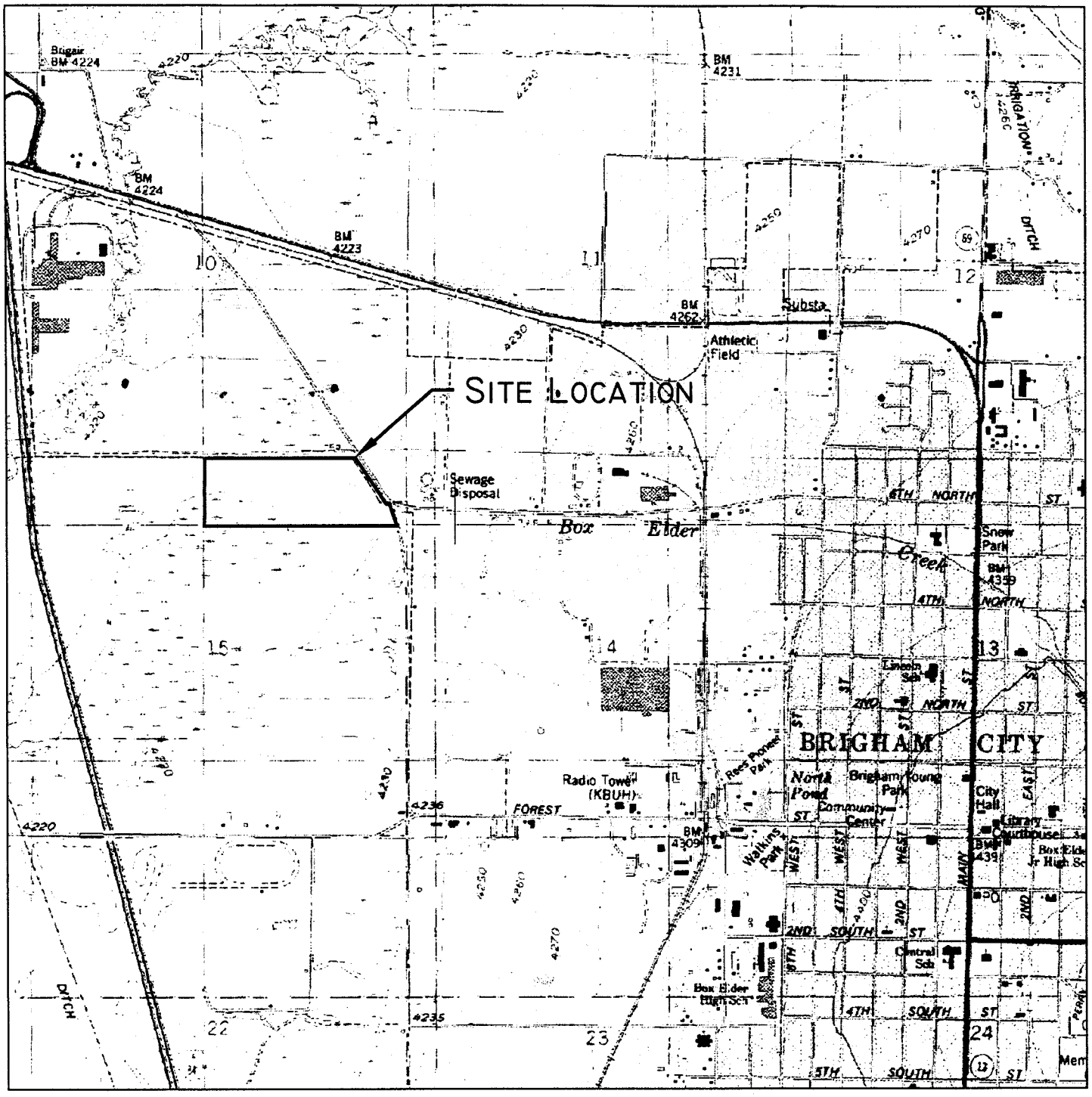
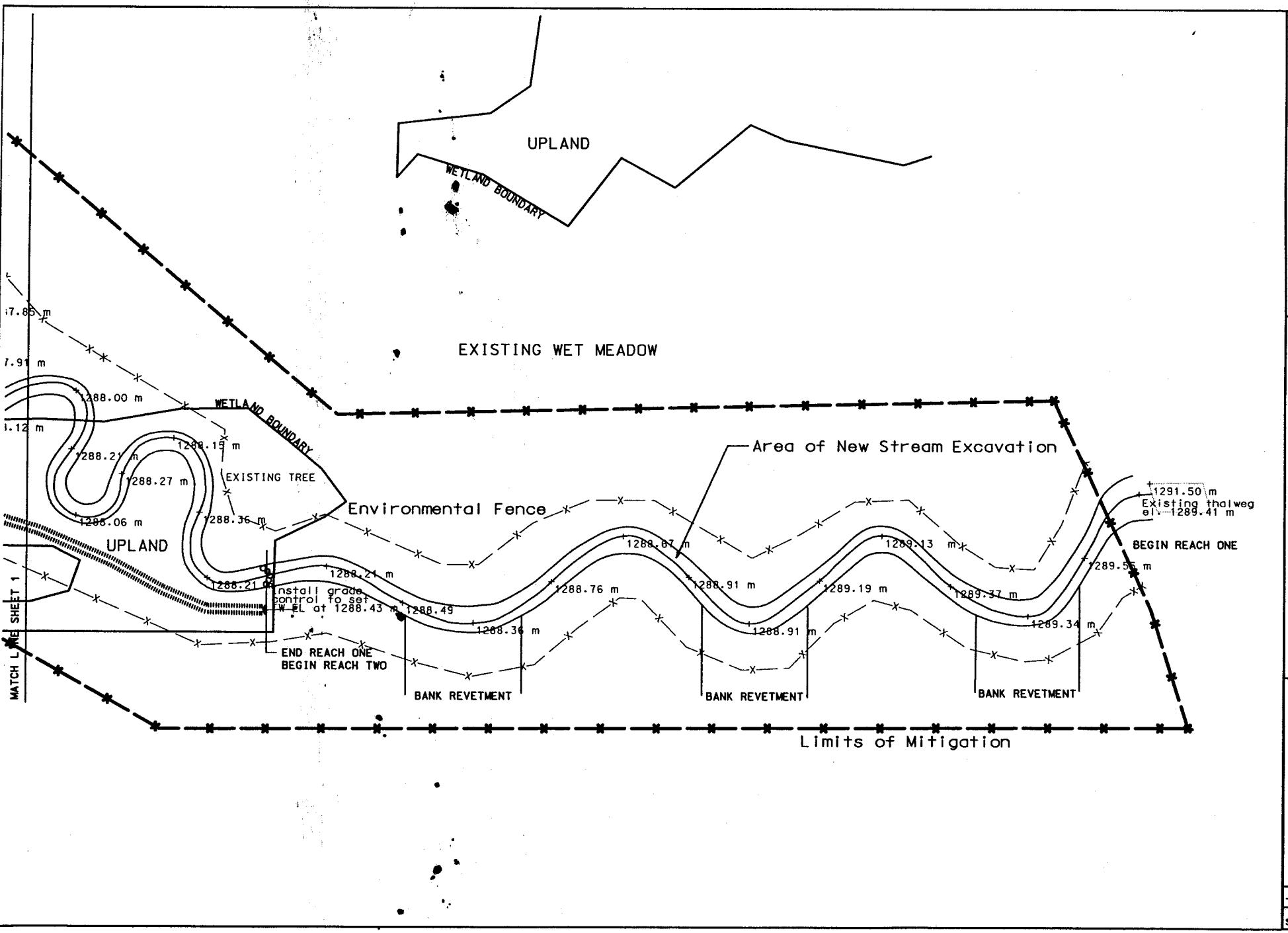



# WATERY LANE
# SITE LOCATION MAP

DATE: 8/1/01

NORTH

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Logan, Utah

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BOX ELDER CREEK

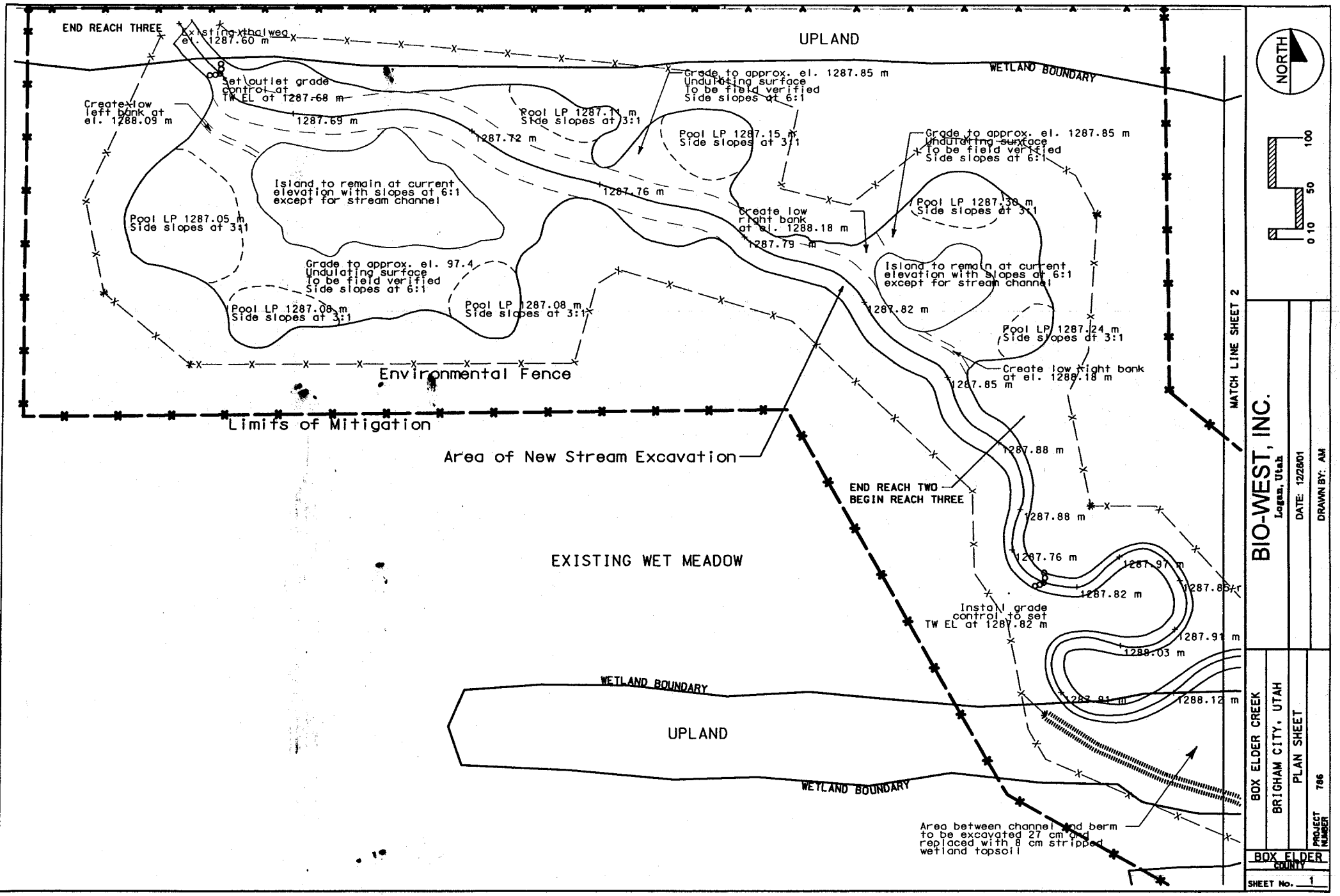
BRIGHAM CITY, UTAH

PLAN SHEET

PROJECT NUMBER 786

BOX ELDER COUNTY

SHEET No. 2


END REACH THREE
Existing thalweg el. 1287.60 m
UPLAND
WETLAND BOUNDARY
Set outlet grade control at TW EL at 1287.68 m
Create low left bank at el. 1288.09 m
1287.69 m
Pool LP 1287.11 m Side slopes at 3:1
Grade to approx. el. 1287.85 m Undulating surface To be field verified Side slopes at 6:1
1287.72 m
Pool LP 1287.15 m Side slopes at 3:1
Grade to approx. el. 1287.85 m Undulating surface To be field verified Side slopes at 6:1
Island to remain at current elevation with slopes at 6:1 except for stream channel
1287.76 m
Pool LP 1287.05 m Side slopes at 3:1
Create low right bank at el. 1288.18 m
1287.79 m
Pool LP 1287.30 m Side slopes at 3:1
Grade to approx. el. 97.4 Undulating surface To be field verified Side slopes at 6:1
Island to remain at current elevation with slopes at 6:1 except for stream channel
Pool LP 1287.08 m Side slopes at 3:1
Pool LP 1287.08 m Side slopes at 3:1
1287.82 m
Pool LP 1287.24 m Side slopes at 3:1
Environmental Fence
Create low right bank at el. 1288.18 m
1287.85 m
Limits of Mitigation
Area of New Stream Excavation
1287.88 m
END REACH TWO
BEGIN REACH THREE
1287.88 m
EXISTING WET MEADOW
1287.76 m
1287.97 m
1287.82 m
Install grade control to set TW EL at 1287.82 m
1287.91 m
1288.03 m
WETLAND BOUNDARY
1287.91 m
1288.12 m
UPLAND
WETLAND BOUNDARY
Area between channel and berm to be excavated 27 cm and replaced with 8 cm stripped wetland topsoil
MATCH LINE SHEET 2
NORTH
0 10 50 100
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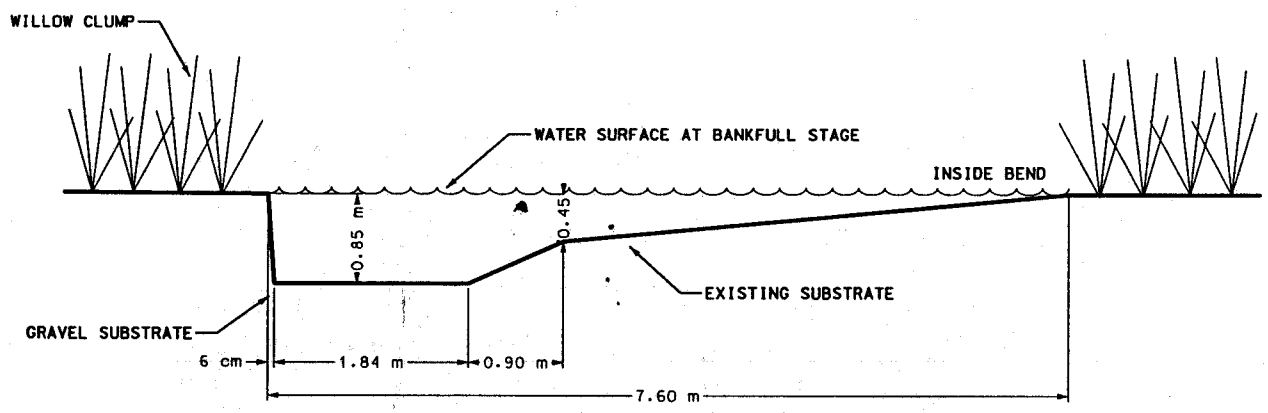
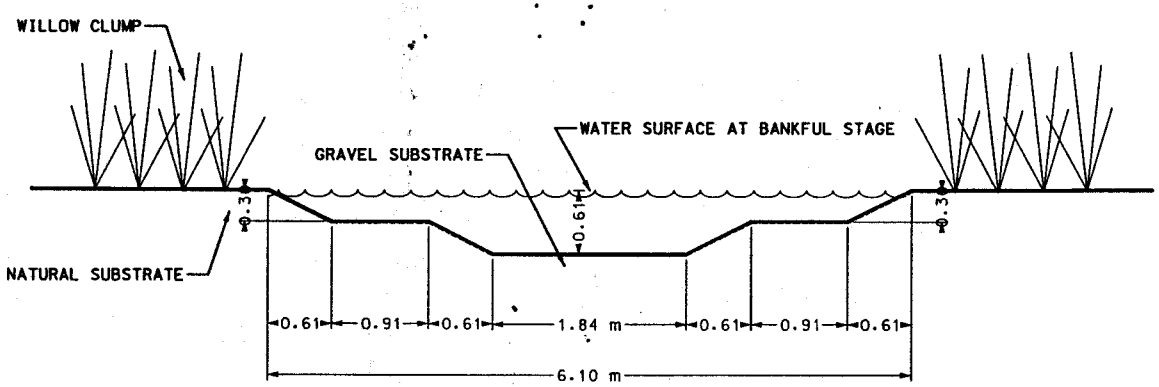
PROJECT NUMBER 786
BOX ELDER COUNTY
SHEET No. 1




REACH 1 STREAM TYPE C4 POOL




REACH 1 STREAM TYPE C4 RIFFLE

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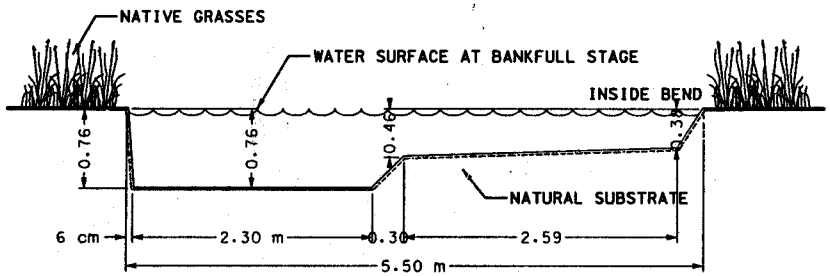
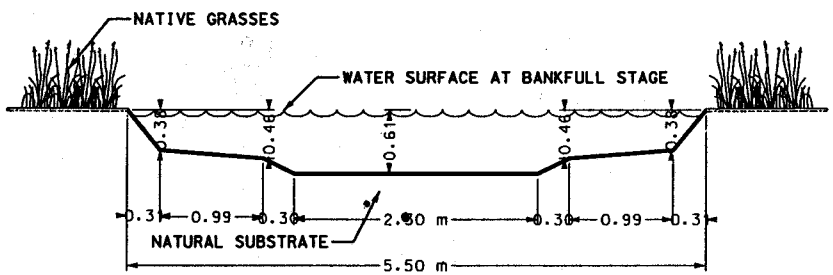
SHEET No. 3




REACH 2 STREAM TYPE E5 POOL




REACH 2 STREAM TYPE E5 RIFFLE

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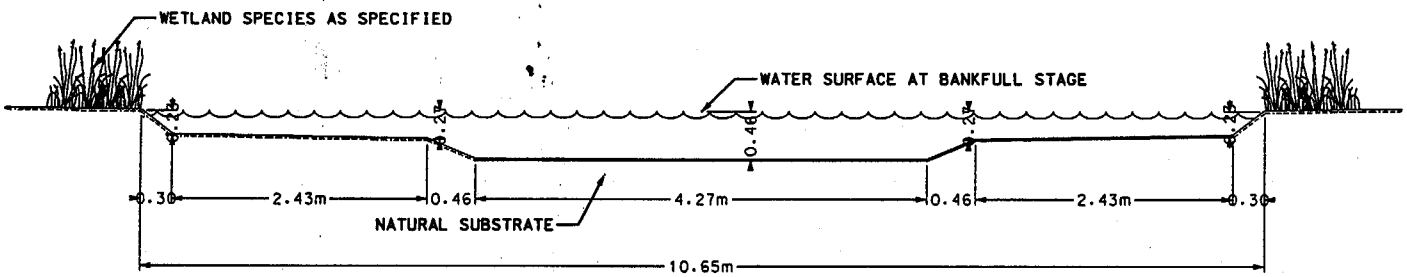
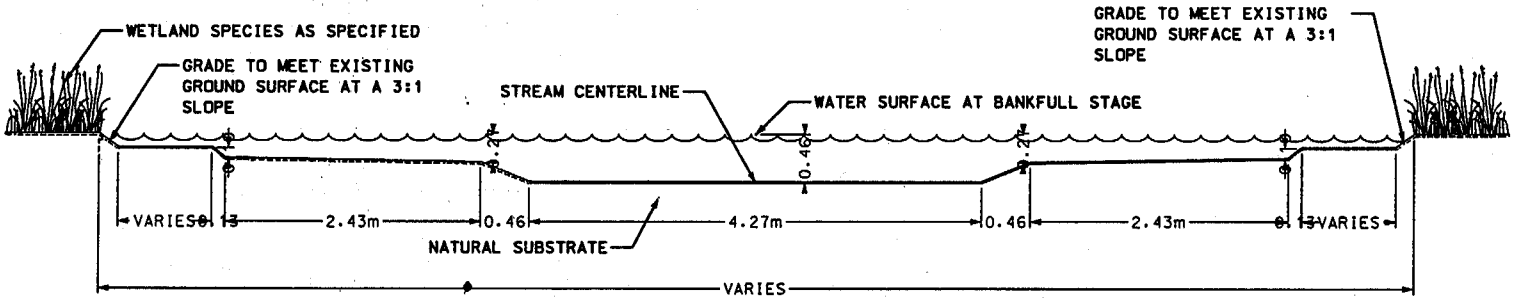
SHEET No. 4




## REACH 3 SLOUGH




## REACH 3 SLOUGH MODIFIED

TO BE USED IN REACH THREE WHEN CHANNEL WIDTH EXCEEDS 10.65 M

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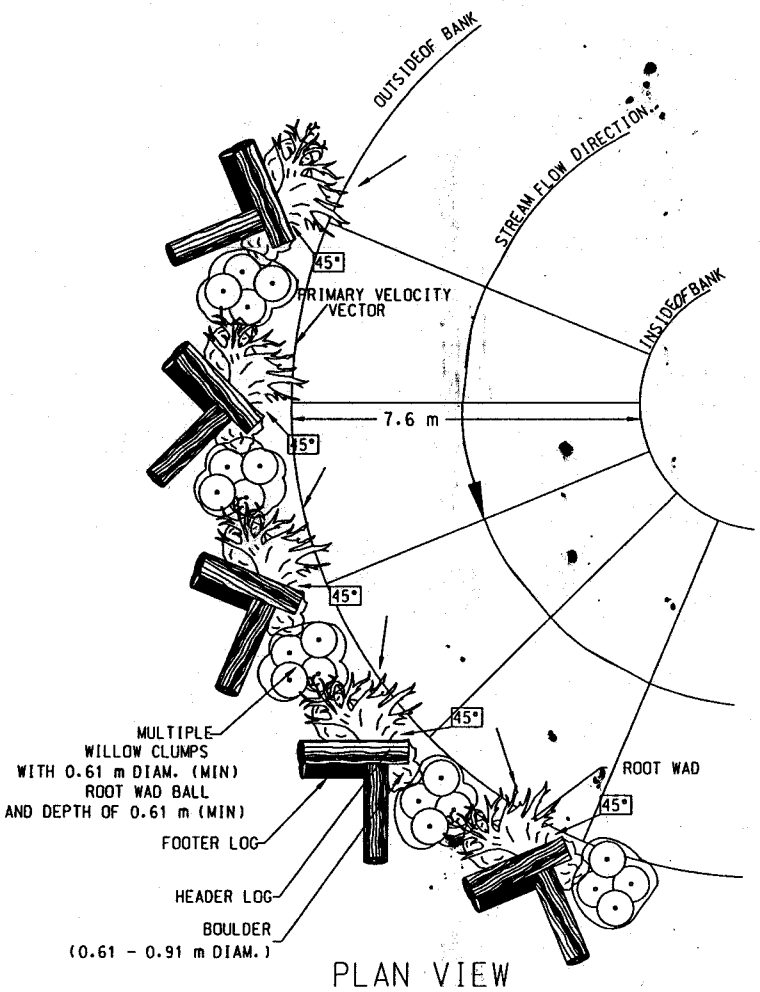
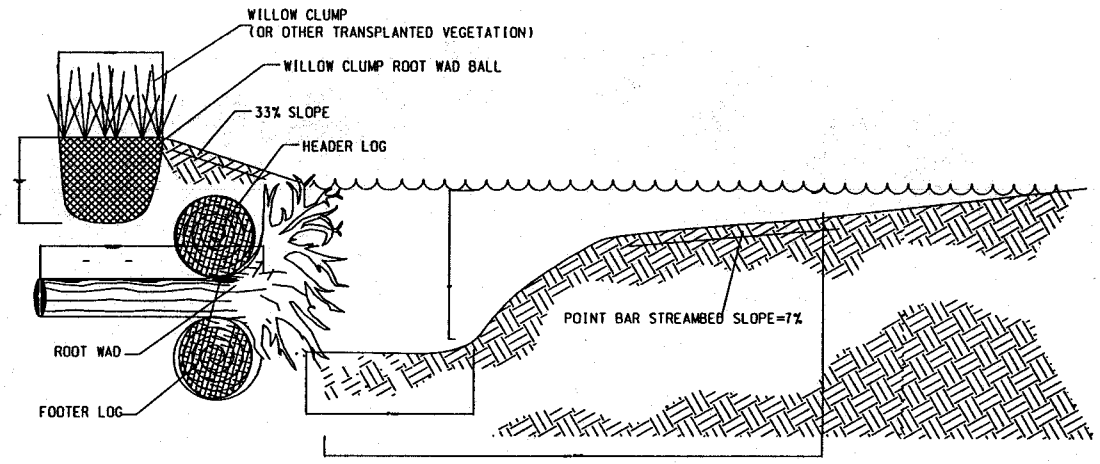
BOX ELDER COUNTY

SHEET No. 5




PLAN VIEW




CROSS SECTION VIEW

NOTES:

1. ROOT WADS SHOULD BE APPROXIMATELY 3 METERS LONG (MIN) WITH A DIAMETER BREAST HEIGHT (DBH) GREATER THAN 10 INCHES AND ROOT DIAMETER OF 0.91-1.22 m. THEY SHALL BE PLACED ON THE OUTSIDE BANK OF BENDS (SEE PROJECT AREA MAP FOR SPECIFIC LOCATIONS).
2. CONTRACTING OFFICER SHALL APPROVE LAYOUT OF ROOT WADS BEFORE ACTUAL INSTALLATION OF FOOTER LOGS AND BOULDERS ON ALL REVETMENT CURVES.
3. EACH ROOT WAD SHALL BE SEPARATED BY A DISTANCE APPROXIMATELY EQUAL TO THE DIAMETER OF ONE ROOT WAD.
4. ROOT WAD ORIENTATION SHALL BE PERPENDICULAR TO PRIMARY VELOCITY VECTORS. TO DO THIS: (1) PLACE ALL FOOTER LOGS AND HEADER LOGS 45 DEGREES TO THE LINE PERPENDICULAR TO THE STREAM'S FLOW LINE, AND (2) PLACE ALL ROOT WADS PERPENDICULAR TO THE FOOTER LOGS AND HEADER LOGS.
5. HEADER LOGS AND FOOTER LOGS SHALL BE APPROXIMATELY 3 METERS LONG (MIN). 25.4 cm ≤ DBH DIAM. ≤ 45.7 cm
6. LARGE WILLOW CLUMP(S) SHALL BE PLACED ON STREAMBANK IMMEDIATELY DOWNSTREAM OF ROOT WAD.
7. TRANSPLANTING OF WILLOW CLUMPS SHALL BE COMPLETED AS SOON AS POSSIBLE, MAXIMUM TIME 2.0 HOURS. DO NOT ALLOW ROOTS TO DRY OUT.

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Logan, Utah

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BOX ELDER CREEK

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PLAN SHEET

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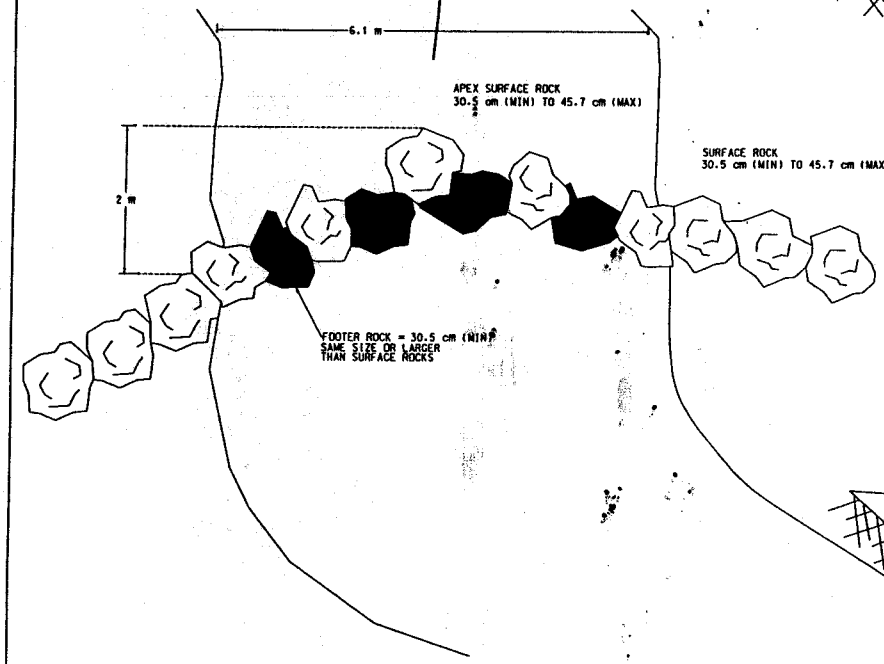
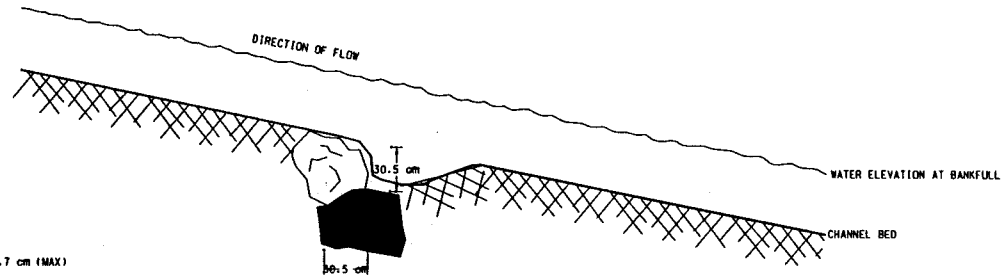
BOX ELDER COUNTY

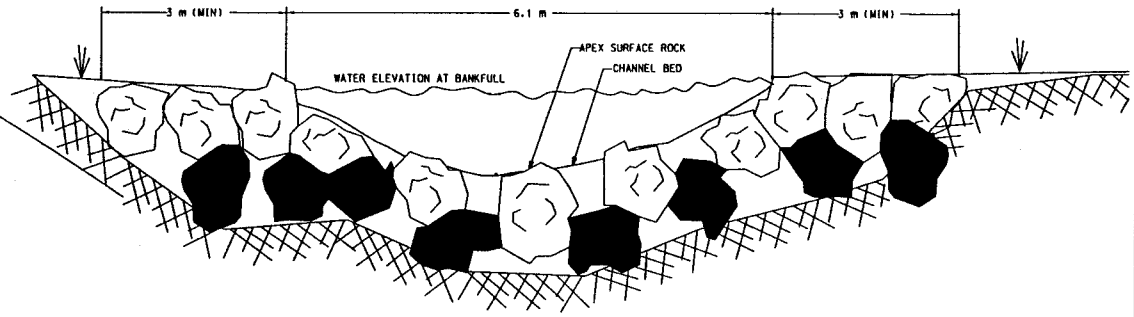
SHEET No. 6




PLAN VIEW




LONGITUDINAL VIEW




CROSS-SECTIONAL VIEW

NOTES:

1. SURFACE ROCKS SHOULD BE APPROXIMATELY 0.61 m IN DIAMETER. THERE SHOULD BE A 0.61-TO 1.22-METER GAP BETWEEN ALL SURFACE ROCKS EXCEPT AT STREAM CHANNEL BANKS WHERE THE FIRST TWO SURFACE ROCKS SHOULD BE PLACED TOGETHER. SURFACE ROCKS SHOULD BE PLACED UPSTREAM OF FOOTER ROCKS BY A DISTANCE EQUAL TO APPROXIMATELY ONE-HALF OF THE DIAMETER OF THE SURFACE ROCK. THE UPPER SURFACE OF THE APEX SURFACE ROCK SHOULD BE 20.3-30.5 CM ABOVE THE STREAM CHANNEL BED. THE SURFACE APEX ROCK SHOULD BE SET ONE-THIRD OF THE CHANNEL WIDTH IN FROM THE CHANNEL BANK.

2. FOOTER ROCKS SHOULD BE A MINIMUM OF 0.61 METERS IN DIAMETER (THE SAME SIZE OR LARGER THAN SURFACE ROCKS). THE UPPER SURFACE OF FOOTER ROCKS SHOULD BE 30.5-40.6 CENTIMETERS BELOW THE CHANNEL BED.

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BOX ELDER COUNTY

SHEET No. 7