Kenny, Ann

From: Katie Walter [KLW@shanwil.com]
Sent: Wednesday, August 01, 2001 11:06 AM
To: Kenny, Ann
Subject: todays meeting

21-1-12020-001-M1 REVISED.doc

I am frantically getting more things on paper. I will attach the draft i have. It is in a very jumbled order. I wonder if it would be better to meet sometime tomorrow, when i am further along. What do you think? I am available any time tomorrow.
Thanks
Katie.

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DELIBERATIVE – DO NOT DISCLOSE

MEMORANDUM

TO: Ann Kenny, Washington State Department of Ecology

FROM: Katie Walter

DATE: August 1, 2001

RE: DRAFT 401 CONDITIONS

AUBURN MITIGATION SITE REVISIONS

1. The revised grading plan (June 28, 2001) shows a culvert in the northwest corner of the site in the proposed new drainage swale. The culvert will pass flows under the site access path. The drawing shows this culvert approximately 60 feet long, passing under a path that is only approximately 15 feet wide. This culvert should be no longer than is necessary to pass the water under this pathway.

2. The revised grading plan (June 28, 2001) shows a culvert in the south central portion of the mitigation site. This culvert appears to be mis-located. I assume that the culvert should be shown in the wetland directly east of the shown location, where the wetland passes under the proposed maintenance path. This culvert should be no longer than is necessary to pass the water under this pathway.

3. Two additional culverts need to be shown along the new drainage swale where the water outlets the southwestern basin, under the maintenance pathway.

4. Culverts should be placed during construction under the paths/roads in all areas where there is a potential for impounding water. A note should be added on the construction documents.

PERFORMANCE STANDARDS

1. The NRMP states that 'major' plant community boundaries will be located (7-77). Major plant communities will be defined as ...

2. Recreate table 7.5-1 (NRMP) showing 15 years of monitoring, instead of the 10 years.

3. All vegetation sampling and analysis will employ statistically valid sampling and analysis procedures.

4. Both the US Army Corps of Engineers, and Washington State Department of Ecology will be notified when monitoring field work is occurring, and given opportunities to observe the field work.

5. As-built will include detailed plans showing locations of all monitoring transects and locations. Statistically valid sampling methods will be conducted during each of the monitoring events. Monitoring reports will show all sampling locations, calculations, data, discuss trends and changes, discuss problems, and give remedies for the problems which includes a timeline for their resolution.

6. Ecology will require written documentation of all contingency measures and adaptive management measures implemented.

7. Hydrologic monitoring using piezometers and shallow hand dug soil pits in undisturbed wetlands downslope of the new embankment must be conducted frequently enough to determine wet season trends. Ecology will require bi-monthly hydrologic monitoring for the first three wet seasons, November – May. Maps of sample locations and vegetation in the surrounding areas, observation of stressed vegetation, any adaptive management implemented in the surrounding areas, comparison to baseline data, and conclusions must be documented and submitted to Ecology on a monthly basis during that period.

8. Hydrologic monitoring using piezometers and shallow hand dug soil pits in undisturbed wetlands associated with Borrow Site 3 must be conducted frequently enough to determine wet season trends. Special emphasis should be given to the area near where the drainage swale will discharge into Wetland 29. Ecology will require bi-monthly hydrologic monitoring for the first three wet seasons, November – May. Maps of sample locations and vegetation in the surrounding areas, observation of stressed vegetation, any adaptive management implemented in the surrounding areas, comparison to baseline data, and conclusions must be documented and submitted to Ecology on a monthly basis during that period.

9. Final performance standard for the replacement drainage channel shall read, "Construct the replacement channel to convey all storm events equal to or less than the 100-year, 24-hour design storm and seepage water collected by the embankment drains layer and adjacent areas.

10. An irrigation plan for the Miller Creek mitigation area will be provided to Ecology for review.

11. "Other wetlands with predominantly mineral soils will have soils saturated within the upper 16 inches to mid-April in years of normal rainfall."

12. In the revised low flow submittal direct and indirect impacts to wetlands must be addressed. NEEDS MORE INFORMATION HERE –

13. Existing wetland and mitigated wetland boundaries will be delineated at years 5, 10, and 15. A licensed survey crew will survey the wetland points established. The delineation map will be furnished to Ecology by December 31 of each of the delineation years.

AUBURN

Emergent marsh plants shall be planted with rhizomes 12" on center instead of the 18" o.c. specified. Areas that are designated for hydroseeding that have visible surface water at the time of planting must be planted with plugs. Routine maintenance will occur at least twice a year in all areas and more often in areas if needed. The Port will maintain a contract with a maintenance crew for the monitoring period. A biologist will meet with the maintenance crew to identify invasive species and identify problem areas.

VACCA FARM

Observable surface flow must be present in the created channel at all times.

LOW FLOW

Low flow augmentation water shall pass through the wetlands and will not be directly discharged to the stream.

KLW/klw