SEPA ENVIRONMENTAL CHECKLIST

**Purpose of checklist:**
Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

**Instructions for applicants:**
This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

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 or provide additional information reasonably related to determining if there may be significant adverse impact.

**Instructions for Lead Agencies:**
Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

**Use of checklist for nonproject proposals:**
For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

**A. Background [HELP]**

1. Name of proposed project, if applicable: Deol Residential Building Permit

2. Name of applicant: Jas Deol
3. Address and phone number of applicant and contact person: 2314 S 254th Court, Des Moines WA 98198

4. Date checklist prepared: December 2, 2019

5. Agency requesting checklist: King County

6. Proposed timing or schedule (including phasing, if applicable): Immediately after permit issuance.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. A critical area report prepared by Wetlands Northwest LLC identified a Category II wetland and a Type N aquatic area on the property; a HPA Permit will be applied for by MacWhinney Environmental Consulting, LLC to address the pipeline crossing of the Type N Stream. It isn’t possible to apply for an HPA without a SEPA determination, so upon receipt of King County’s SEPA determination, the HPA application will be submitted.

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. King County Health Department and WDFW approvals.

10. List any government approvals or permits that will be needed for your proposal, if known. Septic system approval from King County Department of Health and Hydraulic Project Approval from the WDFW. Permit submittals have been (KC Health) or will be (HPA) made and approval is expected.

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

This SEPA Checklist is being prepared in support of a residential building permit on a 10 acre property. The project is the constructing of a new single-family residence in the northern ¼ of the property with a septic drainfield at the southern ¼ of the property. A new paved driveway will be constructed from NE 80th Street. The project site is located in the Evans Creek Drainage Basin and is defined by a single drainage basin that discharges to the southwest. Developed runoff will be completed mitigated via full dispersion consistent with the KCSWDM.

The site contains a Category II wetland and a Type N stream. The property slopes from the northeast to southwest at an average grade of approximate 5%. The project will be serviced by an on-site septic system. Since the septic tanks will be located immediately behind the house
and the drainfield in the southern portion of the property, a pressure sewer line will be installed across a wetland, Type N watercourse, and associated buffers. The sewer line will connect to the drainfield which has suitable soils for seweage treatment which are not present or feasible adjacent to the proposed single-family home.

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

The site address is 25325 NE 80th Street Redmond, WA 98053, Tax parcel number 112506-9022 at the NE Section 11 Township 25 N Range 06E.

**B. Environmental Elements [HELP]**

1. **Earth** [help]
   a. General description of the site:
   The property is 10 acres and is approximately 325 feet wide by 1300 feet deep. The northern 2.5 acres is presently developed with single-family home, detached garage, and landscaping. The southern 7.5 acres is a mixed forest with several access roads spanning the area. (circle one): Flat, rolling, hilly, steep slopes, mountainous, other: **rolling**
   b. What is the steepest slope on the site (approximate percent slope)?
   Approx.. 12%
   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 agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.
   Alderwood soils with some saturated Norma soils in depressions.
   d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
   No.
   e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.
   An estimated 1,500 CY’s of imported fill will be required to construct the driveway, garage, and perimeter grading around the house footprint. The installation of the septic transport line will require crossing the wetland buffer and seasonal stream with minimal impact. No fill is necessary to install the drainfield line across the wetland, stream, and buffer.
   f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
   Erosion is not expected.
g. About what percent of the site will be covered with impervious surfaces after project
collection (for example, asphalt or buildings)? Less than 5% of the property will be covered
with impervious surfaces.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
There could be a short term increase in potential for on site erosion where soils are exposed
during site preparation and construction. It is anticipated that standard erosion control BMP’s
will be followed during construction to minimize erosion.

2. **Air** [help]

a. What types of emissions to the air would result from the proposal during construction,
operation, and maintenance when the project is completed? If any, generally describe and
give approximate quantities if known.
Dust and engine exhaust during construction and automobile exhaust when the project is occupied.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so,
generally describe.
None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
During construction equipment will be turned off when not in use.

3. **Water** [help]

a. Surface Water: [help]

1) Is there any surface water body on or in the immediate vicinity of the site (including
year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe
type and provide names. If appropriate, state what stream or river it flows into.
There is an unnamed Type “N” seasonal watercourse that is in the Evan’s Creek Drainage
Basin

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, a pressure sewer pipe will be placed 36” below the bottom of the stream channel. Please
refer to the civil engineering plans by Litchfield Engineering

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 Water: [help]

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

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.

An on-site septic system has been designed and is presently under review by the King County Department of Health

c. Water runoff (including stormwater):

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

Developed runoff from the project improvements includes the roof area and hard surface area of the paved access driveway. Runoff from this area will be collected and conveyed for mitigation via sheet flow dispersion. Discharge from the site is to the natural point of discharge at the southeast corner of the property.

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

None expected or anticipated.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Not expected or anticipated.

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

4. Plants [help]

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

___x__ deciduous tree: alder, maple, aspen, other
___x__ evergreen tree: fir, cedar, pine, other
___x__ shrubs
___x__ grass
___ pasture
### SEPA Environmental checklist (WAC 197-11-960)

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**Crop or Grain**

- Orchards, vineyards or other permanent crops.
- Wet soil 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?

The property has deciduous and evergreen trees. Some limited impact to the wetland buffer and stream crossing will be necessary to construct the septic system and dispersal trenches. These are described more fully in a mitigation report (MacWhinney Environmental Consulting, 12/2/19)

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

None known of.

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

None anticipated.

### e. List all noxious weeds and invasive species known to be on or near the site.

None known of.

5. **Animals**

### a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

- Birds: hawk, heron, eagle, songbirds, other: birds native to Western Washington
- Mammals: deer, bear, elk, beaver, other: mammals native to Western Washington
- Fish: bass, salmon, trout, herring, shellfish, other

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

None known of.

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

Not known.

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

None.

e. List any invasive animal species known to be on or near the site.

None known.

6. **Energy and Natural Resources**

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

Electricity and natural gas.

b. Would your project affect the potential use of solar energy by adjacent properties?
   If so, generally describe.
   No

c. What kinds of energy conservation features are included in the plans of this proposal?
   List other proposed measures to reduce or control energy impacts, if any:
   None proposed

7. Environmental Health  [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
   If so, describe. No

   1) Describe any known or possible contamination at the site from present or past uses.
      None known

   2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
      None known

   3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
      None known

   4) Describe special emergency services that might be required.
      None anticipated

   5) Proposed measures to reduce or control environmental health hazards, if any: None proposed

b. Noise

   1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
      Construction noises at 80 to 90 DBA range from 50' from noise sources may be expected during work hours.

   2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
      Construction equipment will be turned off when not in use. Construction activities will be limited to daytime hours and will adhere to restrictions set forth in King County Code 12.86.520 (noise ordinance).
3) Proposed measures to reduce or control noise impacts, if any: Limit operation of equipment during business hours.

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. **Residential single-family, land uses will be unaffected with this proposal.**

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? Not to our knowledge

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: No

c. Describe any structures on the site. There is an existing single-family home, detached garage, and small sheds/outbuildings on the property.

d. Will any structures be demolished? If so, what? **All existing structures will be demolished and replaced with a new structure and driveway.**

e. What is the current zoning classification of the site? RA5

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

g. If applicable, what is the current shoreline master program designation of the site? Not Applicable

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. There is a wetland and stream riparian corridor as confirmed on King County permit CADS18-0433

i. Approximately how many people would reside or work in the completed project? **4 – 6 people will live at the residential site.**

j. Approximately how many people would the completed project displace? None
k. Proposed measures to avoid or reduce displacement impacts, if any:
   None proposed

l. Proposed measures to ensure the proposal is compatible with existing and projected land
   uses and plans, if any:
   None Proposed

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term
   commercial significance, if any:
   None Proposed

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, mid-
   dle, or low-income housing.
   No new net units will be provided

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle,
   or low-income housing.
   One single family home will be removed and replaced.

c. Proposed measures to reduce or control housing impacts, if any:
   None proposed

10. Aesthetics [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is
   the principal exterior building material(s) proposed?
   35’

b. What views in the immediate vicinity would be altered or obstructed?
   None

b. Proposed measures to reduce or control aesthetic impacts, if any:
   None Proposed

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly
   occur?
   Outside lighting for facilitating ingress and egress during non-daylight hours.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
   Not to our knowledge

c. What existing off-site sources of light or glare may affect your proposal?
   None to our Knowledge
d. Proposed measures to reduce or control light and glare impacts, if any:
   None Proposed

12. Recreation [help]
   a. What designated and informal recreational opportunities are in the immediate vicinity?
      None
   
   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 Proposed

13. Historic and cultural preservation [help]
   a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years
      old listed in or eligible for listing in national, state, or local preservation registers? If so,
      specifically describe.
      None to our Knowledge
   
   b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation?
      This may include human burials or old cemeteries. Are there any material evidence, artifacts,
      or areas of cultural importance on or near the site? Please list any professional studies
      conducted at the site to identify such resources.
      None to our Knowledge
   
   c. Describe the methods used to assess the potential impacts to cultural and historic resources
      on or near the project site. Examples include consultation with tribes and the department of
      archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
      None
   
   d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance
      to resources. Please include plans for the above and any permits that may be required.
      Limit installation of sewage pipe along the access road avoiding impacts to wetland buffer
      vegetation.

14. Transportation [help]
   a. Identify public streets and highways serving the site or affected geographic area and
      describe proposed access to the existing street system. Show on site plans, if any.
      NE 80th Street is the site’s ingress and egress.
   
   b. Is the site or affected geographic area currently served by public transit? If so, generally
      describe. If not, what is the approximate distance to the nearest transit stop?
      No. The closest transit stop is the Redmond Ridge park and ride to the northwest nearly two
      miles away.
c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?
   Approximately 6 parking spaces for domestic vehicles are currently available and will be replaced.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).
   None proposed

e. Will the project or proposal 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 or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?
   No net additional trips are expected to be generated from this proposal.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.
   No

h. Proposed measures to reduce or control transportation impacts, if any:
   None proposed

15. Public Services  [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.
   Not expected.

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

16. Utilities  [help]

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

c. 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.
   No new utilities are proposed

C. Signature  [HELP]
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: ________________________________
Name of signee  Keith Litchfield
Position and Agency/Organization  Owner, Litchfield Engineering
Date Submitted: 12-3-2019

D. Supplemental sheet for nonproject actions [HELP]

(IT IS NOT NECESSARY to use this sheet for project actions)

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

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

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
   None

   Proposed measures to avoid or reduce such increases are:
   None

2. How would the proposal be likely to affect plants, animals, fish, or marine life?
   None

   Proposed measures to protect or conserve plants, animals, fish, or marine life are:
   Restrict installation of sewer pipe during dry weather and limit equipment type within the wetland and its buffer. The sewer pipe will be installed 36" below the bottom of the channel of the Type "N" watercourse. A detailed mitigation plan has been prepared to address impacts from the proposal.

3. How would the proposal be likely to deplete energy or natural resources?
   None

   Proposed measures to protect or conserve energy and natural resources are:
   None

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?
The drainfield line from the house to the proposed drainfield location will cross wetlands, a stream, and associated buffers. A mitigation plan has been prepared to address this.

Proposed measures to protect such resources or to avoid or reduce impacts are:
Restrict installation of sewer pipe during dryer periods of the year. The sewer pipe will be installed 36" below the bottom of the channel of the Type “N” watercourse.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans? Not applicable.

Proposed measures to avoid or reduce shoreline and land use impacts are:
None proposed.

6. How would the proposal be likely to increase demands on transportation or public services and utilities? Not anticipated

Proposed measures to reduce or respond to such demand(s) are:
None

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.
There is no conflict