



Department of Energy

**Ohio Field Office
Fernald Area Office**

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

4-209.9



OCT 19 1998

1787

**Mr. Gene Jablonowski, Remedial Project Manager
U.S. Environmental Protection Agency
Region V, SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590**

DOE-0056-99

**Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911**

Dear Mr. Jablonowski and Mr. Schneider:

**RESPONSE TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON
SILOS INFRASTRUCTURE PROJECT DESIGN PACKAGE**

Enclosed for your review are responses to the comments on the design package for the Silos Infrastructure Project. The issues addressed in the enclosed comment responses were discussed with the Ohio Environmental Protection Agency (OEPA) representatives during the September 17, 1998, walk-down of the Silos Infrastructure Project site and during subsequent telephone conversations.

If you have any questions, please contact Nina Akgündüz at (513) 648-3110.

Sincerely,

FEMP:Akgündüz

**Johnny W. Reising
Fernald Remedial Action
Project Manager**

Enclosure

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OCT 19 1998

Mr. Gene Jablonowski
Mr. Tom Schneider

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cc w/enclosure:

N. Hallein, EM-42/CLOV
J. Saric, USEPA-V, SRF-5J
R. Beaumier, TPSS/DERR, OEPA-Columbus
T. Schneider, OEPA-Dayton (total 3 copies of enc.)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
F. Barker, Tetra Tech
AR Coordinator, FDF/78

1787

cc w/o enclosure:

J. Lorence, OH/FEMP
A. Murphy, OH/FEMP
A. Tanner, OH/FEMP
D. Yockman, OH/FEMP
S. Beckman, FDF/52-4
T. Hagen, FDF/65-2
J. Harmon, FDF/90
R. Heck, FDF/2
S. Hinnefeld, FDF/90
D. Nixon, FDF/52-4
D. Paine, FDF/52-4
EDC, FDF/52-7

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**SILOS INFRASTRUCTURE DESIGN PACKAGE
RESPONSE TO OEPA AND U.S. EPA COMMENTS**

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| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|-----------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 1 | September 18, 1998 | General Comment | |

Comment: The scope of work does not include the monitoring well abandonment. There is some confusion on the reviewers part regarding how the monitoring well abandonment fits into the project and if the proposed well activities were presented in a previous submittal to the agencies.

Response: Well abandonment is not directly a part of the Silo Infrastructure Project scope of work. The design of the road and the impact to specific wells within the area was reviewed with Environmental monitoring personnel to identify the necessary well abandonment activities to be completed prior to the start of road construction.

Action: Necessary documentation concerning these well abandonment activities will be prepared and submitted for your review prior to abandonment.

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|-----------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 2 | September 18, 1998 | General Comment | |

Comment: Ohio EPA does not agree with the proposed road design along the pilot plant drainage ditch as shown on the drawings. DOE should have evaluated roadway alternatives that limited the amount of fill activity required within the stream corridor. Ohio EPA believes DOE should re-evaluate the road design to limit the need for fill within the stream.

Response: As discussed during the September 17, 1998 walk-down with OEPA representatives, the road has been aligned to provide the necessary areas for construction and operations-related activities while minimizing impacts to the stream corridor. Modifications to the site drainage is consistent with existing drainage patterns. The rock fill was used between station 5 + 00 and 8 + 50 to minimize the impact to the creek slope. As was discussed during the walk-down, the roadway construction has been designed to minimize, to the extent practical, the amount of fill and other stream impacts. In fact, the fill material is being installed for the express purpose of maintaining structural stability of the road bed and thereby preventing adverse impact to the stream. Appropriate measures will be taken during construction and installation of fill material to minimize adverse impacts to the

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stream from construction activities.

As OEPA and U.S. EPA are aware, the excavation and fill of the Pilot Plant Drainage Ditch (PPDD) is planned as part of soil remediation activities. The acreage of the PPDD has been accounted for in the 10 acres of wetlands lost for which mitigation is planned as part of the approved wetlands mitigation strategy for the FEMP.

The centerline of the road and the and the edge of the rock fill area were surveyed and staked and subsequently reviewed by Ohio EPA staff during a site tour on October 2, 1998.

Action: No further action required.

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|-----------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 3 | September 18, 1998 | General Comment | |

Comment: Considering the design proposes to place fill within the stream, the document should detail how the Army Corps of Engineers will be involved in permitting the project.

Response: The fill material is being placed for the purpose of road stabilization; Nationwide Permit 26 is the appropriate section 404 permit for this activity. Installation of the Silos infrastructure Project is being conducted in support of the FEMP's overall CERCLA response action and therefore is exempt from the requirement to obtain formal permit approval pursuant to Section 121(e) of CERCLA and 40 CFR Part 300.400(e). The DOE will, however, prepare and submit to OEPA and USEPA a Permitting Cross-Walk detailing how the project will comply with substantive requirements of the U.S. ACOE Nationwide Permit Program.

Action: DOE will prepare a Permitting Cross-Walk for the Silos Infrastructure Project, and submit it for OEPA and U.S. EPA approval prior to initiating any placement of fill material.

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|-----------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 4 | September 18, 1998 | Exhibit 6.1(92) | |

Comment: The WAC Plan includes no provisions for temporary stockpiling above WAC material. The project should be revised to immediately transport any excavated above WAC material to SP-7.

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Response: The amount, if any, of above-WAC soil to be generated will be determined based upon the results of soil sampling conducted in accordance with the Project Specific Plan (PSP) currently undergoing Ohio EPA and U.S. EPA review. Based upon these results, the disposition location for above-WAC soil will be identified prior to beginning excavation. Any above-WAC soil that is generated will be staged at the indicated location for transport to the identified disposition location by the OSDF contractor as soon as practical.

Action: None required

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|--|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 5 | September 18, 1998 | Waste Mgmt. Item 2, 2 nd Para., Pg. 3 of 4 | |

Comment: Second sentence of the second paragraph states that the excess soil generated will be placed on the field south of the K-65 trench. However, the figure, 94X-5500-X-SK-1035, does not display the stockpile area. Additionally, Ohio EPA believes that any excess soil should go directly to the OSDF, assuming placement operations are on-going, rather than generate additional stockpiles.

Response: Excess soil meeting the OSDF WAC will be graded into southern half of the area inside the Silos Infrastructure roadway and stabilized as required. Excavation and disposition of contaminated soil in this area will take place as part of Area 7 Soil Remediation.

Action: none required

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|--|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 6 | September 18, 1998 | Waste Mgmt. Item 4, Option 2 Pg. 4 of 4 | |

Comment: Option 2 explains that soils exceeding the OSDF WAC Attainment Plan will be staged in a temporary working stockpile. However in the WAC Plan, there are no allowances for staging above the WAC. Above WAC soils should be transferred directly to SP-7

Response: See response to Comment No. 4

Action: See response to Comment No. 4

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| Commenting Organization: OEPA | | Commentor: OFFO | |
|---|--------------------|-----------------------------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 7 | September 18, 1998 | Technical Specifications | |
| <p>Comment: The specifications are not consistent in their reference to the State of Ohio DOT Construction and Material Specification. Several reference the 1/95 while some reference the newer 1/97 version. Revise the specifications to refer to the 1997 version.</p> <p>Response: The current issue of the ODOT Construction and Material Specifications is dated January 1, 1997. Some individual specifications, however, have not actually been revised since the January 1995 version.</p> <p>Action: The design specifications shall be revised as necessary to reference the latest issue of each ODOT specification.</p> | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 8 | September 18, 1998 | 02110/3.2(C) Item 3 Pg. 2 of 3 | |
| <p>Comment: Item 3 states that soil material from other excavations may be used. However, it does not differentiate between using the excavation soils within this project or any project on-site. Please clarify to limit to material from this project only.</p> <p>Response: The referenced specification allows the use of soil from other excavations as fill material "if suitable per waste management requirements." FEMP soil management policy restricts the use of excavated soil as fill to soil excavated from within the same project area. In addition, as the Silos Infrastructure Project will generate excess soil, there is no driver for importing soil for use as backfill.</p> <p>Action: none required</p> | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 9 | September 18, 1998 | 02110/3.2(D) Item 2 Pg. 2 of 3 | |
| <p>Comment: Item 2 states that the excavated soil will be stockpiled. Where will it be placed? Additionally, Ohio EPA believes that the excess soil should go to the OSDF.</p> | | | |

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| Response: See response to Comment No. 5 | | | |
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| Action: See response to Comment No. 5 | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 10 | September 18, 1998 | 02200 (2.1)E Page 3 | |
| <p>Comment: No definition of slag is provided. Additional detail on type of proposed slag should be provided or preferably reference to slag deleted.</p> <p>Response: Specification 02200, Section 2.1 specifies that coarse aggregate (granulated slag) used in the contract must conform to ODOT Construction and Material Specification, Item 304, Aggregate Base and Item 703.08, Granulated Slag. Specifically, Item 703.08 completely defines granulated slag as used on the Silos Infrastructure Project.</p> <p>Action: none required</p> | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 11 | September 18, 1998 | 02200/(3.1) F (5) Page 4 | |
| <p>Comment: Bullet 5 refers to constructing the temporary storm water basin first. No temporary sediment basin is evident in the drawings provided. Additional detail should be provided</p> <p>Response: No temporary sediment basin is specifically required. The specification in question is a generic specification used on various contracts. The contractor is required to evaluate erosion control requirements during construction activities and select from the various erosion control methods as required to provide adequate control temporary erosion controls during construction activities.</p> <p>Action: None required.</p> | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 12 | September 18, 1998 | 02200 (3.1)G (1) | |
| <p>Comment: This bullet appears to contain a typo. Please revise the sentence.</p> <p>Response: Agreed</p> | | | |

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Action: The specification will be revised to correct the error.

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| Commenting Organization: OEPA | Commentor: OFFO |
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| Comment # | Date Received | Section / Page | Date/Resolved |
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| 13 | September 18, 1998 | 02220 (3.5) F Page 6 | |
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Comment: Revise the text to require silt fence around the catch basins rather than straw/hay bales. The use of silt fence is consistent with specification 02270.

Response: Agreed

Action: The specification will be revised to delete the usage of straw/hay bales.

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| Commenting Organization: OEPA | Commentor: OFFO |
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| Comment # | Date Received | Section / Page | Date/Resolved |
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| 14 | September 18, 1998 | 02270 (2.1) E Page 4 | |
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Comment: Ohio EPA recommends use of biodegradable erosion blankets. Previous uses of UV stabilized netting at Fernald have had significant drawbacks including lifting by growing grass, entrapment of birds, and failure to decompose after long periods of time. Ohio EPA recommends use of a coconut mesh similar to that used on the recent Paddys Run stabilization effort (Fiber-Blanket, FB80). Also see specification 02270 in the AIP11 CFC Site Prep Package.

Response: The erosion blanket specified has seen much use on site to date. Use of an erosion blanket similar to that proposed for the Silos infrastructure Project was utilized quite successfully on the OU4 Site Preparation Project. Typically, seeding with erosion blankets is accomplished pursuant to manufacturers instructions as will be the case in the Silos Infrastructure Project. The erosion blanket specified meets the requirements of the ODNR manual and is believed acceptable. Proper installation and inspection will alleviate the conditions referenced.

Action: none required

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| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|--------------------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 15 | September 18, 1998 | 02270 (3.1) A (3) Page 4 | |

Comment: Stabilization of piles that are planned to be left idle for more than 45 days must be stabilized as soon as possible but not longer than 7 days after the last activity. The text as written suggests the contractor can wait 45 days after the last activity before stabilizing.

Response: Agreed

Action: The specification will be revised to clarify the requirement for stabilizing soil piles.

| Commenting Organization: OEPA | | Commentor: OFFO | |
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| Comment # | Date Received | Section / Page | Date/Resolved |
| 16 | September 18, 1998 | 02270 (3.1) A (3) Page 4 | |

Comment: The text states the soil pile may reach 15 feet in height whereas previous text states that piles may be no higher than 8 feet. Review the document for consistency.

Response: Specification 02110 (Site Clearing) specifies that temporary topsoil stockpiles created during site clearing should be no higher than eight feet. Specification 02270 (Erosion Control) specifies stabilization requirements for soil stockpiles to be idle for at least 45 days. These requirements specify that these stockpiles must have a slope no greater than 2:1, a drainage pitch of at least 2%, and a maximum height of 15 feet. The actual allowable height of piles requiring stabilization will be determined by the size of the pile, the allowable slope and drainage pitch, and minimization of fugitive dust.

Action: The specification will be revised to clarify the above requirements.

| Commenting Organization: OEPA | | Commentor: OFFO | |
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| Comment # | Date Received | Section / Page | Date/Resolved |
| 17 | September 18, 1998 | 02270 (3.1) B | |

Comment: Please include a bullet stating that points where two separate sections of silt fence connect, require wrapping of the two end pieces around each other to prevent separation.

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| Response: Agreed | | | |
|--|--------------------|----------------------|---------------|
| Action: The specification will be revised to include the requirement that two adjoining separate sections of silt fencing must be connected | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 18 | September 18, 1998 | 02900 (3.1) E Page 6 | |
| Comment: This paragraph references the STP excavation. Please clarify. | | | |
| Response: Reference to STP excavation is incorrect. | | | |
| Action: Specification will be revised to remove reference. | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 19 | September 18, 1998 | Drawing General | |
| Comment: For future revisions please provide drawings bound/stapled together and in order. Additionally, the drawing index should be revised to include all drawings within the package. | | | |
| Response: Future submittals for U.S. EPA and OEPA review will be bound and indexed as requested. | | | |
| Action: None required. | | | |
| Commenting Organization: OEPA | | Commentor: OFFO | |
| Comment # | Date Received | Section / Page | Date/Resolved |
| 20 | September 18, 1998 | 94X-6100-G-02209 | |
| Comment: This figure shows both filling and excavation within a basin in the northern portion drawing. The specifications do not address this activity. Additional details and calculations should be provided regarding this cut and fill operation. | | | |
| Response: The volume of the basin both before and after modification was calculated using Softdesk, which is an add-on to Auto Cad. The program calculates a terrain model based on topographical information from the design drawings. It then uses a triangulation method to calculate volume on a point count every 6 inches. The | | | |

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program then sums these point volumes to obtain the total volume of the basin. The calculations for this portion of the design indicate a net gain of 136 cubic yards in basin volume due to the modification as part of the Silos Infrastructure Project.

Action: The calculations are attached to this comment response document.

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|------------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 21 | September 18, 1998 | 94X-6100-G-02221 | |

Comment: Include detail figure on wrapped connections for silt fence. See Rainwater and Land Development page 120.

Response: See response to Comment 17.

Action: See response to Comment 17

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|------------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 22 | September 18, 1998 | 94X-6100-G-02221 | |

Comment: Silt fence should be consistent with Specification 02770 and Rainwater and Land Development (see page 118:i.e., following the contour). As shown on the drawing silt fence is located inconsistent with the specification. Additionally, the figure should note locations of any check dams or erosion matting.

Response: The plans specify the installation of silt fencing along the lengths of a drainage channel and a fence line to prevent sediment from migrating towards these features. Silt fencing following the contours is difficult in this application because of the tight space between the road construction and the features being protected. As stated in Specification 02270, 3.1(B)(3), silt fencing will be field located to follow contours to the extent possible. The plans also specify staking silt fence across a drainage ditch as a best management practice, rather than as a primary control device, to minimize the amount of sediment entering established drainage ditches.

In a phone conversation between FDF Environmental Compliance and Ohio EPA DSW staff on September 18, 1998 it was agreed to allow the installation as proposed in the design package under the following conditions: 1) an OEPA/DOE/FDF joint inspection of the area, during a rain event, will be conducted after the silt fencing is installed to monitor the performance of the fencing; and 2) if the proposed application is a detriment to the erosion and sediment control strategy that

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immediate corrective action would be taken to address the problem.

Specification 02270, 3.1(A)(5) details the thresholds driving the installation of erosion matting and check dams. It will be the contractor's responsibility for demonstrating compliance with this specification. The thresholds specified were previously agreed to between FDF/DOE and Ohio EPA Division of Surface Water staff.

Action: None required

| Commenting Organization: OEPA | | Commentor: OFFO | |
|-------------------------------|--------------------|------------------|---------------|
| Comment # | Date Received | Section / Page | Date/Resolved |
| 23 | September 18, 1998 | 94X-6100-G-02221 | |

Comment: The figure should be revised to include surface water flow arrows

Response: The drawings provided to construction contractors to guide the performance of field activities do not typically include details such as Flow areas. During the site walk-down, existing surface water flow patterns, and the flow patterns to various segregated areas was discussed with OEPA staff.

Action: None required.

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FLUOR DANIEL NORTHWEST, INC.

ENGINEERING

1200 Jadwin Avenue
Richland, Washington 99352

2-1787

FAX TRANSMITTAL

DATE: 9/28/98

TO: JAY THOMPSON

FAX #: (513) 648-4900

PHONE #: _____

FROM: DAVID S. MESSINGER

FAX #: (509) 376-9399

PHONE #: (509) 372-3805

NUMBER OF PAGES 3
(including lead sheet)

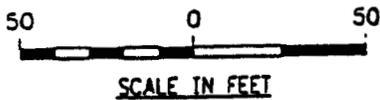
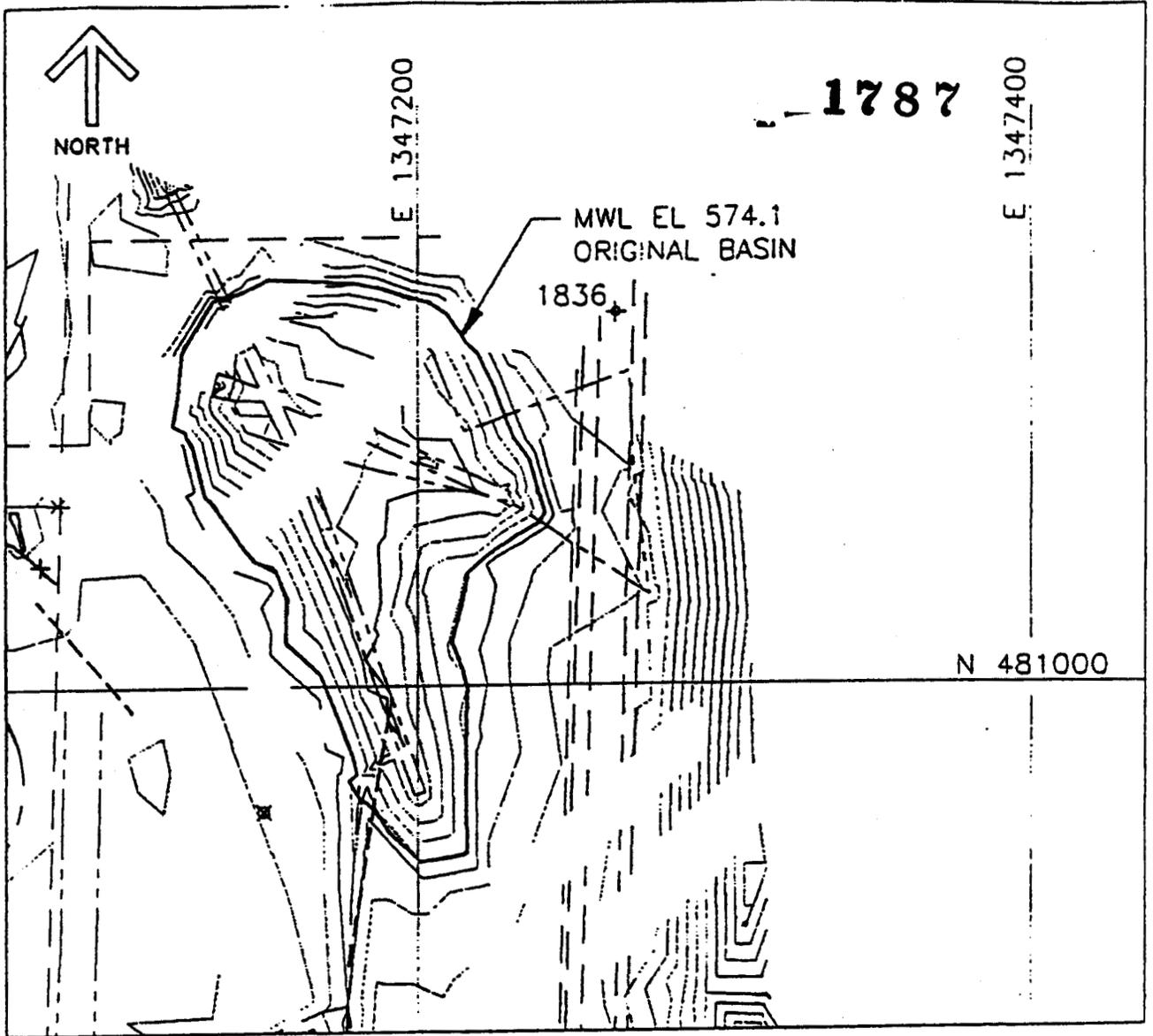
MESSAGE

JAY, ATTACHED ARE THE SKETCHES OF THE POND BEFORE AND AFTER MODIFICATION.

VOLUME BEFORE = 1406 CY TO OVERFLOW

VOLUME AFTER = 1542 CY TO OVERFLOW.

NET GAIN = 136 C.Y.



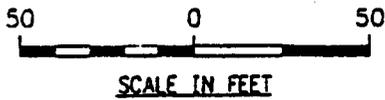
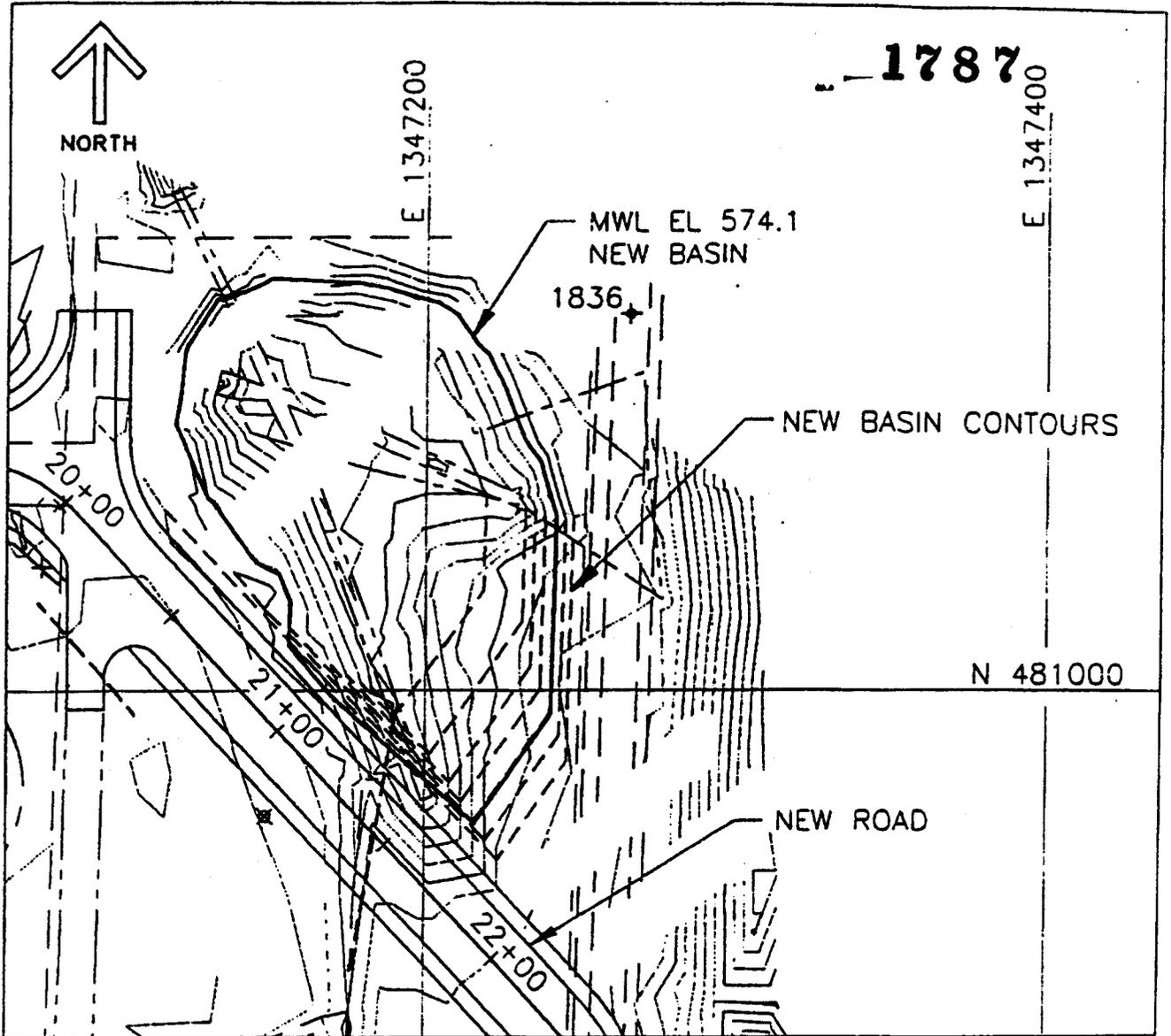
Site Volume Table: Unadjusted

| Site | Stratum | Surf1 | Surf2 | yards | Cut | yards | Fill | yards | Net | Method |
|--------|---------|-------|-------|-------|-----|-------|------|-------|----------|--------|
| basin2 | bsn1 | egnd | basn2 | | 0 | | 1406 | | 1406 (F) | Grid |

REF. DWG 94X-6100-G-02211
SH 2 OF 3

| | | |
|--|--|--------------------|
|  | FLUOR DANIEL NORTHWEST | |
| | Prepared By/Date DJ WHMSH - 9/28/98 | FIGURE 1 |
| | | CAD FILE BASIN: |

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Site Volume Table: Unadjusted

| Site | Stratum | Surf1 | Surf2 | yards | Cut | yards | Fill | yards | Net | Method |
|--------|---------|-------|-------|-------|-----|-------|------|-------|----------|--------|
| basin2 | bsn2 | fgnd3 | mw12 | | 0 | | 1542 | | 1539 (F) | Grid |

REF. DWG 94X-6100-G-02211
SH 2 OF 3

FD FLUOR DANIEL NORTHWEST

| | | |
|--|----------|--------------------|
| Prepared By/Date DJ WHITISH - 9/28/98 | FIGURE 2 | CAD FILE BASIN2 |
|--|----------|--------------------|

LS