



**Thurston County
Proposed Emergency Operations Center
Final Environmental Assessment
2009-EO-MX-0013**

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FEMA

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Appendices

- Appendix A* DHS/FEMA Environmental and Historical Preservation (EHP) Compliance Review Template
- Appendix B* Cultural Resources Survey for Thurston County Emergency Operation Center, prepared by Cultural Resource Consultants, Inc., dated September 15, 2009 and SHPO concurrence dated May 5, 2010
- Appendix C* Wetlands Inventory for the Thurston County Maintenance Facility on Tilley Road, 2002
Update to 2002 Wetland Inventory for the Thurston County Maintenance Facility, prepared by Jeanne Kinney, Environmental Coordinator, Thurston County Public Works, dated June 4, 2009
- Appendix D* Mazama Pocket Gopher Habitat Management Plan for the Thurston County Tilley Road Facility, prepared by Brian Missildine, Senior Scientist, Skillings Connolly, dated June 18, 2009
- Appendix E* Subsurface Exploration, Infiltration Feasibility, Geological Hazard and Preliminary Geotechnical Report, prepared by Associated Earth Sciences, Inc., dated December 19, 2008
- Appendix F* Level of Services Analysis, Thurston County Road and Transportation Facility Expansion, prepared by Skillings Connolly, dated September 20, 2007 and revised September 9, 2008; and
Level 1 Trip Generation and Distribution Study, Thurston County Roads and Transportation Facility Expansion, prepared by Robert Connolly, Skillings Connolly, dated June 30, 2009
- Appendix G* Draft Environmental Assessment Public Notice and publishing affidavit

Acronyms

DAHP	Washington Department of Archaeology and Historic Preservation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EOC	Emergency Operation Center
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
HMP	Habitat Mitigation Plan
LOS	Level of Service
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollution Discharge Elimination System
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer
SR	State Route
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife

Section 1

Introduction

This document provides an Environmental Assessment (EA) for construction and operation of a proposed Emergency Operations Center (EOC) in Thurston County (County). The County has received approval for a grant from the Federal Emergency Management Agency (FEMA) to construct a new EOC at the Tilley Road site. Before the grant award can be authorized, FEMA requires the County to evaluate potential impacts from the proposed EOC project (project) in compliance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and Executive Orders related to Wetlands, Floodplains, and Environmental Justice; and related statutes. This EA has been prepared in accordance with the NEPA and FEMA's regulations implementing NEPA (44 CFR Part 10). The EA analyzes the potential environmental impacts of the proposed EOC and FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or Finding of No Significant Impact (FONSI).

Section 2

Purpose and Need

The purpose of the EOC grant program is to enhance State and local emergency management capabilities through provision of grant funding. The project purpose is to provide an emergency operations center for rapid, flexible, and cohesive disaster response to large and small incidents within Thurston County, Washington.

The current Thurston County EOC is housed at 2703 Pacific Avenue, Olympia, Washington. There is a designated alternate location at the Thurston County Maintenance Facility which is located at 9605 Tilley Road South in Olympia, Washington. A number of existing conditions have resulted in an increase in staffing levels and space needs beyond the capacity of the current building. The development of Homeland Security regions has resulted in an increase in emergency response staff in the region. The 911 system's growing need for technology and data management has increased the need for equipment space. The training and countywide coordination needs of Medic One have also increased staffing levels and space needs. In addition, the emergency management and homeland security staff are currently located on opposite ends of Olympia, which presents management and work coordination challenges.

The existing EOC facility is ordinarily configured as a meeting and training room and requires at least an hour to reconfigure for emergency operations use. Reports from disaster events including the 2001 Nisqually earthquake and five flood and storm events between 2006 and 2009 as well as training exercises have identified the need for a dedicated, full-time, fully-equipped EOC.

The current EOC does not provide adequate office space for existing Thurston County Emergency Management staff, as the staff size has grown over recent years. In addition, more space is needed for the public information and policy team functions.

Section 3

Alternatives Analysis

A number of alternatives were evaluated during the development of the proposed project. These alternatives included a No Action Alternative, expansion or reconfiguration of the existing EOC (“remodel” alternative), and construction of a new EOC at a new location (“construction” alternative). There were several configurations considered for the “construction” alternative. These configurations were evaluated for their ability to meet the purpose and need for the project through the Master Plan process (KMB 2008). The configuration that best met the purpose and need is evaluated further as the proposed project. The “remodel” alternative and the various configurations of the “construction” alternative that were screened out are described under Section 3.3 “Alternatives Considered but Dismissed.”

3.1 No Action Alternative

The No Action Alternative would consist of the EOC remaining in its current location and configuration and no FEMA funding would be provided. This alternative would not meet the purpose and need of the project which is to provide adequate emergency management for Thurston County. The current facility requires at least an hour to reconfigure furniture into coordination pods, bring phones and computers out of storage and plug them in for use. This lag in the start-up in response to unpredictable events such as earthquakes results in unacceptable delays in the ability of emergency response staff to assess situations and manage events. In addition, the current facility is simply too small to house the current emergency management staff.

3.2 Proposed Action: Construct a New EOC

A variety of alternatives for the construction of a new EOC were developed through the Master Plan process and evaluated for their ability to meet the purpose and need of the project (KMB 2008). Alternatives considered but dismissed are discussed in Section 3.3.

Although independent, the proposed project is part of a broader construction initiative at the County Public Works maintenance facility. The proposed action (Master Site Plan Option C) is the result of a master planning effort and entails construction of a new fully-equipped, dedicated EOC with sufficient office and response space for all of the County’s emergency management personnel.

This alternative was preferred because it best meets the purpose and need; provides the public with highly visible and direct access to the Public Works administration building; provides for centralized parking for staff and visitors; locates the new administration building near to existing buildings; separates staff and visitor traffic from County service vehicle traffic; and allows for future expansion of the Thurston County Public Works Department facilities. Moreover, the proposed action alternative provides the best access for staff to the new EOC.

The address for the proposed EOC would be 9605 Tilley Road (Figure 1) as it would be associated with the Thurston County Public Works maintenance facilities immediately to the south. The project would involve constructing an approximately 11,080-square foot EOC building and associated parking lot, as shown in Figure 2. The new EOC would be constructed on the eastern portion of the project site, which consists of two residential parcels located just north of the existing Thurston County maintenance facility. The two parcels are located at 9521 and 9439 Tilley Road South (lat/long 46.949621, -122.908739).

Demolition of the two existing residential buildings and associated garages and outbuildings would be required. Excavation would be required for the proposed new construction to construct concrete footings and foundations and the use of structural fill would be required to support footings and foundations if unsuitable soil is encountered during excavation.

Grading would be required to construct the parking area to proper elevation and achieve positive slope for storm water run-off. Parking and driveway areas may be supported on suitable native soil, structural fill, or existing fill, where the upper 12-inches of soil have been compacted to 95% of the maximum density. Standard construction equipment (backhoe, front end loader, trucks, etc.) will be used. The total area of soil disturbance would be approximately 150,000 square feet or 3.6 acres, including the area where demolition of existing buildings would occur.

Building construction would require the removal of existing trees, shrubbery and surface grasses to accommodate the new building and associated parking area. New landscaping would be provided around the perimeter of the new building. Existing landscaping along the north property line, adjacent to the existing residential properties, would be enhanced to create a visual and noise buffer for the adjacent properties.

A 50-foot communications tower would be installed adjacent to the west side of the new EOC, as shown in Figure 2. The tower will have an attached broadband frequency agile folded dipole antenna extending approximately 50 feet from tower. The new EOC building would house a moveable wall adjoining a training room, allowing the size of the facility to be rapidly increased for managing large incidents (Figure 3). The new EOC would be equipped to be disaster ready, with all systems in place and operable. It would also include enough office space for the entire Emergency Management staff. The current EOC facility with its communications infrastructure in place could serve as an alternate EOC in extreme conditions.

3.3 Alternatives Considered but Dismissed

A number of alternatives were evaluated against the project purpose and need during the development of the proposed project. These alternatives included expansion or reconfiguration of the existing EOC (“remodel” alternative), and several alternate configurations of the “construction” alternative which would construct a new EOC at a new location. These alternative configurations for the construction of a new EOC at

the Tilley Road site were developed through the Master Plan process and screened for their ability to meet the purpose and need of the project (KMB 2008). Ultimately, each of these alternatives was dismissed. In the Master Plan these alternatives are referred to as Option 1 through 3 and Options A through D.

3.3.1 Remodel the Existing EOC

An alternative of remodeling the existing EOC on Pacific Avenue was evaluated by Thurston County Emergency Management. This alternative would have resulted in minor construction-related impacts as the remodel would have been contained within the existing building footprint. The current location only has limited space for an increase in the building footprint. There is not sufficient space to increase the building footprint enough to address the space needs for County emergency operations. This alternative would not have met the purpose and need as the existing building, even in a modified configuration, is too small to accommodate the current and projected emergency management needs of the County. The County Board of Commissioners rejected this alternative.

3.3.2 Construction Alternative: Options 1 through 3

Master Site Plan Option 1: Construct a combined Public Works administrative office building and EOC to be located on the northeast corner of the Tilley Road Site (9605 Tilley Road), with the remaining area to be developed into a centralized parking lot. This option was rejected based on parking space restrictions, and site traffic and pedestrian circulation issues.

Master Site Plan Option 2: Construct a combined Public Works administrative office building and EOC to be located in the existing parking area at the Tilley Road Site. Option 2 was also rejected based on parking space restrictions, and site traffic and pedestrian circulation issues.

Master Site Plan Option 3: Separate Public Works administrative office building and EOC to be located on opposite sides of the Tilley Road Site. This option presented concerns regarding future expansion capabilities for County Roads Operations and restricted staff access to the EOC.

3.3.3 Construction Alternative: Options A through D

Given the issues identified with this first set of options, a second set of configurations was then developed. Option 2 was renamed Option A and was retained to provide a basis for evaluation for the additional three configurations. (In the Master Plan, these are referred to as Options A through D). Option C best met the project purpose and need and is the proposed action as described above in Section 3.2.

Master Site Plan Option B: Co-located Public Works administrative office building and EOC in the northeast corner of the Tilley Road Site. New parking lots would be constructed along with a third driveway to provide sufficient parking spaces and access. This option was rejected because the parking lots would not be centralized and the internal site circulation would not be clear.

Master Site Plan Option D: Same as Option C (proposed action), except that the EOC would be constructed along the west site of the adjacent property to the north to isolate the EOC from the public right-of-way. This option was rejected because there would be increased walking distance between buildings and the parking would be more isolated from each building than under other configurations. In addition, the EOC would be set back from Tilley Road considerably, reducing its visibility and presence from the road.

Section 4

Affected Environment And Potential Impacts

The project site is 4.8 acres and consists of two residential parcels located at 9521 and 9439 Tilley Road South, adjacent to and north of the existing Thurston County Maintenance Facility. Two single-family residences and associated garages and outbuildings are currently located on the project site. The residential buildings consist of a mobile/modular home and an approximately 40-year old frame house. The site is generally flat. The western portion of the site was logged and cleared in early 2000. The eastern portion of the site contains several mature Douglas fir trees and manicured lawn (Figure 4). Appendix B contains photos of the site taken during the cultural resources survey.

The project would include demolition and/or relocation of two existing single-family homes that are less than 50 years old and construction of an 11,080-square foot building and associated parking lot.

For each resource category, the impact analysis follows the same approach in terms of impact findings. When possible, quantitative information is provided to establish impacts and indirect effects will be described as appropriate. Qualitatively, impacts will be measured as outlined below:

None/Negligible: The resource area would not be affected, or changes would be either non-detectable or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.

Minor: Changes to the resource would be measurable, although the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.

Moderate: Changes to the resource would be measurable and have both localized and regional scale impacts. Impacts would be within or below regulatory standards, but historical conditions are being altered on a short-term basis. Mitigation measures would be necessary and the measures would reduce any potential adverse effects.

Major: Changes would be readily measurable and would have substantial consequences on a local and regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected.

4.1 Physical Resources

4.1.1 Geology and Soils

The project site is generally flat and has been previously disturbed during grading and construction of the two single family homes. A geotechnical evaluation was conducted for the project site and consisted of evaluation of soil in exploration pits (Appendix E). During this investigation, fill, topsoil and Vashon recessional outwash was encountered at the project site. The investigation concluded that there are no surface indicators or known history of unstable soils in the immediate vicinity of the project.

The project site is in rural Thurston County, near the city of Olympia. The site is currently zoned residential. The site and surrounding areas are currently developed in residential and public facility uses. While it is located immediately outside of the urban growth boundary, the surrounding area has been previously subdivided into small lots. The soils on site are very gravelly sandy loams and are rated as having severe limitations for growing crops (USDA 2010). The site soils and setting would not be considered prime farmland in Thurston County.

No Action

The No Action Alternative would not involve any construction or ground disturbing activities, therefore, there would be no impacts associated with this alternative.

Proposed Action

There are no unstable soils at the project site. Since the project area would not remove prime agricultural soils from potential production, the project is consistent with the Farmland Protection Policy Act. Therefore, potential impacts related to these issues would be negligible and no mitigation measures would be required.

4.1.2 Air Quality

Thurston County is not within a U.S. Environmental Protection Agency-designated (2010) Attainment or Maintenance Area for air quality.

No Action

Under the No Action Alternative, there would be no construction and no changes to existing conditions at the project site. As such, there would be no impacts related to air quality.

Proposed Action

The proposed EOC would include a back-up emergency generator to provide emergency power to the EOC during power outages. This back-up generator would be tested periodically and would operate if power outages occur during the operation of the facility and if the primary generator is disabled. Operation of this back-up generator could result in some air pollutant emissions for intermittent and short periods of time. However, due to the infrequent nature of this potential air quality

effect, this impact would be minor. Federal and state air quality attainment levels would not be exceeded.

Potential air quality effects related to construction activities are discussed in Section 4.8.

4.1.3 Climate Change

Thurston County is located at the southern tip of Puget Sound and receives an average of 51 inches of rainfall per year. Like most of western Washington, Thurston County's weather is characterized by sunny summers and wet winters. In the warmest months, the average high temperature ranges between 75 and 80 degrees F. In the winter months, high temperatures usually hover around 45 degrees F.

No Action

Under the No Action Alternative, there would be no construction or change in existing land use at the project site. Therefore, there would be no impacts related to climate change.

Proposed Action

Construction and operation of the new EOC has the potential to contribute greenhouse gases that result in climate change. Construction would entail the use of gasoline and diesel fuels for construction equipment, and operation of the EOC would require energy sources for lighting, heating and air conditioning, etc. However, the new EOC building would consolidate emergency operations, thereby reducing the use of fossil fuels associated with transport between and maintenance of separate facilities in different locations. Further, the new EOC building would be constructed to LEED Gold standards and would therefore include many energy saving measures, resulting in a lower overall carbon footprint than the existing scattered emergency operations facilities, many of which are located in older, less energy-efficient buildings. In addition, the new EOC would provide features to encourage alternative modes of transportation, including bicycle parking and showers for bicycle commuters. As a result, the project would not have significant impacts related to climate change and no mitigation measures would be required.

4.2. Water Resources

4.2.1 Water Quality

No ponds, streams or other surface water resources exist at the project site. The project site is identified as being within the Salmon Creek Drainage Basin area. This drainage basin collects surface run-off and conveys waters to Salmon Creek and to the Black River located west of the project site. Portions of the Salmon Creek Drainage Basin are prone to flooding due to high groundwater. High groundwater hazard areas have been delineated within the basin (Thurston County, 2003). The project site is located outside of the high groundwater hazard area, but a portion of the eastern edge of the project area is within the 300-foot buffer area (Figure 5, High Groundwater Hazard Areas).

The drainage basin rules stipulate that the lowest floor elevation of any new building within the 300 foot buffer be two feet above the elevation 198.08. The surface elevations within the project area range from 205 to 200 feet. Therefore, the lowest floor will be located at least two feet above the elevation 198.08 feet. In addition, impervious areas within 300 feet of the high ground water shall be limited to 65% of the total area of the site. Under this proposal, the total impervious area will be 30%.

No Action

There would be no construction or changes to existing land use at the project site under the No Action Alternative. Therefore, there would be no impacts to water quality.

Proposed Action

There are no surface waters on the site and there would be no impacts to water resources from construction or operation of the proposed EOC. While the project site is located outside of the high groundwater hazard area, a portion of the eastern edge of the project area is within the 300-foot buffer area. The new EOC building will comply with the drainage basin rules that are intended to prevent impacts from the high ground water. The lowest floor will be located at least two feet above the high ground water elevation of 198.08 feet. In addition, impervious areas will be 30% well below the regulatory standard of 65%.

Since the area to be disturbed during construction is greater than 1 acre, a stormwater management plan will be implemented during site development per the requirements of a NPDES General Construction Permit issued by the Washington State Department of Ecology. The project design avoids impacts to wetlands, surface waters and groundwater; therefore, no additional mitigation measures are required.

4.2.2 Wetlands

Based on a wetland report conducted in June, 2009, there are no wetlands at the project site (see Appendix C). One jurisdictional wetland is located in the northwest portion of the adjacent Thurston County Maintenance Facility site, approximately 500 feet southwest of the project site.

No Action

As there are no wetlands at the project site, and no construction would occur under the No Action Alternative, there would be no impacts on wetland resources.

Proposed Action

There are no wetlands at the project site, so there would be no impacts to wetlands, consistent with EO 11990 (Wetlands Protection) from construction or operation of the project. The nearest wetland is located approximately 500 feet from the project site and would not be impacted by the project.

4.2.3 Floodplains

The project site is within the Salmon Creek drainage basin but it is not located within a 100-year floodplain, according to FEMA's Flood Insurance Rate Map (FEMA 2010).

No Action

There would be no construction under the No Action Alternative. Therefore, there would be no impacts with regards to floodplains.

Proposed Action

Since the project site is located outside of the high groundwater hazard area identified by Thurston County (Figure 2) and is not within the 100-year floodplain, no direct impacts related to flooding would occur, consistent with EO 11988 (Floodplain Management)

The project does not impact floodplains; therefore, mitigation measures are not required.

4.3 Coastal Resources

The Coastal Zone Management Act requires federal agencies to determine if their actions are consistent with the State's coastal zone management plan. Although Thurston County is designated a coastal county by the WA Department of Ecology's Coastal Zone Management Program, the project site is not near a coastal shoreline, nor is it within 200 feet of a water of statewide significance.

No Action

Under the No Action Alternative, no construction would occur, and there would be no impacts to coastal resources.

Proposed Action

Although the project site is located within a coastal zone county, it is not within 200 feet of a shoreline or a water of the state and therefore, there would be no impacts on coastal resources. Therefore, the proposed action would be consistent with the Coastal Zone Management Act.

4.4 Biological Resources

4.4.1 Vegetation

The project site consists of two residential properties partially vegetated with mature Douglas fir trees and grassy areas. Surrounding areas consist of residential developments and the adjacent Thurston County maintenance facility. The Facility was once used for gravel mining and currently consists of several buildings, maintenance structures, parking lots, and re-vegetated areas. These re-vegetated areas surround small created wetlands and support cottonwoods and willows, along with smaller shrubs and grasses.

No Action

There would be no construction or disturbance of vegetation under the No Action Alternative. Therefore, there would be no impacts.

Proposed Action

The northern edge of the two parcels immediately adjacent to the existing residential properties would be left in their current vegetated state. Existing landscaping along the north property line would be enhanced to create a visual and noise buffer for the adjacent properties. All new landscaping would comply with Thurston County standards.

The retention of mature vegetation along the northern property line and the installation of additional landscaping would mitigate for potential impacts related to vegetation. These mitigation measures would reduce result in negligible impacts.

4.4.2 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) requires federal agencies to determine the impacts of its actions on federally listed threatened or endangered species and designated critical habitat. The Mazama (Western) pocket gopher (*Thomomys mazama*) is known to occur at the project site. The Mazama pocket gopher is a state threatened and federal ESA candidate species that inhabits limited areas of western Washington. A survey was conducted for Mazama pocket gopher at the project site on February 9, 2009 following Washington Department of Fish and Wildlife (WDFW) protocol (Appendix D). Pocket gopher mounds were observed primarily on the western half of the site with a few mounds on the south central portion of the site. No other federal or state threatened or endangered species or critical habitats are known to exist on or near the project site.

No Action

Under the No Action Alternative, there would be no construction or change in land use of the project site. Therefore, there would be no impacts to threatened and endangered species or critical habitat.

Proposed Action

A colony of Mazama pocket gophers, a state listed species and federal ESA candidate species, is located on the western and south central portion of the property. Direct impacts to individual Mazama pocket gophers may occur during construction. To mitigate for potential impacts to the pocket gopher, a Habitat Management Plan (HMP) was developed in consultation with WDFW and is attached as Appendix D. WDFW approved the plan on June 19, 2009. The HMP establishes a set-aside area for Mazama pocket gophers that encompasses the majority of the mounds and the largest concentration of mounds on the project site. During grading, filling, and excavation activities within the identified pocket gopher area, several measures will be taken to avoid any killing of gophers. Within the set aside area, the habitat will be enhanced by planting with native plants and the removal and control of invasive plants,

including scotch broom, which deters pocket gophers. Perimeter fencing will be installed around the set-aside and educational signs will be put up to inform the public of the presence of pocket gophers, their habitat and management needs, and that no entry to the set-aside area is allowed.

The mitigation measures proposed in the HMP would mitigate potential impacts to the Mazama pocket gopher. The ESA does not require federal agencies to consult under Section 7 for candidate species, nonetheless the HMP provides for conservation measures.

4.4.3 Fish and Wildlife

Habitat for fish and wildlife at the project site is limited to mature Douglas fir trees and grassy areas. Thus, terrestrial wildlife species adapted to living near human-occupied structures may occur (e.g., squirrel, raccoon, etc.).

Thurston County is generally in the Pacific Flyway for migratory birds (USFWS 2010). Migratory birds may be present at the project site as there is some limited vegetation present. However, potential habitat is limited to a few trees.

There is no feature or aspect of the habitats present on the site that would indicate that the project area would attract migratory birds to any greater degree than any other nearby residential property. The project site is not located along a waterway or a ridge line that could be expected to attract migratory birds during migration. The site is not designated a priority habitat or flyway for migratory birds by the WDFW.

There is no portion of the site that would provide critical resting or foraging cover for migratory birds. Migratory birds typical of those found in disturbed residential areas, such as American robins or song sparrows, could occur on the site but they would be few in number and likely either summer or winter residents depending on the season.

No Action

Under the No Action Alternative, no construction would occur, and there would be no change in existing conditions for fish and wildlife at the project site. Therefore, there would be no impacts.

Proposed Action

Construction of the project would require the removal of several mature coniferous trees. As migratory birds may use this limited habitat at the project site, construction activities could have direct impacts to migratory bird nests during the nesting season. This potential impact would be avoided by surveying native vegetation for active nests (those with eggs and/or chicks present) and/or timing tree removal to occur outside of the nesting season, generally from April 1 to July 15. If active nests are observed, site work would be modified to avoid impacting those nests until young have fledged. In addition, since habitat for migratory birds at the project site is limited to a few trees, potential impacts would be minor.

The proposed tower would not be expected to pose a hazard to migratory birds. The species that would be found on the site are resident individuals and accustomed to moving in landscaping around structures.

Existing landscaping would be replaced with new landscaping. The landscaping that would be provided around the proposed EOC would likely provide similar habitat values as the existing residential landscaping on site. Based on these mitigation measures, impacts to wildlife are expected to be minor.

Furthermore, because the project site has no surface waters or is not close to any, no Essential Fish Habitat will be affected, consistent with the Magnuson-Stevens Fisheries Conservation and Management Act.

4.5 Historic and Cultural Resources

No historic or cultural resources, including tribal cultural or religious sites, were identified during a cultural resources survey conducted for the project site in September, 2009 (Appendix B). The survey report provides an overview of the project area's prehistoric and historic context.

Consistent with Section 106 of NHPA, which requires consideration of historic properties in federal actions, the survey included a search of records kept at the Washington State Department of Archaeology and Historic Preservation (DAHP) and a review of ethnographic and historic documents, historical maps and aerial photographs, and regional archaeological literature. The cultural resources report was provided to the State Historic Preservation Officer (SHPO) for review. Local tribes, including the Chehalis Confederated Tribes and the Squaxin Island Tribe were contacted for any additional information. No response was received from the tribes.

No Action

Under the No Action Alternative, no construction or other ground-disturbing activities would occur at the project site. Therefore, there would be no impacts related to historic and cultural resources.

Proposed Action

No historic or cultural resources were identified during a cultural resources survey conducted for the project site in September 2009 (Appendix B). No comments were received from Native American tribes on the cultural resources survey results report. The SHPO concurred that the project would result in no historic properties affected and no mitigation measures would be required.

4.6 Socioeconomic Resources

4.6.1 Environmental Justice

Executive Order 12898 requires federal agencies and those receiving federal funds to consider possible disproportionate and high adverse environmental effects to minorities and low-income populations in their actions. In 1997, the Council on

Environmental Quality (CEQ) issued guidance to assist federal agencies with their NEPA procedures regarding environmental justice (CEQ 1997). CEQ guidance defines “minority” as non-white or Hispanic and defines the population of an area as a minority population when the total minority percentage exceeds 50 percent or “is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.” The CEQ guidance states that low-income populations should be identified based on poverty thresholds used by the US Bureau of the Census.

The project site is located within a rural area; the closest urban area near the site is the City of Tumwater, which had a population of 12,698 during the 2000 census, the most recent data available (US Census Bureau 2010). The site is located about one and a half blocks from the city limits of the City of Tumwater.

The site is located in Census Tract 118.20, census block group 3, and census block 3015. US Census data from 2000 are the most recent data available on the percentage of minority and low-income populations at the site. Data are available to the census block level for minority populations and to the block group level for low-income populations (US Census Bureau 2000).

Table 4-1 presents the total minority population of the census block within which the site is located, compared to Thurston County as a whole. Based on these data, the total minority population at the site is 11%, which is less than that of Thurston County (17%), and well below the 50 percent guideline recommended by the CEQ as representing a significant minority population.

Table 4-2 presents the total low income population of the census block group within which the project site is located, compared to Thurston County as a whole. The percentage of the population near the site living below the poverty level (5.3%) is less than Thurston County (8.8%). According to the US Census (2000), the population within the census block group in which the project is located would not be considered a low-income population.

No Action

As the No Action Alternative would not result in construction or changes in land use at the project site, there would be no impacts related to environmental justice.

Proposed Action

Based on the census data, the residents within the vicinity of the project area do not represent a minority or low income population greater than the populations within Thurston County. Therefore, there would be no substantial adverse effects or disproportionate impacts related to environmental justice.

Minority and low income populations would benefit equally from the emergency management public services provided by the Thurston County EOC as the general population. Although minority or low income populations may reside in the project

site's vicinity, they would not be disproportionately affected by the proposal to site a new EOC at the Tilley Road location.

Table 4-1. Demographic Data on Minority Population within Census Block 3015 Compared to Thurston County		
	Block 3015	Thurston County
Total number of persons	19	207,355
White alone	17	172,963
Hispanic or Latino alone	0	9,392
Black or African American alone	0	4,714
American Indian and Alaska Native alone	0	2,883
Asian alone	2	9,034
Native Hawaiian and Other Pacific Islander alone	0	1,030
Some other race alone	0	576
Two or more races	0	6,763
Total minority population (%)	11	17
<i>Source: US Census 2000</i>		

Table 4-2. Population Income Data for Block Group 3 Compared to Thurston County		
	Block Group 3	Thurston County
Total number of persons	1,883	203,619
Income in 1999 below poverty level	99	17,992
Income in 1999 at or above poverty level	1,784	185,627
Total low-income population (%)	5.3	8.8
<i>Source: US Census 2000</i>		

4.6.2 Noise

The area is currently a rural area with relatively low ambient noise levels including normal street noise from Tilley Road. However, the site is located within the southern approach zone for the Olympia / Tumwater airport. Noise contour mapping for the airport vicinity indicates that the existing typical noise level is less than 60 decibels (Thurston County 2010).

The Thurston County maintenance facility immediately to the south is a source of noises related to the normal vehicle start-up and operation associated with the operation and repair of County service vehicles.

No Action

Under the No Action Alternative, no construction would occur and there would be no change in existing noise levels at the project site. Therefore, there would be no impacts related to noise.

Proposed Action

Operation of the EOC would not result in significant changes in traffic volumes and therefore would not change the normal street noises currently existing at the site. Mechanical air-handling equipment would be placed in the building to control noise and maintain a residential aesthetic quality. This design approach would avoid increased noise levels and therefore, additional mitigation would not be required.

A back-up emergency generator would provide emergency power to the EOC during power outages. This back-up generator would be tested periodically and would operate if power outages occur during the operation of the facility and if the primary generator is disabled. Operation of this back-up generator could result in some noise impacts for intermittent and short periods of time. The generator would include standard noise shielding. Due to the infrequent nature of this potential noise impact and the design of the generator, this impact would be minor.

4.6.3 Traffic and Transportation

Existing roads in the vicinity of the project site include Tilley Road SW and 93rd Avenue SW. Based on a traffic analysis conducted for the project site (Appendix F), the existing level of service (LOS) for the intersection of Tilley Road SW and 93rd Avenue SW is LOS B. LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.

No Action

Under the No Action Alternative there would be no construction or alteration of existing traffic and transportation at the project site. Therefore, there would be no impacts.

Proposed Action

According to the traffic analysis conducted for the project, the LOS at the intersection of Tilley Road SW and 93rd Avenue SW would decrease from the existing LOS B to LOS C by 2010, based on a 4% annual growth rate for the project vicinity (Appendix F). LOS C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes affected by the interactions with others in the traffic stream.

According to the traffic analysis, the intersection would continue to operate at LOS C with the additional traffic attributed to operation of the project. Therefore, the project would have minor adverse impacts on traffic and transportation and mitigation measures would not be required.

4.6.4 Land Use

Land use at the project site consists of two single-family residential properties. These two properties were acquired for a negotiated price, mutually agreeable to both parties. Two families will be displaced by this project, but there is adequate available housing in the vicinity. The properties are not considered low income housing. Adjacent properties are low density single-family residential and zoned rural residential (R 1/10), which allows for one dwelling unit per 10 acres. The Thurston County Maintenance Facility is located immediately to the south on a 40 acre site. This site currently contains a variety of structures including several buildings, maintenance structures, parking lots, re-vegetated areas, and remnants of past gravel mining operations.

No Action

Under the No Action Alternative, no change in existing land use would occur at the project site. Therefore, there would be no impacts.

Proposed Action

The project would result in the conversion of two residential parcels to public facility uses. The project is located in an area with sufficient land available to meet local housing demands. Therefore, negligible adverse impacts to housing resources would result from the project.

The project site is immediately adjacent to the existing Thurston County Maintenance Facility which includes several buildings, maintenance structures, parking lots, and re-vegetated areas. The proposed EOC would be consistent in character with the existing public facilities immediately to the south. In addition, under a proposed Master Site Plan for the Tilley Road facilities, the maintenance facilities are proposed to be reconstructed in a way that would result in a more cohesive facility design for both the maintenance facilities and the EOC facility. Thus the project will have negligible adverse impacts on area land use and is compatible with them.

4.6.5 Visual and Aesthetics

The area is rural with a mix of residential and public facilities. The surrounding land uses include single family residential homes on large lots and the Thurston County public works shop facilities with storage sheds/garages, office buildings, parking lots, and a fueling station. The surrounding land cover includes a mix of residential landscaping, scattered trees, and managed grass lands such as pastures and lawns.

The existing public works shop facility to the south uses exterior night lighting on the outside of the existing buildings and upright wood pole standards in the central parking lot and the service vehicle parking area.

No Action

No construction or change in the visual or aesthetic conditions at the project site. Therefore, there would be no impacts.

Proposed Action

Existing, mature trees around the site perimeter will be preserved to maintain the existing landscape screen and buffer that currently exists for the surrounding residential properties. A landscape plan would be developed by a landscape architect that incorporates new landscaping in areas that are disturbed by construction. This plan would use the existing vegetation wherever possible and would conform to Thurston County landscape requirements.

The EOC would be located near existing residential properties. The undeveloped, natural buffer area separating the proposed EOC from the residential properties to the north would be enhanced to create a visual screen along the property line. The building form and shape would complement the character of the adjacent residential properties by including a single story design and a sloping roof system. In addition, the proposed EOC would be consistent in character with the new maintenance facility buildings proposed immediately to the south.

The height of new upright light standards in parking areas would allow the light pattern to be directed downward to prevent glare to adjoining properties. These light standards, as well as building mounted lighting, would also be equipped with housing shields to prevent glare to adjoining properties. New lighting would not affect views or impact adjoining properties. Thus the project would result in minor adverse impacts to visual and aesthetic qualities in the immediate surrounding area. No additional mitigation measures would be required for potential visual or aesthetic impacts.

4.6.6 Public Health and Safety

As described in Section 2, the existing EOC's public safety function has expanded in recent years without commensurate facility improvements. The existing EOC does not have sufficient space for staff, nor is it large enough to accommodate additional County personnel during emergency activations. Moreover, County homeland

security and emergency management staff are currently working out of two different locations, which presents management and coordination inefficiencies.

No Action

Under the No Action Alternative there would be no construction or change in the emergency operations center. Therefore, the existing operations would continue to be inefficient and have the potential for adverse effects to public safety from delayed or inefficient emergency response.

Proposed Action

The new EOC will positively impact Thurston County's public safety capabilities by providing a facility in which all homeland security and emergency management staff can work from, dedicated space for training, and for emergency activations. The regional emergency management community surrounding Thurston County, will indirectly benefit from the project as well because of the improved facilities. Thus the project will result in moderate positive impacts on public safety.

4.7 Hazardous Materials

Land use at the project site has consisted of residential use. No hazardous materials or environmental conditions have been identified at the site. A Phase I Environmental Site Assessment was conducted prior to the purchase of the proposed project site and no hazardous materials concerns were identified (Associated Environmental Group 2008).

No Action

As there are no identified hazardous materials at the project site, there would be no impacts under the No Action Alternative.

Proposed Action

There are no hazardous materials at the project site. Therefore, no impacts related to these issues would occur and no mitigation measures would be required.

4.8 Construction

No Action

The No Action Alternative would not involve any construction activities and there would be no impacts associated with construction.

Proposed Action

Construction activities will involve the use of typical construction equipment for clearing, grading, building construction and parking lot paving including excavators, bull dozers, dump trucks, flat bed trucks and a variety of smaller light duty trucks.

Construction activities have the potential to affect air quality from dust, air emissions from off-road diesel equipment; noise, and traffic. Thurston County is not within a U.S. Environmental Protection Agency-designated (2010) Attainment or Maintenance

Area for air quality. Dust generated due to the construction work will be mitigated by watering during dry periods. In order to minimize air emissions during construction, the contractor will be instructed to turn off construction equipment when it is not in use. Construction noise would be limited to normal working hours and will comply with local noise control codes. Some traffic would be generated by construction activities; however, the existing road system is adequate to handle the expected traffic. The project would not require the removal of large quantities of material that would be likely to generate significant traffic. With the mitigation measures described above and construction lasting about 14 months, the project would result in minor adverse impacts from construction activities.

4.9 Cumulative Impacts

Cumulative impacts may occur if impacts would be significant when project-related impacts are added to those of past, present, and reasonably foreseeable future actions in the project vicinity. Reasonably foreseeable actions in the project vicinity include the proposed reconfiguration and construction of additional structures on the Thurston County Maintenance Facility immediately to the south. Since the maintenance facility project is proposed to occur in a similar time frame as the EOC project, the potential for cumulative impacts exists.

The project's potential adverse impacts are limited to potential effects on water resources (high groundwater hazard area), wildlife (including the Mazama pocket gopher), traffic, land use, visual and aesthetics, and construction.

Water Resources: The project is designed to avoid impacts related to the high ground water hazard area and the related project to the south is located outside of the hazard area and its buffer. Therefore, there would be no cumulative impacts related to water resources.

Wildlife: The Mazama pocket gophers occur mostly on the EOC site, but a portion of the area identified in the surveys occurs on the maintenance facility site to the south. The HMP developed to avoid impacts to the pocket gophers applies to both projects and would be implemented jointly. Therefore, there would be no cumulative impacts related to wildlife resources.

Traffic: The traffic analysis included potential traffic impacts from both the EOC project and the related maintenance facility project and concluded that there would be no significant adverse impacts to traffic. Therefore, there would be no cumulative impacts.

Land Use: The related maintenance facility project does not result in any changes in land use and the potential impacts of the EOC project are less than significant, therefore, there are no cumulative impacts.

Visual and Aesthetics: The proposed EOC is designed to be consistent with both the existing residential character of the surrounding land uses as well as to present a

consistent extension of the public facilities to the south. The related maintenance facility project proposes to construct new buildings and reconfigure existing buildings in a way that would result in a cohesive facility design between both projects. Therefore, there would be no cumulative impacts to visual and aesthetic resources.

Construction: The Thurston County Maintenance Facility project and the EOC project are anticipated to be under construction at approximately the same time. The construction practices and mitigation measures described for the EOC project would also be applied to the related project to the south. Therefore, there would be no cumulative impacts from construction.

Section 5

Public Involvement

Public involvement about the proposed EOC completed to date includes the following:

- Notice of Application, mailed on November 16, 2009 to local and state agencies, interested parties, and residents within 500 feet of the site, inviting comments on the project proposal during a 20-day public comment period that ended December 7, 2009;
- Notice of a public open house held on December 8, 2009;
- Mitigated Determination of Non-significance, issued on December 8, 2009, inviting public comment during a 14-day comment period that ended December 22, 2009; and
- Notice of the public hearing held on January 26, 2010.

A public notice was required for the draft EA. The public, tribes, and public agencies had the opportunity to comment on the draft EA for 30 days after notice publication. The notice identified the action, location of the proposed site, participants, location of the draft EA, and who to write to provide comments (see Appendix G). No public comments were received either by FEMA the County or Washington Emergency Management Division.

Section 6

NEPA Conclusion

Based on the evaluation presented herein, the proposed action could have direct impacts related to water resources, wildlife, vegetation, visual and aesthetics, and construction.

With implementation of Thurston County development standards, potential impacts due to high groundwater at the project site would be reduced to a less than significant level.

Potential impacts to migratory birds would be avoided by timing tree removal to occur outside of the nesting season unless otherwise evaluated by a biologist to ascertain whether any active nests are present. In addition, since habitat for migratory birds at the project site is limited to a few trees, potential impacts would not be significant.

Mitigation measures would be implemented to ensure no significant adverse impacts to the Mazama pocket gopher would occur during construction or operation of the project. The HMP outlines the mitigation measures to be implemented to reduce impacts. Application of the Thurston County development standards with respect to landscaping and the retention and enhancement of the existing vegetation along the northern property lines would reduce any potential impacts to vegetation to a less than significant level.

The project would retain a vegetated visual buffer between the new building and the existing adjacent residential uses. In addition, the building form and shape would complement the character of the adjacent residential properties by including a single story design and a sloping roof system. The proposed EOC would also be consistent in character with the new maintenance facility buildings proposed immediately to the south. These measures would result in no significant adverse impacts to visual and aesthetic resources.

Construction activities could result in some increases in dust, air emissions, noise, and traffic. However, with the implementation of mitigation measures and compliance with local codes and ordinances designed to mitigate dust, noise and traffic impacts, there would be no significant adverse impacts from the project.

With implementation of mitigation measures described in Section 7, the project would result in no significant adverse impacts, thus a FONSI was issued..

Section 7

Project Conditions and Mitigation Measures

Project conditions and mitigation measures include:

- The County shall secure and comply with all applicable federal, state, and local project permitting.
- The County must secure a coastal zone management plan consistency determination from the WA Department of Ecology before proceeding.
- The County must secure an NPDES General Construction Permit. During site work, the County is responsible for selecting, implementing, monitoring, and maintaining best management practices to control soil erosion and sediment, reduce spills and pollution, and provide habitat protection; consistent with permitting requirements.
- Site soils would be covered and/or wetted during construction as needed to minimize fugitive dust.
- Construction activities will be conducted during the daytime, to reduce adverse noise impacts.
- Conservation measures outlined in the Mazama Pocket Gopher HMP shall be implemented.
- Site work will be done outside the nesting season for migratory birds, generally from April 1 to July 15; if vegetation clearing is required during the breeding season, the area will be first surveyed by a biologist for the presence of nesting birds to ensure that active nests (nests with eggs and/or chicks) are not destroyed.
- In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity shall be discontinued, the area secured, and the SHPO and FEMA notified.
- County is responsible for determining the presence of hazardous materials during demolition work. This may include, but is not limited to, asbestos containing materials and lead-based paint, discarded paints and solvents, cleaning chemicals, containers of pesticides, lead acid batteries, items containing chlorofluorocarbons (CFCs), used oil filters and motor oil. County shall handle, manage, abate, and dispose of hazardous materials in accordance to the requirements and to the satisfaction of the governing local, state and federal agencies, including but not limited to the Washington Department of Ecology.

- If any hazardous materials are found during construction; these shall be characterized, remediated, and disposed of as appropriate, and otherwise handled in accordance with applicable local, state, and federal laws and regulations.
- The site stormwater management system shall be operated and maintained consistent with its intended design.
- Any change to the approved scope of work stated in the FEMA grant application and described in this EA as the proposed alternative will require re-evaluation for compliance with NEPA and other laws and Executive Orders.

Section 8

List of Preparers

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Section 9

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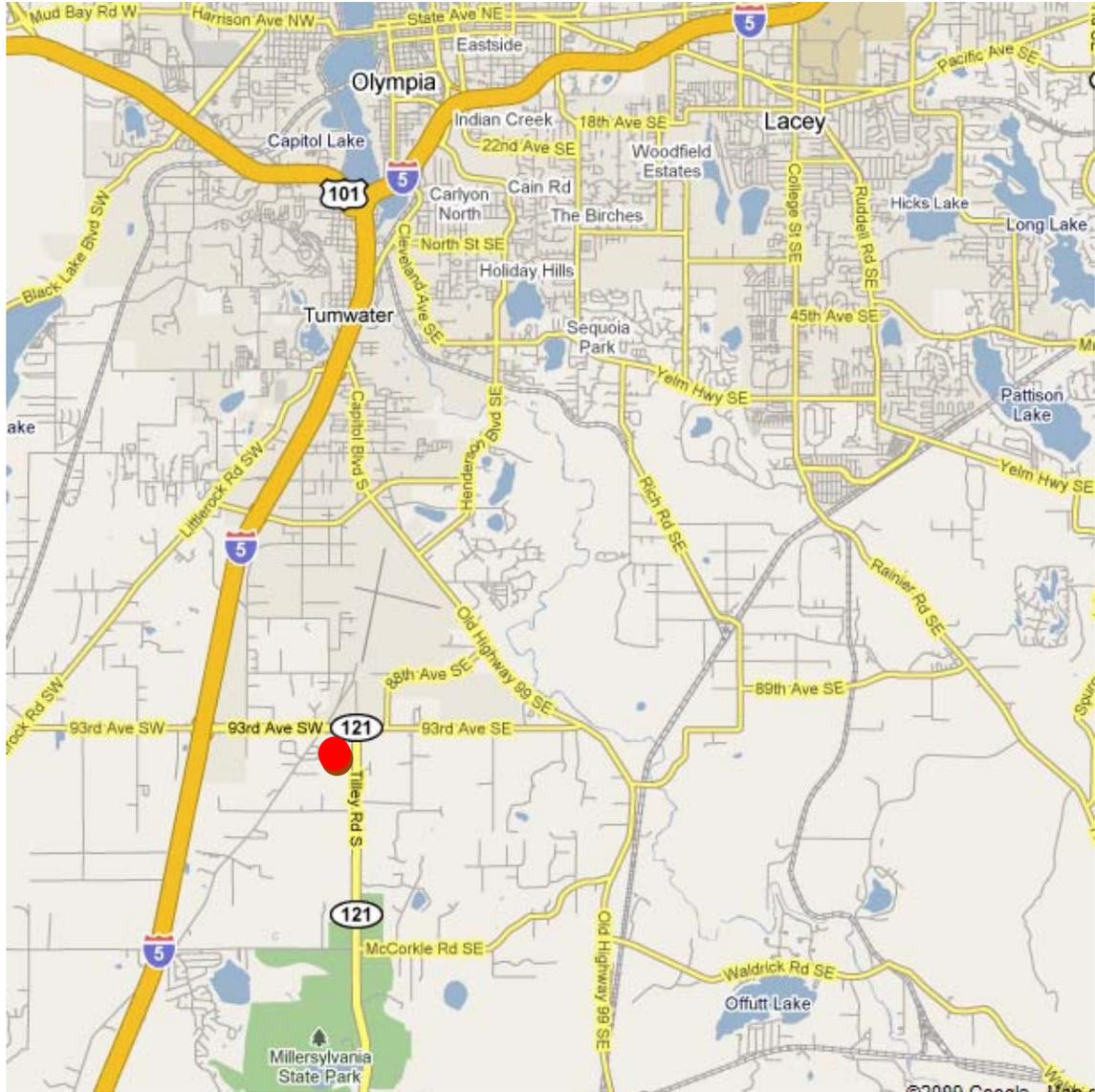
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Figures



● Project Site

Figure 1. Site Vicinity Map

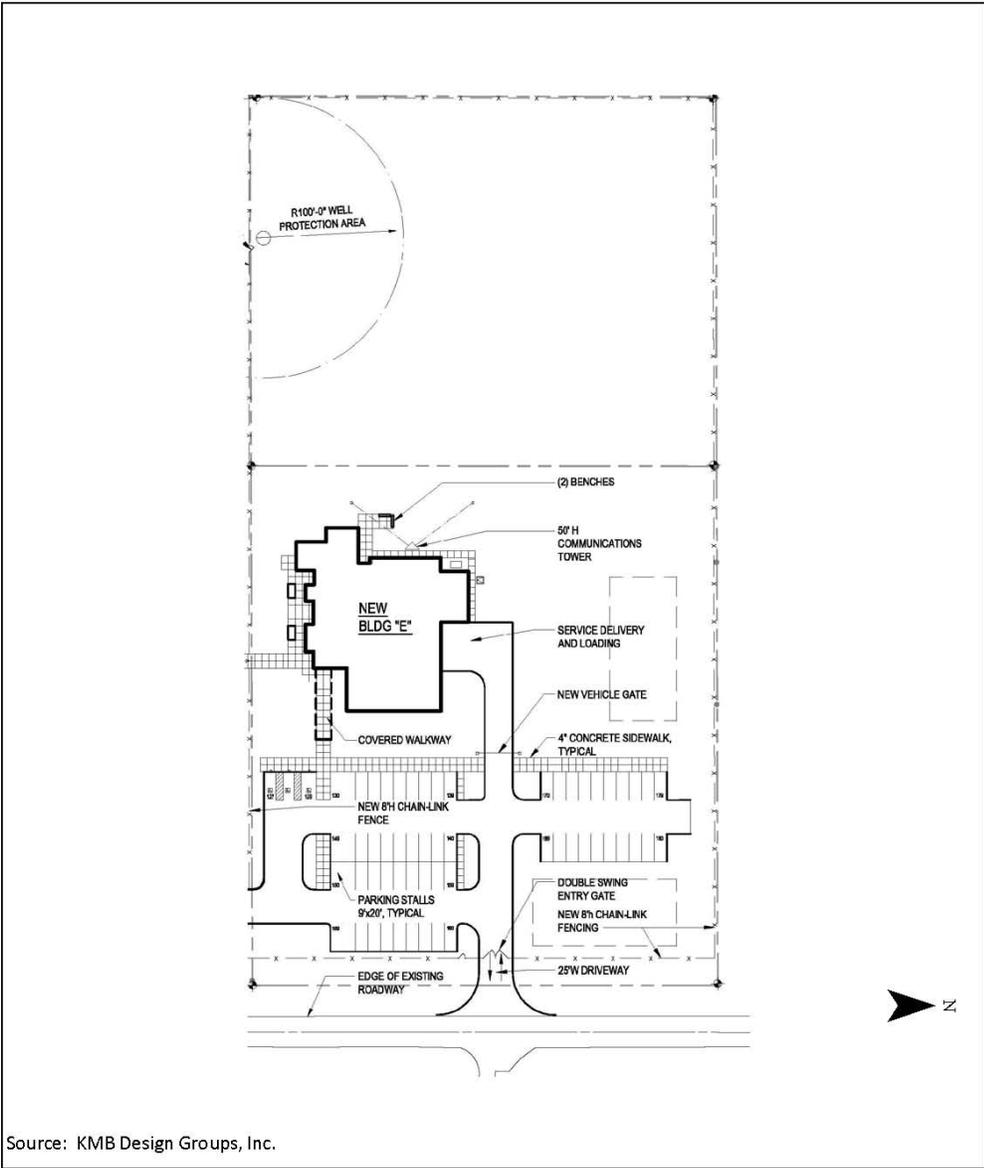
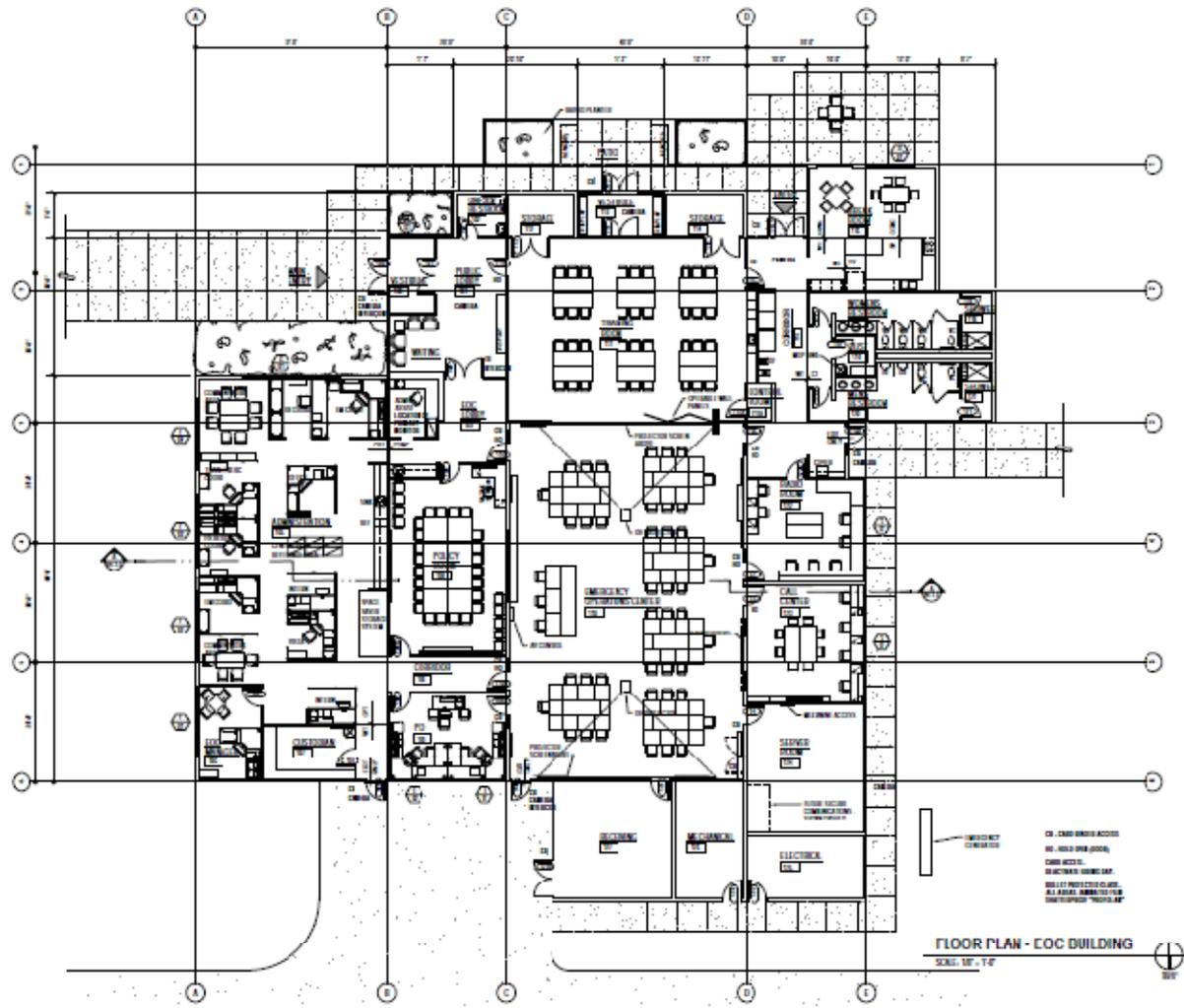


Figure 2. Architectural Site Plan



KWB

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 206-725-4000
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TILLEY ROAD CAMPUS IMPROVEMENTS
BUILDING E
THURSTON COUNTY
 9800 TILLEY ROAD SOUTHWEST
 OLYMPIA, WASHINGTON 98502

10/20/2011
 10/20/2011

10/20/2011
 10/20/2011

Figure 3

Figure 3. Proposed EOC Floor Plan



LEGEND

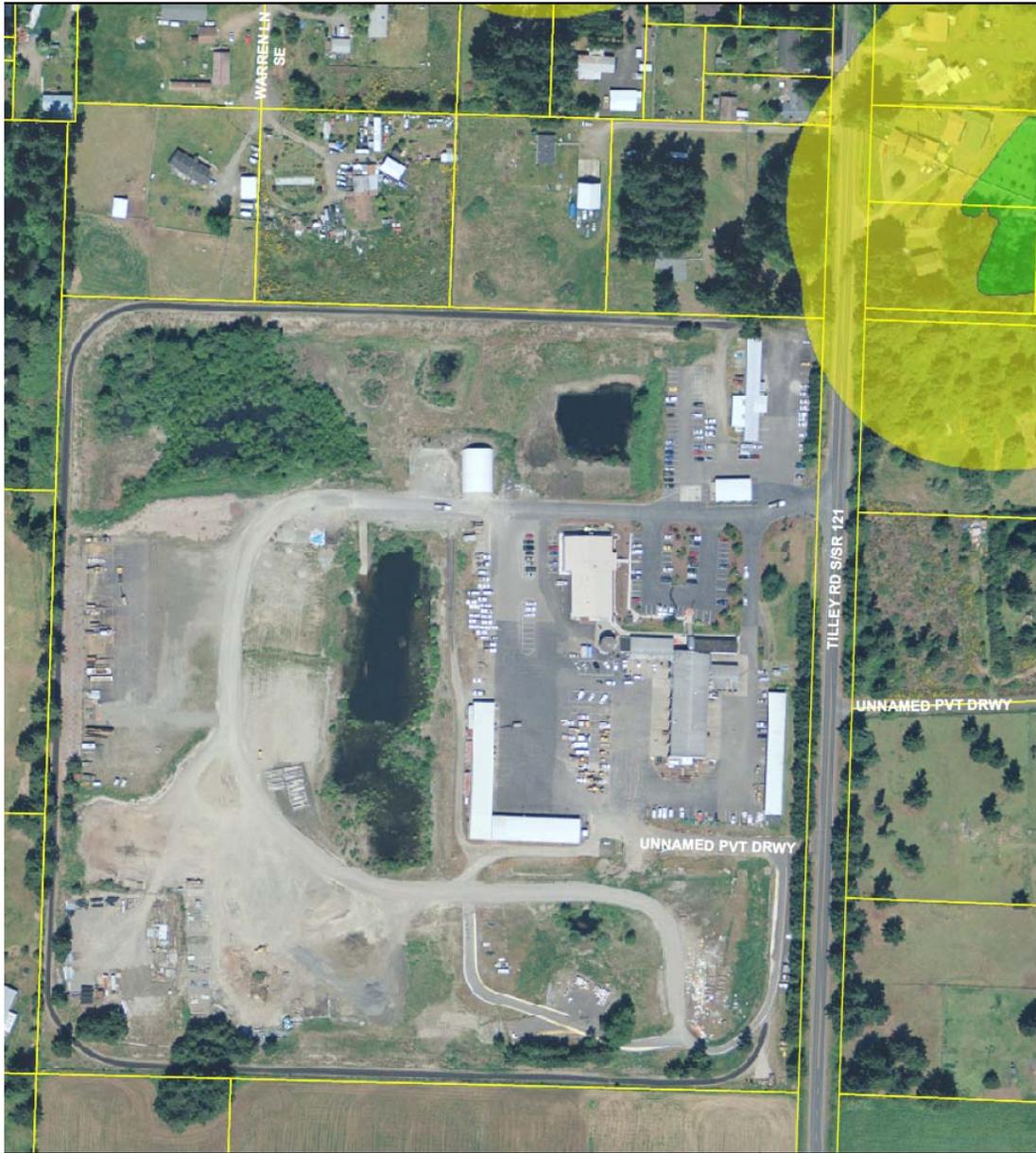
- Project boundary
- Parcel lines

Image source: Thurston County GeoData



Figure 4. 2006 Aerial Photo of Project Site
Tilley Road Maintenance Facility

April 15, 2009
9521 Tilley Road S
Olympia, WA 98512



THURSTON COUNTY

*Figure 5. High Groundwater Hazard Areas
Tilley Road Shop*



- Salmon Cr. HGW Hazard
- Salmon Cr. HGW Hazard-300' Buffer

Aerial Photography Taken May 2006
High Groundwater Hazard Area Data.

Thurston
GeoData
Center



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