**EXISTING CROSS SECTION**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DATE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex 2</td>
<td>5/10/19</td>
<td>SPM</td>
</tr>
</tbody>
</table>

**EXISTING 2-LANE SECTION**

<table>
<thead>
<tr>
<th>STREET</th>
<th>LENGTH</th>
<th>TYPE</th>
<th>WIDTH</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Street</td>
<td>13+83 to 16+00</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
</tr>
</tbody>
</table>

**PROPOSED CROSS SECTION**

<table>
<thead>
<tr>
<th>STREET</th>
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<tbody>
<tr>
<td>Spring Street</td>
<td>2+85 to 15+00</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
</tr>
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**PROPOSED CROSS SECTION**

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</thead>
<tbody>
<tr>
<td>Spring Street</td>
<td>6+50 to 10+60</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
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<tbody>
<tr>
<td>Yuba Street</td>
<td>13+83 to 15+00</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
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</thead>
<tbody>
<tr>
<td>Yuba Street</td>
<td>8+93 to 13+63</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
</tr>
</tbody>
</table>

**SPRING STREET**

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</tr>
</thead>
<tbody>
<tr>
<td>Spring Street</td>
<td>13+43 to 16+00</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
</tr>
</tbody>
</table>

**SCALE: 1"=5'**

**NOTE: FOR STORM SEWER, USE TR DET B (MDOT R-83-C)**

**SPRING STREET**

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**SCALE: 1"=5'**

**NOTE: FOR STORM SEWER, USE TR DET B (MDOT R-83-C)**

**SPRING STREET**

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<tbody>
<tr>
<td>Spring Street</td>
<td>3+00 to 6+50</td>
<td>2-Lane</td>
<td>12'</td>
<td>SSN 2144-01</td>
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</tbody>
</table>

**SCALE: 1"=5'**

**NOTE: FOR STORM SEWER, USE TR DET B (MDOT R-83-C)**
EXISTING CROSS SECTION

EXISTING 2-LANE SECTION

PROPOSED CROSS SECTION

PROPOSED 2-LANE SECTION

EX HMA THICKNESS

EXIST HMA, THICKNESS

EX GROUND

LIMITS OF MACHINE GRADING, MODIFIED

EXISTING CONCRETE WALK

EXISTING SIDEWALK TO

EXISTING CONCRETE

EXISTING SIDEWALK (TYP)

SIDEWALK, CONC, 6 INCH

SIDEWALK, CONC, 4 INCH

2% SLOPE

SIDEWALK

APPROX. 26"

VARIES

EX 5'

18' W.B. LANE & PARKING

18' E.B. LANE & PARKING

18' S. B. LANE & PARKING

18' N. B. LANE & PARKING (VARIES)

4 INCH

SIDEWALK

EX 5'

2% SLOPE

EX 5'

VARIES

VARIES

VARIES

VARIES

APPROX 5 INCHES

APPROX. 26"
CITY OF MUSKEGON
SPRING STREET SEWER REROUTE AND BOURDON STREET ALLEY SEWER MICHIGAN EGLE SRF PROJECT NO. 5675-01
MICHIGAN EGLE DWRF PROJECT NO. 7449-01

INTERSECTION DETAILS
EXISTING VALVE AND EXISTING 6" CAST IRON WATERMAIN TO BE RESTRAINED WITH CLAMPS AND TIE RODS BEFORE CUTTING PIPE FOR CAP. TIE RODS AND CLAMPS INCLUDED IN COST FOR CUT AND CAP, 6 INCH WATERMAIN.

DUCTILE IRON MECHANICAL JOINT CAP WITH RETAINING GLANDS

EXISTING LEAD JOINTS TYPICAL

NO SCALE

WATER MAIN DETAIL SHEET

FLOW

FROST LID

FORD HOOD STD. W-3

W / 11.5 INCH LID

OR APPROVED EQUAL

LID SHALL BE SET FLUSH WITH EXISTING GRADE

METER

5.5 FOOT MINIMUM COVER

18 INCH TO 20 INCH TO CENTER OF YOKE

3/4 INCH YOKE BAR

YOKE "L" W/DRAIN FOR 1" COPPER TO 3/4" METER

20" I.D.

STOP FOR 1" COPPER TO 3/4" METER

36 INCH

10.5 INCH

WATER SERVICE - 1 INCH TYPE "K" COPPER

BRICK SUPPORT 4 REQUIRED

P.V.C. PIT

EXPANSION

HANDWHEEL

WHERE POSSIBLE, EXISTING OUTSIDE METERS SHALL BE RELOCATED, BY THE CITY, INSIDE THE RESIDENCE OR PLACE OF BUSINESS. IF METERS HAVE TO REMAIN OUTSIDE, NEW METER PITS SHALL BE INSTALLED ON THE PROPERTY LINE. ALL ABANDONED METER PITS SHALL BE REMOVED BY THE CONTRACTOR, THE REMOVAL TO BE INCLUDED IN THE NEW WATER SERVICE.

PIPE RESTRAINT SCHEDULE

LENGTH OF RESTRAINT REQUIRED * (FEET)

NO SCALE

PIPE RESTRAINT SCHEDULE

NO SCALE