less are generally the most suitable for development from a grading, road design, and servicing perspective. These areas typically require less extensive site alteration and are better suited to a broader range of development forms. However, flat land is not automatically suitable for development. In some cases, very flat areas may correspond with poor drainage, wet soils, wetlands, or flood-prone conditions. As a result, slope must be interpreted alongside wetland mapping, Wet Area Mapping, watercourses, drainage patterns, and flood risk.

Lands with slopes greater than 5% and less than or equal to 15% present moderate development constraints. These areas may still be suitable for development, but they often require more careful grading, road alignment, lot layout, and stormwater management. Development on moderate slopes may increase construction costs and may require additional attention to drainage, retaining, erosion control, driveway grades, and the placement of buildings and infrastructure. These areas are generally not exclusionary, but they should be considered



more carefully during future concept planning and engineering review.

Lands with slopes greater than 15% present more significant development constraints. Steeper slopes can limit the feasibility of conventional road layouts, increase the amount of cut and fill required, create challenges for municipal servicing, and increase the risk of erosion or unstable drainage patterns if disturbed. These lands may still have some development potential in specific circumstances, but they are generally less suitable for intensive development and may be better suited for open space, natural corridors, visual buffers, or low-impact uses unless detailed engineering analysis demonstrates otherwise.

Within the study area, the slope analysis shows that the westernmost portions of the site contain the most rugged and variable topography. This is particularly evident along and near Grand Lake, where slopes are generally steeper and the landform is more constrained. These conditions may limit opportunities for conventional development and create challenges related to road access, grading, stormwater management, and protection of shoreline and lake-adjacent environments.

A significant ridge is also visible in the northeasternmost parcel of the study area. This parcel was not part of the original Growth Reserve Area but was included in the expanded study area for the Secondary Planning Strategy. The ridge creates a prominent topographic feature that may influence future road connections, servicing alignments, development layout, and viewshed considerations. Depending on the final development concept, portions of this ridge may be better suited for open space, natural area retention, or lower-intensity forms of development.

Several drumlins are also evident in the topography of the study area. These rounded landforms contribute to the varied terrain and create localized differences in slope, drainage, and development suitability. While drumlin slopes may not always preclude development, they can affect grading patterns, road alignments, and stormwater flow. Their presence reinforces the need to consider the study area as a varied landscape rather than as a uniform development block.

The flattest lands are generally concentrated in the central portion of the study area, bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. From a slope perspective, these lands appear to offer some of the most favourable conditions for future development consideration. Their relatively gentle terrain may support more efficient road layouts, servicing extensions, and development blocks, subject to the findings of the broader environmental, transportation, and servicing analysis.

Additional large flat areas are present in the southernmost portion of the study area and behind properties along Whitney Maurice Drive. However, these areas should be interpreted with caution. Although they appear favourable from a slope perspective, the wetland and Wet Area Mapping results indicate that many of these flat lands are likely wet or poorly drained. As a result, they may not be suitable for development despite having limited slope constraints. These areas demonstrate the importance of interpreting slope as one layer within the broader land suitability assessment, rather than as a standalone indicator of developable land.

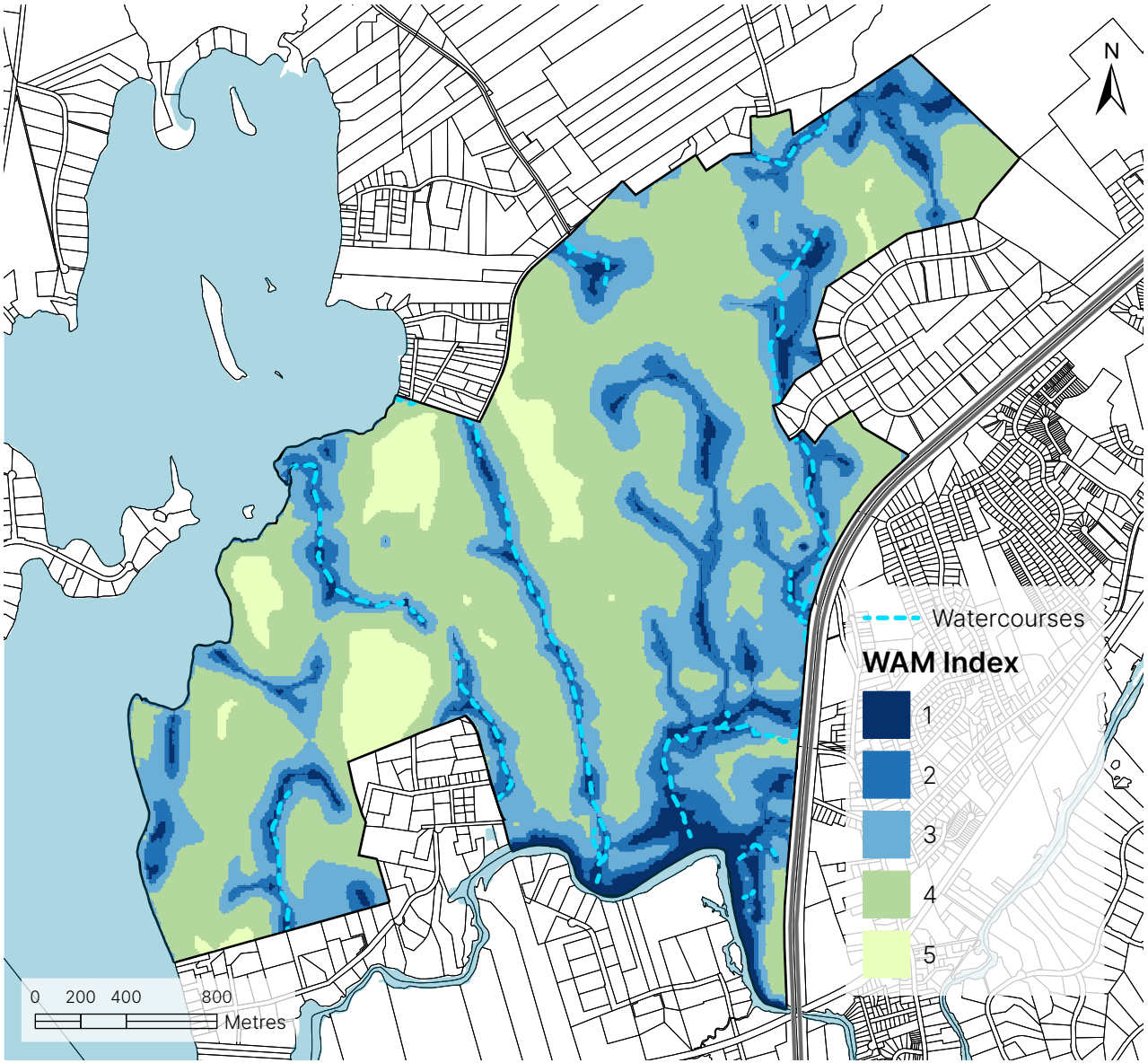
Overall, the slope analysis suggests that the study area contains a mix of highly suitable, moderately constrained, and significantly constrained terrain. The central portion of the study area appears to contain the most favourable slope conditions, while the western lake-adjacent lands, northeastern ridge, and localized drumlin features introduce greater development complexity. When combined with the wetland, drainage, flood risk, and Wet Area Mapping analysis, the slope findings will help identify areas where future development may be most feasible and areas where conservation, open space, or further technical review may be more appropriate.

3.4 — Drainage and Wet Area Mapping

Wet Area Mapping (WAM) was used to assess the likely distribution of wet areas and drainage corridors across the study area. WAM is a provincial dataset that predicts where water is likely to flow or accumulate based on terrain modelling, mapped surface water features, mapped wetlands, and related hydrologic inputs. The dataset is commonly understood as a cartographically derived depth-to-water index, meaning that it uses landscape position and topography to estimate relative wetness conditions across the land surface.

The WAM dataset is a useful planning tool, but it is not a substitute for field investigation. The mapped values do not necessarily represent the actual depth to groundwater or surface water at any specific location. Local conditions such as soil texture, bedrock, micro-topography, seasonal precipitation, drainage infrastructure, road construction, culverts, ditching, and other human disturbances may affect how water moves across a site in ways that are not fully captured by the model. As a result, WAM should be interpreted as a screening tool that helps identify areas requiring further review rather than as a final determination of wetland boundaries, drainage conditions, or development limits.

Despite these limitations, WAM provides a useful planning-level indication of broad drainage patterns. Areas identified as wet through the WAM model often correspond with natural drainage channels, low-lying terrain, wetlands, watercourses, and other hydrologically connected features. For this reason, WAM is particularly valuable at the secondary planning scale, where the objective is to understand the overall network of wet areas and drainage corridors that may influence land suitability, road layout, stormwater management, open space



planning, and future development potential.

The WAM mapping prepared for this report divides the study area into five classifications. A WAM value of 1 corresponds to a predicted depth-to-water of 0.00 to 0.10 metres; a value of 2 corresponds to 0.11 to 0.50 metres; a value of 3 corresponds to 0.51 to 2.00 metres; a value of 4 corresponds to 2.01 to 10.0 metres; and a value of 5 corresponds to greater than 10.0 metres. Lower WAM values therefore indicate areas where water is predicted to be closer to the surface and where development constraints are likely to be greater. Higher WAM values indicate drier areas where wetness-related constraints are generally expected to be lower.

On the accompanying map, WAM values of 4 and 5 are shown in green to indicate areas that are of lower concern from a wetness and drainage perspective. WAM values of 1, 2, and 3 are shown in progressively darker shades of blue to indicate areas where water is predicted to be closer to the surface and where development may require greater caution. This symbology helps distinguish between relatively dry upland areas and the wettest or most hydrologically connected portions of the study area.

Known watercourses are also overlaid on the WAM map using a dashed blue line. The mapping shows a strong relationship between mapped watercourses and WAM drainage channels. In general, the known watercourses correspond closely with areas classified as WAM values 1, 2, or 3. This provides confidence that the WAM dataset is effectively capturing the major drainage corridors within the study area and helps identify where additional unmapped or intermittent drainage features may be present.

The WAM mapping also identifies several drainage channels that are not necessarily captured as mapped watercourses. These are especially visible in the eastern half of the relatively flat area bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. Although portions of this central area appear favourable from a slope perspective, the WAM results indicate that drainage conditions vary across this landscape and that some areas may be wetter or more constrained than topography alone would suggest. These drainage channels should be considered carefully in any future concept planning, particularly with respect to road placement, stormwater routing, open space design, and development block configuration.

The least wet portions of the study area generally correspond to several upland plateaus in the western half of the site. These areas are shown primarily as WAM values 4 and 5 and may present fewer wetness-related constraints than the surrounding low-lying areas and drainage corridors. However, these areas should still be reviewed alongside the slope mapping, as some of the western uplands are associated with more rugged terrain and steeper slopes, particularly near Grand Lake.

The wettest areas are concentrated along the Shubenacadie River in the southern portion of the study area, where low-lying lands, mapped water features, flood risk, and WAM values collectively indicate significant hydrologic constraints. Additional wet areas are also visible behind properties along Whitney Maurice Drive and in other low-lying portions of the study area. In these locations, flat terrain should not be interpreted as an indicator of high development suitability, as the WAM and wetland mapping suggest that poor drainage or wet conditions may substantially limit development potential.

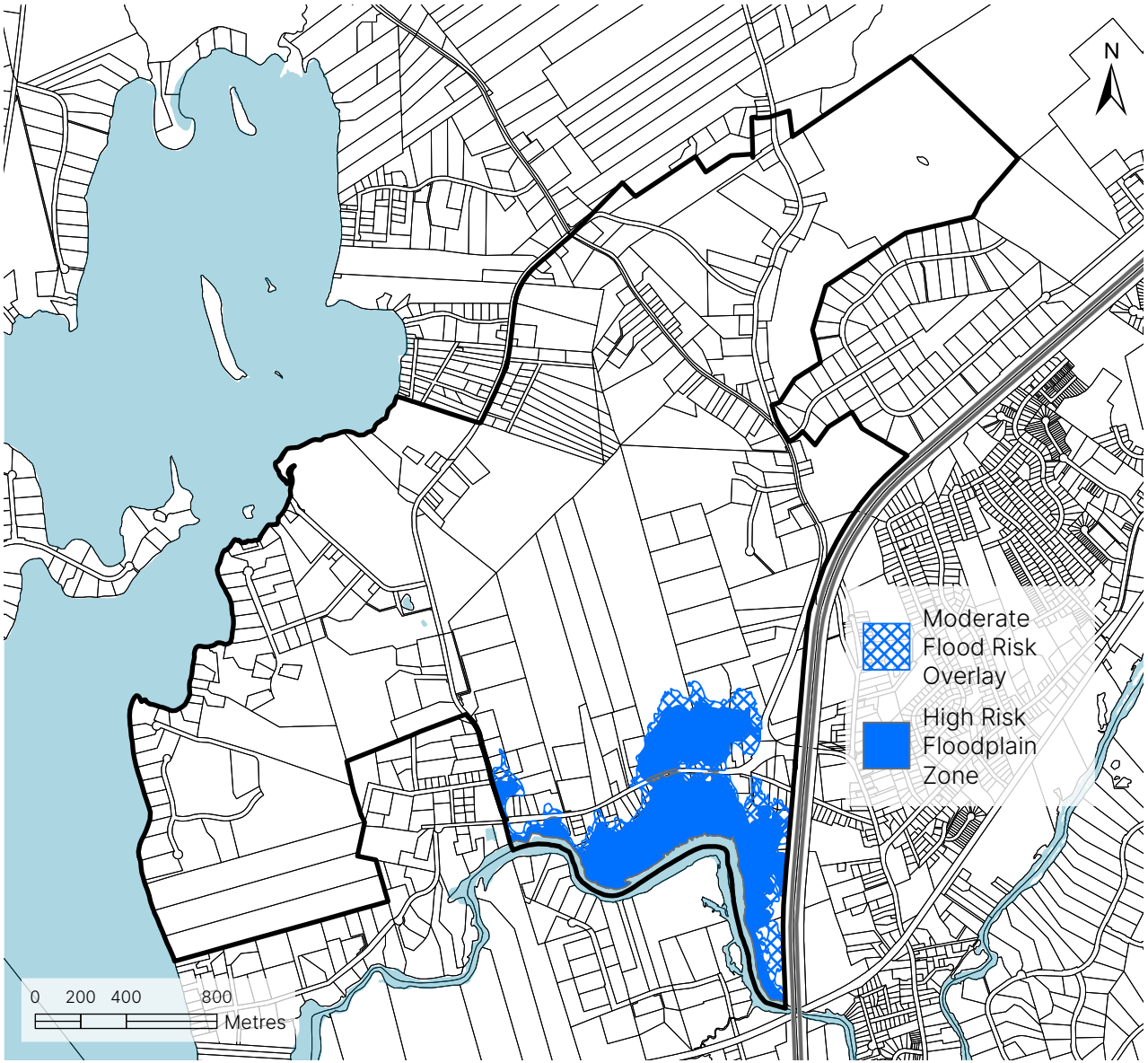
Overall, the WAM analysis confirms that the study area contains a connected network of wet areas, watercourses, drainage corridors, and low-lying lands. These features are not evenly distributed across the site and will play an important role in determining future development suitability. Areas with lower WAM values should be treated as higher constraint areas and may be better suited for conservation, stormwater management, or further field investigation. Areas with higher WAM values may offer greater development potential, provided they are also suitable from the perspective of slope, flood risk, access, servicing, and other planning considerations.

3.5 — Flood Risk

Flood risk was reviewed using the High Risk Floodplain Zone and Moderate Risk Floodplain Overlay identified through the East Hants Municipal Planning Strategy and Land Use Bylaw. These designations are used by the Municipality to identify areas where development may be limited or subject to additional requirements due to the potential for flooding. The High Risk Floodplain generally represents lands with the greatest exposure to flooding and is more restrictive from a development perspective. The Moderate Risk Floodplain Overlay identifies areas where some development may be considered, but where additional floodproofing, land alteration controls, and other requirements may apply.

For the purposes of this Phase 1 analysis, the flood risk map shows only the currently adopted municipal floodplain information. Additional flood mapping information is understood to be under provincial review; however, this information was not incorporated into the analysis because it has not yet completed the review process. Once finalized, any updated flood mapping should be reviewed and considered as part of future planning, particularly before development limits, road alignments, stormwater infrastructure, or land use designations are finalized near flood-prone areas.

Within the study area, mapped flood risk is concentrated along the southern boundary, generally associated with lands along or near the Shubenacadie River. Properties in this area are more constrained for future development due to their exposure to flooding and their relationship to the river corridor. These lands should be treated with caution in future planning and may be more suitable for conservation, stormwater management, passive recreation, or other low-impact uses, depending on site-specific conditions and



applicable regulatory requirements.

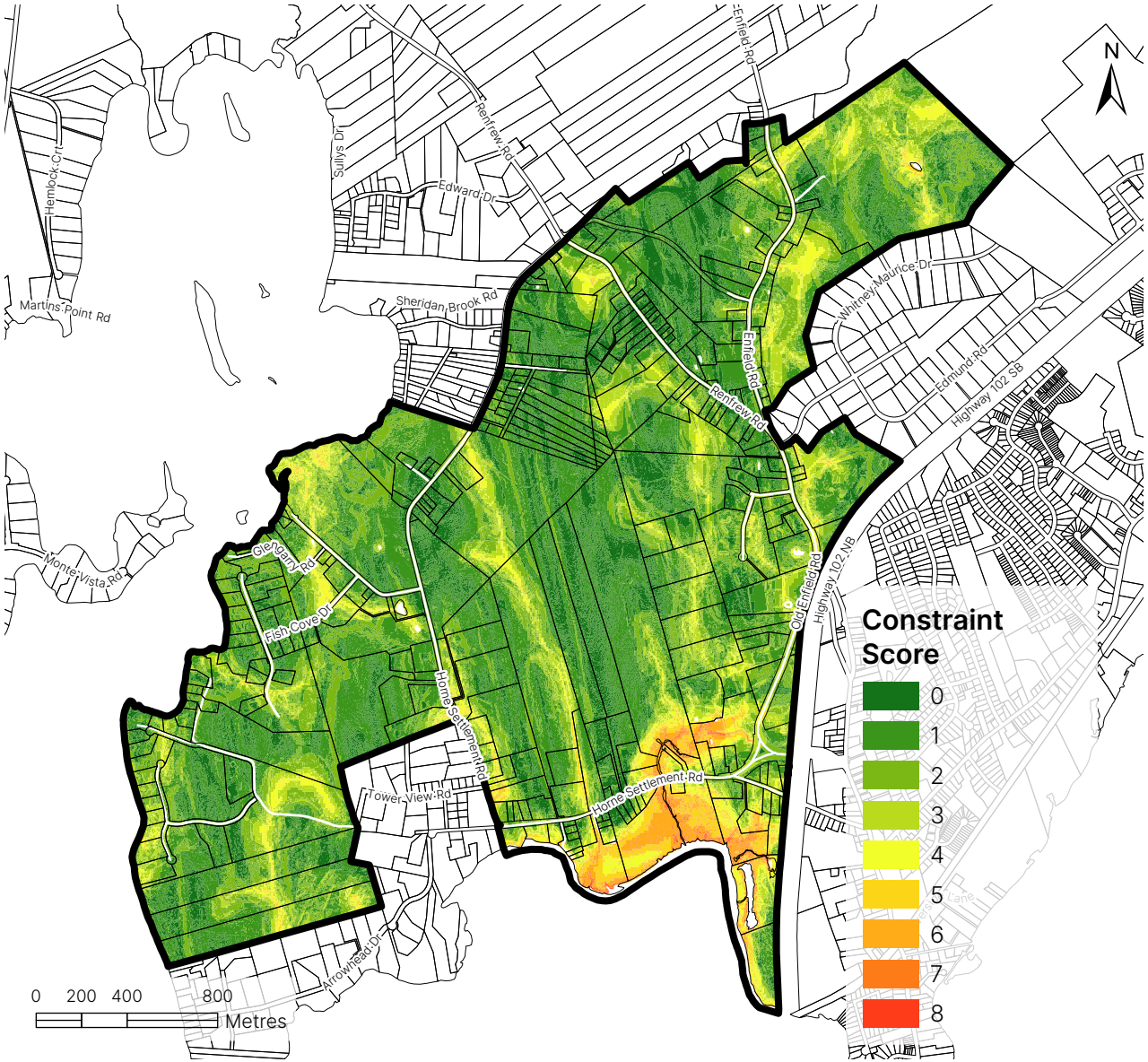
The flood risk mapping does not indicate widespread floodplain constraints across the remainder of the study area. However, this does not mean that localized flooding or drainage issues are absent elsewhere. The floodplain mapping should be interpreted alongside the Wet Area Mapping, wetland mapping, slope analysis, and drainage review to understand the broader hydrologic conditions across the site. In particular, low-lying or poorly drained areas outside the mapped floodplain may still require further study before being considered suitable for development.

3.6 — Environmental Constraints Summary

The environmental constraints summary brings together the key physical and environmental indicators reviewed in the preceding sections to provide a consolidated understanding of development suitability across the study area. The composite constraint map was developed by layering relevant GIS datasets and assigning each indicator a constraint value based on the degree to which it may limit or complicate future development. The indicators included Wet Area Mapping, consolidated wetland mapping, flood risk mapping, slope, and open waterbodies.

The Wet Area Mapping dataset formed the basis of the environmental analysis because it provides a predictive indication of wet areas and drainage pathways across the landscape. WAM values range from 1 to 5, with 1 representing the wettest areas and 5 representing the least wet areas. For the purposes of this analysis, WAM values of 1, 2, and 3 were assigned constraint values of 3, 2, and 1 respectively, while WAM values of 4 and 5 were assigned a constraint value of 0. This approach recognizes that wetter areas are generally more constrained for development due to drainage, grading, stormwater, and environmental considerations.

Provincial predictive wetland mapping was also incorporated into the analysis. Wetland polygons from the available provincial wetland datasets were merged into a single consolidated wetland layer. Lands located within this combined wetland layer were assigned a constraint value of 1. This reflects the importance of wetlands as a development constraint while recognizing that the mapping is predictive and desktop-based, rather than the result of field-verified wetland delineation. In many areas, the predictive wetland layer is supported by the WAM data, which



provides additional confidence in the interpretation of likely wet or poorly drained lands.

Flood risk was incorporated using the High Risk Floodplain and Moderate Risk Floodplain mapping identified through the East Hants planning framework. Lands within the Moderate Risk Floodplain were assigned a constraint value of 1, while lands within the High Risk Floodplain were assigned a constraint value of 2. This reflects the increased development challenges associated with flood-prone lands, including public safety, floodproofing, land alteration, emergency access, and potential impacts to surrounding lands and water systems.

Further, the High Risk Floodplain was assigned a higher constraint value because it represents both a physical hazard and a significant regulatory limitation on future development. Under the East Hants Land Use Bylaw, the High Risk Floodplain Zone permits only a narrow range of low-impact uses, such as conservation-related uses, passive and seasonal recreation, parks, agricultural grazing and pasturage, and public works structures. The Bylaw also prohibits permanent structures in the High Risk Floodplain Zone except for limited public works structures associated with piped services or structures. As a result, lands within the High Risk Floodplain are not simply more difficult to develop; they are fully unavailable for most forms of conventional residential, commercial, institutional, or employment development. This makes the High Risk Floodplain one of the most significant constraints in the environmental analysis and supports assigning it a higher constraint value than the Moderate Risk Floodplain.

Slope was calculated across the study area using provincial LiDAR-derived elevation data and expressed as percent rise. Lands with slopes between 0% and 5% were assigned a constraint value of 0, as these areas are generally the most suitable for development from a grading and constructability perspective. Lands with slopes between 5% and 15% were assigned a constraint value of 1, while lands with slopes greater than 15% were assigned a constraint value of 2. This reflects the increasing development challenges associated with steeper slopes, including grading complexity, road design limitations, erosion potential, stormwater velocity, and construction cost.

Indicator	Classification	Score
Wetlands	No known or predicted wetland areas	0
Wetlands	Known or predicted wetland areas	1
WAM	WAM value 4 or 5	0
WAM	WAM value 3	1
WAM	WAM value 2	2
WAM	WAM value 1	3
Flooding	Outside Floodplain Risk Area	0
Flooding	Moderate Risk Floodplain	1
Flooding	High Risk Floodplain	2
Slope	Slope 0–5%	0
Slope	Slope 5–15%	1
Slope	Slope greater than 15%	2

Watercourses were mapped and reviewed as part of the environmental analysis but were not assigned a separate constraint value in the composite scoring. This is because mapped watercourses generally correspond closely with WAM flow channels and wet drainage features already captured through the WAM analysis. As a result, assigning a separate watercourse score would risk double-counting the same hydrologic constraint. Watercourses remain important environmental features and should be considered in subsequent stages of planning, particularly with respect to riparian protection, stormwater management, and open space design.

The combined constraint score for each area was calculated by summing the applicable constraint values from each layer. Scores range from 0 to 8, with lower scores representing areas with fewer identified environmental or physical constraints and higher scores representing areas where multiple constraints overlap. This scoring system is intended to support planning-level comparison across the study area. It does not determine whether lands can or cannot be developed, but it helps identify where development may be more feasible, where additional study is likely required, and where conservation, stormwater management, or avoidance may be more appropriate.

Overall, the mapping indicates that most of the study area is constrained in some way. The most common constraints are related to slope and wetness, including wet areas, drainage corridors, wetlands, and areas of steeper topography. These constraints are not distributed evenly across the study area. Some lands are affected by multiple overlapping constraints, while other areas have relatively lower scores and appear more promising from an environmental and physical suitability perspective.

The most notable lower-constraint areas are located within the central portion of the study area, inside the main road loop generally bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. Within this area, the composite mapping identifies two north-south linear areas with relatively low constraint scores. These areas are located on either side of a watercourse and represent the most promising lands for future development consideration. The area east of the watercourse covers approximately 103 hectares, while the area west of the watercourse covers approximately 37 hectares. Both areas benefit from comparatively favourable slope conditions and fewer overlapping environmental constraints than many other parts of the study area.

Another lower-constraint area is located to the northeast of the central lands, forming a triangular area generally bounded by Renfrew Road, Enfield Road, and the edge of the study area boundary. This area covers approximately 38.6 hectares and directly abuts the larger central lower-constraint area. Given its location and relationship to the central portion of the study area, this area may warrant further review as part of future development concept planning, subject to transportation, servicing, parcel fabric, and detailed environmental considerations.

Smaller pockets of lower-constraint land are also present in the eastern and western extremities of the study area. However, these areas are generally less continuous and are often separated or interrupted by watercourses, wetlands, wet areas, steeper slopes, or other sensitive environmental features. As a result, while some of these lands may have localized development potential, they may be more difficult to integrate into a connected and efficient development pattern without further technical review.

The most constrained lands are located along the southern edge of the study area, particularly in areas associated with the Shubenacadie River. Properties between the river and Horne Settlement Road are among the least suitable for development from an environmental constraints perspective. These lands are affected by flood risk, wetness, drainage, and proximity to the river corridor, and should generally be treated as high-constraint areas. They may be better suited for conservation, stormwater management, passive recreation, or other low-impact uses, depending on site-specific conditions and applicable regulatory requirements.

The composite constraint mapping reinforces the importance of considering the study area as a varied landscape rather than as a uniform growth area. While several areas appear promising for future development, particularly in the central portion of the study area, other lands are significantly constrained by hydrologic, floodplain, wetland, or topographic conditions. These findings should inform the review of the study area boundary, the identification of potential development areas, and the scope of further field verification and technical work in Phase 2.

4.0 Existing Lot Conditions

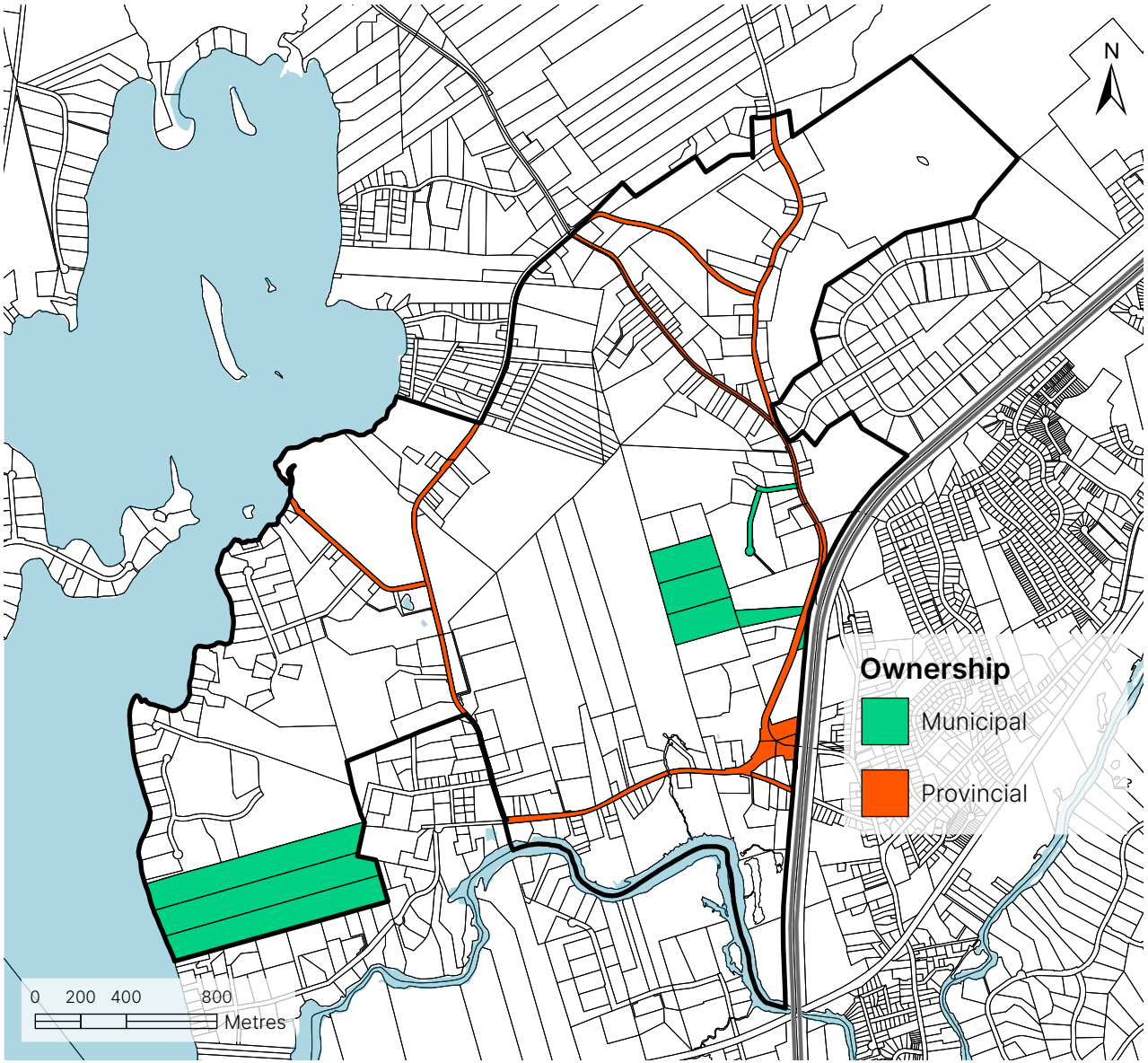
4.1 — Land Ownership and Parcel Fabric

Land ownership and parcel fabric are important considerations in determining how future development, infrastructure, open space, and public amenities may be coordinated within the study area. A fragmented ownership pattern can make comprehensive planning more difficult, particularly where future roads, servicing corridors, stormwater facilities, or public spaces must cross multiple properties. Conversely, larger parcels and lands under public ownership can provide greater flexibility for coordinated planning and may create opportunities to secure public amenities as development proceeds.

The accompanying ownership map identifies the distribution of private, municipal, provincial, and federal land ownership within the study area. No federally owned parcels were identified. Provincially owned lands within the study area appear to be limited to road parcels and do not represent significant development or public amenity lands for the purposes of this review.

Several municipally owned parcels are located within the study area. In the southwestern portion of the study area, three municipally owned parcels fronting Grand Lake are identified in East Hants' mapping as "water service" lots. Together, these parcels total more than 35 hectares. Their location along Grand Lake and their identification as water service lands suggest that they may have an infrastructure-related function or long-term municipal utility role. These lands should therefore be understood separately from municipally owned parcels that may have broader future community planning potential.

Municipally owned lands also include the rights-of-way for Cranberry Court and Mayflower Drive. These parcels reflect existing road infrastructure and are not



considered significant development parcels; however, they are relevant to understanding the public road network and existing municipal land interests within the study area.

Most notably, the ownership review identified three large municipally owned parcels in the central portion of the study area, generally within the area bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. These parcels were purchased by the municipality in 2025 and represent a potential future opportunity for community-serving uses. Together with a fourth adjacent municipally owned parcel that provides access to Enfield Road, these lands total nearly 14 hectares.

The presence of these central municipally owned parcels is significant because they are located in an area that appears to have relatively strong potential for future development, subject to further review of environmental constraints, access, servicing, and overall land suitability. Municipal ownership in this location may create opportunities to plan for public amenities, such as parks, recreation facilities, schools, stormwater infrastructure, utility functions, or other community-supportive uses. The availability of publicly owned land in this part of the study area may also provide greater flexibility in coordinating future development patterns, road connections, and open space systems.

From a Phase 1 perspective, the central municipal landholdings support the rationale for focusing more detailed future planning attention on this portion of the study area. While the final use of these parcels would require further municipal direction and technical review, their size, location, and ownership make them strategically important to the overall structure of the future secondary plan. These parcels should be carried forward into Phase 2 as key opportunity sites when evaluating potential development areas, public amenities, infrastructure needs, and community design options.

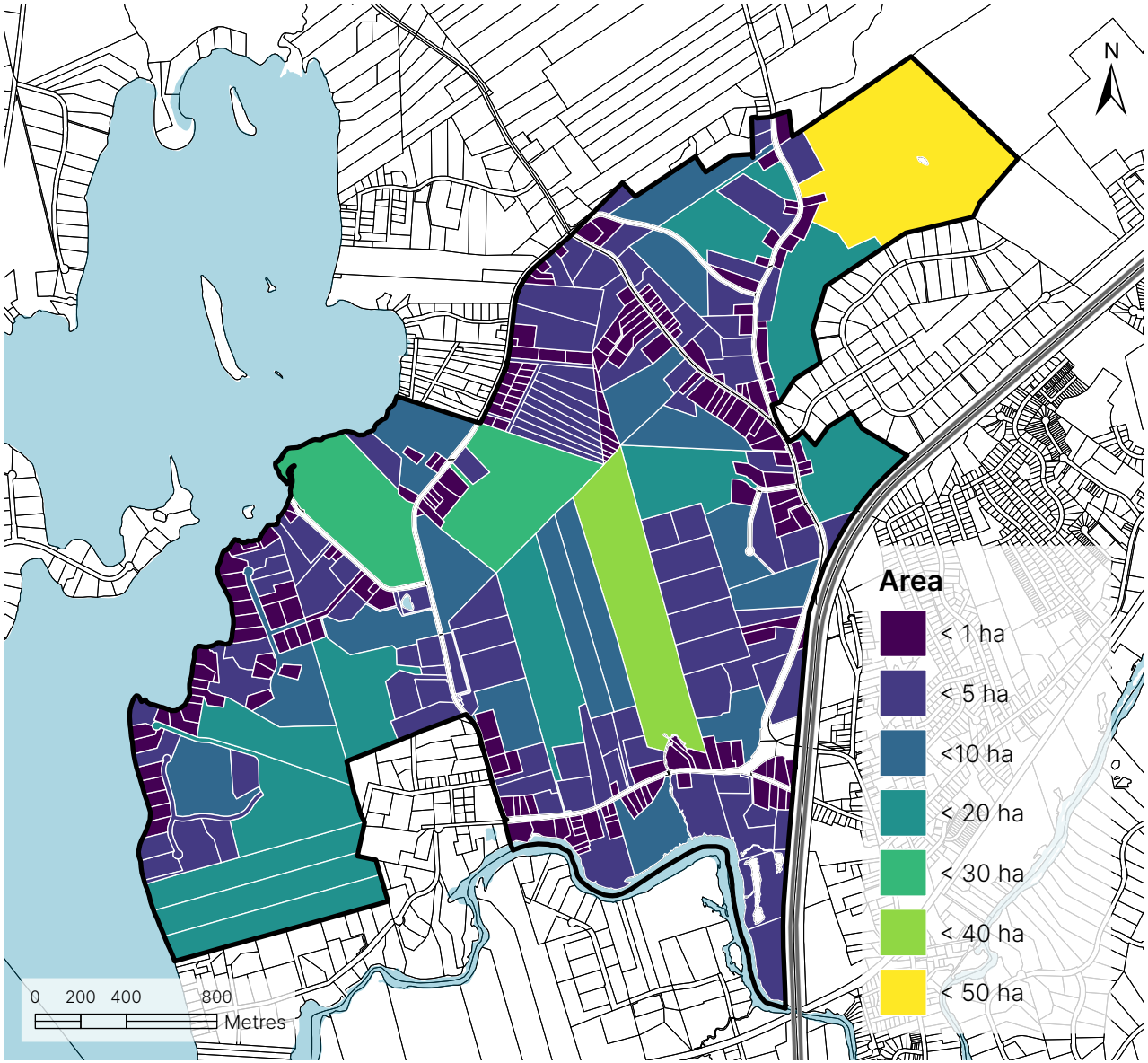
The ownership mapping should be treated as a planning-level inventory. Property ownership, parcel boundaries, easements, encumbrances, and intended municipal use should be confirmed through municipal records and land title review before any site-specific decisions are made.

4.2 — Lot Size

Lot size is an important consideration in evaluating the future planning potential of the study area. Larger parcels generally provide greater flexibility for comprehensive planning because they allow roads, servicing, stormwater management, open space, environmental protection, and development blocks to be considered together rather than being constrained by a fragmented ownership pattern. In the context of a secondary planning process, larger lots can support more coordinated development concepts, more efficient infrastructure phasing, and a stronger relationship between future land use, mobility, and environmental systems.

By contrast, smaller lots often indicate areas that are already subdivided and developed. Within the low-density rural context of the study area, these smaller lots are less likely to be redeveloped in the near term and may provide fewer opportunities for large-scale land use change. Existing homes, established access arrangements, private servicing, and individual ownership patterns can make redevelopment more difficult and can limit the ability to introduce new road connections or coordinated development patterns. As a result, smaller lots are generally less significant from a comprehensive development perspective, though they remain important in understanding existing settlement patterns and potential compatibility considerations.

The accompanying lot size map classifies properties within the study area into the following size ranges: less than 1 hectare, less than 5 hectares, less than 10 hectares, less than 20 hectares, less than 30 hectares, less than 40 hectares, and less than 50 hectares. This mapping helps distinguish between already fragmented areas and larger parcels that may have greater long-term planning potential.



The largest property within the study area is located in the northeastern corner, adjacent to municipally owned industrial lands. This parcel is approximately 49.1 hectares and represents a significant development opportunity due to its size, location, and relationship to nearby municipal lands. Its inclusion in the Enfield Secondary Planning Strategy study area, despite being outside the original Growth Reserve Area, likely reflects its potential role in supporting a more complete and coordinated review of future growth opportunities in this part of Enfield.

The central portion of the study area, generally bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road, contains many of the largest lots in the study area. This area is especially important because the large parcel fabric aligns with some of the lower environmental constraint areas identified in Section 3.6. The combination of larger lots, fewer overlapping environmental constraints, and a more central location within the study area makes this area one of the most promising locations for future comprehensive planning consideration.

Other large parcels are located toward the western edge of the study area. These include three municipally owned parcels identified for future water service purposes, as well as other large private landholdings. While these parcels may appear significant based on size alone, many of the western properties face access challenges and are connected primarily by narrow private roads. As a result, their development potential may be more limited unless future road access, servicing, and environmental constraints can be addressed through more detailed planning and engineering review.

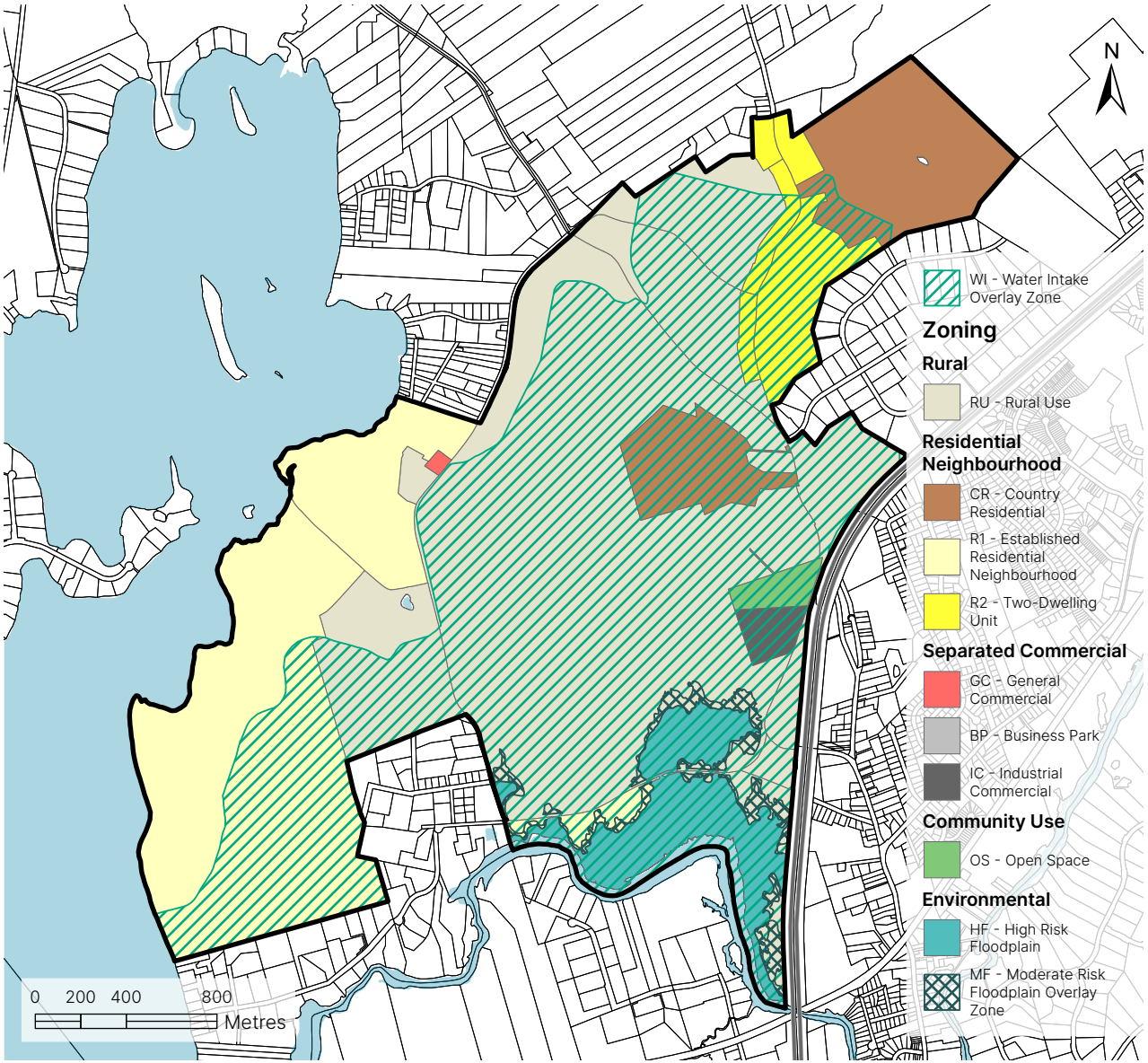
Overall, the lot size analysis suggests that the study area contains several large parcels with meaningful potential for coordinated future planning, particularly in the central area and the northeastern parcel adjacent to municipal lands. However, lot size must be considered alongside environmental constraints, road access, servicing feasibility, ownership patterns, and existing land use. Large parcels may provide greater flexibility, but they are not automatically suitable for development; similarly, smaller lots may have limited redevelopment potential but remain important in shaping future boundary, compatibility, and access considerations.

4.3 — Existing Land Use and Zoning

The study area is currently regulated through a range of zones and overlays under the East Hants Land Use Bylaw. As shown on the accompanying existing zoning and overlays map, most of the study area is zoned Rural Use (RU), reflecting the area's current rural and largely undeveloped character. Larger pockets of Established Residential Neighbourhood (R1), Country Residential (CR), and High Risk Floodplain (HF) zoning are also present, along with smaller areas zoned Two-Dwelling Unit Residential (R2), General Commercial (GC), Business Park (BP), Industrial Commercial (IC), and Open Space (OS).

The existing zoning provides useful context for understanding current land use permissions and development patterns in the study area. However, the existing zoning is not expected to be the primary determinant of future land use outcomes. If the Enfield Secondary Planning Strategy proceeds to Phase 2, the future land use framework, zoning structure, and related implementation tools may be updated to reflect the preferred development concept for the area. As a result, the current base zones should be understood as an existing condition rather than a fixed constraint on future secondary planning.

The existing zoning map also identifies areas subject to the High Risk Floodplain Zone and Moderate Risk Floodplain Overlay. These areas represent significant development constraints and have important implications for future land use planning. However, flood risk has already been addressed through the environmental and physical constraints analysis in Section 3.0. As a result, these floodplain zones and overlays are not assigned an additional constraint value as part of the land use and zoning review. Counting them again in this section would duplicate their effect in the overall constraint mapping



and could overstate the relative constraint level of affected lands.

One overlay that is more directly relevant to this Phase 1 review is the Water Intake (WI) Overlay Zone. Unlike many of the base zones, the WI Overlay is tied to source water protection and is likely to remain an important regulatory consideration even if the underlying land use designations or zones change through the secondary planning process. The WI Overlay is intended to protect the Enfield water intake area and applies additional restrictions to otherwise permitted underlying zone uses.

Within the WI Overlay, development must comply with restrictions intended to prevent impacts to the sustained purity and flow of water. Uses that may result in the escape or disposal of toxic waste products, or the storage of materials that produce toxic leachate, are not permitted. The overlay also prohibits Highway Commercial and Industrial Commercial uses, industrial development involving the production, wholesale storage, or distribution of dangerous goods, business or storage facilities intended to hold liquid or gaseous hydrocarbons or chemicals, and intensive livestock operations. Private sewage treatment facilities may be permitted where approved by Nova Scotia Environment.

The WI Overlay has important implications for future land use planning. Residential, institutional, recreational, open space, and some lower-impact commercial or office uses may be less directly affected, provided they do not involve the restricted activities noted above. However, the overlay may significantly limit the range of employment, industrial, highway commercial, fuel storage, chemical storage, warehousing, or other higher-risk land uses that could otherwise be considered in parts of the study area. This is particularly important because the secondary planning process may explore opportunities for future commercial, employment, public service, and infrastructure uses.

Because the WI Overlay restricts certain forms of development and may influence the location of future land uses, it is treated as a planning constraint in this Phase 1 analysis. Lands within the overlay are not necessarily unsuitable for development, but they require additional caution and should be evaluated in relation to source water protection objectives. The WI Overlay will therefore be considered as part of the overall constraint mapping and should be carried forward into Phase 2 when identifying appropriate development areas, employment lands, infrastructure locations, and open space or conservation opportunities.

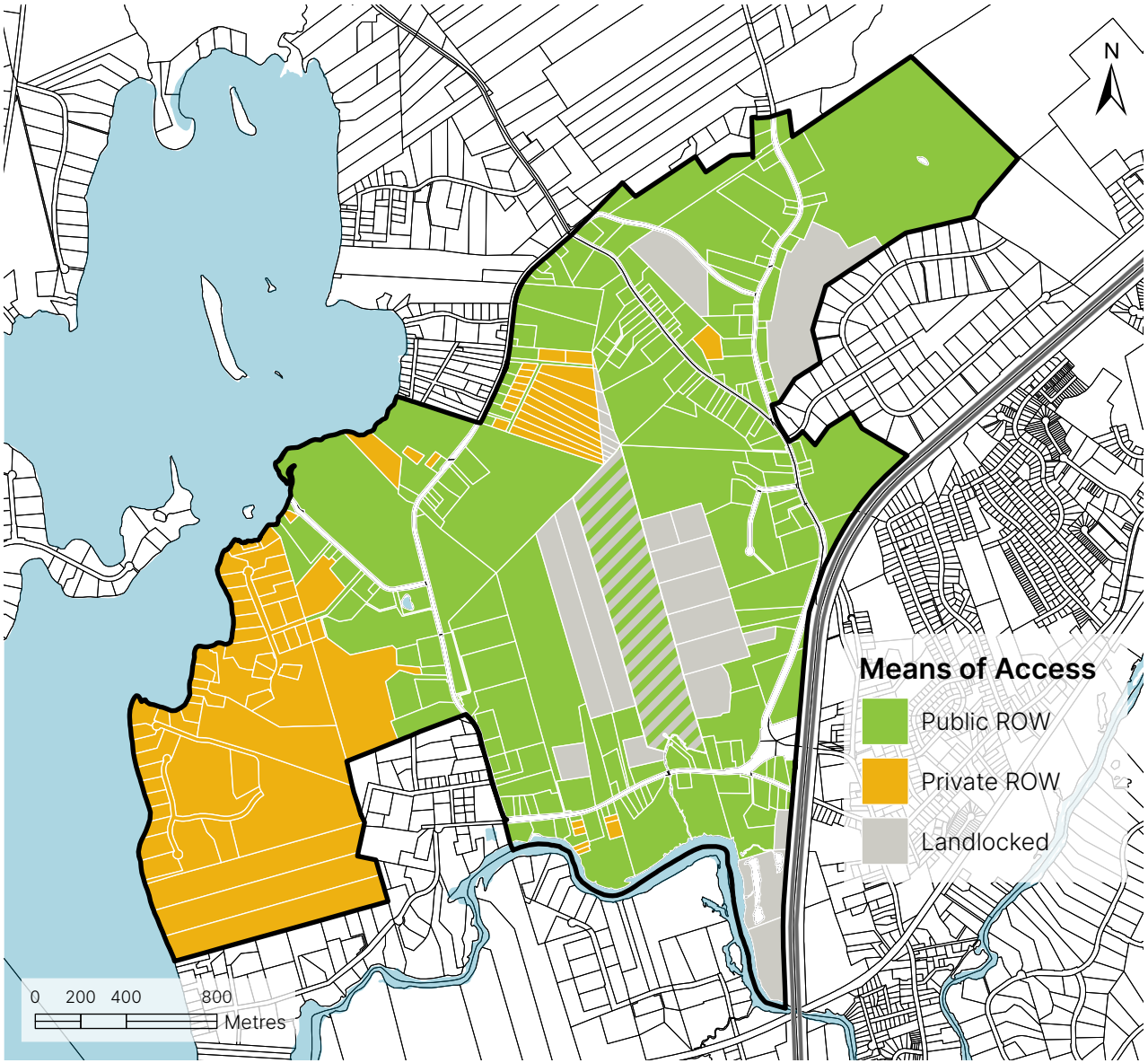
4.4 — Existing Access Conditions

Existing access conditions were reviewed to understand how properties within the study area currently relate to road rights-of-way. For the purposes of this analysis, properties were grouped into three categories: parcels with frontage on a public road right-of-way, parcels with frontage only on a private road right-of-way, and landlocked parcels with no apparent frontage on either a public or private road right-of-way.

Public road access means direct frontage on a provincially or municipally owned road. Controlled-access highways and other roads that do not provide direct property frontage were excluded from this review, as they do not provide practical development access for abutting lands. Parcels with public road frontage are generally less constrained from an access perspective because they can be more readily considered for future development, subject to environmental, servicing, transportation, and land use considerations.

Parcels with frontage only on private road rights-of-way are considered more constrained. While these parcels may have some form of physical access, private road access can create challenges for comprehensive planning, particularly where future development is expected to rely on public road standards, municipal servicing, emergency access, active transportation facilities, and long-term maintenance. This is especially relevant in the western portion of the study area, where many properties rely on small private roads rather than public road infrastructure.

Landlocked parcels were identified as a separate access category. These are parcels that do not appear to have frontage on either a public road right-



of-way or a private road right-of-way. Landlocked parcels are constrained under existing conditions because they cannot be independently accessed for development without new road construction, access agreements, parcel consolidation, or development of adjacent lands. However, in the context of a secondary planning process, landlocked parcels are not necessarily as constrained as lands embedded within established private road subdivisions. In some cases, particularly where large landlocked parcels are located near other development opportunity areas, access may be addressed through a coordinated future road network.

In general, most lots within the study area have some form of frontage on a public road. This includes many properties along Horne Settlement Road, Renfrew Road, Enfield Road, Old Enfield Road, and other public roads that define the central and eastern portions of the study area. These properties are less constrained from an access perspective and may be better positioned to respond to future planning changes, subject to environmental, servicing, transportation, and land use considerations.

The major exception is the western third of the study area, where many properties rely almost entirely on private roads for access. This creates a significant constraint for future development, particularly where large parcels are located behind existing developed areas or are connected only by narrow private road corridors. While some of these lands may appear promising based on parcel size, their reliance on private access may limit their near-term development potential unless a future public road network is planned and constructed.

Several landlocked parcels are also present within the study area, including large parcels in the central area generally bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. These lands are important because they include some of the larger undeveloped parcels in the study area and are located near areas that appear promising from an environmental and physical constraints perspective. Their lack of existing frontage is a constraint, but it also reinforces the value of the secondary planning process. A coordinated secondary plan can identify where new public roads, access points, and development blocks should be located so that these lands can be planned comprehensively rather than remaining constrained by their current lack of frontage.

One parcel requiring specific attention is PID 45079167, located within the central portion of the study area. This is one of the largest parcels in the study area and appears to have a narrow strip of land extending toward Horne Settlement Road between two other properties. However, this connection is not clearly contiguous with the remainder of the parcel, as it appears to cross a provincial water polygon that does not have a PID number. Given this uncertainty, PID 45079167 has been shown as landlocked on the access map. Confirmation of this parcel's legal and functional access should be carried forward into future phases of work, as its connection to Horne Settlement Road could have important implications for development potential and road network planning.

Another parcel to highlight is PID 45403920 in the north of the study area. Although the property technically has frontage along a provincially-owned ROW (labelled as HN0484-TOWER RD in the mapping), this ROW does not appear to be a traversable road but instead, an informal trail through an area of woods. Since this section of road does not appear to be formally maintained as a vehicle travelway, PID 45403920 is also shown as being landlocked in the access map.

Overall, the access analysis indicates that the study area contains a mix of publicly accessible parcels, private-road-dependent lands, and landlocked parcels. The central and eastern portions of the study area generally have stronger relationships to the public road network, while the western portion is more constrained by private road access. Future planning should prioritize the creation of a connected public road framework that can support comprehensive development, improve access to large interior parcels, and reduce reliance on private roads where long-term urban development is contemplated.

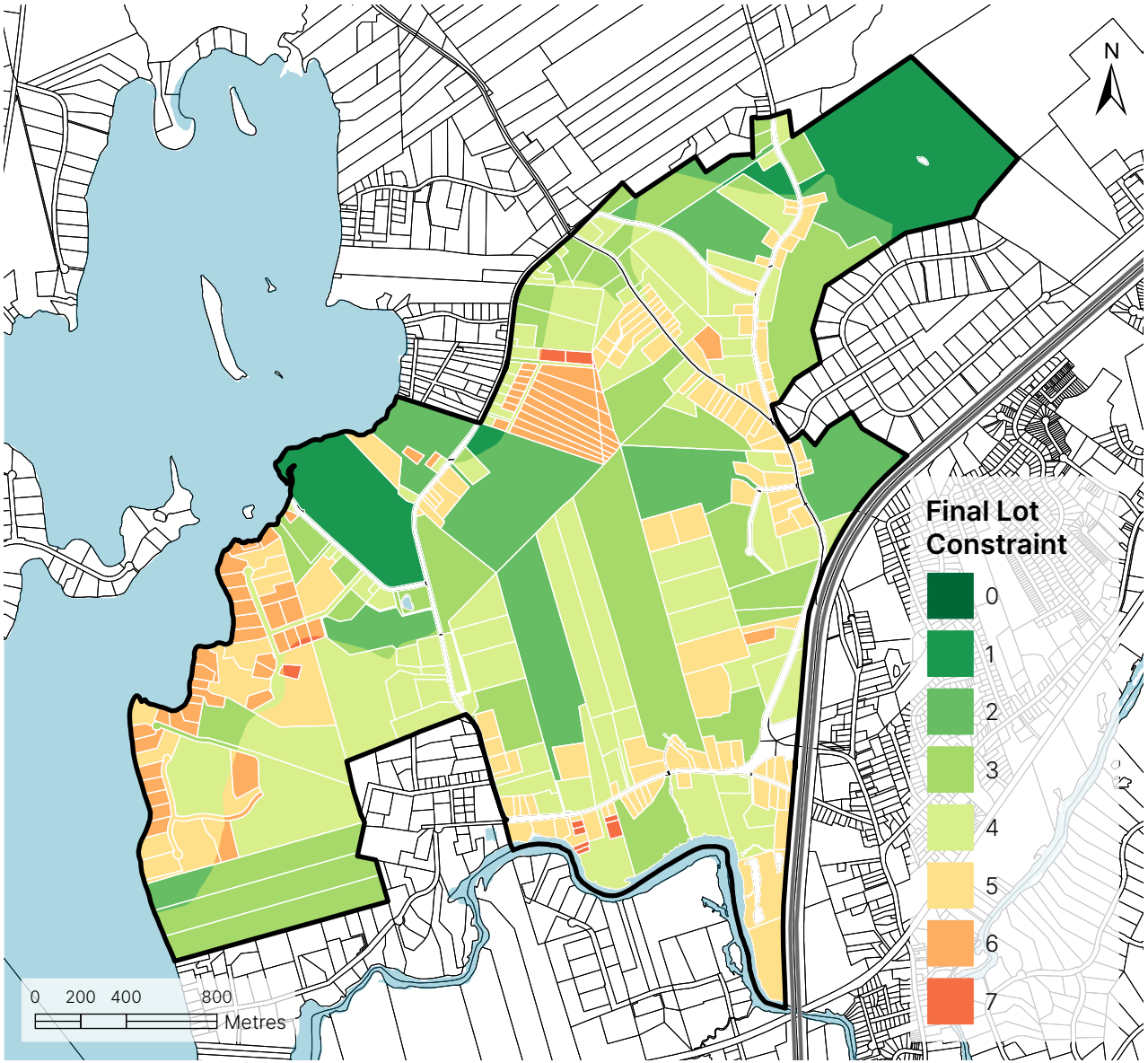
4.5 — Lot and Parcel Constraints Summary

A lot and parcel constraints analysis was completed to assess how existing ownership, parcel size, zoning overlays, and road frontage may influence future development potential within the study area. Similar to the environmental constraints analysis, each indicator was assigned a constraint score and then layered to create a composite parcel-based constraint map. The purpose of this analysis is to identify lands that may be easier or more difficult to plan comprehensively through the secondary planning process.

The analysis considered four parcel-based indicators: ownership, lot size, Water Intake Overlay status, and road frontage/access. Together, these factors help identify where future planning may be supported by larger parcels, public ownership, direct public road access, and fewer regulatory limitations. Conversely, smaller private lots, parcels constrained by the Water Intake Overlay, landlocked parcels, and lands accessed only by private roads were identified as more constrained for comprehensive development planning.

For ownership, municipally owned parcels were assigned a constraint score of 0, while all other parcels were assigned a score of 1. This reflects the fact that publicly owned land can be easier to coordinate through a secondary planning process, particularly where public amenities, infrastructure, parks, utilities, or other community-supportive uses may be needed. Provincially owned lands within the study area were identified as road parcels and were therefore not considered meaningful development opportunity sites.

Lot size was included because larger parcels generally provide more flexibility for comprehensive planning. Larger parcels are better able to



accommodate coordinated road layouts, infrastructure corridors, stormwater facilities, parks, open space systems, and a mix of land uses. Smaller parcels, particularly where they are already subdivided or developed, are generally more difficult to integrate into a comprehensive future development pattern. Parcels less than 1 hectare were assigned a score of 3, parcels between 1 and 5 hectares were assigned a score of 2, parcels between 5 and 10 hectares were assigned a score of 1, and parcels 10 hectares or larger were assigned a score of 0.

Existing zoning was considered only where it creates a constraint likely to remain relevant through the secondary planning process. Most existing base zones are expected to be reconsidered through future planning work and were therefore not assigned a constraint value. However, lands within the Water Intake Overlay Zone were assigned a score of 1 to recognize the additional restrictions that apply in this area. The Water Intake Overlay limits certain higher-risk forms of development and is expected to remain an important source water protection consideration even if the underlying zoning changes.

Road access was also included as a major parcel-based constraint. Parcels with frontage on a public road were assigned a score of 0, landlocked parcels with no apparent frontage on either a public or private road right-of-way were assigned a score of 1, while parcels with frontage only on private roads were assigned a score of 2. This reflects the significant challenges associated with comprehensively redeveloping or re-planning areas that rely on private road access, particularly where municipal servicing, public road standards, emergency access, active transportation, and long-term maintenance must be considered. Landlocked parcels are also constrained under existing conditions because they cannot be independently accessed without new road construction, access agreements, parcel consolidation, or development on adjacent lands. However, where landlocked parcels are large, undeveloped, and located near other development opportunity areas, their access limitations may be more readily addressed through a coordinated secondary planning process.

The scoring framework used for the parcel-based constraints analysis is summarized in the following table:

Indicator	Classification	Score
Ownership	Government-owned parcel	0
Ownership	Private parcel	1
Lot Size	10 ha or greater	0
Lot Size	5 ha to less than 10 ha	1
Lot Size	1 ha to less than 5 ha	2
Lot Size	Less than 1 ha	3
Existing Zoning	Outside Water Intake Overlay Zone	0
Existing Zoning	Within Water Intake Overlay Zone	1
Access	Public road frontage	0
Access	Landlocked or ambiguous frontage condition	1
Access	Private road frontage only	2

Based on this framework, parcels could receive a total score ranging from 0 to 7, with higher scores representing greater parcel-based constraints. In general, smaller privately owned parcels with frontage only on private roads scored as the most constrained, while larger parcels outside the Water Intake Overlay Zone with public road frontage scored as the least constrained.

The most constrained parcel patterns are generally located in the western portion of the study area near Grand Lake, where smaller lots, existing residential development, private ownership, and access conditions limit the potential for comprehensive redevelopment. A private road subdivision off Horne Settlement Road also scored as constrained due to its smaller lot pattern and lack of public road frontage. These areas may continue to function largely as established residential or rural residential areas and are less likely to support large-scale coordinated growth without significant land assembly or infrastructure intervention.

The analysis also identified more favourable parcel conditions in parts of the study area where larger parcels, public road frontage, and fewer overlay constraints are present. The large parcel in the northeastern extremity of the study area performs well under this analysis and appears to represent one of the stronger parcel-based opportunities for future development consideration, subject to the findings of the environmental, transportation, and servicing analyses.

The central portion of the study area, generally bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road, requires more nuanced interpretation. Three large municipally owned parcels in this area received a composite score of 4, partially because of access-related constraints. However, this score may overstate the practical

constraint level because an adjacent municipally owned parcel provides potential access to Enfield Road. If these parcels are considered together as part of a coordinated municipal landholding, their effective constraint level is closer to 3. This distinction is important because these municipally owned lands are located within one of the areas that appears to have stronger overall development potential and could support future public amenities, infrastructure, open space, or community facilities.

This analysis has several limitations. It does not account for potential parcel consolidation, landowner coordination, easements, or cases where landlocked parcels may share ownership with adjacent parcels that could provide road access. It also does not determine whether a parcel is suitable for development from an environmental, servicing, engineering, or market perspective. Instead, the parcel-based constraints analysis should be interpreted as one input into the broader suitability review, helping to identify where the existing ownership and lot fabric may support or complicate future secondary planning.

5.0 Overall Constraint Mapping

5.1 — Suitability Framework

The final suitability framework was developed by combining the environmental constraint analysis with the lot and parcel constraint analysis. Together, these two inputs provide a broader understanding of development suitability across the study area by considering both the natural and physical conditions of the land, as well as the existing parcel fabric and land use context.

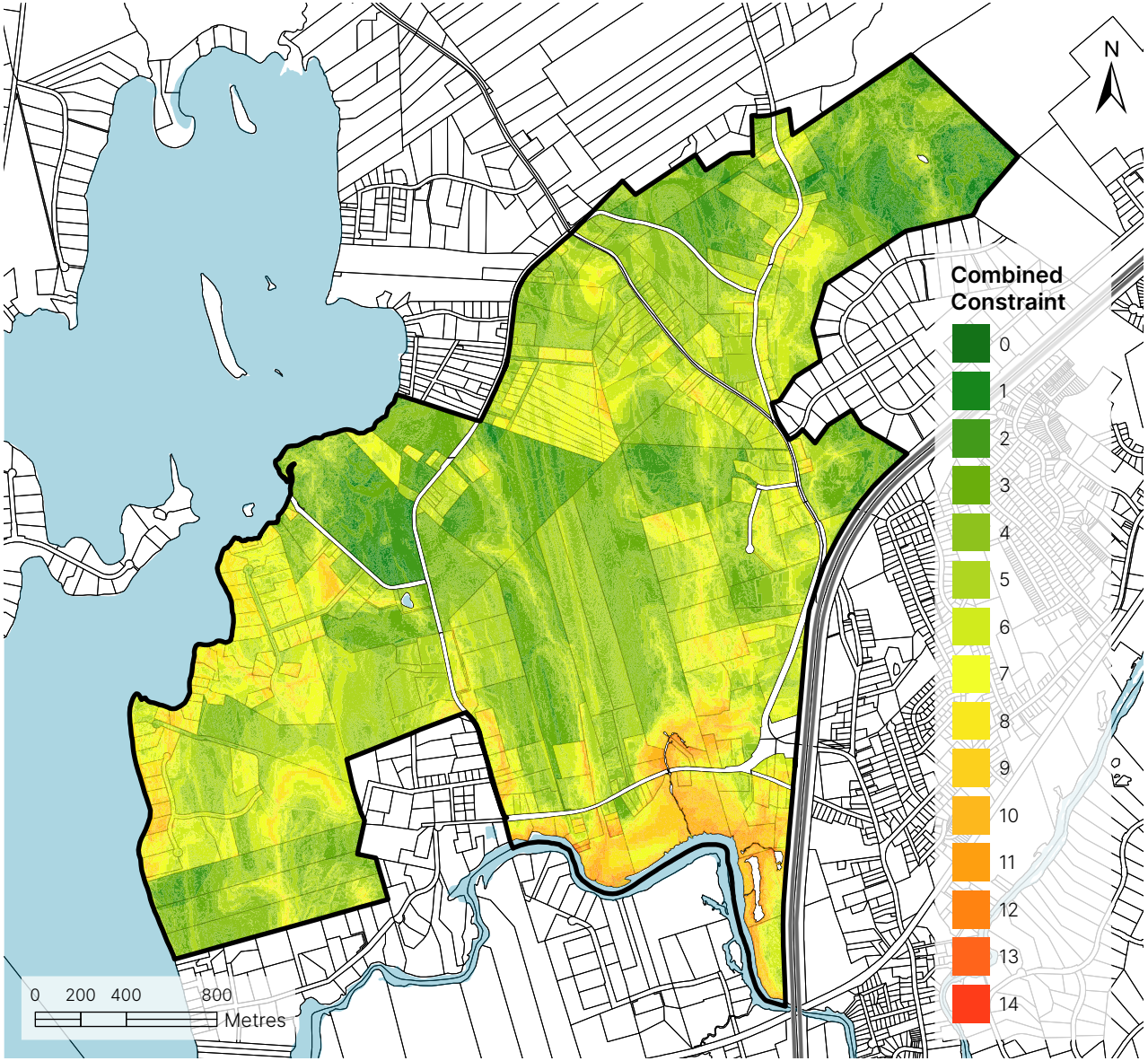
The environmental constraint map identifies lands that may be affected by wetlands, wet areas, flood risk, slope, open waterbodies, and related physical conditions. The lot constraint map identifies lands where existing ownership patterns, lot size, parcel configuration, existing development, zoning, or access conditions may influence future development potential. Each map assigns constraint values to the relevant indicators, allowing the two analyses to be layered together in ArcGIS Pro.

The final suitability map was created by summing the values from the environmental constraint map and the lot constraint map to produce a comprehensive constraint score for lands across the study area. Areas with lower total scores are interpreted as having fewer identified constraints and may be more suitable for future development consideration. Areas with higher total scores are interpreted as having more overlapping constraints and may require further study, mitigation, conservation, or a different planning approach.

This framework is intended to support planning-level comparison across the study area. It does not determine final development capacity or confirm whether development should occur on any specific property. Rather, it provides a decision-support tool to help identify the most promising areas for future planning, areas that may warrant boundary refinement, and areas where additional technical review should be completed in Phase 2.

5.2 — Final Constraint Mapping

The final constraint map brings together all of the indicators reviewed through the Phase 1 analysis, including environmental constraints, physical conditions, parcel-based constraints, and access considerations. By layering these inputs into a single composite map, the analysis provides an overall picture of where constraints are most concentrated and where lands may be comparatively more suitable for future development consideration.



6.0 Findings, Recommendations, and Next Steps

6.1 — Major Constraints and Opportunities

The Phase 1 analysis identified a range of constraints, some significant and others manageable through future comprehensive planning. Specifically, some areas are significantly limited by access, parcel configuration, flooding, wetlands, watercourses, and wet ground conditions, while other areas appear to offer more promising opportunities for coordinated future growth.

Major Constraints

Access is one of the most significant barriers to development in several portions of the study area. This is particularly evident west of Horne Settlement Road, where many parcels front onto small private roads rather than public road infrastructure. These areas are generally fragmented, constrained by existing access arrangements, and unlikely to support substantial redevelopment or comprehensive urban development without major changes to road ownership, road standards, parcel assembly, and servicing. As a result, these lands are expected to have limited redevelopment potential within the context of the Secondary Planning Strategy.

Environmental and hydrologic constraints also significantly affect development suitability. The southern portion of the study area, particularly lands associated with the Shubenacadie River corridor, is heavily constrained by flood risk, wet ground conditions, and proximity to sensitive water-related features. These lands are not considered suitable for substantial future development and should generally be treated as high-constraint lands. They may be better suited for conservation, stormwater management, passive recreation, or other low-impact uses, subject to applicable regulatory requirements and site-specific review.

Within the central portion of the study area, a watercourse runs generally north-south through the lands bounded by Horne Settlement Road, Renfrew Road, Enfield Road, and Old Enfield Road. This feature effectively divides the central development area into eastern and western portions. If future development is pursued on both sides of the watercourse, at least one crossing will likely be required to support an efficient and connected road network. Any such crossing would require further environmental, engineering, and regulatory review, and its location would need to be carefully considered through future concept planning.

The eastern portion of the central development area also contains wet ground conditions and is likely to include several large wetlands and smaller connecting watercourses or drainage features that will impact where and how development occurs. These conditions may limit the amount of developable land, influence the location of future roads, and require careful consideration of stormwater management, open space protection, and environmental buffers.

Major Opportunities

Despite these constraints, the analysis identifies several areas that appear to have meaningful development potential. The most significant opportunity is a large linear tract of lower-constraint land extending from Horne Settlement Road in the south toward Renfrew Road in the north. This area appears to have comparatively favourable physical conditions and may represent one of the strongest candidates for future development within the study area. This area is roughly 103 hectares.

A second, smaller but similarly promising tract of land is located west of the central watercourse. This area extends across Horne Settlement Road and reaches toward Grand Lake. Although it is smaller and more constrained by surrounding features, it appears to offer development potential and could form part of a broader growth structure if appropriate road, servicing, and environmental considerations can be addressed. This area is roughly 37 hectares.

Another opportunity exists in the northeastern portion of the study area. While the large parcel in this area is partially constrained by wetlands, it also contains a sizable area that appears suitable for future development. This land is notable because it is located near an existing road right-of-way connection into the Whitney Maurice Drive subdivision to the south. This potential connection could provide an important opportunity to integrate future development with existing road infrastructure, subject to further transportation review, municipal direction, and detailed design. This area is roughly 35 hectares.

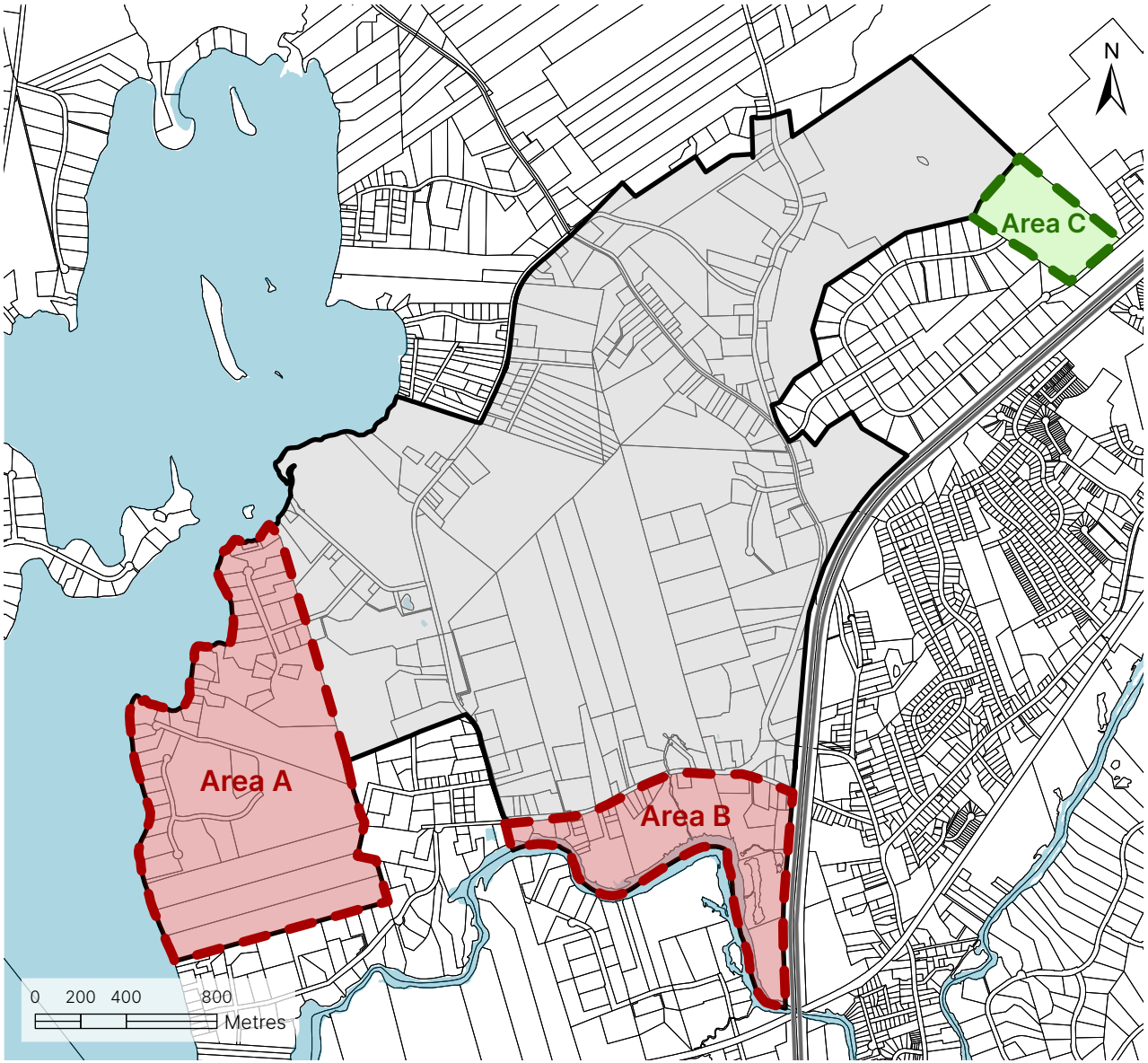
A key advantage of the primary opportunity areas is that they are generally contiguous or capable of being connected through existing or potential future road links. The central development areas, the southeastern lands, and the northeastern parcel can be understood as part of a broader connected growth opportunity, rather than as isolated development pockets. In several locations, future connections may be possible without requiring new watercourse crossings, which could reduce environmental impacts and simplify infrastructure planning. This pattern of relatively connected, lower-constraint lands should be a primary consideration in the boundary review and in any future Phase 2 concept planning.

6.2 — Recommendations for Study Area Boundary Changes

As part of the Phase 1 analysis, properties directly adjacent to the study area were reviewed to determine whether the current boundary should be expanded, reduced, or maintained. This review considered environmental and physical constraints, parcel fabric, existing development patterns, access conditions, and the potential for adjacent lands to contribute to a logical and coordinated future development pattern.

To the southwest, the review considered whether the study area boundary should be extended toward the point where the Shubenacadie River meets Grand Lake, which also forms part of the municipal boundary. This area is characterized by small lots, private road access, and significant flood-related constraints associated with the Shubenacadie River corridor. These conditions are similar to the broader western portion of the study area, where many properties are already subdivided, front onto private roads, and are unlikely to support substantial redevelopment or comprehensive future growth. As a result, extending the boundary in this direction is not recommended.

North of the study area, beyond Horne Settlement Road, there are several existing private road subdivisions. These areas present similar challenges from a secondary planning perspective. Existing lot patterns, private access arrangements, and low-density development make it difficult to plan for meaningful redevelopment, future public road connections, or efficient servicing. One larger PID extends toward Grand Lake and may have some theoretical development potential; however, on its own, it does not appear to represent a sufficiently significant or strategic opportunity to justify expanding the study area boundary northward.



To the east, the Whitney Maurice Drive and Edmund Road subdivision was also considered. This area is made up of existing low-density residential lots and is already largely developed. Given its established subdivision pattern, existing residential character, and limited opportunity for comprehensive redevelopment, this area is not considered a strong candidate for inclusion in the Secondary Planning Strategy study area. Maintaining its exclusion from the boundary is appropriate.

The northeastern edge of the study area presents the most meaningful opportunity for a potential boundary adjustment. In this location, the study area abuts a series of large municipally owned properties that are understood to be intended for future industrial development. There is a clear rationale for keeping these lands outside the current study area, as the objectives for an industrial area differ from those of a future residential or mixed-use growth area. However, there may also be value in considering these areas together at a high level, particularly with respect to road connections, servicing, stormwater management, land use transitions, and the relationship between future employment lands and future residential neighbourhoods. Even if the industrial lands remain outside the formal Secondary Planning Strategy boundary, future road links and interface conditions between these areas should be considered through the next phase of planning.

Based on this review, the recommended approach is to generally maintain the existing study area boundary, with three possible refinements for consideration.

First, the Municipality may wish to consider reducing the boundary in the western portion of the study area to exclude existing private road-accessed, low-density residential areas (Area A - 126 ha) that are unlikely to contribute meaningfully to future comprehensive development.

Second, the Municipality may wish to consider removing the lands to the south of Horne Settlement Road where the suitability for development is highly impacted by the Shubenacadie River flood risk areas (Area B - 50 ha).

Third, the Municipality may wish to consider whether the northeastern boundary should be expanded to include, or at least more directly coordinate with, the adjacent municipally owned industrial lands, specifically the municipally-owned parcel (45225992) that would allow for a transportation connection to Park Road (Area C - 17 ha). If the boundary is not changed, the Phase 2 process could still account for future connectivity and compatibility between the study area and these industrial lands.

These considerations do not represent a large expansion of the study area, but rather they would ensure that lands carried forward into the next phase have realistic development potential and can contribute to a coherent long-term growth structure for Enfield. Additionally, the changes may avoid unnecessarily raising questions about the future of lands that would not reasonably contribute to the Secondary Planning Strategy goals.

6.3 — Final Recommendation on Approach to Phase 2

The Phase 1 analysis confirms that the study area contains a mix of significant constraints and meaningful long-term development opportunities. Several portions of the study area are affected by environmental, physical, parcel-based, and access-related constraints, including flood-prone lands along the Shubenacadie River, wet areas and likely wetlands in the eastern portion of the central development area, the north-south watercourse that bisects the central lands, and existing low-density private road subdivisions in the western and northern portions of the study area.

At the same time, the analysis identifies several areas that appear to have potential for future comprehensive development that collectively total over 170 hectares of land in large mostly contiguous parcels. The most promising lands are located within the central portion of the study area, including the large linear tract extending between Horne Settlement Road and Renfrew Road, the smaller western tract extending toward Grand Lake, and the triangular lower-constraint area near Renfrew Road and Enfield Road. The northeastern portion of the study area also contains lands with development potential, particularly where future road connections may be possible near the Whitney Maurice Drive subdivision and adjacent municipal lands.

Based on these findings, the presence of constraints does not present an insurmountable barrier to future planning. Rather, the constraints help clarify where future growth should be focused, where development should likely be avoided, and which issues require further study. The lower-constraint lands identified through Phase 1 are sufficiently large and connected to warrant continued secondary planning work.

It is therefore recommended that the Municipality proceed to Phase 2 of the Enfield Secondary Planning Strategy. Phase 2 should build on the Phase 1 findings by testing future land use concepts, road and active transportation connections, servicing approaches, stormwater management strategies, open space networks, and implementation options. Particular attention should be given to the central development areas, the need for any watercourse crossings, the treatment of wetland and drainage features, potential boundary refinements, and coordination with adjacent municipal industrial lands to the northeast.

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