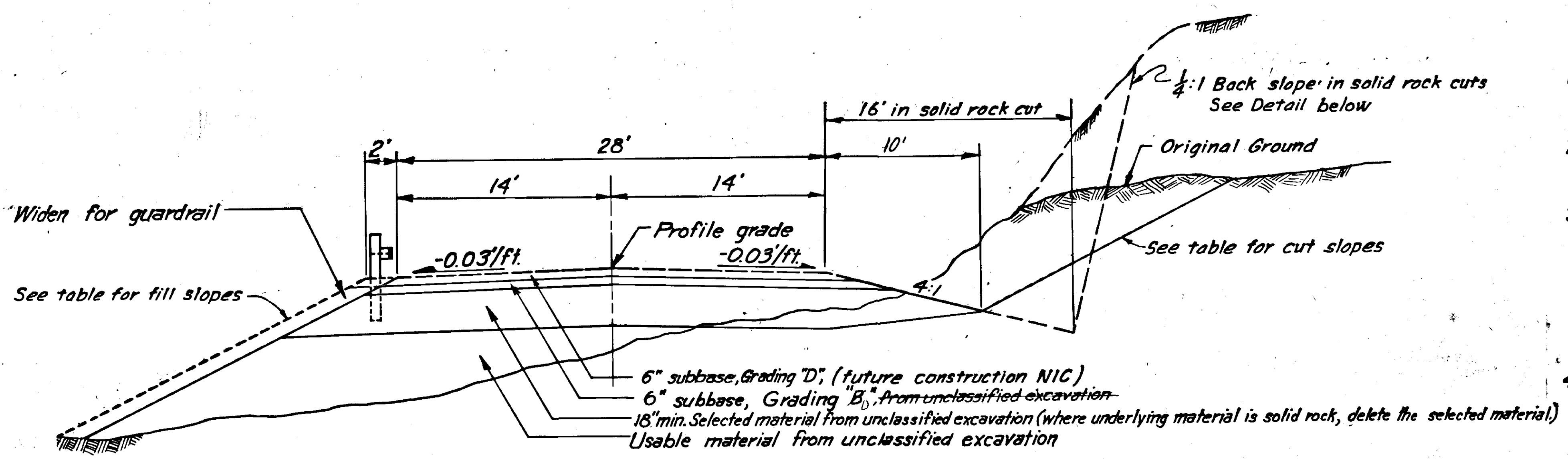


TYPICAL SECTIONS AND MISC. TABLES

| FROM STATION | TO STATION | offset | slope |
|-----------------------|--------------|---------------------|-------|
| 0+03+95 Lt. | 0+37+00 Lt. | 2:1 | 2:1 |
| 0+03+95 Rt. | 0+37+00 Rt. | 2:1 | 2:1 |
| 0+37+50 Lt. | 0+38+00 Lt. | 1/4:1 | 1/4:1 |
| 0+37+50 Rt. | 0+38+00 Rt. | 1/4:1 | 1/4:1 |
| 0+38+50 Lt. | 0+74+80 Lt. | 2:1 | 2:1 |
| 0+38+50 Rt. | 0+75+20 Rt. | 2:1 | 2:1 |
| 0+75+20 Lt. | 0+81+30 Lt. | 1/4:1 | 1/4:1 |
| 0+75+20 Rt. | 0+81+30 Rt. | 1/4:1 | 1/4:1 |
| 0+82+00 Lt. | 0+187+00 Lt. | 2:1 | 2:1 |
| 0+82+00 Rt. | 0+185+50 Rt. | 2:1 | 2:1 |
| 0+187+50 Lt. | 0+233+10 Lt. | 1/4:1 | 1/4:1 |
| 0+186+00 Rt. | 0+230+50 Rt. | 1/4:1 | 1/4:1 |
| 0+234+50 Lt. | 0+304+50 Lt. | 2:1 | 2:1 |
| 0+231+00 Rt. | 0+233+50 Rt. | 2:1 | 2:1 |
| 0+305+00 Lt. | 0+309+00 Lt. | 1/4:1 | 1/4:1 |
| 0+334+00 Rt. | 0+235+50 Rt. | 1/4:1 | 1/4:1 |
| 0+309+50 Lt. | 0+311+00 Lt. | 2:1 | 2:1 |
| 0+236+00 Rt. | 0+257+50 Rt. | 2:1 | 2:1 |
| 0+311+50 Lt. | 0+313+50 Lt. | 1/4:1 | 1/4:1 |
| 0+258+00 Rt. | 0+274+50 Rt. | 1/4:1 | 1/4:1 |
| 0+314+00 Lt. | 0+322+75 Lt. | 2:1 | 2:1 |
| 0+275+00 Rt. | 0+304+50 Rt. | 2:1 | 2:1 |
| 0+323+00 Lt. | 0+336+50 Lt. | 1/4:1 | 1/4:1 |
| 0+305+00 Rt. | 0+308+00 Rt. | 1/4:1 | 1/4:1 |
| 0+337+00 Lt. | 0+346+50 Lt. | 2:1 | 2:1 |
| 0+339+02.00-342+03.50 | 0+342+03.50 | Klawak River Bridge | |
| 0+308+50 Rt. | 0+311+00 Rt. | 2:1 | 2:1 |
| 0+311+50 Rt. | 0+313+50 Rt. | 1/4:1 | 1/4:1 |
| 0+314+00 Rt. | 0+322+75 Rt. | 2:1 | 2:1 |
| 0+323+00 Rt. | 0+337+00 Rt. | 1/4:1 | 1/4:1 |
| 0+337+50 Rt. | 0+346+50 Rt. | 2:1 | 2:1 |



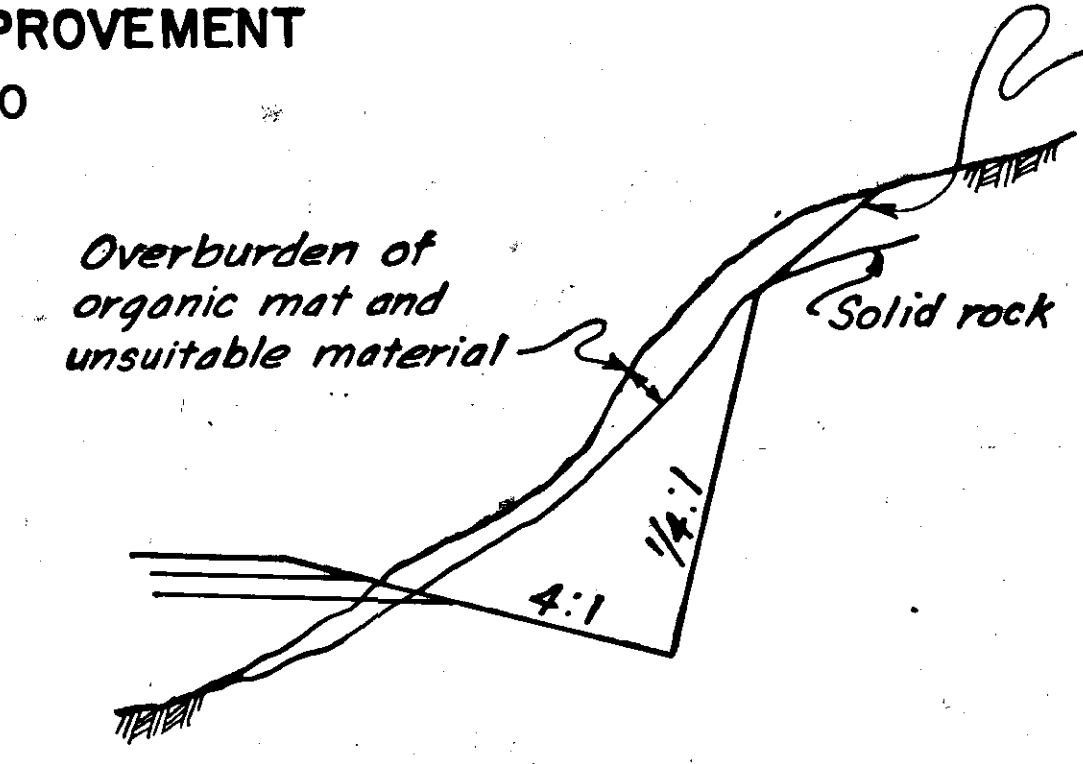
TYPICAL SECTION OF IMPROVEMENT
"L" 17+40 TO "O" 346+50

*See Bridge Plans

| FROM STATION | TO STATION | offset | SLOPE |
|--------------|--------------|--------|-------|
| 0+03+95 Lt. | 0+13+50 Lt. | 1/2:1 | 1/2:1 |
| 0+03+95 Rt. | 0+32+50 Rt. | 2:1 | 2:1 |
| 0+14+00 Lt. | 0+17+00 Lt. | 2:1 | 2:1 |
| 0+33+00 Rt. | 0+38+00 Rt. | 4:1 | 4:1 |
| 0+17+25 Lt. | 0+32+50 Lt. | 4:1 | 4:1 |
| 0+38+50 Rt. | 0+51+25 Rt. | 2:1 | 2:1 |
| 0+33+00 Lt. | 0+54+25 Lt. | 2:1 | 2:1 |
| 0+51+25 Rt. | 0+70+80 Rt. | 4:1 | 4:1 |
| 0+54+75 Lt. | 0+70+50 Lt. | 4:1 | 4:1 |
| 0+71+25 Rt. | 0+75+20 Rt. | 1/2:1 | 1/2:1 |
| 0+70+80 Lt. | 0+73+80 Lt. | 1/2:1 | 1/2:1 |
| 0+75+70 Rt. | 0+89+50 Rt. | 4:1 | 4:1 |
| 0+74+25 Lt. | 0+74+80 Lt. | 2:1 | 2:1 |
| 0+90+00 Rt. | 0+97+00 Rt. | 2:1 | 2:1 |
| 0+75+20 Lt. | 0+83+80 Lt. | 4:1 | 4:1 |
| 0+75+50 Rt. | 0+100+00 Rt. | 1/2:1 | 1/2:1 |
| 0+84+00 Lt. | 0+96+00 Lt. | 2:1 | 2:1 |
| 0+100+50 Rt. | 0+124+00 Rt. | 4:1 | 4:1 |
| 0+96+50 Lt. | 0+98+50 Lt. | 1/2:1 | 1/2:1 |
| 0+124+50 Rt. | 0+139+00 Rt. | 2:1 | 2:1 |
| 0+99+00 Lt. | 0+180+50 Lt. | 2:1 | 2:1 |
| 0+139+50 Rt. | 0+249+00 Rt. | 4:1 | 4:1 |
| 0+181+00 Lt. | 0+187+00 Lt. | 1/2:1 | 1/2:1 |

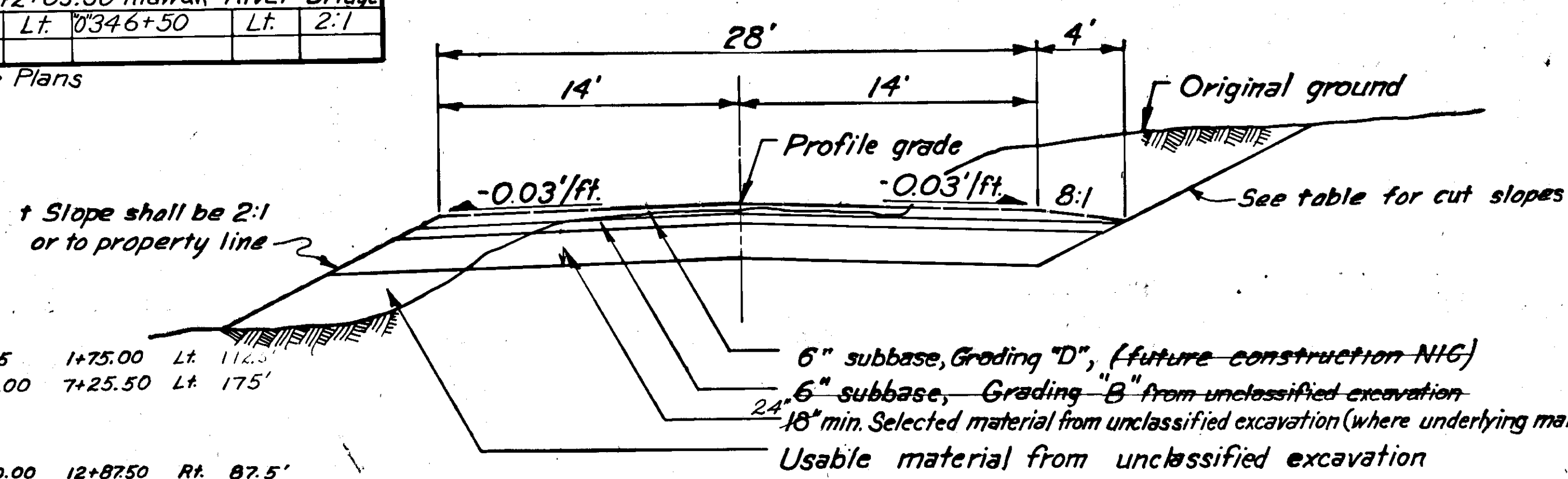
*See Bridge Plans

| From | To | Offset | Length | Remarks |
|-------------|-------------|--------|--------|---------|
| 0+5+63.00 | 0+7+25.50 | Lt. | 162.5' | Install |
| 0+14+00.00 | 0+15+87.50 | Rt. | 187.5' | Install |
| 0+14+06.50 | 0+16+81.50 | Lt. | 275' | Install |
| 0+16+00.00 | 0+16+85.50 | Rt. | 85.5' | Install |
| 0+39+25.00 | 0+43+00.00 | Lt. | 375' | Install |
| 0+70+50.00 | 0+75+25.00 | Lt. | 475' | Install |
| 0+72+62.00 | 0+75+24.50 | Rt. | 262.5' | Install |
| 0+95+00.00 | 0+99+00.00 | Lt. | 400' | Install |
| 0+95+00.00 | 0+99+00.00 | Rt. | 400' | Install |
| 0+338+27.00 | 0+339+02.00 | Rt. | 75' | Install |
| 0+338+52.00 | 0+339+02.00 | Lt. | 50' | Install |
| 0+342+03.50 | 0+342+78.50 | Lt. | 75' | Install |
| 0+342+03.50 | 0+342+53.30 | Rt. | 50' | Install |



DETAIL FOR SOLID ROCK CUTS

The slope from top of solid rock to surface of original ground shall be as steep as the condition of the type of material will stand without sluffing until seeding can be accomplished. In areas of excessive moisture temporary soil stabilization and erosion controls shall be utilized as specified in Section III of the specifications.

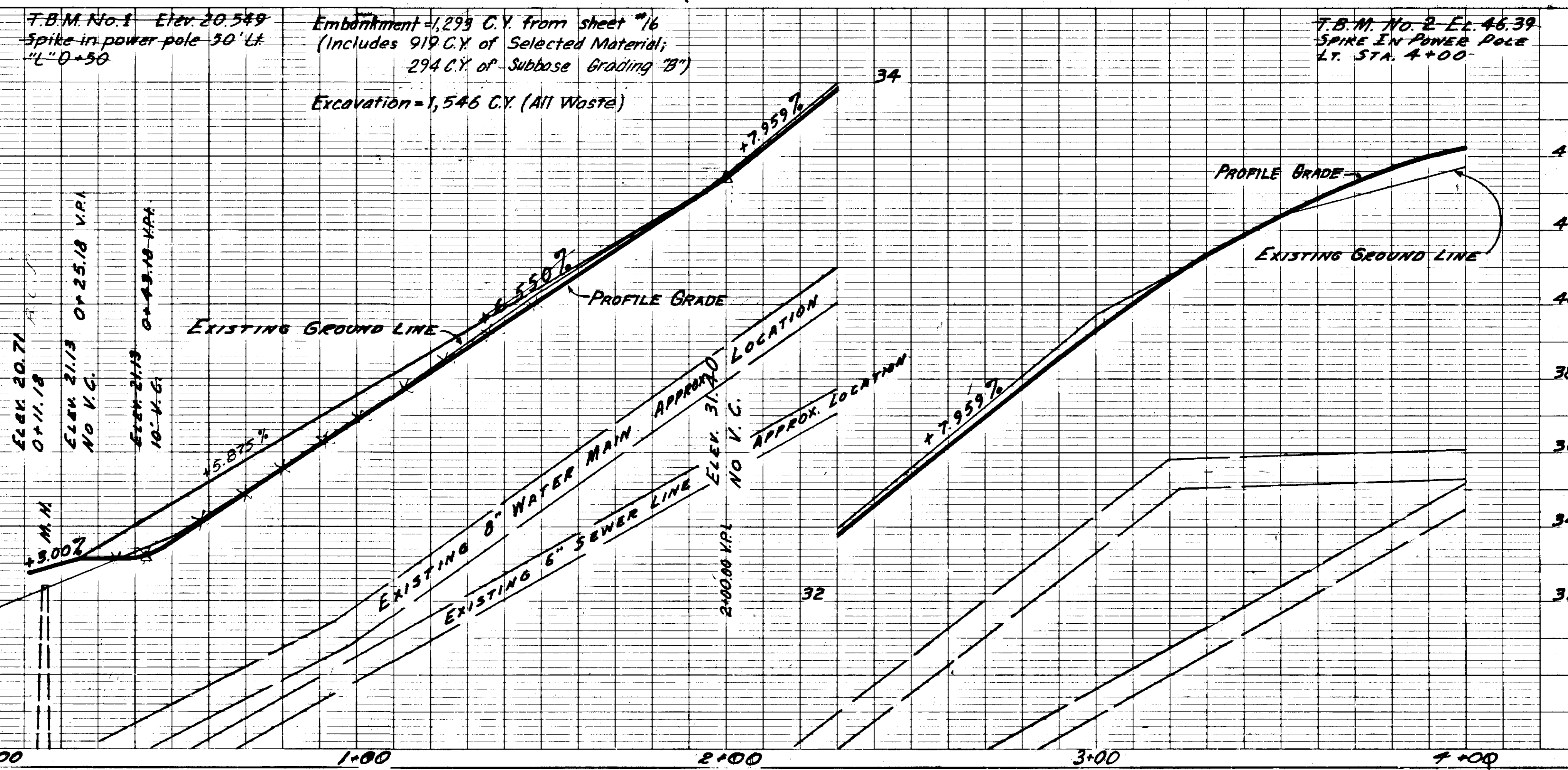
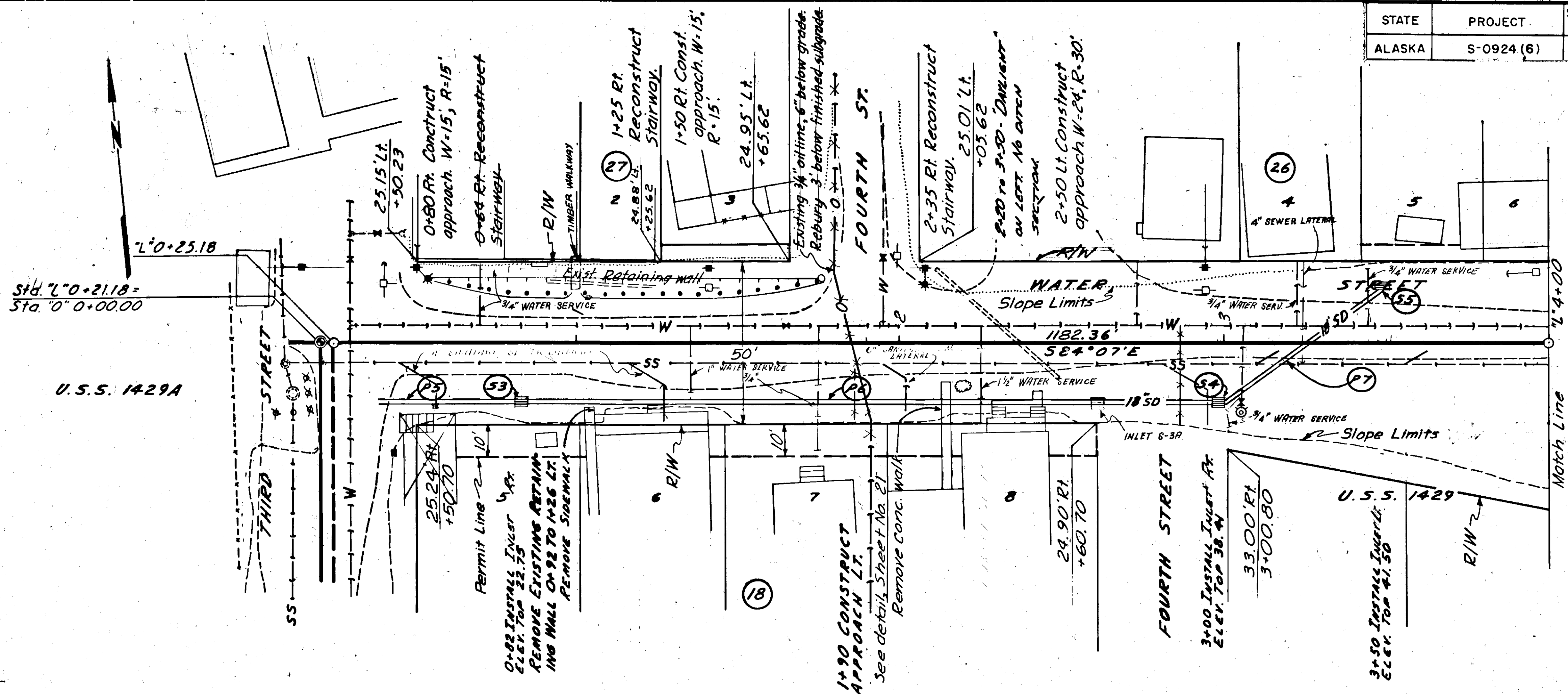


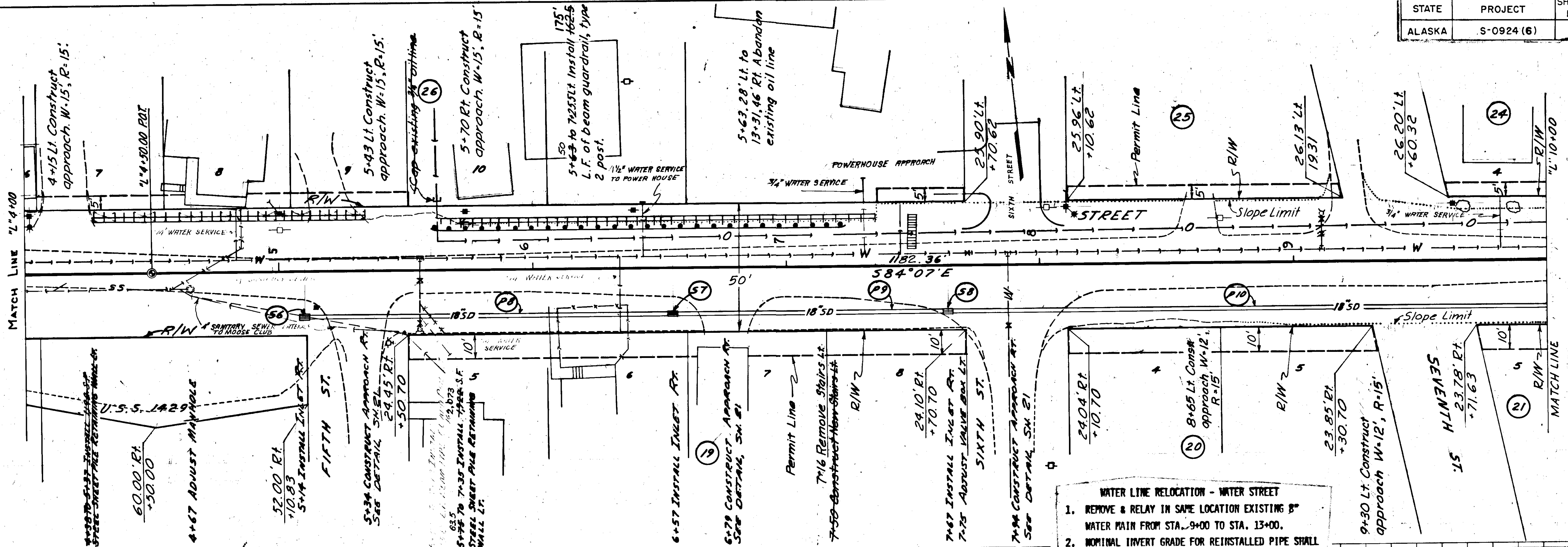
TYPICAL SECTION OF IMPROVEMENT
"L" 0+21.18 TO "L" 17+40
"O" 0+00 TO "O" 4+05

| FROM STATION | TO STATION | offset |
|--------------|------------|-----------|
| 38+50 | 39+10 | Lt. |
| 42+80 | 43+50 | Lt. & Rt. |
| 78+00 | 84+15 | Lt. |
| 94+50 | 95+50 | Rt. |
| 103+00 | 104+00 | Rt. |
| 128+35 | 129+05 | Rt. |
| 149+50 | 150+50 | Rt. |
| 188+00 | 190+50 | Rt. |
| 205+00 | 206+00 | Lt. |
| 246+50 | 247+50 | Rt. |
| 270+50 | 272+10 | Rt. |
| 274+25 | 274+75 | Rt. |
| 321+50 | 323+10 | Lt. |

- GENERAL NOTES**
- Grades and alignment shown on these plans are subject to minor revisions.
 - Culvert lengths and locations are approximate only and are subject to minor revisions.
 - The clearing & grubbing limits shall be a neat line within the slope limits of the roadway prism. Hand clearing shall include the area to a neat line ten ft. beyond the slope limits in cut sections and five ft. beyond the slope limits in fill sections or to the R.O.W. limits whichever is less.
 - All existing culverts located within construction limits of this project shall be removed and disposed of, such removal and disposal shall be considered incidental to other items of work performed under this contract and no separate payment shall be made therefor.
 - Utility poles and transformers within the construction limits will be moved by others.
 - The existing power line located from Sta. 17+50 to 57+00 will be removed by others. The contractor shall coordinate his work to allow the relocation to be accomplished immediately after clearing and grubbing operations.
 - In areas indicated on the plans as Rock Embankment, only the outer 3' of the roadway prism shall meet the requirements of Rock Embankment as specified in section 203 of the specifications.
 - All centerline shown on plan and profile sheets is staked in the field except that designated by the prefix "O".
 - From Sta. 56+00 to end of project there is an existing telephone line on the ground on each side of the traveled way. The line shall be moved by others.
 - Hydro-seeding, Item 618 (1), will be required on all fill slopes constructed with material other than rock, cut slopes other than rock, and on all exposed surfaces of waste areas.

| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|--------|------------|-----------|--------------|
| ALASKA | S-0924 (6) | 6 | 35 |





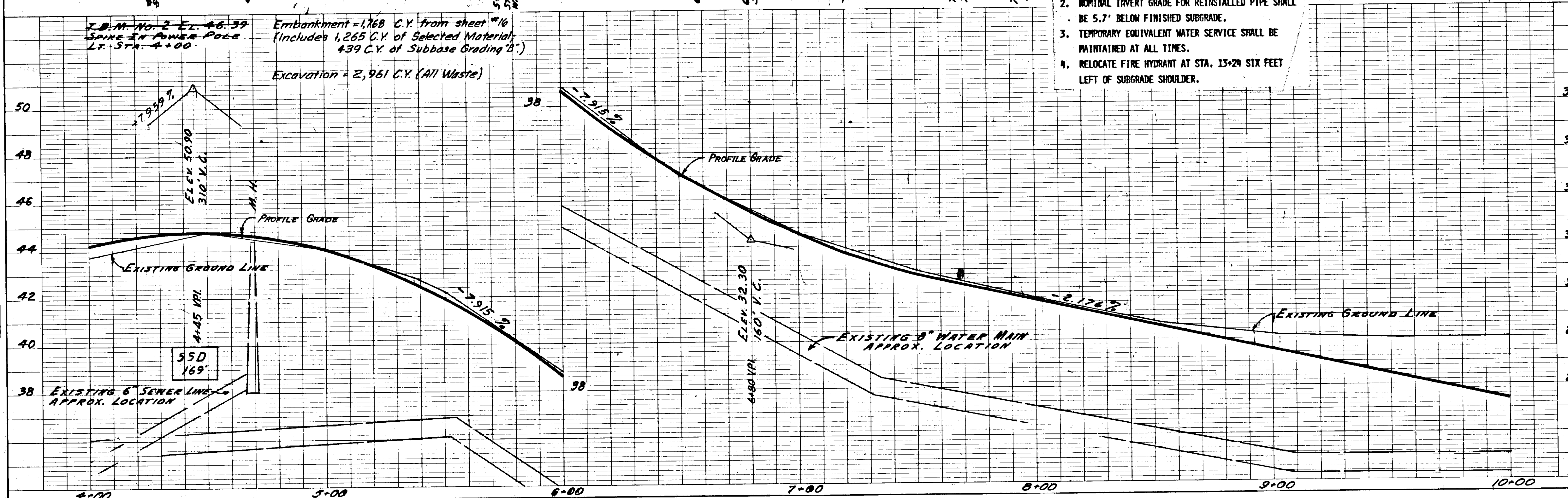
WATER LINE RELOCATION - WATER STREET

1. REMOVE & RELAY IN SAME LOCATION EXISTING 8" WATER MAIN FROM STA. 9+00 TO STA. 13+00.
2. NOMINAL INVERT GRADE FOR REINSTALLED PIPE SHALL BE 5.7' BELOW FINISHED SUBGRADE.
3. TEMPORARY EQUIVALENT WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.
4. RELOCATE FIRE HYDRANT AT STA. 13+29 SIX FEET LEFT OF SUBGRADE SHOULDER.

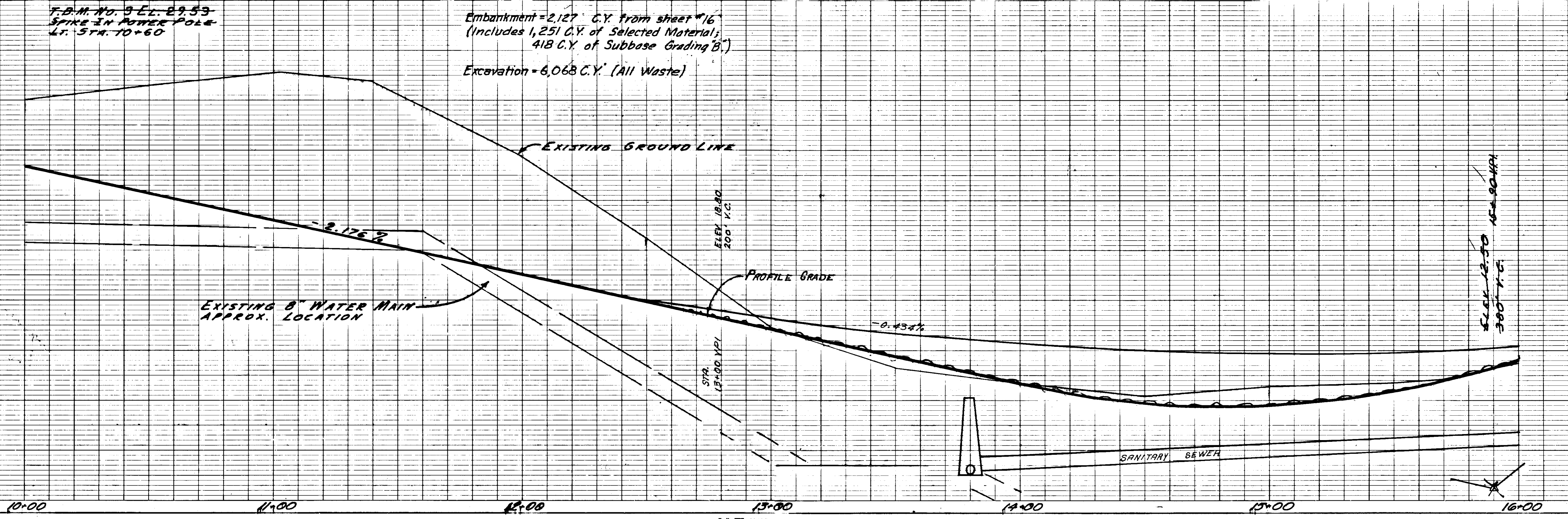
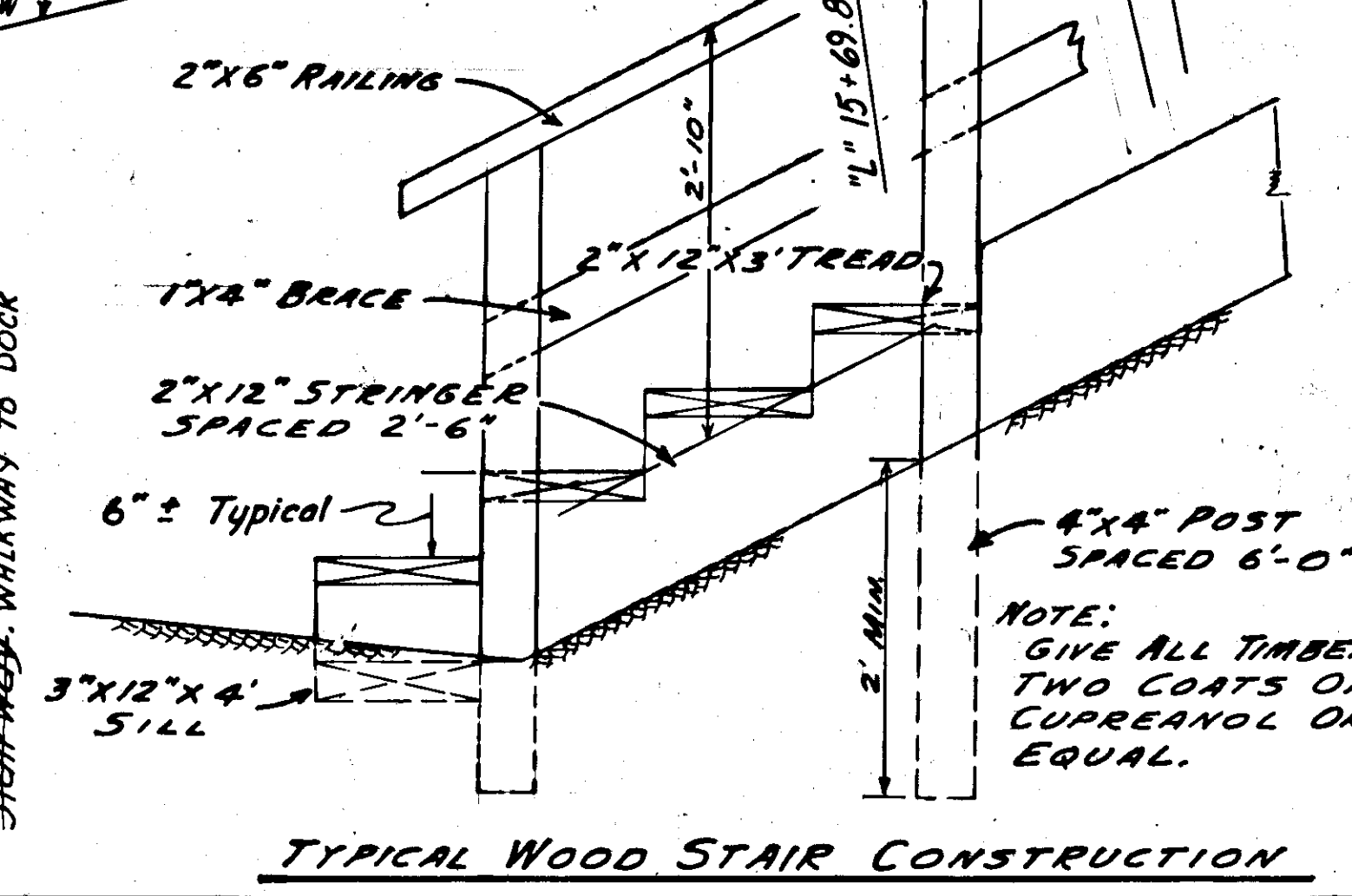
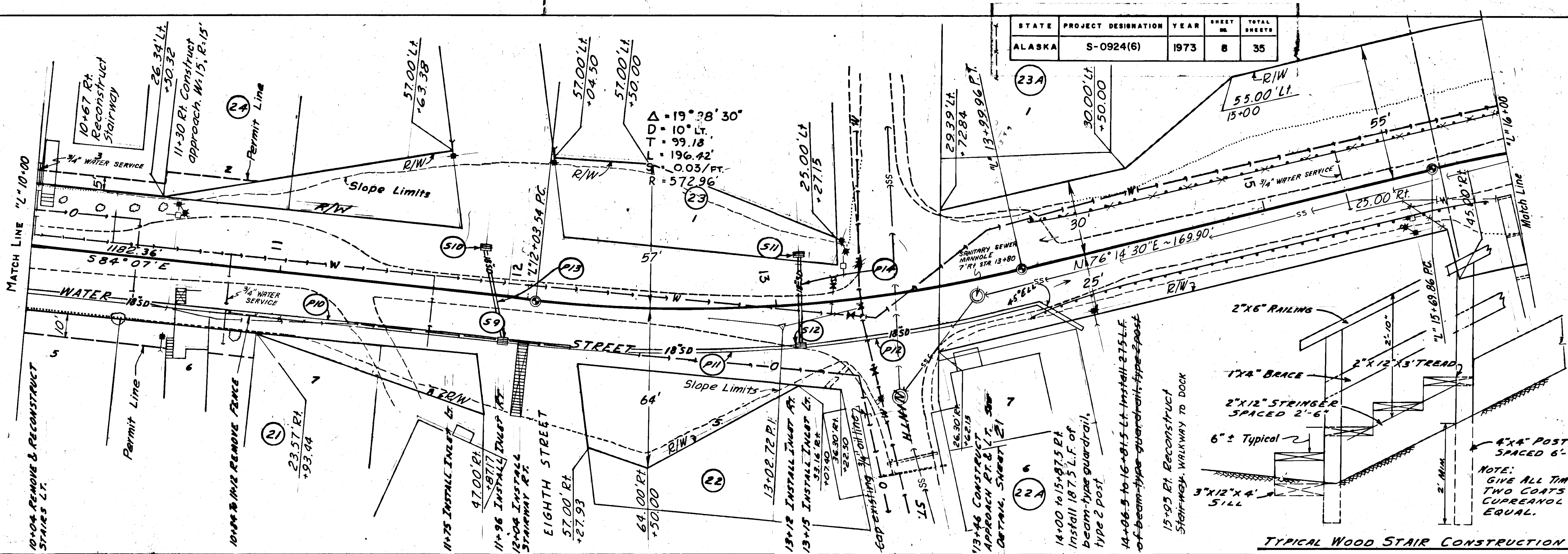
F.B.M. No. 2 E.L. 46.39
SPIKE IN POWER POLE
LT. STA. 4+00.

Embankment = 1,768 C.Y. from sheet #16
(Includes 1,265 C.Y. of Selected Material
439 C.Y. of Subbase Grading "B".)

Excavation = 2,961 C.Y. (All Waste)

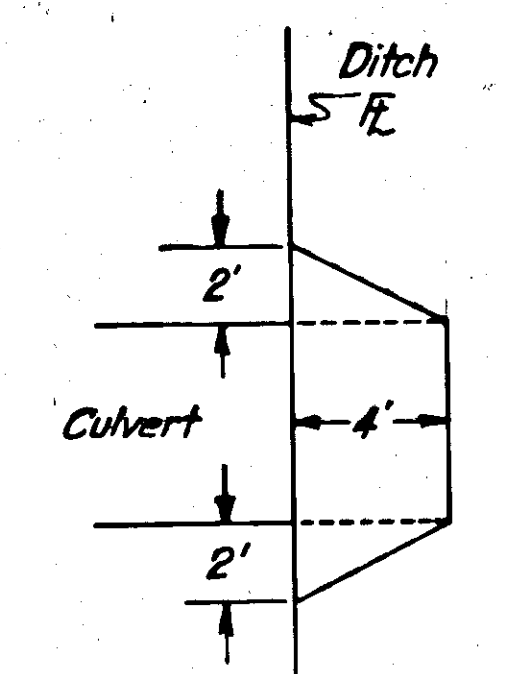


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 8 | 35 |

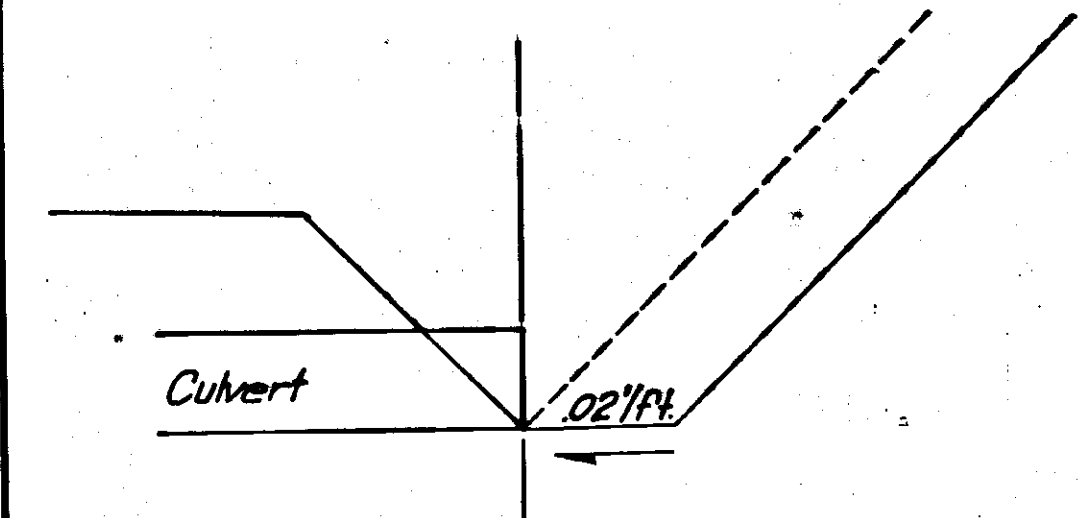


| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|--------|------------|-----------|--------------|
| ALASKA | S-0924 (6) | 9 | 35 |

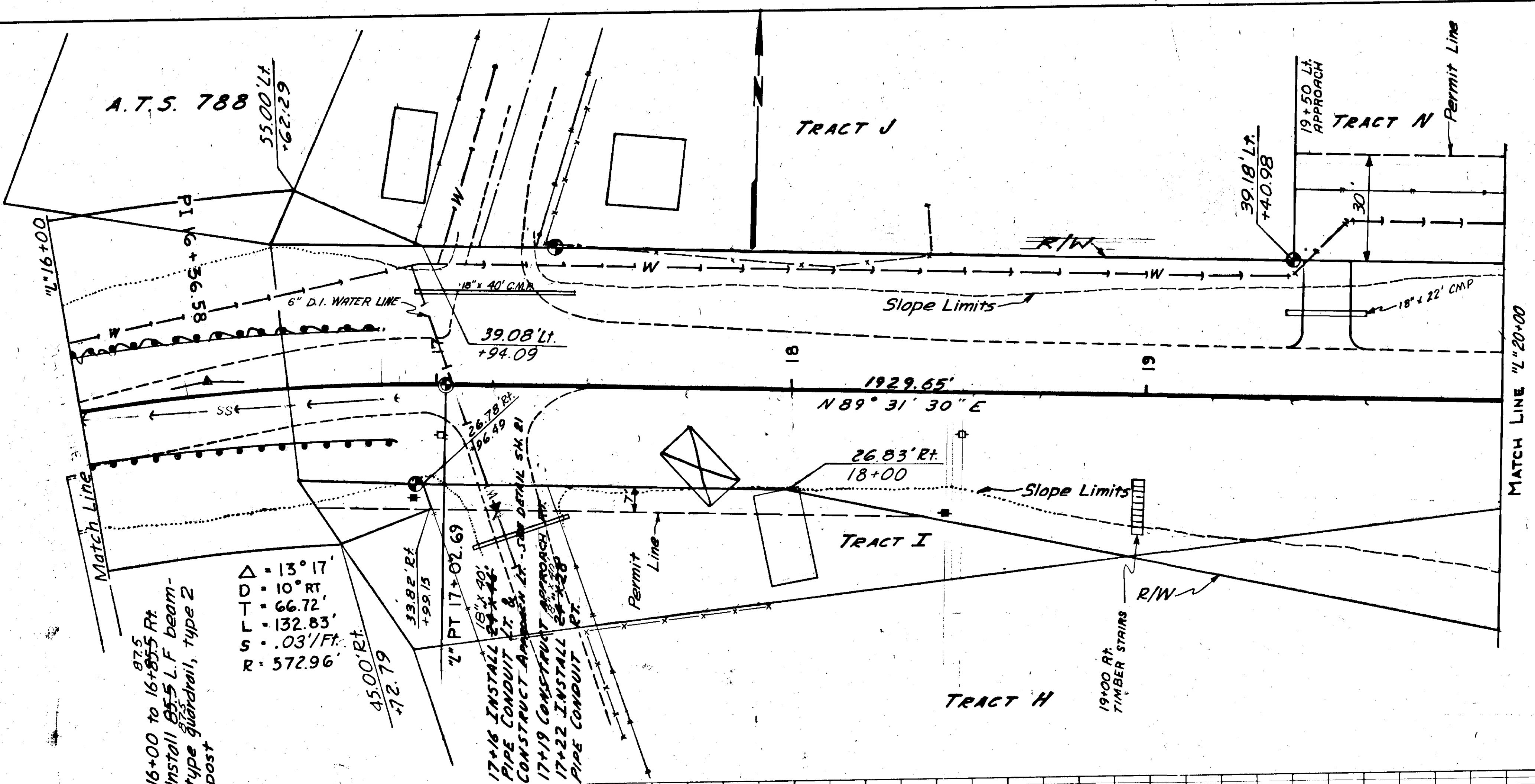
CULVERT INLET DETAIL



PLAN



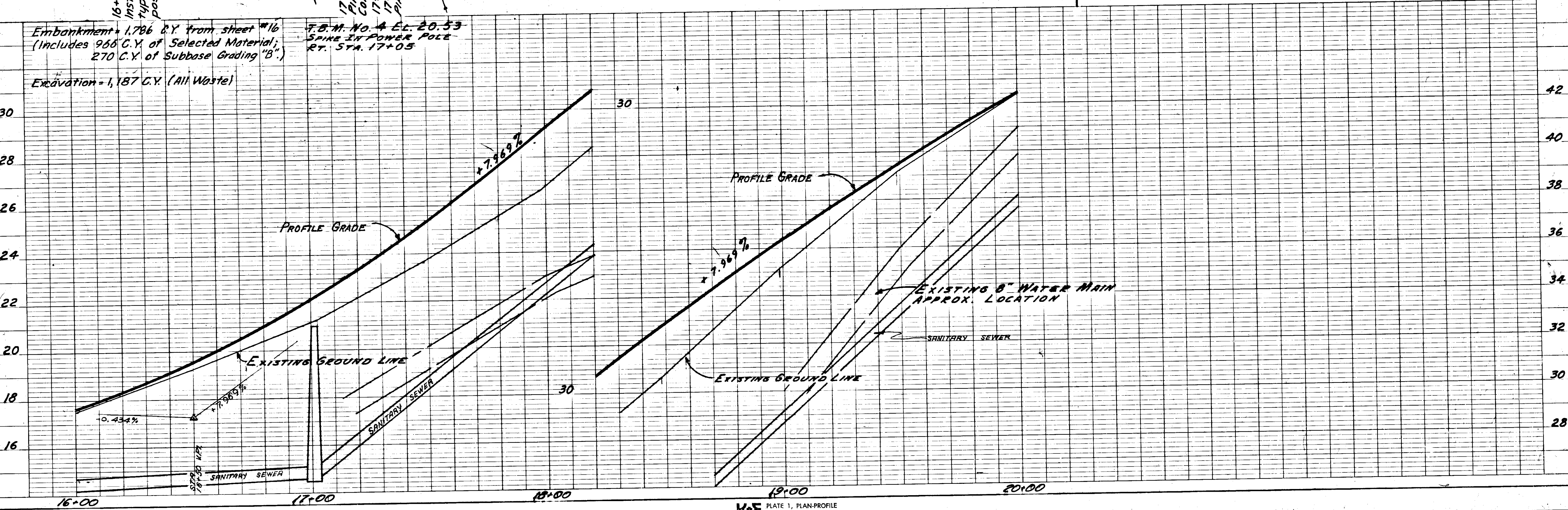
SECTION



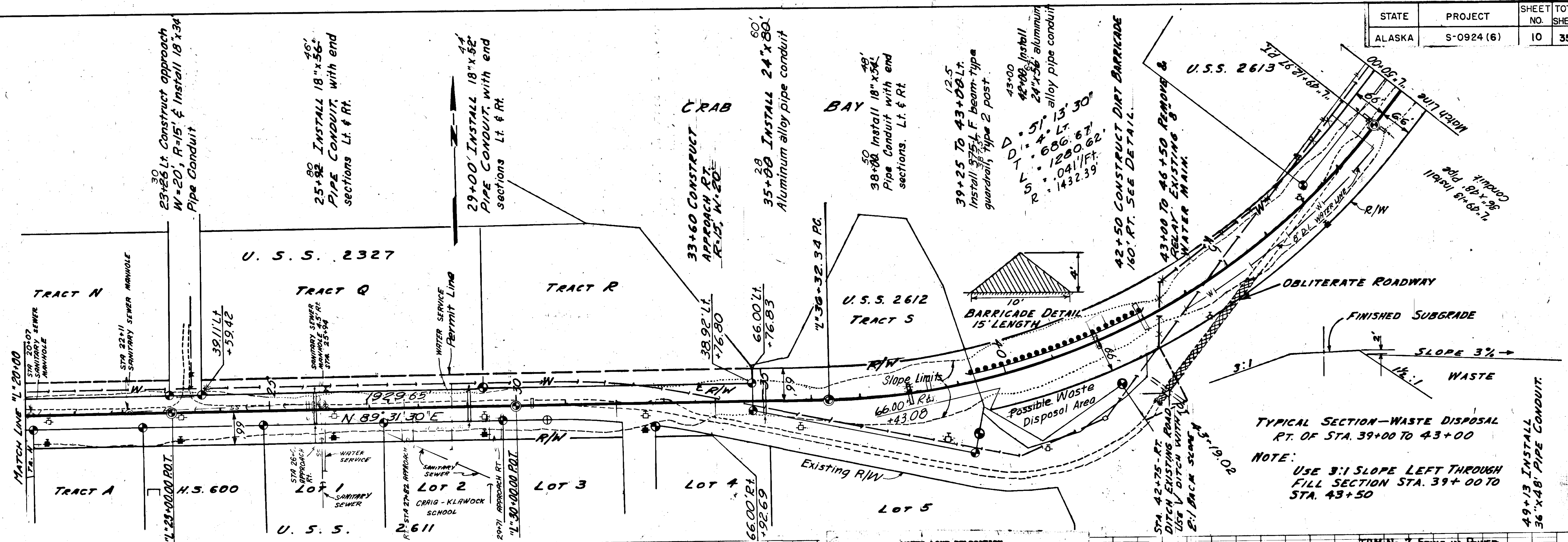
$\Delta = 13^\circ 17'$
 $D = 10^\circ RT$
 $T = 66.72'$
 $L = 132.83'$
 $S = .03'/FT.$
 $R = 572.96'$

Embankment + 1,786 C.Y. from sheet #16
 (Includes 966 C.Y. of Selected Material,
 270 C.Y. of Subbase Grading "B")
 Excavation - 1,187 C.Y. (All Waste)

F.B.M. No. 4 E.L. 20.53
 SPIKE IN POWER POLE
 RT. STA. 17+05



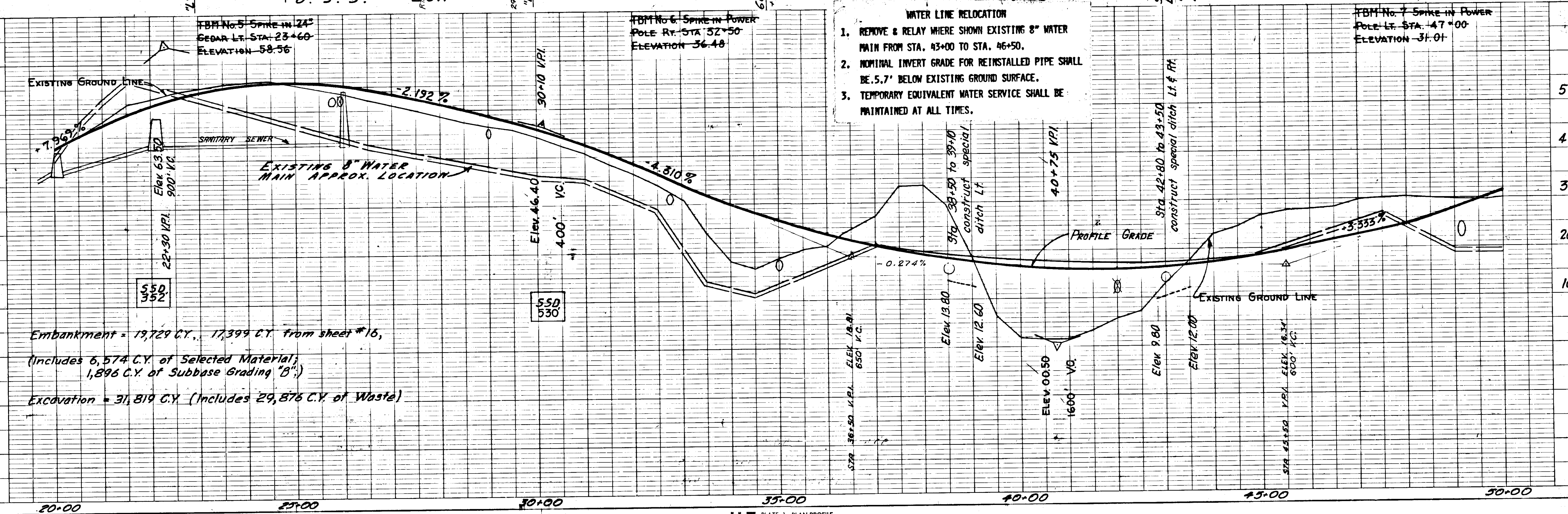
| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|--------|------------|-----------|--------------|
| ALASKA | S-0924 (6) | 10 | 35 |



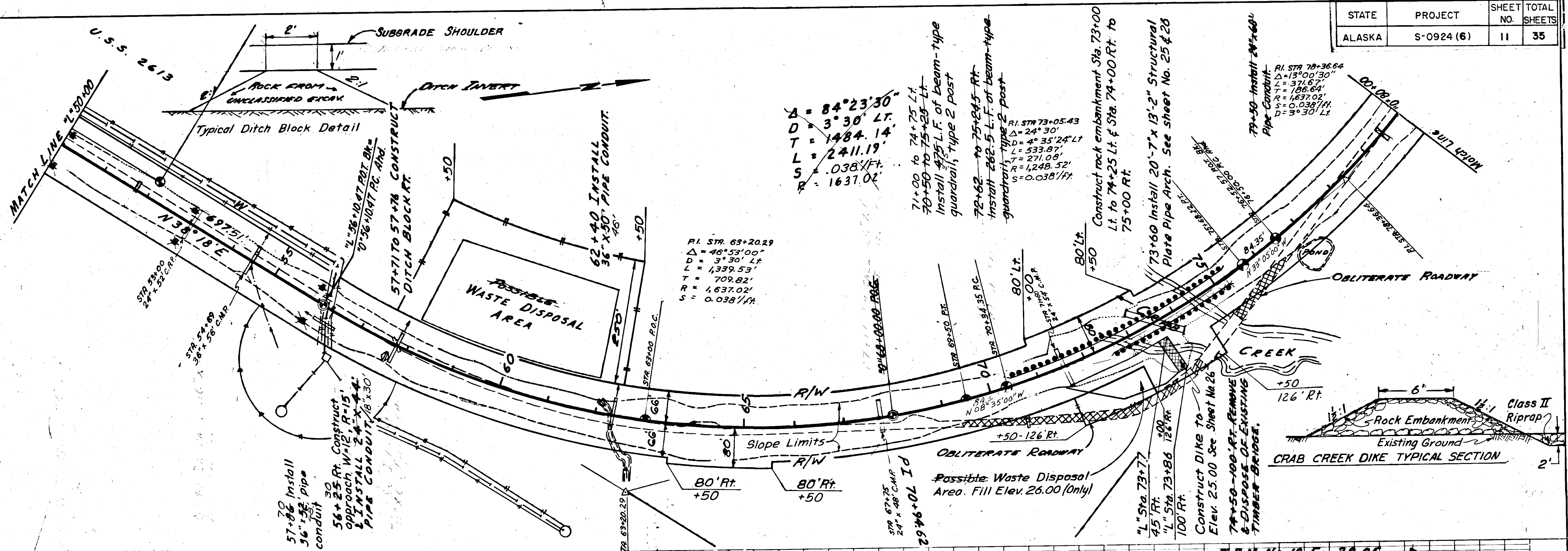
TYPICAL SECTION—WASTE DISPOSAL RT. OF STA. 39+00 TO 43+00
 NOTE: USE 3:1 SLOPE LEFT THROUGH FILL SECTION STA. 39+00 TO STA. 43+00

WATER LINE RELOCATION

1. REMOVE & RELAY WHERE SHOWN EXISTING 8" WATER MAIN FROM STA. 43+00 TO STA. 46+50.
2. NOMINAL INVERT GRADE FOR REINSTALLED PIPE SHALL BE 5.7' BELOW EXISTING GROUND SURFACE.
3. TEMPORARY EQUIVALENT WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.



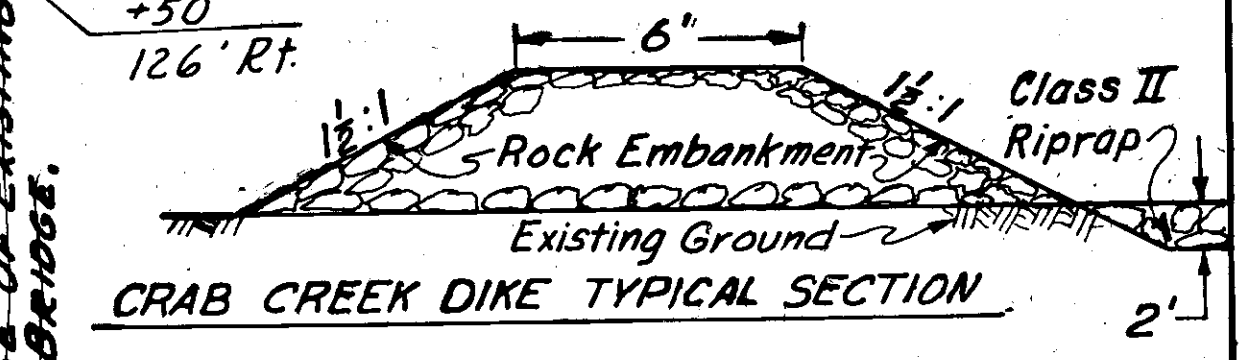
| | | | |
|--------|------------|-----------|--------------|
| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
| ALASKA | S-0924 (6) | 11 | 35 |



$\Delta = 84^{\circ}23'30''$
 $D = 3^{\circ}30' \text{ LT.}$
 $T = 1484.14'$
 $L = 2411.19'$
 $S = .038\%/ft.$
 $R = 1637.02'$

P.I. STA. 63+20.29
 $\Delta = 46^{\circ}53'00''$
 $D = 3^{\circ}30' \text{ LT.}$
 $L = 1339.53'$
 $T = 709.82'$
 $R = 1637.02'$
 $S = 0.038\%/ft.$

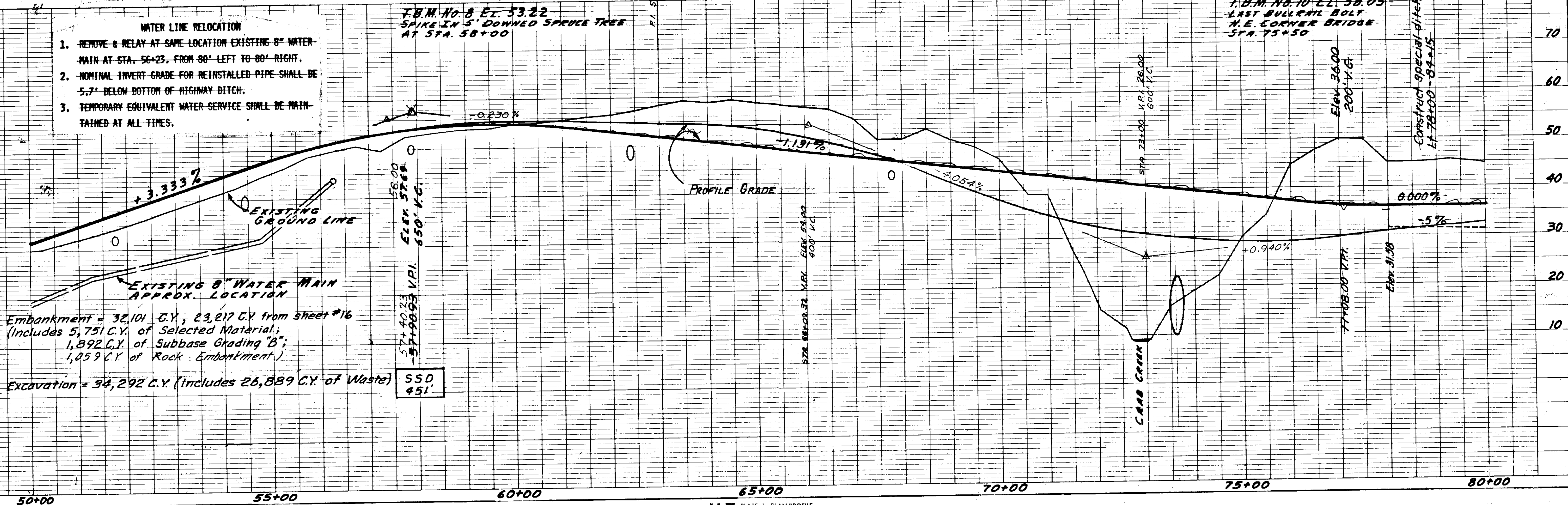
P.I. STA. 73+05.43
 $\Delta = 24^{\circ}30'$
 $D = 4^{\circ}35'24'' \text{ LT.}$
 $L = 533.87'$
 $T = 271.08'$
 $R = 1248.52'$
 $S = 0.038\%/ft.$



- WATER LINE RELOCATION**
1. REMOVE & RELAY AT SAME LOCATION EXISTING 8" WATER MAIN AT STA. 56+23, FROM 80' LEFT TO 80' RIGHT.
 2. NOMINAL INVERT GRADE FOR REINSTALLED PIPE SHALL BE 5.7' BELOW BOTTOM OF HIGHWAY DITCH.
 3. TEMPORARY EQUIVALENT WATER SERVICE SHALL BE MAINTAINED AT ALL TIMES.

T.B.M. NO. 8 EL. 53.22
 SPIKE IN 5" DOWNED SPRUCE TREE
 AT STA. 58+00

T.B.M. NO. 10 EL. 38.05
 LAST SURVEY BOLT
 N.E. CORNER BRIDGE
 STA. 75+50

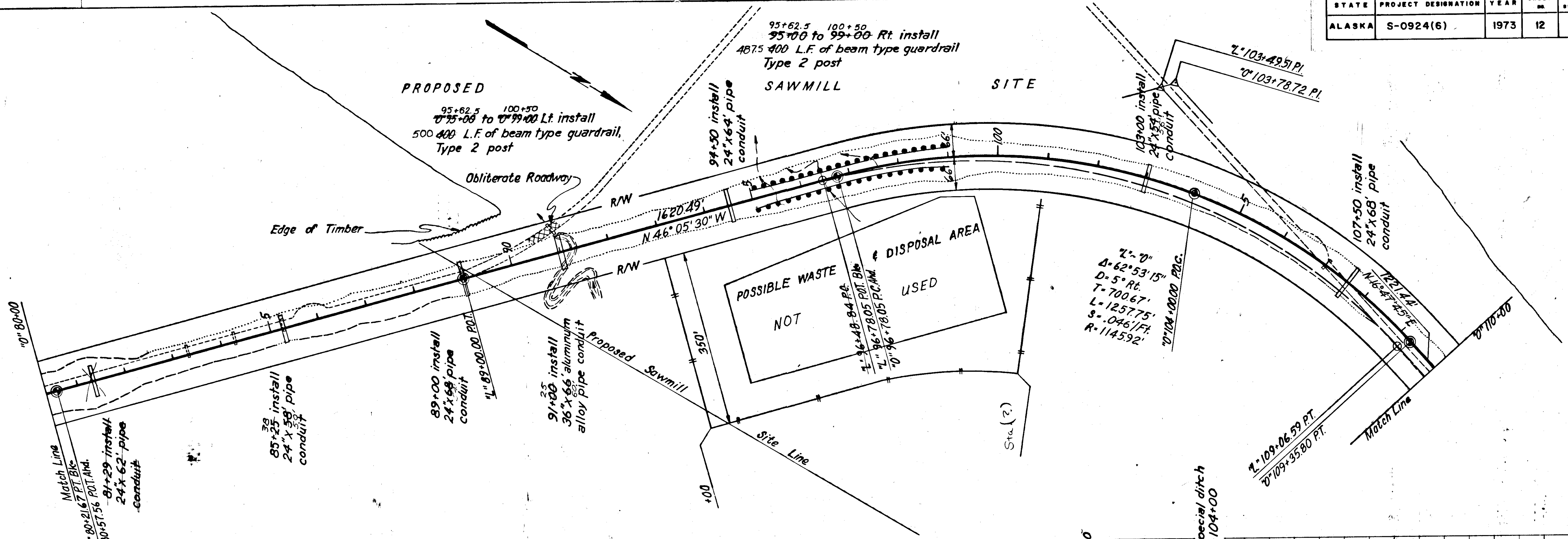


Embankment = 32,101 C.Y.; 23,217 C.Y. from sheet #16
 (Includes 5,751 C.Y. of Selected Material;
 1,892 C.Y. of Subbase Grading "B";
 1,059 C.Y. of Rock Embankment)

Excavation = 34,292 C.Y. (Includes 26,889 C.Y. of Waste)

SSD
 45'

| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 12 | 35 |

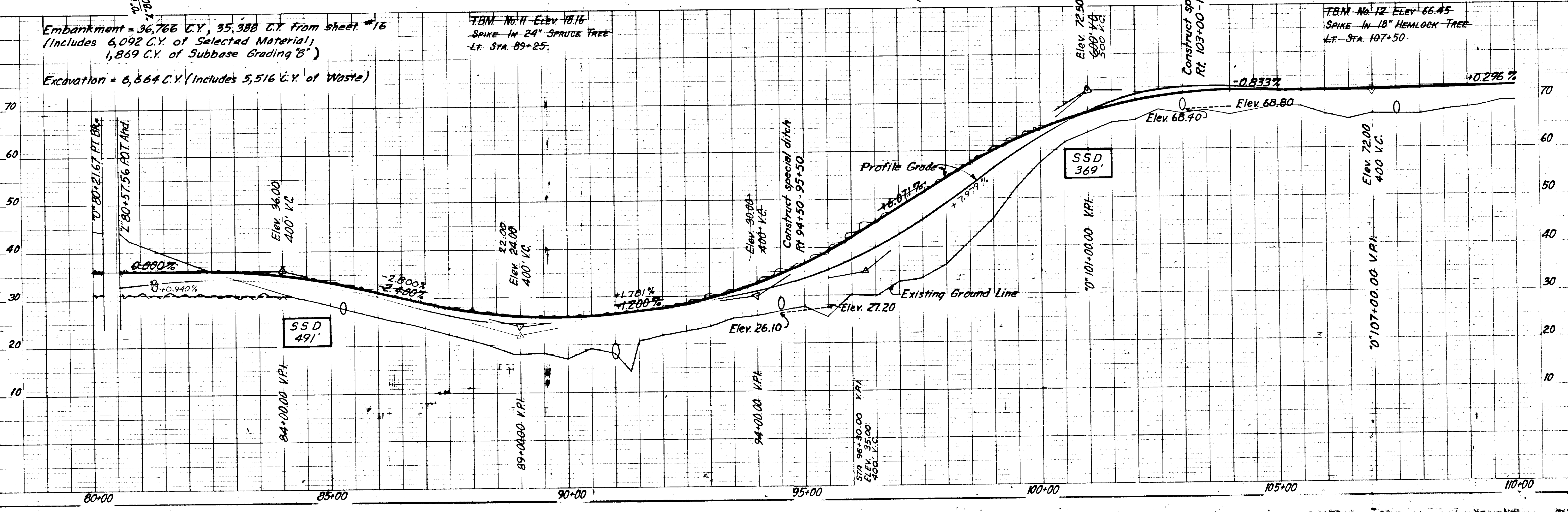


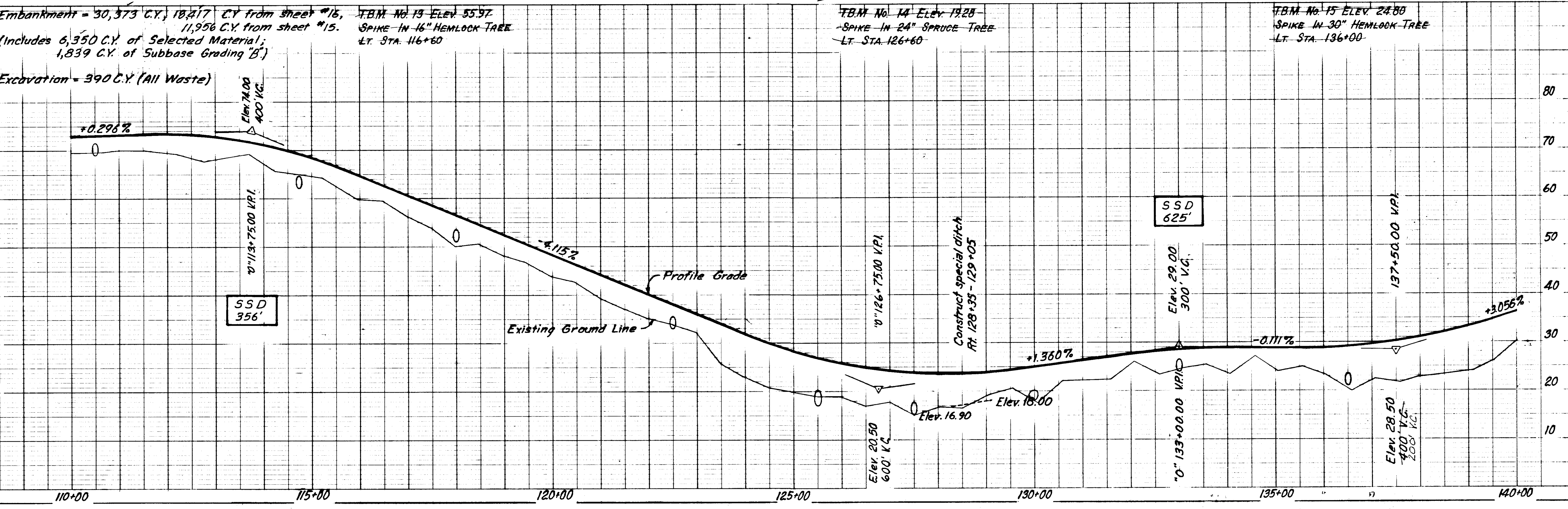
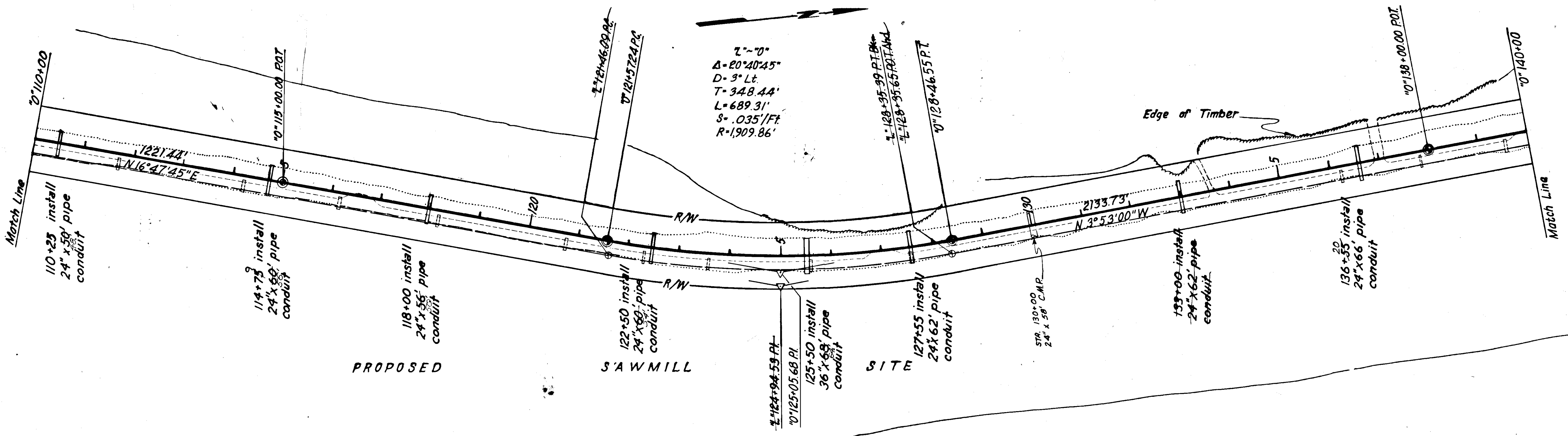
Embankment = 36,766 C.Y., 35,388 C.Y. from sheet #16
 (Includes 6,092 C.Y. of Selected Material;
 1,869 C.Y. of Subbase Grading "B")

Excavation = 6,664 C.Y. (Includes 5,516 C.Y. of Waste)

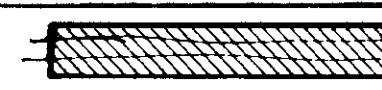
TBM No. 11 Elev. 18.16
 SPIKE IN 24" SPRUCE TREE
 LT. STA. 89+25

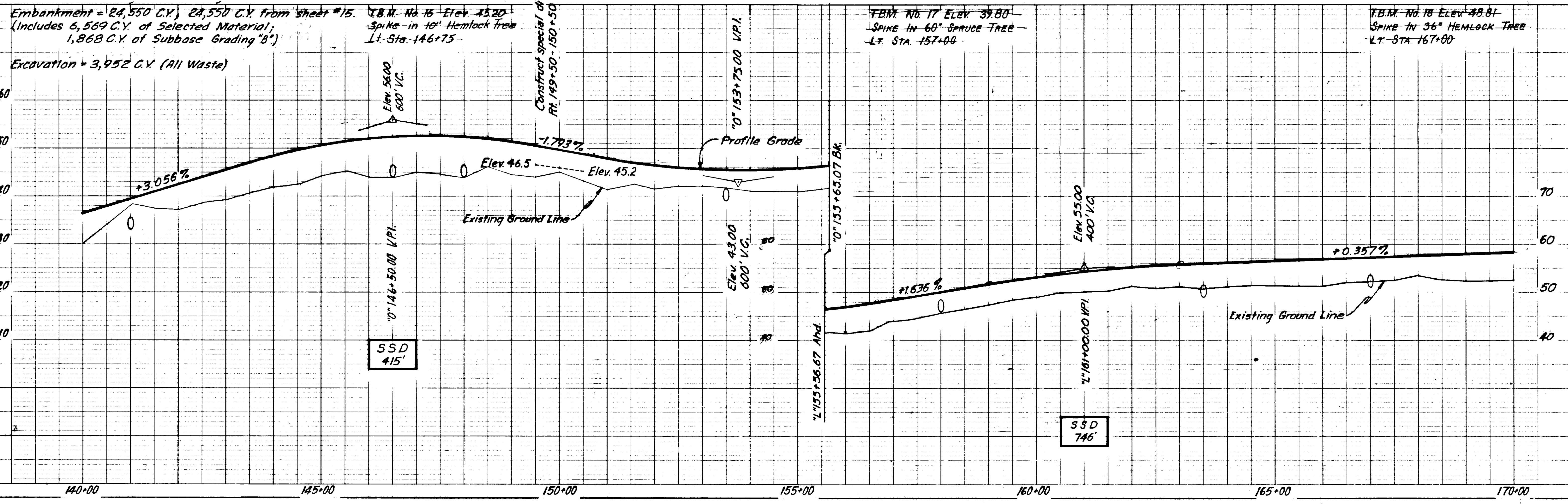
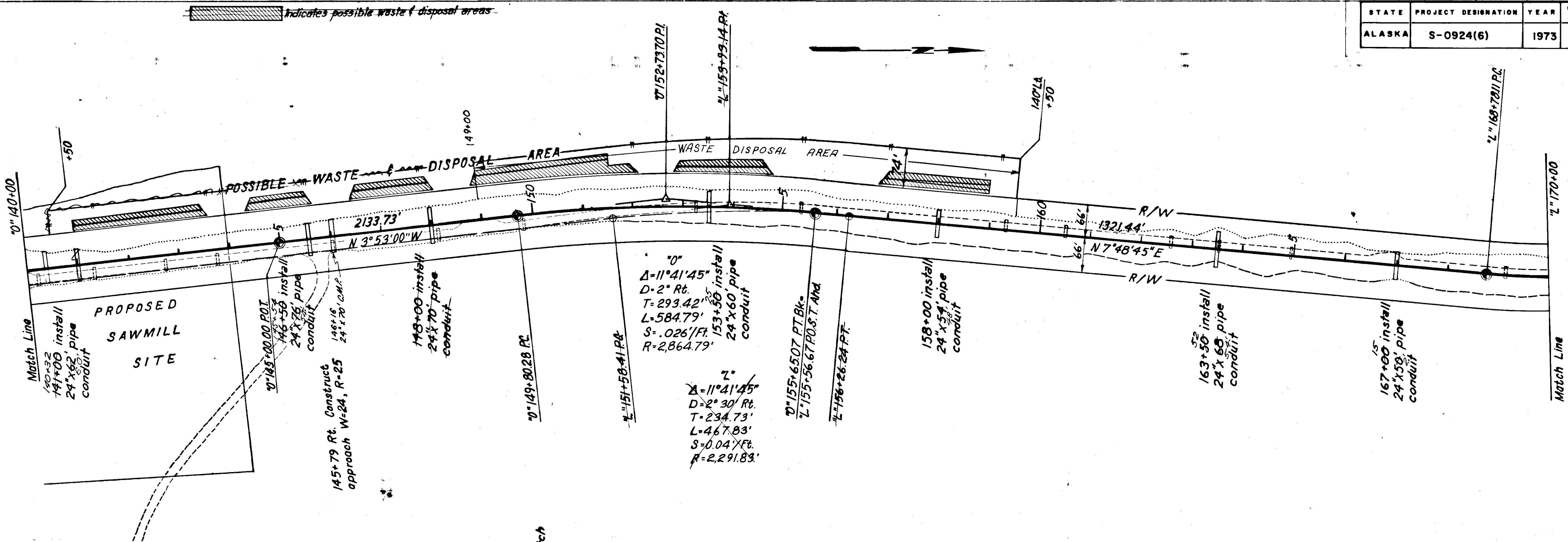
TBM No. 12 Elev. 66.45
 SPIKE IN 18" HEMLOCK TREE
 LT. STA. 107+50



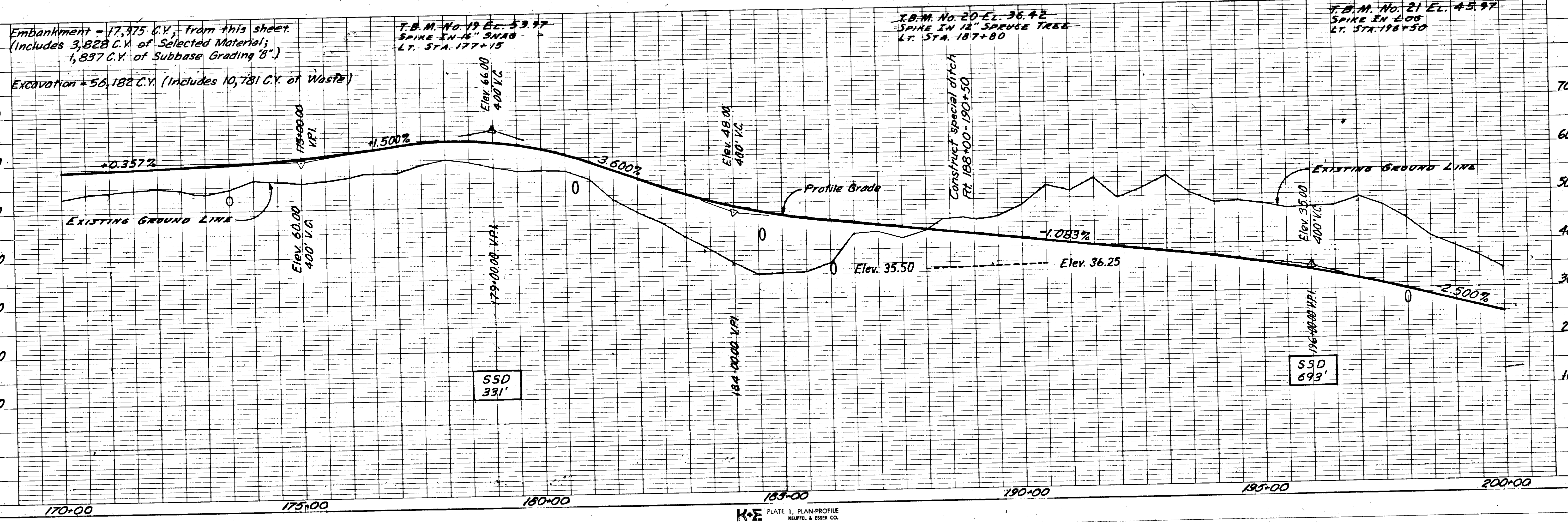
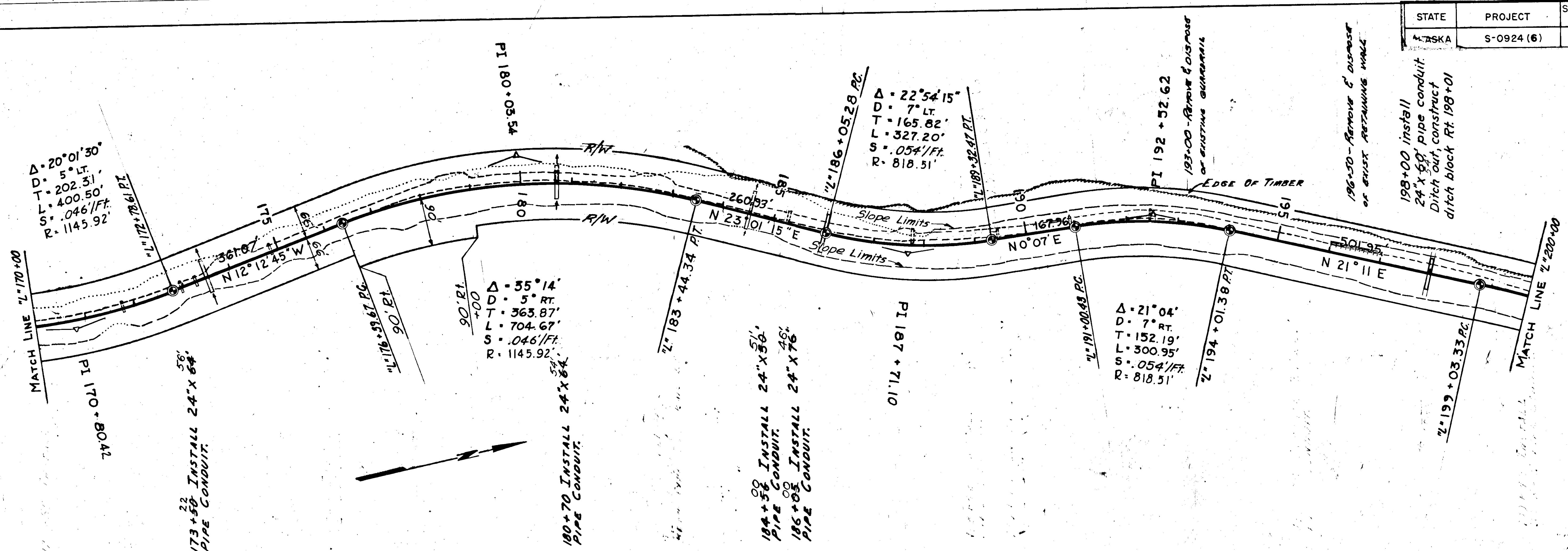


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 14 | 35 |

 Indicates possible waste disposal areas

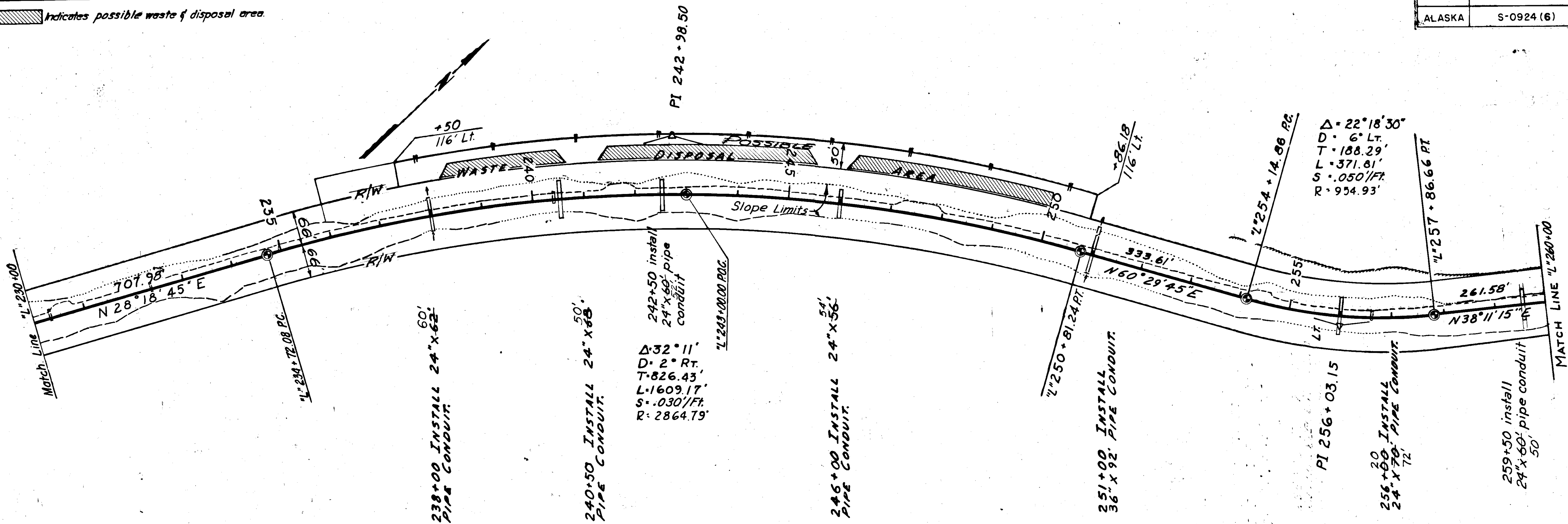


| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|-----------|------------|-----------|--------------|
| M. D. SKA | S-0924 (6) | 15 | 35 |



| STATE | PROJECT | SHEET NO. | TOTAL SHEETS |
|--------|------------|-----------|--------------|
| ALASKA | S-0924 (6) | 17 | 35 |

Indicates possible waste & disposal area.

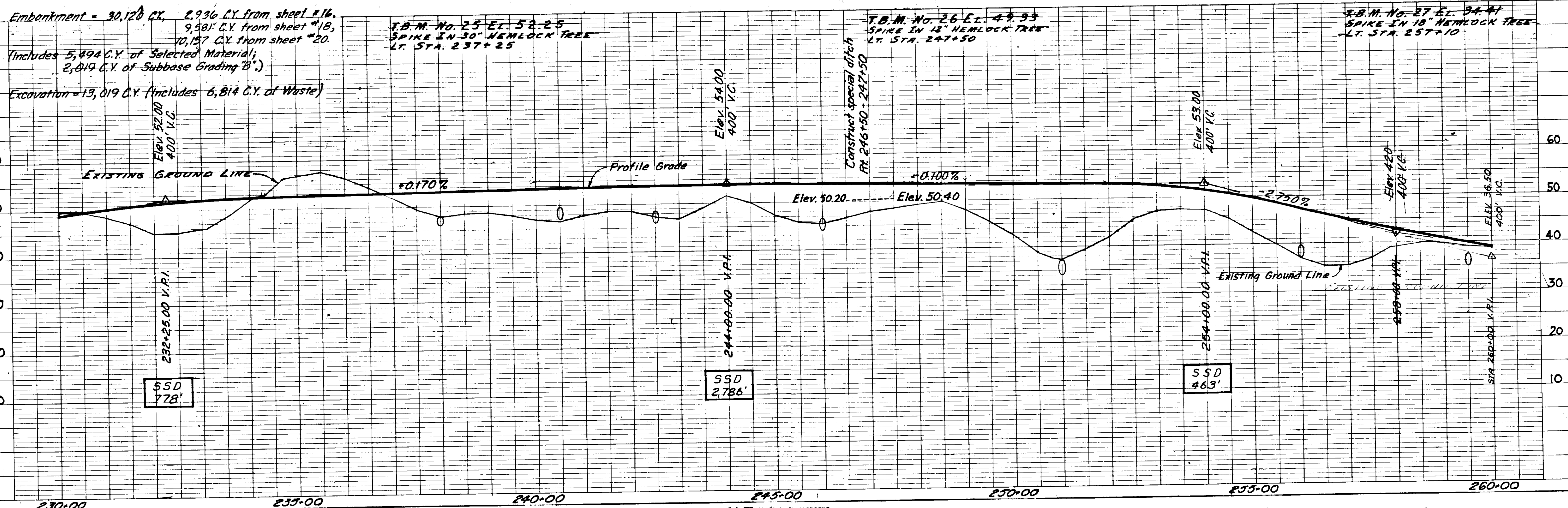


Embankment = 30,120 C.Y. 2,936 C.Y. from sheet #16,
9,581 C.Y. from sheet #18,
10,157 C.Y. from sheet #20.
(Includes 5,494 C.Y. of Selected Material;
2,019 C.Y. of Subbase Grading "B".)
Excavation = 13,019 C.Y. (Includes 6,814 C.Y. of Waste)

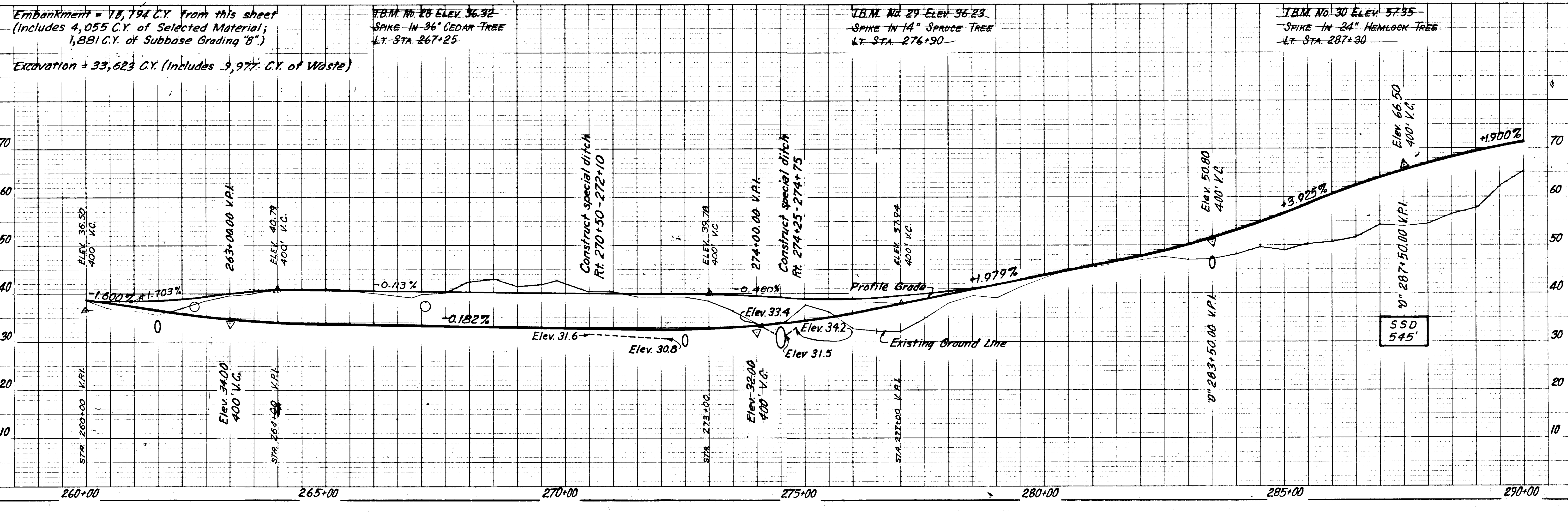
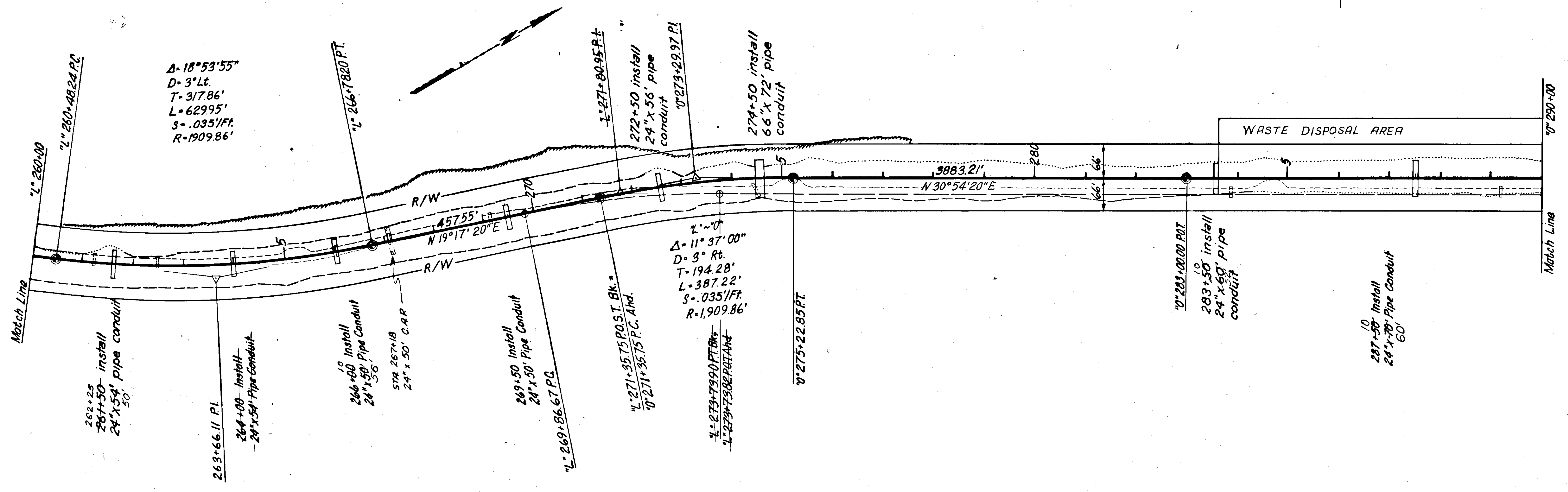
F.B.M. NO. 25 EL. 52.25
SPIKE IN 30" HEMLOCK TREE
LT. STA. 237+25

F.B.M. NO. 26 EL. 49.93
SPIKE IN 18" HEMLOCK TREE
LT. STA. 247+50

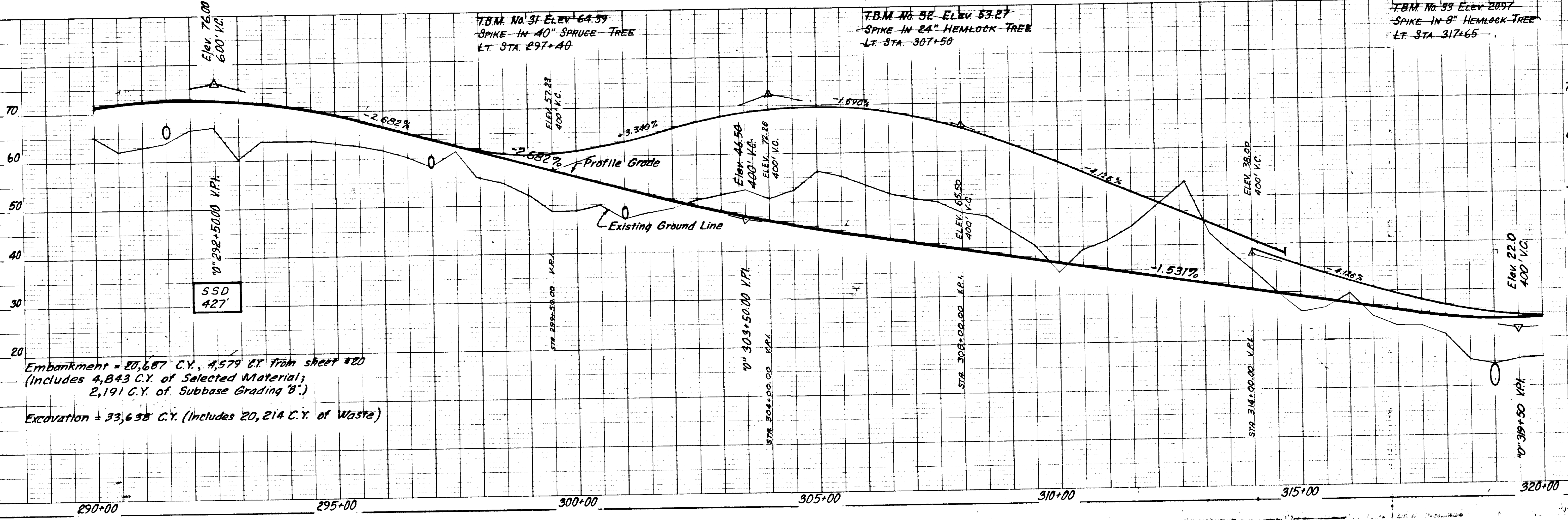
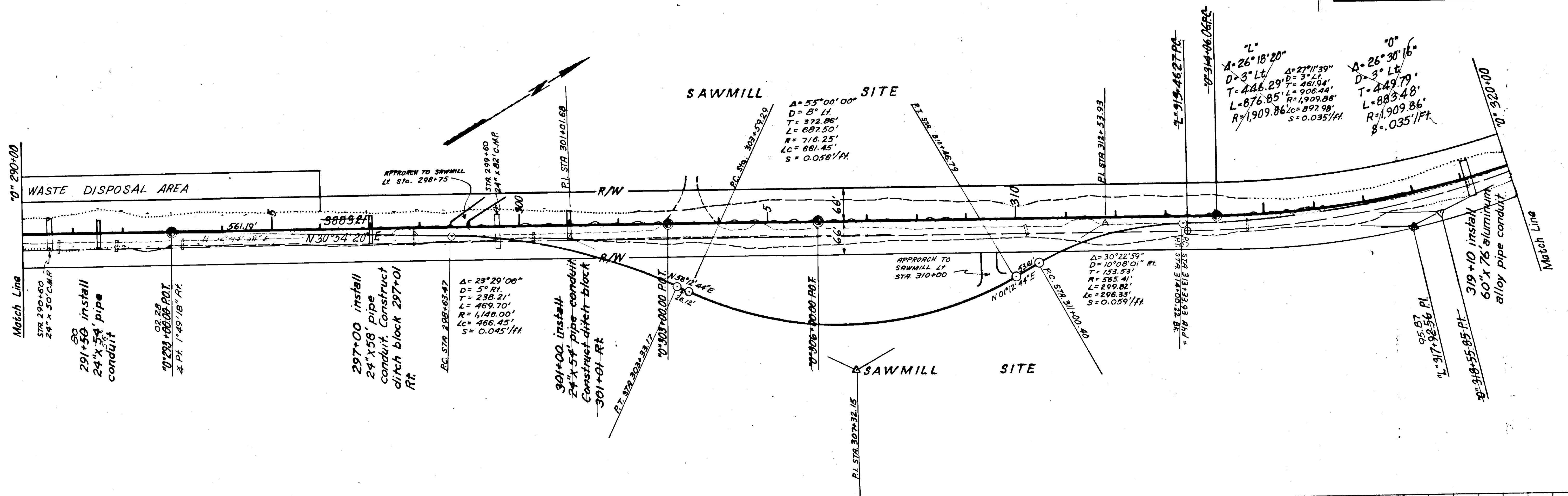
F.B.M. NO. 27 EL. 34.41
SPIKE IN 18" HEMLOCK TREE
LT. STA. 257+10

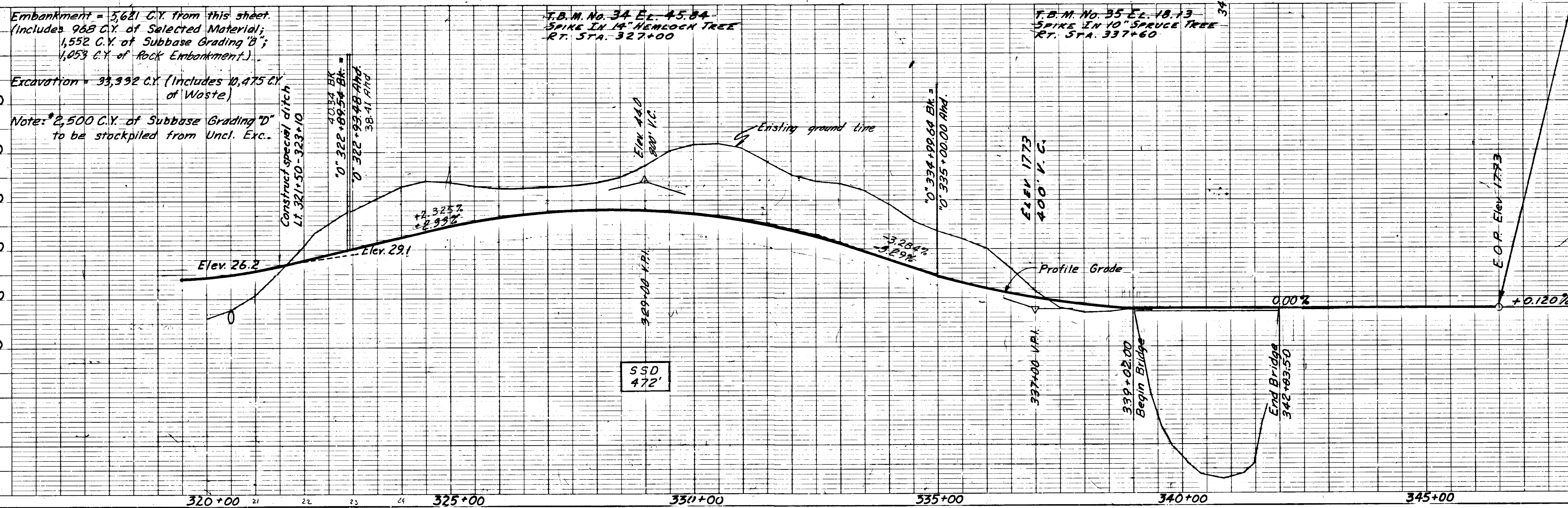
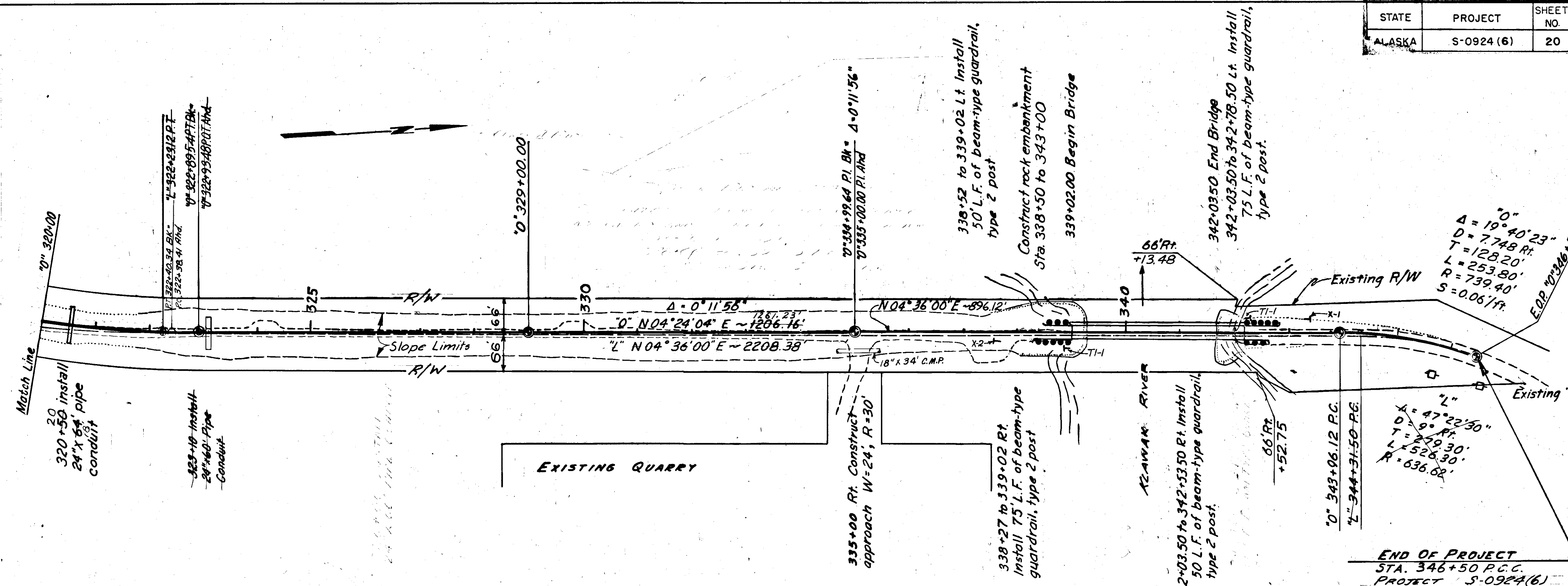


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 18 | 35 |



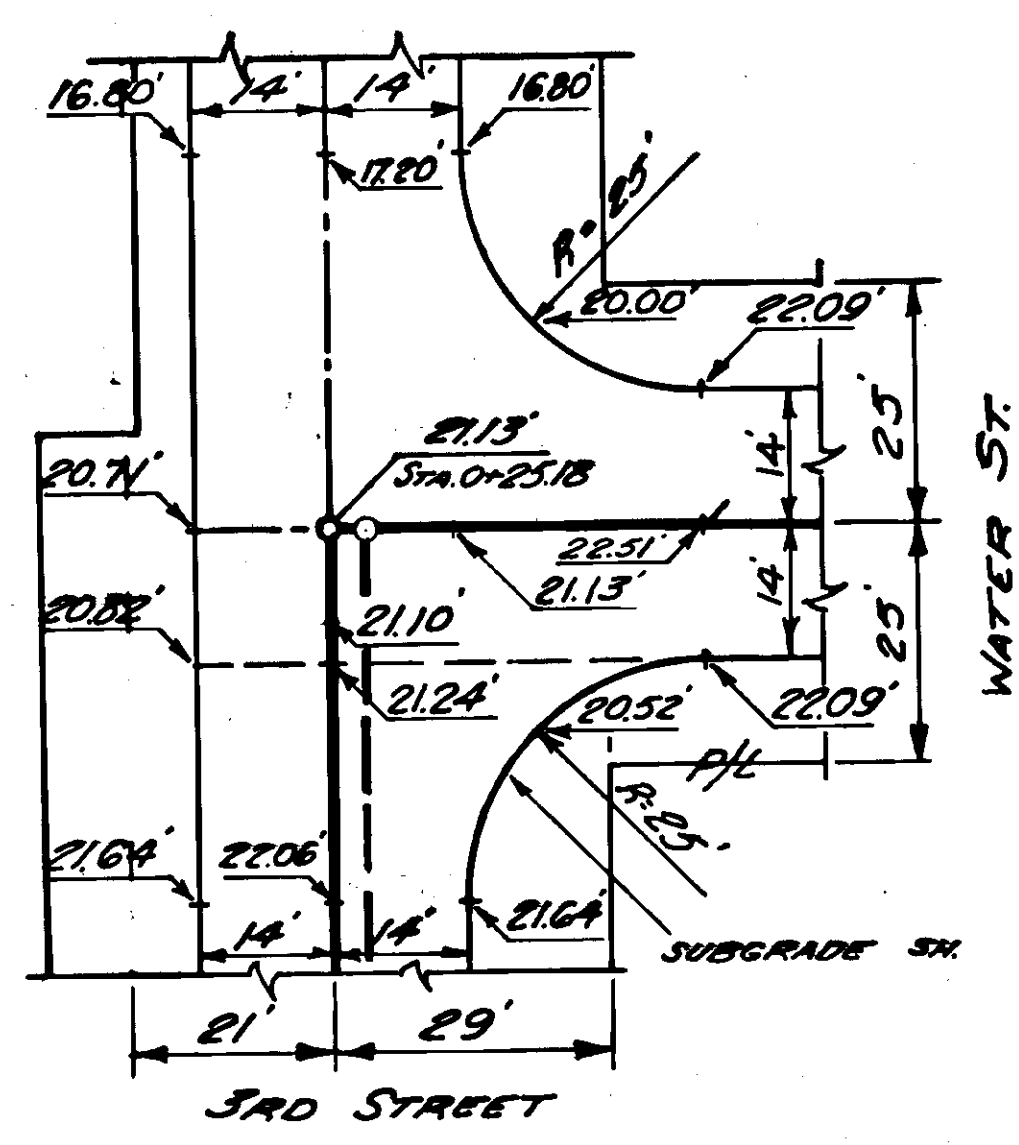
| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 19 | 35 |



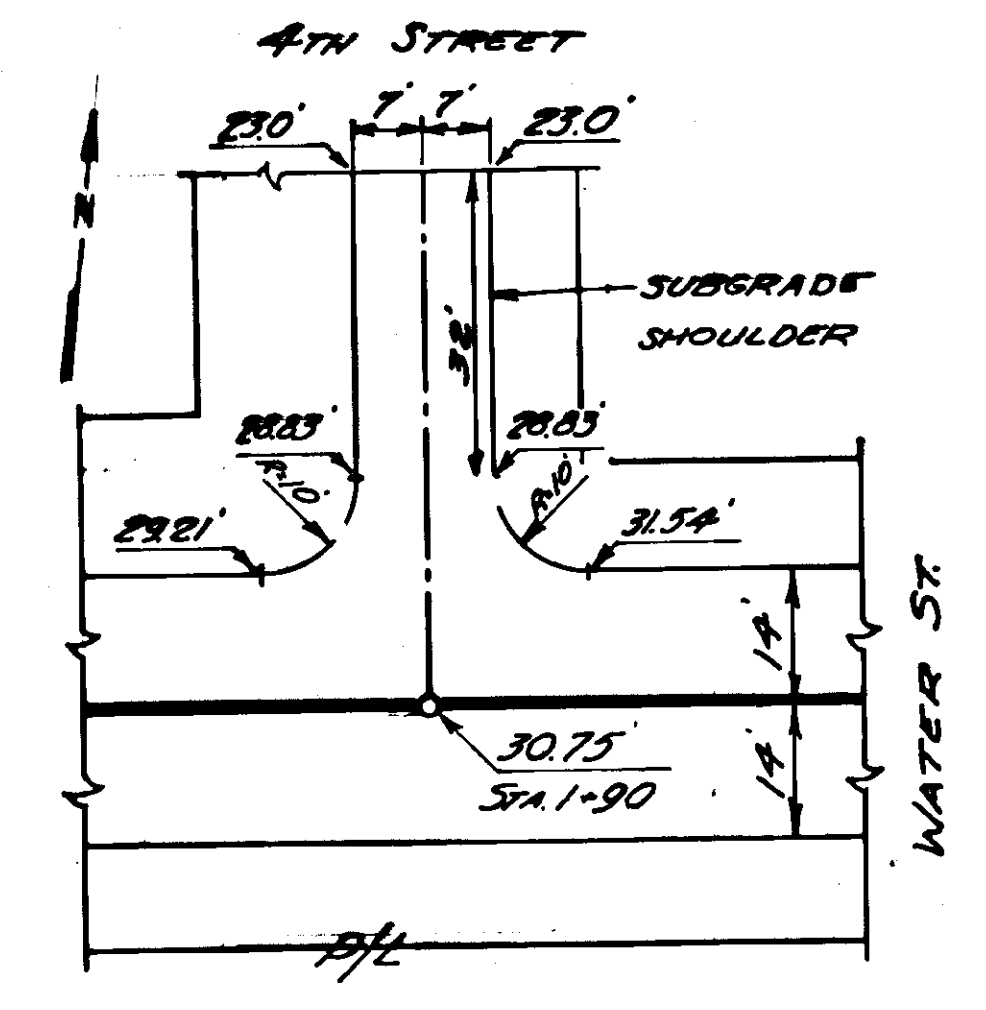


| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1972 | 21 | 3 |

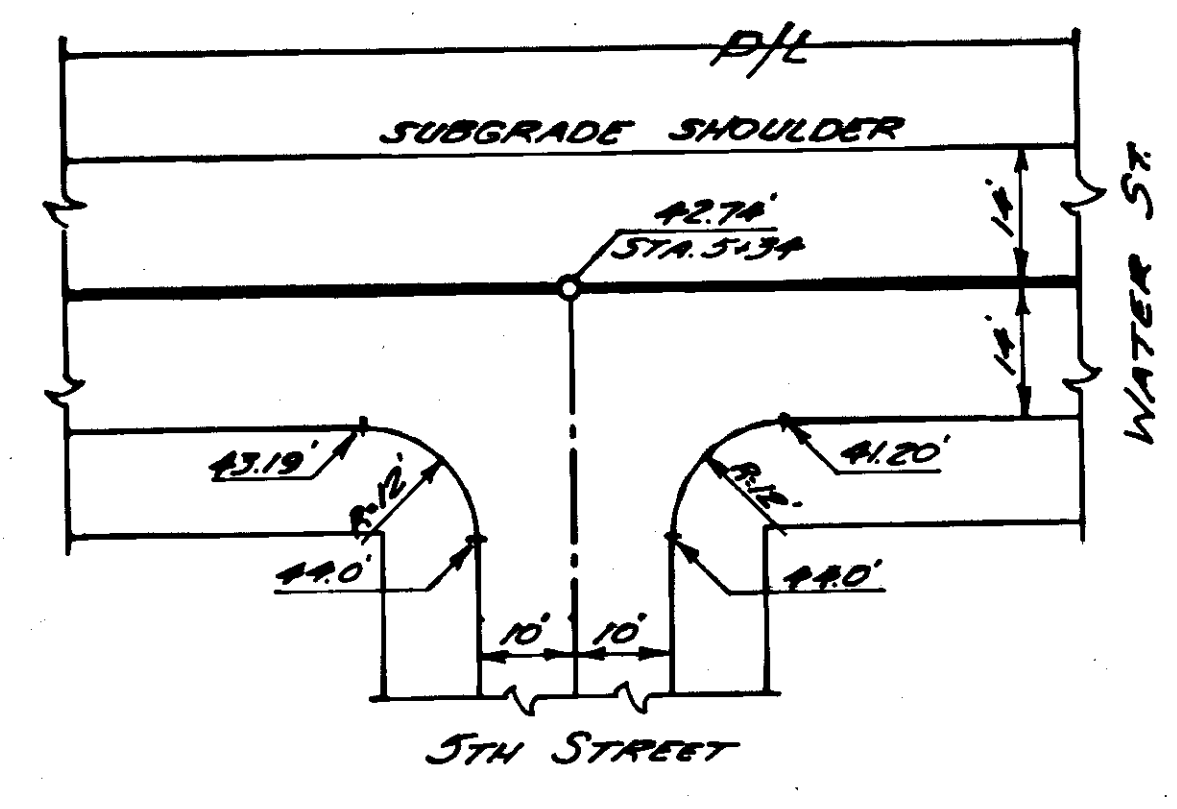
INTERSECTION DETAILS



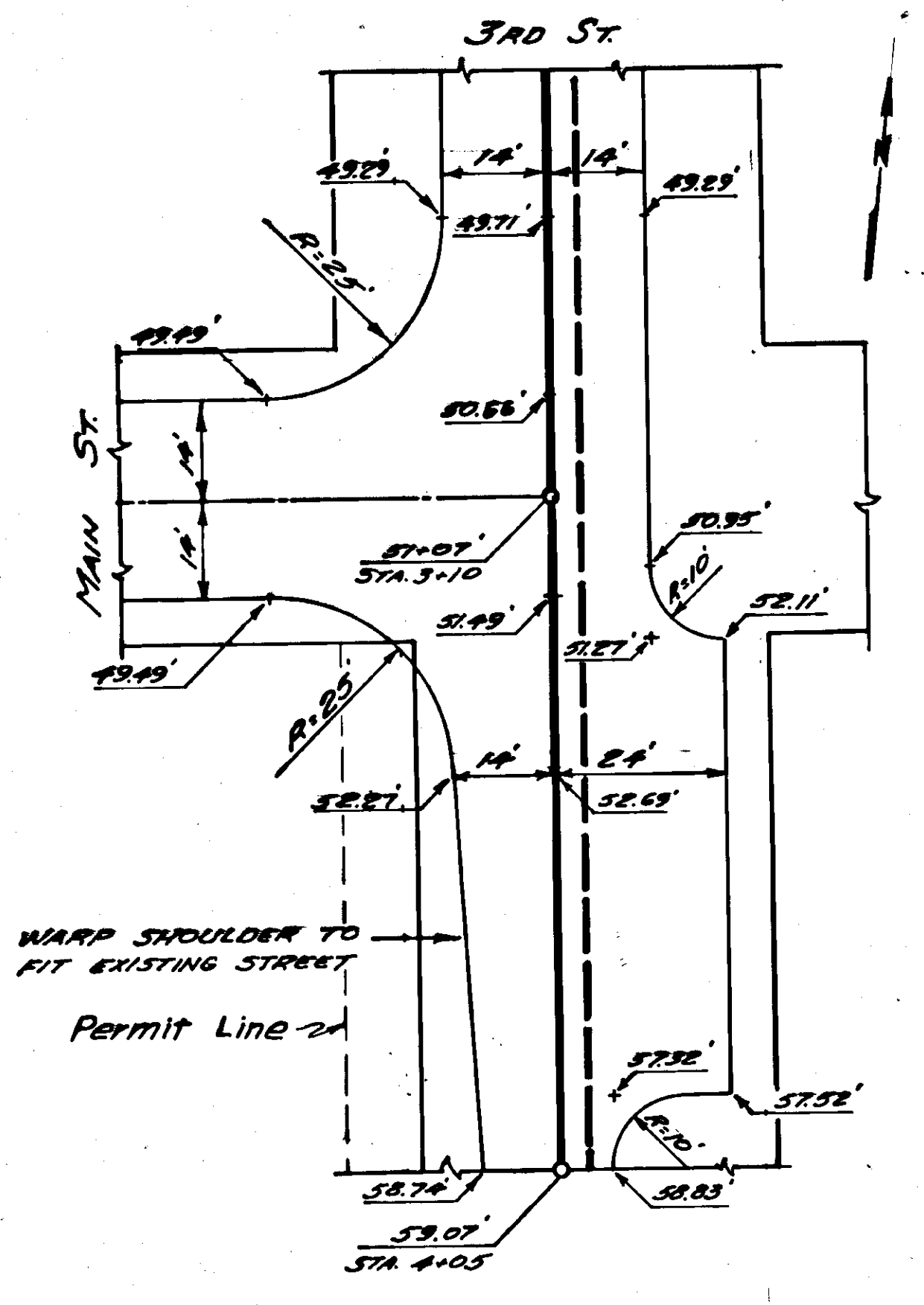
3RD ST - WATER ST. INTERSECTION



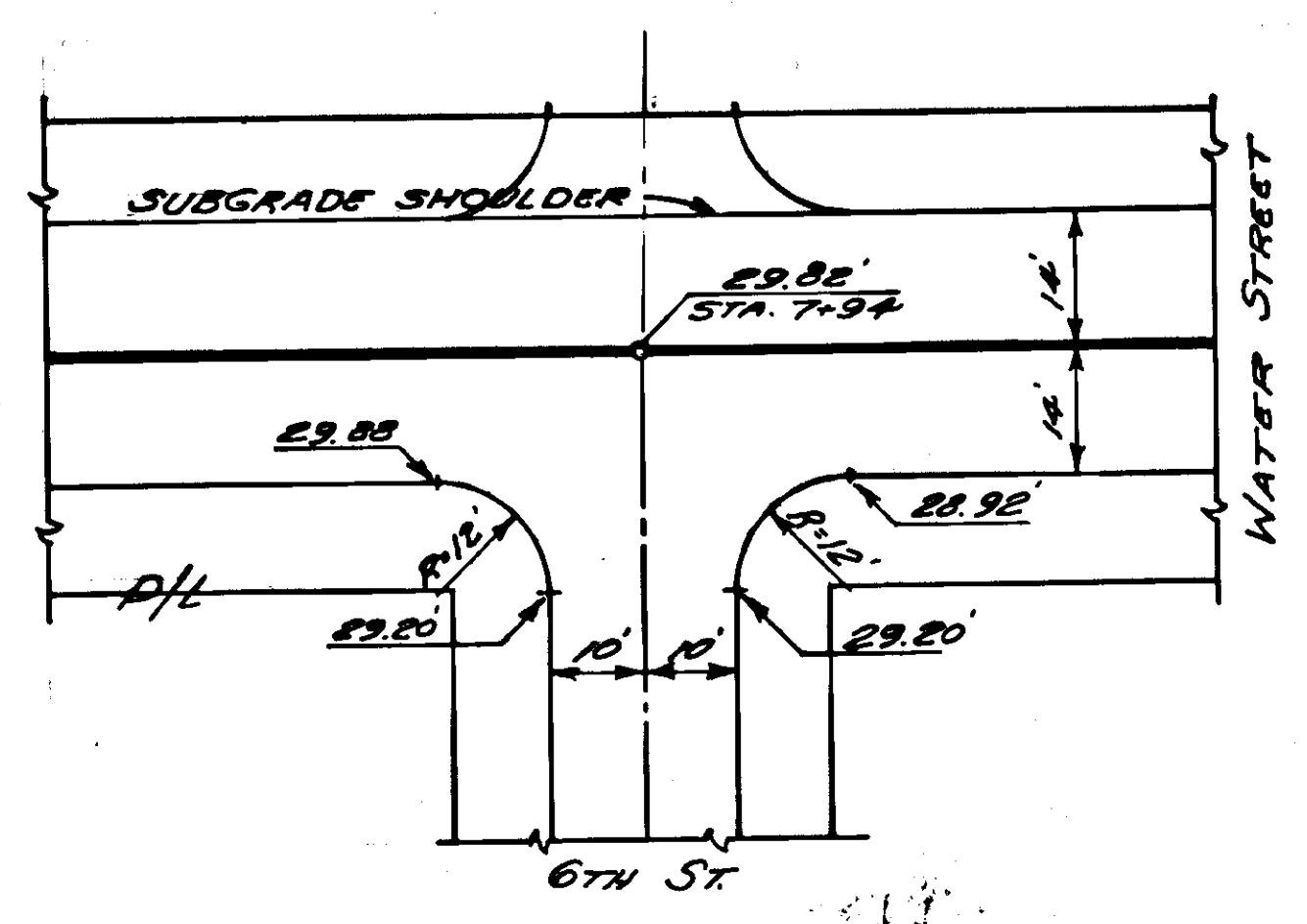
4TH ST. - WATER ST. INTERSECTION



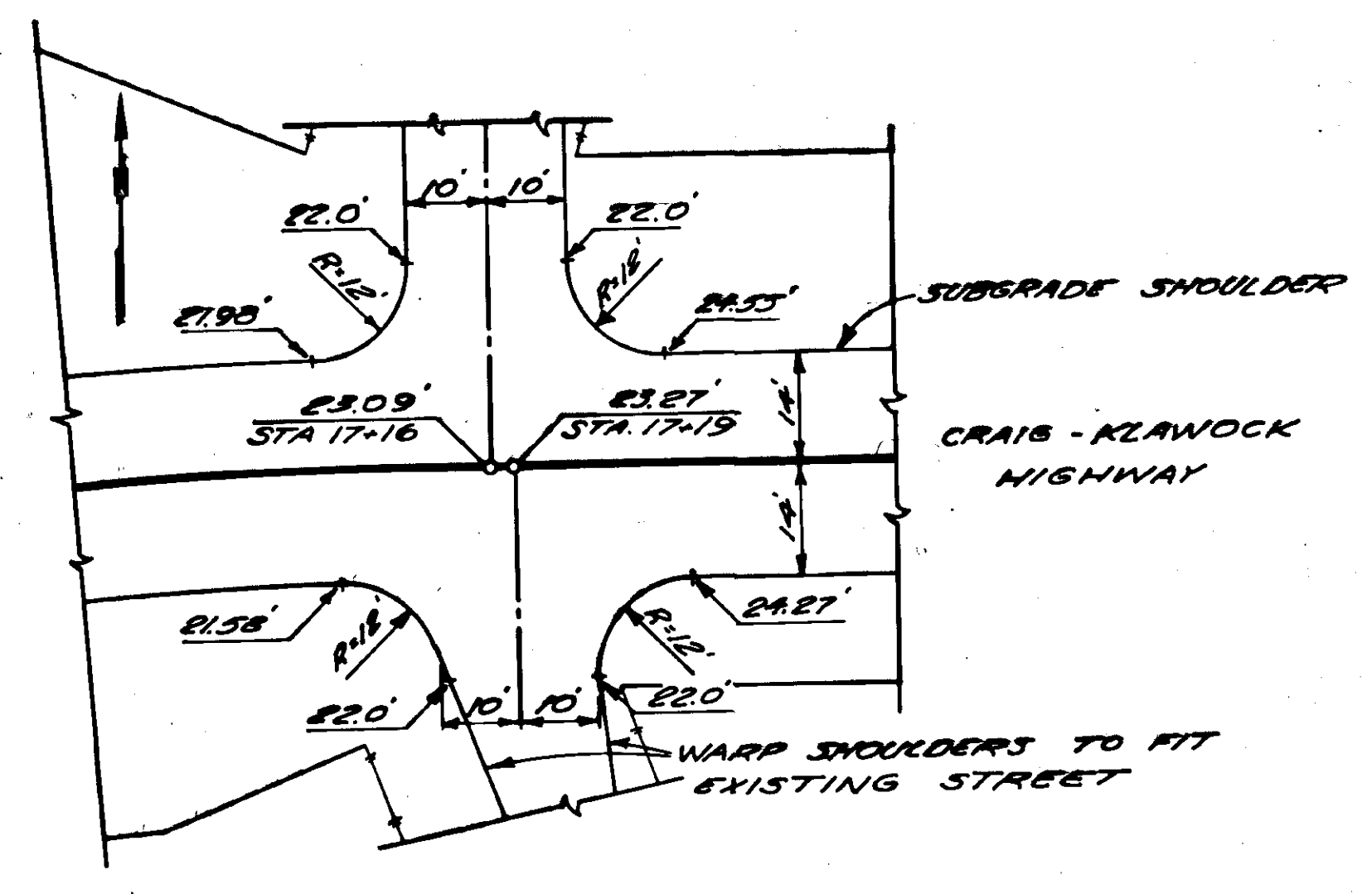
5TH ST. - WATER ST. INTERSECTION



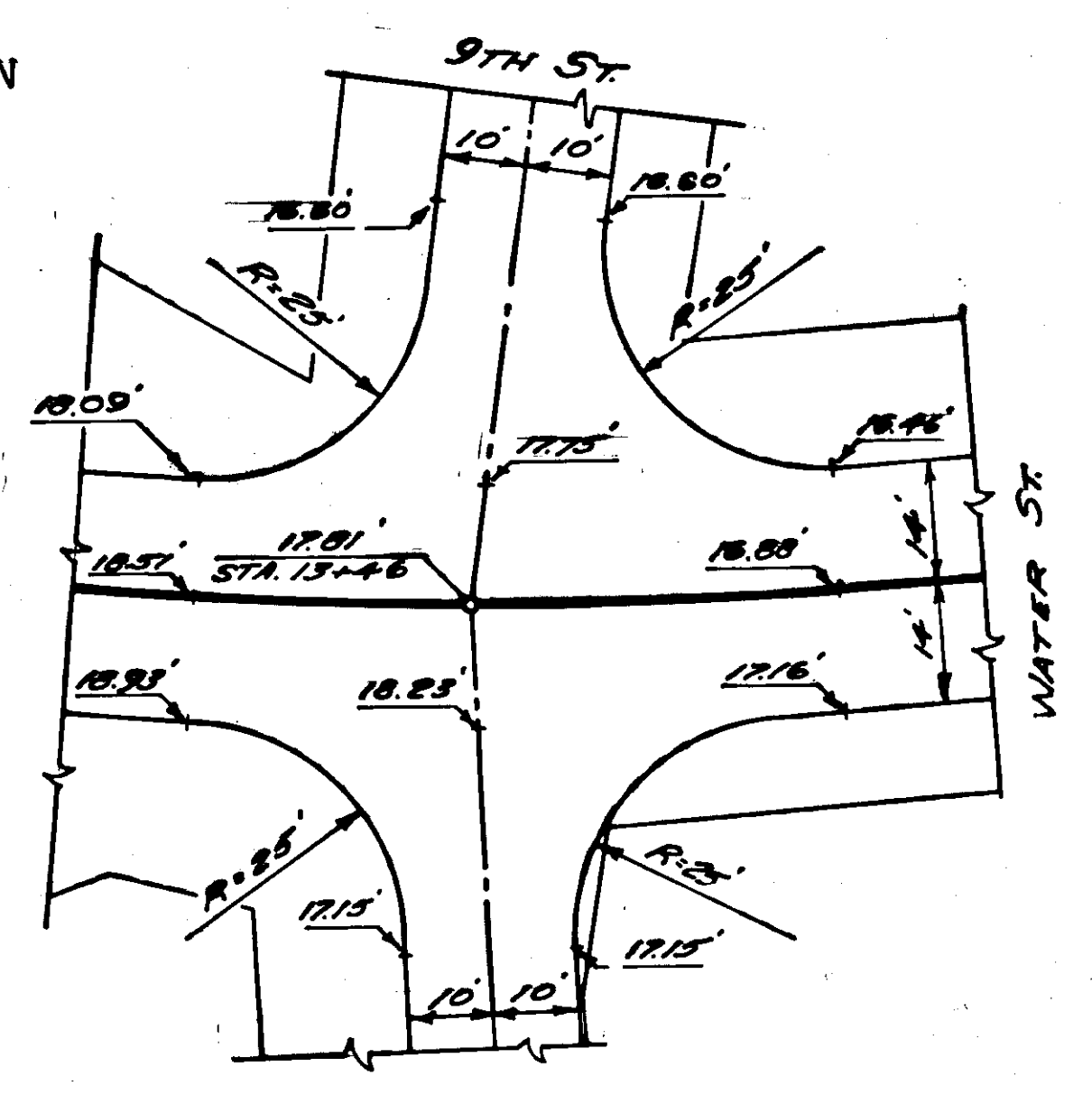
3RD ST. - MAIN ST. INTERSECTION



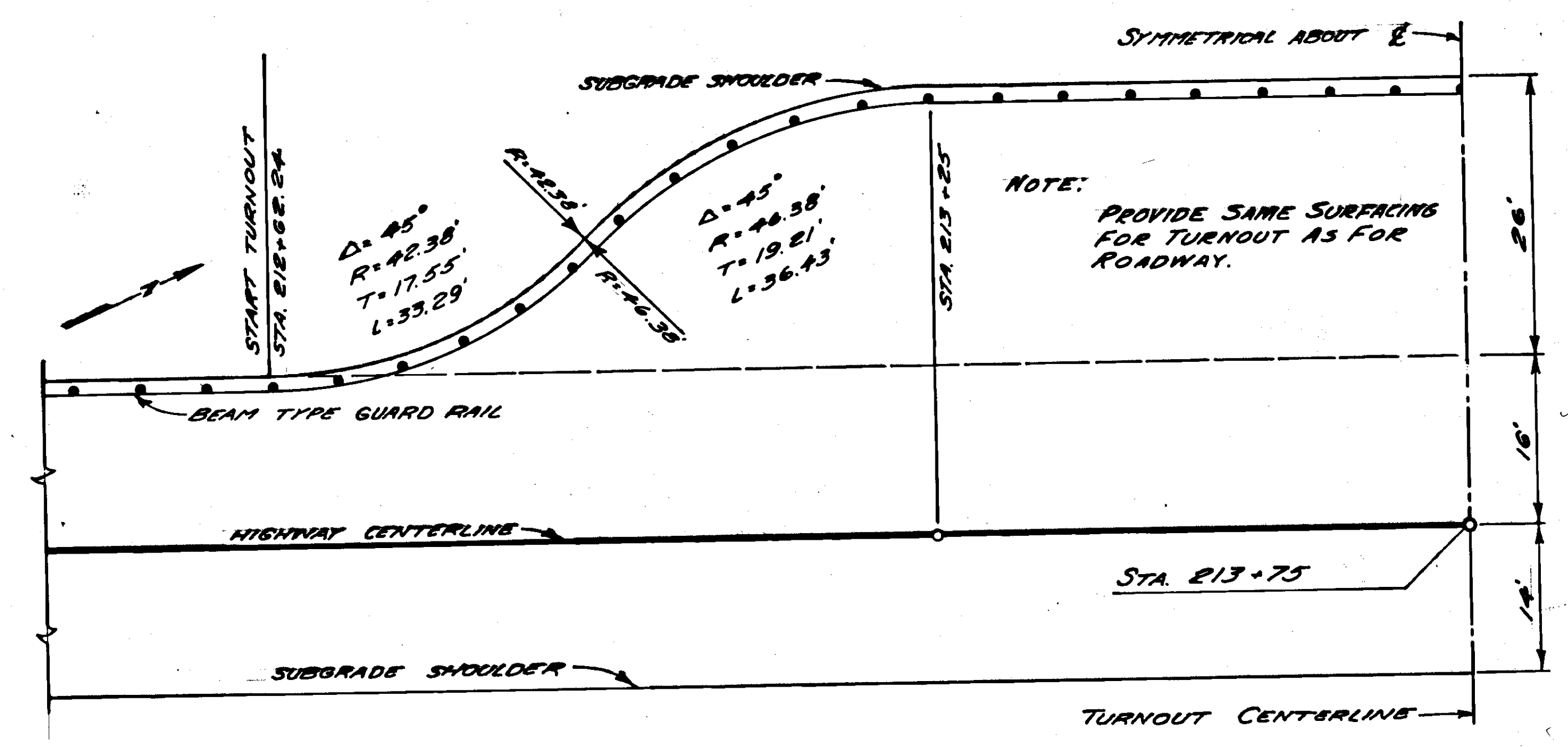
6TH ST. - WATER ST. INTERSECTION



INTERSECTION AT STA. 17 + 16



9TH ST. - WATER ST. INTERSECTION

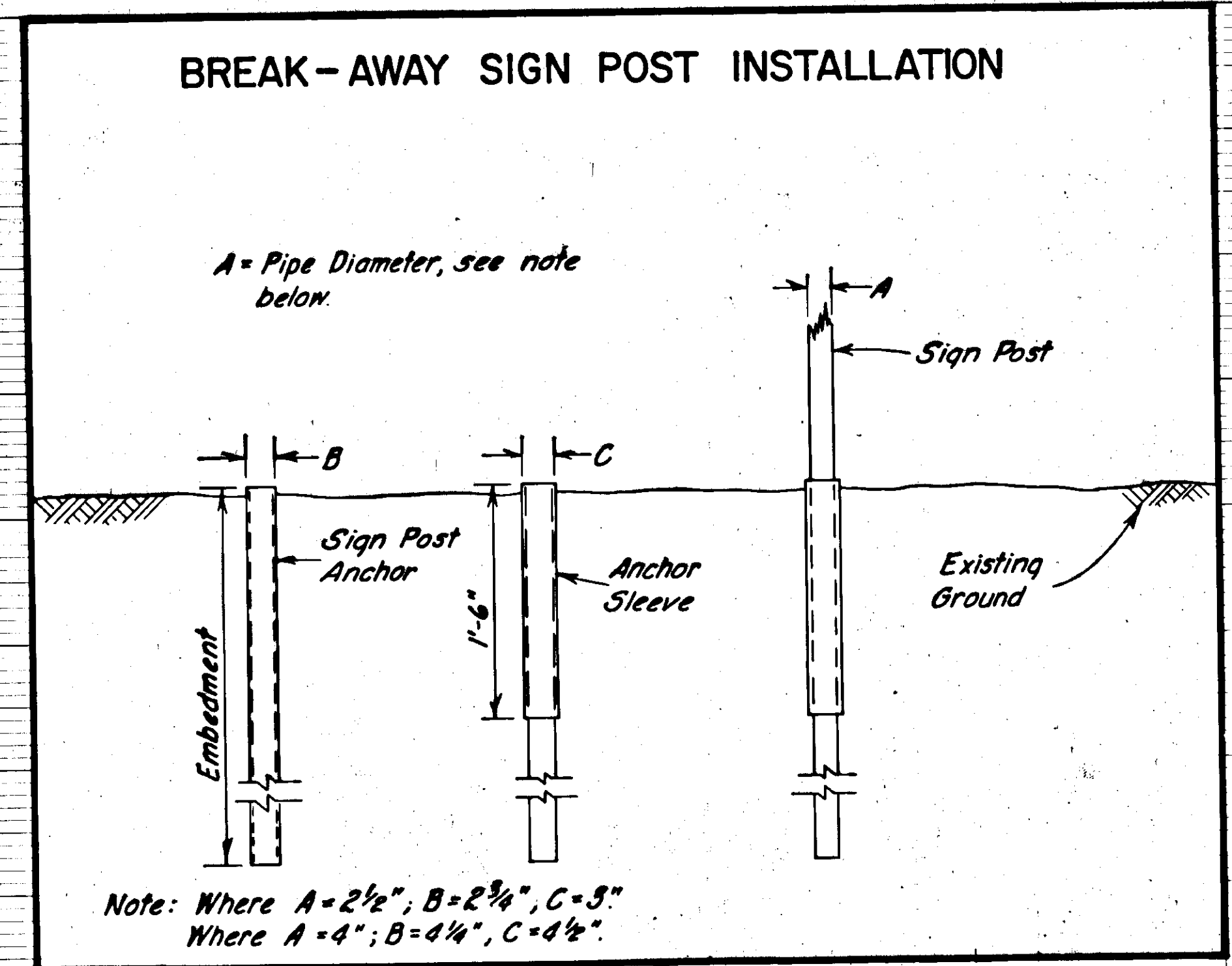
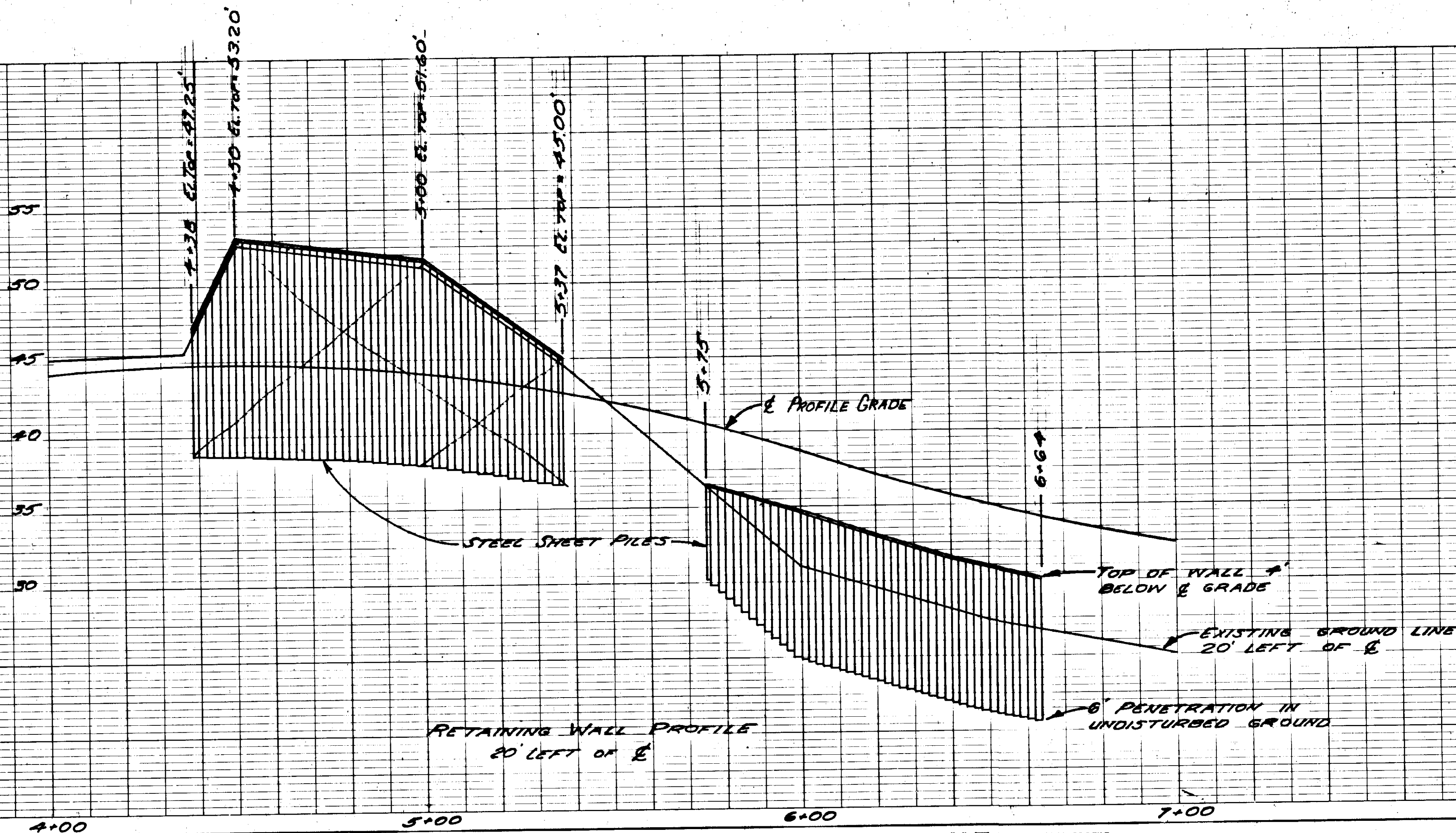
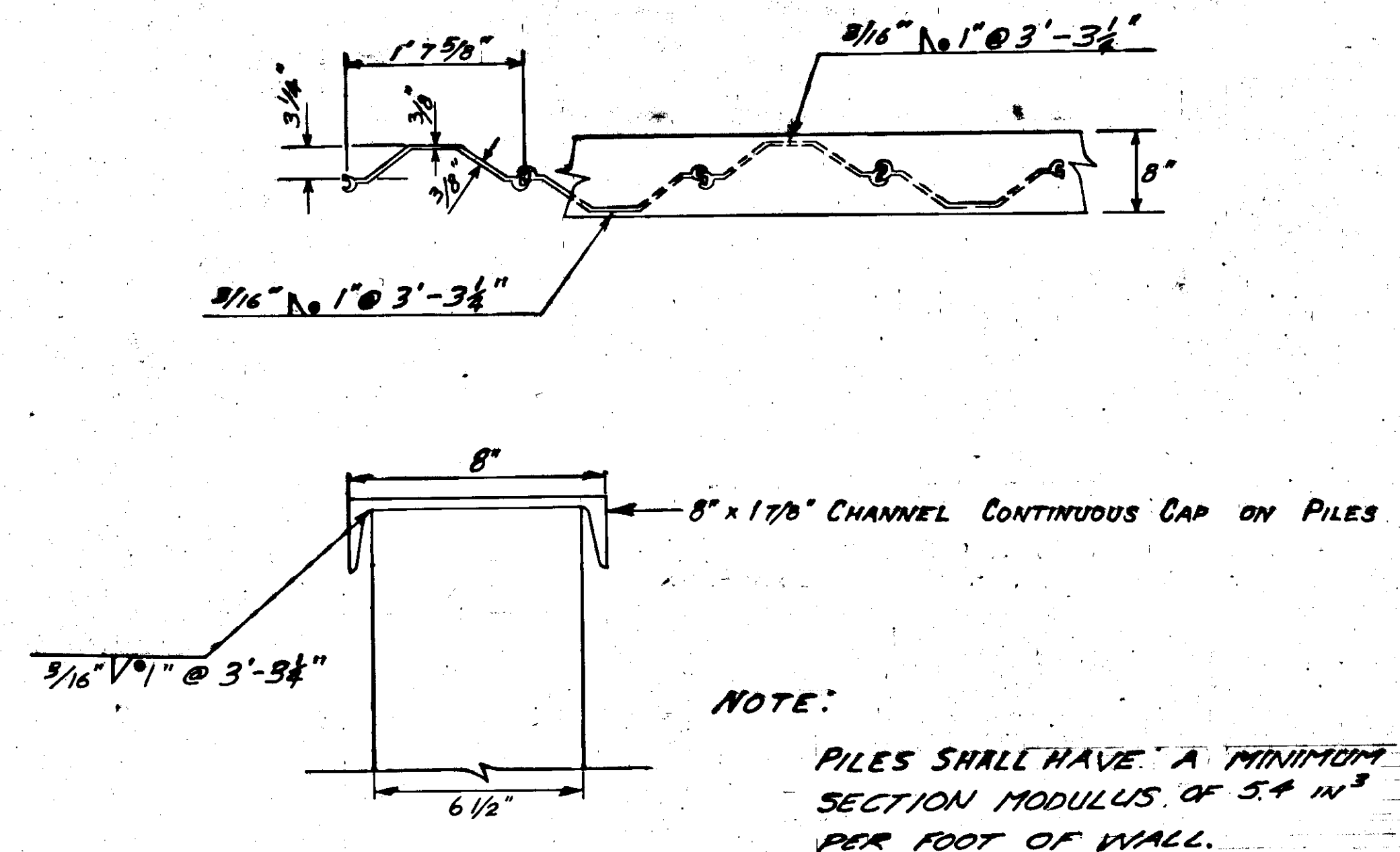
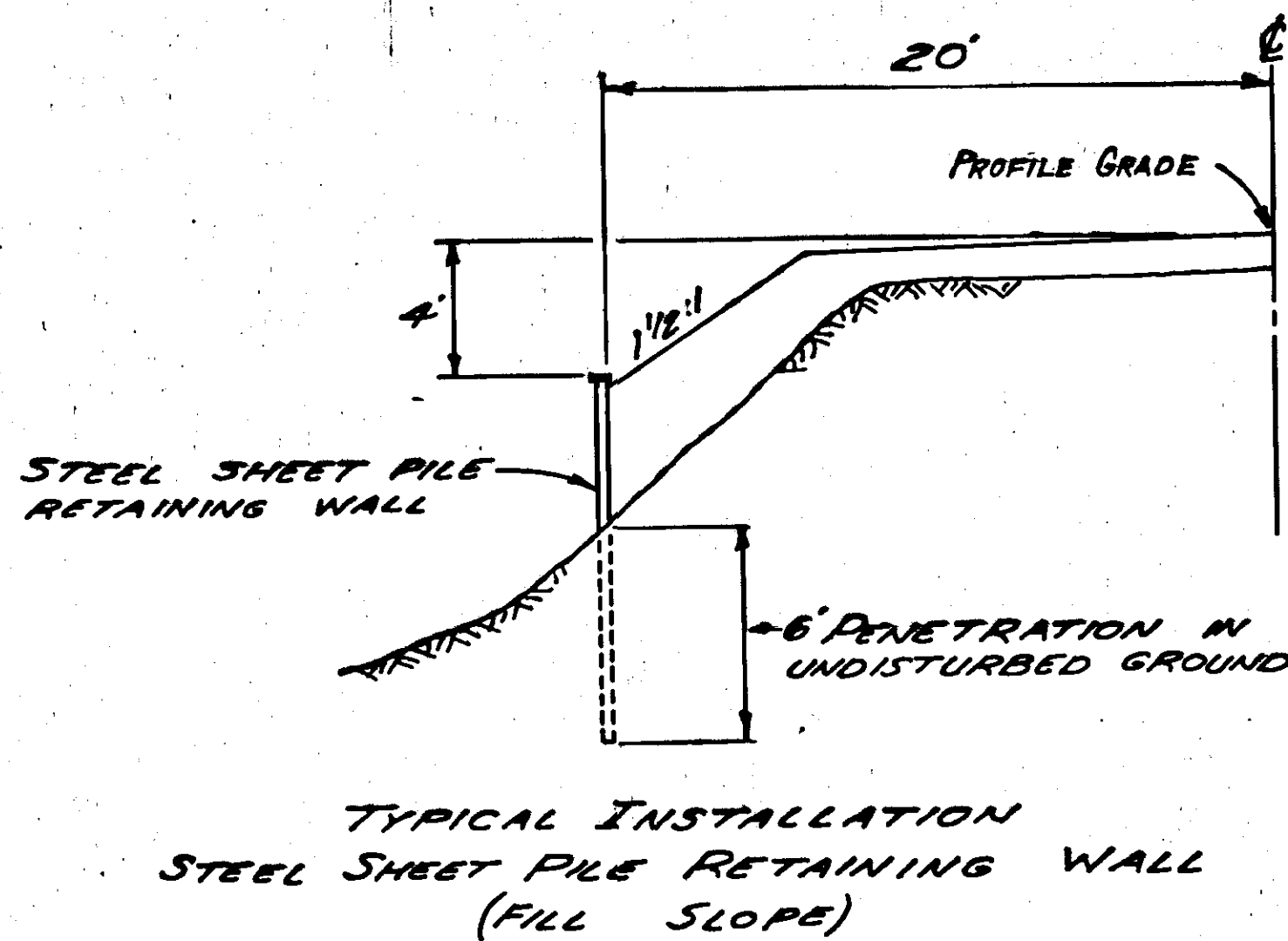
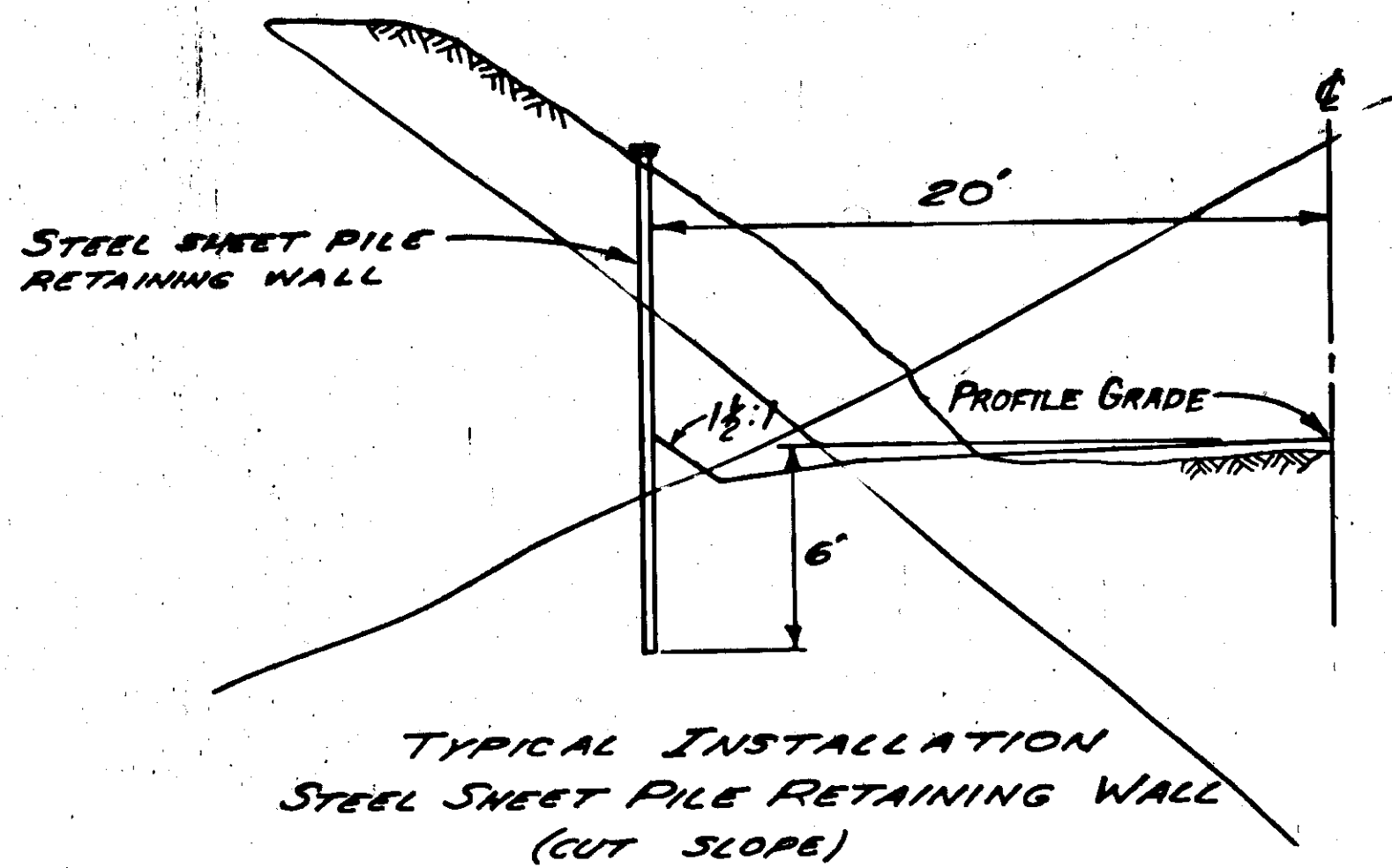


TURNOUT DETAIL
STA. 212+62.24 TO STA. 214+87.76

NOTE: PROVIDE SAME SURFACING FOR TURNOUT AS FOR ROADWAY.

| | | |
|--------|------------|-----------|
| STATE | PROJECT | SHEET NO. |
| ALASKA | S-0924 (6) | 23 |

STEEL SHEET PILE DETAIL



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 25 | 35 |

**CRAB CREEK
CULVERT DETAIL**

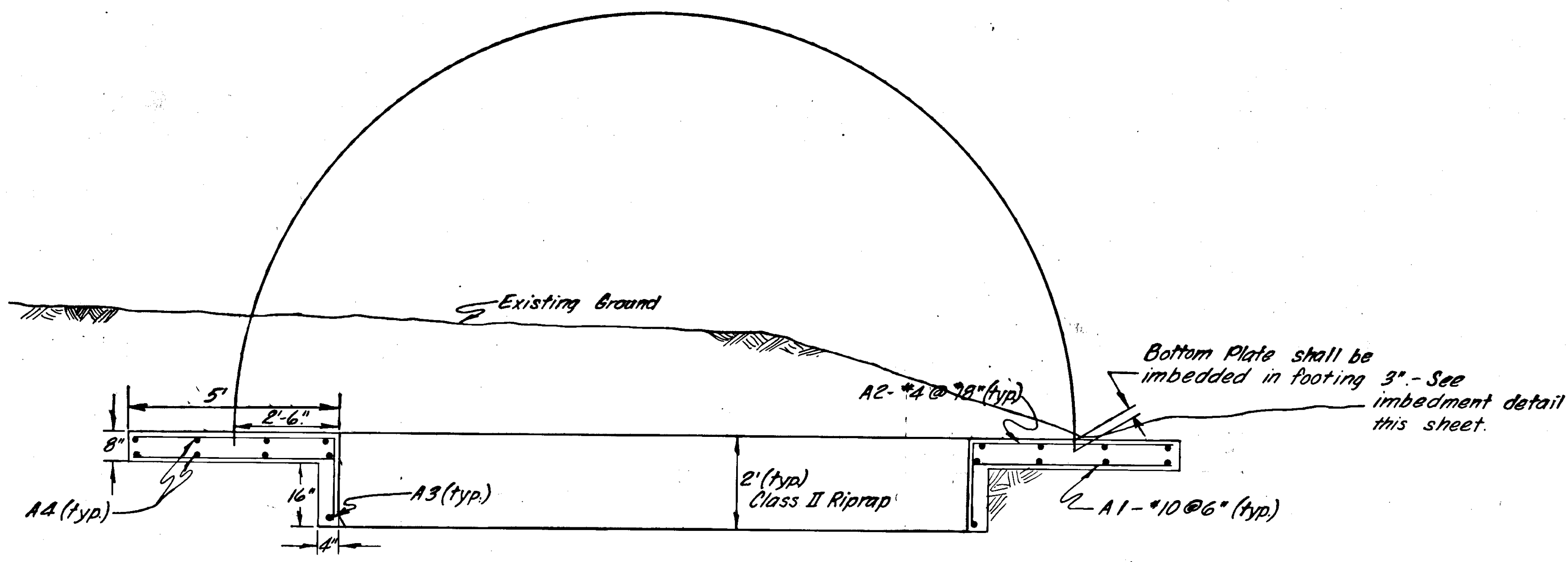
GENERAL NOTES

- All Concrete shall be Class "A"
- The span and rise dimensions are minimum and may be modified in accordance with manufactures standard size Structural Plate Arches.
- Backfilling around culvert shall be in accordance with manufactures recommendations.
- The concrete footings and abutments may be left in place, upon removal of the existing Crab Creek Bridge.

BAR SCHEDULE FOR FOOTINGS

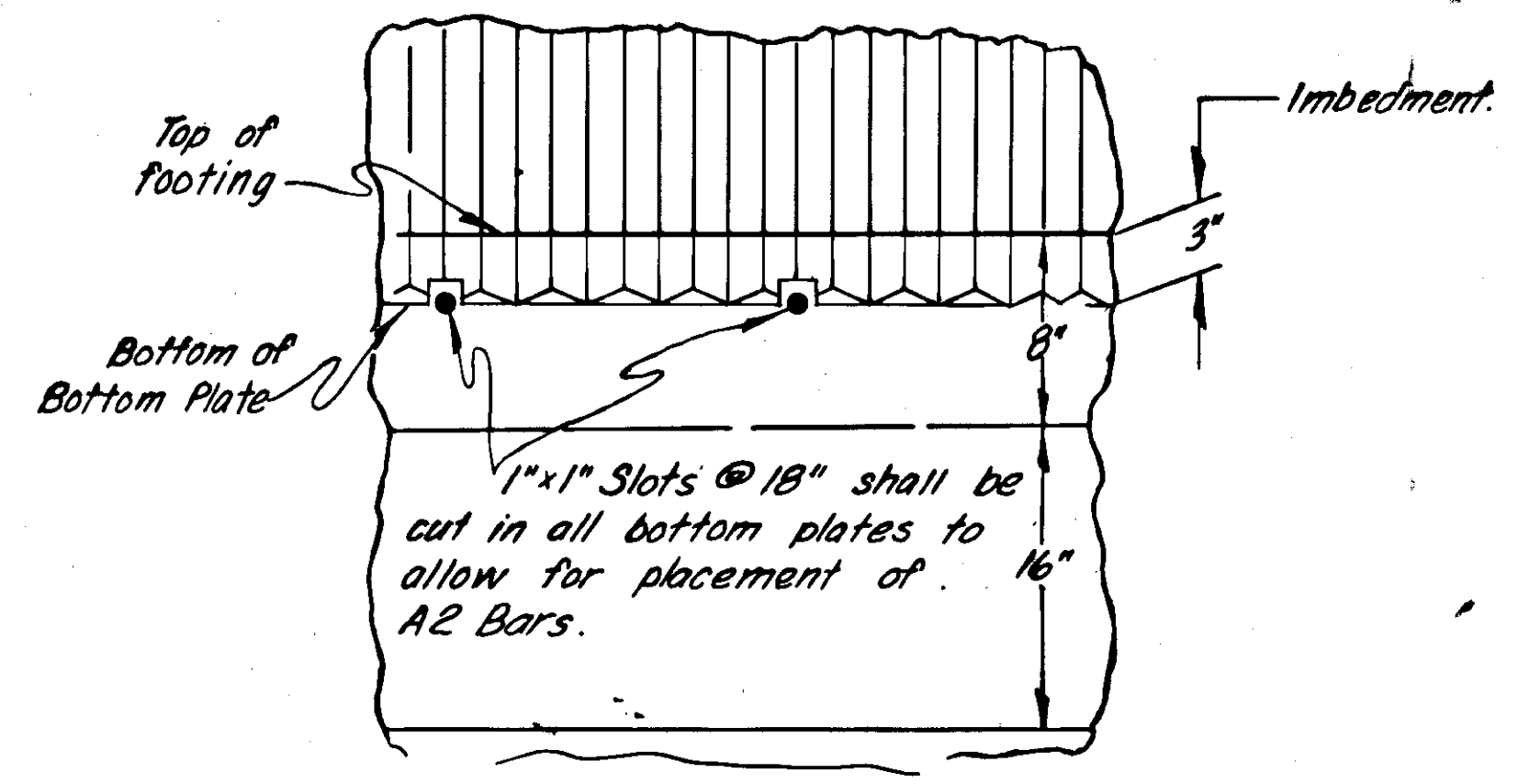
| Mark | Size | No. | Length |
|------|------|-----|------------|
| A1 | #10 | 738 | 4'-8" |
| A2 | #4 | 248 | 6'-4" |
| A3 | #4 | 2 | Continuous |
| A4 | #4 | 16 | Continuous |

* See detail below.

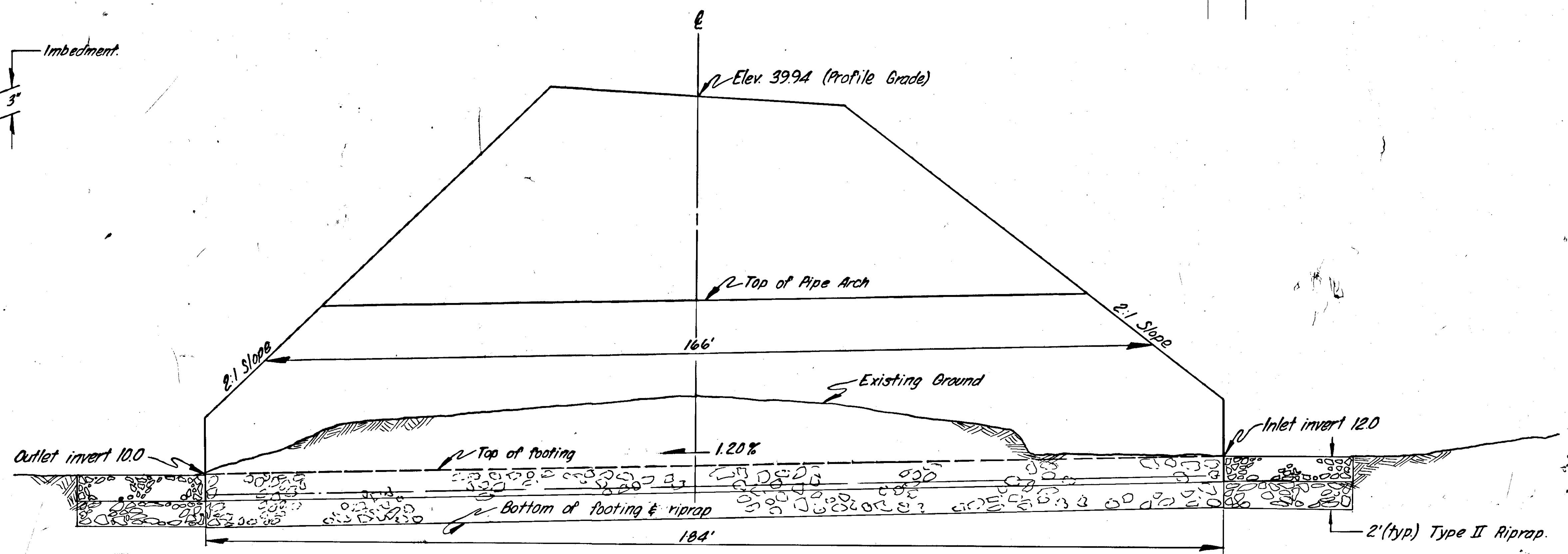


SECTION A-A

SEE ATTACHED PLAN SHEETS LABELED
CRAB CREEK STRUCTURE REPAIRS
FOR AS BUILT REVISIONS



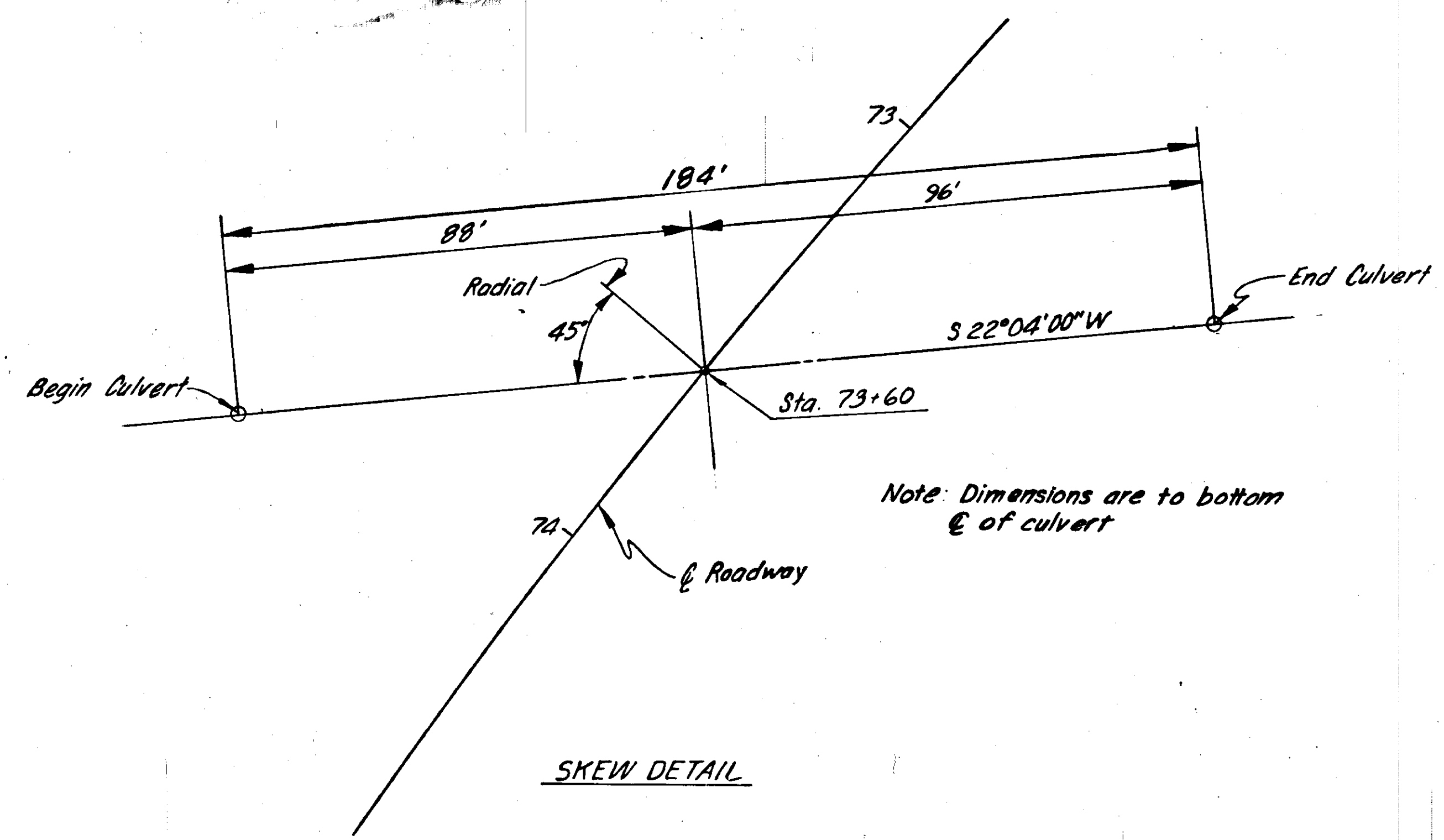
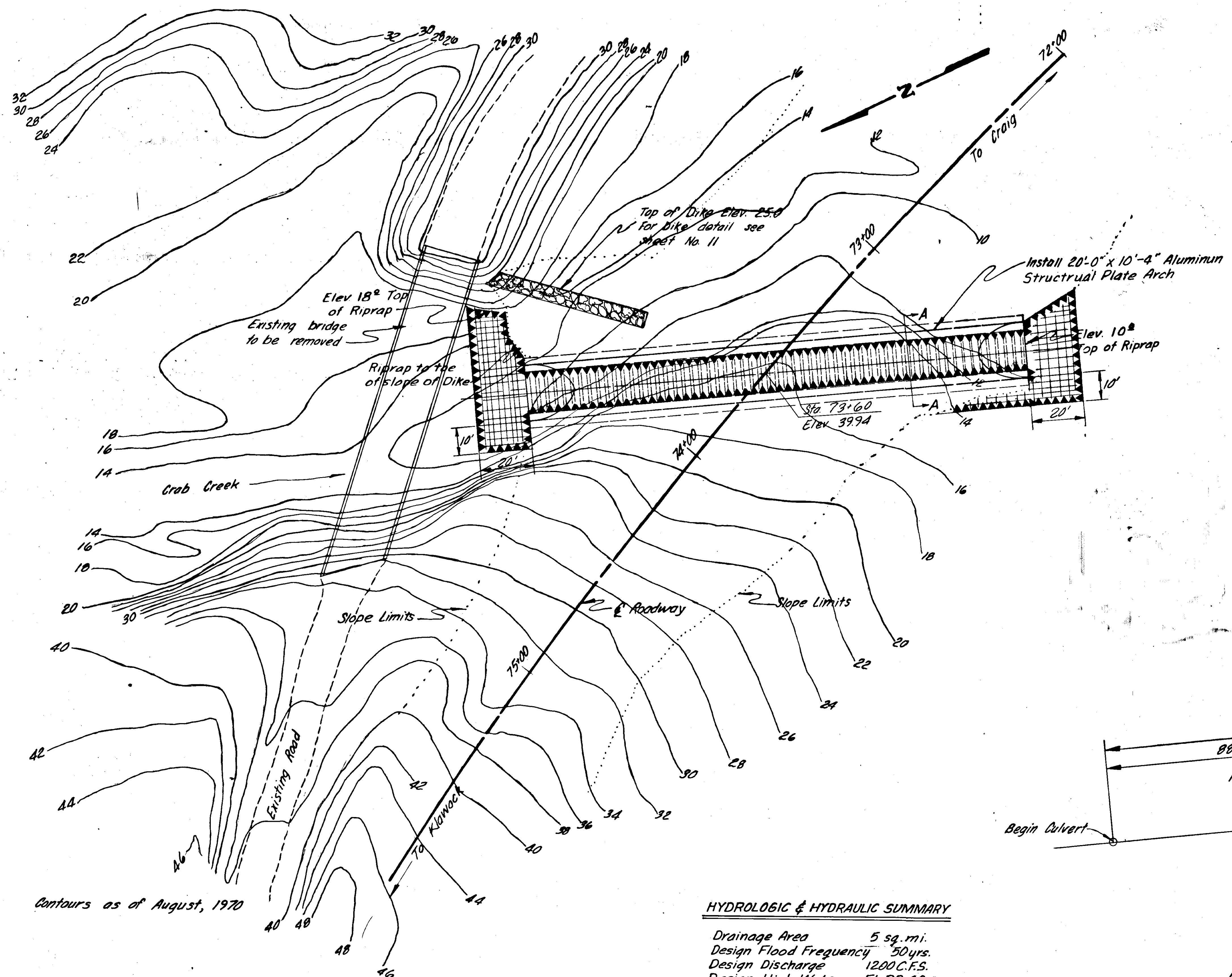
IMBEDMENT DETAIL



| STATE | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | S-0924(6) | 1973 | 26 | 36 |

**CRAB CREEK
CULVERT DETAIL**

| ESTIMATE OF QUANTITIES | | |
|--|------|--------|
| ITEM | UNIT | AMOUNT |
| Aluminum Structural Plate Arch 20'-0" x 10'-4" | L.F. | 166 |
| Class "A" Concrete | C.Y. | 51.7 |
| Reinforcing Steel | Lb. | 17,713 |
| Class II Riprap | C.Y. | 296 |
| | | |
| | | |
| | | |



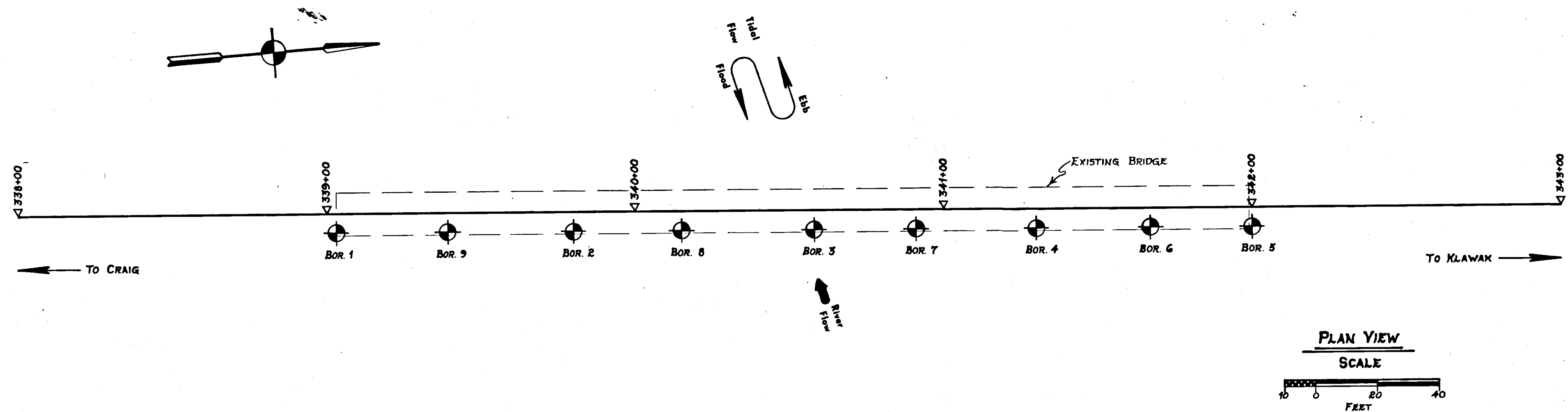
HYDROLOGIC & HYDRAULIC SUMMARY

Drainage Area 5 sq. mi.
 Design Flood Frequency 50 yrs.
 Design Discharge 1200 C.F.S.
 Design High Water El. 22.00

Note: Dimensions are to bottom of culvert

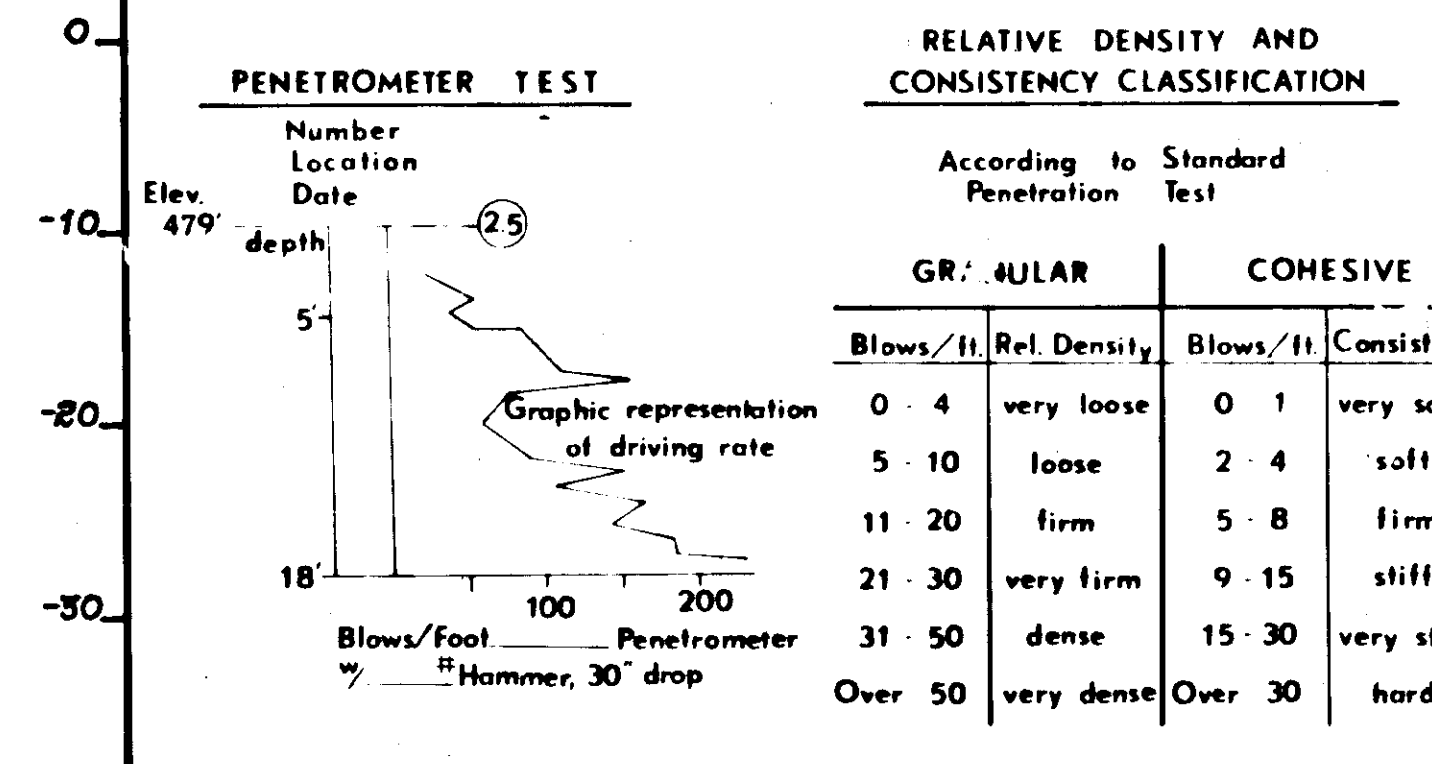
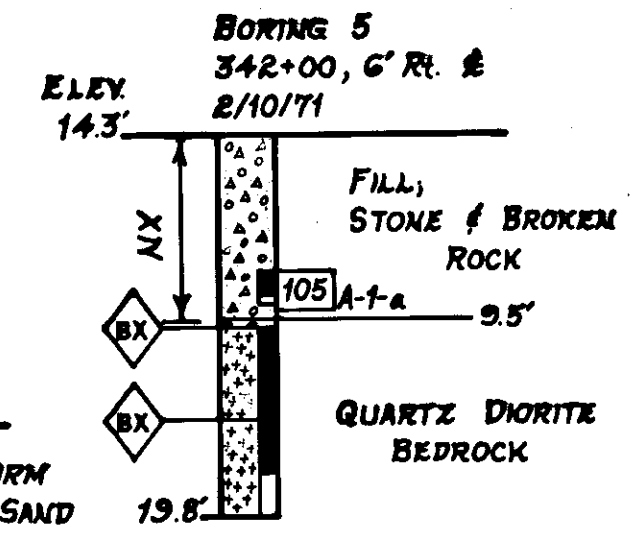
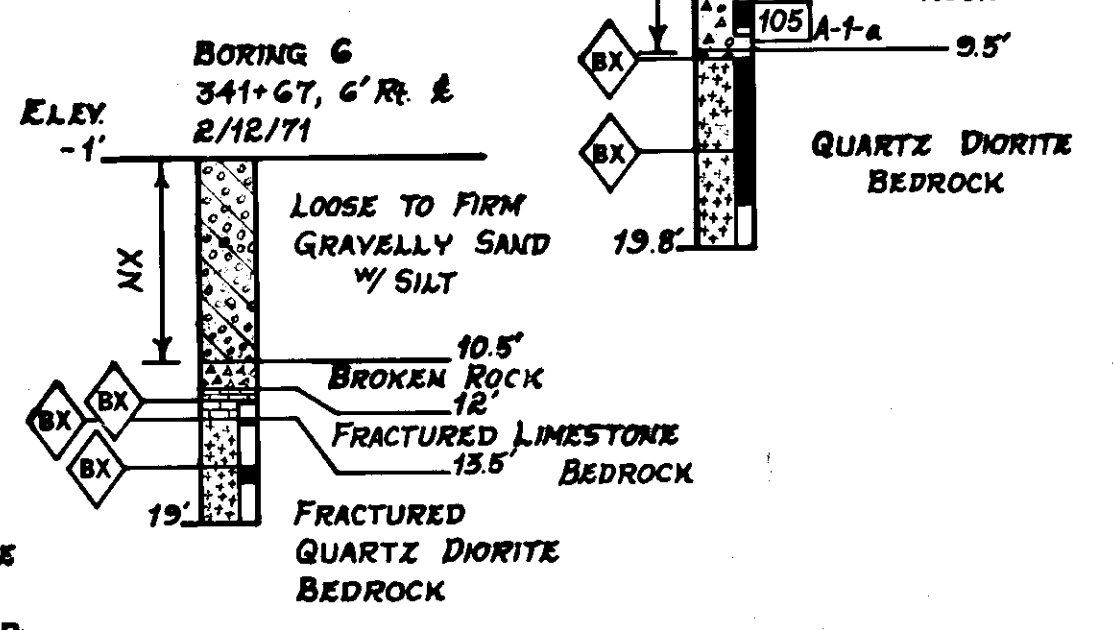
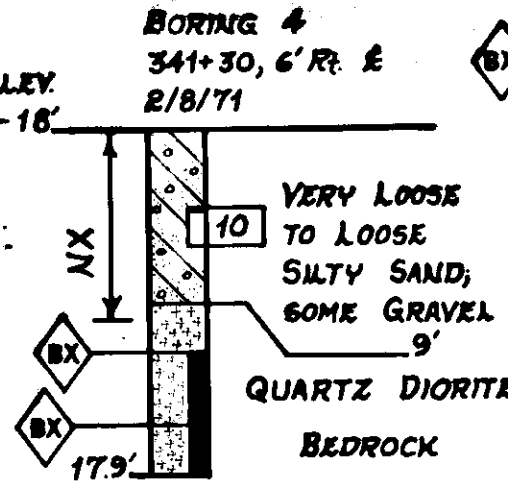
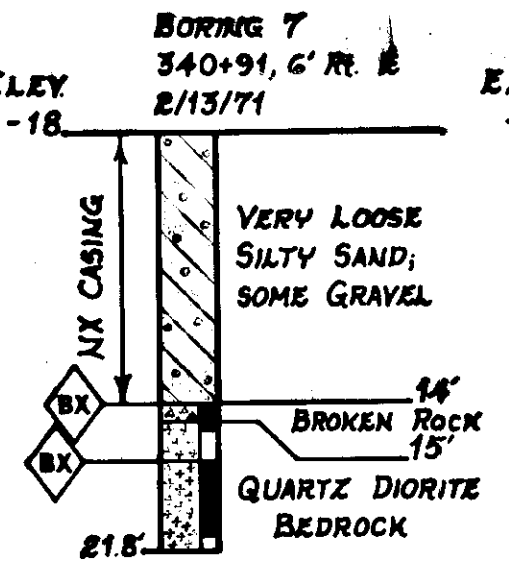
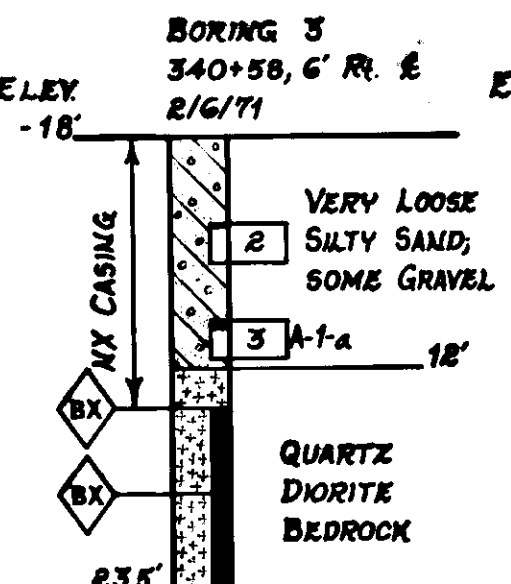
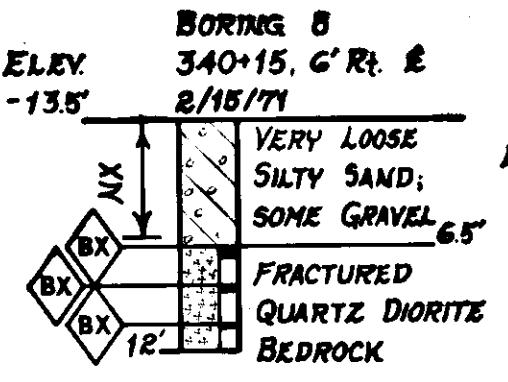
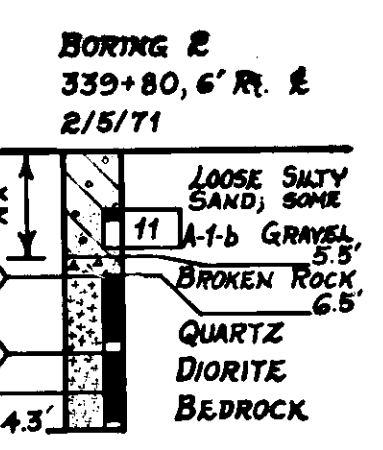
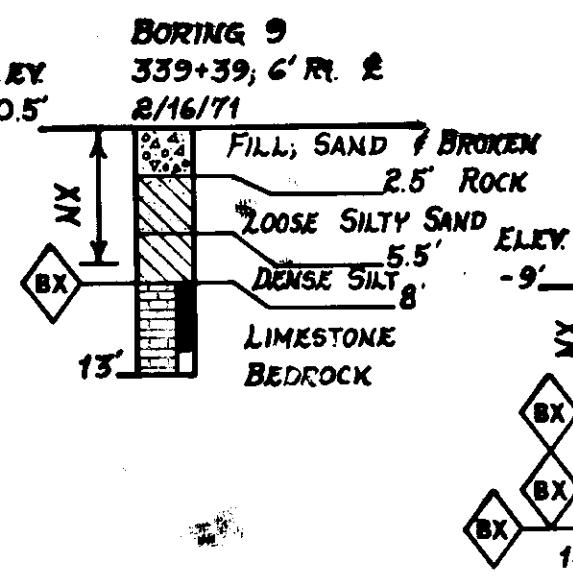
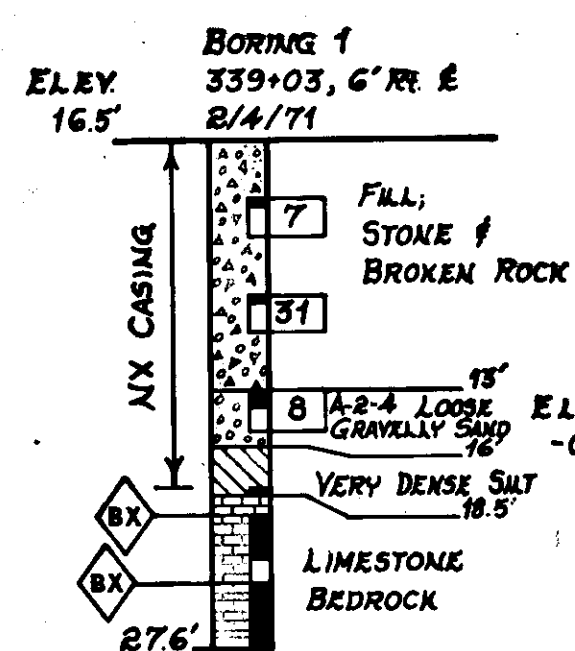
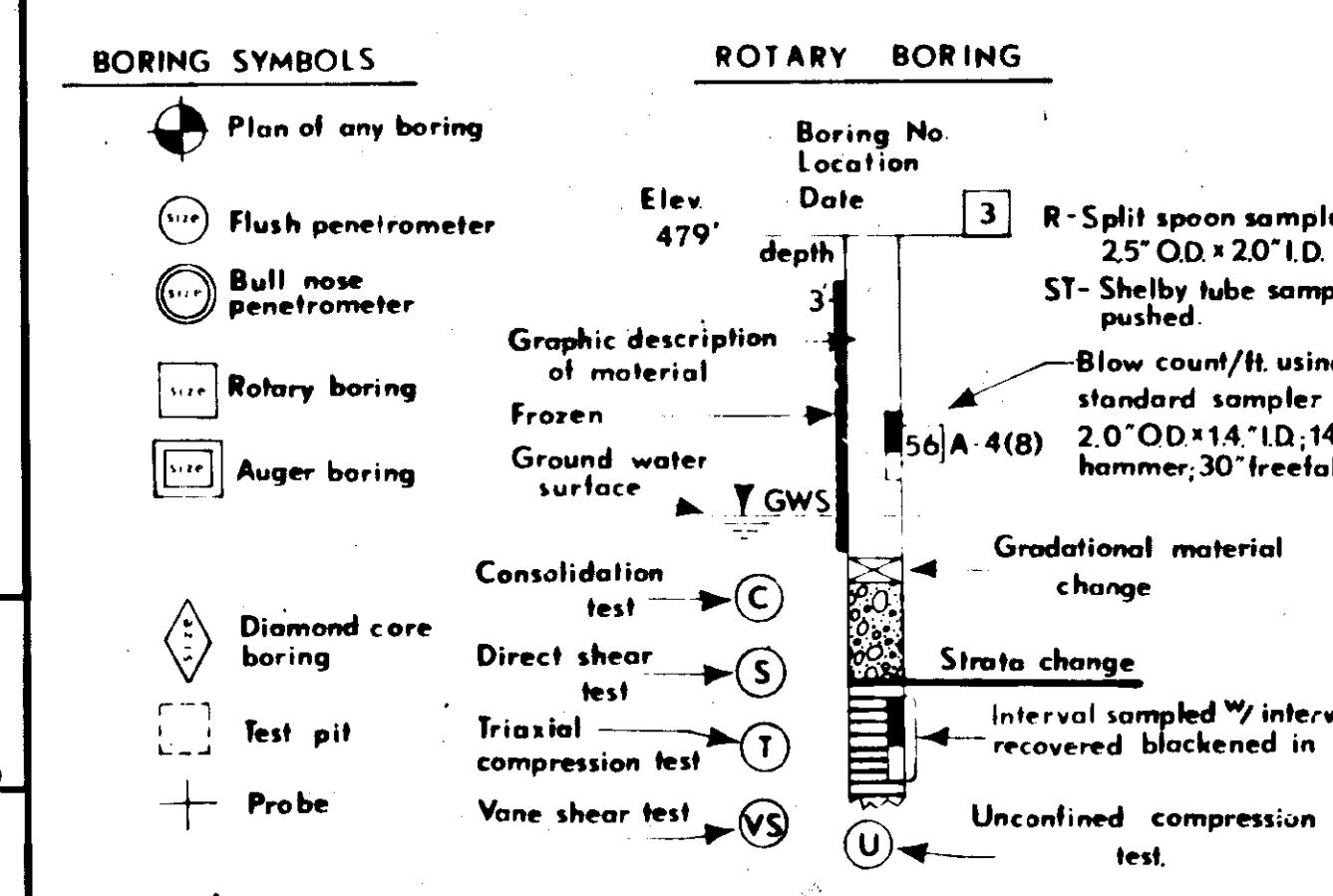
SKEW DETAIL

Contours as of August, 1970



MATERIAL SYMBOLS

| | | | |
|--|------------------------|--|----------------|
| | Organics, Organic Silt | | Clayey Silt |
| | Cobbles and Boulders | | Sandy Silt |
| | Sandy Gravel | | Gravelly Silt |
| | Gravelly Sand | | Silty Clay |
| | Gravel | | Silty Sand |
| | Sand | | Silty Gravel |
| | Clay | | Limestone |
| | Silt | | Quartz Diorite |



KLAWAK RIVER BRIDGE
ROUTE NO. S-924
LOG OF TEST BORINGS

State of Alaska
DEPARTMENT OF HIGHWAYS
Juneau, Alaska.

Date 3-15-71 Bridge no. 301
Approved [Signature] Drawing no. 2882