

**Snohomish County Planning and Development Services (PDS)**

3000 Rockefeller Avenue, M/S 604, Everett, WA 98201 (425) 388-3311

**PDS Use Only**

Project File Number \_\_\_\_\_ Date Received \_\_\_\_\_

Project Manager (Planner) \_\_\_\_\_

Transportation Reviewer (TDR) \_\_\_\_\_



**LID**

**LOW IMPACT DEVELOPMENT (LID)  
DEVIATION FROM ENGINEERING DESIGN &  
DEVELOPMENT STANDARDS (EDDS) –  
PAVEMENT, PLANTER AND SIDEWALK WIDTH  
FOR DEVELOPMENT OF 194<sup>TH</sup> ST SE**

**Instructions:**

Attach copies of the EDDS section(s) and/or drawings for which a deviation is requested. Include documentation such as drainage calculations, other engineering data and drawings, which will verify and substantiate the request. Engineering elements not meeting the required standards may require submittal by an engineer licensed in the State of Washington.

Submit 3 complete sets of copies of the request and documentation to: PDS CSC 2<sup>nd</sup> floor, Admin East, 3000 Rockefeller Ave, Everett, WA 98201. ONE DEVIATION PER FORM.

**Project Name:** Clearwater Commons

**(c) Requestor:** Mark Buehrer, PE, Juliet Thompson, EIT

**Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St. PO Box 1621

**City, Zip:** Bellingham, Washington 98227

**Check EDDS edition:**  1992  2003  2004 Revision

**Chapter/Section :** EDDS 3-04 **Standard Drawing:** 3-065

**Describe the EDDS standard to be deviated from:**

EDDS 3-04 (Road Standards: Arterials and Non-Arterials), Standard Drawing 3-050 (Typical Urban Non-Arterial Road), and Standard Drawing 3-065 (Road Standards – Urban Non-Arterials).

These drawings provide detailed road standards for non-arterial roads. In urban areas where

PFN: 06 131051 000 00 LU Clearwater Commons  
Received - 12/12/2006

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DEC 15 2006



planter strips and sidewalks are required, there shall be a minimum of 1.0 feet of public right-of-way between the back of public sidewalk and private property line along a non-arterial road. Standard Drawings 3-050 and 3-065 identify detailed design elements for design speed, pavement width, travel lane dimensions, planter width, sidewalk width, and R/W width.

The EDDS standard to be deviated from is the requirement for pavement width, sidewalk width and planter strip width along the northern site property frontage on 194<sup>th</sup> Street SE.

**Check the proposed LID techniques and features to be used:**

**Pervious Paving:**       **Soil Amendments:**       **Raingardens:**       **Green roofs:**

**Pin Piles:**       **Tree Retention:**       **Road Widths:**

**Other:**  Pervious Driveways and Patios

**Describe the proposed LID design:**

The attached site plan illustrates the existing 30-foot right-of-way, the proposed right-of-way, and the location of the wetland edges that are adjacent to the roadway.

A Request for Deviation to EDDS 3-040 regarding required frontage improvements along the 194<sup>th</sup> is requested for 2 reasons: 1. The existence of Class 3 wetlands on both sides of the current 30-foot wide 194<sup>th</sup> Street SE right-of-way on the subject parcel, and 2. The proximity of North Creek to the west edge of the property.

The Deviation proposes a reduced road width and elimination of the planter strip along the wetland edge to the eastern boundary of the site. As shown in the accompanying detail, an 18-foot ACP driving surface is proposed for vehicle traffic and a five-foot concrete sidewalk. Cross-sections A-A and B-B illustrate this.

194<sup>th</sup> Street SE will be widened as necessary to provide a minimum 18-foot wide ACP driving surface from the parcel's east boundary to the edge of property.

**Justification for LID deviation:**

1. Describe how this design meets the approved standard:

**Right-of-Way Issues:** The current 30-foot wide right-of-way for 194<sup>th</sup> Street SE exists entirely on the subject property, and is not shared with the property to the north. The centerline of the existing right-of-way is not in alignment with the centerline of the existing street. If additional ROW will be required because of road widening beyond the proposed width, right-of-way will need to be obtained from the property to the north. To meet the requirement of establishing 1 foot behind the edge of the proposed sidewalk, right of way to the south will need to be dedicated to the County.

**Frontage Improvement Issues:** The required frontage improvements along the northern site property on 194<sup>th</sup> Street SE cannot be achieved due to the presence of Class 3 wetlands. These wetlands exist adjacent to both sides of the 30-foot wide 194<sup>th</sup> Street SE right-of-way, and would be significantly impacted by the widening required.

**Potential Critical Area Impacts:** The requested deviations from the Snohomish County Code are for road design modifications (Chapter 3), partially due to their impacts on critical areas and water quality, and partially from the client's desire to emphasize the pedestrian-oriented goals of this development.

North Creek, a stream that provides habitat for fall run Chinook, an endangered species, is 600 ft. to the west of the property border. The extension of 194<sup>th</sup> St. SE would require that another stream crossing be designed over North Creek. Road crossings over North Creek exist both at 192<sup>nd</sup> St. SE and 196<sup>th</sup> St. SE. Recent research in the Puget Sound region suggests that lower numbers of stream crossings per stream length are associated with higher levels of stream health<sup>1</sup>. A low impact, watershed-based approach in the North Creek basin would include maintaining a continuous stream corridor and appropriately downsizing the proposed roadway infrastructure until a time when it is clear that an additional stream crossing is necessary.

**2. Describe how traffic safety and operations will not be adversely affected by this LID deviation:**

Since 194<sup>th</sup> St. SE comes to a dead end just beyond the property entrance, vehicles will be slowing down to enter the property. The proposed narrower road width will encourage drivers to slow down as they approach the end of the roadway.

**3. Describe how the LID deviation will not adversely affect maintenance and associated costs:**

The lesser road width will require less maintenance time. The porous concrete sidewalk proposed as a stormwater management method for the roadway section requires periodic pressure washing and/or periodic vacuum sweeping by a street cleaning truck. Compared to the costs of installing and maintaining a stormwater vault, the proposed method requires significantly less installation and maintenance costs.

**4. Describe how the aesthetic appearance will be maintained:**

It is recommended that low-maintenance plantings be used in the adjacent planting strip so that the aesthetic appearance will be easy to maintain.

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<sup>1</sup> Avolio, C.M. (2003) *The local impacts of road crossing on Puget Lowland creeks*. Master's thesis, University of Washington, Seattle.

This page to be completed by Public Works Staff:

ANALYSIS OF JUSTIFICATION FOR EDDS DEVIATION

Conformance to existing standard:

Adverse topography:

Comparable to or exceeds standards:

Public cost savings:

Improved safety:

Maintainability:

Aesthetics:

Other:

Staff Recommendations:

Approve  Deny

Basis:

Project Name: \_\_\_\_\_

PFN: \_\_\_\_\_

EDDS Section # \_\_\_\_\_

Certain projects may require review by other departments as applicable.

- Fire Marshal Review attached.
- Drainage Review attached.
- Traffic Review attached.

*Previous Concrete ok subject to approved design*

Final Public Works Decision:

APPROVED  DENIED

County Engineer: \_\_\_\_\_

Date: 1/22/07

*Owen B. Carter, P.E.*

Attach a copy of the letter of notification

- cc: Land Use File
- EDDS Deviation Request File
- PDS

DENIED: ROADWAY WIDTH

APPROVED: SIDEWALK WIDTH

*NO COMMENT ON PERVIOUS CONCRETE SIDEWALK AT THIS TIME*



Snohomish County Planning and Development Services (PDS)  
3000 Rockefeller Avenue, M/S 604, Everett, WA 98201 (425) 388-3311

*Approved: 9-27-06  
APP'D [Signature]  
9/27/06*



**LID**

**LOW IMPACT DEVELOPMENT (LID) SUPPLEMENTAL**

PDS Use Only	
Project File Number <u>06-131051</u>	Date Received <u>9-1-06</u>
Project Manager (Planner) _____	
Transportation Reviewer (TDR) _____	

**Project Name:** Clearwater Commons

**Requestor:** Mark Buehrer, PE / Juliet Thompson, EIT      **Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St., PO Box 9621 Bellingham, WA 98227

**Describe the LID technique to be used that requires the modification:**

The use of compost-amended soils is recommended in the Low Impact Development Technical Guidance Manual (LID TGM or TGM). Applying compost to large areas of sites can restore the soil's water retaining ability and increase the amount of stormwater infiltrated on-site. The amended soil acts as a sponge, allowing the stormwater to infiltrate gradually. Evapotranspiration also plays a larger role when the topsoil's ability to hold and slowly discharge stormwater is improved. At present, there is no modeling technique outlined in the TGM to demonstrate the benefit of using compost-amended soils. We are presenting a method of representation using WWHM2. We are also submitting data and justification for the infiltration rate used in the model.

**Check if DOE Credits are requested**

**Check the proposed LID techniques and features to be used for your development :**

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Green Roofs     | <input checked="" type="checkbox"/> Rain Gardens    | <input checked="" type="checkbox"/> Road Width Reduction |
| <input checked="" type="checkbox"/> Pervious Paving | <input checked="" type="checkbox"/> Soil Amendments |  |
| <input checked="" type="checkbox"/> Pin Piles       | <input checked="" type="checkbox"/> Tree Retention  |  |

**Other:** Pervious walkways and patios

**Describe the proposed LID design:**

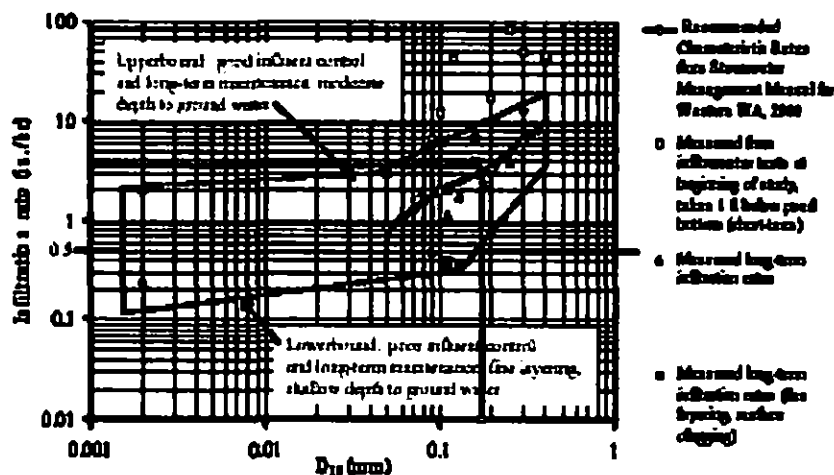
The site plan shown in Figure 1 shows the areas where composted-amended soils will be added to the site soils and rototilled to a depth of 1 ft. This area comprises 1.18 acres or 53% of the site, out of a total of 2.19 acres of developable area within the site.

**Determination of Infiltration Rate:** Falling head infiltration rate testing was performed at four locations, approximately 150' equidistant from northwest to southeast across the site. The test holes are shown as TP-1, TP-4, TP-5 and TP-6 on the site plan. Testing was performed on August 5, 2006. The test holes were saturated for 24 hours before the test, and water levels were measured on an hourly basis over a four-hour period. The test results are as follows:

Test Site	Infiltration Rate, in./hr
TP-1	13.3
TP-4	21.4
TP-5	11.6
TP-6	2.4

The on-site infiltration test results in an average infiltration rate of 12.2 in/hour. When a safety factor of 4 is applied, the long term infiltration rate from field testing is 3.0 in/hr.

A grain size analysis was done by a geotechnical engineer for TP-5, and the  $D_{10}$  grain size of 0.21 was used to obtain a comparison infiltration rate using WSDOT literature as recommended in the TGM. The graph used (Fig. 4-17 – WSDOT Highway Runoff Manual) to obtain the rate is shown in Figure 2. The "mean value line" gave a long term infiltration rate of 3.5 in/hr. Since the soils on-site are layered and have an average depth to shallow groundwater seeps at 3 feet, the mean value was used instead of the "upperbound value". The mean value also compares well to the field testing result.



(Note: The mean values represent low-gradient conditions and relatively shallow ponds.)

Figure 4-17. Infiltration rate as a function of the  $D_{10}$  size of the soil for ponds in western Washington.

Figure 2. Reproduction of Figure 4-17 from WSDOT Highway Runoff Manual

In summary, the long-term infiltration rate from the D10 method, 3.5 in/hr, was used for modeling the site using a safety factor of 1, as specified in the WSDOT literature.

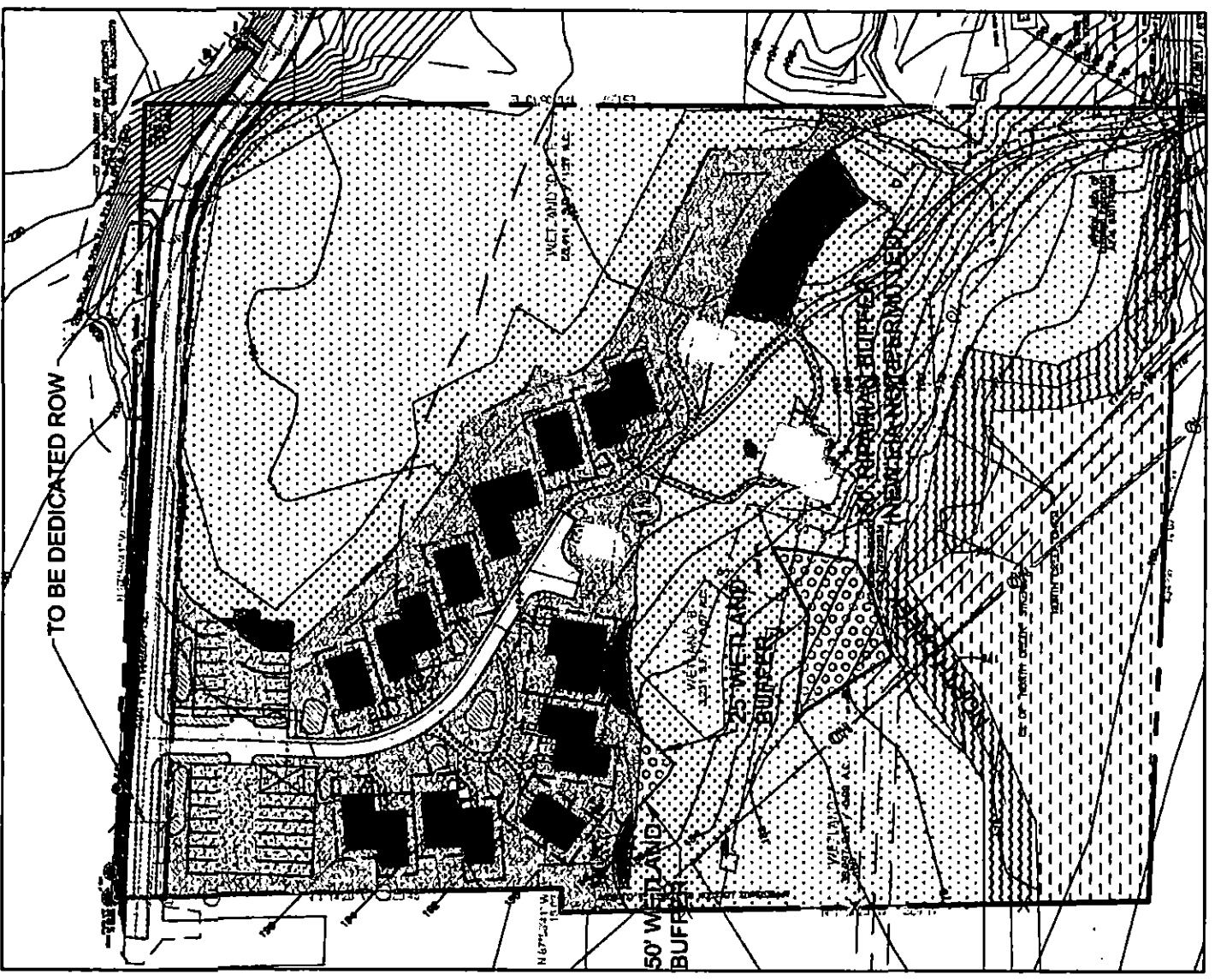
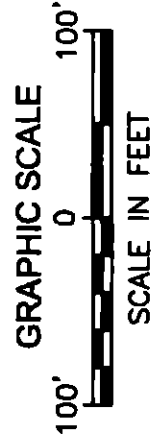
**Modeling Approach:** The approach and assumptions used to model the site using WWHM2 is as follows: Green roofs, pervious pathways, and pervious concrete were represented as landscape over till soils as per the guidance in Chapter 8 of the TGM. The remaining acre of undeveloped site was modeled as an infiltration pond with the depth calculated as the void space in one foot of the compost-amended soils, taking into account a compaction rate of 15%. This approach provided results indicating that 100% infiltration of the stormwater generated on site can be achieved by adding compost amendments to the on-site soils.

A detail of the compost-amended soil layer is shown in Figure 3. The result of the WWHM2 modeling showing 100% infiltration is provided in Figure 4.

**FIGURE 1.  
CLEARWATER COMMONS  
SITE PLAN SHOWING LID  
MEASURES** NTS

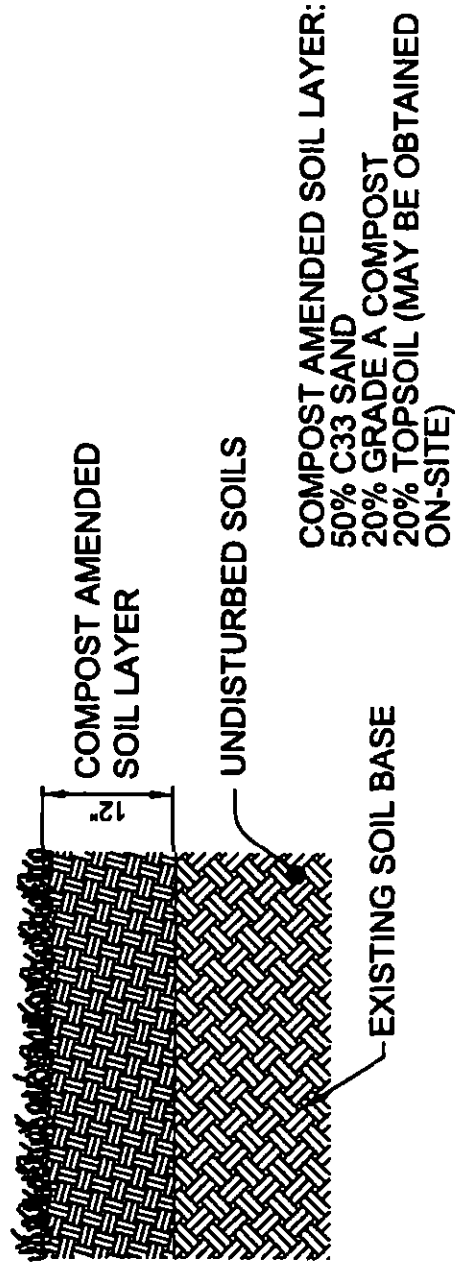
**LEGEND**

	COMPOST AMENDED SOIL
	PERVIOUS GRAVEL WALKWAY
	POROUS CONCRETE SURFACE
	POROUS ASPHALT SURFACE
	RAINGARDEN AREA
	NEW HOMES - NO EXCAVATION FOUNDATION (I.E. PIN PILES) W/GREEN ROOFS
	EXISTING BUILDINGS
	WETLAND BUFFER
	UNDISTURBED EXISTING WETLAND
	WETLAND BUFFER IMPACT





**Figure 3. Compost Amended Soil Section  
CLEARWATER COMMONS**



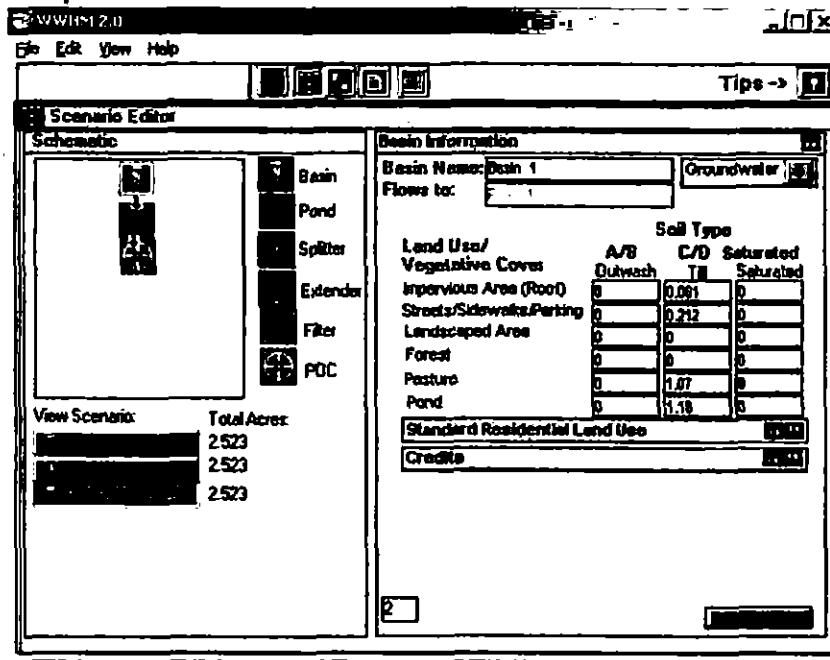
## **COMPOST AMENDED SOIL SECTION**

NTS

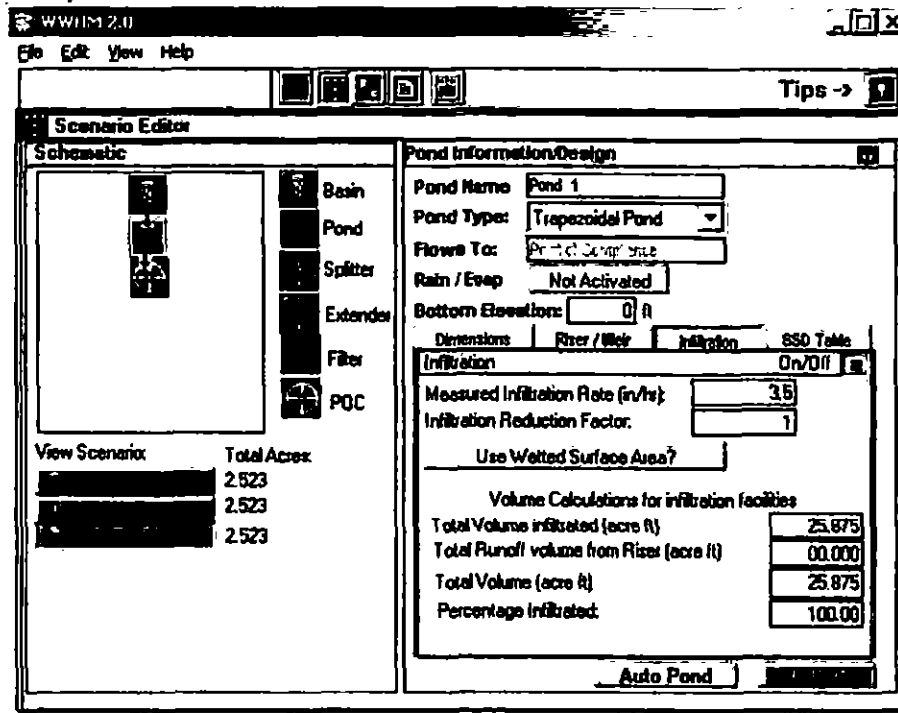
**Clearwater Commons  
LID Supplemental – Compost Amended Soils**

This print screen from WWHM2 shows the areas corresponding to the following proposed land uses:

Existing Buildings/Roofs	0.061 ac.
Proposed 194 <sup>th</sup> St. SE Impervious Area	0.212 ac
Pervious pathways, green roofs, driveway, parking	1.07 ac
Compost amended soils	1.18 ac



This print screen from WWHM2 shows that 100% of the on-site flows were infiltrated.



APPROVED 9/27/2006  
OK PD 9-27-06 [Signature]

**Snohomish County Planning and Development Services (PDS)**  
3000 Rockefeller Avenue, M/S 604, Everett, WA 98201 (425) 388-3311



**LID**

**LOW IMPACT DEVELOPMENT (LID) SUPPLEMENTAL**

PDS Use Only	
Project File Number <u>06-131051</u>	Date Received <u>9-1-06</u>
Project Manager (Planner) _____	
Transportation Reviewer (TDR) _____	

**Project Name:** Clearwater Commons

**Requestor:** Mark Buehrer, PE / Juliet Thompson, EIT      **Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St., PO Box 9621 Bellingham, WA 98227

**Describe the LID technique to be used that requires the modification:**

The design criteria in the Low Impact Development Technical Guidance Manual (TGM) for permeable pavements in Section 7.1.2 specifies that if impervious areas are adjacent to porous concrete the flowpath of the impervious area shall not be greater than the length of porous concrete. In a roadway limited on either side by wetlands, it is proposed to use a modified porous sidewalk in order to treat and infiltrate the roadway runoff. A modification to porous pavement design is described below.

**Check if DOE Credits are requested**

**Check the proposed LID techniques and features to be used for your development :**

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Green Roofs     | <input checked="" type="checkbox"/> Rain Gardens    | <input checked="" type="checkbox"/> Road Width Reduction |
| <input checked="" type="checkbox"/> Pervious Paving | <input checked="" type="checkbox"/> Soil Amendments |  |
| <input checked="" type="checkbox"/> Pln Piles       | <input checked="" type="checkbox"/> Tree Retention  |  |

**Other:** Pervious walkways and patios

**Describe the proposed LID design:**

It is proposed to use a pervious concrete sidewalk to treat and infiltrate the roadway runoff from 194<sup>th</sup> St. SE. This modification of the porous concrete design adds understorage and composted soil to minimize clogging of the pervious concrete and to ensure that all flows are captured and adequately treated. A detail of the sidewalk design is attached. The calculations showing the WWHM2 results are also included.

PFN: 06 131051 000 00 PA Chad Port  
Received - 09/01/2006



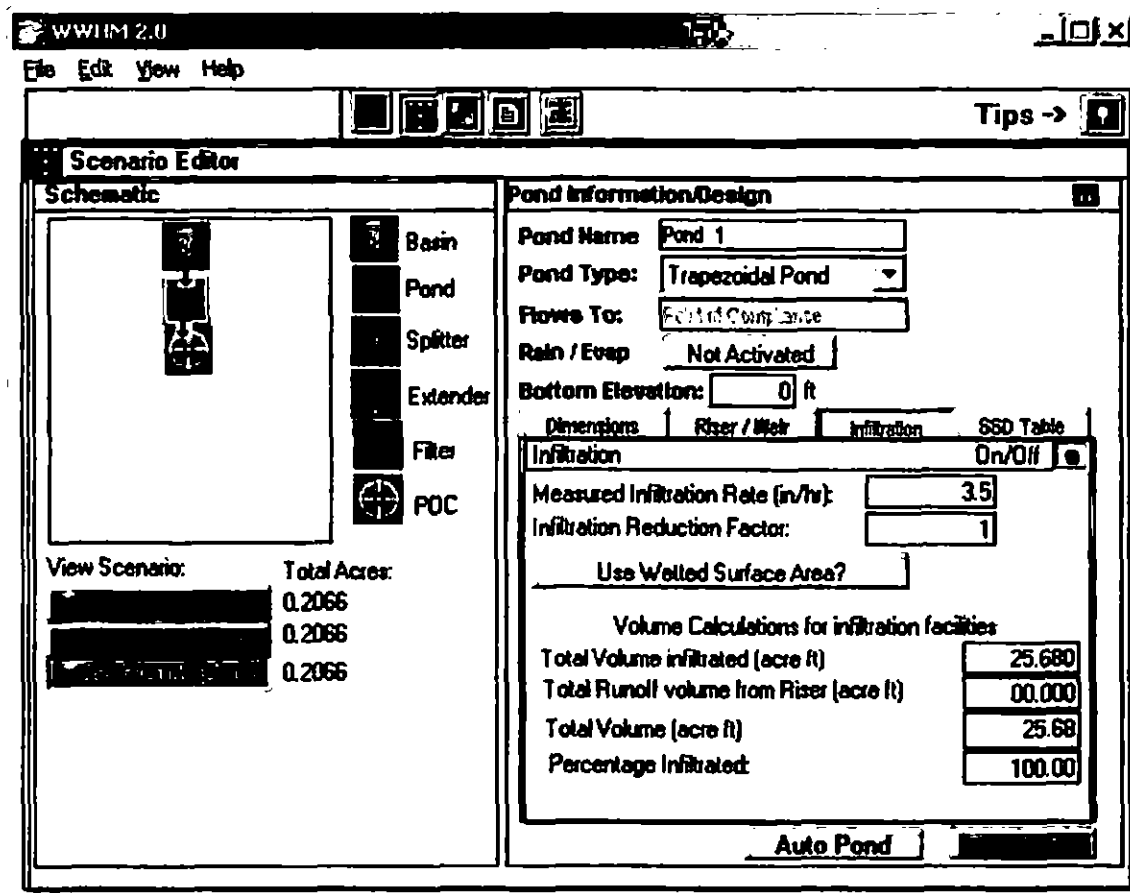
For this design the sidewalk was modeled as an infiltration pond with a length equivalent to the improved roadway length, a width of 5 ft, and a depth equivalent to the gravel depth multiplied by void space percentage of the gravel. The pre-existing condition was modeled as forest.

Since this site development proposes to add no new impervious area to the private development, the only new impervious area will be for the roadway improvements to 194<sup>th</sup> St. SE. The existing impervious asphalt road surface averages 15 feet wide, with a length of approximately 500 ft. located on private property (on-site). To maintain a low-impact development approach to the project and to minimize the impact to surrounding critical areas and neighborhoods, the road is proposed to be widened to only 18 feet (See Deviation from EDDS – 194<sup>th</sup> St. SE width), and the sidewalk designed to a 5 foot width.

The widening of 194<sup>th</sup> St. SE along the length of the property will add 1500 square feet of new impervious surface. This is under the threshold of a major development, and as such, the water quality treatment and detention requirements only apply to the new impervious surface created.

If the entire roadway is treated by the porous concrete sidewalk, the sidewalk must be capable of infiltrating 9000 sf or 0.21 acres of impervious area. The sidewalk was modeled for both the existing and the addition of new impervious roadway surface, and with the addition of the gravel, is capable of infiltrating and providing treatment to the entire roadway.

This screen from WWHM shows that 100% of the flow from the impervious area was infiltrated.



WESTERN WASHINGTON HYDROLOGY MODEL V2  
PROJECT REPORT

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Project Name: Sidewalk-allroadway  
Site Address:  
City : Bothell  
Report Date : 8/23/2006  
Gage : Everett  
Data Start : 1948  
Data End : 1997  
Precip Scale: 1.00

---

PREDEVELOPED LAND USE

Basin : Basin 1  
Flows To : Point of Compliance  
GroundWater: No

<u>Land Use</u>	<u>Acres</u>
TILL FOREST:	0.2066

---

DEVELOPED LAND USE

Basin : Basin 1  
Flows To : Pond 1  
GroundWater: No

<u>Land Use</u>	<u>Acres</u>
IMPERVIOUS:	0.2066

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RCHRES (POND) INFORMATION

Pond Name: Pond 1  
Pond Type: Trapezoidal Pond  
Pond Flows to : Point of Compliance  
Pond Rain / Evap is not activated.

Dimensions

Depth: 0.2ft.  
Bottom Length: 500ft.  
Bottom Width : 5ft.  
Side slope 1: 0 To 1  
Side slope 2: 0 To 1  
Side slope 3: 0 To 1  
Side slope 4: 0 To 1  
Volume at Riser Head: 0.011 acre-ft.

Discharge Structure

Riser Height: 0.2 ft.  
Riser Diameter: 10000 in.

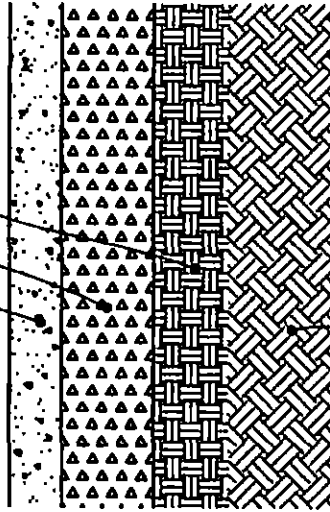
# CLEARWATER COMMONS

4" OR 5" DEPTH POROUS CONCRETE SURFACE  
(PORTLAND CEMENT CONCRETE MIX)

5" DEPTH FOR VEHICLE SURFACES  
4" DEPTH FOR OTHER SURFACES

6" DEPTH, 1-1/4" CHIPPED ROCK  
(DRAINAGE "RESERVOIR" BASE COURSE)

4" AMENDED SOIL  
AMENDED SOIL MIX:  
85% SAND  
15% GRADE A COMPOST



NOTE:  
POROUS CONCRETE PAVEMENT MAY BE  
USED FOR DRIVEWAYS, PATIOS AND  
SIDEWALKS WITHIN LOTS.

EXISTING SOIL  
MINIMAL COMPACTION (92%±)  
TO RETAIN POROSITY AND PERMEABILITY

## TYPICAL POROUS CONCRETE SECTION

NTS



**Snohomish County**  
**Planning and Development Services**



**Aaron Reardon**  
County Executive

October 24, 2007

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

(425) 388-3311  
FAX (425) 388-3872

Mark Buehrer, P.E.  
2020 Engineering  
700 Dupont St. PO Box 1621  
Bellingham, WA 98227

RE: Clearwater Commons - PFN 06131051  
Request for 2004 EDDS Deviation - EDDS 3-04, Standard Drawing 3-065

Dear Mr. Buehrer:

The Department of Public Works received your request on September 24, 2007, for a deviation to widen the substandard road section of 194<sup>th</sup> Street SE to 20 feet. Your request to widen the road to 20 feet of pavement with 1 foot gravel shoulders on each side is conditionally approved.

Discussions were held with the County Engineer on October 22, 2007 and the decision was once again made that the road section of 194<sup>th</sup> Street SE will be no less than 20 feet of pavement. The 20 feet of improvement will provide for the minimum road surface to provide basic emergency services.

**Frontage Improvements**

In the portion of the road that is pinched by the wetlands, the planter strip may be eliminated provided a 5 foot sidewalk is installed adjacent to the curb. In the portion of the road that is not pinched by the wetlands, a planter strip will be required between the curb and the sidewalk. A 4 foot sidewalk is approved in this section unless a pervious sidewalk is installed, then a 5 foot sidewalk will be required. **A 1 foot area of right-of-way will be required between the sidewalk and the right-of-way edge of the right-of-way.**

If you have any questions concerning this issue please call Norm Stone at (425) 388-3488, extension 4599.

Sincerely,

Ken Crossman, P.E.  
Interim Supervisor IV

**FILE COPY**

cc: File



**Snohomish County**  
**Planning and Development Services**

**Aaron Reardon**  
County Executive

(425) 388-3311  
FAX (425) 388-3872

October 25, 2007

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

Mark Buehrer, P.E.  
2020 Engineering  
700 Dupont St. PO Box 1621  
Bellingham, WA 98227

RE: Clearwater Commons - PFN 06131051  
Request for 2004 EDDS Deviation - EDDS 3-04, Standard Drawing 3-065

Dear Mr. Buehrer:

The Department of Public Works received a deviation request on April 3, 2007, for a deviation to not construct any frontage improvements along the development's 80 feet of frontage along 196<sup>th</sup> Street SE. Since the westerly 60 feet of frontage is actually in North Creek and adjacent wetlands; improvements would be difficult at best.

The County Engineer approved the deviation on April 16, 2007.

On September 24, 2007 Public Works received the same, slightly modified, request to not construct frontage improvements along 196<sup>th</sup> Street SE stating that approximately 30 feet of length would be in the creek itself. Since the previous deviation was already approved, the current deviation request was not addressed.

If you have any questions concerning this issue please call Norm Stone at (425) 388-3488, extension 4599.

Sincerely,

Ken Crossman, P.E.  
Interim Supervisor IV

Enclosure; Previous deviation letter

cc: File





**Snohomish County**  
**Planning and Development Services**

**Aaron Reardon**  
County Executive

(425) 388-3311  
FAX (425) 388-3872

April 23, 2007

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

Mark Buehrer, P.E.  
2020 Engineering  
700 Dupont St. PO Box 1621  
Bellingham, WA 98227

RE: Clearwater Commons - PFN 06131051  
Request for 2004 EDDS Deviation - EDDS 3-04, Standard Drawing 3-065

Dear Mr. Buehrer:

The Department of Public Works received your request on April 3, 2007, for a deviation to not construct any frontage improvements along the development's 80 feet of frontage along 196<sup>th</sup> Street SE. Since the westerly 60 feet of frontage is actually in North Creek and adjacent wetlands; improvements would be difficult at best.

The County Engineer approved the deviation on April 16, 2007.

If you have any questions concerning this issue please call Norm Stone at (425) 388-3488, extension 4599.

Sincerely,

Ken Crossman, P.E.  
Interim Supervisor IV

cc: File

**FILE COPY**

Maintenance of Drylock system [REDACTED]  
No R/W adjacent to sidewalk

PDS Use Only	
Project File Number _____	Date Received _____
Project Manager (Planner) _____	
Transportation Reviewer (TDR) _____	



**LID**

**LOW IMPACT DEVELOPMENT (LID)  
DEVIATION FROM ENGINEERING DESIGN &  
DEVELOPMENT STANDARDS (EDDS)**

**ROAD WIDTH and FRONTAGE IMPROVEMENTS –  
194<sup>TH</sup> ST. SE**

06 13 1051

**Instructions:**

Attach copies of the EDDS section(s) and/or drawings for which a deviation is requested. Include documentation such as drainage calculations, other engineering data and drawings, which will verify and substantiate the request. Engineering elements not meeting the required standards may require submittal by an engineer licensed in the State of Washington.

Submit 3 complete sets of copies of the request and documentation to: PDS CSC 2<sup>nd</sup> floor, Admin East, 3000 Rockefeller Ave, Everett, WA 98201. ONE DEVIATION PER FORM.

**Project Name:** Clearwater Commons – Offsite Development of 194<sup>th</sup> St. SE

**Requestor:** Mark Buehrer, PE

**Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St. PO Box 1621

**City, Zip:** Bellingham, Washington 98227

**RECEIVED**

SEP 24 2007

PDS  
LAND USE / RECORDS

**Check EDDS edition:**  1992  2003  2004 Revision

**Chapter/Section :** EDDS 3-04 **Standard Drawing:** 3-065

**Describe the EDDS standard to be deviated from:**

Standard Drawing 3-065 (Road Standards – Urban Non-Arterials).

Standard Drawing 3-065 identifies detailed design elements for design speed, pavement width, travel lane dimensions, planter width, sidewalk width, and R/W width.

**FILE COPY**

**A. Road Width:** The EDDS standard to be deviated from is the road width requirement for 194<sup>th</sup> St. SE. The community association of the Clearwater Commons development proposes to reduce the road width to a 20 ft asphalt concrete pavement. The road classification for 194<sup>th</sup> St. SE is Residential (ADT 1 – 1000).

**B. Frontage Improvements:** The EDDS standard to be deviated from is the width of the planter and sidewalk for a section of the frontage improvements to 194<sup>th</sup> St. SE.

1. It is proposed to construct a sidewalk of 4 feet in width in the area in front of the Clearwater Commons entrance as shown in Figure 1, Frontage Improvements.
2. It is proposed to eliminate the planting strip in a section of road that is pinched by wetlands on both sides as shown in Figure 1, Frontage Improvements

**C. 1 foot separation between sidewalk and R/W line:** That the standard 1 foot separation between sidewalk and R/W line be eliminated.

**Justification:** A Request for Deviation to Standard Drawing EDDS 3-065 regarding travel lane width and frontage improvements of 194<sup>th</sup> St. SE is justified for three purposes:

**1. To avoid or minimize fill to Class 3 wetlands on both sides of the improved roadway.**

The sidewalk – roadway configuration has been designed to minimize impacts to wetlands on either side of the roadway. North Creek is a federally protected Chinook spawning stream and these wetlands need to be preserved to support habitat protection. Protecting this direct link to a protected stream corridor is a unique and critical reason to reduce impervious surfaces and promote low impact development. Reducing road widths and sidewalk widths is key to minimizing impervious areas intruding into the wetlands.

**2. To design a roadway that corresponds with the Low Impact and pedestrian oriented focus of the development.**

Research has demonstrated that narrower roads are safer (traffic calming) and are critical to reduce impervious surfaces. 194<sup>th</sup> is not a through street, it dead ends at North Creek and does not connect to an adjacent street across the Bothell-Everett Highway. The proposed Clearwater Commons 15 unit development will make extensive use of Low Impact Development techniques including: no new effective impervious surfaces; less than 5,000 ft of new impervious surface; and, limited vehicle access – a central parking area at 194<sup>th</sup> St. SE with pedestrian only access beyond.

**3. To demonstrate the values and aesthetics of Low Impact designs.**

The Clearwater Commons community association wants to create a signature component at the street entrance to their community by establishing a planting strip and sidewalk element that reflects the character of the Co-Housing community and their commitment to LID.

The sidewalk will be reduced to 4' at locations to minimize impervious surfaces while maintaining required pedestrian access. The project is also proposing that the planting strips be at street level and that they be raingardens with low-maintenance plants used to disperse and treat stormwater. The planting area in front of the Clearwater Commons entrance will be maintained by the community association. Plant selection will be such that the height of the plants will not affect the sight triangles required at the parking entrance.

**Check the proposed LID techniques and features to be used:**

Note: The checked boxes below refer to the development of 194<sup>th</sup> St. SE and not the Clearwater Commons Site.

**Pervious Paving:**       **Soil Amendments:**       **Raingardens:**       **Green roofs:**

**Pin Piles:**       **Tree Retention:**       **Road Widths:**

**Other:**  **Pervious Driveways and Patios**

**Describe the proposed LID design:**

**A. Road Width:** Per Owen Carter email dated 4/25/07, the following LID road section has been revised to meet Public Works requirement for safety along 194<sup>th</sup> St. SE. The road width will provide a **20 ft area of asphalt concrete paving (ACP)** with 1 foot wide gravel aprons (shown as wedge of crushed surfacing top course on Figure 3) on either side of the road. The crushed gravel apron will provide an engineered surface which will protect the edge of the ACP and will also support the LID design by transferring runoff into the vegetated raingardens.

194<sup>th</sup> Street SE will be widened as necessary to provide 20 ft of ACP with crushed gravel aprons from the parcel's western boundary to the entrance of the North Creek Mobile Manor Park. The existing roadway varies from 13 to 15 feet in width. Per Owen Carter email dated 5/11/07, the pavement widening will include saw cutting the existing pavement edge. Edges will be heated and tacked with CSS-1 sealer, and sealed with AR4000 and sand. The saw cut will be 1 foot minimum inside the existing edge of pavement. A four foot wide minimum paved section will be constructed parallel to the existing roadway.

**B. Frontage Improvements:** Sidewalk and frontage improvements are provided to enhance the functions and values of low impact developments.

1. Per preliminary approval from Owen Carter and Norm Stone at our 4/24/07 meeting at Snohomish County, it is proposed to construct a concrete sidewalk of 4 feet in width in the area in front of the Clearwater Commons. The 5 foot planting strip/raingarden with low-maintenance native plants will be installed at street grade (no curb and gutter) and shall be engineered to accommodate sheet runoff from the street and sidewalk.
2. Per Peter Beckford email dated 5/16/07 the following road section was designed to meet minimum County requirements. Through the section of 194<sup>th</sup> St. SE which is bounded by wetlands on both sides the planting strip shall be eliminated and a curb and gutter shall be installed on the South side of 194<sup>th</sup> to convey runoff to the planterstrip/raingardens to the west. A curb and gutter will also be installed on the North side of 194<sup>th</sup> were adjacent to the wetlands with a minimum 2 foot "clear zone" beyond the face of the curb.

**C. One foot separation between sidewalk and R/W line:** Per preliminary approval from Owen Carter at our 4/24/07 meeting, the Clearwater Commons is requesting that the Right of Way line be 33 feet in width and adjacent to the concrete sidewalk in the area near the parking area. This is three feet more than the existing Right of Way and provides more than one half of a required 60' Right of Way should the adjacent property to the North be developed. The Right of Way shall widen to 40' in the area where the road shifts to the South and the sidewalk widens to 5 feet.

**Justification for LID deviation:**

**1. Describe how this design meets the approved standard:**

The design follows the example of several projects that have used narrower road widths for traffic calming, and to reduce the quantities of impervious surfaces that contribute to stormwater pollution. The raingardens have also been used on several projects to provide onsite stormwater management. The reference used for the design is the Low Impact Development Technical Guidance Manual for Puget Sound, approved by Snohomish County for Low Impact Development design. The 4 foot section of sidewalk meets the WSDOT designation for a trail, and meets ADA width requirements.

**2. Describe how traffic safety and operations will not be adversely affected by this LID deviation:**

The proposed narrower road width will encourage drivers to maintain the posted 25 mph speed limit as they travel 194<sup>th</sup> St. SE. The 20 feet of drivable surface is the width required for emergency vehicles to pass safely.

The community plans to install "No Parking" signs in the vicinity of the entrance, and to request that visitor's park in the parking lot at the entrance to the development. To offset the elimination of on-street parking, the entrance has been designed with a curb radius that will accommodate delivery trucks, in accordance with the zoning.

The proposed narrower 4' wide sidewalk section will be separated from the roadway by a planter strip. In areas where the wetland is directly adjacent to the frontage improvements, the planter section will be eliminated and a curb and gutter with raised sidewalk shall be installed to provide pedestrian safety. This will provide a clear separation between the road and sidewalk while also minimizing the impacts of the frontage improvements on the adjacent wetlands to the North and South. Pedestrian safety will be enhanced by the slower travel speeds due to the narrower road width of 20 feet.

Maintenance for the sidewalk will be the same as regular frontage maintenance. The plantings and the stormwater treatment function of the raingarden will be maintained by the Clearwater Commons community.

**3. Describe how the LID deviation will not adversely affect maintenance and associated costs:**

The reduced road width will require less maintenance time. The Clearwater Commons development is unlike a standard residential development and is a departure from traditional subdivision design. The site design emphasizes pedestrian walkways and centralized parking over individual garages with parking in driveways and on the street. In keeping with the community's

desire to de-emphasize automobile usage, a low-maintenance, lower profile streetscape leading into the community will more closely match the character and intent of the low-impact design of the site.

The street maintenance would more closely match the practices used for rural roadways, since there is no curb separating the roadway from the adjacent planting strip along most sections of the road. Low Impact Development practices use plantings and low-volume distributed measures to disperse and treat stormwater. This requires an approach to maintenance that is different from standard urban road and stormwater facilities with their associated curbs, gutters, catchbasins, and centralized stormwater facilities.

The streetscape for 194<sup>th</sup> St. SE will require periodic (annual) Vac-Truck maintenance of the asphalt roadway. Plantings along 194<sup>th</sup> St. SE are designed to be low maintenance, and may require annual maintenance in the form of soil refreshment (addition of compost raked into the top 3" of soil), and re-planting and/or trimming of landscape plants. The Clearwater Commons will maintain the planting areas along 194<sup>th</sup> Street in order to provide the aesthetic and low impact benefits the community is attempting to create.

**4. Describe how the aesthetic appearance will be maintained:**

It is recommended that low-maintenance native plantings with low water needs (xeriscaping) be used in the adjacent planting strip so that the aesthetic appearance will be easy to maintain. The community will maintain the plantings along the right of way adjacent to the Clearwater Commons development.

This page to be completed by Public Works Staff:

**ANALYSIS OF JUSTIFICATION FOR EDDS DEVIATION**

Conformance to existing standard:

Adverse topography:

Comparable to or exceeds EDDS:

Public cost savings:

Improved safety:

Maintainability:

Aesthetics:

Other:

Staff recommendation:

Approve

Deny

Basis:

Project Name:

PFN:

EDDS Section #

Certain projects may require review by other departments as applicable.

Fire Marshal Review attached.

Drainage Review attached.

Traffic Review attached.

**Final Public Works Decision:**

APPROVED

DENIED

County Engineer:



Owen B. Carter, P.E.

Date:

10/22/07

Attach a copy of the letter of notification

cc

PDS Project File

PDS Traffic/Drainage Engineering File

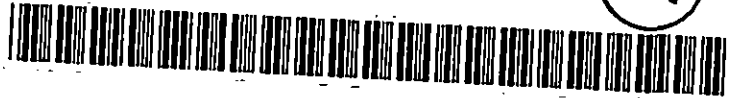
EDDS Deviation Request File

**RECEIVED**

FEB 13 2008

PDS  
LAND USE / RECORDS

PFN: 06 131051 000 00 LU Clearwater Commons  
File#: 06131051  
Received - 02/06/2008



PDS Use Only

Project File Number \_\_\_\_\_ Date Received \_\_\_\_\_

Project Manager (Planner) \_\_\_\_\_

Transportation Reviewer (TDR) \_\_\_\_\_



**LID**

**LOW IMPACT DEVELOPMENT (LID)  
DEVIATION FROM ENGINEERING DESIGN &  
DEVELOPMENT STANDARDS (EDDS)**

**FRONTAGE IMPROVEMENTS RAINGARDEN STRIPS  
FOR STORMWATER RUNOFF – 194<sup>TH</sup> ST. SE**

**Instructions:**

Attach copies of the EDDS section(s) and/or drawings for which a deviation is requested. Include documentation such as drainage calculations, other engineering data and drawings, which will verify and substantiate the request. Engineering elements not meeting the required standards may require submittal by an engineer licensed in the State of Washington.

Submit 3 complete sets of copies of the request and documentation to: PDS CSC 2<sup>nd</sup> floor, Admin East, 3000 Rockefeller Ave, Everett, WA 98201. ONE DEVIATION PER FORM.

**Project Name:** Clearwater Commons – Offsite Development of 194<sup>th</sup> St. SE

**Requestor:** Mark Buehrer, PE, Jenifer Ramsey, PE

**Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St. PO Box 1621

**City, Zip:** Bellingham, Washington 98227

**Check EDDS edition:**  1992  2003  2004 Revision

**Chapter/Section :** EDDS 3-04 **Standard Drawing:** 3-065

**Describe the EDDS standard to be deviated from:**

Standard Drawing 3-065 (Road Standards – Urban Non-Arterials).

Standard Drawing 3-065 identifies detailed design elements for design speed, pavement width, roadway, planter, sidewalk, parking and R/W width.



The EDDS standard to be deviated from is the addition of a raingarden strip for a section of the frontage improvements to 194<sup>th</sup> St. SE. It is proposed to construct a raingarden strip along two portions of 194<sup>th</sup> St. SE that will provide treatment and infiltration of stormwater.

The total new impervious surface created by the improvements does not require treatment or detention (less than 5000 sq ft of new surface is being added). However, the addition of the raingarden strip will allow for treatment and infiltration of stormwater that would otherwise enter North Creek.

**Check the proposed LID techniques and features to be used:**

Note: The checked boxes below refer to the development of 194<sup>th</sup> St. SE and not the Clearwater Commons Site.

**Pervious Paving:**       **Soil Amendments:**       **Raingardens:**       **Green roofs:**

**Pin Piles:**       **Tree Retention:**       **Road Widths:**

**Other:**  Pervious Driveways and Patios

**Describe the proposed LID design:**

A Request for Deviation to Standard Drawing EDDS 3-065 regarding the use of two raingarden strips for the frontage improvements to 194<sup>th</sup> St. SE in the vicinity of the Clearwater Commons development is requested for two purposes:

**1. To provide stormwater treatment and infiltration of roadway runoff.**

The use of raingarden strips along 194<sup>th</sup> St SE will allow all stormwater runoff to be treated and infiltrated into the native soils. The improvements do not require treatment or detention (less than 5000 sq ft of new surface is being added). However, the addition of the raingarden strip will allow for treatment and infiltration of stormwater that would otherwise enter North Creek.

**2. To improve aesthetics of the sidewalk and planter**

The Clearwater Commons community association wants to add a signature component at the entrance to their community by establishing a planting scheme and sidewalk element that reflects the character of the Co-Housing community.

The raingarden strips will treat stormwater naturally, and will be planted with low-maintenance native plants. The raingarden strips in front of the Clearwater Commons entrance will be maintained by the community association.

**Justification for LID deviation:**

**1. Describe how this design meets the approved standard:**

**Stormwater Treatment and Detention:** The raingarden strips will provide total infiltration of all stormwater from 194<sup>th</sup> St SE as shown on Figure 1.

The improvement of 194th St. SE can be considered a redevelopment project. A tabulation of the new and existing impervious surfaces applied to the roadway development of 194th St. is shown in Table 4.

**Table 1 – Summary of Total Impervious and Pervious Surfaces – Road Improvements 194<sup>th</sup> St. SE ROW**

Condition	Existing	Proposed	LID Credit
	Ac.	Ac.	
Developable Area	0.28	0.28	--
Pollution Generating Impervious (PGIS) – 194 <sup>th</sup> St. SE (whole road section)	0.18	0.21	--
Raingardens	--	0.008	--

The summary of existing and proposed surfaces for the right-of-way is shown in Table 2.

**Table 2 – Summary of Impervious Surfaces for 194<sup>th</sup> St. SE using LID Credits**

Condition	Existing Areas	Proposed Areas	Change	Criteria
	Sq. Ft.	Sq. Ft.		
Impervious Surface	7673	12,263	4590 ft <sup>2</sup>	Less than 5000 ft <sup>2</sup> of new impervious surface created

The criteria analysis using the flowchart in Volume I page 2-10 of the DOE SWMM indicates that the road-related improvements add 4590 ft<sup>2</sup> of new impervious surface - less than the 5000 ft<sup>2</sup> threshold. Minimum Requirements 1 through 5 apply to the road redevelopment of 194th St. SE under the current design criteria.

Stormwater modeling for the raingarden strips shows all stormwater will infiltrate. See Appendix A for an analysis of the soils at the site.

SWMM13 - 457 C.R. Ruppardens

File Edit View Help

Schematic

**SCENARIOS**

Predeveloped  
 Merged  
 Run Scenario

**ELEMENTS**

Basin  
 Channel  
 Catchment  
 Control Structure  
 Culvert  
 Facility  
 Inlet  
 Manhole  
 Outlet  
 Pipe  
 Pump  
 Sump  
 Trench  
 Valve  
 Weir

Move Elements:

Save .cgp Load .cgp  
 X: 131 Y: 32

**Gravel Trench Bed 1 (Estimated)**

Facility Name: Gravel Trench Bed 1

Outlet 1: 0 Outlet 2: 0 Outlet 3: 0

Downstream Connection: [ ]

Facility Type: [ ]

Precipitation Applied to Facility  
 Evaporation Applied to Facility

Facility Bottom Elevation (ft): 6

**Facility Dimensions**

Trench Length: 72  
 Trench Bottom Width: 3  
 Effective Total Depth: 3  
 Bottom slope of Trench: 0.01  
 Left Side Slope: 3  
 Right Side Slope: 3

**Outlet Structure**

Rear Height (ft): 0  
 Rear Diameter (ft): 0  
 Rear Type: Flat  
 Notch Type:

**Material Layers for**

Layer	Thickness (ft)	porosity
Layer 1	1.5	0.35
Layer 2	1	0.35
Layer 3	0	0

Orifice Number	Diameter (ft)	Height (ft)	O/Max (ft)
1	0	0	0
2	0	0	0
3	0	0	0

Infiltration: YES  
 Measured Infiltration Rate (in/hr): 3  
 Infiltration Reduction Factor: 1  
 Unwetted Surface Area (square-ft): 140  
 Total Volume Infiltrated (acre-ft): 17,508  
 Total Volume Through Roof (acre-ft): 0

Trench Volume at Rise Head (acre-ft): 0.033  
 Pond Infiltration: 0.10  
 Show Pond Table: Open Table

Total Volume Through Facility (acre-ft)	Percent Infiltrated
17,508	100

Infiltration for all stormwater in Basin 1 of 194<sup>th</sup> St SE.

SWMM11 03/10/1999/07:21

File Edit View Help

Icons: [Home] [Back] [Forward] [Print] [Help] [LID]

Scenario: **SCENARIOS**

Predeveloped  
 Modified

**ELEMENTS**

[Inlet]  [Manhole]  [Culvert]  [Trench]  [Basin]  [Pond]  [Outlet]  [Structure]  [Infiltration]  [Storage]  [Flow Control]  [Slope]  [Elevation]  [Material]  [Infiltration]  [Storage]  [Flow Control]  [Slope]  [Elevation]  [Material]

Move Elements: [Left] [Up] [Down] [Right]

Save x,y Load x,y

X: 40 Y: 24

Groundwater: No

**Gravel Trench Bed 2 Stagnated**

Facility Name: Gravel Trench Bed 2

Outlet 1: 0 Outlet 2: 0 Outlet 3: 0

Downstream Connection: 0

Facility Type: Quick Trench

Precipitation Applied to Facility  
 Evaporation Applied to Facility

Facility Bottom Elevation (ft): 0

**Facility Dimensions**

Trench Length: 120.9  
Trench Bottom Width: 5  
Effective Total Depth: 3.6  
Bottom slope of Trench: 0.01  
Left Side Slope: 0.3  
Right Side Slope: 0.3

**Outlet Structure**

Riser Height (ft): 0  
Riser Diameter (ft): 0  
Riser Type: Flat  
Notch Type:

**Material Layers for**

Layer 1 Thickness (ft): 1.5  
Layer 1 porosity: 0.35  
Layer 2 Thickness (ft): 1  
Layer 2 porosity: 0.35  
Layer 3 Thickness (ft): 0  
Layer 3 porosity: 0

**Infiltration** YES

Measured Infiltration Rate (in/hr): 3  
Infiltration Reduction Factor: 1  
Use Wetted Surface Area (sideswale): NO  
Total Volume Infiltrated (acre-ft): 52.109  
Total Volume Through Riser (acre-ft): 0

Orifice Number Diameter (ft) Height (ft) QMax (cfs)  
1 0 0 0  
2 0 0 0  
3 0 0 0

Trench Volume at Rise Head (acre-ft): 0.33  
Pond Increment: 0.10  
Show Pond Table: Open Table

Total Volume Through Facility (acre-ft): 52.109  
Percent Infiltrated: 100

**Infiltration for all stormwater in Basin 2 of 194<sup>th</sup> St SE.**

The full stormwater analysis for each of these raingardens is attached to this document, as well as infiltration data supporting the infiltration rates used in the analysis.

**2. Describe how traffic safety and operations will not be adversely affected by this LID deviation:**

The proposed raingarden strip section will be separated from the roadway and function similar to a bioswale. The slopes of the raingarden strip are 3 to 1, gentle enough to prevent pedestrians from falling into the raingarden.

**3. Describe how the LID deviation will not adversely affect maintenance and associated costs:**

The raingarden will be maintained by the Clearwater Commons homeowner's association. Maintenance for the raingardens requires in general the same maintenance procedures as required for bioswales, planter strips and catch basins. Large debris should be removed from the raingarden and sediment should not be allowed to accumulate. Any pipelines connected to the raingarden should be checked for plugging.

Additional maintenance is to check on the plantings to make sure they are healthy and thriving, as well as perform some weeding tasks to prevent the total overgrowth of weeds in the raingarden.

**4. Describe how the aesthetic appearance will be maintained:**

It is recommended that low-maintenance plantings appropriate for use with raingardens be used in so that the aesthetic appearance will be easy to maintain. Along the right of way adjacent to the Clearwater Commons development, the community will maintain the plantings along 194<sup>th</sup> St. SE.

---

This page to be completed by Planning and Development Services Staff

**ANALYSIS OF JUSTIFICATION FOR EDDS DEVIATION:**

- DOE Credits:
- Conformance to existing standard:
- Adverse Topography:
- Comparable to or exceeds Standards:
- Public cost savings:
- Improved Safety:
- Maintainability:
- Aesthetics:
- Water Quality:
- Other:

Staff Recommendations:

Approve  Deny

*Somewhat changed from that previously approved.  
Now reingarden in R/W*

Basis:

Project Name: \_\_\_\_\_ PFN: 06131051 EDDS Section # 3-065

Certain projects may require review by other departments as applicable.

- Fire Marshal Review attached.
- Drainage Review attached.
- Traffic Review attached.

FINAL DECISION:  APPROVED  DENIED

Chief Engineering Officer:  \_\_\_\_\_  
Randolph Sleight, P.E., P.L.S.

Date: 3/10/08

Attach a copy of the letter of notification  
cc Project File



**SNOHOMISH  
HEALTH  
DISTRICT**

**ENVIRONMENTAL HEALTH DIVISION**  
3020 Rucker Avenue, Suite 104  
Everett, WA 98201-3900  
425.339.5250 FAX: 425.339.5254  
Deaf/Hard of Hearing: 425.339.5252 (TTY)

---

Date: March 17, 2008

To: Darryl Eastin  
Planning/Community Development  
Snohomish County

From: ✓ Brent Raasina, R.S., Senior Sanitarian  
Water & Wastewater Section  
Environmental Health Division  
Snohomish Health District

Subject: Request for Review - File #06-131051 LU  
Administrative Site Plan of Clearwater Commons (Chad Port)  
Property Tax Acct. Number: 270518 004 01300

Snohomish Health District has no objections to administrative site plan subject to sanitary sewers and approved public water provided by Alderwood Water & Wastewater District.

Snohomish Health District records indicate that the existing development on the site utilizes onsite sewage disposal facilities. The Health District recommendation for preliminary plat is with the understanding that the existing onsite sewage system(s) will be abandoned by having the septic tank(s) pumped by a certified pumper, then having the top of the tank removed or destroyed and filling the void (WAC 246-272A-0300). Documentation demonstrating completion of this work must be submitted prior to final plat approval.

BR/ss

cc: Chad Port



**Snohomish County**  
**Planning and Development Services**

**Aaron Reardon**  
County Executive

(425) 388-3311  
FAX (425) 388-3872

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

**March 20, 2008**

Mark Buehrer, P.E.  
2020 Engineering  
700 Dupont St. PO Box 1621  
Bellingham, WA 98227



RE: Clearwater Commons - PFN 06131051  
Request for 2004 EDDS Deviation - EDDS 3-04, Standard Drawing 3-065

Dear Mr. Buehrer:

The Department of Public Works received your request on February 20, 2008, for a deviation to allow for the addition of a raingarden strip for a section of the frontage improvements to 194<sup>th</sup> Ave SE.

This deviation request was approved by the County Engineer on March 10, 2008. A 4 foot sidewalk is approved separated from the driving surface by the raingarden. A 5 foot sidewalk will be required along the portion of the frontage improvements where the sidewalk is not separated by the raingarden. A 1 foot area of right-of-way will be required between the sidewalk and the edge of the right-of-way.

If you have any questions concerning this issue please call Norm Stone at (425) 388-3488, extension 4599.

Sincerely,

Ken Crossman, P.E.  
Interim Supervisor IV

cc: File

**CONVENIENCE COPY**



**Snohomish County Planning and Development Services (PDS)**

3000 Rockefeller Avenue, M/S 604, Everett, WA 98201 (425) 388-3311

**RECEIVED**

FEB 13 2008

PDS  
LAND USE / RECORDS

PFN: 06 131051 000 00 LU Clearwater Commons

File#: 06131051

Received - 02/05/2008



PDS Use Only

Project File Number \_\_\_\_\_ Date Received \_\_\_\_\_

Project Manager (Planner) \_\_\_\_\_

Transportation Reviewer (TDR) \_\_\_\_\_



**LID**

**LOW IMPACT DEVELOPMENT (LID)  
DEVIATION FROM ENGINEERING DESIGN &  
DEVELOPMENT STANDARDS (EDDS)**

**FRONTAGE IMPROVEMENTS RAINGARDEN STRIPS  
FOR STORMWATER RUNOFF – 194<sup>TH</sup> ST. SE**

**Instructions:**

Attach copies of the EDDS section(s) and/or drawings for which a deviation is requested. Include documentation such as drainage calculations, other engineering data and drawings, which will verify and substantiate the request. Engineering elements not meeting the required standards may require submittal by an engineer licensed in the State of Washington.

Submit 3 complete sets of copies of the request and documentation to: PDS CSC 2<sup>nd</sup> floor, Admin East, 3000 Rockefeller Ave, Everett, WA 98201. ONE DEVIATION PER FORM.

**Project Name:** Clearwater Commons – Offsite Development of 194<sup>th</sup> St. SE

**Requestor:** Mark Buehrer, PE, Jenifer Ramsey, PE

**Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St. PO Box 1621

**City, Zip:** Bellingham, Washington 98227

**Check EDDS edition:**  1992  2003  2004 Revision

**Chapter/Section :** EDDS 3-04 **Standard Drawing:** 3-065

**Describe the EDDS standard to be deviated from:**

Standard Drawing 3-065 (Road Standards – Urban Non-Arterials).

Standard Drawing 3-065 identifies detailed design elements for design speed, pavement width, roadway, planter, sidewalk, parking and R/W width.

The EDDS standard to be deviated from is the addition of a raingarden strip for a section of the frontage improvements to 194<sup>th</sup> St. SE. It is proposed to construct a raingarden strip along two portions of 194<sup>th</sup> St. SE that will provide treatment and infiltration of stormwater.

The total new impervious surface created by the improvements does not require treatment or detention (less than 5000 sq ft of new surface is being added). However, the addition of the raingarden strip will allow for treatment and infiltration of stormwater that would otherwise enter North Creek.

**Check the proposed LID techniques and features to be used:**

Note: The checked boxes below refer to the development of 194<sup>th</sup> St. SE and not the Clearwater Commons Site.

**Pervious Paving:**       **Soil Amendments:**       **Raingardens:**       **Green roofs:**

**Pin Piles:**       **Tree Retention:**       **Road Widths:**

**Other:**  **Pervious Driveways and Patios**

**Describe the proposed LID design:**

A Request for Deviation to Standard Drawing EDDS 3-065 regarding the use of two raingarden strips for the frontage improvements to 194<sup>th</sup> St. SE in the vicinity of the Clearwater Commons development is requested for two purposes:

**1. To provide stormwater treatment and infiltration of roadway runoff.**

The use of raingarden strips along 194<sup>th</sup> St SE will allow all stormwater runoff to be treated and infiltrated into the native soils. The improvements do not require treatment or detention (less than 5000 sq ft of new surface is being added). However, the addition of the raingarden strip will allow for treatment and infiltration of stormwater that would otherwise enter North Creek.

**2. To improve aesthetics of the sidewalk and planter**

The Clearwater Commons community association wants to add a signature component at the entrance to their community by establishing a planting scheme and sidewalk element that reflects the character of the Co-Housing community.

The raingarden strips will treat stormwater naturally, and will be planted with low-maintenance native plants. The raingarden strips in front of the Clearwater Commons entrance will be maintained by the community association.

**Justification for LID deviation:**

**1. Describe how this design meets the approved standard:**

**Stormwater Treatment and Detention:** The raingarden strips will provide total infiltration of all stormwater from 194<sup>th</sup> St SE as shown on Figure 1.

The improvement of 194th St. SE can be considered a redevelopment project. A tabulation of the new and existing impervious surfaces applied to the roadway development of 194th St. is shown in Table 4.

**Table 1 – Summary of Total Impervious and Pervious Surfaces – Road Improvements 194<sup>th</sup> St. SE ROW**

Condition	Existing	Proposed	LID Credit
	Ac.	Ac.	
Developable Area	0.28	0.28	--
Pollution Generating Impervious (PGIS) – 194 <sup>th</sup> St. SE (whole road section)	0.18	0.21	--
Raingardens	--	0.008	--

The summary of existing and proposed surfaces for the right-of-way is shown in Table 2.

**Table 2 – Summary of Impervious Surfaces for 194<sup>th</sup> St. SE using LID Credits**

Condition	Existing Areas	Proposed Areas	Change	Criteria
	Sq. Ft.	Sq. Ft.		
Impervious Surface	7673	12,263	4590 ft <sup>2</sup>	Less than 5000 ft <sup>2</sup> of new impervious surface created

The criteria analysis using the flowchart in Volume I page 2-10 of the DOE SWMM indicates that the road-related improvements add 4590 ft<sup>2</sup> of new impervious surface - less than the 5000 ft<sup>2</sup> threshold. Minimum Requirements 1 through 5 apply to the road redevelopment of 194th St. SE under the current design criteria.

Stormwater modeling for the raingarden strips shows all stormwater will infiltrate. See Appendix A for an analysis of the soils at the site.

Windows 10 | 197 of 1140 borders

File Edit View Help

Icons: Home, Back, Forward, Stop, Refresh, Print, Save, Undo, Redo, Help, LID

**SCENARIOS**

Predeveloped

Modified

Run Scenario

**ELEMENTS**

Move Elements

Size X: 50

Y: 50

**Gravel Trench Bed 1 Activated**

Facility Name: Gravel Trench Bed 1

Downstream Connection: Outlet 1 (0), Outlet 2 (0), Outlet 3 (0)

Facility Type: Quick Trench

Precipitation Applied to Facility

Evaporation Applied to Facility

Facility Bottom Elevation (ft): 0

**Facility Dimensions**

Trench Length: 7A

Trench Bottom Width: 5

Effective Total Depth: 3

Bottom slope of Trench: 0.01

Left Side Slope: 3

Right Side Slope: 3

**Material Layers for**

Layer 1 Thickness (ft): 1.5

Layer 1 porosity: 0.35

Layer 2 Thickness (ft): 1

Layer 2 porosity: 0.25

Layer 3 Thickness (ft): 0

Layer 3 porosity: 0

**Infiltration**  YES

Measured Infiltration Rate (in/hr): 3

Infiltration Reduction Factor: 1

Use Wetted Surface Area (sidewalk): NO

Total Volume Infiltrated (acre-ft): 17.508

Total Volume Through Rose (acre-ft): 0

**Outlet Structure**

Riser Height (ft): 0

Riser Diameter (in): 0

Riser Type: Flat

Notch Type:

Orifice Number	Diameter (in)	Height (ft)	QMax (cfs)
1	0	0	0
2	0	0	0
3	0	0	0

Trench Volume at Rise Head (acre-ft): .038

Pond Inflow: 0.10

Show Pond Table: Open Table

Total Volume Through Facility (acre-ft): 17.508

Percent Infiltrated: 100

Infiltration for all stormwater in Basin 1 of 194<sup>th</sup> St SE.

SWIN 12/11/14 10:00:21

File Edit View Help

Icons: [Home] [Back] [Forward] [Print] [Save] [Load] [Help]

**SCENARIOS**

Predeveloped

Modified

Run Scenario

**ELEMENTS**

Icons: [Gravel Trench] [Gravel Trench Bed] [Gravel Trench Bed 2] [Gravel Trench Bed 3] [Gravel Trench Bed 4] [Gravel Trench Bed 5] [Gravel Trench Bed 6] [Gravel Trench Bed 7] [Gravel Trench Bed 8] [Gravel Trench Bed 9] [Gravel Trench Bed 10] [Gravel Trench Bed 11] [Gravel Trench Bed 12] [Gravel Trench Bed 13] [Gravel Trench Bed 14] [Gravel Trench Bed 15] [Gravel Trench Bed 16] [Gravel Trench Bed 17] [Gravel Trench Bed 18] [Gravel Trench Bed 19] [Gravel Trench Bed 20] [Gravel Trench Bed 21] [Gravel Trench Bed 22] [Gravel Trench Bed 23] [Gravel Trench Bed 24] [Gravel Trench Bed 25] [Gravel Trench Bed 26] [Gravel Trench Bed 27] [Gravel Trench Bed 28] [Gravel Trench Bed 29] [Gravel Trench Bed 30] [Gravel Trench Bed 31] [Gravel Trench Bed 32] [Gravel Trench Bed 33] [Gravel Trench Bed 34] [Gravel Trench Bed 35] [Gravel Trench Bed 36] [Gravel Trench Bed 37] [Gravel Trench Bed 38] [Gravel Trench Bed 39] [Gravel Trench Bed 40] [Gravel Trench Bed 41] [Gravel Trench Bed 42] [Gravel Trench Bed 43] [Gravel Trench Bed 44] [Gravel Trench Bed 45] [Gravel Trench Bed 46] [Gravel Trench Bed 47] [Gravel Trench Bed 48] [Gravel Trench Bed 49] [Gravel Trench Bed 50] [Gravel Trench Bed 51] [Gravel Trench Bed 52] [Gravel Trench Bed 53] [Gravel Trench Bed 54] [Gravel Trench Bed 55] [Gravel Trench Bed 56] [Gravel Trench Bed 57] [Gravel Trench Bed 58] [Gravel Trench Bed 59] [Gravel Trench Bed 60] [Gravel Trench Bed 61] [Gravel Trench Bed 62] [Gravel Trench Bed 63] [Gravel Trench Bed 64] [Gravel Trench Bed 65] [Gravel Trench Bed 66] [Gravel Trench Bed 67] [Gravel Trench Bed 68] [Gravel Trench Bed 69] [Gravel Trench Bed 70] [Gravel Trench Bed 71] [Gravel Trench Bed 72] [Gravel Trench Bed 73] [Gravel Trench Bed 74] [Gravel Trench Bed 75] [Gravel Trench Bed 76] [Gravel Trench Bed 77] [Gravel Trench Bed 78] [Gravel Trench Bed 79] [Gravel Trench Bed 80] [Gravel Trench Bed 81] [Gravel Trench Bed 82] [Gravel Trench Bed 83] [Gravel Trench Bed 84] [Gravel Trench Bed 85] [Gravel Trench Bed 86] [Gravel Trench Bed 87] [Gravel Trench Bed 88] [Gravel Trench Bed 89] [Gravel Trench Bed 90] [Gravel Trench Bed 91] [Gravel Trench Bed 92] [Gravel Trench Bed 93] [Gravel Trench Bed 94] [Gravel Trench Bed 95] [Gravel Trench Bed 96] [Gravel Trench Bed 97] [Gravel Trench Bed 98] [Gravel Trench Bed 99] [Gravel Trench Bed 100]

Move Elements

Save [K] Load [L]

X [6] Y [2]

**Gravel Trench Bed 2**

Facility Name: Gravel Trench Bed 2

Outlet 1: 0 Outlet 2: 0 Outlet 3: 0

Downstream Connection: 0

Facility Type: Quick Trench

Precipitation Applied to Facility

Evaporation Applied to Facility

Facility Bottom Elevation (ft): 0

**Facility Dimensions**

Trench Length: 120.5

Trench Bottom Width: 3

Effective Total Depth: 3.6

Bottom slope of Trench: 0.01

Left Side Slope: 0.3

Right Side Slope: 0.3

**Outlet Structure**

Riser Height (ft): 0

Riser Diameter (ft): 0

Riser Type: Flat

Notch Type:

**Material Layers for**

Layer 1 Thickness (ft): 1.5

Layer 1 porosity: 0.25

Layer 2 Thickness (ft): 1

Layer 2 porosity: 0.25

Layer 3 Thickness (ft): 0

Layer 3 porosity: 0

**Infiltration** YES

Measured Infiltration Rate (in/hr): 3

Infiltration Reduction Factor: 1

Use Wetted Surface Area (sidewalks): NO

Total Volume Infiltrated (acre-ft): 52.109

Total Volume Through Piers (acre-ft): 0

**Orifice Diameter Height Orifice Number (in) (ft) (cfs)**

Orifice Number	Diameter (in)	Height (ft)	Orifice (cfs)
1	0	0	0
2	0	0	0
3	0	0	0

Trench Volume at Piers Head (acre-ft): 0.03

Pond Increment: 0.10

Show Pond Table: Open Table

Total Volume Through Facility (acre-ft): 52.109

Percent Infiltrated: 100

Groundwater: No

**Infiltration for all stormwater in Basin 2 of 194<sup>th</sup> St SE.**

The full stormwater analysis for each of these raingardens is attached to this document, as well as infiltration data supporting the infiltration rates used in the analysis.

**2. Describe how traffic safety and operations will not be adversely affected by this LID deviation:**

The proposed raingarden strip section will be separated from the roadway and function similar to a bioswale. The slopes of the raingarden strip are 3 to 1, gentle enough to prevent pedestrians from falling into the raingarden.

**3. Describe how the LID deviation will not adversely affect maintenance and associated costs:**

The raingarden will be maintained by the Clearwater Commons homeowner's association. Maintenance for the raingardens requires in general the same maintenance procedures as required for bioswales, planter strips and catch basins. Large debris should be removed from the raingarden and sediment should not be allowed to accumulate. Any pipelines connected to the raingarden should be checked for plugging.

Additional maintenance is to check on the plantings to make sure they are healthy and thriving, as well as perform some weeding tasks to prevent the total overgrowth of weeds in the raingarden.

**4. Describe how the aesthetic appearance will be maintained:**

It is recommended that low-maintenance plantings appropriate for use with raingardens be used in so that the aesthetic appearance will be easy to maintain. Along the right of way adjacent to the Clearwater Commons development, the community will maintain the plantings along 194<sup>th</sup> St. SE.

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This page to be completed by Planning and Development Services Staff

**ANALYSIS OF JUSTIFICATION FOR EDDS DEVIATION:**

- DOE Credits:
- Conformance to existing standard:
- Adverse Topography:
- Comparable to or exceeds Standards:
- Public cost savings:
- Improved Safety:
- Maintainability:
- Aesthetics:
- Water Quality:
- Other:

- Staff Recommendations:
  - Approve
  - Deny

*Somewhat changed from that previously approved.  
Now reingarden in R/W*

Basis:

Project Name: \_\_\_\_\_ PFN: 06131051 EDDS Section # 3-065

Certain projects may require review by other departments as applicable.

- Fire Marshal Review attached.
- Drainage Review attached.
- Traffic Review attached.

FINAL DECISION:  APPROVED  DENIED

Chief Engineering Officer: \_\_\_\_\_

*[Signature]*  
Randolph Sleight, P.E., P.L.S.

Date: 3/10/08

Attach a copy of the letter of notification  
cc Project File



**Snohomish County  
Planning and Development Services**

**Aaron Reardon**  
County Executive

(425) 388-3311  
FAX (425) 388-3872

M/S #604  
3000 Rockefeller Avenue  
Everett, WA 98201-4046

**CORRECTED DETERMINATION OF NONSIGNIFICANCE**

**Local File Number:** 06-131051-LU      **Project File Name:** Clearwater Commons

**Applicant:** Chad Port  
3630 123rd Street  
Seattle, WA 98125

**DESCRIPTION OF PROPOSAL:** Clearwater Commons, LLC, owns a 7.4 acre site in the North Creek Basin just north of Bothell in South Snohomish County *and proposes to construct 15 single family detached dwelling units.* The site lies between I-405 to the west, and Bothell-Everett Highway to the east between 194<sup>th</sup> Street SE and 196<sup>th</sup> Street SE. The site slopes generally from the northeast to the southwest, with slopes from approximately 5% to 15%. The existing road to the site is from 196<sup>th</sup> Street SE, and is gravel surfaced. This road extends 280 feet into the site and is proposed to be used for occasional materials delivery, but will be maintained as pedestrian access from the site to the Clearwater School and to 196<sup>th</sup> Street. Clearwater Commons, LLC, was granted a deviation to not install frontage improvements along 196<sup>th</sup> Street SE. Primary vehicular access to the site is planned from 194<sup>th</sup> Street SE. It is zoned multi-family residential (MR) and lies within the Urban Growth Area. The Clearwater School (grade school through high school) is directly across from the site along 196<sup>th</sup> Street SE. The site contains sensitive areas including wetlands (Category A, B and DEF) and North Creek (Type 2 Stream). A total of 4.64 acres of site contains critical areas and buffers that will be permanently protected under the developed proposal in a Native Growth Protection Area (NGPA). Clearwater Commons, LLC, proposes a site plan that will minimize the impact to these sensitive areas through extensive use of Low Impact Development (LID) techniques. Houses have reduced footprints, and are clustered. LID features also include minimizing impervious surfacing, preserving existing vegetation, incorporating amendments into soils to restore and improve localized infiltration, and creating bioretention (raingarden) areas. Water and Sewer is provided by Alderwood Water and Wastewater District.

Mitigation fees are to be paid in accordance with Chapters 30.66A, B, and C, SCC, for project impacts to community parks, nearby road system traffic and to the Everett School District No. 2, and to the Northshore School District No. 417.

An evaluation of the information submitted with the application coupled with an on-site investigation has resulted in a determination that the application complies with Chapter 30.62 SCC (Critical Area Regulations) and is consistent with the purpose and objectives of the chapter in regulation of development activities in critical areas to safeguard the public health, safety and welfare.

**Correction:** The correction made is to add the proposed number of dwelling units under the "Proposal Description" above. The number of units has not changed from the 15 units proposed at time of issuance of the original Determination of Nonsignificance (DNS) on December 17, 2008. Therefore, there is no need for a new comment and appeal period for the corrected DNS. This corrected DNS was mailed to the WSDOE, agencies listed on the Distribution List and the applicant on February 6, 2009.

**Location of Proposal:** 1415 196<sup>th</sup> Street SE, Bothell in Section 18, Township 27 North, Range 5 East, W.M., Snohomish County, Washington.



**Tax Account Numbers:** 270518-004-013-00  
270518-004-041-00

**Lead Agency:** Snohomish County Planning and Development Services

**THRESHOLD DETERMINATION:**

The lead agency for this proposal has determined that it does not have a probable, significant adverse impact on the environment. An environmental impact statement (EIS) is NOT required under RCW 43.21C.030(2)(c). This decision was made after review by Snohomish County of a completed environmental checklist and other information on file with this agency and such information is adopted herein by reference. This information is available for public review upon request.

This Determination of Nonsignificance is issued under WAC 197-11-340 (2) and is subject to a 14 day comment period. Written comments may be submitted to the lead agency at the address below. Comments must be received by 31 December 2008.

**APPEALS:**

This DNS may be appealed pursuant to the requirements of Section 30.61.300 SCC and Chapter 2.02 SCC. The fourteen (14) day appeal period commences on the date of publication of notice. Any appeal must be addressed to the County Hearing Examiner, accompanied by a filing fee of \$500.00, and be filed in writing at the Customer Support Center on the 2<sup>nd</sup> Floor, County Administration Building East, Everett, WA. The appeal must be received by 31 December 2008. The appeal must contain the items set forth in 30.71.050(5) SCC as follows:

- (a) Facts demonstrating that the person is aggrieved by the decision;
- (b) A concise statement identifying each alleged inadequacy in the threshold determination;
- (c) The specific relief requested; and
- (d) Any other information reasonably necessary to make a decision on appeal.

Please note that failure to file a timely and complete appeal including all the above items shall constitute waiver of all rights to an administrative appeal under county code. In addition to the above requirements, SCC 30.61.305(1) also requires that any person filing an appeal of a threshold determination made pursuant to this chapter shall file with the hearing examiner, within seven days of filing the appeal, a sworn affidavit or declaration demonstrating facts and evidence, that, if proven, would demonstrate that the issuance of the threshold determination was clearly erroneous.

**Contact Person:** Roxanne Pilkenton, Senior Planner

**Responsible Official:** Craig R. Ladiser, Director  
Planning and Development Services

**Address:** County Administration Building East, 2<sup>nd</sup> Floor  
3000 Rockefeller Avenue, M/S 604  
Everett, Washington 98201

**Signature:**

  
Darryl Eastin for Responsible Official

**Date:** 2-5-09

## **VOLUNTARY OFFERS**

This threshold determination was reached on the basis of mitigation offered voluntarily by the developer. The voluntary offers submitted were evaluated as part of this threshold determination, and are considered necessary to reduce the overall level of impact below that which is probable, significant and adverse.

## **DISCLAIMER**

The determination that an environmental impact statement does not have to be filed does not mean there will be no adverse environmental impacts. Snohomish County codes governing noise control, land use performance standards, construction and improvement of county roads, off site road improvement obligations, drainage control, fire protection and building practices will provide substantial mitigation of the aforementioned impacts.

The issuance of this Determination of Nonsignificance should not be interpreted as acceptance or approval of this proposal as presented. Snohomish County reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interest of the county and/or necessary for the general health, safety and welfare of the public to do so.

## **DISTRIBUTION LIST**

<b>Snohomish County</b>	Department of Public Works, Fire District #7 & #10
<b>Washington State</b>	Department of Ecology Department of Transportation Department of Fish and Wildlife
<b>Utilities</b>	Public Utility District #1 of Snohomish County Alderwood Water and Wastewater District
<b>Other Agencies</b>	Northshore School District No. 417 Snohomish Health District City of Bothell
<b>Adjacent Property Owners</b>	Notice of the issuance of this Determination of Nonsignificance has been mailed to property owners of record within 500 feet of the external boundaries of this project.

## **ATTACHMENTS**

*No attachments with corrected DNS*



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SEATTLE DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 3755  
SEATTLE, WASHINGTON 98124-3755

MAR 27 2009

Regulatory Branch

Clearwater Commons, LLC  
ATTN: Chad Port  
3630 123<sup>rd</sup> Street  
Seattle, Washington 98125

Reference: NWS-2008-101  
Clearwater Commons LLC

Dear Mr. Port:

We have reviewed your application to permanently fill less than 0.01 of an acre of wetland to widen 194<sup>th</sup> Street Southeast and install a sewer manhole; temporarily fill 0.04 of an acre of wetland to construct 194<sup>th</sup> Street Southeast and install a sanitary sewer line; and extend an 18-inch concrete culvert in an unnamed stream by 2 feet. The proposed work would occur in wetlands adjacent to North Creek near Bothell, Snohomish County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 29, *Residential Developments* (Federal Register, March 12, 2007 Vol. 72, No. 47), authorizes your proposal as depicted on the enclosed drawings, dated January 2, 2008. In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the enclosed *Nationwide Permit 29, Terms and Conditions* and the following special conditions:

a. You must implement and abide by the ESA requirements and/or agreements set forth in the *Habitat Management and Critical Areas Study*, dated January 3, 2008, in its entirety. The National Marine Fisheries Service (NMFS) concurred with a finding of "may affect, not likely to adversely affect" based on this document on April 29, 2008 (NMFS Reference Number 2008/02096). The U.S. Fish and Wildlife Service (USFWS) concurred with a finding of "may affect, not likely to adversely affect" based on this document on May 7, 2008 (USFWS Reference Number 13410-2008-I-0260). Both agencies will be informed of this permit issuance. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and your Corps permit. The USFWS/NMFS is the appropriate authority to determine compliance with ESA.

b. In order to protect Chinook salmon, steelhead, and bull trout, the permittee may conduct the authorized in-water activities during the period from July 1 through September 30 in any year this permit is valid. The permittee shall not conduct any in-water work authorized by this permit during the period from 1 October through 30 June in any year this permit is valid.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification and the Coastal Zone Management Act requirements for this NWP. No further coordination with Ecology is required.

We have reviewed your project pursuant to the requirements of the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act in regards to Essential Fish Habitat (EFH). We have determined that this project complies with the requirements of NWP National General Condition regarding ESA and will not adversely affect EFH.

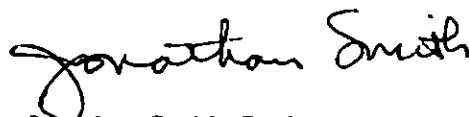
We have completed an approved jurisdictional determination for your project area which can be found on our website at <http://www.nws.usace.army.mil/> click on Regulatory, Regulatory/Permits, Recent Jurisdictional Determinations. If you object to this determination, you may request an administrative appeal under our regulations 33 CFR 331 as described in the enclosed *Appeal Process Fact Sheet* and the *Notification of Administrative Appeal Options and Process and Request for Appeal* form.

Our verification of this NWP authorization is valid for 2 years from the date of this letter unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date, please contact us to discuss the status of your authorization. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act. Also, you must obtain all State and local permits that apply to this project.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit* form. Thank you for your cooperation during the permit process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey form. This form and information about our program is available on our website.

If you have any questions about this letter, please contact me at telephone (206) 764-6910 or via email at [Jonathan.Smith@usace.army.mil](mailto:Jonathan.Smith@usace.army.mil).

Sincerely,



Jonathan Smith, Project Manager  
Regulatory Branch

Enclosures

3000 Rockefeller Ave., MS 604  
Everett, WA 98201  
1-800-562-4367  
(425) 388-3311

**Snohomish County Planning and Development Services**  
**Grading Permit - Commercial**

Assessor Property Tax #: 270518-004-013-00 Permit # **06 131051 CG**

Ref # 06131051

Site Address: 1415 196TH ST SE BOTHELL 98012  
Thomas Guide Page 456 D4

Expires: May 18, 2012

Issued: May 19, 2010

By: scdrar

Type: Commercial Property

Work Proposed: Grading Activity

Permit Description: APPLICATION EXTENDED UNTIL 3/16/2011  
Grading for site preparation and construction approval

Applicant: Chad Port

3630 NE 123rd ST SEATTLE WA 98125

(206) 229-8709 Work

(206) 229-8709 Home

Sec Twn Rng: 18-27-5 16th: 17 Lot: Subdiv.: LS 50-06

Zoning: MR

Ref File #: 06131051

R/W Inspector: Mike McCrorie Exc. Cu Yds 10

Fill Cu Yds

200

Special Conditions: 25 lb Snow Load Area (Itaylor 9/1/06)  
CASP A/F# is 200903050339

All site work must comply with Chapter 33 of the Uniform Building Code, Title 17 and Title 24 SCC. All activities determined complete after February 1, 2003, must comply with UDC 30.63 and UDC 30.63b. The permittee must notify the Snohomish County grading inspector twenty-four (24) hours prior to the beginning of the above described work.

Should building be contemplated, all requirements of the Uniform Building Code (as adopted and amended by Snohomish County) shall apply.

The permittee, or his agent, shall notify the grading inspector when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices and all erosion control measures, has been completed in accordance with the final approved grading plans, specifications, attachments and conditions. Copies of the approved plans, specifications, attachments and conditions shall be available on site at all times during construction.

The permittee, successors or assigns, agree to protect Snohomish County and save it harmless from all claims, actions or damages of every kind and description which may occur or be suffered by any person or persons, corporation or property, by reason of the construction, installation, maintenance and use of said earth fill or excavation.

ISSUANCE OF THIS GRADING PERMIT DOES NOT IMPLY APPROVAL OF PERMANENT DRAINAGE DESIGN NOR AUTHORIZE CONSTRUCTION OF WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

The permit shall be posted in an easily visible location on-site at all times during construction.

CALL (425) 388-3311, ExL 2473, FOR INSPECTION -- 24 HOUR ADVANCE NOTIFICATION REQUIRED.

BY: Thom A. Gabel Date 5/19/10  
Applicant or Applicant's Representative

# Snohomish County Planning and Development Services

## Retaining Wall Permit - Commercial

Assessor Property Tax #: 270518-004-013-00 Permit # **06 131051 002 00 RC**

Ref# 06131051

Site Address: 1415 196TH ST SE BOTHELL 98012  
Thomas Gulde Page 458 D4

Expires: May 19, 2012

Issued: May 19, 2010

By: scdrar

Type:

Work Proposed: New

Permit Description: APPLICATION EXTENDED UNTIL 3/16/2011  
Construction of a retaining wall along the south side of 194th St. SE

Applicant: Chad Port

3630 NE 123rd ST SEATTLE WA 98125

(206) 229-8709 Work

(206) 229-8709 Home

Occupant: Clearwater Commons LLC

11748 Lakeside AVE NE SEATTLE WA 98125

(425) - Work

(425) - Home

Contact Person: Chad Port

3630 NE 123rd ST SEATTLE WA 98125

(206) 229-8709 Work

(206) 229-8709 Home

Sec Twn Rng: 18-27-5

16th: 17

Lot:

Subdiv.: LS 50-06

Zoning: MR

Ref File #: 06131051

Valuation \$

20000

LDC

slh

R/W Inspector:

Mike McCrorie

Special Conditions: 25 lb Snow Load Area (Itaylor 9/1/06)

PROPERTY OWNERS ARE RESPONSIBLE FOR DETERMINING ALL PROPERTY LINE LOCATIONS AND RELATED EASEMENTS.

\_\_\_\_ I certify that I am exempt from the requirements of state contractor's registration under Sec. 3, Chap. 126, Laws of 1967.

I certify that the information furnished by me is true and correct to the best of my knowledge and all work will conform to applicable Snohomish County Code.

Signature Thom O. G. [Signature]

Date 5/19/10

**Snohomish County Planning and Development Services (PDS)**  
3000 Rockefeller Avenue, M/S 604, Everett, WA 98201 (425) 388-3311

PDS Use Only

Project File Number \_\_\_\_\_ Date Received \_\_\_\_\_

Project Manager (Planner) \_\_\_\_\_

Transportation Reviewer (TDR) \_\_\_\_\_



**LID**

**LOW IMPACT DEVELOPMENT (LID)  
DEVIATION FROM ENGINEERING DESIGN &  
DEVELOPMENT STANDARDS (EDDS)**

**ROAD WIDTH and FRONTAGE IMPROVEMENTS –  
194<sup>TH</sup> ST. SE**

**Instructions:**

Attach copies of the EDDS section(s) and/or drawings for which a deviation is requested. Include documentation such as drainage calculations, other engineering data and drawings, which will verify and substantiate the request. Engineering elements not meeting the required standards may require submittal by an engineer licensed in the State of Washington.

Submit 3 complete sets of copies of the request and documentation to: PDS CSC 2<sup>nd</sup> floor, Admin East, 3000 Rockefeller Ave, Everett, WA 98201. ONE DEVIATION PER FORM.

**Project Name:** Clearwater Commons – Offsite Development of 194<sup>th</sup> St. SE

**Requestor:** Mark Buehrer, PE

**Firm:** 2020 Engineering

**Phone:** (360) 671-2020      **Email:** mark@2020engineering.com

**Address:** 700 Dupont St. PO Box 1621

**City, Zip:** Bellingham, Washington 98227

**Check EDDS edition:**  1992  2003  2004 Revision

**Chapter/Section :** EDDS 3-04 **Standard Drawing:** 3-065

**Describe the EDDS standard to be deviated from:**

Standard Drawing 3-065 (Road Standards – Urban Non-Arterials).

Standard Drawing 3-065 identifies detailed design elements for design speed, pavement width, travel lane dimensions, planter width, sidewalk width, and RW width.