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ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

NEW
CHURCH

TABERNACLE
BAPTIST CHURCH
2445 FOURTH ST.
SUDELL, LA

DRAINAGE
DETAILS AND
CALCULATIONS

REV:

SCALE AS NOTED

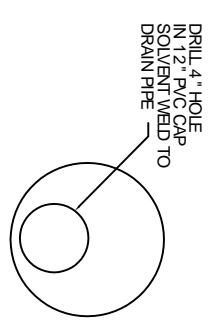
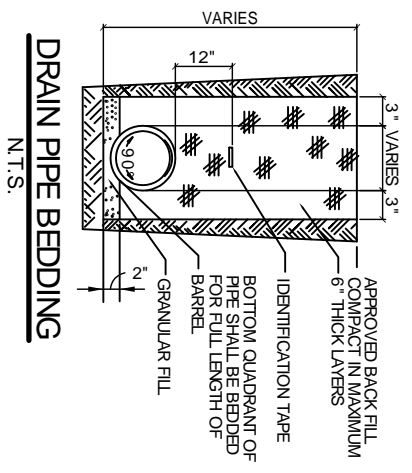
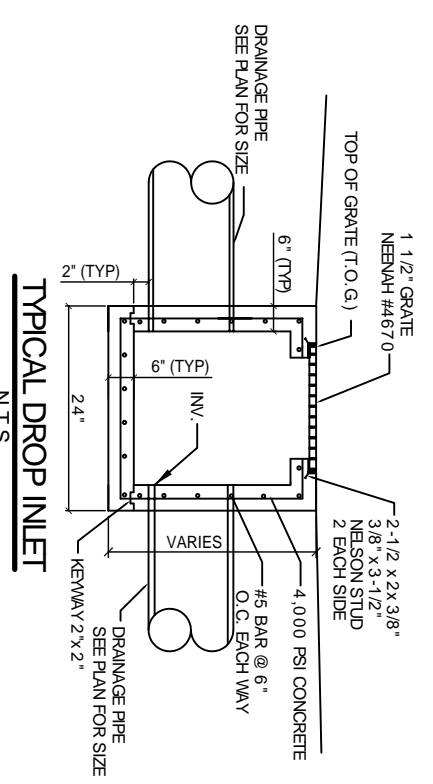
JOB#: 2050

DATE: 2-8-10

SHEET 7

C-6

OF 25



PROJECT:																		
[1] RATIONAL METHOD: Q=Aci																		
Peak discharge of watershed in cubic feet per second (cfs) due to maximum storm																		
[4] TC=	$\left(L^{0.8} \left(\frac{1000}{e} - 9 \right)^{0.7} \right)$																	
Time of concentration = time required for rain falling at most remote point to reach																		
<table border="1"> <tr> <td>0.9</td> <td>5824</td> <td>0.134</td> </tr> <tr> <td>0.25</td> <td>0</td> <td>0.000</td> </tr> <tr> <td>0.15</td> <td>22963</td> <td>0.527</td> </tr> <tr> <td>0.30</td> <td>28787</td> <td>0.661</td> </tr> </table>				0.9	5824	0.134	0.25	0	0.000	0.15	22963	0.527	0.30	28787	0.661			
0.9	5824	0.134																
0.25	0	0.000																
0.15	22963	0.527																
0.30	28787	0.661																
Expected rainfall		Elev diff = 1																
<table border="1"> <tr> <td>0.30</td> <td>30</td> <td></td> </tr> <tr> <td>1.8667</td> <td>1.8667</td> <td></td> </tr> <tr> <td>8.71</td> <td>8.71</td> <td></td> </tr> <tr> <td>2.33</td> <td>2.33</td> <td></td> </tr> </table>				0.30	30		1.8667	1.8667		8.71	8.71		2.33	2.33				
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q		Elev diff = 2.69																
<table border="1"> <tr> <td>0.9</td> <td>77185</td> <td>1.772</td> </tr> <tr> <td>0.14</td> <td></td> <td>0.000</td> </tr> <tr> <td>0.2</td> <td>779431.3</td> <td>17.833</td> </tr> <tr> <td>0.26</td> <td>856376.3</td> <td>19.665</td> </tr> </table>				0.9	77185	1.772	0.14		0.000	0.2	779431.3	17.833	0.26	856376.3	19.665			
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sqft =		sqft =																
<table border="1"> <tr> <td>959</td> <td>959</td> <td></td> </tr> <tr> <td>0.26</td> <td>0.26</td> <td></td> </tr> <tr> <td>0.2805</td> <td>0.2805</td> <td></td> </tr> <tr> <td>30.42</td> <td>30.42</td> <td></td> </tr> <tr> <td>2.33</td> <td>2.33</td> <td></td> </tr> </table>				959	959		0.26	0.26		0.2805	0.2805		30.42	30.42		2.33	2.33	
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0.2805	0.2805																	
30.42	30.42																	
2.33	2.33																	
and from Rainfall		Elev diff =																
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- NOTES:
- 1) DRAIN PIPE & FITTINGS WITHIN PROPERTY LINE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE, MEETING CLASS 100 C-900 PVC.
 - 2) ELEVATIONS SHOWN ARE M.S.L.
 - 3) FIELD VERIFY ALL ELEVATIONS AND DRAINAGE SYSTEM PLACEMENT PRIOR TO START OF WORK.
 - 4) MUCK OUT 24" DEEP FOR FOUNDATION PAD MINIMUM, OR TO UNDISTURBED SOIL, CAPABLE OF 1500 PSF BEARING.
 - 5) DOWN SPOUTS SHALL FLOW INTO SUB-SURFACE DRAINAGE PROPERTY. NEW DRAINAGE CALCULATIONS ARE DETERMINED ACCORDINGLY.
 - 6) THERE IS NO EVIDENCE OF EXISTING OFF-SITE FLOW CROSSING THE

GUTTERS AND DOWN SPOUTS TO BE SEAMLESS ALUMINUM 24 GAUGE. COLOR TO BE SELECTED BY OWNER. GUTTERS TO BE TOGETHER IN CROSS SECTION, MINIMUM 6" WIDTH.