STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF WEATHERSFIELD
COUNTY OF WINDSOR
ROUTE NO: VT 131; BRIDGE NO: 15

PROJECT LOCATION: APPROXIMATELY 0.33 MILES WEST OF INTERSECTION WITH VT 131 AND TH-1.

PROJECT DESCRIPTION: THE PROJECT SHALL CONSIST OF LINING THE EXISTING CULVERT WITH A NEW CULVERT AND GROUTING SPACE IN BETWEEN, AND MINOR HEADWALL REPAIRS.

LENGTH OF STRUCTURE: 11 FEET
LENGTH OF PROJECT: 50 FEET

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS. THE STANDARDS SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, ARE TO BE FOLLOWED AND CONFORMITY WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

CONCEPTUAL PLANS
JULY-14-2016
# PRELIMINARY INFORMATION SHEET (CULVERT)

## PLAN SHEETS
1. TITLE SHEET
2. PRELIMINARY INFORMATION SHEET
3. TYPICAL SECTION
4. CONVENTIONAL SYMBOL LEGEND
5. LOWER
6. PROFILE
7. CHANNEL AND CULVERT CROSS SECTIONS 1
8. CHANNEL AND CULVERT CROSS SECTIONS 2
9. CHANNEL AND CULVERT CROSS SECTIONS 3
10. RESOURCE SHEET

## STRUCTURES DETAIL SHEETS

## TRAFFIC MAINTENANCE NOTES
1. Maintain two-way traffic on the existing structure.
2. Install and maintain temporary barriers.
3. Sidewalks are not necessary.

## DESIGN VALUES
1. DESIGN LIVE LOAD: 4,000 lbs
2. FUTURE PAVEMENT: 20 years
3. CULVERT SPAN: 20 ft.
4. MIN. WEARING PAVEMENT: 0.5"
5. PRESTRESSING STRAND: 7,000 psi
6. PRESTRESSED CONCRETE STRENGTH: 4,000 psi
7. CONCRETE: HIGH PERFORMANCE CLASS AA
8. WEATHERING: 50 year (2% A.H.
9. STEEL: 60,000 psi
10. CONCRETE: HIGH PERFORMANCE CLASS B
11. CONCRETE: 60,000 psi
12. STRUCTURAL STEEL: ASTM A36
13. NORM. BEARING RESISTANCE: 2,000 psi
14. NORM. BEARING RESISTANCE: 1,000 psi
15. CULVERT CONSTRUCTION NOT REQUIRED.
16. ROCK RESISTANCE (IN SOIL): NA

## LRFD LOAD RATING FACTORS

<table>
<thead>
<tr>
<th>LOADING LEVELS</th>
<th>TRUCK</th>
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<tbody>
<tr>
<td></td>
<td>LOAD</td>
</tr>
<tr>
<td></td>
<td>10</td>
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## TRAFFIC DATA

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AQI</th>
<th>OAH</th>
<th>%D</th>
<th>%T</th>
<th>ADT</th>
<th>100-year ESA (for flexible pavement)</th>
<th>2017 to 2057</th>
<th>NA</th>
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<tbody>
<tr>
<td>2017</td>
<td>500</td>
<td>510</td>
<td>65</td>
<td>4</td>
<td>570</td>
<td>30-year ESA (for flexible pavement)</td>
<td>(Y)</td>
<td>NA</td>
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<tr>
<td>2027</td>
<td>500</td>
<td>540</td>
<td>65</td>
<td>5</td>
<td>580</td>
<td>Design Speed: 50 mph</td>
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## WEATHERSFIELD

<table>
<thead>
<tr>
<th>PROJECT NAME:</th>
<th>STP 0146(15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NUMBER:</td>
<td></td>
</tr>
<tr>
<td>FILE NAME:</td>
<td></td>
</tr>
<tr>
<td>PROJECT LEADER:</td>
<td>1 LEVIES</td>
</tr>
<tr>
<td>DRAWN BY:</td>
<td>A. KUDERKAR</td>
</tr>
<tr>
<td>DESIGNED BY:</td>
<td>1 LEVIES</td>
</tr>
<tr>
<td>PRELIMINARY INFORMATION SHEET:</td>
<td>11</td>
</tr>
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</table>
REPOINT EXIST. MARBLE HEADWALL - REPOINTING MASONRY (20 SY)

FILL VOIDS BETWEEN INLET HEADWALL AND EXISTING PIPE WITH CONTROLLED DENSITY FLOWABLE FILL ABOVE ORDINARY HIGH WATER (OHW) FLOW LINE AND WITH CONCRETE, CLASS D BELOW OHW FLOW LINE (TYP.)

NOTE:
THE CONCRETE GROUT BETWEEN THE PIPES SHALL BE BEVELED AT THE INLET END.
THE PROPOSED LINER PIPE SHALL BE SIX INCHES SHORTER THAN THE EXISTING PIPE TO CONSTRUCT THE BEVELED INLET.
NOTES:

1. ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG L ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG L.

PROJECT NAME: **WEATHERSFIELD**  
PROJECT NUMBER: **STP 0146(16)**  
FILE NAME: **0146(16).dwg**  
PLT DATE: 7/16/2016  
DESIGNED BY: **A. KURDEKAR**  
CHECKED BY: **T. LEVINS**  
DRAWN BY: **A. KURDEKAR**  
NOTE: **SLOPE = -2.5270%**