

DISPOSITION FORM

(AR 340-15)

OFFICE SYMBOL OR FILE REFERENCE

SUBJECT

NPSEN-PP

Avon Bypass Cost Estimate

TO C, EstSec

FROM C, ProjPlngBr

DATE 31 Oct 63

CMT 1

1. Draft of final estimate for Avon Bypass Reactivation Report is inclosed for your concurrence.
2. Cost of bridges for Great Northern Railway relocations are being reviewed by Civil Works Design Section by separate request. Your concurrence in costs of these bridges is also requested.
3. Quantities for feature 11 "Levee Improvement and Extension," are subject to major revision upward.

Incl
as

H. LUK

cc: Gedney w/incl
Louk "
CW Des Sec w/incl

P 000899

AVON BYPASS COSTS

A detailed cost estimate of the major features included in the recommended plan of the Avon Bypass is shown below:

| Feature | Unit | Quantity | Unit Price | Item Cost | Feature Cost |
|----------------------------|------|-----------|------------|---------------|--------------|
| <u>FEDERAL COSTS</u> | | | | | |
| 07. <u>RELOCATIONS</u> | | | | | |
| -02- GN RR MAINLINE BRANCH | | | | | |
| Bridge | LF | 530 | 1,400.00 | 742,000 | |
| Shoofly | " | 4,000 | 18.00 | 72,000 | |
| Approaches | " | 4,000 | 13.00 | <u>52,000</u> | |
| | | | | | \$866,000 |
| .02- GN RR BRANCHLINE BR. | | | | | |
| Bridge | LF | 710 | 700.00 | 497,000 | |
| Shoofly | " | 8,000 | 18.00 | 144,000 | |
| Approaches | " | 8,000 | 9.00 | <u>72,000</u> | |
| | | | | | \$713,000 |
| 09. CHANNEL | | | | | |
| Clearing | Acre | 20 | 700.00 | 14,000 | |
| Stripping | " | 400 | 240.00 | 96,000 | |
| Excavation | cy | 9,700,000 | 0.50 | 4,850,000 | |
| Gravel Slope Prot. | " | 230,000 | 3.50 | 805,000 | |
| Gravel Bedding | " | 5,000 | 4.00 | 20,000 | |
| Riprap | " | 10,000 | 6.00 | 60,000 | |
| Interior Drainage Fac. | LS | - | - | 130,000 | |
| Seeding | Acre | 360 | 275.00 | <u>99,000</u> | |
| | | | | | \$6,074,000 |

| Feature | Unit | Quantity | Unit Price | Item Cost | Feature Cost |
|---------|------|----------|------------|-----------|--------------|
|---------|------|----------|------------|-----------|--------------|

11. LEVEE IMPROVEMENT & EXTENSION

| | | | | | |
|----------------|------|---------|----------|---------|--|
| Clearing | Acre | 1 | 2,000.00 | 2,000 | |
| Stripping | SY | 120,000 | 0.05 | 6,000 | |
| Embankment | cy | 160,000 | 0.75 | 120,000 | |
| Gravel Bedding | " | 4,800 | 2.50 | 12,000 | |
| Riprap | " | 10,000 | 6.00 | 60,000 | |

15. CHANNEL CONTROL STRUCTURES

\$300,000

15.7 DOWNSTREAM CONTROL STRUCTURE

| | | | | | |
|----------------|----------------|------|---------|----------|-----------|
| Treated Timber | Excavation | cy | 190,000 | 0.90 | 171,000 |
| | Piles | LF | 280,000 | 3.25 | 910,000 |
| | Dewatering | LS | - | - | 100,000 |
| | Mass Concrete | cy | 40,000 | 40.00 | 1,600,000 |
| | Reinforcing | | | | |
| | Steel | lb. | 210,000 | 0.20 | 42,000 |
| | Wakefield | | | | |
| | Piles | MBF | 80 | 250.00 | 20,000 |
| | Flap Gate | Ea. | 2 | 1,500.00 | 3,000 |
| | Sluice Gate | Ea. | 2 | 5,000.00 | 10,000 |
| | Trash Rack | lb. | 1,500 | 0.67 | 1,000 |
| | Bedding Gravel | cy | 7,000 | 4.00 | 28,000 |
| | Riprap | cy | 10,000 | 6.00 | 60,000 |
| | Elect. Work | L.S. | - | - | 2,000 |

\$2,945,000

15. INTAKE STRUCTURE

| | | | | | |
|----------------|-----------------|-----|---------|-----------|---------|
| | Excavation | cy | 36,000 | 1.00 | 36,000 |
| | Dewatering | LS | - | - | 40,000 |
| Treated Timber | Piles | LF | 68,000 | 3.25 | 221,000 |
| | Mass Concrete | cy | 13,500 | 40.00 | 554,000 |
| | Pier Concrete | " | 2,000 | 55.00 | 110,000 |
| | Bridge Concrete | cy | 300 | 130.00 | 39,000 |
| | Reinforcing | | | | |
| | Steel | lb. | 365,000 | 0.20 | 73,000 |
| | Wakefield | | | | |
| | Piles | MBF | 80 | 250.00 | 20,000 |
| | Tainter Gates | lb. | 480,000 | .50 | 240,000 |
| | Gate Hoists | Ea. | 6 | 40,000.00 | 240,000 |
| | Sluice Gates | Ea. | 2 | 3,000.00 | 6,000 |
| | Drift Barrier | LS | - | - | 100,000 |
| | Bedding Gravel | cy | 4,500 | 4.00 | 18,000 |
| | Riprap | cy | 7,000 | 6.00 | 42,000 |
| Elect. Work | LS | - | - | 8,000 | |

\$1,747,000

