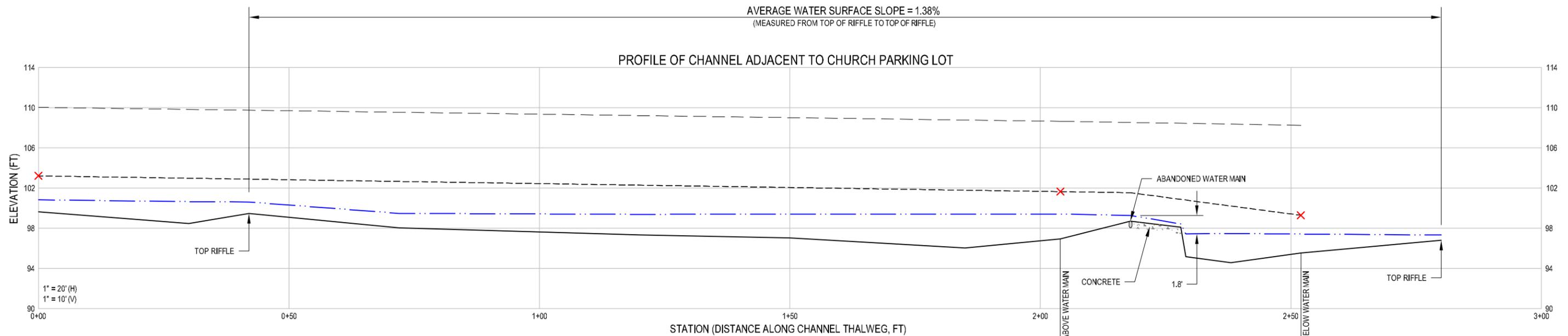


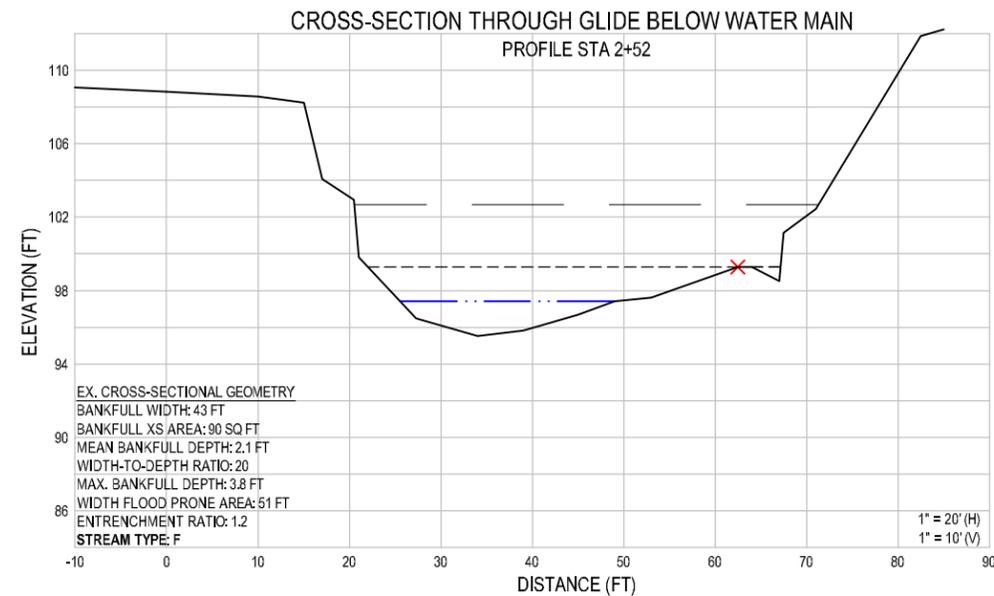
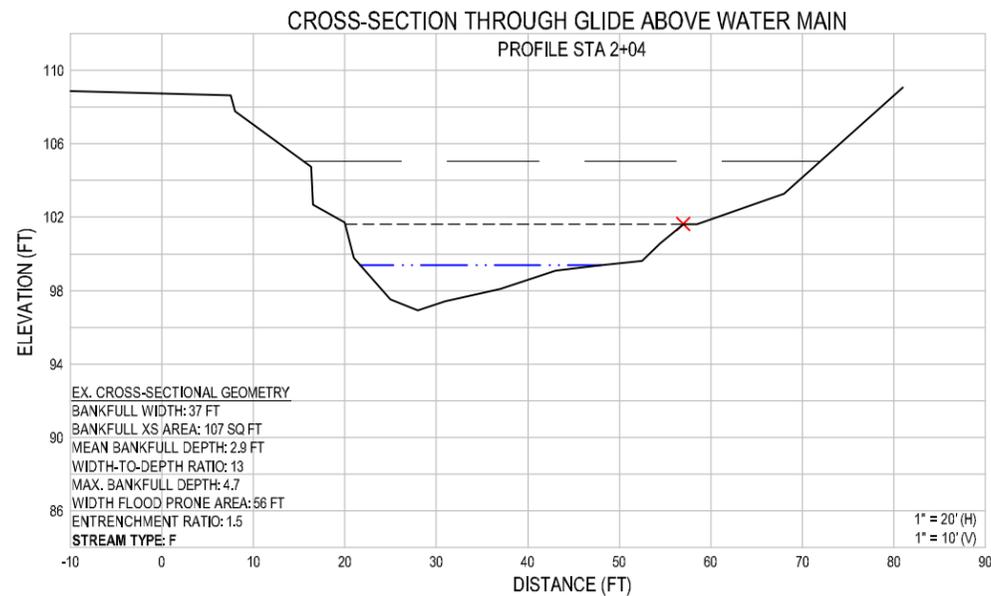
Appendix 4

Existing and Conceptual Longitudinal Profiles and Cross-Sections



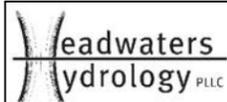
LEGEND

- EXISTING GROUND (THALWEG ON PROFILE)
- WATER SURFACE 10-8-09
- - - BANKFULL
- × SURVEYED BANKFULL INDICATOR
- - - TOP OF LEFT BANK
- WIDTH OF FLOOD PRONE AREA



NOTES:

1. THE CROSS-SECTIONS AND PROFILE WERE SURVEYED ON OCTOBER 8, 2009. VERTICAL DATUM IS ASSUMED.
2. THE CROSS-SECTIONS ARE PLOTTED FROM LEFT TO RIGHT LOOKING DOWNSTREAM.
3. THE CROSS-SECTIONS ARE LOCATED AT GLIDE BED FEATURES WHERE MAXIMUM BANKFULL DEPTHS ARE GREATER THAN AT RIFFLE BED FEATURES. THE WIDTH OF FLOOD PRONE AREA, WHICH IS MEASURED AT TWICE THE MAXIMUM BANKFULL DEPTH ABOVE THE THALWEG, IS MORE APPROPRIATELY MEASURED AT RIFFLES. THEREFORE, FLOOD PRONE AREA WIDTHS AT THESE CROSS-SECTIONS HAVE BEEN MEASURED AT A HEIGHT OF 3.4 FEET ABOVE THE SURVEYED BANKFULL STAGE, WHICH IS THE MAXIMUM BANKFULL DEPTH MEASURED AT THE TOP OF RIFFLE AT PROFILE STATION 0+42.



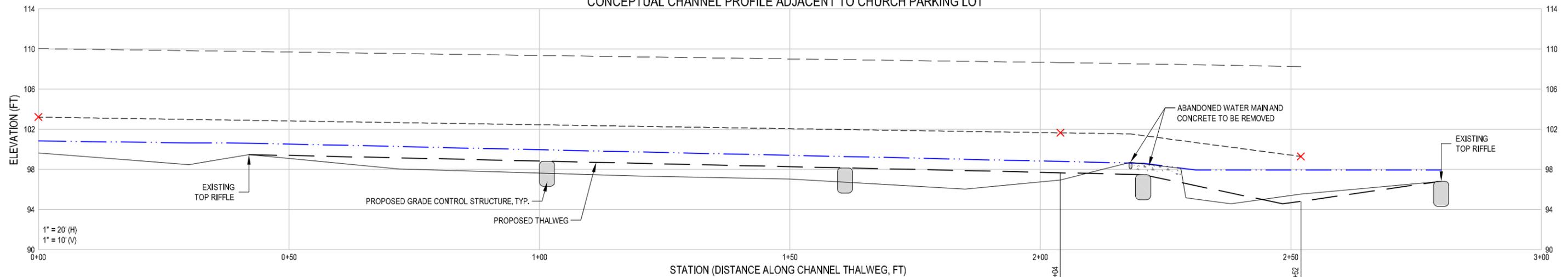
254 Marry Hill Road, Littleton, NH 03561 (800) 444-2591

**MAD RIVER AT
ST. PETER'S CHURCH**
CENTRAL STREET, FARRINGTON, NH
EXISTING LONGITUDINAL PROFILE
AND CROSS-SECTIONS

NO.	REVISION	DATE

DATE: OCT 2009	PROJECT #: 0534
ENGINEERED BY:	
DRAWN BY: SPS	

CONCEPTUAL CHANNEL PROFILE ADJACENT TO CHURCH PARKING LOT

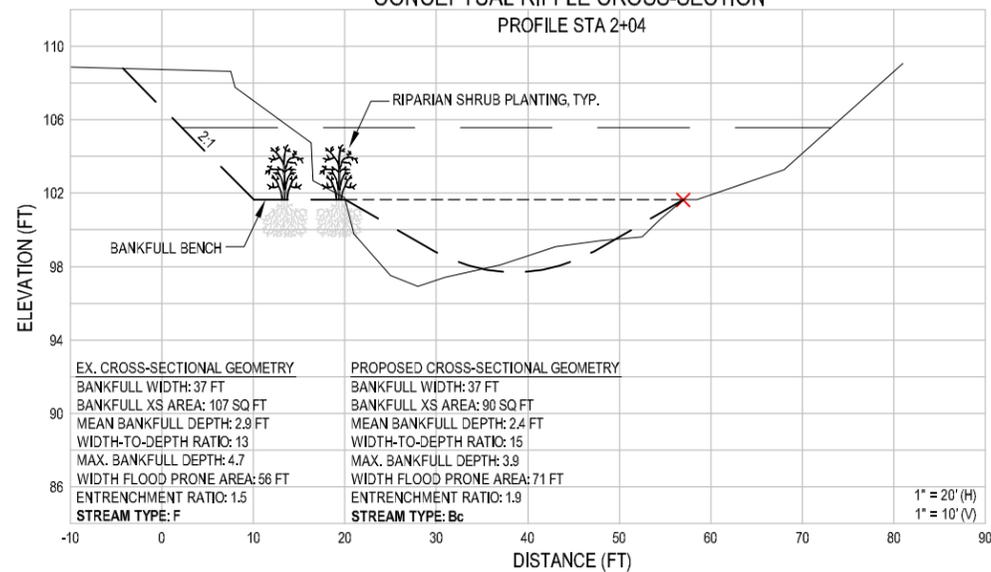


LEGEND

- EXISTING GROUND (THALWEG ON PROFILE)
- CONCEPTUAL LOW FLOW WATER SURFACE
- - - EXISTING BANKFULL
- × SURVEYED EXISTING BANKFULL INDICATOR
- - - EXISTING TOP OF LEFT BANK
- WIDTH OF FLOOD PRONE AREA
- - - PROPOSED GROUND (THALWEG ON PROFILE)

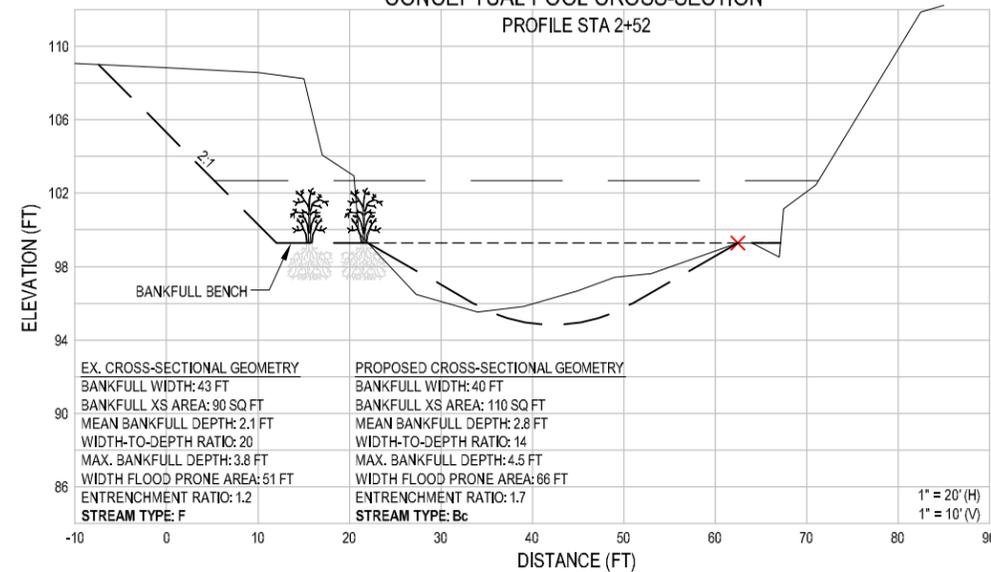
CONCEPTUAL RIFFLE CROSS-SECTION

PROFILE STA 2+04



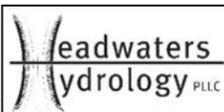
CONCEPTUAL POOL CROSS-SECTION

PROFILE STA 2+52



NOTES:

- THE CHANNEL IMPROVEMENTS SHOWN ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION.
- THE EXISTING CROSS-SECTIONS AND PROFILE WERE SURVEYED ON OCTOBER 8, 2009. VERTICAL DATUM IS ASSUMED.
- THE CROSS-SECTIONS ARE PLOTTED FROM LEFT TO RIGHT LOOKING DOWNSTREAM.
- THE CROSS-SECTION AT PROFILE STATION 2+42 IS LOCATED AT A PROPOSED POOL WHERE THE MAXIMUM BANKFULL DEPTH WOULD BE GREATER THAN AT A RIFFLE BED FEATURE. THE WIDTH OF FLOOD PRONE AREA, WHICH IS MEASURED AT TWICE THE MAXIMUM BANKFULL DEPTH ABOVE THE THALWEG, IS MORE APPROPRIATELY MEASURED AT RIFFLES. THEREFORE, THE PROPOSED FLOOD PRONE AREA WIDTH AT THIS CROSS-SECTION HAS BEEN MEASURED AT A HEIGHT OF 3.4 FEET ABOVE THE BANKFULL STAGE, WHICH IS THE MAXIMUM BANKFULL DEPTH MEASURED AT THE TOP OF THE EXISTING RIFFLE AT PROFILE STATION 0+42.



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MAD RIVER AT
ST. PETER'S CHURCH
CENTRAL STREET, FARRINGTON NH
CONCEPTUAL PROFILE AND
CROSS-SECTIONS

NO.	REVISION	DATE

DATE: OCT 2009
PROJECT #: 0934
ENGINEERED BY:
DRAWN BY: SPS