

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:
Castle Rock Landing on the Cowlitz – Temporary Access Plan
2. Name of applicant:
CT6, LLC

Received
CR 21-91
DEC 22 2021

Castle Rock
Finance

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

CT6, LLC
1904 SE 6th Place
Battle Ground, WA 98604
Contact: Shane Tapani, (360) 687-1148

4. Date checklist prepared:

December 21, 2021

5. Agency requesting checklist:

City of Castle Rock

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

The applicant is requesting review of grading and installation of a proposed Temporary Access Road to be constructed from Huntington Road S. to the interior of the site.

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

Yes, this is the first grading and development action proposed for the Castle Rock Master Plan. There will be future applications to request approval for grading and development of phases of the site, to implement the various elements of the Castle Rock Master Plan.

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

A wetland biologist has performed preliminary wetland field work to establish an initial boundary for the wetland area adjacent to Salmon Creek on the east side of the property. This wetland area and a 100' buffer were shown on the Master Plan, and will not be impacted by this proposed Temporary Access Road.

A geotechnical engineer has performed a preliminary geotechnical field study of the area where the Temporary Access Road is proposed. The geotechnical engineer proposes granular haul roads and staging areas be provided for construction on the site. The proposed Temporary Access Road will be a granular haul road that will meet the type of construction road recommended by the geotechnical engineer.

A civil engineer has performed a preliminary, high-level stormwater assessment of the Master Plan site, and provided a Conceptual Stormwater Plan. The proposed Temporary Access Road will comply with the Conceptual Stormwater Plan by maintaining the existing flow paths and drainage patterns of the existing condition. Runoff from the proposed temporary access road will sheet flow and be dispersed through the native vegetation.

Received
CR21-91
DEC 22 2021

Castle Rock
Finance

An archaeological investigation will not be required to implement the proposed Temporary Access Road as the stripping's will be done to a maximum of 6" depth. A geo-fabric will be placed after the stripping's are taken and before installation of aggregate for the temporary road. The proponent and the City of Castle Rock will be in consultation with the Cowlitz Tribe to determine the need for and scope of any additional archaeological investigations and/or studies prior to future land use applications that will implement the various phases of the Castle Rock Landing project.

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 no other applications pending that directly affect the property where the Temporary Access Road is proposed.

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

- Grading permit including stormwater and erosion control
- Right-of-way use application (as needed)

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

The project is a proposed Temporary Access Road to allow access to the site for workers and equipment. As soon as this road is constructed, the applicant will block access to Larsen Lane until such time as a second access is needed.

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 project site is located in the City of Castle Rock, Cowlitz County, WA. The project address is 2542 Larsen Lane SW, Castle Rock, WA 98611. The project site is accessed from I-5 at exit #48 and is located south side of Huntington Avenue S., approximately ¼ of mile west of the exit. The Temporary Access Road will begin at the property that fronts on Huntington Ave in front of Timberlake Church. The Access Road will then swing to the east and then head south to end at the existing farm buildings.

The project site is comprised of parcels identified as follows:

- 2542 Larsen Lane SW, Subdivision CROL300/301, Parcel # 30812, 907,355 s.f.
- 1955 Huntington Ave. S., Subd. CR08080, Lot 2, Parcel # 308100100, 46,174 s.f.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

B. Environmental Elements [\[HELP\]](#)

1. Earth [\[help\]](#)

- a. General description of the site: (circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

- b. What is the steepest slope on the site (approximate percent slope)?

The site is mostly flat, and is slightly steeper (10-30%) where the site is accessed from Huntington Avenue S.

- 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.

The project site contains the following soil type:

- Newberg fine sandy loam, 0-3 percent slope

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

There is a large dredge pile located to the south of the site. This pile is the result of dredging that occurred post-1980 to clear material from the Cowlitz River.

- 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.

A maximum of 6" of topsoil will be excavated and hauled off from the site. Approximately 6" of granular fill material be imported to replace the excavated material. No additional grading will be proposed. The overall amount of material proposed to be cut will be 682 CY, and approx. 700 CY proposed as fill material.

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

Yes, erosion could occur as a result of clearing and construction. Soils will be exposed in the cut area for a brief period during construction. However, any disturbed areas will be covered with gravel or re-vegetated.

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

The proposed Temporary Access Road will be covered with gravel and granular materials after project construction. There is approx. 35,500 SF of existing buildings and driveways onsite. The proposed temporary access road will add 18,400 SF for a total of 53,911 SF. After construction, approx. 1% of the site will be impervious surfaces.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
BMPS from the SMMWW will be implemented including the following BMP E1.25: preserving natural vegetation, BMP E2.10: Stabilized construction Entrance.

Received
CR21-91
DEC 22 2021

Castle Rock
Finance

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.

Emissions from construction equipment such as dump trucks and dozers will occur at the time of construction. Emissions after construction will occur from vehicles to and from the site.

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

There are no known off-site sources of emissions or odor that may affect the proposal.

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

Use properly certified and licensed construction equipment and maintain a dust-control plan during construction.

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.

The project site is in the vicinity of the Cowlitz River on the west, and Salmon Creek on the east.

- 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.

No, the project will not require any work over, in or adjacent to (within 200 feet) the described waters.

- 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.

No fill or dredge material will be placed in or removed from surface waters or wetlands.

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

No surface water withdrawals or diversions will be required for this project.

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

Received
CR 21-91
DEC 22 2021

Castle Rock
Finance

Portions of the project site lie within the AE zone of the 100-year floodplain.

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

There will be no discharges of waste materials to surface waters as part of this project.

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.

Groundwater will not be withdrawn from a well for drinking water or other purposes. Stormwater may be infiltrated into the ground, at pre-development levels. Details of water utility extension and stormwater treatment and discharge will be provided with subsequent land use planning and building permit applications.

- 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.

Waste material will not be discharged into the ground from septic tanks or other sources.

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.

Water runoff will occur at existing building roofs, paved areas, and the proposed gravel temporary access road. Runoff from these impervious surfaces will sheet flow and be dispersed through the existing and/or native vegetation onsite.

Stormwater may be discharged to surface waters or infiltrated into the ground, at pre-development levels, and after being treated/dispersed via the methods noted above

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

Waste materials could enter ground or surface waters through accidental erosion or spills that occur during or after construction.

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

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

The construction of the temporary access road will not alter or affect drainage patterns.
Existing grades and drainage patterns will be maintained.

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

By maintaining existing grades and existing vegetation to the maximum extent practical, the effects of the project on existing runoff of and drainage patterns will be negligible.

4. **Plants** [\[help\]](#)

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

☐ deciduous tree: alder, maple, aspen, other
☐ evergreen tree: fir, cedar, pine, other
☒ shrubs
☒ grass
☐ pasture
☐ crop or grain
☐ 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?

Grass will be removed during blading of the road, approx. 18,400 SF.

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

There are no threatened or endangered plant species known to be on or near the site.

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

No measures are proposed.

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

There are no noxious weeds or invasive species known to be on or near the site.

5. **Animals** [\[help\]](#)

- 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:

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

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

Received
CR 21-91
DEC 22 2021

Castle Rock
Finance

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

There are no known threatened or endangered species on or within 200 feet of the project site.

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

The site is within the generalized Pacific Flyway that stretches over the western States.

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

No measures are proposed.

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

There are no invasive animal species known to be on or near the site.

6. Energy and Natural Resources [\[help\]](#)

- 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.

Fuel for vehicles and equipment will be used during the construction of the Temporary Access Road.

- 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:

No measures are 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.

- 1) Describe any known or possible contamination at the site from present or past uses.

There is no known or possible contamination at the site from present or past uses.

- 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.

There are no known existing hazardous chemicals or conditions that might affect project development and design.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

- 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.

Fuel for vehicles and equipment will be used, and might be stored, during the construction of the project.

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

No special emergency services should be required.

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

The project will include procedures for cleaning any potential fuel spills.

b. Noise

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

There is a BNSF railroad line to the east of the site.

- 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.

Noise from construction equipment such as dump trucks and dozers will occur at the time of construction. Noise after construction will occur from vehicles (trucks and automobiles) to and from the area using the Temporary Access Road.

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

No measures are proposed.

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.

The site is currently vacant and has an existing residence and outbuildings. There is a church located south of the proposed road entrance/exit at Huntington Avenue S.

- 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?

The property does not appear to be agricultural or forest land of long-term commercial significance, and the property has not been designated as resource lands in terms of tax status.

Received
CR 21-91
DEC 22 2021

Castle Rock
Finance

- 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:

There do not appear to be any large-scale farms or forest land near the project site.

- c. Describe any structures on the site.

There is an existing residence and outbuildings on the site.

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

The existing residence and outbuildings will be demolished as a result of a future planning application or building permit.

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

Most of the site is zoned Industrial, with a small area of Highway Commercial, and a small area of Low Density Residential right at Huntington Ave.

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

Industrial, Commercial, and Residential.

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

There are no shorelines on the proposed project site.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The site is part of a floodplain area.

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

No residents or workers will result from the project.

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

The estimated number of people anticipated to be displaced by the completed project would be zero.

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

No displacement will result from this project.

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

No measures proposed.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

No measures are required, as this project site does not contain agricultural or forest lands of long-term commercial significance.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

9. Housing [\[help\]](#)

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

No units are proposed with this project.

- 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:

There will be no significant impacts to housing, so no measures are or will be 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?

No buildings or structures are proposed with this project.

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

No views will be significantly altered, and no views will be obstructed.

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

No measures are 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?

Light from construction equipment may be present during construction in the early evening.

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

Light or glare from vehicle headlights.

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

There are no off-site sources identified at this time.

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

No measures are proposed.

12. Recreation [\[help\]](#)

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

The property to the west and the DNR-owned site to the south provide informal fishing and hiking areas.

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

Received
CR 2191
DEC 22 2021

Castle Rock
Finance

No.

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

No measures are 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.

There is an existing single story house that was built in 1957. There are also outbuildings of various types and unknown construction dates.

- c. 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.

There is no known material evidence of Native American or historic use or occupation. No grading other than stripping's to remove the topsoil will occur, so no ground disturbance will occur with this project. A geo-fabric will be placed after the stripping's are taken and before installation of aggregate for the temporary road. The proponent and the City of Castle Rock will be in consultation with the Cowlitz Tribe to determine the need for and scope of any additional archaeological investigations and/or studies prior to future land use applications that will implement the various phases of the Castle Rock Landing project.

- 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.

There is no known material evidence of Native American or historic use or occupation. This project was presented to the Cowlitz tribe for initial assessment, which resulted in the recommendation to remove 6" or less of stripping's, instead of grading at this time. The proponent and the City of Castle Rock will be in consultation with the Cowlitz Tribe to determine the need for and scope of any additional archaeological investigations and/or studies prior to future land use applications that will implement the various phases of the Castle Rock Landing project.

- 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.

There are no known resources at this time. Should evidence of resources be uncovered, the project will comply with City and State requirements for identification and recovery of such resources.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

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.

The project will be accessed from Huntington Avenue, S., approximately ¼ mile west of the I-5 Exit #48 interchange and Pleasant Hill Road.

- 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?

The site is not served by and is not near public transit. There is a regional bus shuttle stop with Park-and-Ride located at I-5 Exit #49, approximately 2 miles north of the project site. The closest Amtrak train station is in Kelso, WA.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

No parking is required or proposed with this project action.

- 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).

This application proposes a temporary access road to allow access for vehicles and equipment to the site directly from Huntington Avenue.

- 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?

The proposed temporary access road will change the access location to the site (which is currently through Larsen Lane), but will not generate any uses.

- 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.

There are no known agricultural or forest product producers in the immediate project area.

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

No measures are 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.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

No.

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

No measures proposed.

16. Utilities [\[help\]](#)

- a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other wells

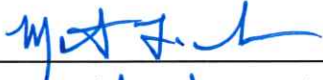
- d. Describe the utilities that are proposed for the project, the utility providing the service,
and the general construction activities on the site or in the immediate vicinity which might
be needed.

No utilities are needed for this project.

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 _____

Martin L. Snell

Position and Agency/Organization _____

Mackay Sposito

Date Submitted: _____

12/22/21

Received
OR 21-91
DEC 22 2021
Castle Rock
Finance

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?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

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?

Proposed measures to protect such resources or to avoid or reduce impacts are:

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?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

Received
CR 21-91
DEC 22 2021
Castle Rock
Finance

II-5.6 STRUCTURAL EROSION CONTROL BMPs.

II-5.6.1 BMP E2.10: Stabilized Construction Entrance and Tire Wash

Code: **CE** Symbol: 

Definition A temporary stone-stabilized pad located at points of vehicular ingress and egress on a construction site.

Purpose

To reduce the amount of mud, dirt, rocks, etc. transported onto public roads by motor vehicles or runoff by constructing a stabilized pad of rock spalls at entrances to construction sites and washing of tires during egress.

Conditions Where Practice Applies

- Whenever traffic will be leaving a construction site and moving directly onto a public road or other paved areas.

Advantages

- Mud on vehicle tires is significantly reduced which avoids hazards caused by depositing mud on the public roadway.
- Sediment, which is otherwise contained on the construction site, does not enter stormwater runoff elsewhere.

Planning Considerations

Construction entrances provide an area where mud can be removed from vehicle tires before they enter a public road. If the action of the vehicle traveling over the gravel pad is not sufficient to remove the majority of the mud, then the tires must be washed before the vehicle enters a public road. If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is carried off-site. Construction entrances should be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by vehicles.

It is important to note that this BMP will only be effective if sediment control is used throughout the rest of the construction site.

Design Criteria

- Material should be quarry spalls (where feasible), 4 inches to 8 inches size.
- The rock pad shall be at least 12 inches thick and 100 feet in length for sites more than 1 acre; and may be reduced to 50 feet in length for sites less than 1 acre.
- A filter fabric fence (see BMP E3.10) should be installed down-gradient from the construction entrance in order to contain any sediment-laden runoff from the entrance.
- Width shall be the full width of the vehicle ingress and egress area (minimum 20 feet).
- Additional rock should be added periodically to maintain proper function of the pad.
- See Figure II-5.4 for details.

Received
CR 21-91
DEC 22 2021

II-5.4 PERMANENT COVER PRACTICES

II-5.4.1 BMP E1.25: Preserving Natural Vegetation

Code: VEG

Symbol: 

Definition Minimizing exposed soils and consequent erosion by clearing only where construction will occur.

Purpose

To reduce erosion by preserving natural vegetation wherever practicable.

Condition Where Practice Applies

- Natural vegetation should be preserved on steep slopes, near perennial and intermittent watercourses or swales, and on building sites in wooded areas.
- As required by local governments.

Advantages

Preserving natural vegetation will:

- Help reduce soil erosion.
- Beautify an area.
- Save money on landscaping costs.
- Provide areas for wildlife.
- Possibly increase the value of the land.
- Provide buffers and screens against noise.
- Moderate temperature changes and provide shade and cover habitat for surface waters and land. This is especially important where detention ponds drain to salmonid-bearing streams. Increases in water temperature tend to lower the dissolved oxygen available for aquatic life.

Disadvantages/Problems

- Saving individual trees can be difficult, and older trees may become a safety hazard. Cottonwood and alder trees are especially prone to blowdown.

Planning Considerations

New development often takes place on tracts of forested land. In fact, building sites are often selected because of the presence of mature trees. However, unless sufficient care is taken and planning done, in the interval between buying the property and completing construction much of this resource is likely to be destroyed. The property owner is ultimately responsible for protecting as many trees as possible, with their understory and groundcover. This responsibility is usually exercised by agents--the planners, designers and contractors. It takes 20 to 30 years for newly planted trees to provide the benefits for which we value trees so highly.

Design Criteria

Natural vegetation can be preserved in natural clumps or as individual trees, shrubs and vines.

Received
CR 21-91
DEC 22 2021

Castle Rock
Finance

The preservation of individual plants is more difficult because equipment is generally used to remove unwanted vegetation. The points to remember when attempting to save individual plants are:

- Is the plant worth saving? Consider the location, species, size, age, vigor, and the work involved. Local governments may also have ordinances to save natural vegetation and trees.
- Is the tree or shrub a desirable plant? Is it shallow-rooted, do the roots seek water, or are insects and disease a problem? Shallow-rooted plants can cause problems in the establishment of lawns or ornamental plants. Water-seeking roots can block sewer and tile lines. Insects and diseases can make the plant undesirable. This is especially true with aphid on alder and maple.
- Old and/or large plants do not generally adapt to changes in environment as readily as young plants of the same species. Usually, it is best to leave trees which are less than 40 years of age. Some of the hardwoods (Red alder, Cherry, etc.) mature at approximately 50 years of age. After maturity they rapidly decline in vigor. Conifers, after 40 years of age, may become a safety hazard due to the possibility of breakage or blowdown, especially where construction has left only a few scattered trees in an area that was formerly dense woods. While old large trees are sometimes desirable, the problem of later removal should be considered. Again, local governments may have requirements to preserve older, larger specimen trees. It is expensive to cut a large tree and to remove the tree and stump from a developed area. Thinning some branches from trees can provide avenues for wind and hence lessen the "sail" effect.
- Clearly flag or mark areas around trees that are to be saved. It is preferable to keep ground disturbance away from the trees at least as far out as the dripline.

Plants need protection from three kinds of injuries:

- Construction Equipment -- This injury can be above or below the ground level. Damage results from scarring, cutting of roots, and compaction of the soil. Such injuries can be prevented by roping or fencing a buffer zone around plants to be saved prior to construction (Figure II-5.3.).
- Grade Changes -- Changing the natural ground level will alter grades which affect the plant's ability to obtain the necessary air, water, and minerals. Minor fills usually do not cause problems although sensitivity between species does vary. Cedars are more sensitive. Trees can tolerate fill of 6 inches or less. For shrubs and other plants the fill should be less. When there are major changes in grade, it may become necessary to supply air to the roots of plants. This can be done by placing a layer of gravel and a tile system over the roots before the fill is made. A tile system protects a tree from a raised grade.

The tile system should be laid out on the original grade leading from a dry well around the tree trunk. The system should then be covered with small stones to allow air to circulate over the root area (see Figure II-5.3).

Lowering the natural ground level can seriously damage trees and shrubs. The highest percentage of the plant roots are in the upper 12 inches of the soil and cuts of only 2-3 inches can cause serious injury. To protect the roots it may be necessary to terrace the immediate area around the plants to be saved. If roots are exposed, construction of retaining walls may be needed to keep the soil in place. Plants can also be preserved by leaving them on an undisturbed, gently sloping mound. To increase the chances for survival, it is best to limit grade changes and other soil disturbances to areas outside the dripline of the plant (Figure II-5.3).

Received
CE 21-91
DEC 22 2021

Castle Rock
Finance

- Excavations -- Protect trees and other plants when excavating for tile, water, and sewer lines. Where possible, the trenches should be routed around trees and large shrubs. When this is not possible, it is best to tunnel under them. This can be done with hand tools or with power augers.

If it is not possible to route the trench around plants to be saved, then the following should be observed:

Cut as few roots as possible. When you have to cut -- cut clean. Paint cut root ends with a wood dressing like asphalt base paint.

Backfill the trench as soon as possible.

Tunnel beneath root systems as close to the center of the main trunk to preserve most of the important feeder roots.

Some problems that can be encountered with a few specific trees are:

- Maple, Dogwood, Red alder, Western hemlock, Western red cedar and Douglas fir do not readily adjust to changes in environment and special care should be taken to protect these trees.
- The tipover hazard of Pacific silver fir is high while that of Western hemlock is moderate. The danger of tipover increases where dense stands have been thinned. Other species (unless they are on shallow, wet soils under 20 inches deep) have a low tipover hazard.
- Cottonwoods, maples, and willows have water-seeking roots. These can cause trouble in sewer lines and filter fields. On the other hand, they thrive in high moisture conditions that other trees would succumb to.
- Thinning operations in pure or mixed stands of Grand fir, Pacific silver fir, Noble fir, Sitka spruce, Western red cedar, Western hemlock, Pacific dogwood, and Red alder can cause serious disease problems. Disease can become established through damaged limbs, trunks, roots, and freshly cut stumps. Diseased and weakened trees are also susceptible to insect attack.

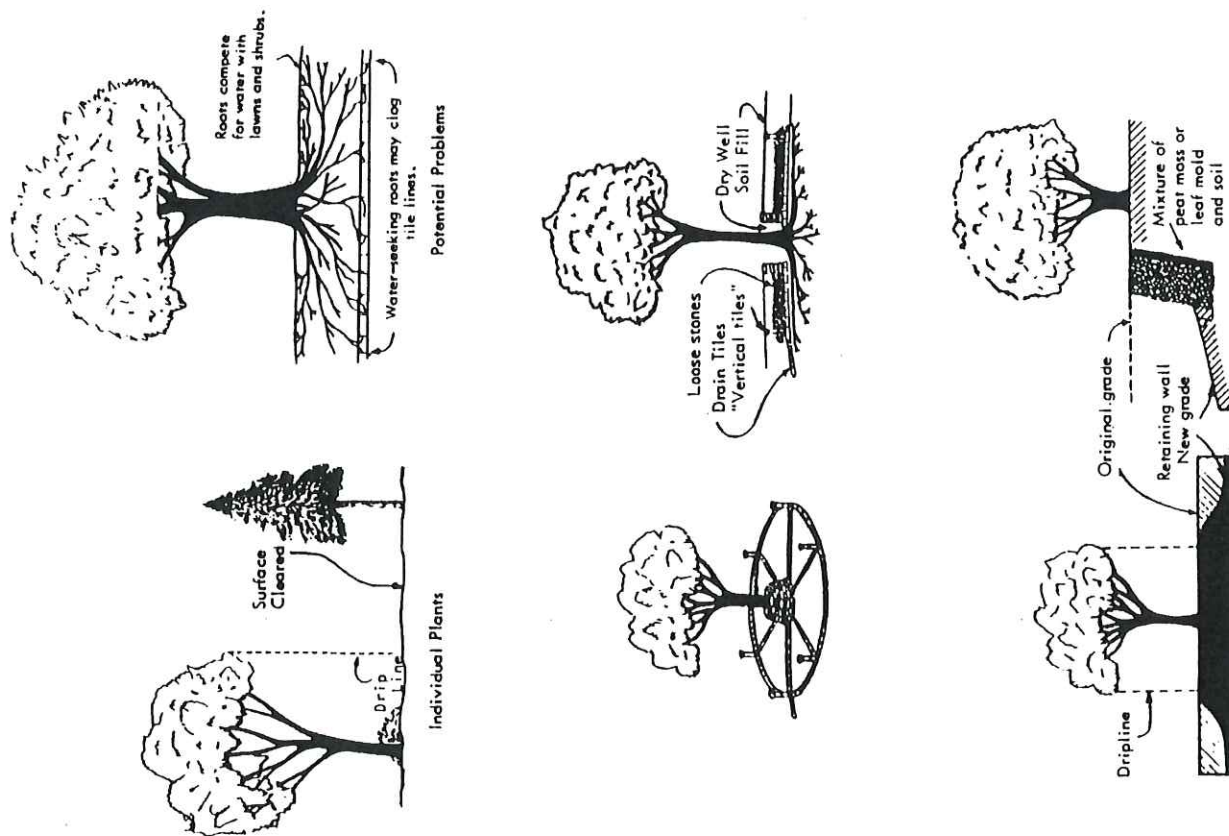
Maintenance

- Inspect flagged areas regularly to make sure flagging has not been removed. If tree roots have been exposed or injured, re-cover and/or seal them.

Received
OK 21-91
DEC 22 2021

Castle Rock
Finance

Figure II-5.3 Preserving Natural Vegetation



Castle Rock
Finance

