

## 2164 OLD PRESCOTT ROAD

Planning Rationale

August 31, 2022

Prepared for: PW Justice Holding Ltd.

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Project Number: 160410230

## 2164 Old Prescott Road

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
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# 1 INTRODUCTION

Stantec has prepared this Planning Rationale for our client, PW Justice Holdings Ltd., in support of a Zoning By-law Amendment application for their property at 2164 Old Prescott Road. The owner is proposing to construct a detached dwelling and ancillary building, both on private services, on the property.

# 2 SITE CONTEXT AND DEVELOPMENT PROPOSAL

## 2.1 Site Context

The property is located in the City of Ottawa, south of the community of Greely at the northeast corner of Stagecoach Road and Old Prescott Road (Figure 1). The property, municipally known as 2164 Old Prescott Road, is a corner lot located at the north-east corner of Old Prescott Road and Stagecoach Road. The property is legally described as *Part of Lot 15, Concession 4, Geographic Township of Gloucester, part of Part 1 on Plan 5R-684 save and except Parts 1 to 10 on 4R-18771, City of Ottawa*. The property has an area of approximately 9.63 hectares (23.7 acres) with 203 metres of frontage on Stagecoach Road and 478 metres of frontage on Old Prescott Road.



Figure 1: Aerial imagery of the property (orange) and surrounding context (GeoOttawa, 2021).



The property is part of a former sand and gravel pit and is partially covered by a large, excavated pond. The aggregate licence (*Aggregate Resource Act* Licence No.: 4047) was surrendered on December 10, 2012. Our client has severed three lots (2158, 2160 and 2162 Old Prescott Road) from the original pit and constructed three detached dwellings on the respective lots. The remainder of the property is covered by mowed grass and regenerating trees. The property slopes from Old Prescott Road to the excavated pond.



Figure 2: View of the waterbody from the southwest portion of the property, looking northeast. The aggregate operation is located in the distance (July 2022).

The property and surrounding lands are designated as Sand and Gravel Resource Area on Schedule A of the current Official Plan (2003, as amended) and zoned ME2- Mineral Extraction (Zoning By-law 2008-250).

The new Official Plan (adopted 2021) places the property within the Rural Transect on Schedule A and designates it as Rural Countryside with a Sand and Gravel Overlay on Schedule B9.

The following uses surround the property:

**North:** Osgoode Sand and Gravel Ltd. operates a Class A sand and gravel pit northeast of the property at 2094 Old Prescott Road. Further north along Stagecoach Road are residential uses (detached dwellings), agriculture uses, and the commercial use Vriend Construction Ltd.

**East:** Three detached dwellings on private services, constructed by the client, are located to the east of the property at 2158, 2160 and 2162 Old Prescott Road. As mentioned above, the three lots were severed from the original pit. The lots are designated Sand and Gravel Resource Area and zoned RU[193r]- Rural. Rural special exception zone 193 requires a building's footing to be 0.3m higher

than the high water table and permits a habitable dwelling within 5m to the high water mark of the lake.

**South:** Old Prescott Road, a collector, bounds the property to the south. Meadowlands Village, a mobile home park, is located at 2183 Old Prescott Road and surrounds 2191 Old Prescott Road, a detached dwelling on private services, opposite the property.

**West:** Stagecoach Road, an arterial, bounds the property to the west. A detached dwelling and paving company are located at 2136 Stagecoach Road.



Figure 3: Photo of property south of the waterbody, looking west towards Stagecoach Road at the proposed development site. Old Prescott Road is to the left (July 2022).

# 2.2 Development Proposal

The intent of the ME2- Mineral Extraction zone is to recognize lands with aggregate resource potential and limit land uses which would preclude extraction of these resources. The property is a former sand and gravel pit, and all aggregate resources on the property have been exhausted.

The owner is seeking to rezone the property from ME2- Mineral Extraction to RU [193r]- Rural Countryside Zone. The new zone will allow the final portion of the former sand and gravel pit to be repurposed as residential lot, similar to the previous three lots that have been created from the former pit since 2012. The RU[193r] zone is identical to the three existing residential lots to the east.



Rural special exception zone [193r] permits all uses within the RU- Rural Countryside parent zone with the following additional provisions:

- Minimum building footing elevation of 0.3 m above high water table
- No habitable dwelling may be constructed within 5 m of the high water mark of the lake

As noted above, the zoning is identical to three dwellings east of the property constructed over the past decade. The dwellings, and aggregate operation to the north, have operated adjacent to the waterbody and each other for over ten years without issue.

Further details of the proposed zoning are discussed in Section 3.3 of this rationale.

## 2.3 Environmental Site Assessment and Record of Site Condition

Since the previous severances and home construction to the east, changes have been made to O. Reg. 153/4 of the Environmental Protection Act. As a result, a Record of Site Condition (RSC) was required to change to the use of the property from industrial (such as an aggregate operation) to residential.

Stantec prepared a Phase I Environmental Site Assessment (ESA) (June 2018), Phase I update letters (July and August 2021), and Phase II ESA (November 2021) which formed part of the RSC submission to the Ministry of Environment, Conservation and Parks. The application was approved by the Ministry and entered into the Environmental Site Registry on March 30, 2022 (RSC #: 230914). Further details of the environmental site assessments and environmental approvals are provided in Section 4.3 of this rationale.

The RSC covers a portion of the property's southwest corner with an area of 1.08 ha. The area is of sufficient size that, even with a setback applied to the waterbody, there is sufficient space to accommodate a large dwelling, private well and septic system, extensive amenity area, and safe and convenient vehicular access.



# 3 POLICY AND REGULATORY FRAMEWORK

# 3.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) provides policy direction on land use planning and development matters of provincial interest. Under Section 3 of the *Planning Act*, decisions affecting planning matters "shall be consistent with" the PPS.

#### **RURAL AREAS IN MUNICIPALITIES**

The PPS defines 'rural lands' as those that are not within a 'settlement area', nor designated 'prime agricultural area'. Section 1.1.5 of the PPS states that limited residential development, home occupations and home industries are permitted uses on rural lands. Policy 1.1.5.4 states that development that is compatible with the rural landscape, and can be sustained by rural service levels, should be promoted. The proposed RU[193r] zone is used for a number of properties in the area and permits a limited number of lower intensity and land-extensive uses that are compatible both with each other and the surrounding rural context consistent with the PPS. The anticipated future use of the property will be for a residential dwelling on private services; the use is compatible with the surrounding landscape and can be sustained by rural service levels, including the proposed private well and septic systems.

Policy 1.1.5.7 states that development not related to agricultural or other resource-related uses should be directed to areas where it will minimize constraints on these uses. The proposed development is not located on prime agricultural lands. The development is located on a former sand and gravel pit which surrendered its licence 2012 after all mineral aggregate resources on the site were exhausted. Stantec has prepared an Aggregate Impact Assessment (June 2018) which demonstrates that the proposed development will not impact the extraction of existing or future mineral aggregate resources on surrounding lands.

#### SEWAGE, WATER AND STORMWATER

Section 1.6.6.4 of the PPS states that individual, on-site water and wastewater services may be used if site conditions are suitable for their long-term provision without negative impacts. Hydrogeological (June 2018) and geotechnical (June 2018) reports have been prepared by Stantec for the proposed development. The reports demonstrate there is sufficient quantity and quality of groundwater to service the proposed development, and soil conditions are conducive to the placement of septic systems without any negative impacts on surrounding drinking water or environmental features.

#### WISE USE AND MANAGEMENT OF RESOURCES

Section 2.0 of the PPS provides further policies related to the protection natural resources, summarized below.

• Section 2.1 (Natural Heritage): the site is a former sand and gravel pit that was active until 2005. An active mineral aggregate operation is located north of the property and will eventually expand the



existing excavated pond. The proposed development will not impact any significant wetlands, woodlands, valleylands or areas of natural or scientific interest. Due to the site's recent use as a sand and gravel pit, and adjacency to an active mineral aggregate operation an investigation of natural heritage features was not considered to be necessary.

- Section 2.2 (Water): The development will not impact groundwater features, natural heritage features
  or municipal drinking water supplies. The excavated pond on the property is a result of the former
  mineral aggregate operation and does not outlet to a watercourse.
- Section 2.3 (Agriculture): The property is not located on lands with any identified agricultural potential.
- Section 2.4 (Minerals and Petroleum): There are no mineral or petroleum resources on the property.
- Section 2.5 (Mineral Aggregate Resources): The property is a former sand and gravel pit. All resources
  have been exhausted and the extraction licence was surrendered in 2012. Policy 2.5.3.1 states that
  final rehabilitation shall be required to accommodate subsequent land uses and final rehabilitation shall
  take surrounding land use designations into consideration. The proposed development is appropriate
  for a former sand and gravel pit site and is compatible with surrounding rural and resource extraction
  uses.
- Policy 2.5.2.5 state that development of uses on lands adjacent to known deposits of mineral aggregate resources that would preclude, or hinder establishment of new operations shall only be permitted in limited circumstances. An Aggregate Impact Assessment prepared by Stantec (June 2018) demonstrates that the proposed development will not impact existing surrounding mineral aggregate extraction operations, or areas designated for mineral aggregate extraction.
- Section 2.6 (Cultural Heritage and Archaeology): the property is a former sand and gravel pit which
  was active until approximately 2005, resulting in extensive ground disturbance. There are no buildings
  or features of cultural significance present on the property.

#### PROTECTING PUBLIC HEALTH AND SAFETY

Section 3.0 of the PPS provides policies related to reducing the potential public cost and protection of residents from natural or human-made hazards.

- Section 3.1 (Natural Hazards): the property is not located on lands impacted by hazardous sites, erosion and/or dynamic beach hazards, or large inland lakes. A Geotechnical Investigation was prepared by Stantec (June 2018) addressing public health and safety concerns. Additional details are provided in Section 4.2 of this rationale.
- Section 3.2 (Human-Made Hazards): no mining, aggregate operation or petroleum resource operation hazards exist on or near the property. Stantec was retained to conduct environmental investigations of the property beginning with a Phase I ESA prepared in June 2018. Due to the former aggregate operation use it was determined that a Phase II assessment was warranted to support an RSC application to the Ministry. Earlier this year, the Ministry issued an RSC and entered the property into the Environmental Site Register. Use of the approved portion of the property for residential purposes may proceed.



# 3.2 Official Plan (2003, as amended)

The City of Ottawa adopted a new Official Plan (new OP) document in fall of 2021. The new OP is currently under review by the Ministry of Municipal Affairs and Housing with an indeterminant timeline for its approval. Until approved, both the current Official Plan (approved in 2003 and since amended) (current OP) and new OP policies must be considered. The following section reviews the applicable policies of the current OP.

The property is designated as Sand and Gravel Resource Area on Schedule A of the Official Plan (see Figure 3). Section 3.7.4 of the OP states that Sand and Gravel Resource Areas are designated to protect non-renewable mineral aggregate resources for future use, protect resources and existing operations from incompatible uses, and minimize negative impacts of mineral aggregate extraction operations on communities and the environment.



Figure 4: Extract of Schedule A of the Official Plan (2003, as amended).

Policy 15 of Section 3.7.4 states that, where the mineral aggregate resources of a property have been fully extracted, the site fully rehabilitated and the licence surrendered, the property may be used for other purposes.

Policy 10 of Section 3.7.4 states that development will not be approved within 300m of a Sand and Gravel Resource Area unless it can be demonstrated that the development will not conflict with future mineral aggregate extraction- this includes zoning changes to permit residential dwellings. Policy 11 further explains that development can be approved within 300 m of an existing sand and gravel pit if it can be demonstrated



that that the existing operation, and its potential future expansion in depth or extent, will not be affected by the development.

As mentioned in Section 2.1 of this Rationale, the mineral aggregate resources on the property have been exhausted and the former pit has been rehabilitated. The future area of residential development is located approximately 130 m south of the north property line which abuts lands zoned ME2- Mineral Extraction.

To assess the development's potential impacts on the existing mineral aggregate operation, and other surrounding lands designated Sand and Gravel Resource Area, Stantec prepared an Aggregate Impact Assessment (June 2018). The assessment demonstrates that the proposed development will not result in direct sterilization of mineral resources, land use conflicts which may impair extraction of surrounding resources, or increased restrictions on existing operations. The assessment notes that there are several existing dwellings in the area at the same distance from the existing mineral aggregate operation and lands designated Sand and Gravel Resource Area. The assessment states that since there is no significant risk of the proposed development creating a new source or type of risk of conflict with existing and/or future aggregate operations, no special mitigation is required.

#### WATER AND WASTEWATER SERVICING

Section 4.4 of the OP outlines policies regarding the provision of water and wastewater services. The proposed development is located outside the City's Public Service Area and will be serviced by a private well and septic systems. Stantec prepared a hydrogeological assessment (June 2018) which reviewed site conditions and assessed groundwater supply potential and septic system effluent disposal. Based on the assessment of geological conditions, and records from two operating wells within 200m of the property, both the overburden and bedrock formations reflect water-bearing zones that are highly transmissive and ground conditions at the property can sustain a yield to serve the proposed development. Guideline D-5-4 for individual on-site sewage systems states that, for lots greater than 1 hectare "the risk that the boundary limits imposed by these guidelines may be exceeded by individual systems is considered acceptable in most cases." The lot is 9.2 hectares, significantly larger than the 1-hectare minimum area noted to warrant a more detailed hydrogeological assessment.

A summary of the assessment is provided in Section 4.1 of this rationale.

#### ARCHAEOLOGICAL RESOURCES

Section 4.6.2 states that an archaeological resource assessment be conducted where archaeological potential exists. While the site is listed as part of a larger area of possible archaeological potential, the site has been heavily disturbed and modified by the former aggregate operation. As noted in the Phase I ESA, portions of the property have also been filled as part of the aggregate pit rehabilitation. Considering the property's former use, an archaeological assessment was not required by City staff.



#### **EROSION PREVENTION AND PROTECTION OF SURFACE WATER**

Section 4.7.3 of the Official Plan discusses protection stream corridors and surface water environments. The OP states that the purpose of these policies is to preserve and enhance the environmental quality of stream and river corridors as well as reduce risks from natural hazards associated with watercourses.

Policy 2 of Section 4.7.3 provides a minimum setback of 30 m from the normal high water level of a river, lake or stream. This setback may be modified through an amendment or variance to the Zoning By-Law. Policy 7 outlines matters considered by the City and Conservation Authority when an alternate setback is proposed.

While the large, excavated pond is considered a waterbody, it was created by a former aggregate extraction operation, and is currently being expanded by the ongoing Osgoode Sand and Gravel Ltd. operation to the north of the property. The excavated pond is a result of excavation below the water table and does not have an outlet watercourse, nor does it have tributary watercourses which contribute surface runoff. There are no geotechnical or slope stability issues

Three existing dwellings east of the property are zoned RU[193r], which permits a reduced 5 m setback from the high water mark. Considering the excavated pond's ongoing expansion by an adjacent aggregate extraction operation, absence of geotechnical constraints, and precedent of adjacent dwellings with setbacks as little as 5 m, the proposed Zoning By-law amendment to reduce the setback to the pond is reasonable.

#### PROTECTION OF HEALTH AND SAFETY

Section 4.8.3 of the Official Plan discusses unstable soils and bedrock. Site plan, subdivision, condominium, and consent applications are to be supported by a geotechnical study to demonstrate that the soils are suitable for the proposed development. There are no unstable slopes on the property identified on Schedule K of the current Official Plan.

Stantec prepared a geotechnical and slope stability assessment (June 2018) for the Zoning By-law amendment at the request of City staff. The information will also be used by the owner to inform the design of the dwelling and any accessory buildings. There is a slope from Old Prescott Road down to the excavated pond. The assessment confirmed that portions of the existing slope are not stable and recommended stable slope and access allowance setbacks. While there are slope-related constraints on the property, there is sufficient land outside the identified hazards to permit the proposed dwelling. Further discussion of the report's recommendations is provided in the Geotechnical Investigation and Slope Stability Assessment and Section 4.2 of this rationale.

Section 4.8.4 of the Official Plan requires applicants to document previous uses of a property subject to a development application to determine the potential for site contamination.

As noted in Section 2.3 of this rationale, a series of environmental investigations were completed by Stantec to investigate the presence of anthropogenic hazards on or adjacent to the property in support of a required



RSC application to permit a change in land use from industrial to residential. Earlier this year, the Ministry issued an RSC and entered the property into the Environmental Site Register.

## 3.3 New Official Plan (adopted 2021)

The new Official Plan places the property within the Rural Transect on Schedule A and designates it as Rural Countryside with a Sand and Gravel Overlay on Schedule B9.

#### **GREENBELT AND RURAL TRANSECTS**

Development in the Rural Transect located outside of designated villages is to be low-rise and with a built form and site design that maintaining the rural character, image, and identity. Section 5.5.1 Policy 2 expands on the built form and land uses that may be considered in the Rural Transect (emphasis added):

- 2) Development in the Greenbelt and Rural Transect areas shall:
  - a) <u>Be of low density throughout, with the majority of residential uses and commercial and institutional uses concentrated within Villages;</u>
  - b) Allow for higher densities within serviced Villages;
  - c) Allow for uses that integrate well with the natural environment and rural area;
  - d) Direct high-intensity rural industrial uses to locations near highway interchanges;
  - e) <u>Be adequately serviced and not create any risk that cannot be adequately mitigated, to the quality and quantity of groundwater for the surrounding area</u>
  - f) Within the Greenbelt, allow for higher institutional or employment uses where the use can be supported by the available transportation network, including consideration for the availability of public transit service.

The property's surroundings are characterized by one and two-storey detached dwellings, some with home-based businesses or farm operations, on large lots with generous setbacks and extensive naturalized and manicured landscaping. Development under the proposed RU[193r] zone will be of a consistent form and design to the established rural character and can be sustained by rural service levels.

#### **AGGREGATE OVERLAYS**

Section 5.6.3 of the new OP provides direction on lands affected by the Sand and Gravel Overlay. The intent of these policies is to protect mineral aggregate resources from direct or indirect sterilization from incompatible uses and limit the potential of land use conflicts between existing, new or expanding aggregate operations and sensitive land uses.

Similar to the current OP, the development of sensitive land uses is generally restricted within 300 m of lands within the Sand and Gravel Overlay. Section 5.6.3.1 Policy 4 permits new development within this potential influence area if it can be demonstrated that the existing mineral aggregate operation, and potential future expansion of the operation in depth or extent, will not be affected by the development.

Policy 10 recognizes that land on which aggregate resources have been exhausted may be used for other uses in line with the underlying designation:



10) Where the sand, gravel or bedrock mineral aggregate resources of a property have been fully extracted, the site fully rehabilitated and an aggregate license surrendered, the property may be used for other purposes in accordance with the policies of the underlying designation. Under this circumstance the City shall not require the proponent to amend the mineral aggregate overlay; instead the overlay shall be amended to accurately reflect the new use at the time of the next comprehensive Official Plan update or through a City-initiated Official Plan amendment.

In this case, land uses permitted by the underlying Rural Countryside designation may be considered on the property now that the resources have been exhausted, rehabilitation has been completed, and the aggregate licence surrendered.

#### **RURAL COUNTRYSIDE**

Section 9.2 Policy 1 of the new OP lists the types of uses permitted within the Rural Countryside designation:

- 1) The following uses may be permitted:
  - a) Forestry, conservation and natural resource management activities;
  - b) Agriculture, agriculture-related and on-farm diversified uses;
  - c) Residential uses according to the policies of this plan;
  - d) Animal services boarding, breeding and training and equestrian establishments;
  - e) Bed and breakfasts;
  - f) Utility Installations;
  - g) Cemeteries; and
  - h) Sand and gravel pits.

The proposed RU[193r] zoning will permit use of the land for a number of uses contemplated by the designation with the intended use to be for a detached dwelling on private services. The proposed rezoning is consistent with the transect, overlay and designation of the new OP.

### **SERVICES**

Section 4.7.2 of the new OP outlines policies regarding the provision of water and wastewater services. The proposed development is located outside the City's Public Service Area and will be serviced by a private well and septic systems. Stantec prepared a hydrogeological assessment (June 2018) which reviewed site conditions and assessed groundwater supply potential and septic system effluent disposal. Based on the assessment of geological conditions, and records from two operating wells within 200m of the property, both the overburden and bedrock formations reflect water-bearing zones that are highly transmissive and ground conditions at the property can sustain a yield to serve the proposed development. Guideline D-5-4 for individual on-site sewage systems states that, for lots greater than 1 hectare "the risk that the boundary limits imposed by these guidelines may be exceeded by individual systems is considered acceptable in most cases." The lot is 9.2 hectares, significantly larger than the 1-hectare minimum area noted to warrant a more detailed hydrogeological assessment.

A summary of the assessment is provided in Section 4.1 of this rationale.



#### **WATER RESOURCES**

Section 4.9 of the new OP provides direction intended to protect water resources and riparian ecosystems.

Section 4.9.3 Policy 2 provides direction on required setbacks from surface water features when not located within an approved subwatershed or environmental management plan. The minimum setback is the greater of a hazard limit, 30 metres from top of bank, or 15 metres from existing stable top of slope where defined. The definition of "surface water features" is consistent with that of the PPS being: "water-related features on the earth's surface, including headwater drainage features, rivers, stream channels, drains, inland lakes, seepage areas, recharge/discharge areas, springs, wetlands and associated riparian lands that can be defined by their soil moisture, soil type, vegetation or topographic characteristics, including fish habitat." The policy and definition do not consider waterbodies that have formed as a result of aggregate extraction operations.

While the waterbody could be narrowly defined as a surface water feature under the definition of the PPS and new OP this does not consider the origins of the waterbody, its current operation as a recreational asset, or human interventions that have been made to revegetate and restore the property and waterbody to a state that supports a variety of flora and fauna. The waterbody is not a natural feature and is connected to, and being expanded by, ongoing sand and gravel extraction operations north of the property.

Based on the waterbody's human-made origins, disconnection from other riparian corridors, and ongoing disturbance and modification by a mineral aggregate operation to the north, setbacks outlined in Policy 2 of Section 4.9 of the new OP are unreasonable to apply to the current proposal.

#### PROTECTION OF HEALTH AND SAFETY

Section 10 of the new OP provides policies intended to protect public health and safety. Many of these policies are identical either in direction or intent to the current OP, and are reviewed in brief below.

Section 10.1.4 directs development away from areas of unstable soils or bedrock as defined as a Hazardous Site in the PPS.

Stantec prepared a geotechnical and slope stability assessment (June 2018) for the Zoning By-law amendment at the request of City staff. The information will also be used by the owner to inform the design of the dwelling and any accessory buildings. The assessment identified the top of slope and recommended a stable slope and access allowance setback. While there are slope-related constraints on the property, there is sufficient land outside the identified hazards to permit the proposed dwelling.

Section 10.1.6 provides policies related to potential soil or groundwater contamination. As discussed in Section 2.3 of this rationale, a Record of Site Condition was submitted to the Ministry as a result of the proposed land use change from industrial (former sand and gravel pit) to residential.

- 4) When the filing of a Record of Site Condition is required, a copy of the Record of Site Condition and all supporting documentations along with the Ministry's acceptance shall be submitted to City. The City shall consider a Record of Site Condition as acknowledged by the Ministry when:
  - a) It has been confirmed that the Record of Site Condition has passed the Ministry's audit; or



b) It has been confirmed that the Record of Site Condition will not be audited by the Ministry.

The updated Phase I and Phase II ESAs focused on a one-hectare portion of the property at the southwest corner of the larger parcel. The purpose of the Phase II ESA is to evaluate the environmental condition of the property in support of the filing of an RSC for future residential development. The Phase II ESA characterized soil and groundwater at areas of potential environmental concern (APECs) identified in the Phase II ESA. Limited soil and groundwater exceedances were identified in the 2018 Phase I ESA; more extensive sampling through 2020 and 2021 did not exceed Table 8 limits either in average or absolute terms.

Based on the results of the Phase II ESA, the MECP (2011) Table 8 SCS were met at the time of the assessment within APEC 1.

The application was approved by the Ministry and entered into the Environmental Site Registry on March 30, 2022 (RSC #: 230914). Further details of the environmental site assessments and environmental approvals are provided in Section 4.3 of this rationale.

The RSC covers a portion of the property's southwest corner with an area of 1.08 ha. The area is of sufficient size that, even with a setback applied to the waterbody, there is sufficient space to accommodate a large dwelling, private well and septic system, extensive amenity area, and safe and convenient vehicular access.

Section 10.1.10 of the new OP provides policies related to hazards created from former mines and aggregate operations. The former pit was adequately decommissioned and has been under the care and stewardship of the current owner for over a decade who has worked to replant, grade, and landscape the lands to stabilize slopes, prevent erosion, and promote the development of a range of local flora and fauna on the property and surrounding the waterbody. The pit has been more than adequately rehabilitated and there are no risks to public health or safety from the former operation.

# 3.4 Zoning By-law 2008-250

The property is currently zoned ME2- Mineral Extraction zone. To permit the proposed development, an amendment to the Zoning By-law is required. The intent of the ME2- Mineral Extraction zone is to recognize lands with aggregate resource potential and limit land uses which would preclude extraction of these resources. As discussed previously, all aggregate resources have been exhausted, the property has been rehabilitated and the aggregate licence has been surrendered to the MNRF.

The owner is seeking to rezone the property from ME2- Mineral Extraction to RU [193r]- Rural Countryside. The new zone will allow the final portion of the former sand and gravel pit to be repurposed as residential lot, similar to the previous three lots that have been created from the former pit since 2012. The RU[193r] zone is identical to the three existing residential lots to the east.

Rural special exception zone [193r] permits all uses within the RU- General Rural parent zone with the following additional provisions:



- Minimum building footing elevation of 0.3 m above high water table
- No habitable dwelling may be constructed within 5 m of the high water mark of the lake

As noted above, the zoning is identical to three properties containing detached dwellings to the east of the property constructed over the past decade. The dwellings, and aggregate operation to the north, have operated adjacent to the waterbody and each other for over ten years without issue.

The intent of the RU- Rural Countryside zone is to accommodate resource-based, country residential lots created by severance and other land uses characteristic of Ottawa's countryside. The zone also intends to regulate various types of development in manners that ensure compatibility with adjacent land uses and respect the rural context. The RU zone permits a range of low-intensity rural and residential uses consistent with the General Rural Area designation of the current OP and the Rural Countryside designation of the new OP.

The proposed reduction in setback from the excavated pond is consistent with the three dwellings east of the property, all of which have reduced setbacks of 5 m.



## 4 OVERVIEW OF TECHNICAL STUDIES

Section 4.7 of the current Official Plan states that "design components will be considered as inputs into the development process and must be assessed and considered prior to establishing an initial design or lot pattern. This process will be implemented through an application of the integrated environmental review process". The Official Plan describes an integrated environmental review as a process which, "considers, as a whole, the significant findings from individual support studies and ensures that development design complies with the environmental policies contained in Section 4, and that the principles of design with nature have been applied."

The following section provides a summary of each technical study prepared in support of the proposed development. Detailed and technical information can be obtained by reviewing the respective studies.

## 4.1 Hydrogeological Assessment

Stantec prepared a desktop hydrogeological investigation using information from the Ontario Water Well Records database to identify wells in proximity to the proposed development. Two well records were identified for nearby wells. There are no known reports of impacted groundwater quality at nearby groundwater supply well locations.

Well A095929 is located on 2162 Old Prescott Road immediately east of the property and serves the existing dwelling. It was completed within the limestone bedrock. Steady state groundwater pumping at 82 m3/day effected less than 1m of water table drawdown.

Well 1527636 is a communal well south of the property, completed with a 2.5 m long stainless steel wire wound screen at the base of the overburden aquifer. The well record indicates the well is capable of sustaining a pumping rate up to 654 m3/day. At this pumping rate, 3. m of water level drawdown was observed within the pumping well.

The assessment concludes that the nearby well records show that both overburden and bedrock formations are highly transmissive water bearing zones and that ground conditions at 2164 Old Prescott Road are capable of sustaining a yield sufficient for servicing the proposed development, which will have a water demand less than 10 m³/day. As such, operation of groundwater supply wells at 2164 Old Prescott Road should not adversely affect the operation of nearby groundwater production wells.

The assessment notes that, due to the property's large size (9.2 hectares), the limited scale of the proposed development, and high transmissivity of overburden and bedrock formations there should be no concerns with nitrate-nitrogen concentrations from septic system effluent.



# 4.2 Geotechnical Investigation

Stantec prepared a Geotechnical Investigation and Slope Stability Analysis for the property based on the City's Slope Stability Guidelines. Stantec advanced four boreholes at the locations of proposed buildings, and at the top and bottom of the slope. Subsurface conditions on the south side of the site generally consist of fill, sand, sandy silt, and till. Groundwater was measured 5.2 m below ground surface.

Two cross-sections, bisecting each of the proposed buildings' potential locations, were analyzed for slope stability under static and seismic conditions. The slope stability assessment concluded that there are unstable slopes on the property and recommends that proposed buildings be located outside of the stable slope and 6m access allowance. The locations of these constraints are shown in the Geotechnical Investigation and Slope Stability Analysis.

The report recommendations do not restrict the proposed uses or development of the property. The recommendations have been used to adjust the concept plan for the proposed development and will inform the building design and construction process, including foundation design and building location. Due to the limited nature of the development these matters can be adequately addressed through the building permit application process.

## 4.3 Environmental Site Assessment

Section 4.8.4 of the current Official Plan requires that all development applications are accompanied by a Phase I Environmental Site Assessment (Phase I ESA) completed in accordance with Ontario Regulation 153/04.

Stantec prepared a Phase I Environmental Site Assessment (ESA) (June 2018), Phase I update letters (July and August 2021), and Phase II ESA (November 2021) which formed part of the RSC submission to the Ministry of Environment, Conservation and Parks. The application was approved by the Ministry and entered into the Environmental Site Registry on March 30, 2022 (RSC #: 230914).

The updated Phase I and Phase II ESAs focused on a one-hectare portion of the property at the southwest corner of the larger parcel. The Phase II ESA characterized soil and groundwater at areas of potential environmental concern (APECs) identified in the Phase II ESA. Limited soil and groundwater exceedances were identified in the 2018 Phase I ESA; more extensive sampling through 2020 and 2021 did not exceed Table 8 limits either in average or absolute terms.

Based on the results of the Phase II ESA, the MECP (2011) Table 8 SCS were met at the time of the assessment within APEC 1.

A Record of Site Condition (RSC) was required to change to the use of the property from industrial (such as an aggregate operation) to residential. The RSC covers a portion of the property's southwest corner with an area of 1.08 ha. The area is of sufficient size that, even with a setback applied to the waterbody, there



is sufficient space to accommodate a large dwelling, private well and septic system, extensive amenity area, and safe and convenient vehicular access.

# 4.4 Mineral Aggregate Impact Assessment

Section 3.7.4 Policy 10 of the current Official Plan states that development will not be approved within 300 m of a Sand and Gravel Resource Area unless it can be demonstrated that the development will not conflict with future mineral aggregate extraction.

Stantec prepared an Aggregate Impact Assessment (June 2018) to assess the development's potential impacts on the existing mineral aggregate operation, and other surrounding lands designated Sand and Gravel Resource Area. The assessment demonstrates that the proposed development will not result in direct sterilization of mineral resources, land use conflicts or increased restrictions on existing operations. The assessment notes that there are a number of existing dwellings in the area that are the same distance from the existing mineral aggregate operation and other lands designated Sand and Gravel Resource Area. The assessment states that since there is no significant risk of the proposed development creating a new source or type of risk of conflict with existing and/or future aggregate operations, no special mitigation is required.



# 5 CONCLUSION

This rationale has demonstrated that the proposed development is consistent with the Provincial Policy Statement, conforms to both the current and new City of Ottawa Official Plans and has been designed respecting relevant guidelines.

The Zoning By-law Amendment will change the current ME2- Mineral Extraction zone to a RU- Rural Countryside special exception zone, as has been done for the three existing dwellings to the east that have been located on the former sand and gravel pit.

The proposed amendments to the Zoning By-law, and development concept, represent good planning and will be a positive addition to the community.

Respectfully submitted,

Eric A. Bays MCIP, RPP Intermediate Planner



# CONCEPTUAL DEVELOPMENT PLAN

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