



CITY OF BLAINE

DEPARTMENT OF COMMUNITY DEVELOPMENT

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State Environmental Policy Act (SEPA) Environmental Checklist

Washington Administrative Code 197-11-960

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Total Fees \$ _____	
Receipt # _____	STAMP IN DATE

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies, including the City of Blaine, use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Please answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions pertain to governmental regulations such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have are having difficulties answering these questions, please contact the Department of Community Development at the City of Blaine for assistance.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. You may be asked to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, **complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (Part D).** For **nonproject actions**, the references in the checklist to the words "project," "applicant," and "property or site" should read as **"proposal," "proposer,"** and **"affected geographic area,"** respectively. You maybe asked to provide more information where answers appear incomplete.

A. BACKGROUND

1. Name of proposed project, if applicable:

Grandis Pond

2. Name of applicant:

Grandis Pond, LLC

3. Address and phone number of applicant and contact person:

Applicant:

**Ken Hertz
Grandis Pond, LLC
P.O. Box 30647
Bellingham, WA 98228
360.738.8088**

Contact:

**Petur Sim
David Evans and Associates, Inc.
119 Grand Ave, Suite D
Bellingham, WA 98225
360.647.7151**

4. Date checklist prepared:

April 20, 2007

5. Agency requesting checklist:

City of Blaine

6. Proposed timing or schedule (including phasing, if applicable):

The Grandis Pond Planned Unit Development (PUD) is anticipated to be constructed in phases with full build out taking as long as 20 years to achieve. The construction will be completed in five development area phases that will be built out 60 units at a time over the next 20 years.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No, there are no plans for future expansions or additions to the Grandis Pond PUD beyond what is outlined in the project phasing already discussed.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- **Preliminary Stormwater Report, April 2007, David Evans & Associates, Inc.**
- **Priority Habitats & Species Report, August 2005, Cantrell & Associates**
- **Critical Areas Assessment Report, October 2006, Cantrell & Associates**
- **Cultural Resource Assessment Report, July 2005, ARAC**
- **Hydrogeological Characterization Study East Blaine Annexation Area, February 1995, EMCON Northwest, Inc.**
- **Evaluation of Aquifer Vulnerability Proposed East Blaine Annexation Area, September 1992, EMCON Northwest, Inc.**
- **Preliminary Traffic Analysis, David Evans & Associates, Inc**
- **Conceptual Mitigation Plan, David Evans & Associates, Inc.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No applications are pending.

10. List any government approvals or permits that will be needed for your proposal, if known.

City of Blaine

- **Planned Unit Development & Preliminary & Final Site Plan Approval**
- **Preliminary Plat Approval**
- **Master Development Permit**
- **Binding Site Plan**
- **Land Disturbance Permit**
- **Clearing Permit**
- **Critical Areas approval**
- **Building Permits**

Washington State Department of Natural Resources

- **Forest Practices Permit**

Washington State Department of Ecology

- **NPDES Permit**
- **401 Water Quality Certification of waiver thereof**

U.S. Army Corps of Engineers

- **Nationwide Permit**

Washington State Department of Fish and Wildlife

- **Hydraulic Project Approval**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The applicant, Grandis Pond, LLC, is proposing to develop a Planned Unit Development (PUD) in Blaine, Washington within Sections 33 and 34, Township 41 North, Range 1 East, W.M. in Whatcom County . The development site is approximately 440 acres and is located one mile east of Harvey Road, between the north side of 'H' Street and the Canadian border.

The proposed PUD is designed to include single-family lots, cottage homes, duplex/paired housing units, and multi-family housing units, for a total of approximately 1030 residential units. In addition, approximately 48,000 square feet of commercial building space is proposed. Grandis Pond has been designed to include extensive recreation trails, pocket parks and environmentally sensitive areas for a total of 233 acres of open space. It is anticipated that Grandis Pond will be constructed in development area phases with full build out taking as long as 20 years to achieve. Along with the houses and other buildings, the development is proposed to include paved roadways with sidewalks and trails, a public safety facility, water and sanitary sewer mains, dry utilities, and stormwater management facilities.

Development Area One includes the Lady Fern, Hawthorn, Foxglove, Twinberry, Engelmann, Cottonwood, and Dogwood neighborhoods, This phase consists of 345 single family residences and 72 cottage homes, and 33.90 acres of open space.

Development Area Two includes the development of the Bentgrass, Marsh Wren, Sedge, Sitka and Grandis Pond with the creation of a hiking trail around and the preservation of Grandis Pond, also, the allocation of a parcel to be set-aside for a fire/police public safety facility. This site is a 70,500 SF (1.62 acre) parcel. This phase consists of 48 paired/duplex units, 100 condominium/multi-family units, 83 single-family units, 48,000 SF of commercial space, and 113.73 acres of open space.

Development Area Three includes the development of the Willow, Pond Lilly, Buttercup and Salmonberry neighborhoods located on the eastern portion of the site. This phase consists of 258 single family residences and 40.64 acres of open space.

Development Area Four includes the development of the Huckleberry neighborhood located on the northeastern portion of the site. This phase consists of 39 single family residences and 19.91 acres of open space.

Development Area Five, the final phase, includes the development of the Snowberry and Brooklime neighborhoods located in the northwestern portion of the site. This phase consists of 85 single family residences and 25.25 acres of open space.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Grandis Pond project is located on twenty-two parcels on the eastern edge of the Blaine city limits between the Canadian border (to the north) and H Street Road (to the south) and Harvey Rd. (to the west) and W. 31st Place (to the east). Based on information from the Whatcom County Assessor, the total project site is approximately 440 acres.

The Assessor's Parcel Numbers:

410133-333288	410134-032225	410134-170200	410134-376287
410133-462214	410134-034164	410134-150070	410134-364199
410133-458148	410134-034104	410134-185030	410134-464203
410133-495100	410134-016034	410134-215199	410134-099148
410134-025284	410134-111284	410134-285286	
410134-032259	410134-099184	410134-287199	

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline): Flat, rolling, hilly, steep slopes, mountainous, other.

The site is currently wooded with a network of old logging roads. The northeastern portion of the study area is the site of historic gravel extraction. Two maintained gravel roads access the site from H Street Road. A third logging road (known as the Old Mill Logging Road) enters the property from the west.

Western Area:

The western area is approximately 150 acres of woods and wetlands. The overall site topography slopes to the west with average slopes between 2% to 12%. The wetland delineation report prepared by Cantrell & Associates, Inc. (CAi) identifies the southwestern portion of this area as being within the Dakota Creek Watershed, and the remainder as being in the Little Campbell River Watershed.

Central Area:

The approximately 240 acre central portion of the site consists of a combination of woods, wetlands, and a 16 acre pond. The pond drains through a ravine to the northwest and is on of the headwaters to Jacobson Creek. A ridge along the western boundary separates this portion of the site from the Western Area. Topography generally slopes towards the pond in the center of the site. Slopes average from 3% to 7% along the west side of the area and 10% to 20% along the east side of the area. The wetland delineation report prepared by CAi identifies this area as lying within the Little Campbell River Watershed.

Northeast Area:

The Northeast Area consists of approximately 50 acres of a combination of woods and wetlands. Topography in this area slopes primarily to the central wetland and then north to an infiltration pit remaining from the gravel mining. Slopes average between 2% and 12%. A small portion of this area along the very eastern property boundary slopes to the east, and the very northeast corner slopes to the northwest. The wetland delineation report prepared by CAi identifies the eastern area as being within the Little Campbell River Watershed.

b. What is the steepest slope on the site (approximate percent slope)? and note any prime farmland.

The steepest slope on-site is approximately 99% and is located in the ravine draining to Jacobson Creek and is not typical of the property.

The site would not be appropriate to be classified as prime farmland due to the topography, dense vegetation, and a high percentage of inadequate soils on-site.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The Soil Survey of Whatcom County Area, Washington (USDA, 1992) describes the site as containing Everett gravelly sandy loam, Everett complex, Clipper silt loam, Sehome loam, Tromp loam, Everett very gravelly sand loam, Labounty silt loam, Histosols and Squalicum gravelly loam.

Clipper Silt Loam, drained, 0-2 percent slopes

This very deep, somewhat poorly drained soil is in depressions on outwash terraces and outwash plains. It has been artificially drained. Permeability is moderate in the upper part of the Clipper soil and rapid in the substratum. Available water capacity is moderate. The effective root depth is limited by a seasonal high water table, which is at a depth of 2 to 4 feet. This unit is mainly used for hay and pasture or as cropland. It is also used as woodland and a site for homes.

Everett gravelly sandy loam, hard stratum, 2-8 percent slopes

This deep somewhat excessively drained soil is on outwash terraces and moraines. Permeability is moderate in the upper part of the Everett soil, and very rapid in the substratum, and very slow in the dense glacial till. Available water capacity is low. The effective rooting depth is limited by a seasonal high water table, which is at a depth of 3.5 feet to 5.0 feet from December through April. Runoff is slow, and the hazard of water erosion is slight. This unit is used mainly as woodland and as a site for homes.

Everett very gravelly sandy loam, 8-15 percent slopes and 15-35 percent slopes

This very deep, somewhat excessively drained soil is on outwash terraces and moraines. Permeability is rapid in the upper part of the Everett soil and very rapid in the lower part. Available water capacity is low. The effective rooting depth is 60 inches. Runoff is slow, and the hazard of water erosion is slight. This unit is used mainly as woodland. It is also used for hay and pasture, and a source of aggregate. The unit on 8-15 percent slopes is also used as a site for homes.

Everett Complex, 2-8 percent slopes

This map unit is 50 percent Everett very gravelly sand loam and 35 percent Everett gravelly sandy loam, both of which are described above.

Histosols, ponded, 0-1 percent slopes

These very deep, very poorly drained soils are in backswamps on floodplains and on the edge of bodies of water. Permeability is moderate or moderately slow in the Histosols. Available water capacity is high. The effective rooting depth is limited by a seasonal high water table, which is at or above the surface from November through August. Runoff is ponded, and there is no hazard of erosion. This unit is used for wildlife habitat.

Labounty silt loam, 0-2 percent slopes

This very deep, poorly drained soil is in depressions on glaciomarine drift plains. It has been artificially drained. Permeability is moderately slow in the Labounty soil. Available water capacity is high. The effective rooting depth is limited by a seasonal high water table, which is at a depth of 1 to 3 feet from November through May. Runoff is slow, and there is no hazard of erosion. This unit is used for hay and pasture or as cropland.

Sehome loam, 8-15 percent slopes

This moderately deep, moderately well drained soil is on mountain foot slopes. Permeability is moderate in the upper part of the Sehome soil and very slow in the dense glacial till. Available water capacity is moderate. The effective rooting depth is 24 to 40 inches. Water is perched above the dense glacial till from December through April. Runoff is medium, and the hazard of water erosion is moderate. This unit is used mainly as woodland. It is also used for hay, pasture and as cropland.

Squalicum gravelly loam, 5-15 percent slopes

This moderately deep, moderately well drained soil is on foothills and in valleys. Permeability is moderate in the upper part of the Squalicum soil and very slow in the dense glacial till. Available water capacity is high. The effective rooting depth is limited by a seasonal high water table, which is at a depth of 3.5 feet to 5.0 feet from December through April. Runoff is slow, and the hazard of water erosion is slight. This unit is used mainly as woodland. It is also used for hay, pasture, and as a site for homes.

Tromp loam, 0-2 percent slopes

This very deep, moderately well drained soil is on outwash terraces. Permeability is moderate in the upper part of the Tromp soil and very rapid in the substratum. Available water capacity is high. The effective rooting depth is limited by a seasonal high water table, which is at a depth of 1.5 feet to 2.5 feet from November through April. Runoff is slow, and there is no hazard of erosion. This unit is mainly used for hay and pasture, as cropland, or as woodland. It is also used as a site for homes.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

A majority of the site is characterized as sloping gradually and being hilly and most of the soils on-site are described as having low erosion potential.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Exact quantities of fill are unknown at this time, but are expected to be approximately 280,000 cubic yards for the entire project. Detailed grading plans are not yet available. This information will be provided in conjunction with submittal of an application for grading permits as part of the final project construction site plan.

The source of fill for the entire project proposal, including fill for roads, minor grading activities, and stormwater basins for all five phases will originate on-site. Due to the variety of soils and existing gravel source on-site, it is anticipated that all fill material will be available from within the project boundaries. If it is determined in the future that on-site fill material is not adequate to meet the needs of the project, then local suppliers will be used as a supplement.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Moderate erosion could occur during construction and concurrent heavy rainstorms. During construction the erosion potential will be minimized through the use of construction Stormwater Pollution Prevention Plan (SWPPP) outlining temporary erosion and sediment control measures and best management practices.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The total impervious area for the entire project, including all five development areas, is approximately 113 acres of impervious surfaces, which is approximately 26% of the site. This estimate is based on the proposed road design, sidewalks, driveways, and typical single/multi residential and commercial development footprints.

Development Area 1	49 Acres Impervious
Development Area 2	19 Acres Impervious
Development Area 3	27 Acres Impervious
Development Area 4	7 Acres Impervious
Development Area 5	12 Acres Impervious
Grandis Pond Trails	.6 Acres Impervious
Fire Public Safety	04 Acres Impervious

According to the Preliminary Stormwater Site Plan prepared by David Evans and Associates, Inc., April 2007, the site has been modeled to include 17 storm basins with the same basin boundaries as the present pre-development conditions. Please refer to the Preliminary Stormwater Site Plan for a summary of average basin impervious areas (roof, roads, hardscape), and pervious areas (lawn and parks).

In general, the approach to stormwater runoff water quality treatment and flow control is to incorporate Low Impact Development (LID) techniques wherever practical (See the April 2007, LID Manual prepared by DEA). Proposed road widths have been narrowed to minimize pollution generating surfaces. The roads and parking areas will be sloped to direct runoff to rain garden and bioinfiltration swales located in the center median in the main boulevards and along one side of the road in local access streets. In areas where infiltration is possible, the rain gardens and bioinfiltration swales will discharge directly to the ground below. In areas where infiltration is possible for low intensity storms, overflow catch basins will be installed that permit treatment and infiltration of the water quality flows and that bypass the higher flows to detention facilities. In areas where infiltration is not practical, rain gardens and bioinfiltration swales with underdrains, traditional wet detention ponds, and other techniques will be evaluated to determine the most practical management alternatives.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

As indicated above the project will be developed in phases. The phased development plan will limit disturbed areas. When practicable, soil removed from the site shall be used elsewhere on the site to minimize soil transport and loss. A SWPPP including temporary erosion and sediment control measures will be implemented and maintained throughout the construction phase of the project. Best management practices will also be used to minimize erosion and sedimentation impacts. As required by jurisdictional agencies, stormwater collection features will be the first features to be constructed for each phase of the project.

Potential for post-construction erosion will be minimized by seeding and planting all exposed soils and implementing BMP's where necessary until final stabilization of each phase. A requirement of the CC&R for Grandis Pond is front yards shall incorporate generous plantings of trees and shrubs in groupings to represent natural conditions. Large expanses of lawn, uninterrupted by plantings will not be acceptable. Rear and sides yards, shall at a minimum be planted with grass. The CC&R landscaping requirements have been set in order to eliminate the possibility of soil erosion and runoff onto neighboring lots and the surrounding natural environment.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Exhaust emissions from heavy equipment (trucks, excavator, bulldozer, grader, and backhoe) and dust resulting from clearing and grading activities are anticipated throughout the construction phase. Long-term emissions are limited to vehicle exhaust associated with the residential subdivision.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The project will include watering exposed soils during dry periods to minimize dust generated in the construction phase. Construction will be limited to Monday through Saturday 7 AM to 7 PM. Equipment will not be idled for long time periods to control emissions.

Whatcom Transportation Authority (WTA) has been contacted and is considering extending public transportation services to serve the site. Providing access to public transportation would encourage alternative transportation use within and around the Grandis Pond development. Public transit would likely reduce the number of vehicular trips made each day ultimately reducing car emissions.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The October 8, 2006, Critical Areas Assessment Report by Cantrell & Associates, Inc., identifies 52 wetlands, one of which is a 16 acre pond, and 11 drainages within the project area. The wetlands range in size from approximately 487 square feet to approximately 2,389,035 square feet. One of the wetlands includes and is associated with Jacobson Creek, a tributary to Little Campbell River. The total wetland area is approximately 94.5 acres. Although many of the wetlands were connected by hydric soils to other wetlands or drainages, they were separated according to their differing characteristics and each wetland and drainage is individually described in the Critical Areas Assessment Report. Some wetlands were found to lack surficial hydrologic connections to streams or other wetlands. In places,

streams and wetlands follow or overflow into remnant roadbeds (Cantrell & Associates, 2006). Please refer to CAI's Critical Areas Assessment Report for details of individual wetlands.

CAI observed eleven ephemeral drainages within the study area, which were not included within the boundaries of a wetland. Their descriptions and wetland connections are also described in the Critical Areas Assessment Report.

2) Will the project require any work over, in, or adjacent to (within 200 feet of) the described waters? If yes, please describe and attach available plans.

The project has been designed to avoid and minimize wetland impacts to the greatest extent possible. On the 440 acre site, direct wetland impacts have been limited to approximately 19,815 SF (0.45 acre) and approximately 111,189 SF (2.6 acres) of wetland buffer. Wetland and buffer impacts will be necessary to allow for road connectivity throughout the site and to fulfill the density requirements for the area.

Wetland and buffer impacts for each development are described below:

Development Area One

The total wetland impact and buffer impact for Development Area 1 is approximately 1,757 SF of wetland impact and 9,028 SF of buffer impact.

Development Area Two

The total wetland impact and buffer impact for Development Area 2 is approximately 15,650 SF of wetland impact and 59,369 SF of buffer impact.

Development Area Three

The total wetland impact and buffer impact for Development Area 3 is approximately 1,131 SF of wetland impact and 18,342 SF of buffer impact.

Development Area Four

The total wetland impact and buffer impact for Development Area 4 is approximately 972 SF of wetland impact and 14,205 SF of buffer impact.

Development Area Five

The total wetland impact and buffer impact for Development Area 5 is approximately 305 SF of wetland impact and 10,245 SF of buffer impact.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

The total amount of fill to be placed in wetlands for the entire proposal, including all five development areas, is approximately 1,552 cubic yards. The source of fill for the entire project proposal, including wetland fill for all five development areas will originate on-site. Due to the variety of soils and existing gravel source on-site, it is anticipated that all fill material will be available from within the project boundaries. If it is determined in the future that on-site fill material is not adequate to meet the needs of the project, then local suppliers will be used as a supplement. Type of fill material will be a combination of crushed rock and structural fill. Additional clean fill material will be obtained from local suppliers if needed.

Wetland fill quantities for each development area are described below:

Development Area One

Total amount of fill material to be placed in wetlands for Development Area One is approximately 88 cubic yards.

Development Area Two

Total amount of fill material to be placed in wetlands for Development Area Two is approximately 941 cubic yards.

Development Area Three

Total amount of fill material to be placed in wetlands for Development Area Three is approximately 75 cubic yards.

Development Area Four

Total amount of fill material to be placed in wetlands for Development Area Four is approximately 446 cubic yards.

Development Area Five

Total amount of fill material to be placed in wetlands for Development Area Five is approximately 2 cubic yards.

Dredging or excavation within wetland areas is not planned at this time.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The project does not require any surface water withdrawals or diversions.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

In accordance with Whatcom County's Frequently Flooded Areas Map and the City of Blaine's Critical Areas Map, the project area is not located within a 100-year floodplain.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No the project does not include discharges of waste materials to surface waters.

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

None anticipated.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals: agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not applicable. The City of Blaine will provide sanitary sewer services for Grandis Pond.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

In general, the approach to stormwater runoff water quality treatment and flow control is to incorporate LID techniques wherever practical. Proposed road widths have been narrowed to minimize pollution generating surfaces. The roads and parking areas will be sloped to direct runoff to rain garden and bioinfiltration swales located in the center median in the main boulevards and along one side of the road in local access streets. In areas where infiltration is possible, the rain gardens and bioinfiltration swales will discharge directly to the ground below. In areas where infiltration is possible for low intensity storms, overflow catch basins will be installed that permit treatment and

infiltration of the water quality flows and that bypass the higher flows to detention facilities. In areas where infiltration is not practical, rain gardens and bioinfiltration swales with underdrains, traditional wet detention ponds, and other techniques will be evaluated to determine the most practical management alternatives.

Runoff from non-pollution generating areas, such as roofs, will also be infiltrated where soil conditions make this practical. Based on site specific soil information these infiltration systems can include individual detention structures at each home or regional facilities. In areas where infiltration is not practical, traditional detention ponds and other techniques will be evaluated to determine the most practical management alternatives.

The Grandis conveyance system will include stormwater stubs to allow off site runoff presently crossing into the Grandis site to continue to pass through. Runoff from any development in these off site areas is assumed to be treated and detained prior to entering the Grandis system and that the Grandis stormwater management facilities will be sized accordingly. Figure 1 of the Preliminary Stormwater Plan notes the connection points from off site influent flow. Please see DEA's April 2007 Preliminary Stormwater Site Plan DEA's April 2007 LID Manual for additional information

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is possible accidental spills from trucks or construction equipment could enter the newly constructed storm system or surface waters during construction of the proposed project. However, spill prevention measures will be utilized during the project. During the construction phase of the project, source controls measures will be implemented in accordance with the SWPPP. As typically required in a SWPPP, the contractor will be required to develop a plan to control spills of oil, fuel, hydraulic fluids and other pollutants during the construction phase of the project.

Long-term, typical components of stormwater from impervious surfaces include petrochemicals and products associated with combustion engines. All stormwater will be collected and treated prior to discharge into surface waters.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The project has been designed to avoid and minimize critical areas impacts as much as practicable. However, in order to allow for the applicant to build to the UGA density and to allow for road connectivity within the development, some impacts are unavoidable.

A combination of wetland creation, wetland enhancement, buffer averaging, buffer reforestation, and low impact development is proposed for compensation of lost wetland and buffer function on the project site. Total permanent wetland impacts will be 19,815 (0.45 acre) and total permanent buffer impact will be 111,189 square feet (2.6 acres). Wetland enhancement will occur within adjacent wetland areas that are disturbed and have the potential for enhancement. Buffer averaging will occur across the project site to enhance and protect existing wetland and buffer functions. Buffer reforestation will be conducted throughout the project site wherever buffer areas have gaps or are disturbed. Impact areas and proposed mitigation are included below.

Impact Type	Impact Area (sq ft)	Proposed Mitigation Ratio	Mitigation Area (sq ft)
Wetland Fill	19,815	1.5 : 1 creation 2 : 1 enhancement	29,723 creation 39,630 enhancement
Buffer Impact	111,189	1 : 1	111,189 buffer averaging

Due to the planned phased construction of the project site mitigation areas are located within both the Phase 1 and 2 areas. The mitigation (wetland creation and enhancement portion) planned within the Phase 1 development area will compensate above the level of impacts planned for the phase. Mitigation (wetland creation and enhancement portion) planned within the Phase 2 portion of the

development will account for all of the remaining impacts on the project site. Buffer averaging and low impact development will occur across the project site

Finally, low impact development (LID) strategies would include reduced road and sidewalk standards, rain gardens/bioswales, and residential lot roof runoff dispersion trenches.

For more details regarding wetland mitigation, please refer to the Conceptual Mitigation Plan prepared by David Evans and Associates Inc. and Cantrell and Associates Inc., April 2007.

4. Plants

a. Check or circle types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

Please refer to the Priority Habitats & Species Report prepared by Cantrell & Associates, Inc. (CAI), August 23, 2005, for a more complete list of plant species found on the site.

b. What kind and amount of vegetation will be removed or altered?

A total of 214 acres will be cleared in order to prepare for development of all five development areas of the project. The project will be cleared in accordance with the phasing plan over a period of several years. Phased clearing will minimize the potential for erosion and water quality impacts. Native vegetation within critical areas and buffers will be retained. Large trees located outside development areas will also be retained the greatest extent possible.

The August 2005, Priority Habitats & Species Report separated the character of the on-site vegetation into four main communities. Wetland vegetation consisted of many types of wetland species such as cattail, hardhack, red alder, salmonberry, and slough sedge, among others. Evergreen forested wetland buffers represent some of the most mature vegetation communities within the project site and include western red cedar and Douglas fir trees. The recently harvested forestland was characterized by regenerating vegetation dominated by red alder saplings, vine maple, red elderberry, and salmonberry. Medium aged deciduous forest contain a canopy dominated by medium-aged red alder and sparse western red cedar, Douglas fir, paper birch, bigleaf maple, bitter cherry, and salmonberry, among others.

The clearing area and vegetation communities to be removed for the entire project total approximately 255 acres. The vegetation to be removed includes medium-aged deciduous forest, recently harvested forestland, previously cleared/disturbed gravel pit.

c. List threatened or endangered species known to be on or near the site.

In accordance with the Washington State Department of Natural Resources (WDNR) and the WDNR Natural Heritage Program (NHP) GIS database dated June 2003, no rare plants or high quality native ecosystems have been documented as occurring in the vicinity of the project site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Native trees and shrubs will be planted in the wetland creation, wetland enhancement, and buffer reforestation areas as part of the mitigation plan. Upland areas adjacent to existing wetland buffers will be included as new buffer within the preserved native growth protection area (NGPA). To improve buffer function and improve habitat value buffers will be reforested as necessary throughout the

project site. This will include plantings of native tree species within gaps and any disturbed buffer areas.

In accordance with the Low Impact Development Technical Guidance Manual for Puget Sound, bioretention/rain garden areas will be planted with a minimum of three herbaceous, three shrub, and three tree species. Species planted in these areas will be native to western Washington.

The Grandis Pond Covenants, Conditions and Restrictions (CC&R) and Architectural Control Standards (ACS) requires the front yard landscape plan for residences should incorporate generous plantings of trees and shrubs in natural groupings. Large expanses of lawn, uninterrupted by plantings, are not acceptable. Street trees of a minimum two (2) inch caliper shall be included at not greater than forty (40) foot spacing.

At a minimum, the rear yard and side yards of each lot will be planted and maintained with grass to eliminate the possibility of soil erosion and mud run-off onto neighboring lots and the surrounding environment.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other:

- b. List any threatened or endangered species known to be on or near the site.

In accordance with the August 23, 2005, Priority Habitats & Species Report completed in August 2005 by Cantrell and Associates, Inc. (CAi), there are no documented or observed state listed Sensitive, Threatened or Endangered species Candidate species, federal listed Threatened or Endangered species, or federal Species of Concern, within or near the project area.

According to the *Priority Habitats and Species Report*, completed in August 2005 by Cantrell and Associates, Inc. (CAi), evidence of Columbia black-tailed deer (*Odocoileus hemionus columbianus*) was observed within the project boundaries. Columbia black-tailed deer is listed as a state species of recreational, commercial, and/or tribal importance.

- c. Is the site part of a migration route? If so, explain.

Yes. All land in the Whatcom County lowlands are within a Pacific Migratory Flyway.

- d. Proposed measures to preserve or enhance wildlife, if any:

Great measures have been taken to design a project that provides long term measures to preserve and enhance wildlife. In 2005 and 2006 CAi was retained to perform a comprehensive wildlife and habitat study. CAi prepared the 2005 Habitats & Species Report and the 2006 Critical Areas Assessment Report documenting existing site conditions. The scientific information documented within these studies provided project planners with baseline information that eventually shaped the design.

The design ultimately minimizes impacts to wetlands and associated buffers. Less than 1/2 acre of total wetland impact is proposed. The project design has been altered several times to provide functioning buffers as required by the City of Blaine Critical Areas Ordinance. Roads, lots and associated utilities and developments have been designed to avoid impacts to wetlands and their buffers.

The project proposal includes a conceptual wetland mitigation plan designed to offset development impacts. The mitigation plan includes wetland creation and wetland and buffer enhancement measures. The plan has been designed to meet state and local mitigation requirements including

monitoring and maintenance requirements. The mitigation plan also includes long term preservation measures to provide protection to wetlands and associated buffers. The preservation measures include conservation easements and educational signs.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The City of Blaine and Cascade Natural Gas will provide electricity and natural gas for general residential use. Energy uses on-site are primarily restricted to that of a typical single-family residence, multi-family unit, and commercial facilities such as lighting and heating.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

The proposed development will meet local energy codes. The applicant has contacted the Whatcom Transit Authority to arrange for future public transit services. Public transit services would provide opportunities for the project to reduce fuel consumption.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There are no known environmental health hazards that could result from this proposal.

- 1) Describe special emergency services that might be required.

None known.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

None known beyond meeting all fire and building code provisions for fire and life safety.

- b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Existing noise from traffic on H Street Road and O Avenue in Canada can be detected from the site; however, the noise level is not expected to significantly affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short-term noise levels typical of construction operations would be expected from the proposed project. Post construction noise will be limited to that normally associated with a residential and commercial development with the primary noise source being vehicular traffic.

- 3) Proposed measures to reduce or control noise impacts, if any:

Short-term noise impacts will be minimized by limiting construction to the hours between 6 am to 8 pm.

Long-term noise impacts will be minimized by landscaping within the development. Landscaping will be installed to meet the City of Blaine landscaping requirements.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The site is currently undeveloped and has historically been used for forestry and gravel mining. Surrounding land use primarily consists of low-density residential areas to the south, east and west. Canada is located to the north. The property to the north is being developed into high density residential use.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

The only existing structure on-site is a wooden dock accessing Grandis Pond.

d. Will any structures be demolished? If so, what?

The centrally located pond has an exiting dock that will be preserved for future recreation use.

e. What is the current zoning classification of the site?

Planned Residential

f. What is the current comprehensive plan designation of the site?

Residential Single Family

g. If applicable, what is the current shoreline master program designation of the site?

The property is not located within shoreline jurisdiction and does not have a shoreline master program designation.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The property contains 52 wetlands and 11 drainages that are described in the project's Critical Areas Assessment Report. According to the City of Blaine's Critical Areas maps, the site contains geologically hazard areas and is located within a critical aquifer recharge area. The aquifer recharge area is described in the February 2005 Hydrogeological Characterization Study for the East Blaine Annexation Area report prepared by EMCON. The site also contains an 82% slope in the northeastern portion of the property and a 99% slope located in the ravine draining to Jacobson Creek in the central portion of the property. However the site has an average slope of approximately 30%.

i. Approximately how many people would reside or work in the completed project?

Various uncertainties exist for total residential population at build out. For example, a significant number of "empty-nesters" are expected to be part of given phases of the project. In Washington State, the number of residents over age 65 is growing rapidly. U.S. Census figures indicate a 15.1%* increase between 1990 and 2000 compared to 12% nationwide. Joint Center for Housing at Harvard University indicate a 53% increase in the number of senior households by 2020 compared to 2000. If that projection is applied to Washington State, the result would be 708,400 household with at least one person 65 and older by 2020. Census data indicate there are almost 600,000 households that included seniors aged 60 or above, almost 37% lived alone. For seniors aged 75 and above, there were almost 240,000 households with 47% of these live-alone households.

* Housing Washington's Seniors-A Profile: Population by Age Group

Age Group	1990 WA	1995 WA	2005WA
Under 5 years	366,780	394,306	395,158
5-9 years	371,093	425,909	391,946
10-14 years	377,662	434,836	428,257
15-19 years	322,711	427,968	420,054
20-24 years	351,680	390,185	436,604
25-34 years	855,188	841,130	839,812
35-44 years	803,763	975,087	946,032
45-54 years	501,543	845,972	941,950
55-64 years	380,984	496,580	663,051
55-59 years	191,602	285,505	383,409
60-64 years	189,382	211,075	279,642
65 & older	575,288	662,148	683,774
65-74 years	336,034	337,166	361,100
75-84 years	182,953	240,897	245,118
85 years & over	56,301	84,085	77,556

Given uncertainties total population is likely to be 1292 family age households (based on 2.51 persons per household) and 772 adult/senior households (based on 1.5 persons per household) for a total of 2064 resident population at build-out.

Using the Whatcom County figure of 30% as the number of public school aged children in the average household, Grandis Pond is likely to have 387 school age children at build-out. Whatcom County population projections and distribution estimates the City of Blaine population to increase by 3163 residents by 2022.

In estimating Grandis Pond generated employment in the mixed use center one (1) employee per 1000 square feet of commercial floor space was used. Using this computation it is estimated that forty eight (48) new jobs will be created at complete build out.

j. Approximately how many people would the completed project displace?

No people would be displaced by the project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This project will be reviewed by the City of Blaine for compliance with the City's Comprehensive Plan, Zoning Code, Land Division Regulations, Critical Areas Ordinance, as well as other regulations and restrictions concerning land use. The project is consistent with the current zoning designations and City of Blaine Comprehensive Plan.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The proposed development is designed to include single-family lots, cottage homes, duplex/paired housing units, and multi-family housing units, for a total of approximately 1,030 residential units. In addition, approximately 48,000 square feet of commercial building space is proposed. The development is anticipated to be constructed in five development area phases with full build out taking as long as 20 years to achieve. All units will range from high to middle income depending on the market.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The height of the structures is unknown at this time; all houses will conform to current City of Blaine and Whatcom County building regulations and height restrictions.

As required by the Grandis Pond CC&R, all exterior faces of the houses will be finished in either natural stone or brick, synthetic stone, solid wood, fiber cement siding or stucco. Exposed concrete foundations will be limited to a height of 12 inches above the finished grade, except for steeply sloping sites where slightly greater exposures will be permitted. Other exterior materials include a variety of materials include glass and composite products. All materials used will be required to be consistent with a master set of detailed urban design and architectural guidelines. These guidelines will be adopted as binding conditions, covenants and restrictions (CC&Rs) for all new structures on the project site.

- b. What views in the immediate vicinity would be altered or obstructed?

None.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

The project is being developed in phases as a master plan. The master plan document includes design standards and CC&Rs that will provide consistency in the overall development. The project retains and/or enhances significant vegetated "natural" areas. These natural areas are anticipated to reduce aesthetic impacts to adjacent properties and provide aesthetic value to on-site lots. The project also includes a landscape plan as well as a clearing plan designed to preserve and enhance native vegetation.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The proposal will produce light normally associated with residential subdivisions including streetlights, porch lights and vehicular headlights. The project also includes a mixed-use area that will contain lighting typical of a small commercial area with streetlights, headlights, and indoor/outdoor business lights. Lights are expected to be most prevalent from dusk to 11 p.m., although commercial lighting and streetlights will remain lit from dusk to dawn.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

Residential and roadway lighting can be seen from the site. These sources are not anticipated to substantially affect the project.

- c. What existing off-site sources of light or glare may affect your proposal?

Residential and roadway lighting can be seen from the site. These sources are not anticipated to substantially affect the project.

d. Proposed measures to reduce or control light and glare impacts, if any:

Much of the site will remain naturally vegetated, which will control light impacts between proposed neighborhoods and surrounding properties. Lighting will be designed and installed to avoid impacts to traffic and sensitive land uses.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

- **Pipeline Road Athletic Park**
- **Marine Park**
- **Lincoln Park**
- **Peace Arch Park**
- **Birch Bay State Park (located approximately 12 miles southwest of site)**

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The current design includes several onsite recreational opportunities that are designed to mitigate recreational impacts. An extensive on-site trail system has been designed as part of the project to provide pedestrian connections between neighborhoods and potential connections to existing trails within the City of Blaine. The trail system will provide passive recreation opportunities to citizens of Whatcom County that wish to experience the natural beauty of the area. The trails will be developed after final plat approval and will be maintained by the homeowner's association in accordance with the Grandis Pond Covenants, Conditions and Restrictions.

The project proposal also includes several pocket parks. The pocket parks are located strategically throughout the development near primary intersections, neighborhood centers and trailheads. The pocket parks are designed to be gathering places and may include benches, trailheads, parking, playground equipment, mailbox centers and informational kiosks. These areas will also be constructed after final plat approval and will be maintained by the homeowner's association in accordance with the Grandis Pond Covenants, Conditions and Restrictions.

The development may eventually include a community center for community gatherings and social events.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

In accordance with the July 15, 2005, Cultural Resource Assessment prepared by Alfred Reid Archaeological Consulting, Ltd. (ARAC), no places or objects listed on, or proposed for national, state or local preservation registers exist on the site. No sites have been recorded within one mile of the project site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

In accordance with the July 15, 2005, Cultural Resource Assessment prepared by Alfred ARAC, there were only two isolated artifacts (modified cobbles) located during the survey. The artifacts were located near the east boundary of the property at the edge of the access road. Subsurface inspection units near these locations provided no further cultural material. ARAC concluded that there are minimal cultural resource concerns for construction of the project.

c. Proposed measures to reduce or control impacts, if any:

In accordance with the July 15, 2005, Cultural Resource Assessment prepared by ARAC, standard sample monitoring should be required based on the overall low sensitivity of the area. The monitoring should concentrate on the excavation of underground utilities, street construction, and excavation of drainage retention facilities.

If potential cultural materials are encountered during construction; work in the area will stop. The archaeologist will make a determination if the materials are evidence of a previously unknown site or feature, or if the materials are of no cultural significance. If there is a determination that the materials are not significant, construction can proceed. If they are determined to be a cultural resource, standard archaeological procedures regarding further assessment and collection will be followed. Potentially damaging construction activities within a cultural resource site area cannot disturb these deposits without a Washington State Archaeological Excavation Permit. (ARAC 2005)

On-site monitoring of construction can readily identify human burials that were previously unknown and might be accidentally encountered during construction work. Construction activity in the vicinity of a burial must immediately be stopped. If, during the monitoring of the project, human remains are encountered, at least three considerations arise: are the remains the result of criminal activity, are the remains Native American, and are the remains from early Euroamerican settlers. The archaeologist will stop the construction work and notify the local law enforcement agency and the Whatcom County Coroner. The following people or agencies will be immediately notified to make these determinations and make the appropriate decisions about the internment:

- 1. Blossom Management Corporation or their Agent,**
 - 2. Whatcom County Coroner,**
 - 3. local law enforcement agency,**
 - 4. appropriate local agency,**
 - 5. appropriate local government representative,**
 - 6. Lummi Indian Nation, the Nooksack Tribe of Indians, and the Semiahmoo First Nation**
- (ARAC 2005)**

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The site is located north of H Street, east of Harvey Road, north and west of Valley View Road, and west of Delta Line Road. The highways serving the area are Interstate 5 and SR 548 to the west and SR 539 (Guide-Meridian) to the east. The proposed development will have three access points south to H Street. The easternmost access is approximately 400 feet west of Valley View Road. The spacing between the east and central access is approximately 0.4 miles and the spacing between the central and westernmost access is 0.6 miles.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No, the nearest transit stop is approximately 3 miles west at the Blaine City Hall located on H Street between 3rd and 4th Streets. However, public transportation and school buses are anticipated to have a circulation route along the main collector road within the development in order to access the surrounding neighborhoods.

Whatcom Transportation Authority (WTA) has been contacted regarding extending public transportation services to serve the site along the main collector road of the development.

c. How many parking spaces would the completed project have? How many would the project eliminate?

When the project is complete, each of the single-family lots will have on-site parking for 4 or more cars (150 x 4 = 600 parking spaces). The project does not propose additional on-street parking. Front facing garages will be a minimum of 40' from the front property line, which will allow for a minimum of 2 off-

street parking spaces in the driveway and 2 off-street parking spaces in the garage. The driveways and garages are expected to accommodate all necessary residential parking. The multifamily sections will have 1-1.5 parking spaces per unit, as well as additional parking adjacent to recreational areas. The number of parking spaces for the park areas and multi-use areas are undetermined at this time.

The project will not eliminate any current parking areas or spaces.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Yes. Roads will be designed to have narrow street dimensions in order to slow traffic and add a sense of quality and community. The Low Impact Development Concepts produced by the Puget Sound Action Team in the 2005 Technical Guidance Manual for Puget Sound, will be used as guidance for road and drainage improvements.

A major entry/collector road through the project will provide connectivity between adjacent properties, access to neighborhoods, and a direct route to main roads. Private home lots will not have direct frontage access to this road in order to minimize traffic through the site. A landscaped median will be utilized to mitigate for the size of the collector road and to provide stormwater treatment via continuous raingardens.

Narrow street dimensions are preferred for the local access roads in order to reduce impervious surface area and therefore the need for stormwater treatment features, however this must be balanced with the need for emergency vehicle access and additional parking.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

According to the *Traffic Impact Analysis* prepared by David Evans and Associates, Inc. March of 2007, the mixed-use development has been estimated to generate about 780 trips in the PM peak hour on a typical weekday. Volumes were counted at five intersections in the vicinity of the proposed project. These intersections were analyzed to determine their existing level of service (LOS). After absorbing new traffic, the intersections analyzed operate at a LOS D or better for all phases of the project assuming completion of the current road widening project on SR 543 in the fall of 2008.

g. Proposed measures to reduce or control transportation impacts, if any:

After absorbing new traffic, the intersections analyzed operate at a LOS D or better for all phases of the project assuming completion of the current road widening project on SR 543 in the fall of 2008. Therefore, no traffic mitigation measures are needed at any of the study intersections.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The project will result in a gradual, measurable increase in the need for fire and police protection as well as other local government services.

The master planned community anticipates utilization of existing services throughout the City of Blaine.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Proposed measures include payment of applicable impact fees and utility connection charges, full compliance with current fire and building codes, payment of significant construction related sales

taxes, as well as long-term project property taxes and sales taxes. The project will also be built in several phases over 20 year timeframe. This will allow for additional time to provide expanded public services for the completed project

The Grandis Pond PUD proposes to set aside a 70, 500 SF (1.62 acre) parcel to be used specifically for the construction of a public safety facility such as a police and or fire station.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Connections to water mains, sanitary sewers and storm sewers are to be made in accordance with City of Blaine regulations. Authority for such connections should be obtained by making an application for a Building Permit to the City of Blaine and by paying all applicable hook-up and related fees.

Arrangements should be made with the above suppliers of electrical, gas, telephone and cablevision services for the supply of these services by means of underground connections to the owner's home and for the payment of any fees charged in relation to such connections.

It is acknowledged that the Developer shall have no liability for any costs related to the installation, servicing or maintenance of any services or products supplied by any of the aforementioned utilities and service suppliers.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity:

Electricity will be obtained from The City of Blaine. The nearest power available from PSE is at the corner of Valley View Road and H Street Road. PSE does have a small 1 phase overhead line that runs down H Street Road past the development, but it lacks the capacity required for the development. In order to serve the development PSE would extend its 200 amp, 3 phase underground circuit approximately 6,000 feet along H Street Road from Valley view Road to the west entrance of the development.

Sanitary Sewer:

Sanitary Sewer utilities will be provided by the City of Blaine and will be served by the existing wastewater treatment plant. Currently, the gravity sewer main closest to the project is within 'H' St. Rd. approximately 4440 feet (ft) from the north intersection of Harvey Rd. with 'H' St. Rd. (1). The project site is about 5000 ft from Harvey Rd. A major assumption used in developing the options for sanitary sewer service is that another proposed development along 'H' St. Rd., known as East Maple Ridge (EMR), will extend the sanitary sewer main to approximately 800 ft west of the north intersection of Harvey Rd. with 'H' St. Rd.

Sanitary sewer service is proposed for the Grandis Pond project by installing a sanitary sewer line within the present H Street ROW to the southwestern corner of the site. The sewer main is proposed to be installed either by open-cut trenching or boring/tunneling in the center of the west-bound travel lane.

The Grandis site will have gravity sanitary sewer mains that will discharge into the new H Street main extension. The proposed routing will leave a small area along the north property line (approximately 3.5 acres) requiring a pump station. The final development phase of the site, along the far west of the site, can not be serviced by the Grandis gravity main. This area can be temporarily pumped to the Grandis main until the installation of a new gravity sewer connecting N. Harvey Road with Grandis when the parkway is built.

Water:

Water service will be provided by the City of Blaine Water System. It is understood that the City is eventually planning to service this entire area with a future gravity reservoir (FGR), and that this project is proposed to be developed in three distinct phases. It is also assumed that the source of water to serve this area is from the existing Harvey Road reservoir. It is assumed that any transmission main from Harvey Road reservoir to Grandis Pond will be 12-inch or greater diameter.

It appears that unless the proposed future gravity reservoir is constructed concurrently with the start of Phase 1 of the Grandis development, the most cost effective and simplest solution is to install a multi-pump booster station at the Harvey Road reservoir site. This booster pump station can be expanded as the Grandis project is built out, and then eventually be converted to serve the future reservoir. Pumps could be selected to provide adequate flows to Phases 1 and then 2, but with pressures that would allow the water to reach the future reservoir. In addition, if possible, the transmission route from the booster pumps at Harvey Road reservoir should be cross-country via easements to save the expense of following the longer path along current roadways. Currently, no easements exist for the waterline transmission to travel along this route, therefore this option is rejected at this time. The existing water main in H Street will be proposed to be used to connect from Harvey Road to the site, in conjunction with installing PRV valves on each water service line along the road to avoid over-pressurizing the lower portions of the system.

Telephone Communication:

Verizon will provide telecommunication services to the Grandis Pond PUD

Natural Gas:

Cascade Natural Gas will provide natural gas services to the Grandis Pond PUD.

Refuse:

Blaine-Bay Refuse, Inc. and Sanitary Services Company provides solid Waste Collection to the area. Solid waste is transported to the incinerator and recycling transfer point operated by Recomp of Washington, Inc., located on Slater Road in Whatcom County.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: _____

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
2. Proposed measures to avoid or reduce such increases are:
3. How would the proposal be likely to affect plants, animals, fish, or marine life?
4. Proposed measures to protect conserve plants, animals, fish, or marine life are:
5. How would the proposal be likely to deplete energy or natural resources?
6. Proposed measures to protect or conserve energy and natural resources are:
7. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
8. Proposed measures to protect such resources or to avoid or reduce impacts are:
9. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?
10. Proposed measures to avoid or reduce shoreline and land use impacts are:
11. How would the proposal be likely to increase demands on transportation or public services and utilities?
12. Proposed measures to reduce or respond to such demand(s) are:
13. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.