



DATE: 3/6/98 TIME: 130P

TOTAL # PAGES: 14

TO: COMPANY: Parametric FAX NO: (425) 889-8808
 ADDRESS: 5808 Lake Washington Blvd N.E. CITY/COUNTRY: Kirkland
 ATTENTION: Paul Terat DEPT/SECTION: _____ TELEPHONE: (425) 822-8880

FROM: NAME: B. Hinkle TELEPHONE: _____
 ADDRESS: _____ FAX NO: (206) 248-6876
 *FAX OPERATOR: Summer Breeze OFFICE NO: 439-6621

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cc's MADE BY: _____
cc/FAX RELAY DATE: _____

Budget - years?

PARA 0015276

AR 024778



HERRERA
ENVIRONMENTAL
CONSULTANTS

FAX LETTER TRANSMITTAL

Date: 3-6-98

Number of pages including cover 11
Faxed Original will will not be forwarded to you.

Subject: Third Runway WQ Compliance Services

Project Number: C1002.01

To:

From:

Barbara Hinkle/

Carlos Herrera

Kym Mattross

Herrera Environmental Consultants, Inc.
2200 Sixth Avenue, Suite 601
Seattle, Washington 98121
FAX (206) 441-9108
(206) 441-9080

PO Box 68727

Seattle, Wa. 98168

FAX Number 248-6876 / 738-3552

Phone Number

Attached are the following items:

- Scope of Work, Cost Estimate and Cost Estimating Worksheet
previously sent 1 month ago.

Barbara: I am sorry that you did not receive this scope
Please review it and call me with comments. With regards to
your comments on our previous draft scope I strongly disagree

Remarks:

that routine project water quality monitoring should be done by others.
Given the nature of our role, Herrera should be responsible for
compliance monitoring and for BMP performance monitoring.
I think this would be most credible to Ecology and the
airports neighbors if Herrera performed the monitoring.
Please call me and let me know what you think. Thanks

By: Carlos

Copies to: _____

PARA 0015277

AR 024779



HERRERA
ENVIRONMENTAL
CONSULTANTS

FAX LETTER TRANSMITTAL

Number of pages including cover 10
Faxed Original will will not be forwarded to you.

Date: 2/4/98
Subject: Third Runway NQ
Compliance Services

Project Number: P1002

To:

Barbara Hinkle

From:

Carlos Herrera

Herrera Environmental Consultants, Inc.
2200 Sixth Avenue, Suite 601
Seattle, Washington 98121
FAX (206) 441-9108
(206) 441-9080

FAX Number 248-6876 / 728-3252
Phone Number _____

Attached are the following items:

- Scope of Work
- Cost estimate by task by year
- Cost estimating worksheet

Remarks:

Please review and call me with comments or changes
I may have overestimated task 1. Maybe we can reduce
budget on it.

By: Carla

Copies to: _____

PARA 0015278

AR 024780

Third Runway Water Quality Compliance Services—Scope of Work

Scope of Work

Task 1. Project Management and Scoping

Scope

The purpose of this task is to provide project management services and provide a mechanism to develop project-specific programs for individual sites. The Port Project Manager will identify a project site requiring oversight. Herrera will develop scope and budget for site-specific erosion and sediment control oversight programs for each site, and set up a new task number to implement the oversight. Typically plans will be prepared for sites with unique erosion and sediment control issues, monitoring, or problems. Routine observation will be covered in Task 5.

Herrera shall administer contracts executed under task 1, including the following:

- Compile and track budget, labor costs, expenses, fee and staff hours by task and by firm through the course of the work. Monitor and manage weekly expenditures made and progress accomplished under each task. Modify task orders as required.
- Prepare monthly status reports that identify the work performed to date, summarize comparison of current expenditures to budgeted amounts for major tasks, list percent of each major task completed to date, state compliance with schedule requirements, and summarize outstanding project issues and recently resolved project issues.
- Prepare and submit monthly invoices in the format specified by the Port of Seattle. Coordinate Subconsultant invoices to ensure compliance.

Deliverable Products

- Monthly Status Reports
- Monthly invoices
- Scopes and budgets as requested

Budget—\$47,000 per year

Third Runway Water Quality Compliance Services—Scope of Work

Task 2. Data Management, QA/QC Plan Erosion/Sedimentation Control, Inspection Procedures, and Water Quality Monitoring Plans

Scope

The purpose of this task is to describe the routine procedures and data collection that will be performed in Tasks 4, 5, and 6. For example, data confidentiality, inspection frequency and reporting, and on-call response reports will be described in the Task 2 plan. Site-specific water quality monitoring plans, if needed and conducted by Herrera, will be developed. Routine, emergency, or one-time water quality monitoring will be conducted under Task 4.

Herrera shall prepare an erosion/sedimentation control QA/QC plan. The plan shall be prepared for the 1998 construction season and shall be updated annually through the 200_ construction season.

At a minimum the plan shall contain the following:

- Construction schedule
- Inspection procedures
- Reporting requirements
- Protocols for reporting and resolving issues/problems
- Responsible parties
- Inspection schedule and frequency
- Staffing
- Budget

Herrera Environmental Consultants, Inc. (Herrera) shall prepare a water quality monitoring plan for the third runway construction project for specific portions of filling as directed by the Port of Seattle.

The plan shall contain the following at a minimum:

- Sampling locations
- Parameters
- Sampling frequency
- Procedures (field and lab)
- QA/QC plan
- Data evaluation protocol
- Responsible parties
- Equipment required
- Staffing
- Protocols for reporting water quality issues/violations
- Reporting requirements
- Budget

Third Runway Water Quality Compliance Services—Scope of Work

- Onsite lab/field office

Deliverable Products

- Erosion/Sedimentation Control QA/QC Plan
- Annual updates to plan
- Water Quality Monitoring Plan(s)

Budget—Year 1, \$20,000. Following years \$5,000/year

Task 3. Plan Reviews

Scope

The purpose of this task is to assist the Port with plan reviews for new projects prior to start of construction. Herrera will prepare a memo with review comments. Planning meetings for new projects may also be included in this Task.

As requested by the Port, Herrera shall review plans with a focus on erosion/sedimentation control and protecting water quality. The plans may include but are not limited to:

- Construction Plans and Specifications
- Temporary Erosion and Sedimentation Control Plans
- Stormwater Pollution Prevention Plans
- Spill Control Plans
- Contractor submittals

The plans shall be critically reviewed for compliance with applicable regulatory requirements and with an emphasis on identifying and preventing water quality problems. The review shall identify potential water quality problems areas and recommend possible solutions in letter reports. The plan(s) shall only be reviewed following notice-to-proceed by the Port. For budgeting purposes it is assumed that 20 plans shall be reviewed for a total of 400 labor hours.

Deliverable Products

- Letter reports as directed by Port

Budget—\$46,000

Third Runway Water Quality Compliance Services—Scope of Work

Task 4. On-Call Water Quality Monitoring

Scope

The purpose of this task is to provide water quality monitoring as required in response to a specific project issue, discharge, or problem area. Data collected may not be protected by confidentiality. Routine project water quality monitoring, if required by a specific project, would be conducted by others. **Barbara: I think specific project water quality monitoring for NPDES construction permits would be most credible if Herrera did it.**

Herrera shall perform water quality monitoring as specified in the water quality monitoring plan(s) (Task 2). Monitoring may include monitoring for compliance with water quality standards and criteria, identify potential problem areas, evaluating the performance of erosion control practices, and evaluating the performance of sedimentation and stormwater treatment facilities.

Herrera shall supply all the necessary water quality monitoring equipment and field supplies as identified in the monitoring plan. [An onsite field office/laboratory shall be set up and equipped with a telephone, computer, and laboratory equipment as identified in the monitoring plan. Equipment and field supplies shall be purchased and dedicated to the project. **Barbara: do you want this?**]

Budget—\$48,000

We should arrange same sort of joint facility

Task 5. Erosion/Sedimentation Control Inspection and Reporting

Scope

The purpose of this task is to provide routine and scheduled site inspections and reports as in the Task 2 inspection procedures. The reports would be prepared and copied to Ecology.

Herrera shall provide onsite personnel for inspection of erosion control practices, BMPs, sedimentation facilities, and stormwater treatment as identified in the Erosion Sedimentation Control QA/QC Plan (Task 2). All field inspectors shall be certified in Construction Site Erosion and Sediment Control by the Washington State Department of Transportation. For budgeting purposes, it is assumed that weekly routine inspections will be performed between April and the end of October. It was also assumed that unscheduled inspections would be performed prior to and during 25 rainfall events each construction season.

All water quality data and inspection results shall be tabulated in a database or spreadsheet program. All laboratory and field data shall be reviewed and verified according to the water quality monitoring plan to assure that QA/QC goals for the project are met and the data are in compliance with State and Federal guidance documents for water quality.

Third Runway Water Quality Compliance Services--Scope of Work

Water quality monitoring staff and field erosion control inspectors will maintain constant contact with the Port construction management staff. If water quality violations or deficiencies in erosion control practices are observed, the appropriate Port staff will be verbally notified immediately, followed by the submittal of written documentation.

Weekly monitoring reports will be prepared that clearly identify monitoring efforts conducted, the results of those efforts, and actions taken as a result of the findings of the daily monitoring and erosion control inspections. The weekly reports will contain a summary of all field data results collected during the previous week. These weekly reports will be submitted to the Port Project Manager every Monday.

Monthly reports will be submitted to the Port Project Manger by the 5th day of each month. These monthly reports will summarize information gathered during the weekly monitoring and will identify progress-to-date with the monitoring and erosion control efforts. All available laboratory data results will be incorporated into the appendix of the monthly reports, with summaries of these data presented in the text. The reports will identify, if appropriate, any recommended changes to the water quality monitoring and will likewise identify any appropriate modifications to the sedimentation/erosion control facilities.

Annual reports will also be prepared that summarize the progress of the water quality monitoring and sedimentation/erosion control efforts. The reports will include all field and laboratory data and will include a summary analysis of all data collected during the past 6 months. Quality assurance/quality control issues will be reviewed and identified with regard to compliance with the monitoring plan and regulatory compliance. The annual reports will identify the success for compliance with water quality standards and will document any deviations recorded along with corrective actions implemented. To the extent that it may be appropriate and/or they are needed, recommendations for additional BMPs or sedimentation/erosion control practices will be identified. The annual report will also identify any recommended changes for the coming construction season with regard to BMP implementation, monitoring, communications, or other pertinent issues.

Onsite field personnel will be in daily contact with the Port's onsite construction manager. Cellular phones and pagers shall be carried by all Herrera field personnel.

Weekly meetings shall be held onsite to discuss the progress of the previous week's work and plan for upcoming construction activities. The meetings shall be attended by the project manager and the water quality monitoring and erosion control team leaders.

Herrera shall coordinate a monthly workshop with Port staff, regulatory agency staff, contractor, engineer, and other interested parties. The Port shall prepare the list of participants for the monthly workshops. The purpose of the workshop shall be to review progress and performance in meeting water quality goals, evaluate effectiveness of BMPs, anticipate potential problems, and identify solutions.

may be
to meet

Third Runway Water Quality Compliance Services—Scope of Work

Deliverable Products

- Weekly Reports
- Monthly Reports
- Annual Reports
- Minutes for weekly and monthly meetings

Budget—\$125,000

Task 6. On-Call Sediment and Erosion Control Response

The purpose of this task is to provide emergency and non-routine site inspections and reports that are outside of the inspections identified in a plan prepared for Task 2, or the routine inspections described in Task 5.

Budget

Start-up budget \$7,000. Authorize additional budgets as needed from contingency.

Task 7. Contingency

The purpose of Task 7 is to provide a repository for future project needs and unallocated budgets.

Budget

\$105,000. Transfer to other tasks or site-specific tasks as determined by Port Project Manager.

Task 8. Site-Specific Tasks

These tasks are reserved for site-specific tasks that will be developed in Task 1.

Budget

Developed and approved in Task 1 and transferred from Task 7 contingency.

HERRERA ENVIRONMENTAL CONSULTANTS

COST ESTIMATE FOR THIRD RUNWAY WATER QUALITY COMPLIANCE SERVICES FOR THE PORT OF SEATTLE
Project No. C1983

Task 1 Water Quality Compliance Services Number of Tasks: 48 hours/Task 1	Task 2 Data Report Date: Sampling, Distribution, Control Programs Plumlines and Water Quality Monitoring Plans	Task 3 Final Report	Task 4 Data Collection Quality Assessment	Task 5 Dewater/ Submittals Control Hydrology and Priority	Task 6 In-Ad Insured and Other Contract Agreements	Task 7 Emergency	Task 8 Analysis Time	TOTAL CONDUCTORS
17,000.00	26,000.00	8,000.00	8,000.00	15,000.00	7,000.00	64,000.00	51	252,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000
67,000.00	67,000.00	67,000.00	67,000.00	150,000.00	67,000.00	67,000.00	67	617,000

PARA 0015285

NO. 438 P. 10/15 11:01

MR. 6:1588 2:34PM RUNWAY PROJECT ENVIRONMENTAL ENGINEER

AR 024787

NO. 43B P. 11/15 11:01

2:34PM RUNWAY PROJECT HERRERA ENVIRONMENTAL CONSULTANTS

HERRERA ENVIRONMENTAL CONSULTANTS

COST ESTIMATE FOR THIRD RUNWAY WATER QUALITY COMPLIANCE SERVICES FOR THE PORT OF SEATTLE
Project No. 01902

Third Runway Water Quality Compliance Services Number of Weeks #	Task 1 Project Management and Reporting		Task 2 Data Input, QA/QC, Plan Develop, Submittals, Certified, Reproductive Procedures, and Water Quality Monitoring		Task 3 Plan Review		Task 4 On-Call Water Quality Mobility		Task 5 Construction Submittal/Inspection and Reporting		Task 6 On-Call Sediment and Erosion Control Preparation		Task 7 Contingency		Task 8 On-Call Trench		TOTAL	
	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost
COST SUMMARY																		
Labor	240	\$180,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000
Other direct costs (PDC)																		
Subcontractors																		
Indirect factor on labor @ 15%																		
GRAND TOTAL																		
COST ITEMIZATION																		
Labor	419	\$167,611	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000	50	\$18,000
Charter (Direct Costs) (PDC)																		
Trench and partition																		
Auto Win																		
Photography																		
Printing/Signage																		
Construction																		
Freight/Weight																		
Telephone																		
Fuel																		
Other																		

PARA 0015286

AR 024788

61 Pl. NO. 43B
 12/15 11:02

MAR. 6. 1998 2:34PM
 RUNWAY PROJECT
 206-441-9108
 KENNETH ENYR DNS

HERNIMERA ENVIRONMENTAL CONSULTANTS
 COST ESTIMATE FOR THIRD RUNWAY WATER QUALITY COMPLIANCE SERVICES FOR THE PORT OF SEATTLE
 Project No. 01021

Task 1 Final Permitting Water Quality Compliance Services Number of Tasks: 9	Task 2 Data Report, O&M/C Permit Erosion/ Sedimentation Control, Inspection Programs, and Water Quality Monitoring	Task 3 Filtration	Task 4 On-Call Water Quality Alerts	Task 5 Erosion/ Sedimentation Control Inspection and Reporting	Task 6 On-Call Sediment and Erosion Control Response	Task 7 Contingency	Task 8 Site-Specific Tasks	TOTAL
Field equipment and supplies (availability noted)	0	0	0	0	0	0	0	0
Chemicals	10	10	10	10	10	10	10	10
Conductivity meter	1	1	1	1	1	1	1	1
D.O. Analyzers (order plus shipping and handling)	1	1	1	1	1	1	1	1
Portable computer	1	1	1	1	1	1	1	1
Portable printer	1	1	1	1	1	1	1	1
Field gear	1	1	1	1	1	1	1	1
Generator (16 (16kVA))	1	1	1	1	1	1	1	1
Trailer	1	1	1	1	1	1	1	1
Subcontractor (16kVA)	1	1	1	1	1	1	1	1
SUBTOTAL DPCS	15	15	15	15	15	15	15	15
Subcontractor (16kVA)	1	1	1	1	1	1	1	1
Subcontractor (16kVA)	1	1	1	1	1	1	1	1
Subcontractor (16kVA)	1	1	1	1	1	1	1	1
SUBTOTAL SUBCONTRACTORS	3	3	3	3	3	3	3	3
TOTAL	18	18	18	18	18	18	18	18

PARA 0015287

AR 024789

12/15 11:02

2:34PM

HERNIMERA ENVIRONMENTAL CONSULTANTS



Memorandum

DATE: March 4, 1998

TO: Earl Munday, Project Manager
Virginia Kirk, Port Counsel

FROM: Karl Hedlund, Resident Engineer

RE: North Employee Parking Lot - Fines Assesses by
Department of Ecology

CC: Jana Brocata, Barbara Hinkle, Tom Hubbard

As you are aware, the Port was assessed two fines by the Washington Department of Ecology (WDOE) for failure to properly implement temporary erosion and sediment control measures during the construction of the North Employee Parking Lot. The fines were assessed on two separate occasions that occurred during storm events on September 17, 1997 and October 4, 1997.

On September 17, 1997; the rainfall event created a surface water erosion problem on the exposed embankments that ultimately breached the lower sedimentation pond. Turbid water discharged from this lower pond into Lake Reba with some turbid stormwater entering Miller Creek. The main cause of this stormwater discharge was due to Scarsella's failure to construct the necessary erosion control measures in accordance with the Contract Documents. The incomplete and inadequate measures include but are not limited to the following: Lack of necessary sedimentation ponds, incorrect size of sedimentation ponds, incorrect installation of sedimentation pond discharge piping (ponds linked), inadequate or lack of interceptor swales, slopes not track walked, water allowed to cascade over embankment slopes and lack of slope stabilization measures. The contractor has accepted responsibility for this incident and fired the job-site superintendent shortly after the incident.

The fine assessed by DOE for this first violation was for \$2000. Scarsella Bros. has accepted the accountability for this fine. Based on the appeal submitted by the City of Normandy Park, Scarsella will be advised of the potential resolution and adjustment to the original fine levied.

On October 4, 1997; a high intensity rainfall event overwhelmed the overflowing control structures at the sedimentation ponds allowing discharge water to flow at a high volume. This volume of water over stressed the sandbags that were placed as a dam on the inlet side of the 30-inch culvert crossing SR 518 allowing stormwater to discharge into the Port's Lake Reba detention facility.

Seattle-Tacoma
International Airport
P.O. Box 68727
Seattle, WA 98166 U.S.A.
TELE: 703433
FAX (206) 431-5912

PARA 0015288



AR 024790

Many temporary erosion and sedimentation control measures were in place until the peak of this rainstorm broke down the critical control elements such as the dam at the SR 518 culvert crossing. The following measures were in place prior to this rainstorm:

- Sedimentation Ponds were in place and sized per the contract.
- Interceptor Swales and check dams in place.
- Silt fence placement.
- Sedimentation pond overflow structures were in place.
- Earth berms in place on top of the embankment slopes.
- Sedimentation ponds continuously pumped and transported off-site for biofiltration to increase capacity of ponds.
- PCS constructed dam of sandbags placed at the SR 518 culvert crossing.

The contract required temporary erosion control measures that the contractor did not have in place included:

- Tracking the slopes.
- Slope stabilization of slopes exposed beyond the period of 15 days.

Outlined below are the key factors that contributed to the turbid stormwater discharge:

- The 24th Avenue stormwater was discharging into a drainage system that entered onto the eastern portion of the site. There was an unknown drainage pipe that was near the 24th Avenue site entrance that was abandoned. Surface water flowed through this abandoned drainage system allowing stormwater to bubble out of the ground flowing on-site. This was a significant amount of surface water run-off that was overloading the southeast pond causing turbid water to spill through the overflow discharge stand-pipe.
- The SWD water tower roof drains conveyed onto the eastern portion of the unpaved site. This was a significant amount of water that was not considered in the sizing of the sediment ponds. This water flowed to the southeast pond contributing to the overloading of the control structures.
- The sedimentation ponds were designed per King County Standards, however, this design standard does not address the removal of the turbidity caused by fine suspended sediments characteristic of the given soils.
- Approximately 20% of the lot was paved. The unpaved grade was a contributing factor to the conveyance of sediments. Rainfall during the months of September and October 1997 were considerably above the norm which impacted the ability to pave the lot in a timely manner as originally planned.
- The dam failed at the SR 518 culvert crossing allowing water to discharge into Lake Reba.
- The sluice gate on the outlet pipe from the Lake Reba detention facility did not fully shut-off the water allowing water to discharge into Miller Creek even when the sluice gate was totally shut.
- The joints on the outlet pipe from the Lake Reba detention facility were old and failed allowing stormwater to leak and discharge into Miller Creek.

The key factors that contributed to the failure of the temporary erosion and sedimentation controls resulted from unknown or existing conditions that the contractor is not responsible for. Given these factors, I do not see how we can hold the contractor completely responsible for the second violation assessed by WDOE. The contractor was directed to employ water trucks to pump the sedimentation ponds and discharge off-site as a measure over and above the contract. In addition, less than a week following the October 4th incident, the Port directed the contractor to increase the sedimentation ponds sizes to handle a 10-year, 24 hour storm. The measures in place to date mitigate the potential discharge of turbid stormwater by using the treatment and pumping facilities have been installed on site. These additional measures are necessary to prevent a turbid water discharge from this project, these measures were not realized or apparent to the project team prior to the October 4th incident.

PARA 0015289

The fine assessed for the second violation was for \$9,000. My concern is that if the Port takes the position that the contractor is responsible, the chances are that the current contract will escalate into a significant claim. Holding Scarsella Bros. responsible for this incident does not appear justified and the recommendation is not to forward this fine to their account. Please review and advise if you concur with this position.

PARA 0015290