



DEVELOPMENT SERVICES DEPARTMENT  
 ENVIRONMENTAL COORDINATOR  
 450 110<sup>th</sup> Ave NE., P.O. BOX 90012  
 BELLEVUE, WA 98009-9012

**OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS**

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 15-113153-LO

Project Name/Address: Marvel Homes-Single Family Residence/6251 116th Ave SE

Planner: Heidi M. Bedwell

Phone Number: 425-452-4862/hbedwell@bellevuewa.gov

**Minimum Comment Period:** June 18, 2015

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

**OTHERS TO RECEIVE THIS DOCUMENT:**

- State Department of Fish and Wildlife / [Stewart.Reinbold@dfw.gov](mailto:Stewart.Reinbold@dfw.gov); [Christa.Heller@dfw.wa.gov](mailto:Christa.Heller@dfw.wa.gov);
- State Department of Ecology, Shoreline Planner N.W. Region / [Jobu461@ecy.wa.gov](mailto:Jobu461@ecy.wa.gov); [sepaunit@ecy.wa.gov](mailto:sepaunit@ecy.wa.gov)
- Army Corps of Engineers [Susan.M.Powell@nws02.usace.army.mil](mailto:Susan.M.Powell@nws02.usace.army.mil)
- Attorney General [ecyolyef@atg.wa.gov](mailto:ecyolyef@atg.wa.gov)
- Muckleshoot Indian Tribe [Karen.Walter@muckleshoot.nsn.us](mailto:Karen.Walter@muckleshoot.nsn.us); [Fisheries.fileroom@muckleshoot.nsn.us](mailto:Fisheries.fileroom@muckleshoot.nsn.us)

**PART ELEVEN - FORMS**

**WAC 197-11-960 Environmental Checklist.**

**ENVIRONMENTAL CHECKLIST**

*Purpose of Checklist:*

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

*Instructions for Applicants:*

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if the question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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

**A. BACKGROUND**

1. Name of proposed project: **Marvel Homes Reasonable Use Exception**
2. Name of Applicant: **Marvel Homes, Inc.**
3. Mailing address, phone number of applicant and contact person:

<b><u>Applicant and Primary Contact:</u></b> <b>Marvel Homes, Inc.</b> <b>Rene Pham</b> <b>(206) 265-1311</b> <a href="mailto:marvelhomeinc@gmail.com">marvelhomeinc@gmail.com</a>	<b><u>Secondary Contact (Completed Checklist):</u></b> <b>Mark Rigos, P.E.</b> <b>440 SE Darst Street</b> <b>Issaquah, WA 98027</b> <a href="mailto:markrigos@hotmail.com">markrigos@hotmail.com</a> <b>(425) 652-6013</b>
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4. Date checklist prepared: **April 19, 2015**
5. Agency requesting checklist: **City of Bellevue**
6. Proposed timing or schedule (including phasing, if applicable):  
**The hopeful timing for a Reasonable Use Exception approval to be issued by the City of Bellevue is during summer 2015.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.  
**No, only the construction of a three-story single-family home with attached garage as shown on the preliminary civil engineering plans is proposed.**
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.  
**A Category II wetland is onsite and was delineated in early 2015. It was previously delineated approximately six years earlier. A non-fishing bearing stream (Type N water) flows south to north at the wetland's low point. The stream's Ordinary High Water Marks (OHWMs) have been estimated and flagged. A Conceptual Wetland Buffer Mitigation Plan has been designed.**
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.  
**There are none.**
10. List any governmental approvals or permits that will be needed for your proposal, if known.  
**Reasonable Use Exception approval from the City of Bellevue and possible Right-of-Way Use Permit from the City of Bellevue**
11. Give brief, complete description of your proposal, including uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information or project description).  
**The existing site is heavily vegetated and vacant. The site's area is 100% encumbered by either wetland, stream or wetland and stream buffers. The site is roughly 85,916 square feet (approximately two acres). The site contains mostly deciduous trees, but a few evergreen trees. A 3-story home with attached garage are proposed. This will include connections to public utilities such as electricity, tv, phone, water and sewer.**
12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, if any, and section, township, and range, if known. If the proposal would occur over a range of area, provide the range of boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.  
**The site's tax parcel number is 334330-1221. It's located immediately west of 116<sup>th</sup> Avenue SE, in the very southwest corner of the City of Bellevue. The site is completely surrounded by single-family homes, except to the east which is 116<sup>th</sup> Avenue SE. A vicinity map and topographic survey are attached with this submittal.**

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

- a. General description of the site (circle one): Flat, rolling, hilly, steep, slopes, mountains, other.  
**The parcel slopes down from south to north. Also, the east and west sides slope down to the middle, toward the stream.**
- b. What is the steepest slope on the site (approximate percent slope)?  
**Approximately 20-30%.**
- c. What general types of soils are found on the site (for example: clay, sand, gravel, peat, muck?)  
 If you know the classification of agricultural soils, specify them and note any prime farmland.  
**The soils include sand, gravel, silt and loam. The soils are not very permeable as evidenced by the wetland.**

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

**Do not know.**

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

**A very small amount of fill is proposed... probably on the order of 10-20 cubic yards for the driveway base course and some gravel / crushed rock / pea gravel / utility trenches for the home foundation. The source of fill is not yet known. A home contractor has not yet been selected.**

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

**It's unlikely, but if not properly designed for, erosion can occur. A Temporary Erosion and Sedimentation Control (TESC) Plan has been designed and is included in the submittal package. It includes silt fence, clearing / grading limits, construction entrance and filter fabric on nearby catch basins. TESC measures will be implemented to minimize erosion during construction.**

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

**Approximately 2-3%. This includes the driveway and home / garage footprint.**

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

**A TESC Plan has been designed which includes Best Management Practices (BMPs) to reduce and control erosion.**

**Erosion control per BCC 23.76**

**Project will be required to submit a CSSWP as part of the building permit process**

2. Air

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

**Does not apply.**

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

**No.**

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

**No measures are proposed.**

3. Water

a. Surface:

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

**Yes, a non-fish bearing stream is located in the center of the site. It flows south to north at 1-3% through the site. The stream has an upstream tributary area of 20-50 acres and is downstream of the new middle school under-construction in the City of Newcastle. Immediately east and west of the stream is a wetland. The wetland sheet flows water into the stream. The soils in the wetland are hydric and there are several seeps in the wetland area. Several culverts discharge onsite toward the stream / wetland. The wetland is a Category II wetland. Approximately 2 miles northwest of the site, the stream flows into Lake Washington.**

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

**Yes, all of the project will be within 200 feet of the wetland and stream. Attached are plans that show the wetland and stream's locations versus the proposed improvements.**

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

**None.**

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

**No.**

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

**No.**

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

**No.**

b. Ground:

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

**No and no.**

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

**The home will be served by a new side sewer connected from the existing sanitary sewer main on the north side of the site.**

c. Water Runoff (including stormwater):

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

**Stormwater generated from the new home and new driveway will be dispersed via a dispersion trench in the wetland buffer above the stream. This runoff eventually flows into Lake Washington several miles downstream.**

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

**No.**

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

**A Storm Drainage Plan has been designed. The dispersion trench will mimic existing conditions as a Flow Control BMP (Best Management Practice).**

#### 4. Plants

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

\_\_\_\_\_ deciduous trees: alder, maple, aspen, other

\_\_\_\_\_ evergreen trees: fir, cedar, pine, other

\_\_\_\_\_ shrubs

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- \_\_\_\_\_ pasture
- \_\_\_\_\_ crop or grain
- X** \_\_\_\_\_ wet solid plants: cattail, buttercup, bullrush, skunk cabbage, other
- \_\_\_\_\_ water plants: water lily, eelgrass, milfoil, other
- \_\_\_\_\_ other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?  
**Not very much vegetation will be removed. Some shrubs, approximately 5-10 trees and some groundcover will be removed so that the home can be constructed. Also removed will be invasive non-native Himalayan blackberry.**
- c. List threatened or endangered species known to be on or near the site.  
**None to my knowledge.**
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.  
**A Conceptual Wetland Buffer Mitigation Plan has been designed to offset the impacts to the critical area buffers as a result of the home.**

**5. Animals**

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:  
Birds: hawk, heron, eagle, songbirds, other: crows  
Mammals: deer, black bear, elk, beaver, other: covotes  
Fish: bass, salmon, trout, herring, shellfish, other: \_\_\_\_\_
- b. List any threatened or endangered species known to be on or near the site.  
**No threatened or endangered species are known to be on or near the site.**
- c. Is the site part of a migration route? If so, explain.  
**Not to my knowledge.**
- d. Proposed measures to preserve or enhance wildlife, if any.  
**Many existing deciduous and evergreen trees will be preserved, thus preserving valuable bird habitat and animal shelter. The wetland buffer mitigation plan will provide new native shrubs and trees which will enhance wildlife.**

**6. Energy and Natural Resources**

- a. What kind of energy (electric, natural gas, oil, wood, stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.  
**Electric and possibly natural gas, if gas is available in 116<sup>th</sup> Avenue SE.**
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.  
**No.**
- c. What kind of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.  
**None.**

**7. Environmental Health**

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

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No.

1. Describe special emergency services that might be required.

**None.**

2. Proposed measures to reduce or control environmental health hazards, if any.

**None.**

b. Noise

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

**None.**

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

**On a short-term basis, there will be some construction noise from building a home, such as a backhoe, concrete pump truck, other construction machinery and general laborers. On a long-term basis, there will essentially be no noise generated, because of the single-family use.**

3. Proposed measures to reduce or control noise impacts, if any.

**None.**

**Noise will be limited by BCC 9.12**

8. Land and Shoreline Use

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

**The site's current use is vacant and heavily vegetated. It's used by some wildlife. North, west and south of the site contain single-family homes. East of the site is 116<sup>th</sup> Avenue SE.**

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

**Not to my knowledge.**

c. Describe any structures on the site.

**There are no structures onsite.**

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

**No**

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

**R-5.**

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

**Single-family residential.**

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

**Probably does not apply.**

**Not w/in shoreline jurisdiction**

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

**Yes, a Category II wetland and Type N water (stream) are located in the center of the site. They are shown and labeled on the preliminary civil engineering plans.**

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

**One family.**

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

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**None.**

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

**None.**

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

**The project is for single-family residential, which is compatible with existing and projected local land uses and plans.**

**9. Housing**

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

**One unit of middle to high income housing.**

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

**None.**

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

**None.**

**10. Aesthetics**

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

**The two-story home will be approximately 30 feet tall. Proposed exterior building materials are unknown at this time.**

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

**None.**

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

**None.**

**11. Light and Glare**

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

**Very little. During dusk and dawn hours.**

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

**No.**

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

**None.**

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

**None.**

**Lighting will be limited by performance standards 20.25H Critical Areas**

**12. Recreation**

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

**Lake Washington is one mile west of the site. There is fishing, kayaking and boating there. Newcastle Beach Park is 2 miles northwest of the site. This park contains bbq grills, a beach, and playground equipment. Newcastle Golf Club, a 36-hole destination golf course, is several miles east of the site. Lake Boren is approx. one mile to the south, which has tennis courts, basketball hoops, playground equipment, etc.**

- b. Would the proposed project displace any existing recreational uses? If so, describe.  
**No.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.  
**None.**

**13. Historic and Cultural Preservation**

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.  
**None to my knowledge.**
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.  
**To my knowledge, there are no known archaeological, historical, scientific, and/or cultural landmarks on or next to the site.**
- c. Proposed measures to reduce or control impacts, if any.  
**None.**

**14. Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.  
**Access to the site is from 116<sup>th</sup> Avenue SE. The site is a couple blocks south of SE 60<sup>th</sup> Street. The site is close to the City boundaries of Newcastle and Bellevue, but is slightly inside Bellevue. I-405 is approximately one mile west of the site.**
- b. Is site currently serviced in public transit? If not, what is the approximate distance to the nearest transit stop?  
**Public transit is located along Lake Washington Boulevard a few blocks west of the site and on Newcastle Way a few blocks south of the site.**
- c. How many parking spaces would the completed project have? How many would the project eliminate?  
**Two parking spaces, which is assumed for single-family residential use.**
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).  
**No.**
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.  
**No.**
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.  
**The completed project will generate approximately 4 vehicular trips per day.**
- g. Proposed measures to reduce or control transportation impacts, if any.  
**None.**

**15. Public Services**

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

- b. Proposed measures to reduce or control direct impacts on public services, if any.  
**None are proposed.**

**16. Utilities**

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

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

**The following utilities services are available:**

- Electricity: Puget Sound Energy**
- Water: City of Bellevue**
- Refuse: Waste Management**
- TV: Comcast**
- Telephone: Century Link**
- Sanitary Sewer: City of Bellevue**
- Natural Gas: Puget Sound Energy (unsure if available)**
- Storm Drainage: City of Bellevue**

**C. SIGNATURE**

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

Signature of Property Owner:  \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Applicant:  \_\_\_\_\_

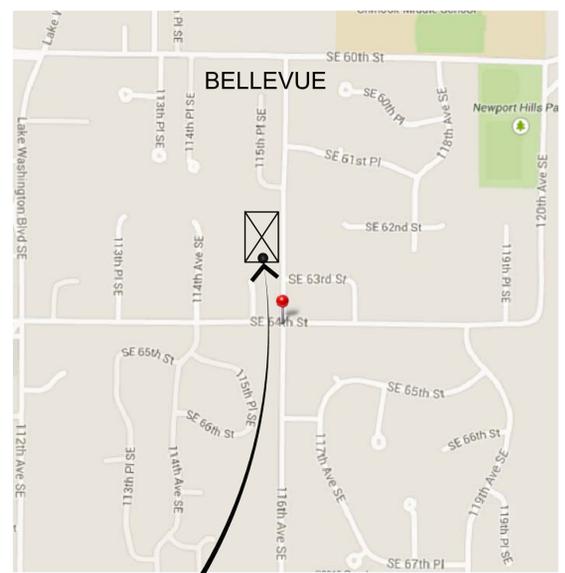
Date: \_\_\_\_\_

# MARVEL HOMES RUE



**LEGEND**

- [Symbol] = EXISTING STRUCTURE
- [Symbol] = WETLAND
- [Symbol] = OHM (ORDINARY HIGH WATER MARK) FLAG
- [Symbol] = WLF (WETLAND FLAG)
- [Symbol] = TREE TO BE REMOVED
- [Symbol] = DECIDUOUS (EX.) TREE
- [Symbol] = ESTIMATED TREE DRUPLINE DIAMETER
- [Symbol] = STREAM FLOW ARROW
- [Symbol] = EXISTING GRAVEL
- [Symbol] = PROPOSED CONCRETE
- [Symbol] = PROPOSED PAVEMENT
- [Symbol] = PROPOSED SAWCUT PAVEMENT
- [Symbol] = PROPOSED WETLAND BUFFER ENHANCEMENT
- [Symbol] = OHM = ORDINARY HIGH (WATER) MARK
- [Symbol] = HMA = HOT MIX ASPHALT
- [Symbol] = FF = FINISH FLOOR ELEVATION
- [Symbol] = EX. = EXISTING
- [Symbol] = TYP. = TYPICAL
- [Symbol] = IE = INVERT ELEVATION
- [Symbol] = CPEP = CORRUGATED POLYETHYLENE PIPE
- [Symbol] = --- = TEMP. SILT FENCE
- [Symbol] = LS = LANDSCAPING
- [Symbol] = DWY = DRIVEWAY
- [Symbol] = BSBL = BUILDING SETBACK LINE
- [Symbol] = PT = POINT OF TANGENCY
- [Symbol] = LS = LANDSCAPE
- [Symbol] = PC = POINT OF CURVATURE
- [Symbol] = CPEP = CORRUGATED POLYETHYLENE PIPE



PROJECT LOCATION  
VICINITY MAP SCALE: NTS

## PROJECT INFORMATION

### SITE ADDRESS:

NOT YET ASSIGNED  
SECTION 20, TOWNSHIP 24 NORTH,  
RANGE 5 EAST, W.M.

### PROJECT INFO:

TAX PARCEL NUMBER 334330-1221  
SITE AREA = 85,916 SF (1.97 ACRES)  
EXISTING IMPERVIOUS AREA = 0 SF  
EXISTING PERVIOUS AREA = 85,916 SF  
**CRITICAL AREAS**  
WETLAND AND STREAM AREA = 38,385 SF  
WETLAND AND STREAM BUFFER AREA = 47,531 SF  
NON CRITICAL AREA OR NON CRITICAL AREA BUFFER = 0 SF  
ONSITE IMPROVEMENT (PROPOSED DISTURBANCE) AREA = 2,100 SF  
MAX. ALLOWED RUE DISTURBANCE AREA = 2,100 SF  
PROPOSED BUFFER ENHANCEMENT AREA = MORE THAN 2,100 SF  
DISTURBANCE / ENHANCEMENT RATIO = LESS THAN 1:1  
WATER PURVEYOR = CITY OF BELLEVUE  
SEWER PURVEYOR = CITY OF BELLEVUE  
PERMITTING JURISDICTION = CITY OF BELLEVUE  
ZONING = R-5

### PROPERTY OWNER:

SONNY AND CAROLINE NGO

### APPLICANT:

MARVEL HOMES, INC.  
RENE PHAM  
(206) 265-1311

### SURVEYOR:

GEODIMENSIONS, INC.  
ED GREEN, PLS  
10801 MAIN STREET, SUITE 102  
BELLEVUE, WA 98004  
(425) 458-4488

### CIVIL ENGINEER:

MARK RIGOS, P.E.  
440 SE DARST STREET  
ISSAQUAH, WA 98027  
(425) 652-6013  
MARKRIGOS@HOTMAIL.COM

### WETLAND BIOLOGIST:

MARK RIGOS, P.E.  
440 SE DARST STREET  
ISSAQUAH, WA 98027  
(425) 652-6013  
MARKRIGOS@HOTMAIL.COM

### SHEET INDEX

C1.0	COVER SHEET
C2.0	SITE PLAN AND TESC PLAN
C3.0	PRELIMINARY GRADING, STORM DRAINAGE, UTILITIES PLAN AND CONCEPTUAL WETLAND BUFFER ENHANCEMENT PLAN
W1.0	WETLAND BUFFER MITIGATION NOTES AND DETAILS
1 OF 1	TOPOGRAPHIC SURVEY (BY OTHERS)

### LEGAL DESCRIPTION

PARCEL 334330-1221

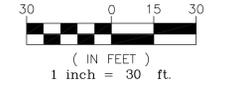
THE NORTH HALF OF LOT 187 OF C.D. HILLMAN'S LAKE WASHINGTON GARDEN OF EDEN ADDITION TO SEATTLE, DIVISION NO. 3, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 11 OF PLATS, PAGE 81, IN KING COUNTY, WASHINGTON.

THERE ARE NO EASEMENTS AFFECTING THE SUBJECT PROPERTY PER THE ABOVE REFERENCE TITLE REPORT.

### SPECIAL NOTES:

- PER KING COUNTY IMAP, SE 62 ND STREET AND 115TH PLACE SE ARE PUBLIC RIGHT-OF-WAYS, NOT PRIVATE ROADWAYS. PRIOR TO GRADING FOR UTILITIES, CONTRACTOR SHALL CONFIRM WITH THE PLS.

### GRAPHIC SCALE



Call 2 Working Days Before You Dig  
**1-800-424-5555**  
Utilities Underground Location Center  
(ID, MT, ND, OR, WA)  
SAFETY PRECAUTION SHALL BE IMPLEMENTED BY CONTRACTORS AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS  
ELECTRIC-RED SEWER-GREEN GAS/OIL-YELLOW SURVEY-PINK TELECOM-ORANGE PROPOSED-WHITE WATER-BLUE

## COVER SHEET

SCALE = 1"=30'



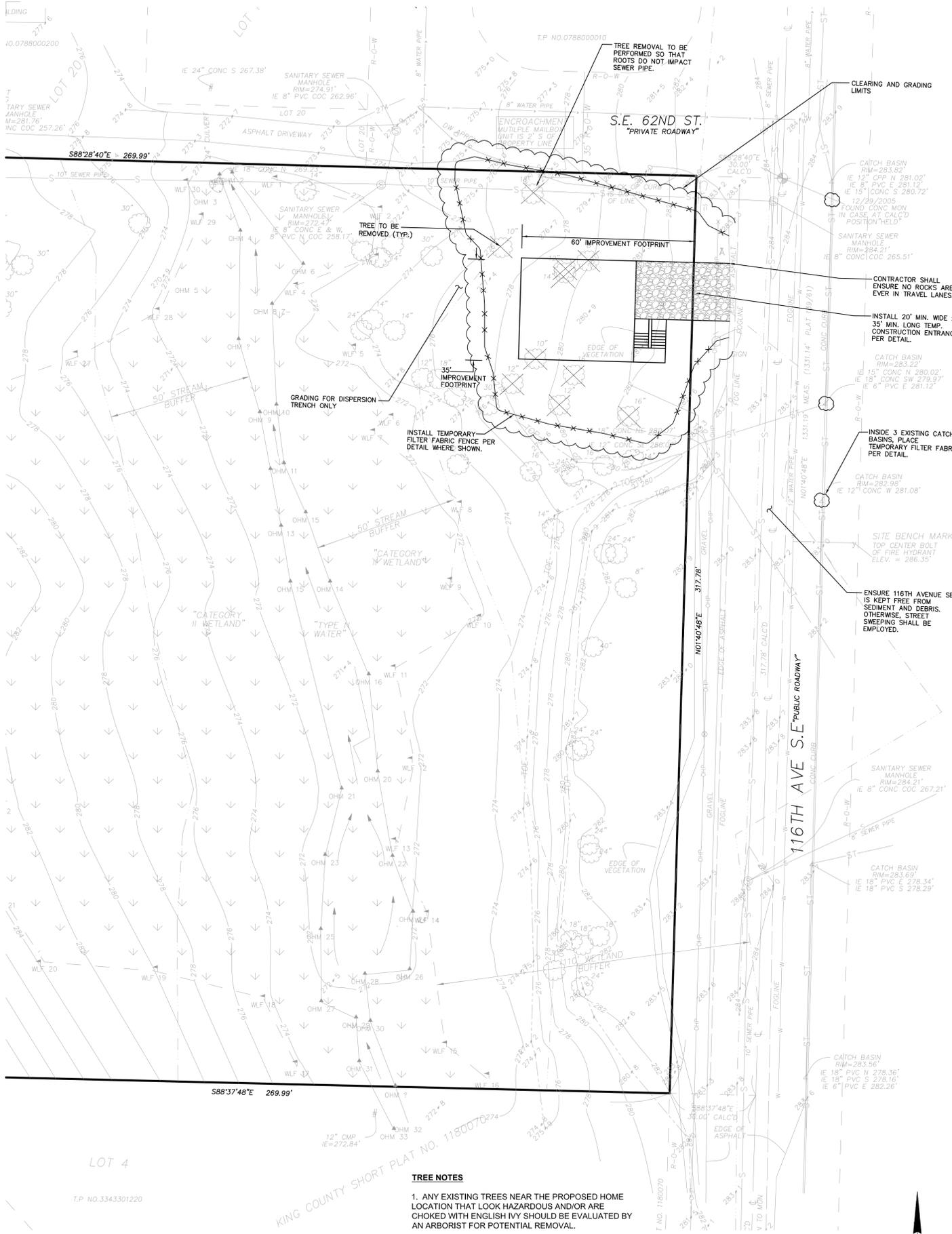
MARK RIGOS  
440 SE DARST STREET  
ISSAQUAH, WA 98027  
(425) 652-6013

MARVEL HOMES REASONABLE USE EXCEPTION  
SE 64TH STREET & 116TH AVENUE SE  
BELLEVUE, WA

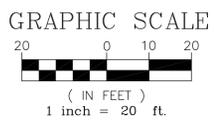
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1	03/02/15

DATE: 04/30/2015

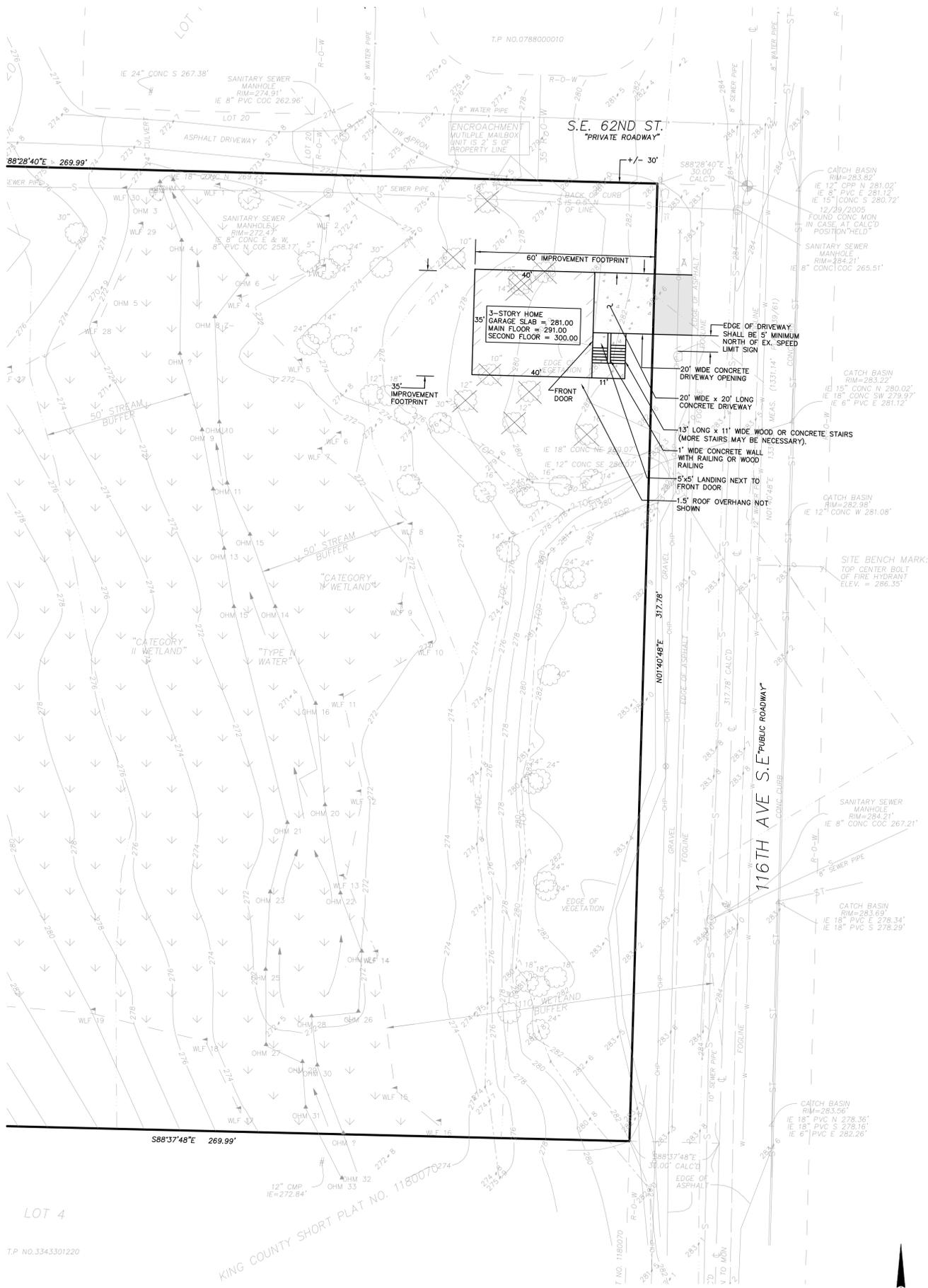
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**TREE NOTES**  
 1. ANY EXISTING TREES NEAR THE PROPOSED HOME LOCATION THAT LOOK HAZARDOUS AND/OR ARE CHOKED WITH ENGLISH IVY SHOULD BE EVALUATED BY AN ARBORIST FOR POTENTIAL REMOVAL.

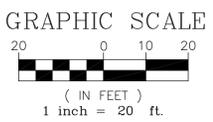


**TESC PLAN**  
 SCALE = 1"=20'



3-STOREY HOME  
 GARAGE SLAB = 281.00  
 MAIN FLOOR = 291.00  
 SECOND FLOOR = 300.00

- EDGE OF DRIVEWAY SHALL BE 5' MINIMUM NORTH OF EX-SPEED LIMIT SIGN
- 20' WIDE CONCRETE DRIVEWAY OPENING
- 20' WIDE X 20' LONG CONCRETE DRIVEWAY
- 13' LONG X 11' WIDE WOOD OR CONCRETE STAIRS (MORE STAIRS MAY BE NECESSARY).
- 1" WIDE CONCRETE WALL WITH RAILING OR WOOD RAILING
- 5'-4" LANDING NEXT TO FRONT DOOR
- 1.5' ROOF OVERHANG NOT SHOWN



**SITE PLAN**  
 SCALE = 1"=20'



**MARK RIGOS**  
 440 SE DARST STREET  
 ISSAQUAH, WA 98027  
 (425) 652-6013

**MARVEL HOMES REASONABLE USE EXCEPTION**  
 SE 64TH STREET & 116TH AVENUE SE  
 BELLEVUE, WA

REV.	DATE:
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**C2.0**



**GENERAL NOTES:**

- THE GOAL OF THIS MITIGATION PLAN IS TO PROVIDE EQUIVALENT OR GREATER HABITAT ASSOCIATED WITH WETLAND BUFFER RESTORATION. IT IS A 3-YEAR MONITORING PERIOD.
- VEGETATION WILL HAVE 100% SURVIVAL RATE AFTER YEAR 1 AND 85% AFTER YEAR 2. VEGETATION WILL HAVE AN 80% SURVIVAL RATE THROUGH THE MONITORING PERIOD. THERE WILL BE LESS THAN 10% AERIAL COVER BY NON-NATIVE INVASIVE SPECIES IN THE MITIGATION AREAS DURING THE ENTIRE MONITORING PERIOD.
- SHRUB COVER WILL BE GREATER THAN 60% AFTER YEAR 1, AND GREATER THAN 60% AFTER YEAR 2, AND GREATER THAN 85% AFTER YEAR 3.
- NON-NATIVE INVASIVE PLANTS WILL NOT MAKE UP MORE THAN 10% OF COVER IN ANY GROWING SEASON.
- IF ANY MONITORING REPORT OR CITY INSPECTION SHOWS THAT MITIGATION IS NOT MEETING THESE PERFORMANCE STANDARDS, BOND HOLDER WILL WORK WITH CITY TO PERFORM CORRECTIVE ACTIONS APPROPRIATE TO THE MITIGATION. E.G., FAILING PLANTS WILL BE REPLACED, OTHER PLANT SPECIES WILL BE SUBSTITUTED, NON-NATIVE INVASIVE WILL BE REMOVED BY HAND WITHOUT PESTICIDES, ETC.
- WHEN IT IS AVAILABLE, CONTACT INFORMATION MUST BE PROVIDED TO CITY FROM THE APPLICANT THAT INCLUDES NAMES, ADDRESSES, AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTING, AND PERFORMING REQUIRED MAINTENANCE AND MONITORING.
- THE MITIGATION AREA SHALL BE WATERED 2-3 TIMES PER WEEK (OR AS APPROPRIATE) DURING THE VARIOUS SEASONS TO ENSURE A HIGH SHRUB SURVIVAL RATE.
- IMPLEMENTATION OF THE MITIGATION PLAN MUST OCCUR WITHIN 60 DAYS OF THE DATE OF THE MITIGATION BOND. INSTALLATION MUST BE INSPECTED AND APPROVED BY CITY. THE INSTALLATION INSPECTION WILL VERIFY THAT SOILS HAVE BEEN DECONTAMINATED AND AMENDED, PLANTS ARE INSTALLED ACCORDING TO DESIGN AND IN GOOD HEALTH, AREA HAS BEEN SEEDED, AND OTHER CONDITIONS HAVE BEEN MET. NURSERY INVOICES MUST BE PROVIDED TO INSPECTOR. ONCE APPROVED, MONITORING PERIOD BEGINS.
- MONITORING PERIOD WILL BE FOR THREE YEARS, WITH RESULTS OF ANNUAL MONITORING EVENTS REPORTED TO THE CITY. MONITORING MAY BE EXTENDED IF FINAL INSPECTION SHOWS RESTORATION HAS NOT ACHIEVED PERFORMANCE STANDARDS, UNTIL SUCH TIME AS PERFORMANCE STANDARDS HAVE BEEN MET.
- MONITORING MUST INCLUDE DESCRIPTION/DATA FOR:
  - PLANT SURVIVAL, VIGOR, AND ESTIMATED AERIAL COVERAGE
  - OBSERVED WILDLIFE, INCLUDING AMPHIBIANS, AVIANS, AND OTHERS
  - RECEIPTS FOR OFFSITE DISPOSAL OF ANY DUMPING, WEEDS, OR INVASIVE PLANTS
  - 4"x6" COLOR PHOTOGRAPHS FROM PERMANENT PHOTO-POINTS AS SHOWN ON REVISED MITIGATION PLANS
- THE MITIGATION AREA/BUFFER MUST BE IDENTIFIED USING PERMANENT SENSITIVE AREA BOUNDARY SIGNS INSTALLED WHERE ON THE PLAN. ONE SIGN MUST BE POSTED EVERY 50' IN A PROMINENT LOCATION, I.E. AT THE CLOSEST POINT TO ADJUTING DEVELOPMENT. REVISED PLANS MUST INCLUDE PROPOSED SIGN LOCATIONS. SIGNS ARE AVAILABLE FOR SALE AT THE KING COUNTY DDES CASHIER.
- ANY DEFICIENCY DISCOVERED DURING ANY MONITORING OR INSPECTION VISIT MUST BE CORRECTED WITHIN 60 DAYS.
- PRIOR TO BEGINNING ANY WORK, THE APPLICANT MUST PROVIDE A RESTORATION BOND OR ASSIGNMENT OF FUNDS PER CITY PROCEDURES. A BOND QUANTITY WORKSHEET WILL NEED TO BE COMPLETED BASED ON ALL ELEMENTS OF THE MITIGATION PLAN. THE TOTAL COST, PLUS CONTINGENCY FEES, WILL BE THE AMOUNT OF THE RESTORATION BOND. THE APPLICANT IS REQUIRED TO PROVIDE. NOTE THAT THE APPROVED BOND WILL INCLUDE REQUIRED START DATE FOR MITIGATION CONSTRUCTION. BONDS ARE ELIGIBLE FOR REDUCTION TO MAINTENANCE STATUS AS SOON AS THREE YEARS AFTER SUCCESSFUL INSTALLATION INSPECTION, PROVING THAT IT ALSO MEETS PERFORMANCE STANDARDS ESTABLISHED IN THE MITIGATION PLAN AND KING COUNTY SENSITIVE AREA MITIGATION GUIDELINES (OCTOBER 2000).
- STANDARDS: ALL WORK AND MATERIALS SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS, AND TO THE SPECIFICATIONS AND DETAILS SHOWN ON THESE PLANS.
- CONTRACTOR'S QUALIFICATIONS: ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR CITY ECOLOGIST.
- SITE CONDITIONS: THE APPLICANT SHALL IMMEDIATELY NOTIFY CITY OF ANY DISCREPANCIES BETWEEN THESE PLANS AND THE SITE CONDITIONS. THE LOCATIONS OF PLANTS AND THE QUANTITIES OF PLANTS SHOWN MAY BE MODIFIED IN THE FIELD BY THE LANDSCAPE DESIGNER AND / OR THE WETLAND BIOLOGIST BASED ON FIELD CONDITIONS AT THE TIME OF PLANTING.
- PLANTS: PLANTS IN NUMBER AND SIZE ARE REQUIRED IN ACCORDANCE WITH APPROVED PLANS.
  - A. ORIGIN: PLANT MATERIALS SHALL BE NATIVE PLANTS, NURSERY GROWN IN THE PUGET SOUND AREA OF WASHINGTON. DIG PLANTS MAY ONLY BE USED UPON APPROVAL OF THE CITY.
  - B. HANDLING: PLANTS SHALL BE HANDLED SO AS TO AVOID ALL DAMAGE, INCLUDING BREAKING, BRUISING, ROOT DAMAGE, SUNBURN, DRYING, FREEZING OR OTHER INJURY. PLANTS MUST BE COVERED DURING TRANSPORT. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE IN A MANNER THAT COULD DAMAGE BRANCHES. PROTECT PLANT ROOTS WITH SHADE AND WET SOIL IN THE TIME PERIOD BETWEEN DELIVERY AND INSTALLATION. DO NOT LET CONTAINER STOCK BY TRUNKS, STEMS, OR TOPS. DO NOT REMOVE FROM CONTAINERS UNTIL READY TO PLANT. WATER ALL PLANTS AS NECESSARY TO KEEP MOISTURE LEVELS APPROPRIATE TO THE SPECIES HORTICULTURAL REQUIREMENTS. PLANTS SHALL NOT BE ALLOWED TO DRY OUT. ALL PLANTS SHALL BE WATERED THOROUGHLY IMMEDIATELY UPON INSTALLATION. SOAK ALL CONTAINERIZED PLANTS THOROUGHLY PRIOR TO INSTALLATION. BARE ROOT PLANTS ARE SUBJECT TO THE FOLLOWING SPECIAL REQUIREMENTS, AND SHALL NOT BE USED UNLESS PLANTED BETWEEN NOVEMBER 1 AND MARCH 1, AND ONLY WITH THE PERMISSION OF THE LANDSCAPE DESIGNER AND CITY ECOLOGIST. BARE ROOT PLANTS MUST HAVE ENOUGH FIBROUS ROOT TO INSURE PLANT SURVIVAL. ROOTS MUST BE COVERED AT ALL TIMES WITH MUD AND/OR WET STRAW, MOSS, OR OTHER SUITABLE PACKING MATERIAL UNTIL TIME OF INSTALLATION. PLANTS WHOSE ROOTS HAVE DRIED OUT FROM EXPOSURE WILL NOT BE ACCEPTED AT INSTALLATION INSPECTION.
  - C. STORAGE: PLANTS STORED BY THE APPLICANT FOR LONGER THAN ONE MONTH PRIOR TO PLANTING SHALL BE PLANTED IN NURSERY ROWS, AND TREATED IN A MANNER SUITABLE TO THAT SPECIES HORTICULTURAL REQUIREMENTS. PLANTS MUST BE RESPECTED BY THE WETLAND BIOLOGIST AND / OR LANDSCAPE DESIGNER PRIOR TO INSTALLATION.
  - D. DAMAGED PLANTS: DAMAGED DRIED OUT, OR OTHERWISE MISHANDLED PLANTS WILL BE REJECTED AT INSTALLATION INSPECTION. ALL REJECTED PLANTS SHALL BE IMMEDIATELY REMOVED FROM THE SITE.
  - E. PLANT NAMES: PLANT NAMES SHALL COMPLY WITH THOSE GENERALLY ACCEPTED IN THE NATIVE PLANT NURSERY TRADE. ANY QUESTION REGARDING PLANT SPECIES OR VARIETY SHALL BE REFERRED TO THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST OR CITY ECOLOGIST. ALL PLANT MATERIALS SHALL BE TRUE TO SPECIES AND VARIETY AND LEGIBLY TAGGED.
  - F. PLANT SUBSTITUTIONS: PLANT SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE PERMISSION OF THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR CITY ECOLOGIST. SAME SPECIES SUBSTITUTIONS OF LARGER SIZE DO NOT REQUIRE SPECIAL PERMISSION.
  - G. QUALITY AND CONDITION: PLANTS SHALL BE NORMAL IN PATTERN OF GROWTH, HEALTHY, WELL-BRANCHED, VIGOROUS, WITH WELL-DEVELOPED ROOT SYSTEMS, AND FREE OF PESTS AND DISEASES. DAMAGED, DISEASED, PEST-INFESTED, SCRAPED, BRUISED, DRIED OUT, BURNED, BROKEN, OR DEFECTIVE PLANTS WILL BE REJECTED. PLANTS WITH PRUNING WOUNDS OVER 1" IN DIAMETER WILL BE REJECTED.
  - H. ROOTS: ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINERIZED, UNLESS EXPLICITLY AUTHORIZED BY THE LANDSCAPE DESIGNER. ROOT BOUND PLANTS OR B&B PLANTS WITH DAMAGED, CRACKED OR LOOSE ROOTBALLS WILL BE REJECTED. BARE ROOT PLANTINGS OF WOODY MATERIAL IS ALLOWED ONLY WITH PERMISSION FROM THE LANDSCAPE DESIGNER.
- SIZES: PLANT SIZES SHALL BE AT LEAST THE SIZE INDICATED IN THE PLANT SCHEDULE. LARGER STOCK IS ACCEPTABLE PROVIDED THAT IT HAS NOT BEEN CUT BACK TO SIZE SPECIFIED, AND THAT THE ROOT BALL IS PROPORTIONATE TO THE SIZE OF THE PLANT. MEASUREMENTS, CALIPER, BRANCHING AND BALLING AND BURLAPPING SHALL CONFORM TO THE AMERICAN STANDARD OF NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN (LATEST EDITION).
- FORM: EVERGREEN TREES, IF USED, SHALL HAVE SINGLE TRUNKS AND SYMMETRICAL, WELL-DEVELOPED FORM. DECIDUOUS TREES SHALL BE SINGLE TRUNKED UNLESS SPECIFIED AS MULTI-STEM IN THE PLANT SCHEDULE. SHRUBS SHALL HAVE MULTIPLE STEMS, AND BE WELL-BRANCHED.
- PLANTING: PLANTING SHALL BE DONE IN ACCORDANCE WITH ILLUSTRATED DETAILS IN THE MITIGATION PLAN SET AND ACCEPTED INDUSTRY STANDARDS.
- WEEDING: EXISTING AND EXOTIC VEGETATION IN THE MITIGATION AND BUFFER AREAS WILL BE HAND WEEDED FROM AROUND ALL NEWLY INSTALLED PLANTS AT THE TIME OF INSTALLATION. NO CHEMICAL CONTROL OF VEGETATION ON ANY PORTION OF THE SITE IS ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE CITY.
- COMPOST: ALL LANDSCAPED AREAS DENuded OF VEGETATION AND ALL PLANTING PIT AREAS SHALL RECEIVE NO LESS THAN 2" OF COMPOST AFTER PLANTING. COMPOST SHALL BE KEPT WELL AWAY (AT LEAST 2") FROM THE TRUNKS AND STEMS OF WOODY PLANTS. COMPOST SHALL BE CEDAR GROVE PURE COMPOST OR APPROVED EQUAL. NO BARK PRODUCTS OR SAWDUST WILL BE PERMITTED. WEED-FREE STRAW MAY BE REQUIRED FOR APPLICATION OVER COMPOST FOR EROSION CONTROL (SEE EROSION CONTROL NOTES).
- SITE CONDITIONS: CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE DESIGNER AND WETLAND BIOLOGIST OF DRAINAGE OR SOIL CONDITIONS LIKELY TO BE DETRIMENTAL TO THE GROWTH OR SURVIVAL OF PLANTS. PLANTING OPERATIONS SHALL NOT BE CONDUCTED UNDER THE FOLLOWING CONDITIONS: FREEZING WEATHER, WHEN THE GROUND IS FROZEN, EXCESSIVELY WET WEATHER, EXCESSIVELY WINDY WEATHER, OR IN EXCESSIVE HEAT.
- PLANT LOCATIONS: LOCATIONS SHALL BE AS DEPICTED IN THE APPROVED PLAN SET. THE LANDSCAPE DESIGNER AND / OR WETLAND BIOLOGIST MAY CHANGE THE LOCATIONS OF PLANTINGS SHOWN ON PLANS BASED ON FIELD CONDITIONS.
- PLANTING IN PITS: PLANTING PITS SHALL BE CIRCULAR OR SQUARE WITH VERTICAL SIDES, AND SHALL BE 6" DEEPER AND 12" LARGER IN DIAMETER THAN THE ROOT BALL OF THE PLANT. BREAK UP THE SIDES OF THE PIT IN COMPACTED SOILS. SET PLANTS UPRIGHT IN PITS, WITH CROWN OF ROOT BALL 2"-3" ABOVE FINAL GRADE. BURLAP SHALL BE REMOVED FROM THE PLANTING PIT. BACKFILL SHALL BE TAMPED DOWN FIRMLY.

Q. WATER: PLANTS SHALL BE WATERED MIDWAY THROUGH BACKFILLING, AND AGAIN UPON COMPLETION OF BACKFILLING. A RIM OF EARTH SHALL BE MOUNDING AROUND THE BASE OF THE TREE OR SHRUB NO CLOSER THAN THE DRIP LINE. EXCEPT ON STEEP SLOPES OR IN HOLLOW, PLANTS SHALL BE WATERED A SECOND TIME WITHIN 24-48 HOURS AFTER INSTALLATION.

R. INTERMEDIATE INSPECTIONS: ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND /OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. ROOTS OF ANY BARE ROOT PLANTS, IF PERMITTED FOR USE, WILL BE INSPECTED. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL BE INSPECTED AND APPROVED PRIOR TO PLANTING.

18. HAND SEEDING: SEEDING IS REQUIRED AS DESCRIBED IN APPROVED PLANS.

A. TIMING: SEEDING SHALL NOT TAKE PLACE UNTIL MULCHING IS COMPLETE. CONTRACTOR SHALL INSURE THAT AREAS TO RECEIVE SEED ARE CLEAN OF DEBRIS AND THAT FINAL GRADES ARE CORRECT. SEEDING SHALL BE PERFORMED AFTER OTHER PLANT INSTALLATION IS COMPLETE. SEEDING IS THE FINAL STEP OF THE INITIAL INSTALLATION; SITE SHALL BE CLOSED TO ALL VEHICLES AND FOOT TRAFFIC SHALL BE MINIMIZED AFTER SEEDING IS COMPLETE. SEEDING SHALL NOT TAKE PLACE WHEN THE GROUND IS FROZEN OR IN WINDY WEATHER. SEEDS SHALL BE HAND BROADCAST OR BY MECHANICAL HAND POWERED SPREADER, WITH AS EVEN DISTRIBUTION AS FEASIBLE. AREAS WITHIN 6"-12" OF STEMS OF INSTALLED PLANTS SHALL NOT BE SEEDED.

B. SEED MIX: USE WETLAND SEED MIX IN WETLAND AREA AND BUFFER SEED MIX FOR WETLAND BUFFER AREAS. THE MIX SHOULD BE COMPOSED OF WEIGHT PERCENTAGES SPECIFIED IN THE TABLE. ALL SEED MATERIALS SHALL BE FREE OF WEED SEEDS OR OTHER FOREIGN MATTER DETRIMENTAL TO PLANT GROWTH. NOTE: SEED MIX SHOULD BE ORDERED AS EARLY AS POSSIBLE TO INSURE AN ADEQUATE SUPPLY OF SPECIFIED NATIVE SEED.

GRASS SEED MIX	
SPECIES	WEIGHT %
RED FESCUE - <i>Festuca rubra</i>	40
ANNUAL RYEGRASS - <i>Lolium multiflorum</i>	40
COLONIAL BENTGRASS - <i>Agrostis capillaris</i>	10
WHITE CLOVER - <i>Trifolium repens</i>	10

C. POST SEEDING EROSION CONTROL: SCATTER 2" OF CERTIFIED WEED-FREE STRAW ON ALL BARE GROUND AFTER SEEDING IS COMPLETE AND INSPECTED, FOR EROSION CONTROL (SEE EROSION CONTROL NOTES).

19. MAINTENANCE: MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH KING COUNTY SENSITIVE AREAS MITIGATION GUIDELINES (2000) AND APPROVED PLANS.

A. SURVIVAL: THE APPLICANT SHALL BE RESPONSIBLE FOR THE HEALTH OF 100% OF ALL NEWLY INSTALLED PLANTS FOR ONE GROWING SEASON AFTER INSTALLATION HAS BEEN ACCEPTED BY CITY ECOLOGIST (SEE PERFORMANCE STANDARDS). A GROWING SEASON IS DEFINED AS OCCURRING FROM SPRING (MARCH 15 - MARCH 15, FOLLOWING YEAR), FOR FALL INSTALLATION, THE GROWING SEASON WILL BEGIN THE FOLLOWING SPRING. THE APPLICANT SHALL REPLACE ANY PLANTS THAT ARE FAILING, NEAR, DEFUNCT, OR DEAD DURING THIS GROWING SEASON, AS DIRECTED BY THE APPLICANT'S LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST.

B. INSTALLATION TIMING FOR REPLACEMENT PLANTS: THE APPLICANT'S LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST SHALL DETERMINE TIMING OF THE INSTALLATION FOR REPLACEMENT PLANTS.

C. DURATION AND EXTENT: IN ORDER TO ACHIEVE PERFORMANCE STANDARDS, THE APPLICANT SHALL HAVE THE MITIGATION AREA MAINTAINED FOR THE DURATION OF THE MONITORING PERIOD, 3 YEARS. MAINTENANCE WILL INCLUDE WATERING, WEEDING AROUND BASE OF INSTALLED PLANTS, PRUNING, FERTILIZING, REPLACEMENT, REMOVAL OF DEAD MATERIAL (OTHER THAN FALLEN LOGS, LARGE WOODY DEBRIS, ETC), RESTAWING, AND ANY OTHER MEASURES NEEDED TO INSURE PLANT SURVIVAL. ALL MAINTENANCE SHALL BE DIRECTED BY THE LANDSCAPE DESIGNER AND/OR WETLAND BIOLOGIST.

D. STANDARDS FOR REPLACEMENT PLANTS: REPLACEMENT PLANTS SHALL MEET THE SAME STANDARDS FOR SIZE AND TYPE AS THOSE SPECIFIED FOR ORIGINAL INSTALLATION UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST. REPLACEMENT PLANTS SHALL BE INSPECTED AS DESCRIBED ABOVE FOR THE ORIGINAL INSTALLATION.

E. REPLANTING: PLANTS THAT HAVE SETTLED IN THEIR PLANTING PITS TOO DEEP, TOO SHALLOW, LOOSE, OR CROOKED SHALL BE REPLANTED AS DIRECTED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST, AND/OR CITY ECOLOGIST.

20. MONITORING: MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED MITIGATION / RESTORATION MONITORING PLAN.

A. VEGETATION MONITORING: SAMPLING POINTS OR TRANSECTS WILL BE ESTABLISHED FOR VEGETATION MONITORING, AND PHOTO-POINTS ESTABLISHED FROM THE MONITORING PERIOD. LINEAR TRANSECTS ARE THE PREFERRED METHOD FOR VEGETATION MONITORING FOR THIS SITE. NO LESS THAN ONE (1) - 25 METER TRANSECTS WILL BE ESTABLISHED IN THE RESTORATION AREA. PERMANENT TRANSECT LOCATION(S) MUST BE IDENTIFIED ON RESTORATION SITE PLANS IN THE FIRST MONITORING REPORT (THEY MAY BE DRAWN ON APPROVED RESTORATION PLANS BY HAND). EACH TRANSECT SHALL BE MARKED WITH HERB, SHRUB, AND TREE ARROWS COVER AT RADIUS OF 1M, 5M, AND 10M RESPECTIVELY, USING THE BRAUN-BLANQUET RELEVÉ METHOD OR OTHER ACCEPTABLE FIELD METHOD.

B. PHOTOPOINTS: NO LESS THAN THREE (3) PHOTOPOINTS WILL BE ESTABLISHED - PHOTOGRAPHS WILL BE TAKEN FROM AT LEAST THREE (3) POINTS WITHIN THE RESTORATION AREA TO VISUALLY DEPICT THE CONDITION OF THE RESTORATION AREA.

C. REPORTS: MONITORING REPORTS SHALL BE SUBMITTED AFTER THE END OF EACH GROWING SEASON (BY NOVEMBER 15) FOR THREE (3) CONSECUTIVE YEARS FOLLOWING SUCCESSFUL INSTALLATION INSPECTION. MONITORING REPORTS MUST INCLUDE DESCRIPTION / DATA FOR:

- PLANT SURVIVAL, VIGOR, AND AERIAL COVERAGE FROM EVERY PLANT COMMUNITY (TRANSECT DATA)
- SITE HYDROLOGY, INCLUDING EXTENT OF INUNDATION, SATURATION, DEPTH TO GROUNDWATER, FUNCTION OF ANY HYDROLOGIC STRUCTURES, INPUTS, OUTPUTS, ETC.
- SOIL CONDITIONS, SITE STABILITY, ANY STRUCTURES OR SPECIAL FEATURES
- BUFFER CONDITIONS, E.G. SURROUNDING LAND USE, USE BY HUMANS, WILD AND DOMESTIC CREATURES
- OBSERVED WILDLIFE, INCLUDING AMPHIBIANS, AVIANS, AND OTHERS
- SOILS INCLUDING TEXTURE AND PHOSPHORUS
- MUNSELL COLOR, ROOTING AND OXIDIZED RHIZOSPHERES
- RECEIPTS FOR ANY STRUCTURAL REPAIR OR REPLACEMENT
- 4" X 6" COLOR PHOTOGRAPHS TAKEN FROM PERMANENT PHOTO-POINTS AS SHOWN ON MONITORING PLAN.

D. CONTINGENCY PLAN: SHOULD ANY MONITORING REPORT REVEAL THE MITIGATION HAS FAILED IN WHOLE OR IN PART, AND SHOULD THAT FAILURE BE BEYOND THE SCOPE OF ROUTINE MAINTENANCE, A CONTINGENCY PLAN WILL BE SUBMITTED. THE CONTINGENCY PLAN MAY RANGE IN COMPLEXITY FROM A LIST OF PLANTS SUBSTITUTED, TO CROSS-SECTIONS OF PROPOSED ENGINEERED STRUCTURES, ONCE APPROVED, IT MAY BE INSTALLED, AND WILL REPLACE THE APPROVED MITIGATION PLAN. IF THE FAILURE IS SUBSTANTIAL, THE CITY MAY EXTEND THE MONITORING PERIOD FOR THAT MITIGATION.

**PREPARATION AND PLANTING NOTES:**

- ENSURE THAT ALL NON-NATIVE VEGETATION SUCH AS HIMALAYAN BLACKBERRY HAS BEEN REMOVED IN THE MITIGATION AREA.
- DECONTAMINATE DISTURBED SOIL TO A MINIMUM DEPTH OF 12". SPREAD 2" (TWO INCHES) OF VEGETATIVE COMPOST OVER BARE SOILS WITHIN MITIGATION AREA.
- MIX INTO SOIL TO A DEPTH OF 12" (TWELVE INCHES) USING A ROTOTILLER OR A SHOVEL.
- PUT PLANTS IN THEIR PLACES ACCORDING TO THE APPROVED BASIC MITIGATION PLAN.
- DIG SQUARE BOTTOMED HOLES FOR PLANTS, TWICE THE SIZE OF CONTAINER (SEE SHRUB PLANTING DETAIL).
- SCORE EDGES OF PLANTING HOLE WITH SHOVEL, SO THAT ROOTS CAN TRAVEL OUTSIDE HOLE.
- LOOSEN PLANT ROOTS SLIGHTLY, AND PLACE IN CENTER OF HOLE, UPRIGHT AND LEVEL WITH GROUND SURFACE.
- AFTER ALL PLANTS HAVE BEEN PLANTED, HANDSEED OVER THE ENTIRE RESTORATION AREA. USE APPROXIMATELY 1-2 POUNDS OF GRASS SEED MIX PER 1,000 SQ. FT. OF MITIGATION AREA USING THE GRASS SEED MIX OR GRAMINOID'S NATIVE TO THE STATE OF WASHINGTON.
- WATER THE WHOLE MITIGATION AREA WITH 2" OF WATER RIGHT AFTER PLANTING. CONTINUE TO WATER 2 TIMES MINIMUM PER WEEK DURING THE DRY SEASON.
- PLAN SHOWS PLANTS ARRANGED IN NATURALIZED CLUSTERS. PLAN SHOWS CERTAIN PLANTS IN THE WETTER BUFFER AND DRIER BUFFER, ACCORDING TO THEIR WATER AND LIGHT NEEDS.

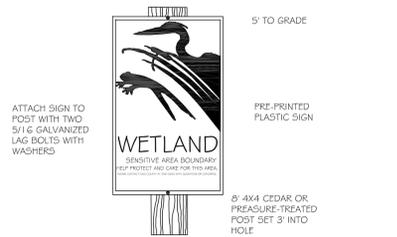
**INVASIVE REMOVAL NOTES:**

BEFORE INSTALLING PLANTINGS FOR RESTORATION AREAS, TAKE NOTE OF ANY INVASIVE WEED SPECIES FOUND ON-SITE. CONTROL OF THESE SPECIES IS VERY IMPORTANT IN RESTORATION AREAS IN ORDER TO ALLOW FOR THE SUCCESSFUL ESTABLISHMENT OF PLANTINGS THAT MUST OTHERWISE HAVE DIFFICULTY COMPETING WITH THESE AGGRESSIVE PLANTS.

WHERE ENCOUNTERED, INVASIVE WEEDS SHOULD BE REMOVED MANUALLY WITHOUT THE USE OF PESTICIDE (INCLUDES HERBICIDE), EXCEPT IN RARE CASES WHEN APPLIED BY A STATE LICENSED PESTICIDE APPLICATOR. MANUAL REMOVAL CAN BE ACCOMPLISHED BY GRUBBING OUT PLANTS AND ROOTS ENTIRELY (INCLUDING SEED PODS, FRUITS AND LEAVES) WITHOUT SIMULTANEOUSLY SPREADING MORE SEEDS. THE IDEAL TIME FOR REMOVAL IS PRIOR TO FLOWERING IN SPRING OR SUMMER. IF REMOVAL IS TO OCCUR AFTER FLOWERING, IT IS RECOMMENDED THAT FLOWERS BE CUT OFF AND DISPOSED OF PRIOR TO GRUBBING. GRUBBED OUT MATERIALS SHOULD BE DISPOSED OF OFF-SITE IMMEDIATELY, SINCE MANY OF THESE SPECIES ARE STILL CAPABLE OF PROPAGATING POST-REMOVAL. DO NOT USE WEED MATERIALS FOR MULCH AND DO NOT PUT INTO COMPOST OR YARD WASTE BINS.

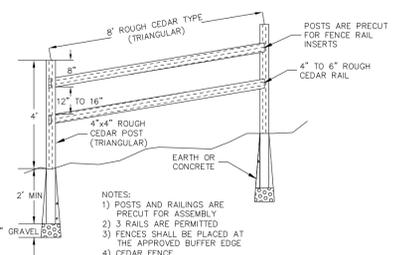
ONCE THE INVASIVE SPECIES HAVE BEEN REMOVED, YOU CAN ASSESS SITE SOIL QUALITY. CERTAIN INVASIVE SPECIES SUCH AS SCOTCH BROOM DISPERSES THOUSANDS OF SEEDS PER PLANT. IN EXTREME CASES, TOPSOIL REMOVAL MAY BE NECESSARY TO EVACUATE THE INVASIVE SEED BANK. DENSE NATIVE PLANTING IS RECOMMENDED AND HAS PROVEN SUCCESSFUL AT PREVENTING WEEDY AND/OR INVASIVE SPECIES FROM REEMERGING.

PLANT MATERIALS FOR WETLAND BUFFER ENHANCEMENT									
SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	TOTAL NUMBER	STRATUM	SPACING ON CENTER	MAX HEIGHT	SITE PLACEMENT	LIGHT NEEDS
BM	BIG LEAF MAPLE	ACER MACROPHYLLUM	5 GAL.	5	TREE	9'	100'	WETTER/DRIER BUFFER	SHADE INTOLERANT/TOLERANT
S	SERVICEBERRY	AMELANCHIER ALNIFOLIA	2 GAL.	9	SHRUB	6'	20'	DRIER BUFFER	SHADE INTOLERANT
H	BEAKED HAZELNUT	CORYLUS CORNUTA	2 GAL.	8	SHRUB	6'	15'	DRIER BUFFER	SHADE TOLERANT
RE	RED ELDERBERRY	SAMBUCUS RACEMOSA	1 GAL.	16	SHRUB	6'	20'	WETTER/DRIER BUFFER	HIGHLY ADAPTABLE
BR	BLACK RASPBERRY	RUBUS LEUCODERMIS	1 GAL.	7	SHRUB	5'	10'	DRIER BUFFER	SHADE TOLERANT
OG	TALL OREGON GRAPE	BERBERIS AQUIFOLIUM	1 GAL.	12	SHRUB	5'	7'	DRIER BUFFER	SHADE DEPENDENT
SN	SNOWBERRY	SYMPHORICARPOS ALBUS	1 GAL.	11	SHRUB	5'	7'	WETTER/DRIER BUFFER	SHADE INTOLERANT
E	EVERGREEN HUCKLEBERRY	VACONIA OVATUM	1 GAL.	16	SHRUB	4'	5'	DRIER BUFFER	SHADE DEPENDENT
SP	SWORD FERN	POLYSTICHUM MUNITUM	1 GAL.	58	FERN	3'	5'	DRIER BUFFER	SHADE TOLERANT
LF	LADY FERN	ATHYRIUM FILIX-FEMINA	1 GAL.	12	FERN	3'	4'	WETTER BUFFER	SHADE TOLERANT

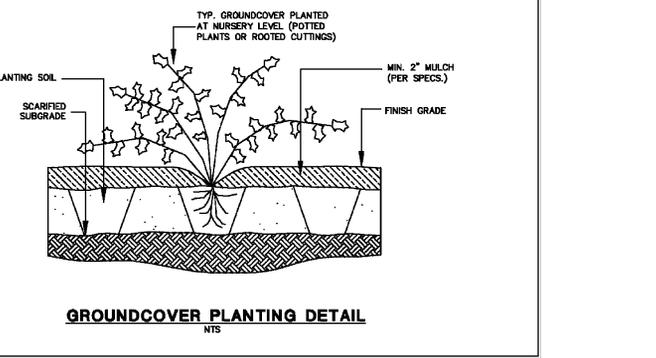
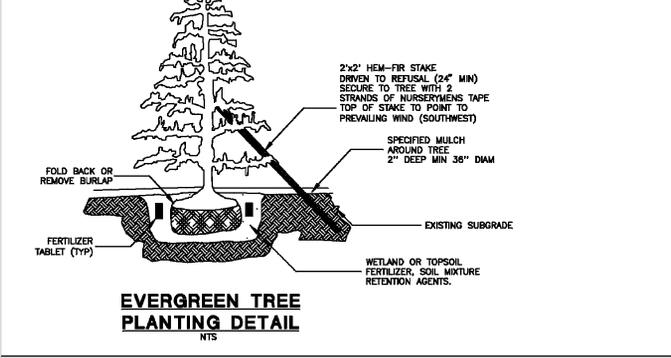
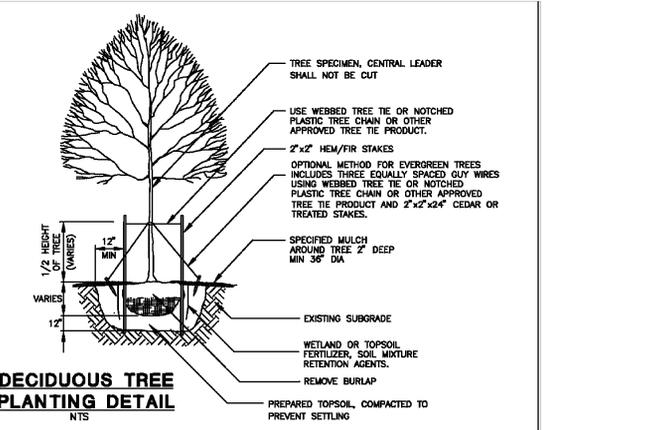
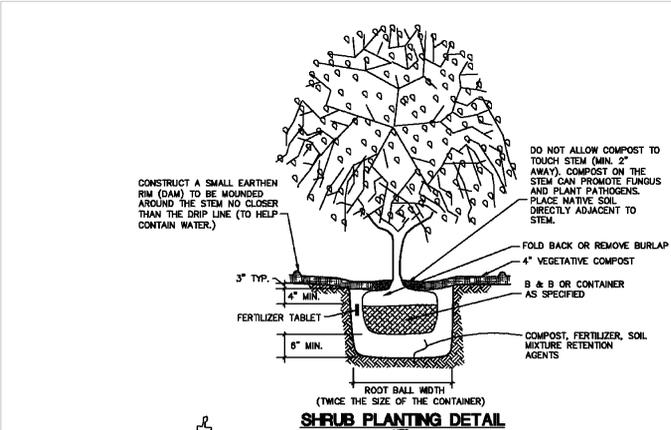


**KING COUNTY WETLAND/STREAM SIGN INSTALLATION DETAIL**

- WETLAND/STREAM SIGN SHALL BE POSTED AT THE BOUNDARY BETWEEN THE SENSITIVE AREA BUFFER, SETBACK AREA OR TRACT AND THE BUILDING SETBACK AREA.
- ONE SIGN SHALL BE POSTED PER LOT FOR EVERY 150-FEET OF SENSITIVE BUFFER AND SHALL BE STATIONED IN A PROMINENT LOCATION, I.E., AT THE CLOSEST POINT TO THE PROPOSED DEVELOPMENT. SIGNS MAY ALSO BE ATTACHED TO FENCES.
- SIGNS ARE AVAILABLE FOR \$2.50 FROM: KING COUNTY BUILDING AND LAND DEVELOPMENT DIVISION, 300 OKSADALE AVENUE SW, RENTON, WA, 98055-1219



**SPLIT-RAIL CEDAR FENCE DETAIL**



**WETLAND BUFFER MITIGATION NOTES AND DETAILS**



MARK RIGOS  
440 SE DARST STREET  
ISSAQUAH, WA 98027  
(425) 652-6013

MARVEL HOMES REASONABLE USE EXCEPTION  
SE 64TH STREET & 116TH AVENUE SE  
BELLEVUE, WA

REV.	DATE:
1	03/02/15

DATE: 04/30/2015

W1.0