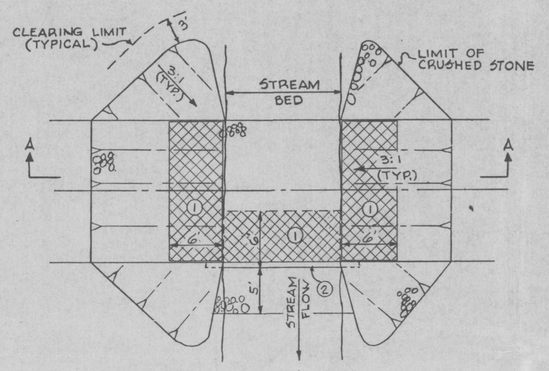


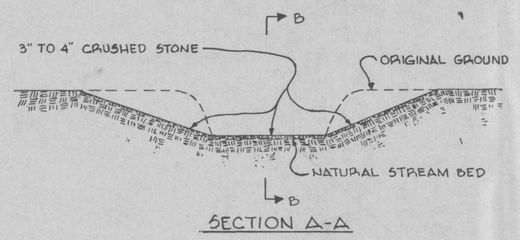
PLAN - TYPICAL STREAM FORD - TYPE 1

WHERE LESS THAN 6" SOFT MATERIAL ON BED

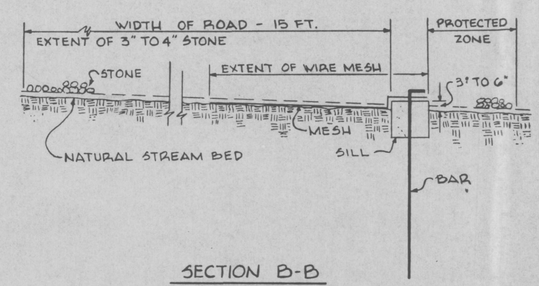
KEY

① GALV. STEEL, 14 GAUGE MESH, 1 1/2" MAX. OPENING

② SILL-CUT BACK INTO STREAM BANK EACH END 1/5 WIDTH OF STREAM BED



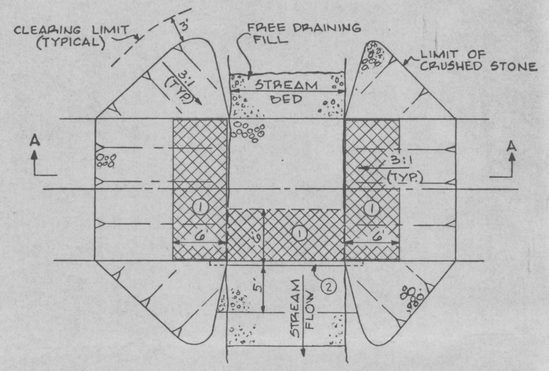
SECTION A-A



SECTION B-B

NOTES:

1. Sill to be approximately 12" diameter log (small end), taken from Right-of-way, or 12"x 12"timber. Prior Corporation approval required for all sill material.
2. Bars to be new steel, 3/4" Ø driven to refusal or 6 ft. max. on 2 ft. ctrs., with tops bent downstream and offering positive support to sill.
3. Wire mesh must be securely fastened to sill. Where more than one section of wire mesh is required, individual sections shall be secured with a continuous 12 ga. galv. spiral wire or overlapped 12 to 18 inches.
4. Stone to be ASTM C-33, 3-1/2" to 1-1/2", from source approved by Corporation.



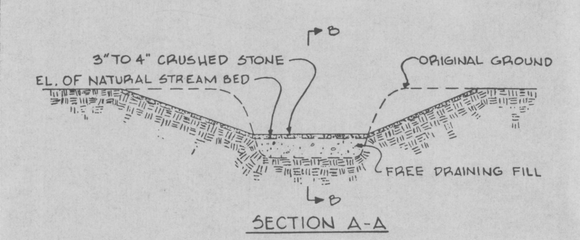
PLAN - TYPICAL STREAM FORD - TYPE 2

WHERE BETWEEN 6" AND 3' SOFT MATERIAL ON BED

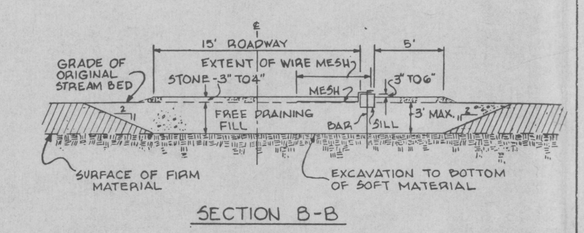
KEY

① GALV. STEEL, 14 GAUGE MESH, 1 1/2" MAX. OPENING

② SILL-CUT BACK INTO STREAM BANK EACH END 1/5 WIDTH OF STREAM BED



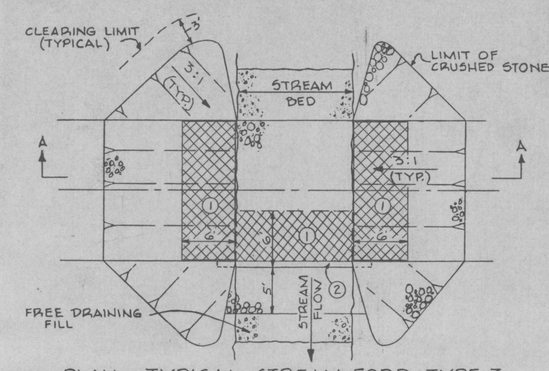
SECTION A-A



SECTION B-B

NOTES:

1. Sill to be approximately 12" diameter log (small end), taken from Right-of-way, or 12"x 12"timber. Prior Corporation approval required for all sill material.
2. Bars to be new steel, 3/4" Ø driven to refusal or 6 ft. max. on 2 ft. ctrs., with tops bent downstream and offering positive support to sill.
3. Wire mesh must be securely fastened to sill. Where more than one section of wire mesh is required, individual sections shall be secured with a continuous 12 ga. galv. spiral wire or overlapped 12 to 18 inches.
4. Stone to be ASTM C-33, 3-1/2" to 1-1/2", from source approved by Corporation.
5. Free draining fill to be any sand, sand-gravel mixture or crushed stone having less than seven percent passing 200 mesh sieve, from source approved by Corporation.
6. Roadway stone in riverbank cut shall be underlain by filter sheet if subsoil is soft. For filter sheet see Note 5-SK 5b.
7. Dispose of excavated soft material away from stream bed and beyond limits of protected slopes with minimum environmental disturbance and Corporation approval.



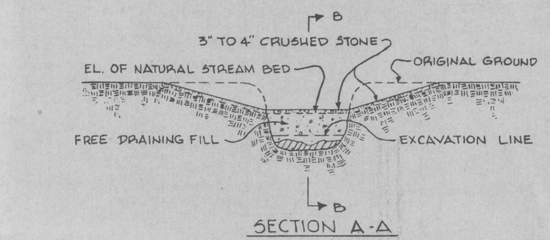
PLAN - TYPICAL STREAM FORD - TYPE 3

WHERE MORE THAN 3' SOFT MATERIAL ON BED

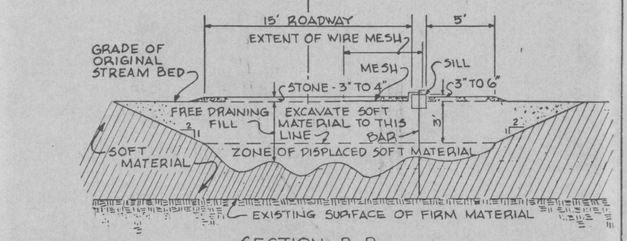
KEY

① GALV. STEEL, 14 GAUGE MESH, 1 1/2" MAX. OPENING

② SILL-CUT BACK INTO STREAM BANK EACH END 1/5 WIDTH OF STREAM BED



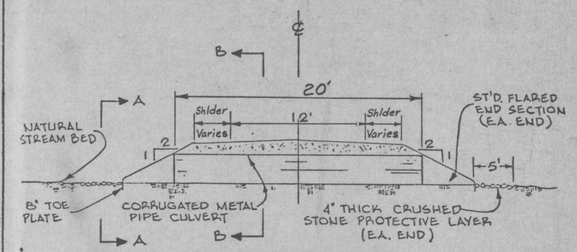
SECTION A-A



SECTION B-B

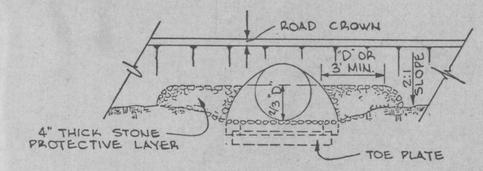
NOTES:

1. Sill to be approximately 12" diameter log (small end), taken from Right-of-way, or 12"x 12"timber. Prior Corporation approval required for all sill material.
2. Bars to be new steel, 3/4" Ø driven to refusal or 6 ft. max. on 2 ft. ctrs., with tops bent downstream and offering positive support to sill.
3. Wire mesh must be securely fastened to sill. Where more than one section of wire mesh is required, individual sections shall be secured with a continuous 12 ga. galv. spiral wire or overlapped 12 to 18 inches.
4. Stone to be ASTM C-33, 3-1/2" to 1-1/2", from source approved by Corporation.
5. Free draining fill to be any sand, sand-gravel mixture or crushed stone having less than seven percent passing 200 mesh sieve, from source approved by Corporation.
6. Roadway stone in riverbank cut shall be underlain by filter sheet if subsoil is soft. For filter sheet see Note 5-SK 5b.
7. Dispose of excavated soft material away from stream bed and beyond limits of protected slopes with minimum environmental disturbance and Corporation approval.
8. Free draining fill must be placed and compacted at full width to full height progressively across stream and any soft material displaced at advancing toe of fill into excavation zone must be removed. Sufficient fill must be placed to provide firm base for sill, mesh and roadway stone at grade of original stream bed.



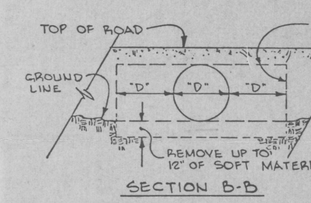
CROSS SECTION

TYPICAL STREAM-CROSSING WITH CULVERT



SECTION A-A

(SAME BOTH ENDS)



SECTION B-B

NOTES:

1. Crown roadway and shoulders 1/2 in. per ft.
2. Lay culvert straight and as nearly as possible along existing stream bed and with invert at bed elevation.
3. Min. depth of fill above culvert to be 12" for 12" Dia., pipe, 18" for 18"-24" Dia. pipe, & 24" for 30" Dia. pipe or larger.
4. Corrugated metal pipe to be galvanized steel per AASHO M-36 with gages as follows:

Dia.in Inches	Gage
18	16
21	16
24	14
30	14
36	12
54	12
60	10
72	10

Aluminum pipe of equivalent strength can be substituted with approval of Corporation.

5. Select borrow for pipe backfill can be any material approved by corporation that is free from: Large rocks or hard lumps or clods greater than 3" in dia., frozen particles, sod, cinders, or earth, with high percentage of organic material. Fill to be kept at same elevation on both sides of pipe.
6. Stone protective layer to be ASTM C-33, 2" to No. 4, from source approved by Corporation.
7. Except where protected by stone all embankment slopes to be stabilized, mulched and seeded subject to approval of Corporation.

NO.	DATE	BY	DESCRIPTION OF REVISION	CK.	APP.

NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION
SYRACUSE, N.Y.

SYSTEM TRANSMISSION

RIGHT-OF-WAY IMPROVEMENT DETAILS

DES. W.S.	DR. WWS	TR. WWS	CK.	DATE 2-8-77	SCALE NOT TO SCALE
APP.			APP.		INDEX 6.0-1-M49
APP.			APP.		No. C-31245-C