

August
2016

UPPER GLENROSA/SALMON ROAD COMPREHENSIVE DEVELOPMENT PLAN

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1.0 INTRODUCTION

The Upper Glenrosa property is 12.07 hectares located within the City of West Kelowna, approximately 3 km northwest of the intersection of Glenrosa Road and Highway 97. The property is bordered by Glenrosa Road to the south, residential neighborhoods to the east, residential, country residential, and forest reserves to the north, and rural residential large parcels to the west.

The proposed development lands consist of the following three legal parcels:

- Block 105, Plan KAP777, District Lot 3190, ODYD (4.05 ha.)
- Lot A, Plan KAP68680, District Lot 3190, ODYD (4.00 ha.)
- Lot B, Plan KAP68680, District Lot 3190, ODYD (4.02 ha.)

The City of West Kelowna Official Community Plan (OCP) Bylaw 0100 Schedule 2 - Growth and Management Designations, locates the three parcels above inside the Rural Reserve boundary. The City recognizes that these parcels are suitable for development and supports residential development options.

This Comprehensive Development Plan (CDP) establishes a coherent framework for implementing OCP policies and guiding future development. The limits of the CDP are illustrated on **Figure 1 – Area Context**.

2.0 CONTEXT

The Upper Glenrosa/Salmon Road CDP consists of three parcels with a combined total land area of 12.07 hectares, shown on **Figure 2.1** below.



Figure 2.1: Area Map

As shown on Figure 2.1, the site is bounded by Glenrosa Road to the south, Crown Land to the north, rural acreages to the west, and single family residential to the northeast, east, and southeast.

The property generally consists of grasslands and forested areas sloping uphill to the northwest. The site also contains a drainage course running west to east, ending just prior to Salmon Road. Existing ground surface and sub-surface conditions are discussed in detail in Section 6.0 of this GDP.

The site lies within the “Rural Reserve” boundary as identified in the City of West Kelowna Official Community Plan (OCP). The intent of this OCP designation is to focus growth within remaining available “inner city” parcels. However, it is recognized that the establishment of Rural Reserve boundaries are at times “high level” exercises where the bordering properties are reviewed on a case by case basis. For this property, we understand the site to be well suited for the intended development. Developing this site will support economic growth, provide affordable housing options, create jobs, and contribute towards positioning West Kelowna for accommodating the ongoing growth of our communities. The OCP designations for the subject site and the surrounding areas are shown on Figure 2.3 below.



Figure 2.3: OCP Map

The existing development site is zoned rural residential. Its proposed future zoning is mostly single family residential (SFR) closely matching many of the existing SFR areas to the northeast, east, and southeast of the subject property. The proposed land use also includes a low density multi-family component intended to lessen impacts to the environment and provide an affordable housing option for prospective buyers.

Figure 2.3 - Zoning Map, below presents the existing surrounding zoning.



Figure 2.3: Zoning Map

The Upper Glenrosa/Salmon Road CDP and its supplemental reports will be taken under advisement in reviewing land use and servicing applications.

A phasing plan has not been established because the development cannot be limited to any one of the three subject properties. It is expected under current economic and market conditions, full construction of the Upper Glenrosa property could take up to 5 years.

3.0 GLENROSA PROCESS AND OPEN HOUSES

The Upper Glenrosa/Salmon Road CDP was developed in consultation with a range of stakeholders, including various City of West Kelowna departments and interested citizens from the Upper Glenrosa residential neighbourhoods.

Two informal ‘drop in’ open houses were held to inform the general public of the CDP and to present the land use concept and receive feedback. Project staff were present to provide information and field questions by attendees. City staff were also present to observe and answer any questions related to the process.

To ensure all attendees had a comprehensive understanding of the information presented, a hand-out was provided with a space available to record their comments and/or suggestions.

Residents expressed their concerns about the existing condition of Glenrosa Road and its inadequate suitability for supporting future development, as well as a secondary access/egress route for emergency situations. This CDP proposes Glenrosa Road to be upgraded to urban standard.

Upgrades include illumination, roadway widening, re-alignment, and grade adjustments which will address deficiencies and improve safety for road users, cyclists, and pedestrians.

A summary of the open houses can be found within **Appendix E: Public Consultation Summary**.

4.0 RESIDENTIAL LAND USE

Based on preliminary analysis of traffic, servicing, and land capabilities, approximately 118 residential units will be supported within the plan area. A breakdown of each land use with its corresponding area is provided in Table 1.

Table 1: Land Use Areas

Land Use	Area (hectares)	Length (metres)
Single Family Residential	8.07	--
Low Density Multi-Family Residential	0.95	--
Dedicate Open Space	1.14	--
Dedicated Parkland Acquisition	1.08	--
Public Roadways	--	1084
Trails / Pathways	--	320

Consideration is given to a variety of housing forms including single family housing and pockets of multi-family residential. Residential forms will be determined based on engineering opportunities and constraints. Multiple family developments will be incorporated into areas where conventional simple fee lots would have a greater impact on the natural environment.

In order to minimize traffic volumes and impact to existing and future single family areas, multiple family land use designations shall be accessed from Glenrosa Road.

Single household housing will conform to the Single Detached Residential Zone (R1) of the Zoning Bylaw of the City of West Kelowna. Multiple family housing will conform to the Low Density Multiple Residential Zone (R3) of the Zoning Bylaw of the City of West Kelowna.

Future residential development will be in accordance with the Upper Glenrosa/Salmon Road CDP as illustrated on Figure 4.1 below. A full size of this image is attached as **Figure 2 – Land Use Concept/Preliminary Lot Layout**.

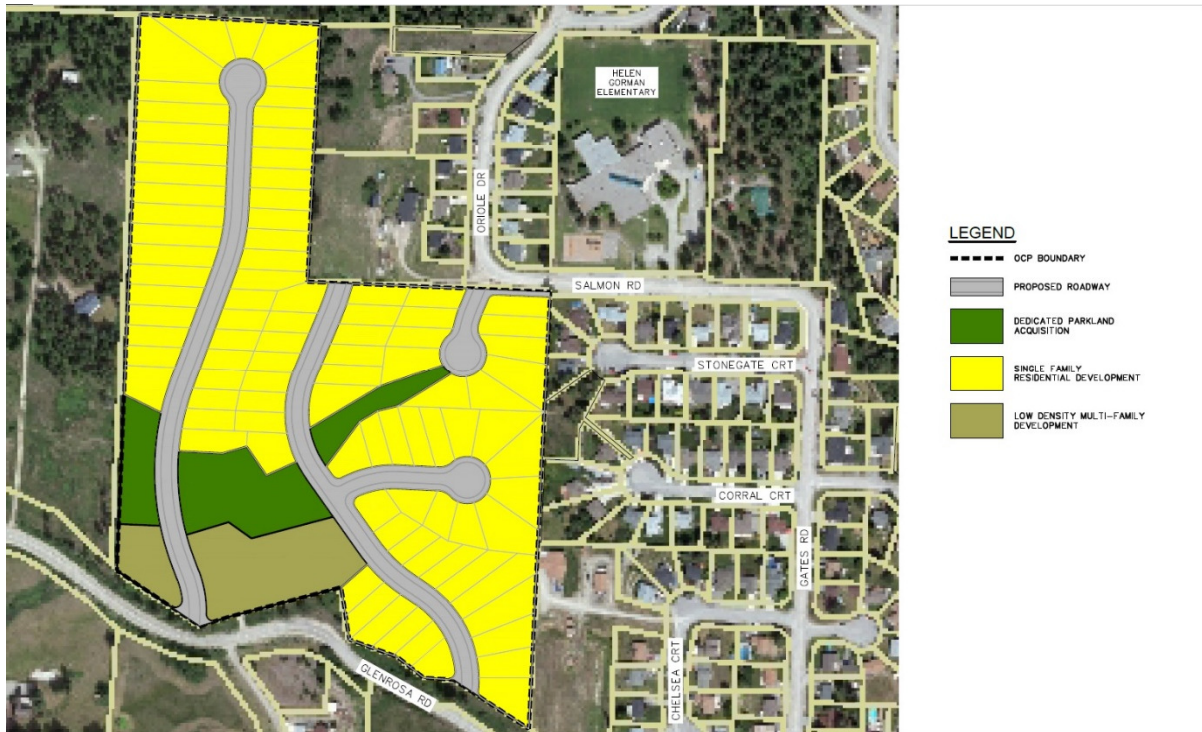


Figure 4.1: Land Use Concept / Preliminary Lot Layout

The following Land Use Policies will guide Upper Glenrosa/Salmon Road future development:

- In general, the land use concept should be maintained, recognizing some flexibility (i.e. rezoning) may be required during the detailed design stage of development.
- Residential density shall be approximately 118 units.

In accordance with the City of West Kelowna OCP, all multiple family developments within the CDP area will require a development permit for form, character, and landscaping. In order to achieve the objectives, the design of areas zoned R3 should follow the DPA 3 – Multiple Family and Intensive Residential guidelines of the OCP. No building permit will be issued without first obtaining a development permit.

The objectives of the development permit will be:

- To maintain a residential character consistent with the single family neighbourhood.
- Be sensitive to the rural location.
- Maintain an orientation and design relationship with the street and neighbourhood.
- To encourage appropriate transitions with adjacent uses.

In addition to following the OCP guidelines, areas zoned R3 should adhere to the following Land Use Policies:

- Buildings should be positioned and stepped to complement the existing topography.
- Multiple family units near single household yards should be sensitive to the issue of privacy. Consideration should be given to special landscaping measures, window and living area orientation, and in sensitively locating outdoor use areas.

5.0 PARKS AND OPEN SPACE

The parkland configuration is designed to protect the area identified as having the highest environmentally sensitive value in the neighbourhood plan area.

Integration of “green space networks” will serve as wildlife corridors to preserve ecosystem connectivity between ESA 2 parkland areas and upland crown land habitats. The wildlife corridors should be left in their natural state where possible, subject to the provisions of the wildfire hazard assessment.

Parkland dedication will provide a west – east recreational and transportation corridor throughout the neighbourhood plan area while providing area residents with the opportunity to access Helen Gorman Elementary.

Parkland will be provided in accordance with the City of West Kelowna Parks and Recreation Master Plan and generally in accordance with **Figure 3 – Parks and Open Spaces**.

The following Parks and Open Space Policies will guide Upper Glenrosa/Salmon Road future development:

- Identification of useable neighbourhood park space will be undertaken at time of subdivision in accordance with *Section 510* of the *Local Government Act*.
- Parkland will be dedicated to the City of West Kelowna as a titled property.
- Wildlife corridors and environmentally sensitive areas will be protected by a Section 219 Covenant in accordance with the *Land Title Act*.
- Dedicated parkland will support the preservation of important ecosystems, wildlife habitats, and connectivity.
- Incorporate a safe and convenient system of interconnected parks, trails, and greenways that encourages pedestrian activity as part of the transportation system.
- Where possible, the dedicated parkland will connect to the existing City of West Kelowna network.
- A neighbourhood park will be situated within the dedicated linear park space adjacent to the existing drainage channel.

6.0 GEOTECHNICAL

Existing site contours and a slope analysis of the Upper Glenrosa/Salmon Road CDP are shown on **Figure 4 – Slope Analysis**.

The CDP boundary generally consists of undulating grasslands and forest areas, sloping up at the northwest corner where occasional bedrock outcrops are visible. Based on visual observations, site appears to be characterized of variable glacial lake deposits, including surface silt deposits underlain by dense gravelly silt and sand, to predominantly sand and gravel soils at the northeast corner of the site.

Occasional bedrock outcroppings were observed along the hillsides sloping up towards the northeast. The exposed bedrock is generally noted to be fairly blocky with frequent random joint sets, such that some consideration with respect to rock fall hazard would be required if blasting is proposed resulting in large bedrock cut slopes.

Overall, no significant geotechnical hazards were observed for the proposed development.

Further details and recommendations are itemized in the Interior Testing Services Ltd. Geotechnical Review (dated October 30, 2015) located in **Appendix A: Geotechnical Study**.

Detailed geotechnical review will be required at subdivision or when a building permit is obtained and additional conditions are added to the development permit in accordance with the City's Terms of Reference for Professional Reporting.

In accordance with the City of West Kelowna OCP, the CDP area will require a development permit for hazardous conditions and protection of the natural environment. In order to achieve the objectives, the design should follow the DPA 4 – Hillside guidelines of the OCP.

The development permit will require that:

- The development will have to minimize the risk of erosion, landslip, and rockfall in steep slope areas.

7.0 WILDFIRE

The City of West Kelowna OCP identifies the Upper Glenrosa site as DPA 7 – Wildfire Interface. In accordance with the DPA, Ecoscape Environmental Consultants Ltd. (Ecoscape) completed a formal Wildfire Hazard Assessment. The assessment involved dividing the CDP boundary into polygons based on vegetation type, density, topography, etc. Polygons were characterized and rated from a wildfire behavioral threat perspective. Wildfire Behavior Threat Scores of *low* and *moderate* were assigned as illustrated on **Figure 5 – Wildfire Hazard Areas**.

Details of the assessment and fire hazard mitigation measures are discussed in the Ecoscape Environmental Consultants Ltd. Wildfire Hazard Assessment (dated November 20, 2013) located in **Appendix B: Wildfire Hazard Assessment**.

The following Wildfire Policies will guide Upper Glenrosa/Salmon Road future development:

- Fire hazard mitigation measures such as woody debris reduction, pruning, and thinning techniques will contribute to a reduction in fire hazard.
- Mitigation exercises should be completed with effort to protect ecological and wildlife values that are present.

8.0 ENVIRONMENTAL

The City of West Kelowna OCP identifies the Upper Glenrosa site as DPA 5 – Aquatic Ecosystem. In accordance with the DPA, Ecoscape completed an environmental assessment that documents aquatic and terrestrial ecosystems on the property. The intent was to identify important environmental features in order to protect the natural environment and its ecosystems.

The property is characterized by a mix of cultivated field, semi-cleared areas, and a variety of trees. Signs of previous disturbance, historical harvesting, and agriculture on site, were observed.

Historically, a tributary to Powers Creek ran generally east west through the CDP property but the watercourse has likely been diverted upstream resulting in a poorly defined channel with no observed flow and lack of scour.

In keeping with the Upper Glenrosa/Salmon Road's commitment to environmental conservation, it is encouraged that impact of sensitive areas be minimized. All designated Environmentally Sensitive

Areas (ESA) including a description of the rating system can be found within **Figure 6 – Environmentally Sensitive Areas**.

Details of the assessment, descriptions of the ecosystems, and recommendations are presented in the Ecoscape Environmental Consultants Ltd. Environmental Assessment (dated March 2015) located in **Appendix C: Environmental Assessment**.

The following sections identify the Environmental and Ecology Policies that will guide Upper Glenrosa/Salmon Road future development:

8.1 Terrestrial Ecosystems

Wildlife habitat areas and corridors shall be protected and enhanced as per the recommendations of our environmental consultant.

8.2 Aquatic Ecosystems

The tributary to Powers Creek does not require a riparian setback as per the recommendations of our environmental consultant.

A detailed evaluation of aquatic ecosystems, including opportunities for enhancement, will be undertaken at time of development.

Natural drainage patterns should be maintained where feasible as per the recommendations of our environmental consultant.

The existing drainage network presents the opportunity to provide the neighbourhood with a unique water feature. Enhancements will be further investigated during later stages of development.

Habitat restoration and re-vegetation efforts will be evaluated and defined in greater detail during the design stage once final limits of disturbances are established.

8.3 Environmentally Sensitive Areas (ESA)

Areas identified as having the highest ESA value should be retained wherever possible as per the recommendations of our environmental consultant.

Disturbed ESA areas shall be remediated as per the recommendations of our environmental consultant. Remediation may include the planting of trees, plants, and shrubs, to create attractive wildlife habitats and enhanced neighbourhood green space and parkland.

9.0 TRANSPORTATION NETWORK

The transportation network for Upper Glenrosa/Salmon Road consists primarily of local roads that will facilitate the movement of transit, automobiles, bicycles and pedestrian. All roads will be designed to provide safe and effective movement to/from the CDP area.

The design of the network sought to provide connectivity throughout the neighbourhood while respecting the natural topography of the site. This goal was achieved by strategic planning and utilizing design methods to minimize the overall 'cut and fill' of the development. The proposed transportation network is illustrated on **Figure 7 – Transportation Network**.

9.1 Traffic Impact Assessment

Opus International Consultants completed a Traffic Impact Assessment (TIA) to identify and evaluate the potential traffic-related impacts of the CDP on the neighbourhood as a result of the new development. The study area includes Glenrosa Road from Turnbull Road to McGinnis Road.

The Upper Glenrosa/Salmon Road TIA concluded that the proposed development will not significantly impact the study area.

Details of the assessment and recommendations are presented in the Opus International Consultants Transportation Review (dated April 9, 2015) located in **Appendix D: Traffic Impact Assessment**.

9.2 Glenrosa Road Upgrades

Glenrosa Road, the primary access to the neighbourhood, is a rural road with many sub-standard components such as inadequate lane width and lack of illumination. The urbanization of Glenrosa Road will considerably improve safety and provide significant benefits to the overall area.

Glenrosa Road will be constructed to full urban arterial standard in accordance with the City of West Kelowna Works and Services Bylaw.

9.3 Internal Road Network

The internal road network was specifically designed to minimize the impacts to the site. The network is predominately north – south given the sites topographical characteristics.

Three local roads will be accessed from Glenrosa Road. One local road will be accessed from Oriole Drive and Salmon Road.

On-street parking may be available adjacent to residential lots and parks.

All internal roads will be designed and constructed to local road standard in accordance with the City of West Kelowna Works and Services Bylaw.

9.4 Pedestrian Connectivity

In order to promote alternative modes of transportation, an emphasis must be placed on pedestrian corridors and connections. The intent of the Upper Glenrosa/Salmon Road CDP is to provide safety and encourage cycling and walking, particularly to/from Helen Gorman Elementary.

A network of multi-use trails, dedicated parkland and roadside sidewalks will provide connectivity throughout the site.

9.5 Transportation Policies

In keeping with the City of West Kelowna Transportation Master Plan (TMP), roadway connections in the CDP will transition from adjacent neighbourhoods effectively and efficiently. The following Transportation policies will guide Upper Glenrosa/Salmon Road future development:

- Traffic improvements to be identified at the detailed design stage of development (i.e. rezoning) and any associated costs will be borne by the developer.

- Internal roads to be positioned on the most favorable alignment to minimize site impacts.
- The design of the internal road network should promote active transportation in order to reduce vehicular travel.
- The internal road network should be designed accommodate for future stormwater management facilities.

10.0 INFRASTRUCTURE AND SERVICING

10.1 Water Supply

The Upper Glenrosa/Salmon Road property is located adjacent to the City of West Kelowna Westbank Service Area. The storage reservoir is located on a neighbouring lot on the south side of Glenrosa Road. The current City of West Kelowna water system operates at a hydraulic grade line of 644 meters. This means it can service approximately 1/10 of the property without pumping. The proposed water system is illustrated on **Figure 8 – Water System**.

The water supply to the remainder of the development will be from a new booster station located adjacent to the existing Glenrosa Road Reservoir. The booster station will supply both domestic water and fire flow from pumps, and will have standby power to assure a constant supply.

The booster station building and piping will be sized to accommodate the expansion of the water system in the Upper Glenrosa area. The piping on Glenrosa Road will match the existing reservoir inlet/outlet main to allow for the maximum capacity to the area. The pumping and standby power design will suit this development.

The City has plans in place to expand the existing reservoir to meet current standards.

Please note that details of the water servicing including projected daily demands are presented in the D.E. Pilling & Associates Functional Servicing Report (dated April 2015) located in **Appendix F: Functional Servicing Report**.

It is noted that the Upper Glenrosa/Salmon Road CDP proposed water servicing deviates from the City of West Kelowna water storage requirements. However, the incorporation of a booster station in lieu of a new reservoir has been supported by Council, subject to a variance to the Works and Services Bylaw No. 0120.

A cash-in-lieu contribution for reservoir storage fees will be required for each subdivided lot along with subdivision fees and Development Cost Charges (DCCs). The DCC contributions from this development will result in a significant contribution to the City of West Kelowna reserve funds for infrastructure improvements and community development. Cash-in-lieu storage fees will specifically contribute towards addressing water storage deficiencies in the Westbank Irrigation District Water System Area.

The water system will be designed and constructed in accordance with the City of West Kelowna Works and Services Bylaw.

10.2 Sanitary Sewer

The sanitary system will collect waste water from each proposed lot and convey the waste by gravity to the existing sanitary manhole located at the corner of Salmon Road and Oriole Drive. The proposed sanitary collection system is illustrated on **Figure 9 – Sanitary Sewer System**.

Please note that system capacity including projected daily demands are demonstrated in the D.E. Pilling & Associates Functional Servicing Report (dated April 2015) located in **Appendix F: Functional Servicing Report**.

The sanitary sewer system will be designed and constructed in accordance with the City of West Kelowna Works and Services Bylaw.

10.3 Stormwater Management

The proposed drainage system is illustrated on **Figure 10 – Stormwater Management**. As per City of West Kelowna requirements, the post-development drainage patterns will match the pre-development pattern. Post-development flows will match pre-development flows utilizing a combination of infiltration and detention.

The drainage will be collected and directed to the existing 500mmØ storm main on Salmon Road. A portion of the drainage will outlet to the existing natural drainage path in order to maintain the existing ecosystem as per the recommendations of our environmental consultant.

The drainage system will consist of a series of swales, culverts and storm sewers. Stormwater treatment systems will be provided where the bylaws and environmental approvals dictate their use.

Please note that stormwater flows have been estimated in the D.E. Pilling & Associates Functional Servicing Report (dated April 2015) located in **Appendix F: Functional Servicing Report**.

Prior to rezoning, a comprehensive hydrology study will be completed to determine any downstream impacts.

The stormwater management system will be designed and constructed in accordance with the City of West Kelowna Works and Services Bylaw.

11.0 SHALLOW UTILITIES

The area will be serviced with standard shallow utilities including natural gas, hydro, telephone, and cable. It is proposed that all servicing be installed underground. Design and installation of the shallow utilities will be carried out to the standards and requirements of each utility company.

11.1 Natural Gas

Fortis BC Natural Gas will extend the existing natural gas system along Glenrosa Road from Fenton Road as required.

Fortis BC Natural Gas will extend the existing natural gas system from Oriole Drive and Salmon Road as required.

11.2 Hydro

BC Hydro has an existing overhead single phase line along Glenrosa Road that will be extended underground as required.

BC Hydro has an existing overhead three phase line along Oriole Drive and Salmon Road that will be extended underground as required.

11.3 Telephone

Telus will utilize the same underground alignment as BC Hydro with a separate duct system to service the area.

11.4 Cable

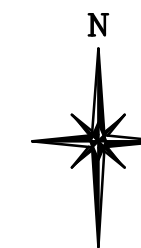
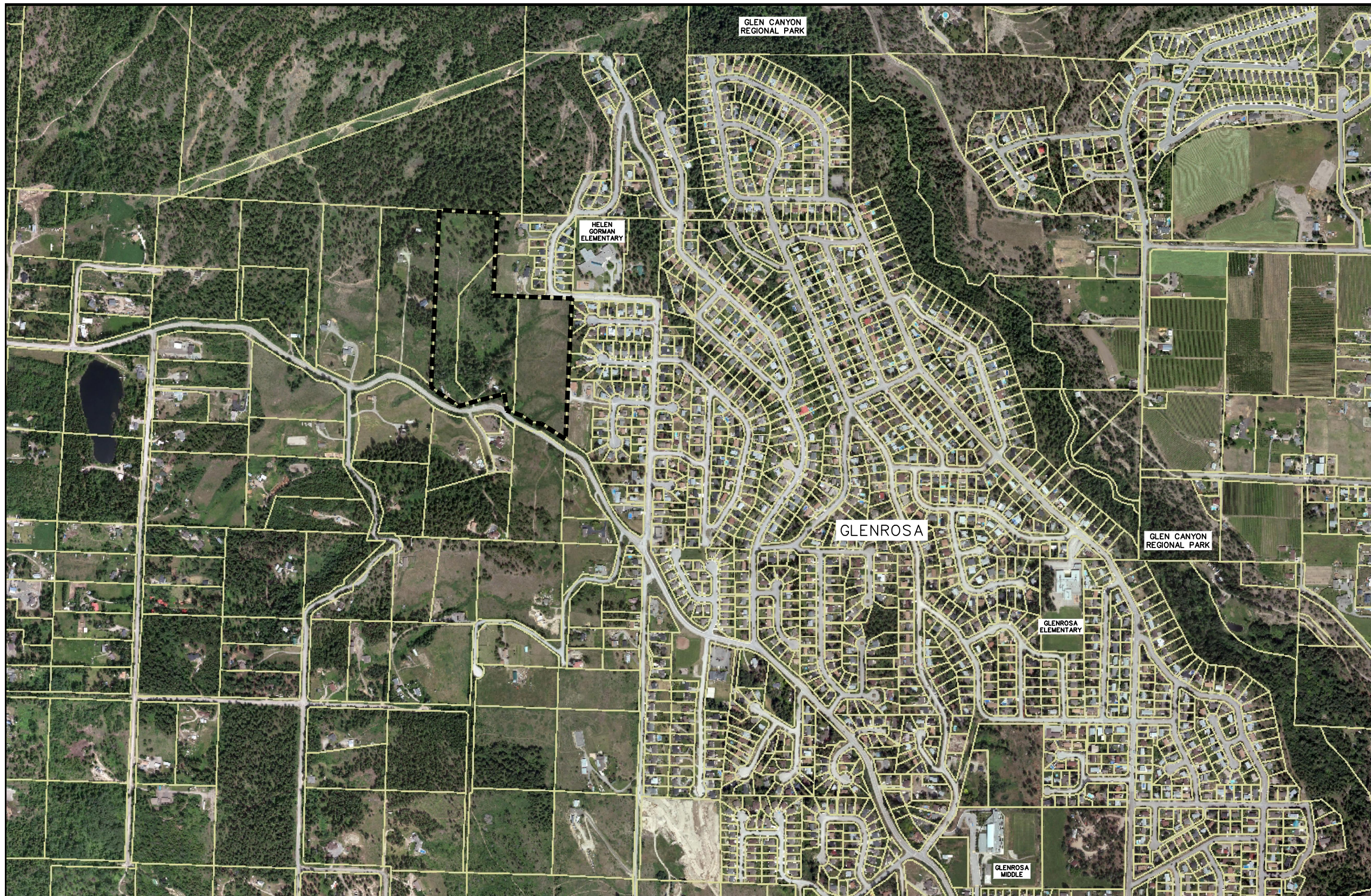
Shaw Cable will follow the same underground location as BC Hydro and Telus, with separate ducting.

12.0 IMPLEMENTATION AND PHASING

Following acceptance of the Upper Glenrosa/Salmon Road CDP by the City of West Kelowna staff and council, the development process will proceed with rezoning, subdivision, development permits, and building permits.

The proposed development cannot be limited to any one of the three subject properties, therefore a definitive phasing plan has not been established. Although, we anticipate that Phase 1 will consist of approximately 10 lots off Salmon Road as illustrated on **Figure 11 – Phasing Plan**.

The timing and development phasing sequence will respond to the logical extension of services to the site. It is expected that full construction of the Upper Glenrosa/Salmon Road area could take up to 5 years, although the exact development timing is unknown.



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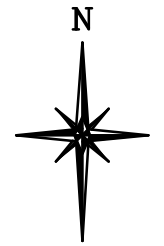
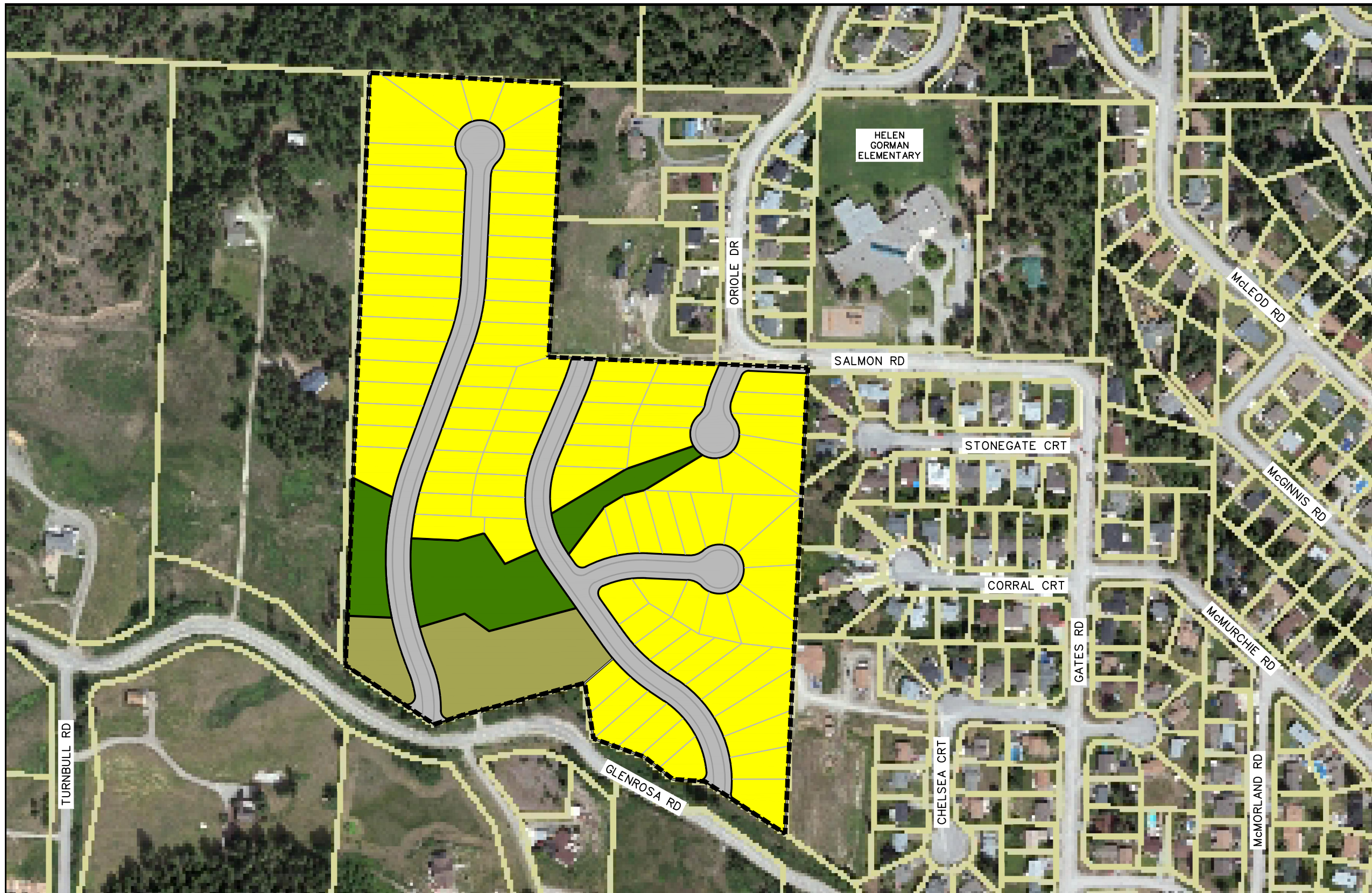
LEGEND

----- CDP BOUNDARY

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC

FIGURE 1 - AREA CONTEXT



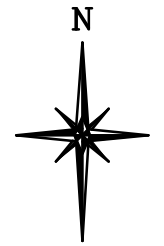
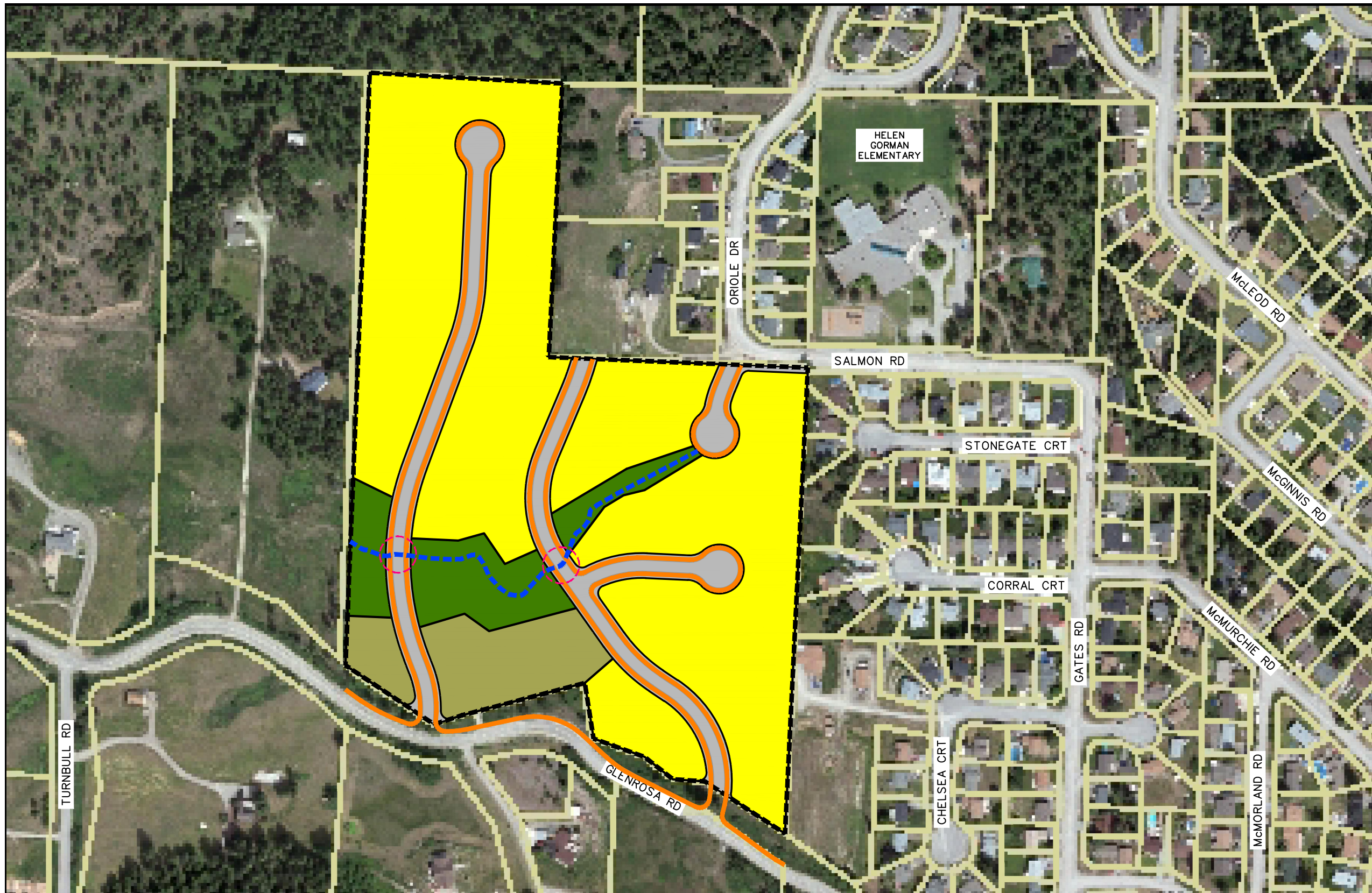
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LEGEND

- OCP BOUNDARY
- ▬ PROPOSED ROADWAY
- DEDICATED PARKLAND ACQUISITION
- SINGLE FAMILY RESIDENTIAL DEVELOPMENT
- LOW DENSITY MULTI-FAMILY DEVELOPMENT

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 2 - LAND USE CONCEPT / PRELIMINARY LOT LAYOUT



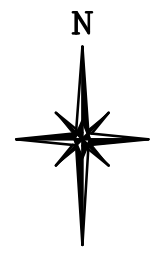
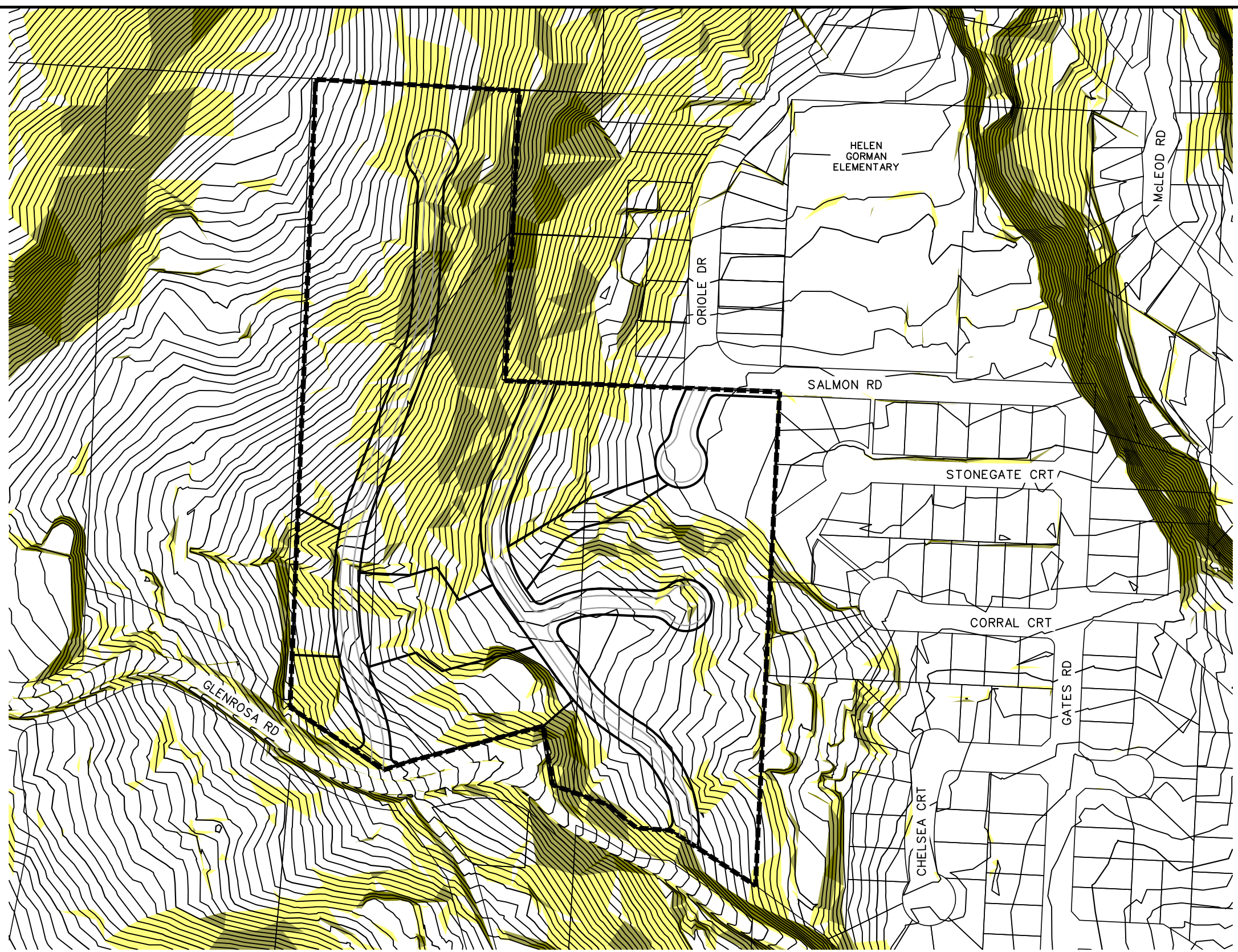
SCALE: 1:3,000

LEGEND

- OCP BOUNDARY
- ROADSIDE CORRIDOR
- - - MULTI-USE TRAIL
- DEDICATED PARKLAND ACQUISITION (0.95 ha.)
- SINGLE FAMILY RESIDENTIAL DEVELOPMENT
- LOW DENSITY MULTI-FAMILY DEVELOPMENT
- DESIGNATED CROSSING POINT

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 3 - PARKS AND OPEN SPACES



SCALE: 1:3,000

LEGEND

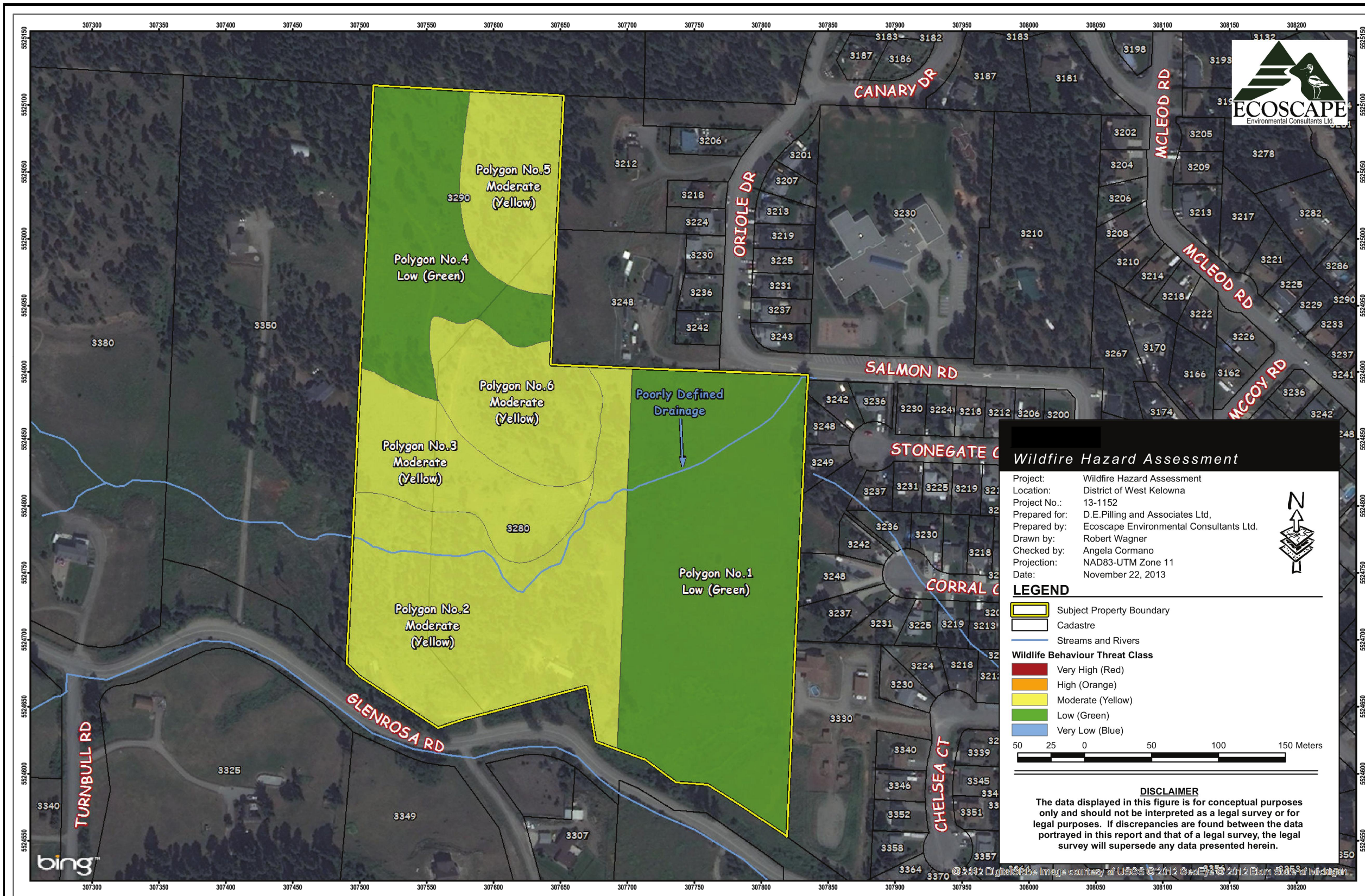
- ▬▬▬▬ OCP BOUNDARY
- ▬▬▬▬ CONTOURS (1m INTERVAL)
- ▬▬▬▬ PROPOSED ROADWAY

SLOPE ANALYSIS

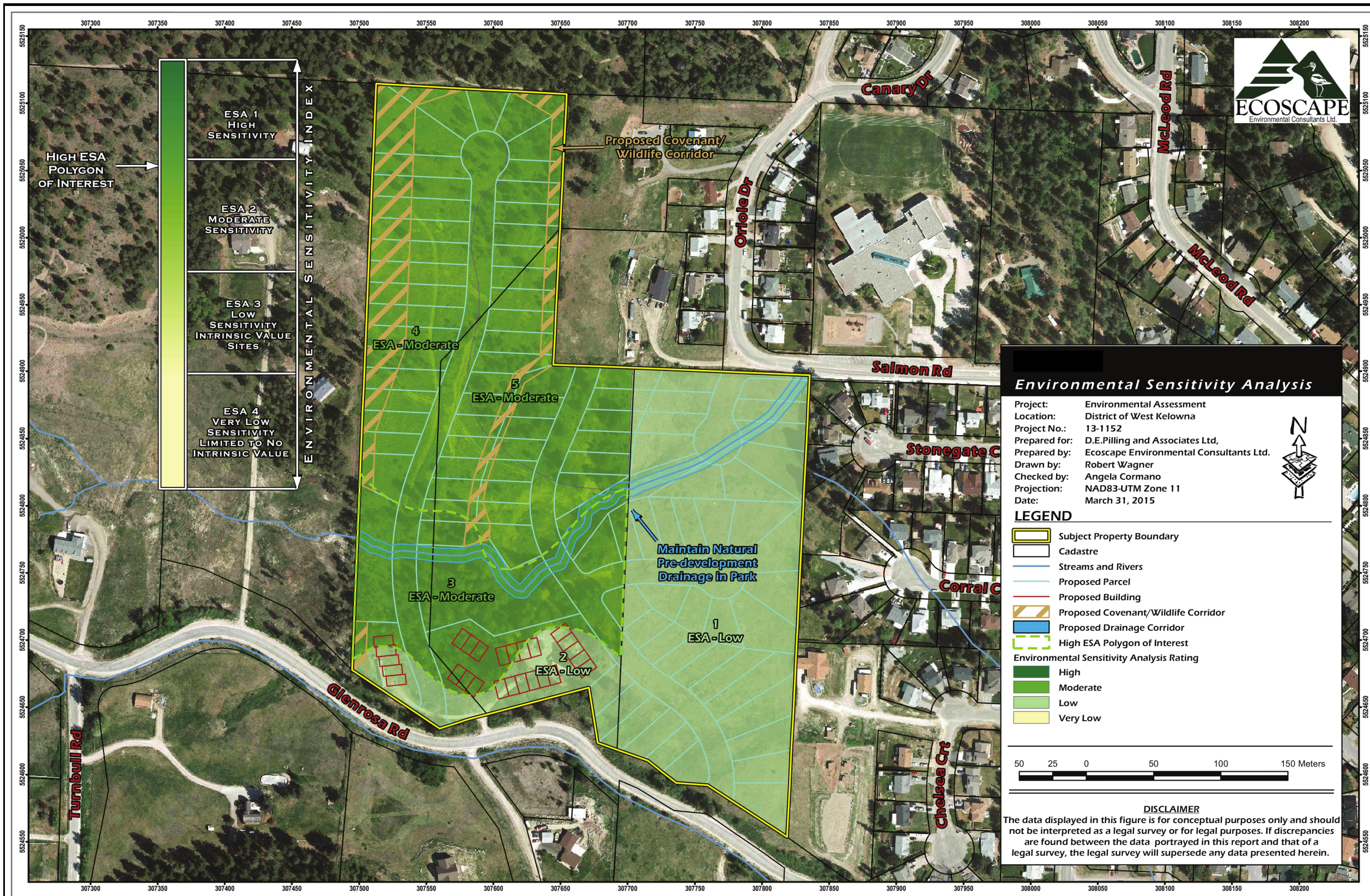
	0% - 20%
	20% - 30%
	30% - 40%
	40% - VERTICAL

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 4 - SLOPE ANALYSIS



UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 5 - WILDFIRE HAZARD AREAS



ESA RATING SYSTEM

- ESA 1 (HIGH):**
AREAS THAT CONTAIN SIGNIFICANT VEGETATION AND WILDLIFE CHARACTERISTICS REPRESENTING A DIVERSE RANGE OF SENSITIVE HABITAT.
- ESA 2 (MODERATE):**
AREAS OF MODERATE ENVIRONMENTAL SIGNIFICANCE CONTRIBUTING TO THE OVERALL DIVERSITY AND NATURAL INTEGRITY OF THE SITE.
- ESA 3 (LOW):**
AREAS THAT REPRESENT DISTURBED OR FRAGMENTED HABITAT WITH LOW SIGNIFICANCE.
- ESA 4 (VERY LOW):**
AREAS WITH LITTLE OR NO VALUE TO THE OVERALL NATURAL DIVERSITY OF THE SITE.

Environmental Sensitivity Analysis

Project: Environmental Assessment
 Location: District of West Kelowna
 Project No.: 13-1152
 Prepared for: D.E.Pilling and Associates Ltd,
 Prepared by: Ecoscape Environmental Consultants Ltd.
 Drawn by: Robert Wagner
 Checked by: Angela Corman
 Projection: NAD83-UTM Zone 11
 Date: March 31, 2015



LEGEND

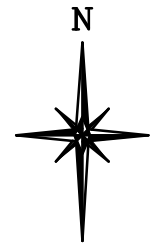
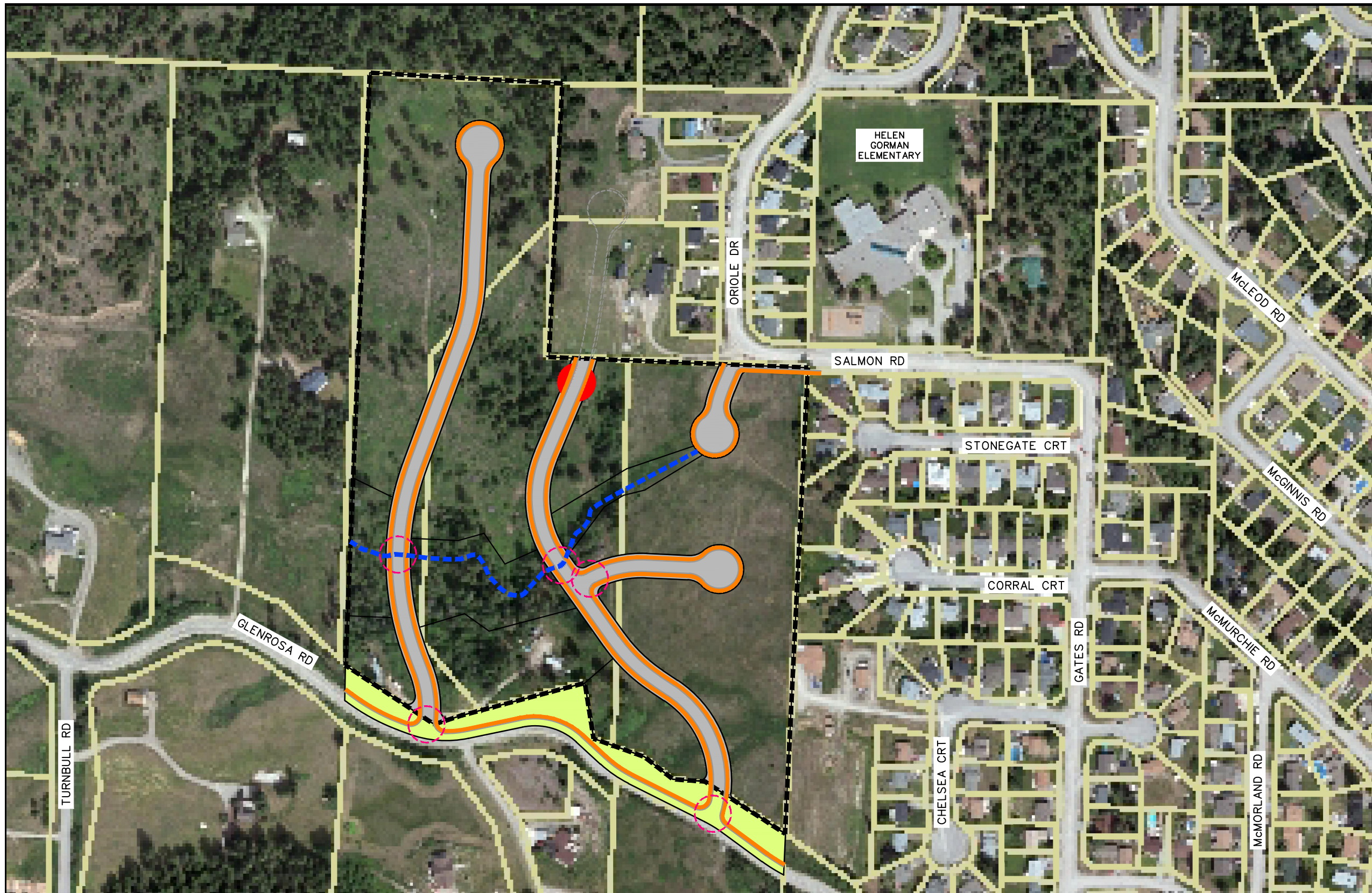
- Subject Property Boundary
- Cadastre
- Streams and Rivers
- Proposed Parcel
- Proposed Building
- Proposed Covenant/Wildlife Corridor
- Proposed Drainage Corridor
- High ESA Polygon of Interest
- Environmental Sensitivity Analysis Rating
- High
- Moderate
- Low
- Very Low



DISCLAIMER

The data displayed in this figure is for conceptual purposes only and should not be interpreted as a legal survey or for legal purposes. If discrepancies are found between the data portrayed in this report and that of a legal survey, the legal survey will supersede any data presented herein.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 6 - ENVIRONMENTALLY SENSITIVE AREAS



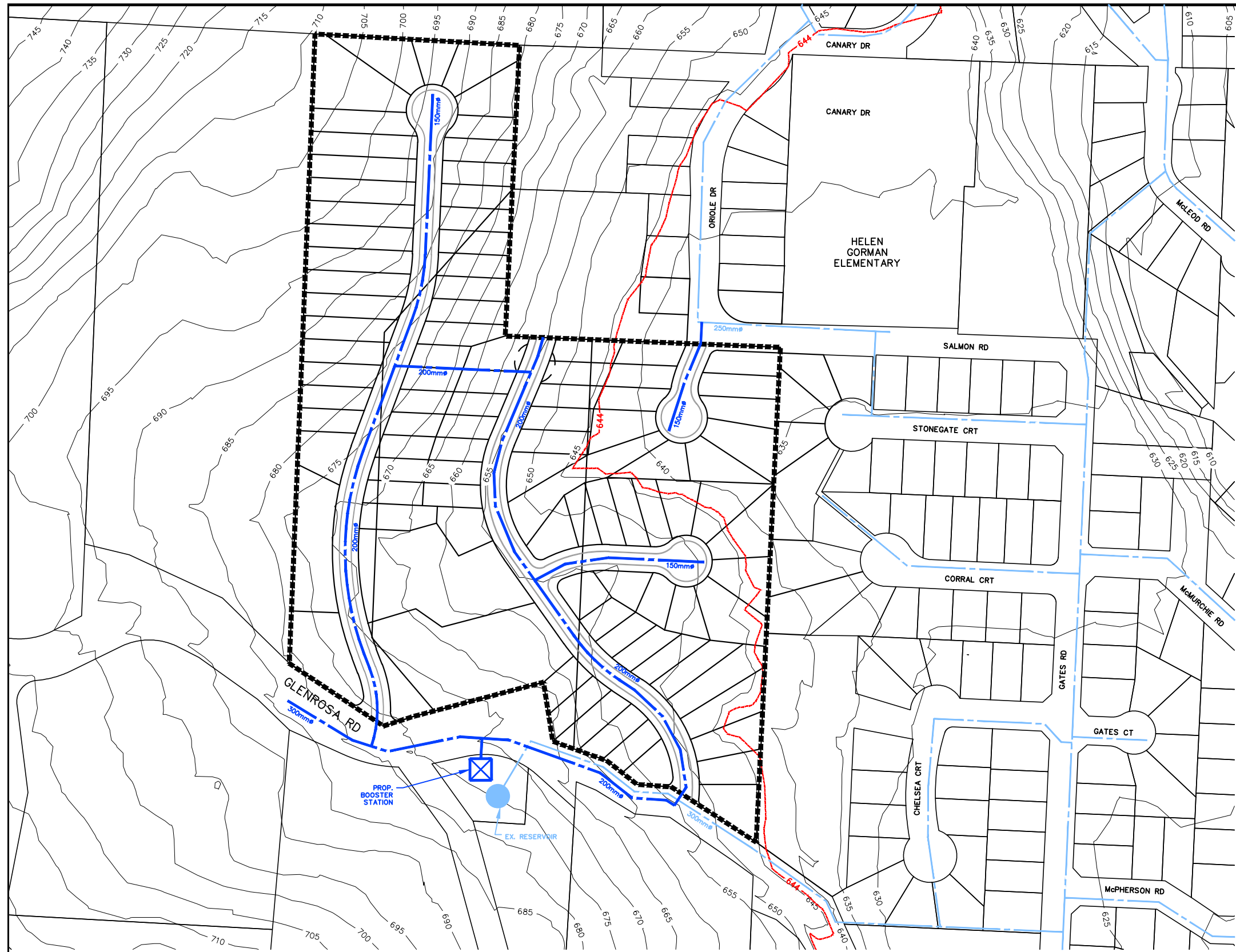
SCALE: 1:3,000

LEGEND

- OCP BOUNDARY
- ROADSIDE CORRIDOR
- - - MULTI-USE TRAIL
- PROPOSED LOCAL ROAD
- PROPOSED ARTERIAL ROAD FRONTAGE WORKS
- - - POSSIBLE FUTURE LOCAL ROAD EXTENSION
- DESIGNATED CROSSING POINT
- ◐ TEMPORARY ASPHALT TURN-AROUND

Disclaimer:
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UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 7 - TRANSPORTATION NETWORK



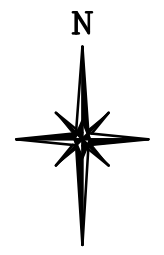
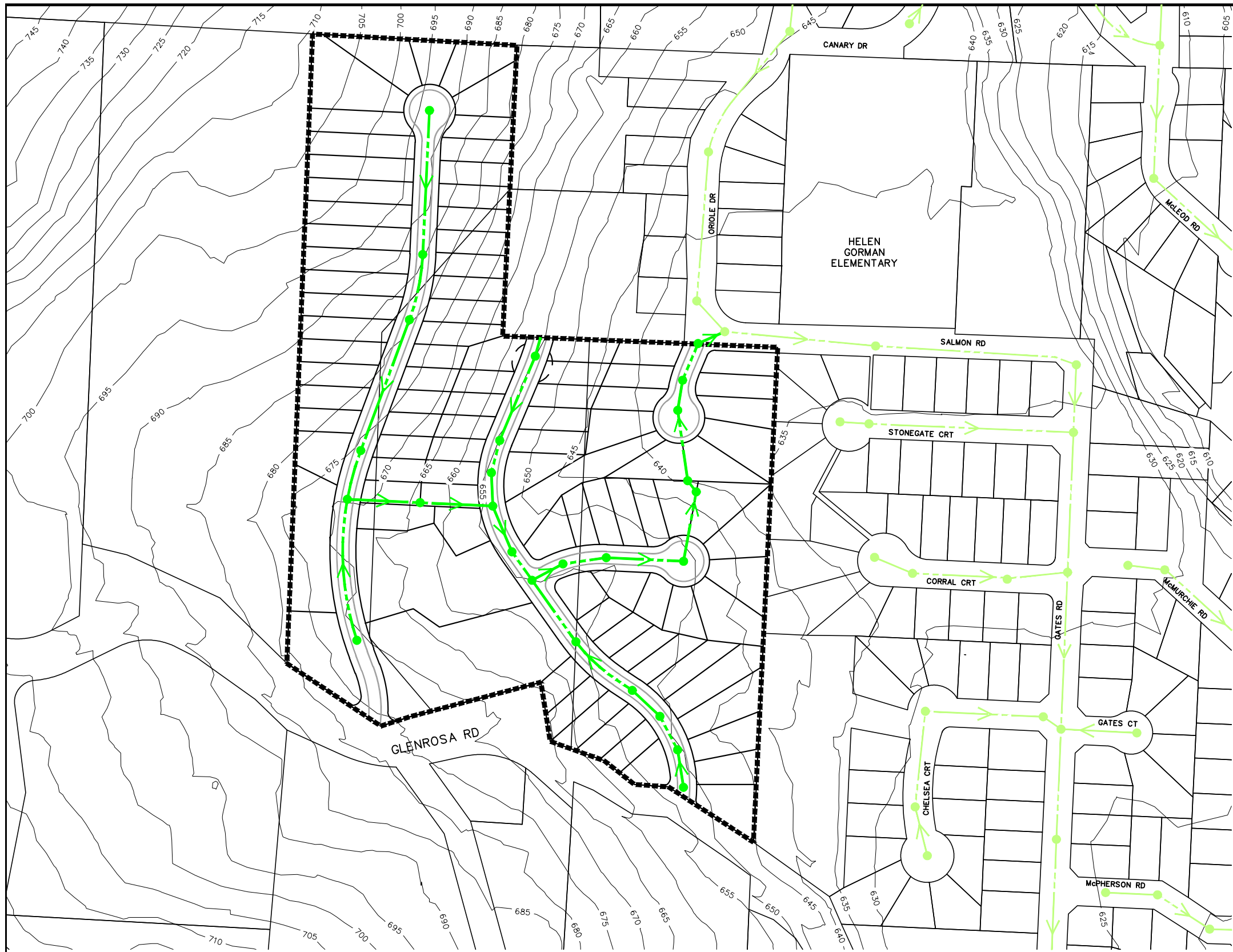
SCALE: 1:3,000

LEGEND

- | | | | | | |
|--|------------------|--|-------------|--|--------------|
| | WATER MAIN | | CURB STOP | | UTILITY POLE |
| | SANITARY SEWER | | HYDRANT | | STREETLIGHT |
| | STORM SEWER | | REDUCER | | TRANSFORMER |
| | ELECTRICAL POWER | | LINE VALVE | | ELEC BOX |
| | TELEPHONE | | TELEPHONE | | TEL BOX |
| | CABLE TV | | MANHOLE | | CABLE BOX |
| | NATURAL GAS MAIN | | CATCH BASIN | | |
| | | | DRYWELL | | |
-
- | | |
|--|----------------------------|
| | OCP BOUNDARY |
| | 190 CONTOURS (5m INTERVAL) |
| | PROPOSED ROADWAY |
| | 644m PRESSURE ZONE |
| | PROPOSED WATER MAIN |
| | PROPOSED BOOSTER STATION |
| | EXISTING WATER MAIN |
| | EXISTING RESERVOIR |

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UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
FIGURE 8 - WATER SYSTEM



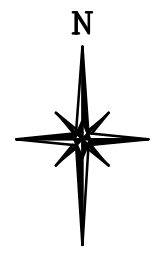
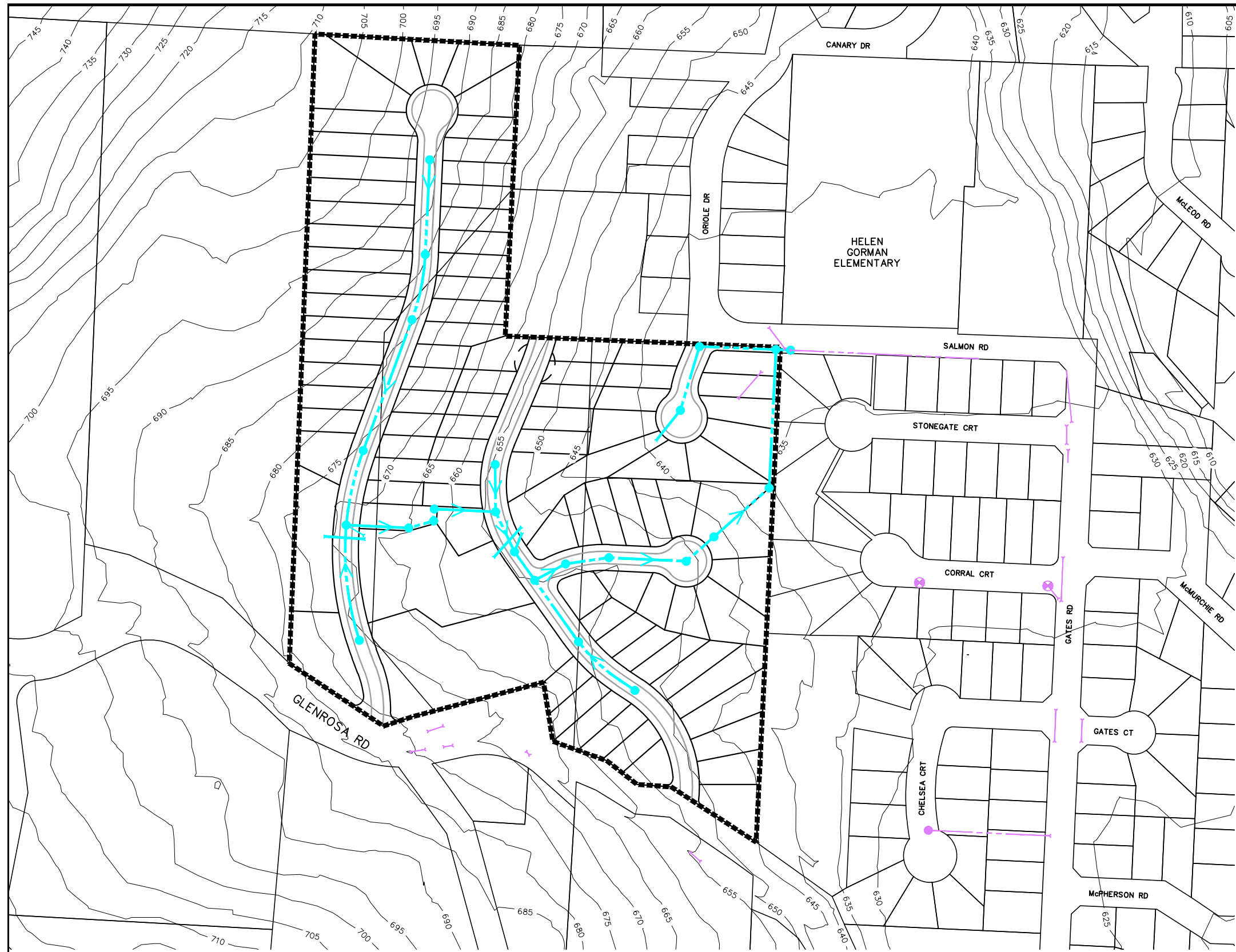
SCALE: 1:3,000

LEGEND

- | | | | | | |
|--|-------------------------------------|--|-------------|--|--------------|
| | WATER MAIN | | CURB STOP | | UTILITY POLE |
| | SANITARY SEWER | | HYDRANT | | STREETLIGHT |
| | STORM SEWER | | REDUCER | | TRANSFORMER |
| | ELECTRICAL POWER | | LINE VALVE | | ELEC BOX |
| | TELEPHONE | | MANHOLE | | TEL BOX |
| | CABLE TV | | CATCH BASIN | | CABLE BOX |
| | NATURAL GAS MAIN | | DRYWELL | | |
| | OCB BOUNDARY | | | | |
| | CONTOURS (5m INTERVAL) | | | | |
| | PROPOSED ROADWAY | | | | |
| | PROPOSED GRAVITY FED SANITARY SEWER | | | | |
| | EXISTING GRAVITY FED SANITARY SEWER | | | | |

Disclaimer:
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UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
FIGURE 9 - SANITARY SEWER SYSTEM



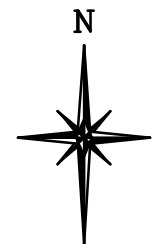
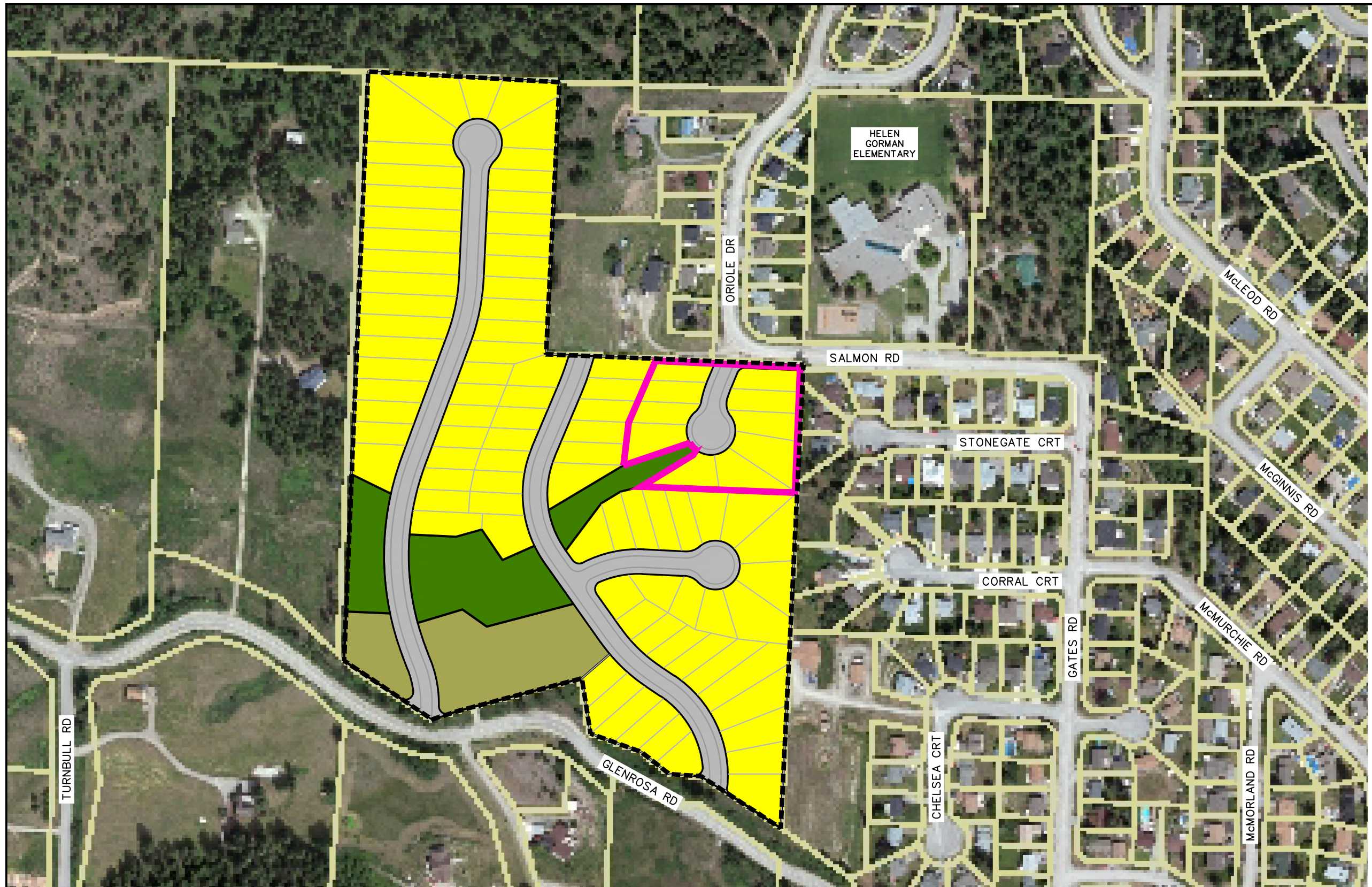
SCALE: 1:3,000

LEGEND

- | | | | | | |
|-----------|------------------------|---|-------------|---|--------------|
| — | WATER MAIN | ● | CURB STOP | ● | UTILITY POLE |
| - - - | SANITARY SEWER | ⊕ | HYDRANT | □ | STREETLIGHT |
| - - - | STORM SEWER | ⊞ | REDUCER | ⊞ | TRANSFORMER |
| - - - | ELECTRICAL POWER | ● | LINE VALVE | ○ | ELEC BOX |
| - - - | TELEPHONE | ● | MANHOLE | ○ | TEL BOX |
| - - - | CABLE TV | ■ | CATCH BASIN | □ | CABLE BOX |
| - - - | NATURAL GAS MAIN | ⊙ | DRYWELL | | |
| - - - - - | OCp BOUNDARY | | | | |
| ~ | CONTOURS (5m INTERVAL) | | | | |
| == | PROPOSED ROADWAY | | | | |
| --- | PROPOSED STORM SEWER | | | | |
| - - - | EXISTING STORM SEWER | | | | |

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
FIGURE 10 - STORMWATER MANAGEMENT



SCALE: 1:3,000

LEGEND

- OCP BOUNDARY
- POTENTIAL PHASE 1
- PROPOSED ROADWAY
- DEDICATED PARKLAND ACQUISITION
- SINGLE FAMILY RESIDENTIAL DEVELOPMENT
- LOW DENSITY MULTI-FAMILY DEVELOPMENT

Disclaimer:
This map is conceptual in nature. Any development patterns including lots and transportation network items identified may be subject to minor refinement at the subdivision development phase.

UPPER GLENROSA / SALMON ROAD CDP - WEST KELOWNA, BC
 FIGURE 11 - PHASING PLAN