Bellingham Public Development Authority proposed Cornwall development environmental impact assessment

Ryan Fung
Western Washington University

Elise Keim
Western Washington University

Nadine Kohl
Western Washington University

Michael Olney
Western Washington University

Lauren Squires
Western Washington University

See next page for additional authors

Follow this and additional works at: https://cedar.wwu.edu/huxley_stupubs

Part of the Environmental Studies Commons

Recommended Citation
Fung, Ryan; Keim, Elise; Kohl, Nadine; Olney, Michael; Squires, Lauren; and Sund, Nicholas, "Bellingham Public Development Authority proposed Cornwall development environmental impact assessment" (2011). Huxley College Graduate and Undergraduate Publications. 12.
https://cedar.wwu.edu/huxley_stupubs/12

This Environmental Impact Assessment is brought to you for free and open access by the Huxley College of the Environment at Western CEDAR. It has been accepted for inclusion in Huxley College Graduate and Undergraduate Publications by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.
Author
Ryan Fung, Elise Keim, Nadine Kohl, Michael Olney, Lauren Squires, and Nicholas Sund

This environmental impact assessment is available at Western CEDAR: https://cedar.wwu.edu/huxley_stupubs/12
Bellingham Public Development Authority
Proposed Cornwall Development
Environmental Impact Assessment

Spring, 2011

Environmental Studies 436: Environmental Impact Assessment
Huxley College of the Environment
Western Washington University
Dear Concerned Citizen:

Enclosed for your review and comment is the Bellingham Public Development Authority (BPDA) Proposed Cornwall Development, Environmental Impact Assessment (EIA). The scope of this EIA is to analyze natural and built elements that could potentially be adversely impacted by the Proposed Cornwall Development. The proposed action is to build an infill development on the site of 1115 Cornwall, currently a parking lot. The infill development would consist of a five story “mixed use” building with potential for office, retail, rental, and residential units.

In addition to analyzing the potential impact of the current BPDA-proposed design plan, this EIA explores two proposed actions: (1) A design alternative that includes modifications to the building design as well as mitigation measures to reduce environmental impacts. (2) A “no action” alternative, in which case the site would continue to serve as a surface level parking lot.

Information included in this EIA was gathered from the City of Bellingham, BPDA, and also collaborative work from WWU students and faculty.

To encourage citizen participation with the proposed site, an informational presentation will be held at 5:00 PM on June 1st, 2011 at the Community Food Co-op 1220 N. Forest Street in Bellingham, WA. The public meeting will include a PowerPoint presentation and questions and concerns will be addressed regarding this EIA. This EIA will also be available to the public through the Wilson Library and the Huxley Map Library, both located on Western Washington University’s campus.

The EIA addresses a real-life proposed development plan and is prepared generally in accordance with the State Environmental Policy Act. With that said, this document was not written by the City of Bellingham or the BPDA, and they have also not endorsed the proposals or findings of the EIA. Rather, this EIA is an academic venture created by Huxley College students as a capstone course required for graduation.

Sincerely,

Elise Keim, Lauren Squires, Nicholas Sund, Michael Olney, Ryan Fung, Nadine Kohl
Instructor: Professor Jean Melious

Environmental Studies 436: Environmental Impact Assessment

Authors: Ryan Fung, Elise Keim, Nadine Kohl, Michael Olney, Lauren Squires, Nick Sund

Huxley College of the Environment

Western Washington University

Disclaimer: This report represents a class project that was carried out by students of Western Washington University, Huxley College of the Environment. It has not been undertaken at the request of any persons representing local governments or private individuals, nor does it necessarily represent the opinion or position of individuals from government or the private sector.
Fact Sheet

Title:
Bellingham Public Development Authority Proposed Cornwall Development Environmental Impact Assessment

Description of Project:

The formerly City-owned monthly permit parking lot at the corner of Cornwall Avenue and Maple Street (1115 Cornwall Ave.) was conveyed to the Bellingham Public Development Authority (BPDA) in December 2010. The City Council deeded this property over to the BPDA at the cost of $1.5 million. Subject to further study and planning, the BPDA anticipates to leverage private ownership of the nearby 1100 Cornwall site to support the construction of a 45,000 – 60,000 sq. ft. structure that will provide lower-level parking with surplus capacity for shared public use especially during off-hours. The structure above the parking structure provides the possibility for limited street-front retail and commercial space, office and residential use for market and workforce housing.

Adapted from the Bellingham Public Development Authority website: http://www.bellinghampda.org/projects/1100-cornwall

Legal Description of Location:

Location of proposed project: The 1100 block of Cornwall Avenue including the sites of 1100 and 1115 Cornwall Avenue. 1115 Cornwall is the formerly City-owned monthly permit parking lot at the corner of Cornwall Avenue and Maple Street.

BPDA-owned 1115 Cornwall, Land parcel number: 380330118056
Legal description: NEW WHATCOM SW 1/2 OF LOT 4-ALL LOTS 5 THRU 8 BLK 42

Privately owned 1100 Cornwall, Land parcel number: 380330129069
Legal Description: NEW WHATCOM SW 1 FT OF NW 50 FT OF LOT 2- ALL LOT 3 BLK 42

Proposer:
Bellingham Public Development Authority

Lead Agency:
City of Bellingham
210 Lottie Street
Bellingham, WA 98225
Phone: (360) 778-8000
Fax: (360) 778-8001
Permits:

While it will be the responsibility of the developer to acquire building permits and other government approvals needed for the development of the site, the BPDA anticipates that no rezoning or changes in the site plan will be required for the proposed project. The developer will have to take the proposed building plan directly to the building department for building permits as well as receiving approval from the Design Review Board.

City of Bellingham:

Bellingham Municipal Code: Chapter 15.42.060 F Minimum Requirements for Stormwater Mitigation

Bellingham Municipal Code: Chapter 19.06.030 Transportation Impact Fee

Bellingham Municipal Code: Chapter 10.24.120 Noise Ordinance


Bellingham Municipal Code: Chapter 15.42.060 Approval Standards

Other Local, City, or County Permits include, but are not limited to:

Bellingham Municipal Code Chapter 17: Construction Codes


City of Bellingham Incentive Programs for Green Design:

Expedited building permit review

Potential 50% reduction in stormwater development charges

Multi-family tax exemption program (BMC 17.82.030)

Reduced parking requirements in urban areas (BMC 20.12.010)

Contributors:

Ryan Fung:
1003 34th St
Bellingham, WA 98229

Elise Keim:
1011 High St #5
Bellingham, WA 98225
Nadine Kohl:
   413 E. Maple #8
   Bellingham, WA 98225

Michael Olney:
   408 17th St.
   Bellingham, WA 98225

Lauren Squires:
   1020 Jersey St
   Bellingham, WA 98225

Nick Sund:
   1218 N. State St. #404
   Bellingham WA 98225

Distribution List:

Jean Melious
   516 High St
   Arntzen Hall 208
   Bellingham, Washington 98225

Wilson Library
   516 High St
   Bellingham, WA 98225

Huxley Map Library
   516 High St
   Arntzen Hall, 101
   Bellingham, Washington 98225

Acknowledgements:

    We would like to thanks James Long, the executive director of the Bellingham Public
    Development Authority whose continued assistance has aided our research for this EIA. We
    would also like to acknowledge professor Jean Melious’ assistance in guiding and reviewing our
    EIA.

Issue Date:

June 01, 2011

Public Presentation Time and Date:

June 1, 2011 at 5pm at the Coop annex on the corner of Chestnut and Forest
# Table of Contents

Table of Contents.................................................................................................................. 7  
Chapter 1: Executive Summary............................................................................................... 8  
List of Figures.......................................................................................................................... 11  
List of Tables ........................................................................................................................... 12  
Glossary Terms ....................................................................................................................... 13  
Chapter 2: Design Alternative Narrative.............................................................................. 14  
Chapter 3: No Action Alternative Narrative......................................................................... 19  
Chapter 4: Affected Environment......................................................................................... 21  
4.1 Water ............................................................................................................................... 21  
4.2 Air and Greenhouse Gasses ......................................................................................... 23  
4.3 Earth ............................................................................................................................... 26  
4.4 Transportation ............................................................................................................... 28  
4.5 Housing ......................................................................................................................... 30  
4.6 Environmental Health.................................................................................................... 32  
4.7 Animals ........................................................................................................................... 34  
4.8 Plants ............................................................................................................................... 35  
4.9 Utilities ........................................................................................................................... 36  
4.10 Energy and Natural Resources ................................................................................... 37  
4.11 Public Services ............................................................................................................. 38  
4.12 Aesthetics ...................................................................................................................... 39  
4.13 Light and Glare ............................................................................................................ 44  
4.14 Recreation ..................................................................................................................... 45  
4.15 Historic and Cultural Preservation .............................................................................. 47  
4.16 Land and Shoreline Use ............................................................................................... 49  
Decision Matrix ...................................................................................................................... 51  
Appendices ............................................................................................................................. 53  
Appendix A: Bellingham Municipal Codes .......................................................................... 54  
Appendix B: Maps .................................................................................................................. 65  
Appendix C: 1100 Cornwall Sale Fiscal Impact Analysis ..................................................... 72  
Appendix D: Design Images .................................................................................................. 78
Chapter 1:

Executive Summary

This document was compiled by six senior-level undergraduate students as the main requirement and focus of the Capstone course, Environmental Studies 436, for Huxley College of the Environment at Western Washington University.\(^1\) Despite this document’s academic nature, the state and national policies for Environmental Impact Assessment (EIA) were closely followed in its creation. The intent of this EIA is to aid in the sustainable development of a site in downtown Bellingham, Washington, referred to the Bellingham Public Development Authority (BPDA) Proposed Cornwall Development.

The purpose of this EIA is to “provide a systematic, reproducible, and interdisciplinary evaluation of the potential effects of a proposed action and its practical alternatives on the physical, biological, cultural and socioeconomic attributes of a particular geographic area.”\(^2\) This document systematically analyzes the potential impacts of proposed development plan for the 1115 Cornwall site and proposes reasonable design alternatives. These alternatives were crafted with the focus of maintaining the project objective established by the BPDA. The project objective is two-fold: the reinvestment of acquired capital in another major development on the Bellingham waterfront and to contribute to the revitalization of downtown Bellingham with an infill project that will inspire commercial activity and attract residents to live in the central business district. As the Bellingham Public Development Authority currently owns the site, it is desirable to recoup the public funds invested in the property in order to invest them elsewhere.

Summary of Proposal

The formerly City of Bellingham-owned monthly permit parking lot at the corner of Cornwall Avenue and Maple Street (1115 Cornwall Ave.) was conveyed to the Bellingham Public Development Authority in December 2010. The City Council deeded this property over to the BPDA at the cost of $1.5 million. Subject to further study and planning, the BPDA anticipates to leverage private ownership of the nearby 1100 Cornwall site to support the construction a 45,000 – 60,000 sq. ft. structure that will provide lower-level parking with surplus capacity for shared public use especially during off-hours. The structure above the parking structure provides the possibility for limited street-front retail and commercial space, office and residential use for market and workforce housing.

---

\(^1\) Website: [http://www.wwu.edu/huxley/](http://www.wwu.edu/huxley/)

\(^2\) The International Network for Environmental Compliance and Enforcement, [http://www.inece.org/EIA/5FAQS.htm](http://www.inece.org/EIA/5FAQS.htm)
Summary of Impacts, Mitigation Measures and Unavoidable Adverse Impacts

The impacts of the BPDA Proposed Cornwall Development are outlined by impact category in the following report. The primary categories of significant environmental impact are Water, Air and Transportation. The proposed development converts a previously permeable site to a completely impervious site. This will have a significant environmental impact with polluted stormwater flowing off of the site. In order to mitigate this impact, specific mitigation measures are proposed with the overall recommendation of the incorporation of a stormwater management system into the development plan. Secondly, during the construction phase, it is predicted that the site will generate a considerable amount of air pollution and greenhouse gas emissions. In order to mitigate this impact, mitigation measures such as the use of alternative construction techniques and best management practices are recommended. Furthermore, the parking capacity proposed in the original development plan also contributes air pollution from increased vehicle emissions. Additionally, the two proposed levels of subsurface parking would also increase congestion in the downtown area. This assessment proposes the elimination of one of the levels of subsurface parking in order to mitigate these adverse impacts.

While this assessment strives to recommend mitigation measures to reduce environmental impact to a non-significant level, avoidable adverse impacts still remain as a result of the proposed development. Even with reduced parking there will still be an increase in traffic to and from the site. Even with best management practices and parking reductions there will still be greenhouse gas emissions from the site. And the site will still produce a considerable amount of runoff even with a stormwater management system.

Summary of Alternatives

Alternative 1: Design Alternative

The design alternative takes all identified adverse impacts into account in order to create a reasonable alternative that meets project objectives at a lower environmental cost. The design alternative retains the building and site design of the original proposal. However, the design alternative proposes the project produce a LEED-certified building in order to achieve energy savings, water efficiency, carbon emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. Additionally, the alternative adds a stormwater management system with bioswales, rain gardens and cisterns to the development plan in order to lessen the impact on stormwater runoff. Finally, the design alternative also removes one story of subsurface parking in order to mitigate air pollution, automobile dependency and congestion in the central business district.

Alternative 2: The “No Action” Alternative

If the BPDA Proposed Cornwall Development were not to proceed as planned, the site would remain a gravel parking lot until another development opportunity presented itself in the future. However, the current development climate is ripe with opportunity for a high-quality, environmentally sound development of the 1115 Cornwall site. Current, opportunity for public private partnership would allow for land assemblage to support a quality mixed-used project that would otherwise be impossible. Downtown development trends are oriented toward the
revitalization of downtown and preparation for the waterfront development. The BPDA Proposed Cornwall Development is directly in line with these trends. A No Action Alternative would reduce environmental impacts such as increased automobile use, carbon emissions and stormwater runoff in the short term. However, if this ripe opportunity for urban infill is not seized, Bellingham could continue on the more environmentally-detrimental path of urban sprawl.

**Conclusion**

The successful redevelopment of the 1115 Cornwall site will contribute to the revitalization and sustainable development of downtown Bellingham. Based on the findings in this assessment, the BPDA Proposed Cornwall Development is determined to be a proposal of non-significant environmental impact. While there are potential adverse impacts associated with the existing development plan, the incorporation of a variety of mitigation measures creates a design alternative that achieves the project objectives at lower environmental cost.
List of Figures

Figure 1: Proposed Design Alternative.................................................................14
Figure 2: Bioswale Image ..................................................................................15
Figure 3: Bioswale Image....................................................................................15
Figure 4: Altered Parking Elevation.....................................................................16
Figure 5: Aerial View of Site with Proposed Development.................................40
Figure 6: Aerial View of Site without Proposed Development..............................41
Figure 7: View from Cornwall and Chestnut with Proposed Development.............41
Figure 8: View from Cornwall and Chestnut without Proposed Development.........42
Figure 9: View of Railroad Avenue in Relation to the Development.......................42
Figure 10: Street View of Railroad Avenue in Relation to the Development............43
Figure 11: The Washington Grocery Building in Relation to the Development.........47
List of Tables

Table 1: King County GHG Analysis ................................................................. 24
Table 2: WTA Mode Share Goals ................................................................. 28
Glossary of Technical Terms, Acronyms and Abbreviations

BPDA - Bellingham Public Development Authority
BMC – Bellingham Municipal Code
CO2 – Carbon Dioxide
SEPA- State Environmental Policy Act
EIS - Environmental Impact Statement
EIA - Environmental Impact Assessment
USGS - United States Geological Survey
DNS - Determination of Non-significance
DS - Determination of Significance
MDNS - Mitigated Determination of Non-significance
LEED - Leadership in Energy and Environmental Design
CBD - Central Business District
WTA - Whatcom Transit Authority
NEPA - National Environmental Policy Act
SWPPP – Stormwater Pollution Prevention Program
Peak Load Events – Severe weather events which strain a city’s stormwater management system
Cisterns - A waterproof receptacle for holding liquids, are often built to catch and store rainwater.
Bioswales – Vegetated landscapes designed to filter pollutants from surface water runoff
Rain Garden – A planted depression that allows rainwater runoff from impervious urban areas to be absorbed.
GHG - Green House Gases
TIF - Traffic Impact Fee
Lead Agency – The agency responsible for compliance with SEPA procedural requirements and the only agency responsible for the threshold determination and for the preparation and content of an environmental impact statement when required.
GMA- Growth Management Act
Chapter 2: Design Alternative

The design alternative is a modification of the original project proposal that still maintains the original project objectives of the BPDA-owned site. These objectives are twofold: the reinvestment of acquired capital in another major development on the Bellingham waterfront and to contribute to the revitalization of downtown Bellingham with an infill project that will inspire commercial activity and attract residents to live in the central business district.

The primary categories of environmental impacts addressed in the design alternative are water, air and transportation.

The design alternative retains the building design of the original proposal. However, the design adds bioswales to lessen the impact on storm water runoff. It also removes one story of underground parking. We explored several reconfigurations of the building in an attempt to increase site permeability. We determined that any attempts to reconfigure the building in a way that increased the site permeability increased other environmental impacts.

The greatest obstacle to sustainable stormwater management on the site is the subsurface parking garage, which exists underneath the entire site. Due to this element, the project site is 100% impervious to water. In order to reduce runoff from the site improvements such as bioswales, and cisterns must be installed.
**Bioswales**

Bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides and filled with vegetation. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Biological factors also contribute to the breakdown of certain pollutants. A common application is around parking lots, where substantial automotive pollution is collected by the paving and then flushed by rain. The bioswale treats the runoff before releasing it to the watershed or storm sewer.

![Bioswale examples in SketchUp (left) and photograph (right)](image)

Bioswales will be installed along the perimeter of the site between street trees to avoid placing them directly atop the parking garage. The site itself will remain 100% impermeable, but the bioswales lining the site on the sidewalk and along the alley will capture, filter and retain the site’s runoff. Bioswales will also have two secondary effects. A vegetated bioswale along the alley will create a sound buffer, reducing the noise from adjacent Boundary Bay Brewery. The bioswales along Cornwall Ave. and Maple St. will create a buffer between cars and pedestrians making the sidewalk more pedestrian friendly and improving the aesthetics of the streetscape.

**Eliminate One Level of Subsurface Parking**

In order to minimize traffic congestion and reduce air pollution in the downtown area one story of underground parking will be removed. By reducing the number of available parking spaces on site, the design alternative maintains the limited automobile capacity of downtown while providing sufficient parking for the tenants living in the site’s residential units. By reducing the number of cars served by the site, the amount of CO2 released as a result of the project is reduced. Additionally, the removal of one story of concrete greatly reduces the CO² impact of the construction.
LEED Certification

LEED is a green building certification system, providing third-party verification that a building or community was designed and built using strategies intended to improve performance in metrics such as energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. The design alternative proposes the achievement of LEED certification or an equivalent green building certification. This will ensure that the building is constructed with less harmful materials and designed to maximize the energy efficiency of its utilities.

Each of these mitigation strategies targets a specific element of the affected environment but will benefit other elements as well. The following subheadings describe the most heavily impacted environmental elements and how each will be improved or changed by the design alternative.

Water

The existing design does not currently include measures to reduce or control stormwater impacts to surface or ground water. However, construction will take place in accordance with current hazard regulations. With the installation of a stormwater management system, as proposed in the design alternative, peak stormwater flows would be reduced, and rainwater would be treated before being discharged into the City’s stormwater system.

In order to mitigate stormwater runoff, vegetated bioswales will be installed at roof downspouts and street edges to remove silt and pollution before it enters the City’s stormwater system. The use of native plants in the bioswale system will help retain and filter rainwater. Additionally, cisterns may be used to capture rain during peak load events and slowly release it afterwards.

Because the development will sit atop an underground parking garage, it is not possible to reduce the site’s impermeable surface area with the use of pervious pavers. However, bioswales and rain gardens can be also be installed at the property edges to reduce rain runoff and allow stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished groundwater). Both of these methods increase the permeability of the site and allow groundwater to be recharged.
Remaining Impacts:
The design alternative will still produce a considerable amount of runoff even with cistern and bioswale implementation.

Air
Proposed mitigation measures for the construction phase primarily suggest alternative construction techniques. Water or wet exposed surfaces multiple times per day to decrease the chance of dust or runaway particulates. Cover or maintain freeboard space on haul trucks that contain soils or loose materials. Limit vehicle speeds to decrease emissions. All paving should be completed as soon as possible to decrease GHG emissions and reactive organic compounds. Minimize idle vehicles. Inspect and maintain all equipment. Such practices are law under Washington Department of Ecology.

In addition to introducing best management practices to reduce emissions during construction it is suggested that developers be selective on material types and geographical locations of materials. Emissions and air pollutants will still be emitted, but possibly in less quantity due to shorter distances travelled.

The elimination of a level of parking will reduce the amount of CO2 emitted by approximately 0.891 million metric tons of CO2. The implementation of semi-permeable surfaces may also reduce CO2 emissions.

Remaining Impacts:
Even with best management practices and parking reductions there will still be GHG emissions from the site.

Earth
The biggest concern in terms of earth mitigation measures for this project is the amount of impervious surface present in the completed project. Making use of semi-permeable surfaces on the site is not an option since the entire site will have sub grade parking. However, it is a viable option to install bioswales between the sidewalk and the street around the site. These bioswales could contain rain gardens connected to the buildings storm runoff system, allowing water to enter the water table.

The project will create more than 5000 ft.² of new impervious surface. This means that the project must comply with Minimum Requirements #1 through #10 of BMC 15.42.060 F Minimum Requirements for Stormwater Mitigation for new impervious surfaces and converted pervious areas (see appendix).

Remaining Impacts:
Even with the design alternative the site will remain 100% impermeable.

Transportation
The proposed alternative eliminates one level of underground parking and this would only provide 155 parking spots instead of the proposed 270 spots. This alternative would create additional opportunities for pedestrian-, bicycle-, and transit-oriented development and reduce
the dependence on private single-occupancy automobiles. Finally, this alternative will also reduce the projected greenhouse gas emissions from private automobiles, but there would be an increased dependence on WTA services.

**Remaining Impacts:**
Even with reduced parking there will still be an increase in traffic to and from the site.

**Environmental Health**
Noise mitigation technology such as absorptive sound walls, and a well-insulated building with noise reducing windows is proposed to help reduce noise impacts to the site. Other environmental health hazards such as hazardous waste will not impact the site and are not discussed in the alternative action.

**Remaining Impacts:**
Occasional noise disturbance from surrounding buildings or train traffic may still impact the building to a lesser degree. No disruptive noise is expected to be produced from the building after the construction phase is completed.
Chapter 3: No Action Alternative

If the BPDA Proposed Cornwall Development were not to proceed as planned, the site of 1115 Cornwall would remain a gravel parking lot until another development opportunity presented itself in the future. In an attempt to predict what would most likely occur if this proposal did not occur, the No Action Alternative analyzes the existing development trends and makes assumptions about the future based off of those trends.

In narrowly analyzing the environmental impact of the development of the site as planned, it is tempting to assume that leaving the site as a gravel parking lot is the less adversely impactful option. An increase in automobile use, carbon emissions and stormwater runoff would be avoided in the short term if the site were not developed. However, if this urban infill opportunity passes, the opportunity to concentrate growth within an already developed and supported urban area also passes. If this proposal did not occur, growth would most likely be directed outside the existing Urban Growth Area3 and would ultimately cause more adverse environmental impacts. The City or County would have to provide more infrastructure at a higher cost to support this outlying growth. Residents would rely on the automobile to support their lifestyles. Ultimately, inefficient urban sprawl would continue. However, if the BPDA Proposed Cornwall Development proceeded, it would converting a gravel parking lot to a more productive use that could support the residential and commercial needs of the growing Bellingham community. This alternative not only takes a broad, long-term perspective on where the proposed development fits into overall trends, it analyzes more specific elements of the project below.

Parking

If 1115 Cornwall were to continue serving its current use, the parking stock in the downtown would be maintained at its current level. However, in looking deeper into the productivity of the use of the site as a parking lot, downtown Bellingham Parking Services reports that it costs roughly $2,500 a year to maintain the lot. The revenue generated from parking permits and fines barely breaks even with that operating cost. While the site does provide a service to downtown, it is not actively generating revenue to offset the $1.5 million the City has invested in the property. In comparing the productivity of its current use and the amount of public investment to be recouped, surely there is a more productive use to the site that would better serve downtown and act as a better investment of public funds.

In acknowledging the service the site currently provides to downtown, the BPDA Proposed Cornwall Development factors into account this loss of public parking spaces with the incorporation of surplus subsurface spaces to act as overflow public parking. While parking is taken away with the development of the site, it is replaced elsewhere and in a manner that generates more revenue value for the City. However, the if the proposed development were not

---

3 http://www.cob.org/services/neighborhoods/community-planning/urban-growth-area.aspx
to occur the site would continue serving its current use and add no additional asset value to the downtown.

**Public Private Partnership**

The main impetus for the development of the 1115 Cornwall site is the ripening of a public private partnership opportunity with a nearby landowner. An opportunity developed to partner with the owner of the 1100 Cornwall site in order to assemble the two neighboring lots for a more productive infill development. This partnership lends itself to a quality of mixed-use infill project that might not otherwise be possible if the BPDA were to develop the 1115 Cornwall site on its own.

However, if the project did not occur as planned this opportunity for site assemblage would pass and public investment would remain wrapped up in a less productive use of space. If the opportunity to capitalize on this partnership to assemble property passed, it is unforeseeable as to when another feasible development opportunity would present itself. In the interest of high-quality, environmentally sound development, it is important that the site be developed in a favorable climate characterized by ripe opportunity, reasonable public cost and promising financial feasibility. The current climate is favorable. If the development does not occur at this time, it is foreseeable that the site may be developed at a lower quality or in a more environmentally impactful way if the BPDA is forced to recoup public investment through a less favorable development plan in the future.

**Revitalization of Downtown Bellingham**

While it is outside the scope of this analysis to determine whether the site would have a negative effect on the value of surrounding properties if it remained a gravel parking lot, it can be determined that the site certainly would not add asset value to the properties around it if it remained at its current use. The City of Bellingham seeks to support the ongoing revitalization of downtown. The productive and dynamic use of properties in the downtown core is essential to overall revitalization. The BPDA Proposed Cornwall Development is directly in line with these goals as it seeks to convert this underutilized asset that contributes very little to the downtown to a more productive use that actively supports surrounding properties and enlivens the area. If the proposal were not to occur and this opportunity for development were not seized, it would be in direct opposition to the goals the City has laid out for the strengthening and revitalization of downtown.

**Gateway to the Waterfront**

Finally, if the BPDA Proposed Cornwall Development were not to proceed it would miss another opportunity to contribute to a more positive gateway to the Bellingham waterfront. Current downtown development trends are oriented toward the future development of the nearby waterfront. The 1115 Cornwall site sits directly adjacent to the waterfront. If the site were to be developed as planned, it would contribute to the gateway to the waterfront creating a high-quality transitional urban fabric as one moves from downtown to the waterfront.
Chapter 4: Affected Environment

This section of the Environmental Impact Assessment (EIA) examines the different environmental elements that may be impacted by the proposed development. The environmental elements are ordered by the most impacted to the least impacted by the proposed development.

Water

Description:
This section of the Environmental Impact Assessment (EIA) describes probable environmental impacts to ground and surface water at the Cornwall Ave. site and surrounding area from the proposed project. Water impacts may include the degradation, contamination, or removal of water resources. The primary source of information for this section was a site visit to examine glare from existing buildings.

Affected Environment:
The site is currently a pay-for-parking lot with no existing structures or residences occupying the site. Of the site’s 43,000 sq. ft., about 33% is impervious asphalt. The remaining 67% is soil with poor drainage. There are no nearby surface water bodies on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands). No fill or dredge material will be placed in any surface waters or wetlands. The proposal will not require surface water or ground water withdrawals or diversions, nor will it involve any discharges of waste materials to surface or ground waters. Soil sampling did reveal contamination from historic uses of the site, but it is not sufficient to require cleanup. Unearthing soils during the construction phase is therefore unlikely to create any significant impacts. The proposal is also not at risk of flooding because it does not lie within the 100-year floodplain.

Impacts:
The project proposes a roof area of 31,000 sq. ft. A parking lot and other paved surfaces make up another 12,000 sq. ft. These two uses will cover 100% of the site with impervious surfaces. Rainwater from the roof will flow from downspouts into the city stormwater and sewer system, ultimately ending up in Bellingham Bay. Other impervious surfaces will drain to streetside stormdrains and flow to Bellingham Bay as well. Overall, the site will generate about 750,000 Gal./year. It is possible that waste and hazardous materials which exist on paved surfaces, such as trash, vehicle oils, or animal feces, may be washed into the stormwater system without treatment.

Mitigation Measures:
There are currently no proposed measures to reduce or control stormwater impacts to surface or ground water. Peak stormwater flows would be reduced, and rainwater would be
treated before being discharged into the stormwater system. Construction will take place in accordance with current hazard regulations.

In order to mitigate stormwater runoff, vegetated bioswale may be installed at roof downspouts and streeedges to remove silt and pollution before it enters the City’s stormwater system. Cisterns may be used to capture rain during peak load events and slowly release it afterwards. The use of native plants will help retain and filter rainwater.

In order to mitigate impermeable surfaces, the parking lot could be built with pervious concrete, asphalt, or pavers. Rain gardens can be also be installed at the property edges to collect rainwater. Both methods increase permeability of the site and allow groundwater to be recharged.

**Alternative 1: Proposed Design Alternative**

Stormwater management improvements such as bioswales, cisterns and pervious pavers will be installed to reduce and filter stormwater runoff and to increase site permeability.

**Alternative 2: No Action Alternative**

The no action alternative would leave the site as a pay-for-parking lot which would continue to generate stormwater runoff at a rate of 750,000 Gallons per year.

**Unavoidable Significant Impacts:**

There are no foreseen unavoidable significant impacts to the site concerning water quality.
Air & Greenhouse Gasses

Description:
This section of the Environmental Impact Assessment (EIA) describes probable environmental impacts on air, air quality, emissions and greenhouse gas emissions (GHGs). Primary sources of information regarding air emissions come from emission studies and projections.

Affected Environment:
Currently the site is a pay-for-parking lot with no structures or residences on the site. Air pollution is unavoidable during the construction and post-construction phase of the proposed Cornwall project. As a result surrounding areas may be affected by the increased levels of air pollution. The exact impacts and affected environments of some emissions are unknown due to the ambiguous nature of GHGs.

Impacts:
Air pollution is going to occur during the construction phase of the 1000 Cornwall site. During construction it is likely that the following pollutants will be emitted: carbon dioxide, vehicle emissions and particulate matter, nitrogen oxides, sulfur oxides, construction dust, other GHGs, reactive organic compounds and other.

Post-construction the site will likely continue to emit GHGs and vehicle emissions. Also, the site will be subject to indoor air pollution in the form of possible radon emissions, molds, allergens, carbon monoxide, volatile organic compounds, and other.

For the total life of the project, it is estimated to emit approximately 40.7 million metric tons of CO2. The King County GHG emissions worksheet breaks down the emissions of GHG into three categories of emissions types, these are: embodied emissions, energy emissions and transportation emissions. Embodied emissions are associated with the extraction, processing, transportation, construction use and disposal of materials. Energy emissions are the post-construction use of energy given the average lifetime of the building; in this case the number estimated lifespan of the building is at least eighty years. Finally, transportation emissions are the estimated emissions from the transportation of the building occupants based on vehicle miles traveled. According to the King County GHG inventories worksheet, for this project, the majority of CO2 will be emitted by the embodied emissions and energy of the office space. The residential space will generate the most GHG related in the transportation emissions category. It must also be noted, that the embodied energy of pavement is also high, but still lower than office space and commercial uses.

There are no known off-site sources of emissions or significant odors that may affect the proposal. The only possibility of odors may result from adjacent entertainment facilities, e.g. Boundary Bay Brewery.
Mitigation Measures:

Proposed mitigation measures for the construction phase primarily suggest alternative construction techniques. Water or wet exposed surfaces multiple times per day to decrease the chance of dust or runaway particulates. Cover or maintain freeboard space on haul trucks that contain soils or loose materials. Limit vehicle speeds to decrease emissions. All paving should be completed as soon as possible to decrease GHG emissions and reactive organic compounds. Minimize idle vehicles. Inspect and maintain all equipment. Abide by local and state level construction standards. Such practices are law under Washington State Clean Air Act.

Alternative 1: Proposed Design Alternative

In addition to introducing best management practices to reduce emissions during construction it is suggested that developers be selective on material types and geographical locations of materials. Emissions and air pollutants will still be emitted, but possibly in less quantity due to shorter distances travelled. In addition, it is suggested that air quality tests are periodically taken inside the buildings to ensure codes and regulations are met.

The elimination of a level of parking will reduce the amount of CO2 emitted by approximately 0.891 million metric tons of CO2. The implementation of semi-permeable surfaces may also reduce CO2 emissions.

Table 1: King County Greenhouse Gas Emissions Worksheet Findings for the Proposed Development

<table>
<thead>
<tr>
<th>Section I: Buildings</th>
<th>Emissions Per Unit or Per Thousand Square Feet (MTCO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type (Residential or Principal Activity (Commercial))</strong></td>
<td><strong>Square Foot (in thousands of square feet)</strong></td>
</tr>
<tr>
<td>Single-Family Home</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Family Unit in Large Building</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Family Unit in Small Building</td>
<td>75</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>0</td>
</tr>
<tr>
<td>Food Sales</td>
<td>0</td>
</tr>
<tr>
<td>Food Service</td>
<td>0</td>
</tr>
<tr>
<td>Health Care Inpatient</td>
<td>0</td>
</tr>
<tr>
<td>Health Care Outpatient</td>
<td>0</td>
</tr>
<tr>
<td>Lodging</td>
<td>0</td>
</tr>
<tr>
<td>Retail (Other Than Mall)</td>
<td>5,100</td>
</tr>
<tr>
<td>Office</td>
<td>23,600</td>
</tr>
<tr>
<td>Public Assembly</td>
<td>0</td>
</tr>
<tr>
<td>Public Order and Safety</td>
<td>0</td>
</tr>
<tr>
<td>Religious Worship</td>
<td>0</td>
</tr>
<tr>
<td>Service</td>
<td>0</td>
</tr>
<tr>
<td>Warehouse and Storage</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Vacant</td>
<td>0</td>
</tr>
<tr>
<td><strong>Section II: Pavement</strong></td>
<td></td>
</tr>
<tr>
<td>Pavement</td>
<td>87,480</td>
</tr>
</tbody>
</table>

Total Project Emissions: 40731115
Alternative 2: No Action Alternative

The no action alternative would leave the site as a pay-for-parking lot which would not generate any significant air quality problems. Vehicle emissions will persist.

Unavoidable Significant Impacts:

Emissions of GHGs are an unavoidable side effect of the proposed project.
Earth

Description:
This section of the Environmental Impact Assessment (EIA) discusses the current conditions of the earth on and below the site and how the proposed project will impact the earth. The primary sources of information for this section are the geological engineering design report prepared for the proposed Cornwall Place Development and the USGS.

Affected Environment:
The site is mostly flat with a slope on the eastern side against the alley and on the southern side against the sidewalk. The slope on the site is between 0 and 5%, and 2H:IV (horizontal:vertical) on the edge along the alley. The 2H:IV section is between 7 and 4 feet tall.

According to the USGS the soils on the sites are classified as glacialmarine drift. This classification includes Unsorted, unstratified silt and clay, some sand, gravel. This soil type was found on the site between depths of 6 1/2 feet and 22 feet. The bedrock begins at 22 feet and is comprised of sandstone from the Chuckanut formation.

Some areas under downtown Bellingham were mined for coal between 1853 and 1878. There is a history of surface subsidence as a result of these collapsing mines within the area, however such subsidence has not been reported since 1920. Research indicates that the typical mining depth was between 300 and 400 feet below the site surface. Tests were performed which demonstrated that the mine was not present within a depth of 100 feet.

Uncontrolled fill was found on the site in all test locations up to a depth of 6 feet. The material used as still appears to be medium dense, silty send to soft, sandy silt. It also includes some gravel surfacing and pit run gravel.

The site is mostly paved. Currently 78% of surfaces are impervious to water being either asphalt or concrete.

Impacts:
No impacts concerning erosion were mentioned in the geotechnical engineering report. It is assumed that the foundation for the sub grade parking structure will be built up to, and in some places above the level of the alley. The existing slope will be properly retained.

Upon completion 100% of the site will be covered with asphalt, concrete, buildings and plazas. The entire site will have a sub grade parking structure, making the use of semi permeable surfaces ineffective. While the project will be 100% impervious it will only be a shift of 22% since the project was already 78% impervious.

Mitigation Measures:
The only real concern in terms of mitigations on this project is the amount of impervious surfaces presents in the completed project. Making use of semi permeable surfaces on the site is not an option since the entire site will have sub grade parking. It would be possible to put
bioswales between the sidewalk and the street around the project. These bioswales could contain rain gardens connected to the buildings storm runoff system, allowing water to enter the water table.

The project will create more than 5000 ft.² of new impervious surfaces. This means that it must comply with Minimum Requirements #1 through #10 of The Bellingham Municipal Code Section 15.42.060 F Minimum Requirements for Stormwater Mitigation, for new impervious surfaces and converted pervious areas (see appendix).

**Alternative 1: Proposed Design Alternative**
To reduce runoff from an entirely impervious site, sidewalk bioswales would need to be installed.

**Alternative 2: No Action Alternative**
The no action alternative would leave the site as a paved parking lot with 78% impervious surfaces. The soils would not be disturbed in the no action alternative.

**Unavoidable Significant Impacts:**
As proposed, the site will be completely impervious which will lead to a great deal of runoff.
Transportation

Description:
This section of the Environmental Impact Assessment (EIA) discusses the probable impacts on transportation as a result of this proposal. Primary sources of information for this section include: Traffic Impact Fee Calculations from the City of Bellingham, Bellingham Public Development Authority, and City of Bellingham Master Plan.

Affected Environment:
Public streets that are in direct contact with the site include Cornwall Avenue, E. Maple Street, and Chestnut Street. The site is also served by Interstate-5 Highway. Currently the site is not directly served by public transit, but there is a Whatcom Transit Authority GO Line located within ¼ mile of the site. The existing lot provides parking for 62 motorists and 1 motorcycle and with the development of the site all of these will be eliminated.

Impacts:
The new development will impact transportation in the Central Business District by increasing bus ridership and road congestion. An increase of residences and businesses on this site will have a strong affect to the circulation systems that are established in the CBD, for example, the WTA downtown station will now have more passengers coming into the CBD as well as nearby areas such as Fairhaven and WWU. In the future this could support a new bus line or increased service in congested areas.

An additional impact will be seen closest to the site with the usage of an adjoining alleyway being intensified in order to provide an exit from the proposed 270 space parking structure.

Overall there will be changes in the modal split for the city of Bellingham.

<table>
<thead>
<tr>
<th>Mode</th>
<th>2004</th>
<th>2010</th>
<th>2015</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobile</td>
<td>87%</td>
<td>84%</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>Transit Bus</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>8%</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
</tr>
</tbody>
</table>

(Note: 2004 data from FTA/Social Data Study for Bellingham)

Table 2: Whatcom Transportation Authority Mode Share Goals

The modal split shown for 2004 is based on current land use patterns. In the future if land use patterns change, to a less auto centric system like the BPDA proposal for Cornwall Avenue, the modal split has been projected to decrease auto trips and increase other forms of transportation.

Mitigation Measures:
As a result of the proposed development both road maintenance and circulation systems need to be improved to prevent an increase in congestion downtown. The following measures can be taken in order to decrease congestion downtown and reduce greenhouse gas emissions.
(1) Improve circulation system downtown to support bicycle and pedestrian connectivity to WTC center.
(2) Kiosks and other signage tools can be used to make navigating downtown more efficient.
(3) Road improvements to alley, connecting E. Maple and Chestnut Street should be included in the overall site plan. This may include the addition of a traffic signal or sign in alleyway.
(4) Decrease parking on the new site by excluding one of the proposed levels of parking.
(5) Add new WTA bus line, “waterfront line”, coordinating with Cornwall Avenue. This will also support future waterfront expansion projects.

**Alternative 1: Proposed Design Alternative**

The proposed alternative eliminates one level of underground parking and this would result in 155 parking spots instead of the proposed 270 spots. This alternative would create additional opportunities for pedestrian-, bicycle-, and transit-oriented development and reduce the dependence on private automobiles. As a result of this alternative there will be a projected reduction in greenhouse gas emissions from private automobiles but there would be an increased dependence on WTA services.

**Alternative 2: No Action Alternative**

The no action alternative will leave the site a paved parking lot with no significant impacts on transportation.

**Unavoidable Significant Impacts:**

The proposal for this infill site would direct growth into higher density, compact urban areas and maximize efficiency and cost-effectiveness of public transportation and create the need for pedestrian and bicycle capital improvements to the transportation network. As a result there will be significant impacts to transportation systems in the CBD.
Housing

Background:
This section of the Environmental Impact Assessment (EIA) describes the probable housing impacts of the proposal. Primary sources of information include site visits and discussions with the director of the Bellingham Public Development Authority (BPDA), the formulated creator the Cornwall development program.

Affected Environment:
Currently, the site of the BPDA-Proposed Cornwall Development is a paved parking lot that brings in minimal revenue to the city of Bellingham through parking permits. No units will be eliminated because the site currently functions as a parking lot. This development will include seventy-five (75) work-force apartments. Workforce housing is defined as middle and low-income housing where residents are earning about 60% - 80% of median income.

Impacts:
The impacts of these additional housing units in downtown Bellingham are mainly positive. The proposed development plan is a more productive use of the site than the current use. The residential units for the proposed Cornwall development do not require the support of more capital facilities, as indicated in a feasibility analysis conducted by the BPDA.

Since the housing units will support workforce-level residents, the residents will contribute to the commercial activity around the site and in the downtown. The proposed development plan includes a workforce-housing program that could potentially culminate in home ownership for some units. This program will aid in the revitalization of downtown with more residents and homeowners populating and patronizing businesses in the downtown. These residents will also support the retail and commercial components of the proposed Cornwall development as potential employees and patrons.

Furthermore, the additional of residential units will have a positive impact on surround property values as well. The BPDA Proposed Cornwall Development will serve as an infill project and increase density in the downtown, a goal of the City Center Master plan.

Mitigation Measures:
Overall, this project will add to the downtown character and productivity with minimal negative impacts, thus no measures are proposed to mitigate housing impacts.

Alternative 1: Proposed Design Alternative
This report does not propose any changes to the existing housing program presented in the original design.

Alternative 2: No Action Alternative
The no action alternative will leave the site as a pay-for-parking lot with no housing impacts.
Unavoidable Significant Impacts:

There are no foreseen unavoidable significant impacts to housing from this proposal.
Environmental Health

Description:
This section of the Environmental Impact Assessment (EIA) describes probable environmental health impacts to the Cornwall Ave site and surrounding area from the proposed project. Environmental health impacts include health hazards such as exposure to toxic chemicals, risk of fire and explosion, hazardous waste, and noise. Information has been gathered from the due diligence phase one site analysis conducted by Whatcom Environmental Services on behalf of the City of Bellingham.

Affected Environment:
The site is currently a pay-for-parking lot with no existing structures or residences occupying the site. There are no current environmental health hazards generated by the site and the surrounding area does not generate any hazards that could impact the site. Soil sampling revealed contamination under the levels requiring clean up. Uearthing soils during the construction phase is therefore unlikely to create any significant environmental hazards.

The site is locates in the Entertainment District of the downtown area. The site could easily be affected by traffic and surrounding building uses. Surrounding land uses include a brewery and restaurant with live outdoor music and a nightclub. The site is also in close proximity to the waterfront railroad tracks and could be affected by train traffic noise.

During the construction phase noise from the site could potentially affect surrounding properties. Once completed traffic to and from the site would be consistent with surrounding land uses and is unlikely to have a significant impact on noise generation in the area. The day to day operations of the completed project are not expected to generate any significant noise impacts.

Impacts:
The phase one site analysis revealed no probable environmental health hazards such as exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste on or affecting the site. It is expected there will be no unusual health hazards during the construction phase. Since there are no foreseeable environmental health hazards the typical police and fire services for mixed use buildings would be required. There are no foreseen specialized emergency services required.

The noise impacts affecting the site and generated by the site could potentially cause some discomfort to patrons and residents of the area.

Mitigation Measures:
There are currently no proposed measures to reduce or control environmental health hazards such as hazardous waste. Construction will take place in accordance with current hazard regulations.
In order to mitigate noise impacts to the site tenants would be notified they are in the entertainment district and to expect occasional disturbances from surrounding buildings. To reduce noise impacts to the site the building would need well insulated walls and noise reducing windows. The building could implement sound barriers in the form of greenery, and residential units could be placed further away from neighboring noise sources.

In order to mitigate short term noise impacts generated by the construction phase Bellingham’s noise ordinance would be followed. City of Bellingham’s Municipal code 10.24.120 states noise generating activities such as construction cannot take place between the hours of 10:00pm and 7:00am.

**Alternative 1: Proposed Design Alternative**

Noise mitigation technology such as absorptive sound walls, and a well insulated building with noise reducing windows is proposed to help reduce noise impacts to the site. Other environmental health hazards such as hazardous waste will not impact the site and are not discussed in the alternative action.

**Alternative 2: No Action Alternative**

The no action alternative would leave the site as a pay-for-parking lot which would not generate any significant environmental health hazards, nor would it be impacted by such hazards or the noise generated by surrounding sites.

**Unavoidable Significant Impacts:**

There are no foreseen unavoidable significant impacts to the site concerning environmental health hazards.
Animals

Description:
This section of the Environmental Impact Assessment (EIA) discusses the probable impacts of the proposal on animals. Primary source of information for this section is from a site visit.

Affected Environment:
On the site there are no birds or animals that have been observed on or near the site. As a result there are no endangered species known to be on or near the site. Mitigation routes have been analyzed and it has been determined that the site is not part of any current mitigation routes.

Impacts:
The wildlife environment has the potential to be adversely affected by storm runoff on the development site. Storm water runoff in both the finished development and construction phase could have potential impacts to fish species in the nearby bay. Likely to be a non-significant impact based on requirements from the city for the developer to prevent construction pollution.

Mitigation Measures:
In order to prevent storm water run off from the site into Bellingham Bay and sewer systems building materials should be carefully selected. Guidelines for materials used should be established in order to lessen the effects of storm water runoff on animal species. Current requirements for the new construction projects can be found in the Bellingham Municipal Code (15.42.060 - APPROVAL STANDARDS).

Alternative 1: Proposed Design Alternative
The mitigation measures proposed to protect against storm water runoff will reduce the impact to wildlife on the site and in adjacent areas.

Alternative 2: No Action Alternative
The no action alternative will not impact animals in the area either positively or negatively.

Unavoidable Significant Impacts:
There are no foreseen unavoidable significant impacts to animals from this proposal.
Plants

Description:
This section of the Environmental Impact Assessment (EIA) discusses the probable impacts on plants in the site. Primary source of information for this section is from a site visit.

Affected Environment:
The current site has minimal plant species found on the property. There are some shrubs and native grass species that are found on the edge of the property, for example, the edge where the sidewalk begins has a small amount of broom shrubs.

Impacts:
As a result of the redevelopment of the site all current vegetation will be removed. This will include grass and shrubs that are currently on the site area. The plants that are being removed are not recognized as threatened or endangered species and for this reason the removal of them will be non-significant.

Mitigation Measures:
Currently the proposed design for the development of the site has not specified future landscaping. There are also no other measures to preserve or enhance vegetation on the site at this time. A proposal could be made to have guidelines set as to what vegetation should be added to landscape the site. The recommendation will be to have native species that will provide habitat for wildlife and reduce water usage for maintaining plants on the site. The Bellingham Municipal Code (section 20.12.030 – LANDSCAPING) states more specific plant requirements.

Alternative 1: Proposed Design Alternative
Planting native plants on site in planters or bio swales will help increase vegetation in the area.

Alternative 2: No Action Alternative
The no action alternative would leave the site with little vegetation.

Unavoidable Significant Impacts:
The limited amount of vegetation removed by the project would not be significant.
Utilities

Description:
This section of the Environmental Impact Assessment (EIA) discusses the use and impact on utilities. Primary sources include site assessment blueprints.

Affected Environment:
Currently the site is a pay-for-parking lot with no structures or residences on the site. Therefore, there is no current utility use. The proposal plans to turn the parking lot into a multi-storied mixed use building including retail space, offices and private residences. This would require the introduction of utility lines and access to city utility infrastructure.

Impacts:
The modification of the site from a parking lot to a mixed use building would require the possible construction to extending the availability of utilities and services, including: electricity, natural gas, water, refuse services, telephone service, sanitary sewage, and other.

Services for the project, upon completion, will be provided by: Bellingham Public Works, Sanitary Service Company, Puget Sound Energy, Cascade Natural Gas, Qwest, Xfinity, Blackrock Cable, etc.

Most significant impacts include the affects the project will have on the municipal water and energy demand.

Mitigation Measures:
There are currently no proposed measures to reduce or control the impacts of increasing service availability besides basic weatherization building codes.

Alternative 1: Proposed Design Alternative
Proposed alternatives suggest the implementation of energy and water efficiency programs such as LEED, or LEED equivalent. In addition, improved weatherization techniques and practices are suggested.

There are incentives that exist for providing environmentally responsible designs.

Alternative 2: No Action Alternative
The no action alternative would leave the site as a pay-for-parking with no need for utilities or services.

Unavoidable Significant Impacts:
No significant impacts are foreseen.
Energy and Natural Resources

Description:
This section of the Environmental Impact Assessment (EIA) discusses the use of energy and effects on natural resources on the proposed site. The primary sources of information for this section include project site assessment maps and general surveillance of the site.

Affected Environment:
The property is located in an area of commercial development. It is currently being used as a pay-for-parking lot. There are no current structures or residences on the site, however there are buildings of mixed-uses surrounding and adjacent to the lot and may be affected.

Impacts:
Completion of the project will increase overall power and gas demand. The site will use electricity provided by Puget Sound Energy and natural gas provided by Cascade Natural Gas. Primary uses are lighting, power and heating. PSE has recently claimed that the company will require an increase in energy capacity by 2016. Currently, the project will be readily absorbed by energy capacities, but may add to the growing demand.

The building, upon completion, may inhibit the use of solar panels on adjacent properties.

Mitigation Measures:
No proposed mitigation measures are known.

Alternative 1: Proposed Design Alternative
Proposed alternatives include the use of an energy efficiency or reduction strategy such as LEED standards or an equivalent system. This would include improved design for natural lighting, improved energy efficiency, etc.

Alternative 2: No Action Alternative
The no action alternative would leave the property as a pay-for-parking lot. No use of energy or deterrence to energy sources would be present.

Unavoidable Significant Impacts:
No significant impacts are foreseen.
Public Services

Description:
This section of the Environmental Impact Assessment (EIA) discusses whether there would be a significant increase in the need for public services to the site including fire and police protection, health care, and schools. The primary sources of information for this section were the phase one site analysis performed by Whatcom Environmental Services on behalf of the City of Bellingham, and the proposal created by the Bellingham Public Development Authority.

Affected Environment:
Currently the site is a pay-for-parking lot with no structures or residences on the site. Due to the current level of activity on the site there are minimal calls for services. The proposal plans to turn the parking lot into a multi story mixed use building including retail space, offices and private residences. The increased density and diverse use of the site would call for more public services to the site.

Impacts:
The modification of the site from a parking lot to a mixed use building would require an alteration in the response of police and fire services. The increased density would not be out of character for the neighborhood and the increased need for services could be readily absorbed by current public service institutions.

Mitigation Measures:
There are currently no proposed measures to reduce or control direct impacts on public services.

Alternative 1: Proposed Design Alternative
The proposed design alternative would be similar to the current proposal in its demands on public services which can easily be absorbed by current public service institutions.

Alternative 2: No Action Alternative
The no action alternative would leave the site as a pay-for-parking lot with little need for public services.

Unavoidable Significant Impacts:
There are no foreseen unavoidable significant impacts to the site concerning public services.
Aesthetics

Description:
This section of the Environmental Impact Assessment (EIA) describes the probable aesthetic impacts from the proposal. Primary sources of information for this section include site visits, simulations and models produced in Google SketchUp and discussions with the director of the Bellingham Public Development Authority (BPDA).

Affected Environment:
Currently there are no structures on the site and the proposal will not impact any views or sightlines from neighboring sites. The BPDA-Proposed Cornwall Development will be five stories tall at its tallest point. The proposal will add considerable bulk to the block, as seen in the figures at the end of this section. However, the design goal of the building is to not penetrate the skyline set by the buildings directly behind the Cornwall Development. The proposed design does not block any views in the vicinity. Additionally, the architecture of this project closely matches the character of other buildings on the block.

Building Materials
Optimally, brick would be the primary exterior building material, however there are no other brick buildings on the block and it is ultimately the decision of the developer and the City’s design review board. The proposed design includes masonry, stone and metal as the principle building materials.

Impacts:
No views in the immediate vicinity of the project would be altered except for the view from the Boundary Bay beer garden located directly behind the site, as can be seen in Figures 9 and 10. However, the proposed design takes this obstruction into account by providing an open-air walkway through the Cornwall Development to link Boundary Bay to Cornwall Avenue. Additionally, the design goal of this project is to not penetrate the skyline set by the surrounding buildings.

Simulations of the development created in Google SketchUp included below aid in the visualization of bulk the development will add to the area. The following figures portray the proposed development’s relationship with other buildings on the block. Generally, the proposed development is of the same scale of surrounding buildings as seen in Figures 5-8. However, the buildings in the proposal are considerably larger than the buildings on Railroad Avenue, as seen in Figures 9 and 10. This impact will be a noticeable difference in the downtown urban fabric. However, the proposed buildings will contribute positively to the revitalization of downtown in terms of new residents, commercial activity and overall density, as well as improving the site aesthetically.

Mitigation Measures:
The proposed design for the Cornwall Development closely aligns with the City Center Design Standards and other aesthetic city goals for the central business district. As the project progresses, it will need official approval by the City Design Review Board. This will mitigate
any adverse aesthetic impacts of the project. Otherwise, the aesthetic impacts of the BPDA Proposed Cornwall Development are positive and desirable. The increase in density in the downtown area are directly in line with the City of Bellingham’s goals to revitalize the downtown, support urban infill and sequester growth within the existing Urban Growth Area.

**Alternative 1: Proposed Design Alternative**

The current proposal aligns with the current City Center Design Standards. Any alternative will continue to align with the design standards.

**Alternative 2: No Action Alternative**

The no action alternative will keep the site as a parking lot. No views will be obstructed by the no action alternative. But the current land use is also not especially aesthetically pleasing.

**Unavoidable Significant Impacts:**

There are no unavoidable significant impacts to aesthetics from this proposal.

Figure 5: Aerial view from the corner of Chestnut St. and Cornwall Ave. with the BPDA Proposed Cornwall Development in the upper right.
Figure 6: Aerial view from the corner of Chestnut St. and Cornwall Ave. without the proposed development (existing parking lot pictured).

Figure 7: View from the corner of Chestnut St. and Cornwall Ave. with the proposed development (on the right, behind Kulshan Cycles).
Figure 8: View from the corner of Chestnut St. and Cornwall Ave. without the proposed development.

Figure 9: BPDA Proposed Cornwall Development in relationship to buildings on Railroad Ave.
Figure 10: BPDA Proposed Cornwall Development in relationship to Boundary Bay Brewery, street level view from Railroad Ave.
Light and Glare

Description:
This section of the Environmental Impact Assessment (EIA) describes probable environmental impacts in the form of light pollution and glare at the Cornwall Ave. site. The primary source of information for this section was a site visit to examine glare from existing buildings.

Affected Environment:
There are no existing structures or residences occupying the Cornwall Ave. site. There are no sources of light pollution or glare other than existing streetlights.

Impacts:
The proposal may produce minimal glare from reflected sunlight on the building’s windows and glazing, primarily during dusk. Some light pollution may be created by additional lighting for the street, storefronts, and parking lot.

Mitigation Measures:
The proposal does not include any measures to reduce light pollution or glare.

Planting street trees along the west and south faces of the building could reduce sunlight exposure to the building’s façade, as well as dissipate light from other sources, such as lamps and illuminated signage.

The use of louvers, jalousie windows, or trellises will reduce the exposure of sunlight to windows during the summer months. They also reduce light pollution emanating from the building’s windows.

Alternative 1: Proposed Design Alternative
The proposal will use additional street plantings and window shading architecture to reduce sunlight exposure and to diffuse lighting from fixtures.

Alternative 2: No Action Alternative
If the proposal is not built, the site will not generate any glare or light pollution other than from existing streetlights.

Unavoidable Significant Impacts:
There are no foreseen unavoidable significant impacts to the site concerning light and glare.
Description:

This section of the Environmental Impact Assessment (EIA) discusses the possible impacts to recreation from this proposal. Primary sources of information for this section include site visits and discussions with the director of the Bellingham Public Development Authority (BPDA).

Existing Conditions: Recreational opportunities in the vicinity

The site of the BPDA-Proposed Cornwall Development is located in Bellingham’s Central Business District, which is supported by many recreational opportunities including restaurants, entertainment venues, the Bellingham public library, museums, galleries and park space. The most notable of these downtown recreational opportunities near the proposed development are the farmer’s market located less than one block from the site, the interurban trail and greenway system linking downtown and Fairhaven and nearby locally owned restaurants such as Boundary Bay Brewery, a local favorite.

Affected Environment:

The BPDA Proposed Cornwall Development will support a population of downtown residents who will further energize the downtown with their patronage of nearby businesses and services and their use of existing recreational opportunities. For example, the downtown Arts District is less than a five-minute walk from the site. The residents of the Cornwall Development will most likely support that entertainment and arts districts and allow them to grow. Additionally, Maritime Heritage Park is the largest park and open green space closest to the Cornwall Development. Maritime Heritage currently has a negative image because few people use it and homeless populations frequent the area. However, the Cornwall Development will provide a mass of residents who could energize the park and reverse its image.

Finally, the BPDA Proposed Cornwall Development is located right next to the Bellingham waterfront. As the waterfront develops, it will provide more recreational opportunities for downtown residents. As the downtown grows, the pressure on existing recreational opportunities will be eased by the addition of services and activities on the waterfront.

Impact and Mitigation Measures:

The BPDA Proposed Cornwall Development would not displace any existing recreational uses. Instead it would provide a population of downtown residents and additional services such as parking to support them.

The BPDA Proposed Cornwall Development is a self-contained project that supports recreational and commercial activity in the surrounding area. The development includes shared public space for residents and retail patrons. However, the development’s impact on recreation is negligible as to require no mitigation measures.
Alternative 1: Proposed Design Alternative
   This report does not propose any mitigation measures in regard to this project insignificant impact on recreation opportunities.

Alternative 2: No Action Alternative
   The no action alternative would leave the site as a paved parking lot with no impacts on recreation.

Unavoidable Significant Impacts:
   There are no foreseen unavoidable significant impacts to recreation in this proposal.
Historic and Cultural Preservation

Description:
This section of the Environmental Impact Assessment (EIA) discusses Historic and cultural preservation on and around the site and how the proposed project will impact the historic and cultural character of Downtown Bellingham. The primary sources of information for this section are the City of Bellingham’s master plan for the downtown area and the national historic registrar.

Affected Environment:
There are two buildings on the historic registrar that are in close proximity to the project site. The Washington Grocery Building is located on the opposite corner of the same block. It is the building that contains Woods coffee. The other historic building is the Leopold Hotel which is located a block north on Cornwall.

Impacts:
The project as proposed will have no significant impact on the historic and cultural character of the surrounding area. The project will not interrupt any views of the Washington Grocery Building's façade. It will only block the view to a small section of its alley side visible from Cornwall. The project massing is similar enough to that of the Grocery Building that it will not dwarf it. The project will in no way threatened the structural integrity of the Washington Grocery Building.
Mitigation Measures:
No mitigation measures are necessary.

Alternative 1: Proposed Design Alternative
The proposed alternative does not mitigate or impact the historic and cultural character of the surrounding area.

Alternative 2: No Action Alternative
The no action alternative would leave the site as a paved parking lot and have no impacts on the historic and cultural character of the surrounding area.

Unavoidable Significant Impacts:
There are no foreseen unavoidable significant impacts to historic or cultural sites as a result of this proposal.
Land and Shoreline Use

Description:
This section of the Environmental Impact Assessment (EIA) discusses the current land uses of the site and how the proposal will impact the current use. The primary sources of information for this section include the phase one site assessment conducted by Whatcom Environmental Services on behalf of the City of Bellingham and the City of Bellingham’s master plan for the downtown area.

Affected Environment:
The property is located in an area of commercial development. It is currently being used as a pay-for-parking lot. There are no current structures or residences on the site. The site is zoned Mixed Commercial by Whatcom County. This site is designated as part of the central business district under the Bellingham comprehensive plan. The site is also in a parking management and multi-family tax exempt zone. The site is not designated under the shoreline master program. Adjacent property uses include a bike shop, multi-family housing, a nightclub, a brewery and restaurant, and office spaces.

Impacts:
From the due diligence documentation prepared by Whatcom Environmental Services the property “appears to be in good order with no recognized environmental conditions observed.” The proposal is in compliance with the Bellingham master plan and is consistent with the current zoning classification of mixed commercial.

There are seventy-five (75) proposed new multi-family residential units. The residential units would be 821 sq ft each which is the size of a one bedroom apartment meaning 1-2 people per unit with a total of 75-150 residents in the proposed project.

The proposal suggests 5,100 sq ft of retail space and 23,600 sq ft of office space. Assuming there are 3 people for 100 sq ft of retail or office space there could be 861 workers in the completed project.

At these densities a total of 936 – 1011 residents or workers would be in the completed project. The property is currently unoccupied and the proposal would not displace any residents of the site. Those who use the site as a parking lot currently would be impacted by the construction of a mixed use building with private parking.

Mitigation Measures:
The proposal seeks to mitigate the loss of parking spaces in the area by providing off hours pay-for-parking to patrons of the area. Residents and workers of the proposed project would be provided parking. When businesses or offices are closed for the evening or weekend, non building users would be permitted to use the onsite parking.
Alternative 1: Proposed Design Alternative

The proposed design alternative would not change the use of the site from a mixed use building with commercial, office and residential space. As such, the land and shoreline impacts would not be altered in the proposed design alternative.

Alternative 2: No Action Alternative

The no action alternative would leave the property as a pay-for-parking lot. Those who utilize the site as a parking lot would therefore not be impacted. The use of the land, as determined by Bellingham’s Public Development Authority would not be its highest and best use and revenue from the proposal would not be gained.

Unavoidable Significant Impacts:

There are no foreseen unavoidable significant impacts to the site concerning land use.
### Decision Matrix

**Ecology and Environment**

<table>
<thead>
<tr>
<th>Category (weight)</th>
<th>Original Design</th>
<th>Proposed Design</th>
<th>Alternative</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth (2)</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Air (3)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Water (4)</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Plants (1)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Animals (1)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Energy and Natural Resources (1)</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Environmental Health (2)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Land and Shoreline Use (1)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Population and Housing (2)</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Aesthetic (1)</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Recreation (1)</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Historic and Cultural Preservation (1)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Transportation (2)</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Public Services (1)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Utilities (1)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>50</strong></td>
<td><strong>59</strong></td>
<td><strong>52</strong></td>
<td></td>
</tr>
</tbody>
</table>

This scorecard is used to give a quantitative weight to different affected environments and to determine the action that has the greatest environmental benefits, or least environmental impact. A higher score means a more environmentally beneficial plan.

Categories are given a weight of importance from 1-4. A 1 is given to a category of relatively low importance to the project and a 4 being of high importance.

A score of 1-3 is given to the categories for each possible action. A 1 designates that the action has either poor mitigation measures or significant impact on the environment. A 3 is given if the action has either good mitigation measures or has an insignificant effect on the environment.

Totals are the summation of each category’s score multiplied by their weight.
**Decision Matrix: Scorecard of Project Criteria**

<table>
<thead>
<tr>
<th>Category (weight)</th>
<th>Original Design</th>
<th>Proposed Design Alternative</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology &amp; Environment (2)</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Political Feasibility (2)</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Economic Impact (4)</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Project Cost (3)</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>25</strong></td>
<td><strong>27</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

This scorecard is used to give a quantitative weight for each project criteria as determined by the goals of the Cornwall Ave. Project. A higher score means a project has a larger total benefit based on these criteria.

Category weights are given a 1-4. A 1 is given to a category of relatively low importance to the total project outcome. A 4 is given to a category that has a relatively high importance to the project.

A 1-3 score is given to the categories for each possible action. A 1 means that the action poorly meets the preference of the category. A 3 is given for an action that positively meets the preferences of the category.

Totals are the summation of each category’s score multiplied by their weight.
Appendices

Appendix A: Bellingham Municipal Codes
BMC: Chapter 15.42.060 F Minimum Requirements for Stormwater Mitigation..................54
BMC: Chapter 19.06.030 Transportation Impact Fee.........................................................63
BMC: Chapter 10.24.120 Noise Ordinance........................................................................64
BMC: Chapter 20.12.030 Landscaping..............................................................................64
Bellingham Municipal Code: Chapter 15.42.060 F Minimum Requirements for Stormwater Mitigation

F. Minimum Requirements for Stormwater Mitigation: The following are considered the minimum requirements for stormwater mitigation

1. Minimum Requirement #1 - Preparation of Stormwater Site Plans (“SSP”): All projects meeting the thresholds in BMC Sections 15.42.060(1) OR 15.42.060(2) shall prepare a Stormwater Site Plan (“SSP”) for the City’s review. SSP’s shall be prepared in accordance with the current editions of the “Ecology Manual”, the City of Bellingham “Development Guidelines and Improvement Standards” and this BMC. This SSP may be incorporated with building, grading or clearing plan sets as applicable. Those projects that are subject to Minimum Requirements #1 through #10 shall include an engineering report that addresses all Elements and Minimum Requirements of the project’s stormwater management along with an analysis that supports the SSP and the Construction Stormwater Pollution Prevention Plan (“Construction SWPPP”). Project facilities that are required by state law to be designed by a professional engineer must also be certified by the engineer of record that facilities have been constructed to design specifications. This shall be accomplished by providing a certified as built of the facility/ies.

2. Minimum Requirement #2 - Construction Stormwater Pollution Prevention Plan (“Construction SWPPP”):
   a. All new development and redevelopment shall comply with Construction SWPPP Elements #1 through #12 as described in this section below.

   b. Projects outside the Lake Whatcom Watershed in which the new, replaced, or new plus replaced impervious surfaces total 2,000 square feet or more, or disturb 5,000 square feet or more of land must prepare a Construction SWPPP as part of the Stormwater Site Plan [see BMC 15.42.060(6)(A)]. Each of the twelve elements must be considered and included in a Construction SWPPP unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the narrative of the SWPPP. The SWPPP shall include, at a minimum, the narrative, the Stormwater Site Plan and copies of Best Management Practice detail sheets that will be utilized as a part of the SWPPP.

   c. Projects outside the Lake Whatcom Watershed that add or replace less than 2,000 square feet of impervious surface and disturb less than 5,000 square feet of land are not required to prepare a Construction SWPPP. They must, however, consider all of the twelve Elements of Construction Stormwater Pollution Prevention detailed below and propose controls for all Elements that pertain to the project site within the Stormwater Site Plan.

   d. Those projects, that are within the Lake Whatcom Watershed, that create or add, 200 square feet or greater, of new, replaced or new plus replaced impervious surface area or that disturb more than 500 square feet of land shall provide a Construction SWP Plan and a Stormwater Site Plan as described above.

   e. Elements of Construction Stormwater Pollution Prevention:
i. **Element 1:** Mark Clearing Limits: Prior to beginning land disturbing activities, including clearing and grading, all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area should be clearly marked, both in the field and on the plans, to prevent damage and offsite impacts. Plastic, metal, or stake wire fence may be used to mark the clearing limits.

ii. **Element 2:** Establish Construction Access:
(a) Construction vehicle access and exit shall be limited to one route if possible.

(b) Access points shall be stabilized with quarry spall or crushed rock to minimize the tracking of sediment onto public roads.

(c) Wheel wash or tire baths should be located on-site, if applicable.

(d) Public roads shall at a minimum be cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling or pickup sweeping and shall be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed in this manner.

(e) Street wash wastewater shall be controlled by pumping back on-site, or otherwise be prevented from discharging into systems tributary to state surface waters.

iii. **Element 3:** Control Flow Rates:
(a) Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity, and peak flow rate of stormwater runoff from the project site. Properties subject to Minimum Requirement # 5 and/or #7 shall implement controls as early in the development as is practicable to mitigate for flow rates.

(b) Downstream analysis is necessary if changes in flows could impair or alter conveyance systems, stream banks, bed sediment or aquatic habitat. See the Ecology Manual for offsite analysis guidance.

(c) Where necessary to comply with Minimum Requirement #7, Stormwater retention/detention facilities shall be constructed as one of the first steps in grading. Detention facilities shall be functional prior to construction of site improvements (e.g. impervious surfaces).

(d.) If permanent infiltration ponds are used for flow control during construction, these facilities should be protected from siltation during the construction phase.

iv. **Element 4:** Install Sediment Controls
(a) The duff layer, native topsoil, and natural vegetation shall be retained in an undisturbed state to the maximum extent practicable.

(b) Prior to leaving a construction site, or prior to discharge to an infiltration facility, stormwater runoff from disturbed areas shall pass through a sediment pond or other appropriate sediment removal BMP. Runoff from fully stabilized areas may be discharged without a sediment removal
BMP, but must meet the flow control performance standard of Element 3(i) above. Full stabilization means concrete or asphalt paving; quarry spalls used as ditch lining; or the use of rolled erosion products, a bonded fiber matrix product, or vegetative cover in a manner that will fully prevent soil erosion. Sediment ponds, vegetated buffer strips, sediment barriers or filters, dikes, and other BMPs intended to trap sediment on-site shall be constructed as one of the first steps in grading. These BMPs shall be functional before other land disturbing activities take place.

(c) Earthen structures such as dams, dikes, and diversions shall be seeded and mulched according to the timing indicated in Element 5 below.

v. Element 5: Stabilize Soils
(a) All exposed and unworked soils shall be stabilized by application of effective BMPs that protect the soil from the erosive forces of raindrop impact and flowing water, and wind erosion.

(b) From October 1 through April 30 of each year, no soils shall remain exposed and unworked for more than 2 days. From May 1 to September 30 of each year, no soils shall remain exposed and unworked for more than 7 days. This condition applies to all soils on site, whether at final grade or not.

(c) Applicable practices include, but are not limited to, temporary and permanent seeding, sodding, mulching, plastic covering, soil application of polyacrylamide (PAM), early application of gravel base on areas to be paved, and dust control.

(d) Soil stabilization measures selected should be appropriate for the time of year, site conditions, estimated duration of use, and potential water quality impacts that stabilization agents may have on downstream waters or ground water.

(e) Soil stockpiles must be stabilized and protected with sediment trapping measures.

(f) Work on linear construction sites and activities, including right-of-way and easement clearing, roadway development, pipelines, and trenching for utilities, shall not exceed the capability of the individual contractor for his portion of the project to install the bedding materials, roadbeds, structures, pipelines, and/or utilities, and to re-stabilize the disturbed soils, meeting the timing conditions listed above.

(g) In addition, at the discretion of the Public Works Director those sites unable to maintain the quality of their stormwater discharge may be required to provide soil stabilization to all exposed soil areas regardless of the working status of the area. Upon written notification, the property owner shall provide full stabilization of all exposed soil areas within 24 hours.

vi. Element 6: Protect Slopes
(a) Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion.

(b) Consider soil type and its potential for erosion.

(c) Reduce slope runoff velocities by reducing the continuous length of slope with terracing and diversions, reduce slope steepness, and roughen slope surface.
d. Divert upslope drainage and run-on waters from off-site with interceptors at top of slope. Off-site stormwater should be handled separately from stormwater generated on the site. Diversion of off-site stormwater around the site may be a viable option. Diverted flows shall be redirected to the natural drainage location at or before the property boundary.

e. Contain down slope collected flows in pipes, slope drains, or protected channels.

f. Provide drainage to remove ground water intersecting the slope surface of exposed soil areas.

g. Excavated material shall be placed on the uphill side of trenches, consistent with safety and space considerations.

h. Check dams shall be placed at regular intervals within trenches that are cut down a slope.
i. Stabilize soils on slopes, as specified in Element #5.

vii. Element 7: Protect Drain Inlets

(a) All storm drain inlets made operable during construction shall be protected so that stormwater runoff shall not enter the conveyance system without first being filtered or treated to remove sediment.

(b) All approach roads shall be kept clean, and all sediment and street wash water shall not be allowed to enter storm drains without prior and adequate treatment unless treatment is provided before the storm drain discharges to waters of the State.

viii. Element 8: Stabilize Channels and Outlets

(a) All temporary on-site conveyance channels shall be designed, constructed and stabilized to prevent erosion from the expected velocity of flow from a 2 year, 24-hour frequency storm for the developed condition.

(b) Stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream reaches shall be provided at the outlets of all conveyance systems.

ix. Element 9: Control Pollutants

(a) All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled and disposed of in a manner that does not cause contamination of stormwater.

(b) Cover, containment, and protection from vandalism shall be provided for all chemicals, liquid products, petroleum products, and non-inert wastes present on the site (see Chapter 173-304 WAC, as currently enacted or hereafter modified, for the definition of inert waste, which is incorporated herein by this reference).

(c) Maintenance and repair of heavy equipment and vehicles involving oil changes, hydraulic system drain down, solvent and de-greasing cleaning operations, fuel tank drain down and
removal, and other activities which may result in discharge or spillage of pollutants to the ground or into stormwater runoff must be conducted using spill prevention measures, such as drip pans. Contaminated surfaces shall be cleaned immediately following any discharge or spill incident. Emergency repairs may be performed on-site using temporary plastic placed beneath and, if raining, over the vehicle.

(d) Wheel wash, or tire bath wastewater, shall be discharged to a separate on-site treatment system or to the sanitary sewer.

(e) Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers’ recommendations shall be followed for application rates and procedures.

(f) Management of pH-modifying sources shall prevent contamination of runoff and stormwater collected on the site. These sources include, but are not limited to, bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters.

x. Element 10: Control De-Watering

(a) All foundation, vault, and trench de-watering water, which has similar characteristics to stormwater runoff at the site, shall be discharged into a controlled conveyance system, prior to discharge to a sediment trap or sediment pond. Channels must be stabilized, as specified in Element #8.

(b) Clean, non-turbid de-watering water, such as well-point ground water, can be discharged to systems tributary to state surface waters, as specified in Element #8, provided the de-watering flow does not cause erosion or flooding of the receiving waters. These clean waters should not be routed through sediment ponds with stormwater.

(c) Highly turbid or otherwise contaminated de-watering water, such as from construction equipment operation, clamshell digging, concrete tremie pour, or work inside a cofferdam, shall be handled separately from stormwater at the site.

(d) Other disposal options, depending on site constraints, may include, by way of example: 1) infiltration, 2) transport off-site in vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters, 3) on-site treatment using chemical treatment or other suitable treatment technologies.

xi. Element 11: Maintain BMPs

(a) All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair shall be conducted in accordance with BMPs.

(b) Sediment control BMPs shall be inspected weekly or after a runoff-producing storm event during the dry season and daily during the wet season. All projects that disturb an area greater than one acre shall have a certified erosion control lead available to the site. This erosion control lead shall be responsible to provide overview of ongoing day to day erosion control
requirements. The erosion control lead shall (within 24 hours) report to the City and Department of Ecology any site discharges that exceed state water quality standards that have or are likely to have entered waters of the State.

(c) All temporary erosion and sediment control BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on site. Disturbed soil areas resulting from removal of BMPs or vegetation shall be permanently stabilized.

xii. Element 12: Manage the Project
(a) Phasing of Construction - Development projects shall be phased where feasible in order to prevent, to the maximum extent practicable, the transport of sediment from the development site during construction. Revegetation of exposed areas and maintenance of that vegetation shall be an integral part of the clearing activities for any phase.

(b) When establishing these permitted clearing and grading areas, consideration should be given to minimizing removal of existing trees and minimizing disturbance/compaction of native soils except as needed for building purposes. Permitted clearing and grading areas and any other areas required to preserve critical or sensitive areas, buffers, native growth protection easements, or tree retention areas, shall be delineated on the site plans and the development site.

(c) Coordination with Utilities and Other Contractors - The primary project proponent shall evaluate, with input from utilities and other contractors, the stormwater management requirements for the entire project, including the utilities, when preparing the Construction SWPPP.

(d) Inspection and Monitoring - All BMPs shall be inspected, maintained, and repaired as needed to assure continued performance of their intended function.

(e) For any project disturbing more than one acre, a Certified Professional in Erosion and Sediment Control shall be identified in the Construction SWPPP and shall be on-site or on-call at all times. Certification may be through the Washington State Department of Transportation/Associated General Contractors (WSDOT/AGC) Construction Site Erosion and Sediment Control Certification Program or any equivalent local or national certification and/or training program, in the City’s discretion.

(f) Whenever inspection and/or monitoring reveals that the BMPs identified in the Construction SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the SWPPP shall be modified, as appropriate, in a timely manner.

(g) Maintenance of the Construction SWPPP - The Construction SWPPP shall be retained on-site. The Construction SWPPP shall be modified whenever there is a significant change in the design, construction, operation, or maintenance of any BMP.

3. Minimum Requirement #3 - Source Control of Pollution: All known, available and reasonable source control BMPs shall be applied to all projects. Source control BMPs shall be selected, designed, and maintained according to the Ecology Manual. Source Controls that are applicable to a project shall be either indicated on the Stormwater Site Plan and/or contained
within a stormwater engineering report when such report is required.

4. Minimum Requirement #4 - Preservation of Natural Drainage Systems and Outfalls: Natural drainage patterns shall be maintained, and discharges from the project site shall occur at the natural location, to the maximum extent practicable. The manner by which runoff is discharged from the project site must not cause a significant adverse impact to downstream receiving waters and down gradient properties. Additional information on how to comply with this requirement may be found in the Ecology Manual.

5. Minimum Requirement #5 - On-site Stormwater Management: Projects shall employ On-site Stormwater Management BMPs to infiltrate, disperse, and retain stormwater runoff onsite to the maximum extent feasible without causing flooding or erosion impacts. On-site Stormwater Management BMPs shall be designed and provided in accordance with the Ecology Manual.

6. Minimum Requirement #6 - Runoff Treatment:

a. All projects subject to this minimum requirement shall utilize On-site Stormwater BMPs for the treatment of runoff. Additionally, when the following design thresholds are met or exceeded within a threshold discharge area an engineered water quality facility shall be provided. All runoff treatment facilities and BMPs shall be designed, sized and provided for in accordance with the “Ecology Manual”.

b. Water Quality Design Thresholds
i. Projects in which the total of new and/or replaced effective, pollution-generating impervious surface (PGIS) is 5,000 sf or more in a threshold discharge area of the project, or

ii. Projects in which the total of new and/or replaced pollution-generating pervious surfaces (PGPS) is 3/4 of an acre or more in a threshold discharge area, and from which there is a surface discharge in a natural or man-made conveyance system from the site.

c. Additional Requirements. Direct discharge of untreated stormwater from pollution-generating impervious surfaces to ground water is prohibited, except for the discharge achieved by infiltration or dispersion of runoff from residential sites through use of On-site Stormwater Management BMPs. Projects within Basin One of the Lake Whatcom Watershed shall meet these standards for water quality in addition to those contained in other portions of this code.

7. Minimum Requirement #7 - Flow Control:

a. Applicability: Projects must provide flow control to reduce the impacts of stormwater runoff from impervious surfaces and land cover conversions. All projects subject to this minimum requirement shall utilize On-site Stormwater BMPs for flow control. Additionally, when the following design thresholds are met or exceeded an engineered water quantity facility shall be provided. All water quantity facilities and flow control BMPs shall be designed and provided for in accordance with the Ecology Manual. The thresholds and requirements below apply to projects that discharge stormwater directly or indirectly into a fresh water. Those projects that meet flow control exemption criteria of the Ecology Manual are eligible to apply for modification to these requirements. Exception: The exemption of flow standards for Lake Whatcom shall only be allowed with the written approval of the Public Works Department. The basis of that approval shall be a finding that no appreciable risk of water quality degradation will result from the exemption.

b. Water Quantity Design Thresholds: The following require construction of engineered flow
control facilities and/or land use management BMPs to satisfy this chapter and the Ecology Manual:

i. Projects in which the total of new, replaced or new plus replaced effective impervious surfaces are 10,000 sf or more in a threshold discharge area; or

ii. Projects that convert ¾ acres or more of native vegetation to lawn or landscape, or convert 2.5 acres or more of native vegetation to pasture in a threshold discharge area, and from which there is a surface discharge in a natural or man-made conveyance system from the site; or

iii. Projects that, through a combination of new, replaced or new plus replaced effective impervious surfaces and converted pervious surfaces, cause a 0.1 cubic feet per second increase in the 100-year flow frequency from a threshold discharge area as estimated using the Western Washington Hydrology Model or other approved model; or

iv. That portion of any development project in which the above thresholds are not exceeded in a threshold discharge area shall apply Onsite Stormwater Management BMPs in accordance with Minimum Requirement #5.

v. Projects within Basin One of the Lake Whatcom Watershed.

c. **Standard Flow Control Methodology:** Stormwater discharges shall match developed discharge durations to predeveloped durations for the range of predeveloped discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow. The pre-developed condition to be matched shall be a forested land cover. This standard requirement is waived for sites that will reliably infiltrate all the runoff from impervious surfaces and converted pervious surfaces.

d. **Alternate Flow Control Methodology:** A modified SCS/SBUH Methodology may be used as an alternate to Department of Ecology Western Washington Hydrology Model if adjustments shown below are utilized and the project area is less than one-acre in size. At such time as the City of Bellingham has a calibrated HSPF model available for use, this alternate flow control allowance will be re-evaluated by the Public Works Director for suspension of the allowance.

i. Adjusted target peak flow standard. Limit the peak rate of runoff from individual development sites to 50% of the pre-developed condition 2-year, 24-hour design storm. Limit the peak rate from the 10-year, 24-hour design storm to the pre-developed condition peak rate from the 2-year, 24-hour design storm. Limit the peak rate from the 100-year, 24-hour design storm to the pre-developed condition peak rate from the 10-year, 24-hour design storm.

ii. Restricted variable assumptions.

(a) The flow path length assumed for sheet flow runoff in the pre-developed condition calculations shall be 300 feet.

(b) The Manning’s effective roughness coefficient for pre-developed forested conditions shall be 0.80.

(c) The curve numbers for the pre-developed conditions shall be selected from the Ecology Manual and shall be fair or good forest. The post developed condition shall also be taken from the Ecology Manual.
8. Minimum Requirement #8 - Wetlands Protection:
a. Applicability: The requirements below apply only to projects whose stormwater discharges into a wetland, either directly or indirectly through a conveyance system. These requirements must be met in addition to meeting Minimum Requirement #6, Runoff Treatment.

b. Thresholds: The thresholds identified in Minimum Requirement #6 – Runoff Treatment, and Minimum Requirement #7 - Flow Control shall also be applied for discharges to wetlands.

c. Standard Requirement: Discharges to wetlands shall maintain the hydrologic conditions, hydrophytic vegetation, and substrate characteristics necessary to support existing and designated uses. A wetland can be considered for hydrologic modification and/or stormwater treatment in accordance with guidance documents from the Department of Ecology.

d. Additional Requirements:
i. The standard requirement does not excuse any discharger from the obligation to apply whatever technology is necessary to comply with state water quality standards, Chapter 173-201A WAC, or state ground water standards, Chapter 173-200 WAC. Additional treatment requirements to meet those standards may be required by federal, state, or local government.

ii. Stormwater treatment and flow control facilities shall not be built within a natural vegetated buffer or wetland, except for:
(a) Necessary conveyance systems as approved by the Directors of the City’s Public Works and Planning Departments or their designees; or

(b) As allowed in wetlands approved for hydrologic modification and/or treatment in accordance with guidance from the Department of Ecology; or

(c) Where full dispersion of flow within a buffer has been approved as a Low Impact Development practice.

iii. An adopted and implemented basin plan (Minimum Requirement #9), or a Total Maximum Daily Load (TMDL, also known as a Water Clean-up Plan) may be used to develop requirements for wetlands that are tailored to a specific basin.

9. Minimum Requirement #9 - Basin/Watershed Planning: Projects may be subject to lesser, equivalent or more stringent minimum requirements for erosion control, source control, treatment, and operation and maintenance, and alternative requirements for flow control and wetlands hydrologic control as identified in Basin/Watershed Plans. Basin/Watershed plans shall evaluate and include, as necessary, retrofitting urban stormwater BMPs into existing development and/or redevelopment in order to achieve watershed-wide pollutant reduction and flow control goals that are consistent with requirements of the federal Clean Water Act. Standards developed from basin plans shall not modify any of the above minimum requirements until the basin plan is formally adopted and implemented by the City and other local governments within the basin, and approved or concurred with by the Department of Ecology.

10. Minimum Requirement #10 - Operation and Maintenance: An operation and maintenance manual that is consistent with the provisions within the Ecology Manual shall be provided for all proposed stormwater facilities and BMPs, and the party (or parties) responsible
for maintenance and operation shall be identified. At private facilities, a copy of the manual shall be retained onsite or within reasonable access to the site, and shall be transferred with the property to the new owner. For public facilities, a copy of the manual shall be retained in the appropriate department. A log of maintenance activity that indicates what actions were taken shall be kept and be available for inspection by the City or Ecology.

Bellingham Municipal Code: Chapter 19.06.030 Transportation Impact Fee

A. A Transportation Impact Fee (TIF) shall be levied upon each development that produces one or more peak hour project trip(s).

1. The number of peak hour project trips generated by a development shall be calculated based upon the latest version of the ITE Trip Generation Manual.

2. The TIF shall be determined based upon the distribution of peak hour project trips generated by future development throughout the City using the Travel Demand Forecast Model. The TIF will be calculated by the summation of future developments’ proportionate impact on transportation improvement projects identified in the City’s adopted Six-Year TIP and CIP. The proportionate share factor for computing the cost of the improvements reasonably related to growth shall be based upon the ratio of future developments’ peak hour project trips to the peak hour capacity used by development of the transportation facilities required to maintain the City’s adopted arterial street level of service standard at LOS E. Residential development TIFs shall be calculated on a per unit basis whereas commercial development TIFs shall be calculated on a per square foot basis, as shown on Table 1. Transportation Impact Fee Worksheet, incorporated herein by this reference.

B. Payment of the TIF shall be made prior to issuance of a building permit, or if no building permit is required, prior to approval by the City of the development.

C. Reductions in PM peak hour traffic volume from a development as a result of traffic demand management strategies, linked trips, or other incentives to reduce PM peak hour traffic loads will be considered; and if valid, reduce the TIF.

1. Specific vehicle trip reduction credits are available in 19.06.040 E., Table 2 for Urban Village development in close proximity to WTA transit. Auto-oriented commercial and drive-through are not eligible.

D. The TIF shall include a credit for the value of any dedication of land for, improvement to, or new construction of any system improvements provided by the developer, to facilities that are identified in the Six-Year TIP and CIP and are required as a condition of the development.

E. Upon application by the owner, the City Council may exempt a low income housing development, as defined by the current City of Bellingham Consolidated Plan (or successor thereto), from all or part of the TIF upon such conditions as the City Council deems appropriate. The City Council may also vote to exempt specific projects, or components thereof, within proposed development activities with broad public purposes from all or part of the required fees upon such conditions as the City Council deems appropriate. The determination to grant or deny an exemption shall be in the sole discretion of the City Council after consideration in an open
public meeting of the public benefit of the specific project, the hardship to the project of the TIF, the impacts of the project, the availability of public funding to pay the TIF payable on the project and other factors deemed relevant by the City Council. If an exemption is granted, the TIF attributable to the development shall be paid from public funds other than TIF accounts, consistent with RCW 82.02.060 (2).

**Bellingham Municipal Code: Chapter 10.24.120 Noise Ordinance**

4. Construction and industrial noises, including but not limited to, motorized construction and equipment operation, hammering, blasting, drilling and sawing in residentially zoned areas, between the hours of 10:00 p.m. and 7:00 a.m., which unreasonably disturb or interfere with the peace, comfort and repose of others; provided that this subsection shall not apply to noises caused by projects required in an emergency to repair public facilities or utilities or to prevent immediate damage or harm to persons or property; and further provided that this subsection shall not apply if the City Council grants a variance from the provisions of this subsection for the construction or repair of a public facility or utility upon a finding that it is either necessary or in the public interest for all or a portion of the work to be performed between the hours of 10:00 p.m. and 7:00 a.m. The Council may impose such conditions as it deems appropriate upon the granting of a variance.

**Bellingham Municipal Code: Chapter 20.12.030 Landscaping**

A. **Applicability.** This section is intended to provide the landscaping requirements for all uses.

B. **General Provisions.**

1. The provisions of this section shall apply to all new construction and to the remodeling of same when the cost of remodeling exceeds 50% of the assessed valuation of the structure to the extent that there is space available for the landscaping. (Single family homes and individual manufactured homes are exempt from any landscaping requirements.)

2. Prior to issuance of a building permit, a scaled landscape site plan shall be submitted and approved by the Planning Department consistent with the provisions herein. Said plan shall specify specie name, size and location.

3. Landscaping pursuant to the approved site plan shall either be installed or bonded for (in an amount no less than 150% of cost of material and installation) prior to issuance of a certificate of occupancy or if no certificate is required prior to final inspection approval.

4. Existing trees which will be saved and which meet the minimum specification herein specified, shall count toward meeting the requirements herein, provided they are an acceptable species as to their location.
Appendix B: Relevant Maps

Parking Districts in the Central Business District ................................................................. 66
Existing Utilities Maps ........................................................................................................ 67
Existing Zoning Maps ........................................................................................................ 68
Existing Land Use Maps .................................................................................................... 69
Soil Types Maps .................................................................................................................. 70
Watershed Maps ................................................................................................................. 71
Appendix B: Map of the Central Business District & Reduced Parking Overlay

This map shows the parking requirements in the Central Business District

Source: City of Bellingham
Appendix B: Electrical Utilities and Pipelines in the Area

This map shows the existing electrical utilities and pipelines around the site

Source: Final Environmental Impact Statement For: The City of Bellingham; UGA; 5-Yr Review Areas; & Whatcom County Urban Fringe Subarea: July 1, 2004
Appendix B: Existing Zoning Map for the Area

This map shows the existing zoning around the site.

Source: Final Environmental Impact Statement For: The City of Bellingham; UGA; 5-Yr Review Areas; & Whatcom County Urban Fringe Subarea: July 1, 2004
Appendix B: Land Use Map for the Area

This map shows the existing land use around the site.

Source: Final Environmental Impact Statement For: The City of Bellingham; UGA; 5-Yr Review Areas; & Whatcom County Urban Fringe Subarea: July 1, 2004
Appendix B: Maps Geology

This map shows the existing soil types around the site.

**Source:** Final Environmental Impact Statement For: The City of Bellingham; UGA; 5-Yr Review Areas; & Whatcom County Urban Fringe Subarea: July 1, 2004
Appendix B: Maps Watersheds

This map shows the existing watersheds around the site.

**Source:** Final Environmental Impact Statement For: The City of Bellingham; UGA; 5-Yr Review Areas; & Whatcom County Urban Fringe Subarea: July 1, 2004
### Appendix C: 1100 Cornwall Sale Fiscal Impact Analysis

#### 1100 Cornwall Fiscal Impact Analysis Summary: Existing and Projected Development Per Sale Alternative

**03.08.11**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Existing</td>
<td>Proposed</td>
<td>Existing</td>
</tr>
<tr>
<td><strong>Sale of Parcel (Estimated)</strong></td>
<td>Note 1</td>
<td>$0</td>
<td>$1,082,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Net Parking Fee Revenue from Public Spaces</strong></td>
<td>Note 2</td>
<td>$25,840</td>
<td>$0</td>
<td>$51,680</td>
</tr>
<tr>
<td><strong>COB General Fund Operating Gross Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax Revenue</td>
<td>Note 3</td>
<td>$0</td>
<td>$221,675</td>
<td>$0</td>
</tr>
<tr>
<td>Less Multi-Family Residential Exemption</td>
<td></td>
<td>$0</td>
<td>($73,152)</td>
<td>$0</td>
</tr>
<tr>
<td>Less Existing Revenues (reserved for UFT revenue)</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Subt.: Property Tax Revenue</td>
<td></td>
<td>$0</td>
<td>$148,523</td>
<td>$0</td>
</tr>
<tr>
<td>Sales Tax Revenue</td>
<td>Note 4</td>
<td>$0</td>
<td>$112,443</td>
<td>$0</td>
</tr>
<tr>
<td>Business &amp; Occupation Tax Revenue</td>
<td>Note 5</td>
<td>$0</td>
<td>$101,721</td>
<td>$0</td>
</tr>
<tr>
<td>Electricity Tax</td>
<td>Note 6</td>
<td>$0</td>
<td>$45,526</td>
<td>$0</td>
</tr>
<tr>
<td>Natural Gas Tax</td>
<td>Note 7</td>
<td>$0</td>
<td>$21,418</td>
<td>$0</td>
</tr>
<tr>
<td>Cable Tax</td>
<td>Note 8</td>
<td>$0</td>
<td>$32,875</td>
<td>$0</td>
</tr>
<tr>
<td>Telephone Tax</td>
<td>Note 9</td>
<td>$0</td>
<td>$36,194</td>
<td>$0</td>
</tr>
<tr>
<td>Utility Taxes</td>
<td>Note 10</td>
<td>$0</td>
<td>$113,377</td>
<td>$0</td>
</tr>
<tr>
<td>Leasehold Excise Tax</td>
<td>Note 11</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Other General Fund Revenues</td>
<td>Note 12</td>
<td>$0</td>
<td>$32,056</td>
<td>$0</td>
</tr>
<tr>
<td>Subt.: General Fund Operating Revenues</td>
<td></td>
<td>$0</td>
<td>$644,133</td>
<td>$0</td>
</tr>
<tr>
<td><strong>COB General Fund Capital Sources (Gross)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park Impact Fees</td>
<td>Note 13</td>
<td>$0</td>
<td>$264,264</td>
<td>$0</td>
</tr>
<tr>
<td>Greenways III (2007-2016)</td>
<td>Note 14</td>
<td>$0</td>
<td>$19,295</td>
<td>$0</td>
</tr>
<tr>
<td>REET Revenues</td>
<td>Note 15</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Subt.: General Fund Capital Sources</td>
<td></td>
<td>$0</td>
<td>$283,559</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Other City Funds: Net Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Service Fund</td>
<td>Note 16</td>
<td>$0</td>
<td>$128,358</td>
<td>$0</td>
</tr>
<tr>
<td>Street Fund</td>
<td>Note 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Operating Income (Not including T.I.F.)</td>
<td></td>
<td>$0</td>
<td>$97,711</td>
<td>$0</td>
</tr>
<tr>
<td>Traffic Impact Fee (Including Credits)</td>
<td></td>
<td>$0</td>
<td>$147,245</td>
<td>$0</td>
</tr>
<tr>
<td>Subt.: Street Fund Operating Income</td>
<td></td>
<td>$0</td>
<td>$244,956</td>
<td>$0</td>
</tr>
<tr>
<td>Less Capital Expenditures or Debt Service</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Net Street Fund Income</td>
<td></td>
<td>$0</td>
<td>$244,956</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Water Fund</strong></td>
<td>Note 18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Operating Income (Including System Devel. Fees)</td>
<td></td>
<td>$0</td>
<td>$253,718</td>
<td>$0</td>
</tr>
<tr>
<td>Less Capital Expenditures or Debt Service</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Net Water Fund Income</td>
<td></td>
<td>$0</td>
<td>$253,718</td>
<td>$0</td>
</tr>
</tbody>
</table>
# Revenue & Credits (con't)

<table>
<thead>
<tr>
<th>Service Fund</th>
<th>Notes</th>
<th>Existing</th>
<th>Proposed</th>
<th>Existing</th>
<th>Proposed</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Fund</td>
<td>Note 19</td>
<td>$0</td>
<td>$257,226</td>
<td>$0</td>
<td>$497,225</td>
<td>$0</td>
<td>$747,413</td>
</tr>
<tr>
<td>Storm Water Fund</td>
<td>Note 20</td>
<td>$0</td>
<td>$97,046</td>
<td>$0</td>
<td>$51,630</td>
<td>$1,571,285</td>
<td>$2,192,018</td>
</tr>
<tr>
<td>Subtotal: Other City Funds - Net Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL REVENUES &amp; CREDITS</td>
<td></td>
<td>$25,840</td>
<td>$2,986,738</td>
<td>$51,630</td>
<td>$4,557,285</td>
<td>$77,520</td>
<td>$6,182,482</td>
</tr>
</tbody>
</table>

## Expenditures: Operating & Capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Notes</th>
<th>Existing</th>
<th>Proposed</th>
<th>Existing</th>
<th>Proposed</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>COB Initial Cost Basis Recovery/Repayment</td>
<td>Note 21</td>
<td>($1,535,600)</td>
<td>($1,535,600)</td>
<td>($1,535,600)</td>
<td>($1,535,600)</td>
<td>($1,535,600)</td>
<td>($1,535,600)</td>
</tr>
<tr>
<td>General Fund Operating Expenditures</td>
<td>Note 22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td>$0</td>
<td>($351,284)</td>
<td>$0</td>
<td>($998,477)</td>
<td>$0</td>
<td>($1,673,144)</td>
</tr>
<tr>
<td>Fire</td>
<td></td>
<td>$0</td>
<td>($203,527)</td>
<td>$0</td>
<td>($578,496)</td>
<td>$0</td>
<td>($969,384)</td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>All other Departments</td>
<td></td>
<td>$0</td>
<td>($22,803)</td>
<td>$0</td>
<td>($69,923)</td>
<td>$0</td>
<td>($126,101)</td>
</tr>
<tr>
<td>Subtotal: General Fund Operating Expenditures</td>
<td></td>
<td>$0</td>
<td>($577,614)</td>
<td>$0</td>
<td>($1,646,896)</td>
<td>$0</td>
<td>($2,768,629)</td>
</tr>
<tr>
<td>General Fund Capital Expenditures</td>
<td>Note 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Fire</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Subtotal: General Fund Capital Expenditures</td>
<td></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>TOTAL EXPENDITURES: OPERATING &amp; CAPITAL</td>
<td></td>
<td>($1,535,600)</td>
<td>($2,113,214)</td>
<td>($1,535,600)</td>
<td>($3,182,496)</td>
<td>($1,535,600)</td>
<td>($4,304,229)</td>
</tr>
</tbody>
</table>

## Net City Income: All Sources & Uses of Funds

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>($1,509,760)</td>
<td>($873,524)</td>
<td>($1,483,920)</td>
</tr>
</tbody>
</table>

Internal Rates of Return

| 10 Years: 2012-2021 | 18.0% |
| 20 Years: 2012-2031 | 18.7% |
NOTES

1100 CORNWALL FISCAL IMPACT ANALYSIS SUMMARY: EXISTING AND PROJECTED DEVELOPMENT PER POTENTIAL SALE AND DEVELOPMENT
03.06.11

Note 1: Estimated Sale Price

The sale price would be determined by negotiation, and subject to approval by the BPDA Board and the City Council in turn. For purposes of this analysis, the projected sale price is estimated at approx. 10% less than the current tax assessed market value and approx. 30% less than the 2008 market high (defined as the City's purchase price).

Note 2: Net Parking Fee Revenue From Public Spaces

Existing surface parking provided 68 leased spaces generating net operating revenue of approximately $38.00 per space per year as of June 2010. (Gross annual revenue @ $26,900 less operating expenses @ $24,300 = net operating revenue @ $2,600 divided by 68 = $38).

Note 3: Property Tax Revenue

City General Fund property tax revenues are calculated at $1.530140 per $1,000 of assessed valuation. Assessed valuation was based on the estimated construction costs for the component uses for the project per the conceptual development plan prepared by the BPDA. This plan may be changed as the buyer's research, planning and approvals for the final development plan for the property is prepared by the buyer.

The Multi-Family Residential Exemption was calculated assuming that approximately 35% of the total building floor area would be utilized for residential uses, which are assumed to be rental and condominium uses according to a mix to be determined but eligible for the exemption. This exemption is assumed to run for 12 years commencing in 2015 following the completion of construction.

The increase in the property's assessed value and property tax generation will add to property tax revenues available for LIFT financing/debt service for waterfront infrastructure improvements. However, the increment is not calculated or deducted from property tax revenues generated by the developed project in this model.

Note 4: Sales Tax Revenue

City sales tax revenue (based on 0.85% City sales tax rate) is projected at an average of approximately $2,800 - $3,000 per year generated by the retail sq. ft. included in the project. This is a conservative estimate equating to approximately $75 per sq. ft. in gross retail sales per sq. foot of retail floor area.

Note 5: Business and Occupation Tax Revenue

City B&O tax rates vary from 0.17% - $0.44% of gross revenues generated by businesses, with an average of approx. 0.27% for the range of businesses potentially included in the development. Annual gross business revenues of approximately $708,800 per year (avg) would be projected for the retail and commercial areas in the project.
NOTES
1100 CORNWALL FISCAL IMPACT ANALYSIS SUMMARY: EXISTING AND PROJECTED DEVELOPMENT PER POTENTIAL SALE AND DEVELOPMENT
03.08.11

Note 6-9: Electricity Tax, Natural Gas Tax, Cable Tax, Telephone Tax

A surcharge on private utilities. Estimates are based on an amount per household or per employee. Per the conceptual development program, the conceptual development is projected to yield 48 employees and 75 residential units. Rates/revenues are projected based on the following factors:

- **Electricity Tax**: $27 per household per year and $39 per employee per year.
- **Natural Gas Tax**: $21 per household per year and $30 per employee per year.
- **Cable Tax**: $38 per household per year.
- **Telephone Tax**: $36 per household per year and $31 per employee per year.

Note 10: Utility taxes

A surcharge on public utility services and based on average water, sanitary sewer and storm water bills. Estimates are based on an amount per household (75 residential units per the conceptual development plan) at an average of approx. $130 per residential unit per year and increasing annually.

Note 11: Leasehold Excise Tax

An excise tax that would be paid if a private entity leased a publicly owned facility. As this development would be privately owned there would be no projected leasehold excise tax revenue.

Note 12: Other General Fund Revenues

Projections are based on per capita factors as follows based on the projected occupant population for the residential units:

- **Liquor Excise Tax**: $4.69 per capita per year.
- **Liquor Board Profits**: $7.09 per capita per year.
- **Traffic Infraction Fines**: $16.09 per capita per year.
- **State Shared Gas Tax**: $21.44 per capita per year. (streets revenue)

Note 13: Park Impact Fees

A one-time payment at the commencement of development or early stages of development to offset the costs of parks and recreation facilities and services for new residents.

The projected infill development, while it will generate park impact fee revenue, is not expected to create minimal impact on existing parks and recreation facilities and not directly require capital investment in new facilities.
NOTES

1100 CORNWALL FISCAL IMPACT ANALYSIS SUMMARY: EXISTING AND PROJECTED DEVELOPMENT PER POTENTIAL SALE AND DEVELOPMENT
03.08.11

Note 14: Greenways III Revenues

The voter-approved Greenways III property tax levy funds the acquisition and development of new parks and recreation and open space facilities. The levy is based on a $0.51645 per $1,000 of assessed valuation and expires in Year 2016.

Note 15: Real Estate Excise Tax Revenues

A surcharge on the value of properties sold or resold equal to 0.5% of sales values that may be collected by the City and applied to the cost of construction for infrastructure. No sales or resale of property for the development is projected.

Note 16: Building Service Fund

One time fee. Estimated based on the following factors:

<table>
<thead>
<tr>
<th></th>
<th>Fire Permit</th>
<th>Permit Fee</th>
<th>Plan Review(*)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First $1,000,000 in</td>
<td>$1,000</td>
<td>$4,202</td>
<td>$2,731</td>
<td>$7,932</td>
</tr>
<tr>
<td>construction cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each additional $1,000,000</td>
<td>$1,000</td>
<td>$3,100</td>
<td>$2,015</td>
<td>$6,116</td>
</tr>
</tbody>
</table>

* 65% of permit fee

Note 17: Street Fund

Street fund revenue is estimated at 42.5% of City sales tax revenue and also includes motor vehicle fuel tax revenue allocated from the State.

The model assumes that no improvements to offsite or adjacent public streets would be required by this infill development. If required, it is assumed that these improvements would be constructed by the development and included in the project’s construction cost.

Traffic Impact Fees were estimated by the Public Works Dept for the projected development program and are net of reductions and credits per the project's downtown and infill location.

Note 18: Water Fund

Revenues are based on one-time System Development Charges and ongoing monthly service charges net of system operating expenses. The model assumes that no improvements to offsite or adjacent utility systems would be required by this infill development. If required, it is assumed that these improvements would be constructed by the development and included in the project’s construction cost.

Note 19: Sewer Fund
NOTES
1100 CORNWALL FISCAL IMPACT ANALYSIS SUMMARY: EXISTING AND PROJECTED DEVELOPMENT PER POTENTIAL SALE AND DEVELOPMENT
03.08.11

Revenues are based on one-time System Development Charges and ongoing monthly service charges net of system operating expenses. The model assumes that no improvements to offsite or adjacent utility systems would be required by this infill development. If required, it is assumed that these improvements would be constructed by the development and included in the project’s construction cost.

Note 20: Storm Water Fund

Revenues are based on one-time System Development Charges and ongoing monthly service charges net of system operating expenses. The model assumes that no improvements to offsite or adjacent utility systems would be required by this infill development. If required, it is assumed that these improvements would be constructed by the development and included in the project’s construction cost.

Note 21: COB Initial Cost Basis Recovery/Repayment

As calculated by the City Finance Department and updated periodically to include the cost of capital investment accrued in the property, including the cost of property acquisition and capitalized expenditures booked to the property. A primary objective of the BPDA is to recover the Initial Cost Basis from revenues and values created by the development of the property, with credits reducing the amount of the Initial Cost Basis as defined in the Second City-BPDA Operating Agreement. As of May 2010, the 1100 Cornwall Initial Cost Basis was calculated as follows:

- Repairs $10,000.00 Patched potholes and striping.
- $1,545,605.39 The Parking Fund was the source of funding for the property purchase and costs as of May 2010.

Note 22: General Fund Operating Expenditures

The model includes estimating factors based on projected resident population for the development and resulting impacts on service levels and personnel (full-time equivalents) for the following departments. No additional impacts are projected for parks and recreation facilities and operations.

a) Police
b) Fire
c) Parks
d) All Other Departments

Note 23: General Fund Capital Expenditures

The model estimates that no additional facilities or equipment would be required by this infill development for police, fire or parks services.
Appendix D: Design Images