



FAYETTEVILLE PUBLIC WORKS COMMISSION

PROCUREMENT DEPARTMENT

<https://www.faypwc.com/bids/>

**Bid Addendum**

**PWC Number:** PWC2526102

**Bid Title:** Lift Station 33 Cargill Lift Station Structural Repair

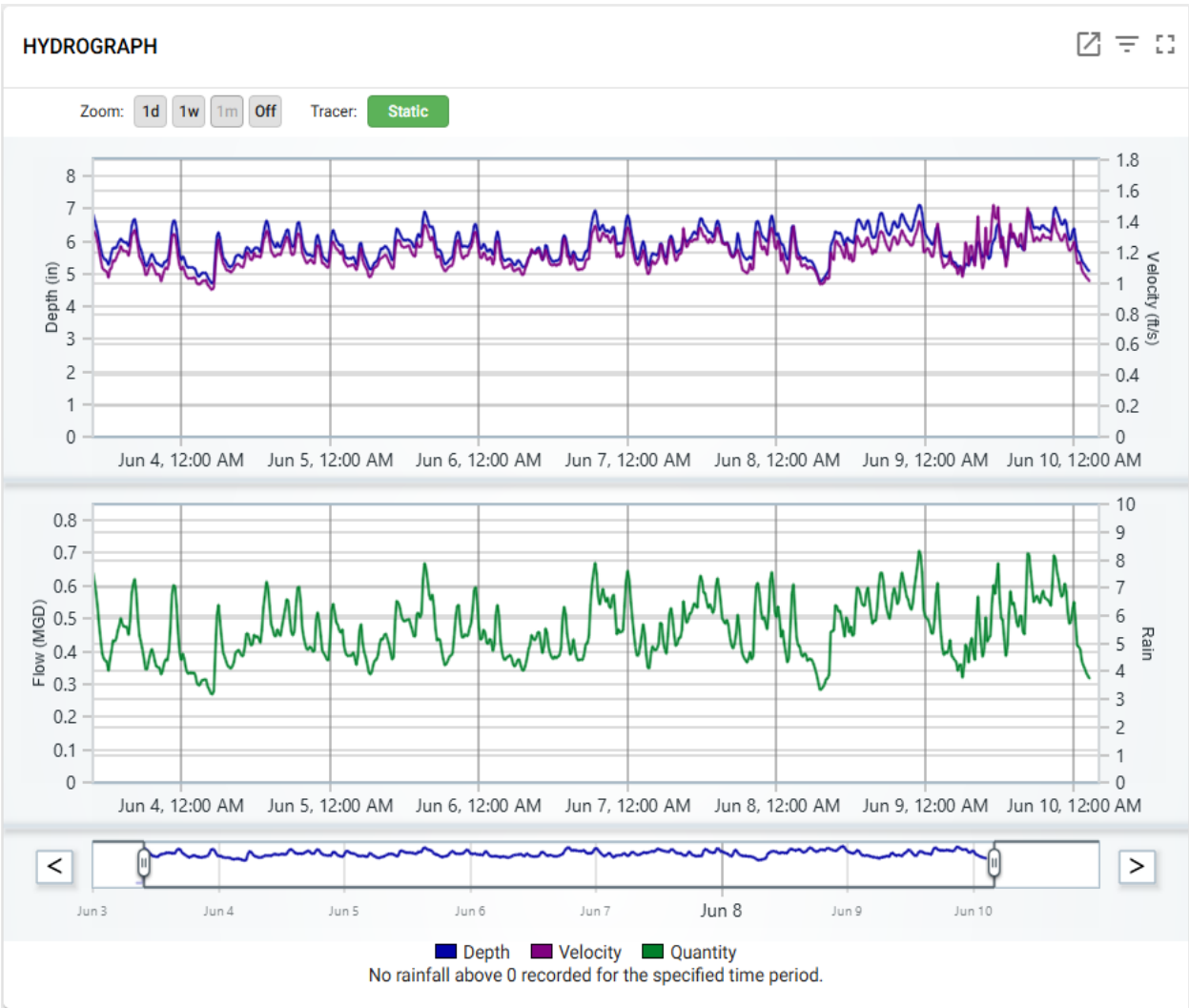
**Bid Opening Date and Time:** June 18, 2026 @ 2:00 pm

**Addendum Number:** 3

**Addendum Date:** June 10, 2026

**Procurement Advisor:** *Shelby Lesane*  
*procurement@faypwc.com*

1. Addenda acknowledgement is required within the IFB Bid Pricing Form.
2. The solicitation is hereby modified as follows:
  - M1. APPENDICES** - Are hereby attached and included in the contract documents as attached to this Amendment No.3.
    - Appendix C - Cargill Flow Data
    - Appendix D – Wet Well Photos



Min: 4.71 (in) on 06/04/2026 at 05:00:00 Max: 7.12 (in) on 06/08/2026 at 23:00:00  <b>5.88 in</b> Average	Min: 0.96 (ft/s) on 06/04/2026 at 05:00:00 Max: 1.51 (ft/s) on 06/09/2026 at 11:00:00  <b>1.19 ft/s</b> Average	Min: 0.269 (MGD) on 06/04/2026 at 05:00:00 Max: 0.707 (MGD) on 06/08/2026 at 23:00:00  <b>3.125 MG</b> Total	<b>0.466 MGD</b> Average	<b>0 in</b> Total
<b>DEPTH</b>	<b>VELOCITY</b>	<b>QUANTITY</b>		<b>RAIN</b>

Average Daily Flow: 0.466 MGD

Peak Flow: 0.707 MGD

The temporary bypass pumping system shall be designed to maintain the flows necessary to meet the requirements of each particular location. The temporary sewer bypass system shall have the capacity to handle the flows outlined in these Contract Documents. The temporary sewer bypass system shall be sized to handle 2.5 times the Average Daily Flow Rate, or the Specified Peak Flow – whichever is greater.

## Cargill Flow Data

DateTime	QUANTITY	DEPTH	VELOCITY
MM/dd/yyyy HH:mm:ss	MGD	in	ft/s
6/3/2026 9:45	0.640	6.831	1.343
6/3/2026 10:00	0.611	6.658	1.330
6/3/2026 10:15	0.580	6.486	1.309
6/3/2026 10:30	0.536	6.279	1.267
6/3/2026 10:45	0.482	6.012	1.210
6/3/2026 11:00	0.436	5.796	1.154
6/3/2026 11:15	0.394	5.576	1.101
6/3/2026 11:30	0.378	5.479	1.083
6/3/2026 11:45	0.372	5.431	1.080
6/3/2026 12:00	0.369	5.413	1.074
6/3/2026 12:15	0.341	5.270	1.034
6/3/2026 12:30	0.375	5.424	1.090
6/3/2026 12:45	0.401	5.661	1.097
6/3/2026 13:00	0.434	5.799	1.148
6/3/2026 13:15	0.430	5.792	1.139
6/3/2026 13:30	0.438	5.790	1.160
6/3/2026 13:45	0.462	5.912	1.188
6/3/2026 14:00	0.479	6.006	1.205
6/3/2026 14:15	0.502	6.084	1.241
6/3/2026 14:30	0.483	6.013	1.214
6/3/2026 14:45	0.475	5.972	1.205
6/3/2026 15:00	0.477	5.974	1.209
6/3/2026 15:15	0.472	5.950	1.203
6/3/2026 15:30	0.450	5.845	1.176
6/3/2026 15:45	0.493	6.051	1.227
6/3/2026 16:00	0.576	6.461	1.308
6/3/2026 16:15	0.605	6.627	1.326
6/3/2026 16:30	0.621	6.689	1.344
6/3/2026 16:45	0.575	6.462	1.305
6/3/2026 17:00	0.502	6.066	1.245
6/3/2026 17:15	0.449	5.859	1.171
6/3/2026 17:30	0.429	5.738	1.151
6/3/2026 17:45	0.405	5.588	1.128
6/3/2026 18:00	0.377	5.391	1.104
6/3/2026 18:15	0.345	5.252	1.051
6/3/2026 18:30	0.347	5.252	1.056
6/3/2026 18:45	0.372	5.377	1.093
6/3/2026 19:00	0.393	5.509	1.117
6/3/2026 19:15	0.408	5.617	1.128
6/3/2026 19:30	0.392	5.537	1.105
6/3/2026 19:45	0.370	5.404	1.080

6/3/2026 20:00	0.353	5.323	1.052
6/3/2026 20:15	0.353	5.296	1.060
6/3/2026 20:30	0.350	5.293	1.053
6/3/2026 20:45	0.330	5.228	1.010
6/3/2026 21:00	0.342	5.234	1.045
6/3/2026 21:15	0.365	5.359	1.080
6/3/2026 21:30	0.376	5.389	1.102
6/3/2026 21:45	0.372	5.399	1.088
6/3/2026 22:00	0.401	5.571	1.123
6/3/2026 22:15	0.473	5.923	1.214
6/3/2026 22:30	0.573	6.447	1.304
6/3/2026 22:45	0.602	6.637	1.317
6/3/2026 23:00	0.597	6.617	1.312
6/3/2026 23:15	0.538	6.356	1.249
6/3/2026 23:30	0.457	5.944	1.166
6/3/2026 23:45	0.396	5.573	1.107
6/4/2026 0:00	0.374	5.427	1.086
6/4/2026 0:15	0.393	5.540	1.107
6/4/2026 0:30	0.376	5.460	1.081
6/4/2026 0:45	0.348	5.285	1.050
6/4/2026 1:00	0.334	5.196	1.032
6/4/2026 1:15	0.332	5.194	1.027
6/4/2026 1:30	0.337	5.213	1.035
6/4/2026 1:45	0.332	5.191	1.026
6/4/2026 2:00	0.336	5.191	1.038
6/4/2026 2:15	0.330	5.148	1.032
6/4/2026 2:30	0.306	5.007	0.996
6/4/2026 2:45	0.297	4.915	0.994
6/4/2026 3:00	0.298	4.935	0.990
6/4/2026 3:15	0.310	5.024	1.004
6/4/2026 3:30	0.314	5.022	1.018
6/4/2026 3:45	0.313	5.042	1.010
6/4/2026 4:00	0.315	5.023	1.021
6/4/2026 4:15	0.294	4.903	0.987
6/4/2026 4:30	0.285	4.826	0.979
6/4/2026 4:45	0.273	4.745	0.960
6/4/2026 5:00	0.269	4.707	0.957
6/4/2026 5:15	0.279	4.785	0.969
6/4/2026 5:30	0.399	5.556	1.120
6/4/2026 5:45	0.507	6.144	1.235
6/4/2026 6:00	0.542	6.277	1.282
6/4/2026 6:15	0.492	6.098	1.211
6/4/2026 6:30	0.441	5.772	1.174
6/4/2026 6:45	0.397	5.508	1.130

6/4/2026 7:00	0.384	5.434	1.113
6/4/2026 7:15	0.369	5.373	1.086
6/4/2026 7:30	0.356	5.265	1.078
6/4/2026 7:45	0.352	5.211	1.082
6/4/2026 8:00	0.348	5.218	1.067
6/4/2026 8:15	0.355	5.258	1.079
6/4/2026 8:30	0.368	5.348	1.091
6/4/2026 8:45	0.396	5.534	1.119
6/4/2026 9:00	0.400	5.568	1.120
6/4/2026 9:15	0.405	5.595	1.125
6/4/2026 9:30	0.396	5.559	1.111
6/4/2026 9:45	0.386	5.491	1.102
6/4/2026 10:00	0.387	5.503	1.102
6/4/2026 10:15	0.414	5.621	1.145
6/4/2026 10:30	0.454	5.813	1.197
6/4/2026 10:45	0.454	5.809	1.196
6/4/2026 11:00	0.435	5.743	1.167
6/4/2026 11:15	0.418	5.647	1.148
6/4/2026 11:30	0.423	5.680	1.153
6/4/2026 11:45	0.451	5.784	1.197
6/4/2026 12:00	0.442	5.796	1.169
6/4/2026 12:15	0.447	5.813	1.177
6/4/2026 12:30	0.439	5.764	1.171
6/4/2026 12:45	0.426	5.664	1.164
6/4/2026 13:00	0.464	5.883	1.202
6/4/2026 13:15	0.534	6.231	1.276
6/4/2026 13:30	0.572	6.468	1.298
6/4/2026 13:45	0.613	6.639	1.340
6/4/2026 14:00	0.592	6.525	1.326
6/4/2026 14:15	0.540	6.274	1.276
6/4/2026 14:30	0.482	6.036	1.205
6/4/2026 14:45	0.469	5.968	1.191
6/4/2026 15:00	0.448	5.853	1.170
6/4/2026 15:15	0.446	5.807	1.175
6/4/2026 15:30	0.467	5.958	1.187
6/4/2026 15:45	0.455	5.855	1.187
6/4/2026 16:00	0.447	5.808	1.180
6/4/2026 16:15	0.476	5.952	1.213
6/4/2026 16:30	0.502	6.086	1.239
6/4/2026 16:45	0.528	6.201	1.270
6/4/2026 17:00	0.559	6.347	1.302
6/4/2026 17:15	0.554	6.355	1.288
6/4/2026 17:30	0.503	6.072	1.245
6/4/2026 17:45	0.459	5.888	1.188

6/4/2026 18:00	0.449	5.821	1.180
6/4/2026 18:15	0.462	5.897	1.194
6/4/2026 18:30	0.537	6.260	1.275
6/4/2026 18:45	0.593	6.557	1.319
6/4/2026 19:00	0.597	6.586	1.320
6/4/2026 19:15	0.554	6.349	1.289
6/4/2026 19:30	0.474	5.990	1.197
6/4/2026 19:45	0.443	5.800	1.172
6/4/2026 20:00	0.422	5.689	1.146
6/4/2026 20:15	0.406	5.604	1.126
6/4/2026 20:30	0.406	5.570	1.136
6/4/2026 20:45	0.415	5.607	1.150
6/4/2026 21:00	0.410	5.556	1.151
6/4/2026 21:15	0.399	5.518	1.131
6/4/2026 21:30	0.403	5.579	1.125
6/4/2026 21:45	0.496	6.083	1.227
6/4/2026 22:00	0.519	6.204	1.247
6/4/2026 22:15	0.493	6.030	1.234
6/4/2026 22:30	0.447	5.799	1.181
6/4/2026 22:45	0.402	5.572	1.125
6/4/2026 23:00	0.394	5.483	1.129
6/4/2026 23:15	0.386	5.453	1.114
6/4/2026 23:30	0.375	5.379	1.101
6/4/2026 23:45	0.373	5.374	1.099
6/5/2026 0:00	0.437	5.752	1.169
6/5/2026 0:15	0.525	6.207	1.261
6/5/2026 0:30	0.545	6.346	1.269
6/5/2026 0:45	0.519	6.215	1.244
6/5/2026 1:00	0.488	6.032	1.220
6/5/2026 1:15	0.481	5.981	1.217
6/5/2026 1:30	0.463	5.881	1.200
6/5/2026 1:45	0.457	5.882	1.185
6/5/2026 2:00	0.467	5.878	1.210
6/5/2026 2:15	0.418	5.656	1.145
6/5/2026 2:30	0.396	5.501	1.127
6/5/2026 2:45	0.387	5.473	1.109
6/5/2026 3:00	0.387	5.481	1.107
6/5/2026 3:15	0.387	5.459	1.115
6/5/2026 3:30	0.389	5.477	1.115
6/5/2026 3:45	0.397	5.531	1.122
6/5/2026 4:00	0.380	5.423	1.104
6/5/2026 4:15	0.359	5.280	1.083
6/5/2026 4:30	0.389	5.460	1.120
6/5/2026 4:45	0.463	5.908	1.192

6/5/2026 5:00	0.483	5.957	1.228
6/5/2026 5:15	0.428	5.721	1.152
6/5/2026 5:30	0.399	5.550	1.121
6/5/2026 5:45	0.383	5.462	1.101
6/5/2026 6:00	0.363	5.321	1.083
6/5/2026 6:15	0.337	5.196	1.040
6/5/2026 6:30	0.330	5.133	1.038
6/5/2026 6:45	0.339	5.164	1.057
6/5/2026 7:00	0.362	5.286	1.093
6/5/2026 7:15	0.374	5.365	1.103
6/5/2026 7:30	0.376	5.376	1.105
6/5/2026 7:45	0.390	5.461	1.122
6/5/2026 8:00	0.423	5.667	1.155
6/5/2026 8:15	0.439	5.790	1.163
6/5/2026 8:30	0.436	5.758	1.165
6/5/2026 8:45	0.450	5.834	1.179
6/5/2026 9:00	0.454	5.855	1.184
6/5/2026 9:15	0.438	5.781	1.162
6/5/2026 9:30	0.422	5.714	1.138
6/5/2026 9:45	0.399	5.562	1.118
6/5/2026 10:00	0.376	5.420	1.093
6/5/2026 10:15	0.383	5.473	1.098
6/5/2026 10:30	0.497	6.105	1.223
6/5/2026 10:45	0.554	6.399	1.275
6/5/2026 11:00	0.548	6.342	1.277
6/5/2026 11:15	0.535	6.240	1.275
6/5/2026 11:30	0.508	6.136	1.241
6/5/2026 11:45	0.496	6.059	1.232
6/5/2026 12:00	0.491	6.024	1.230
6/5/2026 12:15	0.495	6.047	1.234
6/5/2026 12:30	0.496	6.040	1.239
6/5/2026 12:45	0.499	6.042	1.244
6/5/2026 13:00	0.481	6.001	1.211
6/5/2026 13:15	0.466	5.942	1.191
6/5/2026 13:30	0.446	5.816	1.173
6/5/2026 13:45	0.447	5.825	1.175
6/5/2026 14:00	0.514	6.110	1.263
6/5/2026 14:15	0.518	6.233	1.238
6/5/2026 14:30	0.503	6.122	1.231
6/5/2026 14:45	0.515	6.196	1.239
6/5/2026 15:00	0.620	6.695	1.339
6/5/2026 15:15	0.669	6.921	1.380
6/5/2026 15:30	0.649	6.813	1.369
6/5/2026 15:45	0.613	6.645	1.337

6/5/2026 16:00	0.572	6.469	1.296
6/5/2026 16:15	0.557	6.424	1.275
6/5/2026 16:30	0.573	6.459	1.301
6/5/2026 16:45	0.535	6.295	1.260
6/5/2026 17:00	0.471	5.975	1.193
6/5/2026 17:15	0.433	5.743	1.162
6/5/2026 17:30	0.439	5.740	1.177
6/5/2026 17:45	0.434	5.726	1.169
6/5/2026 18:00	0.404	5.616	1.117
6/5/2026 18:15	0.378	5.427	1.096
6/5/2026 18:30	0.358	5.297	1.076
6/5/2026 18:45	0.362	5.314	1.081
6/5/2026 19:00	0.372	5.366	1.099
6/5/2026 19:15	0.384	5.448	1.108
6/5/2026 19:30	0.388	5.475	1.111
6/5/2026 19:45	0.393	5.517	1.116
6/5/2026 20:00	0.443	5.827	1.163
6/5/2026 20:15	0.501	6.097	1.234
6/5/2026 20:30	0.537	6.270	1.272
6/5/2026 20:45	0.542	6.286	1.278
6/5/2026 21:00	0.485	6.034	1.213
6/5/2026 21:15	0.445	5.825	1.170
6/5/2026 21:30	0.442	5.842	1.156
6/5/2026 21:45	0.453	5.871	1.177
6/5/2026 22:00	0.447	5.822	1.174
6/5/2026 22:15	0.449	5.822	1.181
6/5/2026 22:30	0.471	5.886	1.220
6/5/2026 22:45	0.486	5.976	1.231
6/5/2026 23:00	0.528	6.200	1.269
6/5/2026 23:15	0.588	6.491	1.325
6/5/2026 23:30	0.596	6.532	1.332
6/5/2026 23:45	0.547	6.316	1.282
6/6/2026 0:00	0.473	5.948	1.207
6/6/2026 0:15	0.436	5.766	1.162
6/6/2026 0:30	0.439	5.790	1.162
6/6/2026 0:45	0.466	5.923	1.197
6/6/2026 1:00	0.458	5.866	1.190
6/6/2026 1:15	0.427	5.718	1.152
6/6/2026 1:30	0.423	5.682	1.151
6/6/2026 1:45	0.438	5.765	1.168
6/6/2026 2:00	0.433	5.734	1.163
6/6/2026 2:15	0.401	5.584	1.118
6/6/2026 2:30	0.421	5.659	1.153
6/6/2026 2:45	0.515	6.118	1.262

6/6/2026 3:00	0.542	6.305	1.273
6/6/2026 3:15	0.509	6.100	1.254
6/6/2026 3:30	0.431	5.743	1.155
6/6/2026 3:45	0.397	5.522	1.126
6/6/2026 4:00	0.377	5.426	1.095
6/6/2026 4:15	0.374	5.394	1.097
6/6/2026 4:30	0.383	5.440	1.107
6/6/2026 4:45	0.383	5.456	1.105
6/6/2026 5:00	0.390	5.456	1.124
6/6/2026 5:15	0.383	5.406	1.119
6/6/2026 5:30	0.363	5.321	1.085
6/6/2026 5:45	0.354	5.262	1.075
6/6/2026 6:00	0.361	5.293	1.086
6/6/2026 6:15	0.374	5.416	1.090
6/6/2026 6:30	0.376	5.408	1.097
6/6/2026 6:45	0.358	5.312	1.072
6/6/2026 7:00	0.343	5.229	1.051
6/6/2026 7:15	0.343	5.201	1.058
6/6/2026 7:30	0.357	5.216	1.097
6/6/2026 7:45	0.378	5.345	1.122
6/6/2026 8:00	0.405	5.481	1.160
6/6/2026 8:15	0.420	5.567	1.175
6/6/2026 8:30	0.450	5.701	1.220
6/6/2026 8:45	0.439	5.675	1.197
6/6/2026 9:00	0.434	5.637	1.193
6/6/2026 9:15	0.442	5.721	1.191
6/6/2026 9:30	0.458	5.805	1.209
6/6/2026 9:45	0.458	5.794	1.211
6/6/2026 10:00	0.424	5.615	1.172
6/6/2026 10:15	0.395	5.419	1.149
6/6/2026 10:30	0.416	5.542	1.173
6/6/2026 10:45	0.470	5.888	1.217
6/6/2026 11:00	0.455	5.839	1.191
6/6/2026 11:15	0.414	5.603	1.149
6/6/2026 11:30	0.393	5.502	1.121
6/6/2026 11:45	0.383	5.413	1.116
6/6/2026 12:00	0.377	5.358	1.114
6/6/2026 12:15	0.385	5.408	1.123
6/6/2026 12:30	0.379	5.396	1.109
6/6/2026 12:45	0.385	5.408	1.124
6/6/2026 13:00	0.388	5.462	1.117
6/6/2026 13:15	0.410	5.595	1.141
6/6/2026 13:30	0.498	6.053	1.238
6/6/2026 13:45	0.536	6.192	1.292

6/6/2026 14:00	0.513	6.101	1.262
6/6/2026 14:15	0.450	5.867	1.169
6/6/2026 14:30	0.422	5.607	1.169
6/6/2026 14:45	0.390	5.475	1.118
6/6/2026 15:00	0.405	5.553	1.137
6/6/2026 15:15	0.437	5.692	1.185
6/6/2026 15:30	0.406	5.612	1.125
6/6/2026 15:45	0.383	5.480	1.096
6/6/2026 16:00	0.372	5.421	1.082
6/6/2026 16:15	0.376	5.432	1.092
6/6/2026 16:30	0.374	5.427	1.086
6/6/2026 16:45	0.375	5.414	1.091
6/6/2026 17:00	0.393	5.567	1.102
6/6/2026 17:15	0.423	5.707	1.145
6/6/2026 17:30	0.425	5.681	1.156
6/6/2026 17:45	0.446	5.883	1.155
6/6/2026 18:00	0.541	6.349	1.260
6/6/2026 18:15	0.604	6.621	1.325
6/6/2026 18:30	0.639	6.826	1.344
6/6/2026 18:45	0.670	6.948	1.373
6/6/2026 19:00	0.636	6.788	1.348
6/6/2026 19:15	0.565	6.463	1.282
6/6/2026 19:30	0.543	6.334	1.267
6/6/2026 19:45	0.569	6.446	1.296
6/6/2026 20:00	0.591	6.510	1.328
6/6/2026 20:15	0.567	6.365	1.315
6/6/2026 20:30	0.551	6.294	1.297
6/6/2026 20:45	0.564	6.349	1.312
6/6/2026 21:00	0.539	6.282	1.273
6/6/2026 21:15	0.532	6.268	1.260
6/6/2026 21:30	0.564	6.415	1.293
6/6/2026 21:45	0.573	6.441	1.307
6/6/2026 22:00	0.519	6.182	1.254
6/6/2026 22:15	0.452	5.899	1.167
6/6/2026 22:30	0.468	5.937	1.197
6/6/2026 22:45	0.457	5.944	1.165
6/6/2026 23:00	0.460	5.928	1.178
6/6/2026 23:15	0.463	5.953	1.178
6/6/2026 23:30	0.538	6.279	1.271
6/6/2026 23:45	0.614	6.659	1.337
6/7/2026 0:00	0.646	6.806	1.363
6/7/2026 0:15	0.618	6.674	1.342
6/7/2026 0:30	0.556	6.367	1.289
6/7/2026 0:45	0.502	6.104	1.235

6/7/2026 1:00	0.456	5.872	1.185
6/7/2026 1:15	0.413	5.629	1.140
6/7/2026 1:30	0.387	5.446	1.118
6/7/2026 1:45	0.389	5.466	1.117
6/7/2026 2:00	0.415	5.618	1.147
6/7/2026 2:15	0.448	5.846	1.172
6/7/2026 2:30	0.483	6.008	1.215
6/7/2026 2:45	0.454	5.857	1.183
6/7/2026 3:00	0.389	5.528	1.101
6/7/2026 3:15	0.351	5.292	1.057
6/7/2026 3:30	0.349	5.239	1.066
6/7/2026 3:45	0.392	5.509	1.115
6/7/2026 4:00	0.416	5.635	1.145
6/7/2026 4:15	0.406	5.611	1.124
6/7/2026 4:30	0.403	5.582	1.124
6/7/2026 4:45	0.409	5.577	1.142
6/7/2026 5:00	0.424	5.658	1.161
6/7/2026 5:15	0.487	5.931	1.247
6/7/2026 5:30	0.484	5.917	1.245
6/7/2026 5:45	0.430	5.664	1.175
6/7/2026 6:00	0.405	5.532	1.145
6/7/2026 6:15	0.393	5.494	1.121
6/7/2026 6:30	0.449	5.766	1.196
6/7/2026 6:45	0.516	6.079	1.276
6/7/2026 7:00	0.532	6.173	1.287
6/7/2026 7:15	0.500	6.069	1.240
6/7/2026 7:30	0.451	5.813	1.188
6/7/2026 7:45	0.417	5.655	1.143
6/7/2026 8:00	0.423	5.668	1.154
6/7/2026 8:15	0.442	5.724	1.191
6/7/2026 8:30	0.441	5.734	1.186
6/7/2026 8:45	0.465	5.852	1.212
6/7/2026 9:00	0.553	6.111	1.357
6/7/2026 9:15	0.514	6.066	1.276
6/7/2026 9:30	0.487	5.979	1.232
6/7/2026 9:45	0.495	6.002	1.247
6/7/2026 10:00	0.515	6.068	1.278
6/7/2026 10:15	0.517	6.119	1.267
6/7/2026 10:30	0.533	6.234	1.273
6/7/2026 10:45	0.547	6.302	1.285
6/7/2026 11:00	0.539	6.244	1.283
6/7/2026 11:15	0.533	6.200	1.281
6/7/2026 11:30	0.605	6.535	1.351
6/7/2026 11:45	0.631	6.709	1.360

6/7/2026 12:00	0.615	6.682	1.331
6/7/2026 12:15	0.579	6.511	1.300
6/7/2026 12:30	0.577	6.468	1.307
6/7/2026 12:45	0.551	6.378	1.273
6/7/2026 13:00	0.532	6.277	1.259
6/7/2026 13:15	0.544	6.271	1.288
6/7/2026 13:30	0.533	6.265	1.264
6/7/2026 13:45	0.517	6.123	1.265
6/7/2026 14:00	0.532	6.199	1.279
6/7/2026 14:15	0.599	6.513	1.344
6/7/2026 14:30	0.623	6.637	1.362
6/7/2026 14:45	0.592	6.516	1.327
6/7/2026 15:00	0.551	6.262	1.307
6/7/2026 15:15	0.501	6.025	1.255
6/7/2026 15:30	0.492	5.936	1.259
6/7/2026 15:45	0.484	5.905	1.246
6/7/2026 16:00	0.496	5.965	1.261
6/7/2026 16:15	0.481	5.914	1.238
6/7/2026 16:30	0.442	5.723	1.191
6/7/2026 16:45	0.420	5.572	1.175
6/7/2026 17:00	0.409	5.507	1.164
6/7/2026 17:15	0.424	5.595	1.180
6/7/2026 17:30	0.456	5.823	1.198
6/7/2026 17:45	0.512	6.253	1.218
6/7/2026 18:00	0.477	6.055	1.187
6/7/2026 18:15	0.424	5.752	1.134
6/7/2026 18:30	0.394	5.624	1.088
6/7/2026 18:45	0.381	5.529	1.076
6/7/2026 19:00	0.374	5.474	1.074
6/7/2026 19:15	0.366	5.428	1.061
6/7/2026 19:30	0.378	5.488	1.079
6/7/2026 19:45	0.399	5.542	1.126
6/7/2026 20:00	0.376	5.449	1.086
6/7/2026 20:15	0.387	5.543	1.091
6/7/2026 20:30	0.522	6.223	1.250
6/7/2026 20:45	0.600	6.583	1.326
6/7/2026 21:00	0.609	6.622	1.335
6/7/2026 21:15	0.578	6.487	1.304
6/7/2026 21:30	0.523	6.261	1.240
6/7/2026 21:45	0.498	6.137	1.216
6/7/2026 22:00	0.505	6.113	1.239
6/7/2026 22:15	0.486	6.042	1.213
6/7/2026 22:30	0.467	5.982	1.181
6/7/2026 22:45	0.521	6.136	1.271

6/7/2026 23:00	0.617	6.652	1.344
6/7/2026 23:15	0.642	6.791	1.359
6/7/2026 23:30	0.598	6.605	1.317
6/7/2026 23:45	0.520	6.253	1.236
6/8/2026 0:00	0.505	6.179	1.220
6/8/2026 0:15	0.537	6.250	1.276
6/8/2026 0:30	0.499	6.055	1.240
6/8/2026 0:45	0.444	5.904	1.143
6/8/2026 1:00	0.465	5.918	1.193
6/8/2026 1:15	0.426	5.779	1.131
6/8/2026 1:30	0.396	5.565	1.108
6/8/2026 1:45	0.367	5.438	1.062
6/8/2026 2:00	0.379	5.469	1.088
6/8/2026 2:15	0.478	5.995	1.205
6/8/2026 2:30	0.576	6.441	1.312
6/8/2026 2:45	0.605	6.480	1.368
6/8/2026 3:00	0.516	6.112	1.267
6/8/2026 3:15	0.443	5.805	1.170
6/8/2026 3:30	0.418	5.636	1.152
6/8/2026 3:45	0.416	5.550	1.170
6/8/2026 4:00	0.391	5.512	1.110
6/8/2026 4:15	0.384	5.454	1.108
6/8/2026 4:30	0.394	5.507	1.120
6/8/2026 4:45	0.391	5.496	1.116
6/8/2026 5:00	0.371	5.383	1.090
6/8/2026 5:15	0.377	5.398	1.103
6/8/2026 5:30	0.378	5.411	1.103
6/8/2026 5:45	0.373	5.370	1.099
6/8/2026 6:00	0.361	5.279	1.090
6/8/2026 6:15	0.346	5.169	1.078
6/8/2026 6:30	0.328	5.048	1.055
6/8/2026 6:45	0.306	4.878	1.035
6/8/2026 7:00	0.283	4.757	0.993
6/8/2026 7:15	0.285	4.781	0.992
6/8/2026 7:30	0.292	4.845	0.995
6/8/2026 7:45	0.299	4.890	1.007
6/8/2026 8:00	0.316	4.972	1.038
6/8/2026 8:15	0.318	5.044	1.024
6/8/2026 8:30	0.330	5.142	1.034
6/8/2026 8:45	0.459	5.841	1.200
6/8/2026 9:00	0.462	5.998	1.165
6/8/2026 9:15	0.464	6.077	1.149
6/8/2026 9:30	0.541	6.305	1.271
6/8/2026 9:45	0.537	6.265	1.273

6/8/2026 10:00	0.521	6.227	1.245
6/8/2026 10:15	0.524	6.270	1.242
6/8/2026 10:30	0.502	6.174	1.215
6/8/2026 10:45	0.473	6.026	1.184
6/8/2026 11:00	0.445	5.860	1.159
6/8/2026 11:15	0.504	6.047	1.257
6/8/2026 11:30	0.491	6.118	1.204
6/8/2026 11:45	0.458	6.007	1.152
6/8/2026 12:00	0.476	6.029	1.191
6/8/2026 12:15	0.448	5.960	1.138
6/8/2026 12:30	0.451	5.952	1.148
6/8/2026 12:45	0.534	6.319	1.251
6/8/2026 13:00	0.595	6.617	1.307
6/8/2026 13:15	0.591	6.677	1.282
6/8/2026 13:30	0.574	6.605	1.263
6/8/2026 13:45	0.548	6.500	1.234
6/8/2026 14:00	0.540	6.380	1.248
6/8/2026 14:15	0.540	6.378	1.248
6/8/2026 14:30	0.579	6.558	1.287
6/8/2026 14:45	0.595	6.652	1.296
6/8/2026 15:00	0.554	6.508	1.244
6/8/2026 15:15	0.514	6.244	1.224
6/8/2026 15:30	0.484	6.120	1.186
6/8/2026 15:45	0.495	6.102	1.218
6/8/2026 16:00	0.493	6.158	1.198
6/8/2026 16:15	0.532	6.370	1.231
6/8/2026 16:30	0.598	6.654	1.303
6/8/2026 16:45	0.638	6.852	1.334
6/8/2026 17:00	0.640	6.874	1.333
6/8/2026 17:15	0.614	6.737	1.315
6/8/2026 17:30	0.565	6.488	1.276
6/8/2026 17:45	0.532	6.316	1.246
6/8/2026 18:00	0.513	6.225	1.226
6/8/2026 18:15	0.499	6.178	1.207
6/8/2026 18:30	0.530	6.317	1.241
6/8/2026 18:45	0.574	6.522	1.286
6/8/2026 19:00	0.593	6.616	1.303
6/8/2026 19:15	0.573	6.514	1.285
6/8/2026 19:30	0.544	6.414	1.247
6/8/2026 19:45	0.556	6.452	1.265
6/8/2026 20:00	0.613	6.738	1.313
6/8/2026 20:15	0.641	6.847	1.343
6/8/2026 20:30	0.616	6.749	1.316
6/8/2026 20:45	0.592	6.612	1.301

6/8/2026 21:00	0.567	6.519	1.271
6/8/2026 21:15	0.558	6.447	1.271
6/8/2026 21:30	0.537	6.344	1.251
6/8/2026 21:45	0.527	6.303	1.240
6/8/2026 22:00	0.547	6.427	1.250
6/8/2026 22:15	0.595	6.649	1.297
6/8/2026 22:30	0.628	6.822	1.321
6/8/2026 22:45	0.664	6.984	1.352
6/8/2026 23:00	0.707	7.117	1.402
6/8/2026 23:15	0.693	7.081	1.385
6/8/2026 23:30	0.639	6.855	1.336
6/8/2026 23:45	0.527	6.449	1.199
6/9/2026 0:00	0.506	6.249	1.203
6/9/2026 0:15	0.502	6.146	1.223
6/9/2026 0:30	0.495	6.078	1.225
6/9/2026 0:45	0.478	6.012	1.200
6/9/2026 1:00	0.456	5.912	1.173
6/9/2026 1:15	0.454	5.902	1.170
6/9/2026 1:30	0.496	6.053	1.234
6/9/2026 1:45	0.573	6.388	1.322
6/9/2026 2:00	0.609	6.448	1.386
6/9/2026 2:15	0.529	6.230	1.264
6/9/2026 2:30	0.459	5.903	1.184
6/9/2026 2:45	0.412	5.625	1.137
6/9/2026 3:00	0.389	5.535	1.098
6/9/2026 3:15	0.400	5.568	1.120
6/9/2026 3:30	0.394	5.513	1.119
6/9/2026 3:45	0.405	5.574	1.133
6/9/2026 4:00	0.435	5.619	1.203
6/9/2026 4:15	0.387	5.441	1.120
6/9/2026 4:30	0.381	5.347	1.130
6/9/2026 4:45	0.373	5.365	1.102
6/9/2026 5:00	0.368	5.302	1.105
6/9/2026 5:15	0.341	5.184	1.056
6/9/2026 5:30	0.358	5.250	1.090
6/9/2026 5:45	0.361	5.219	1.107
6/9/2026 6:00	0.320	5.015	1.038
6/9/2026 6:15	0.355	5.161	1.108
6/9/2026 6:30	0.421	5.301	1.263
6/9/2026 6:45	0.409	5.309	1.226
6/9/2026 7:00	0.366	5.249	1.116
6/9/2026 7:15	0.422	5.392	1.237
6/9/2026 7:30	0.441	5.540	1.244
6/9/2026 7:45	0.397	5.413	1.158

6/9/2026 8:00	0.374	5.343	1.110
6/9/2026 8:15	0.488	5.844	1.275
6/9/2026 8:30	0.568	5.992	1.434
6/9/2026 8:45	0.485	5.936	1.240
6/9/2026 9:00	0.424	5.651	1.162
6/9/2026 9:15	0.384	5.509	1.092
6/9/2026 9:30	0.405	5.560	1.135
6/9/2026 9:45	0.504	5.718	1.360
6/9/2026 10:00	0.430	5.641	1.181
6/9/2026 10:15	0.441	5.454	1.272
6/9/2026 10:30	0.448	5.535	1.264
6/9/2026 10:45	0.544	5.880	1.409
6/9/2026 11:00	0.602	6.025	1.507
6/9/2026 11:15	0.575	6.069	1.425
6/9/2026 11:30	0.619	6.428	1.415
6/9/2026 11:45	0.669	6.536	1.494
6/9/2026 12:00	0.563	6.390	1.299
6/9/2026 12:15	0.501	6.130	1.226
6/9/2026 12:30	0.496	5.840	1.299
6/9/2026 12:45	0.436	5.606	1.209
6/9/2026 13:00	0.386	5.478	1.105
6/9/2026 13:15	0.413	5.575	1.154
6/9/2026 13:30	0.517	6.004	1.301
6/9/2026 13:45	0.584	6.265	1.385
6/9/2026 14:00	0.543	6.256	1.290
6/9/2026 14:15	0.549	6.190	1.324
6/9/2026 14:30	0.524	6.088	1.293
6/9/2026 14:45	0.489	5.897	1.261
6/9/2026 15:00	0.475	5.880	1.232
6/9/2026 15:15	0.507	5.885	1.312
6/9/2026 15:30	0.509	5.868	1.322
6/9/2026 15:45	0.461	5.738	1.238
6/9/2026 16:00	0.452	5.739	1.212
6/9/2026 16:15	0.563	6.272	1.332
6/9/2026 16:30	0.699	6.766	1.489
6/9/2026 16:45	0.695	6.903	1.439
6/9/2026 17:00	0.643	6.805	1.357
6/9/2026 17:15	0.596	6.563	1.323
6/9/2026 17:30	0.550	6.394	1.267
6/9/2026 17:45	0.560	6.416	1.283
6/9/2026 18:00	0.570	6.441	1.299
6/9/2026 18:15	0.558	6.405	1.283
6/9/2026 18:30	0.547	6.350	1.272
6/9/2026 18:45	0.570	6.466	1.292

6/9/2026 19:00	0.585	6.499	1.317
6/9/2026 19:15	0.564	6.418	1.293
6/9/2026 19:30	0.561	6.385	1.295
6/9/2026 19:45	0.557	6.362	1.293
6/9/2026 20:00	0.551	6.308	1.295
6/9/2026 20:15	0.539	6.269	1.276
6/9/2026 20:30	0.601	6.486	1.356
6/9/2026 20:45	0.693	6.950	1.420
6/9/2026 21:00	0.681	7.045	1.370
6/9/2026 21:15	0.643	6.901	1.330
6/9/2026 21:30	0.619	6.779	1.314
6/9/2026 21:45	0.586	6.627	1.283
6/9/2026 22:00	0.566	6.504	1.272
6/9/2026 22:15	0.576	6.528	1.289
6/9/2026 22:30	0.607	6.666	1.319
6/9/2026 22:45	0.583	6.554	1.296
6/9/2026 23:00	0.517	6.216	1.238
6/9/2026 23:15	0.484	6.034	1.209
6/9/2026 23:30	0.491	6.079	1.214
6/9/2026 23:45	0.527	6.297	1.240
6/10/2026 0:00	0.551	6.396	1.268
6/10/2026 0:15	0.490	6.071	1.215
6/10/2026 0:30	0.419	5.713	1.131
6/10/2026 0:45	0.414	5.683	1.126
6/10/2026 1:00	0.407	5.579	1.137
6/10/2026 1:15	0.372	5.405	1.087
6/10/2026 1:30	0.357	5.328	1.064
6/10/2026 1:45	0.347	5.263	1.052
6/10/2026 2:00	0.334	5.185	1.035
6/10/2026 2:15	0.325	5.111	1.026
6/10/2026 2:30	0.317	5.081	1.010

**DIVISION 2  
SITE WORK**

**02750 WASTEWATER FLOW CONTROL (BYPASS PUMPING)**

**GENERAL**

The intent and purpose of these specifications is to provide wastewater flow control, i.e., bypass pumping, of the sanitary sewer flows during the Contractor's operations. The Contractor shall furnish all labor, materials, accessories, equipment and tools for performing all operations required to bypass pump sewage around a manhole or sewer section in which work is to be performed.

The Contractor shall provide all pumps, piping, and other equipment to accomplish this task; perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to equal or better condition to the satisfaction of the Fayetteville Public Works Commission. The Contractor shall be responsible for the design, installation, operation, and maintenance of the temporary bypass pumping system. The Contractor shall provide sufficient documentation to the Fayetteville Public Works Commission to demonstrate that he, or his designated subcontractor, have the experience in the design, installation, and maintenance of temporary bypass pumping systems.

**RELATED SECTIONS**

- A. Section 02305 – Pipe Bursting
- B. Section 02500 – Traffic Control
- C. Section 02730 – Sanitary Sewer System
- D. Section 02760 – Television Inspection
- E. Section 02766 – Sewer Line Cleaning
- F. Section 02780 – Cured-in-Place Lining

**REQUIREMENTS**

The Contractor shall be responsible for all aspects of the bypass operation, including but not limited to: providing access to install, move, and maintain the pumps in the proper position, traffic control, installation and removal of bypass equipment, pump monitoring, testing of the bypass system, re-fueling, maintenance, notification of property owners (should access to private property be necessary), wastewater and fuel spill containment, and removal and replacement of manhole cones (if necessary). The bypass system (pumps and piping) shall be monitored by Contractor personnel at all times, when the bypass operation is in effect.

The Contractor shall have all materials and equipment on site to immediately respond to any emergencies or other event that could impact the bypass system (i.e., leak in the discharge piping, pump failure, flooding, etc.). The Contractor shall have sufficient support staff and equipment to mobilize to repair and/or service any equipment within one (1) hour of notification, 24 hours a day, seven (7) days a week. In the event of an emergency, the Contractor shall provide an immediate response and fully cooperate with the Fayetteville Public Works Commission.

The Contractor shall install the bypass pumps, equipment, and discharge lines to minimize impacts to the property owners, residents, and environment. The Contractor shall be responsible for determining the best

location for the bypass equipment, to include, but not limited to, the need for any special provisions to ensure access for the customers, preventing the pumps and manholes from flooding, etc. Such special provisions include, but are not limited to: installation of ramps, excavation and burial of the bypass lines, temporary fencing, sandbagging, construction of berms, raising the pumps, etc. The Contractor bears all responsibility for the maintenance and restoration of any trenches, ramps, access, etc. necessary for the temporary bypass pumping operation.

The Contractor shall take appropriate steps to ensure that all pumps, piping and hoses that carry raw sewage are protected from traffic. The Contractor shall identify the proposed methods to protect the temporary bypass pumping system from traffic as part of the detailed temporary bypass pumping plan. Traffic control shall be performed in accordance with these Contract Documents.

The bypass pumping system shall be monitored by Contractor personnel at all times (24 hours a day, 7 days a week), when the bypass operation is in effect. The Contractor's personnel shall be on-site at all times (24 hours a day, 7 days a week), and stationed at the primary bypass pumps. Depending on the location and system set-up, it may be necessary for the Contractor to station personnel at each of the various bypass pump locations. Unless otherwise approved by the Fayetteville Public Works Commission, one (1) person cannot monitor multiple bypass pump locations. All bypass pumps, regardless of their location (primary or on secondary lines), shall be equipped with an automatic dialer (or other similar device). The Contractor personnel shall immediately respond to any issue regarding the temporary bypass pumping system. All temporary bypass piping shall be periodically monitored (patrolled from pumps to discharge), but no less frequently than once every 12 hours. The bypass pumping equipment shall be automated and capable of functioning without the assistance of an operator.

## **SUBMITTALS**

All submittals shall be provided in accordance with these Contract Documents, and the requirements outlined herein. The Contractor shall submit a detailed bypass pumping plan to the Fayetteville Public Works Commission for approval, prior to initiating the bypass operation. The Contractor shall submit this information far enough in advance to allow sufficient time to complete the necessary coordination, including but not limited to obtaining permits (i.e., encroachments), getting permission from property owners to cross and/or utilize their property, and gaining any necessary regulatory approvals. Failure to submit a complete and comprehensive bypass pumping plan in a timely manner shall not be cause for any extension of the Contract Time.

The detailed temporary bypass pumping plan shall include the following information:

- Method of monitoring the pumps to ensure proper operation, to include method of notifying personnel (Fayetteville Public Works Commission and Contractor) in the event of an emergency, activation of back-up pumps, etc.
- Method of monitoring upstream system levels to ensure surcharging does not result in back-ups into buildings, overflows, etc.
- The amount, if any, of any required surcharging.
- Method to initiate back-up pumps.
- Map showing general location of the pumps and bypass lines. This shall include means to maintain access to driveways, etc.
- Measures to secure the bypass system (lines, pumps, etc.) from traffic, vandalism, high stream flows, etc.

- Method of plugging (and securing the plug(s)) and type of plugs.
- Size and location of manholes or other access points for suction and discharge piping.
- Size of pipeline(s) or conveyance system(s) to be bypassed.
- Number, size, material, location, and method of installation of suction piping.
- Number, size, material, location, and method of installation of discharge piping.
- Bypass pump sizes, capacities, and number of each size to be provided on-site, including all primary, secondary, and spare pumping units.
- Calculations of static lift, friction losses, minimum inlet submergence, and flow velocity (pump curves showing pump operating range shall be submitted). Calculations shall be signed and sealed by a licensed Professional Engineer registered in the State of North Carolina. Calculations shall be provided for both the peak flow rate and a normal daily rate (see PUMPING AND BYPASSING section for sizing requirements).
- Measures to protect discharge manhole(s) or structure(s) from erosion and damage due to the bypass operation.
- Erosion control measures.
- Emergency contact information for the personnel responsible for the pump operation.
- Emergency contact information for Contractor personnel to respond in the event of an emergency.
- List of available resources (equipment, materials, personnel) and contact information for emergency response.
- Method to contain potential releases of sewer flow from air release valves.
- Contingency plan for responding to potential sewer spills caused by weather, vandalism, acts of God, etc. The plan shall include communication protocols, available resources, and the steps to be taken in the event of an emergency.

**No bypass operations shall proceed until all bypass submittals have been reviewed and approved by the Fayetteville Public Works Commission.**

### **COORDINATION**

The Contractor shall fully coordinate their temporary bypass pumping operations with the Fayetteville Public Works Commission. It is the Contractor's responsibility to fully determine the scope and location of the temporary bypass pumping system. As outlined in these Contract Documents, the Fayetteville Public Works Commission may provide assistance with the building and maintenance of access roads, clearing of easements, etc. All coordination (to include location of the pumps and discharge lines) shall be fully discussed and agreed to prior to commencement of bypass operations.

The Contractor shall schedule a coordination meeting with the Fayetteville Public Works Commission and other personnel (Contractor, bypass sub-contractor, etc.) a minimum of three (3) business days prior to starting the temporary bypass pumping system. The purpose of this coordination meeting is to ensure that the Contractor and their sub-contractors have a good understanding of the requirements and expectations of operating the temporary bypass pumping system, discuss contingency plans (to include protocols for emergency contacts), identify location(s) of pumps, verify necessary materials (repair sleeves, containment devices, etc.) are on-site and available, and any other items necessary to ensure that the Fayetteville Public Works Commission has confidence that the appropriate personnel can operate and maintain the temporary bypass pumping system. Should, for any reason, the Fayetteville Public Works Commission deem that the Contractor and/or their sub-contractor is not prepared to operate and maintain the temporary bypass pumping system, the temporary bypass pumping system shall not be started. The Contractor shall take all necessary steps to address any concerns to the satisfaction of the Fayetteville Public Works Commission. Upon

completion of those actions, another coordination meeting shall be held, in order for the Fayetteville Public Works Commission to confirm that the Contractor and their sub-contractor is prepared to operate and maintain the temporary bypass pumping system. This process will be repeated until the Fayetteville Public Works Commission is satisfied that the Contractor and their sub-contractor are prepared to operate and maintain the temporary bypass pumping system. No additional contract time will be granted for this delay.

The temporary bypass pumping system shall run for a minimum of 24 hours, or longer as deemed by the Fayetteville Public Works Commission, prior to any activity occurring (cleaning, closed circuit television {CCTV}, etc.) within the main(s) being bypassed.

### **FLOW CONTROL PRECAUTIONS**

Where the raw sewage flow will be blocked during the Work as a result of the temporary bypass pumping operation, the Contractor shall take all necessary precautions to protect the public health. No septic conditions shall be allowed due to Contractor's operations. The sewer system (mains, manholes, laterals, etc.) shall also be protected from damage. The following occurrences shall not be allowed:

1. No sewage shall be allowed to back up into any homes or buildings.
2. No sewage shall overflow any manholes, cleanouts or any other access to the sewers.
3. Users upstream of the project area shall be able to use all their water and sewer utilities without interruption or limitations.

If any of the above occur or are expected to occur, the Contractor shall take immediate action to alleviate one or all of the conditions. Additionally, the Contractor is required to observe the conditions upstream of the plug and be prepared to immediately increase bypass pumping or release the flows, as required. Any damage claims resulting from the Contractor's failure to properly maintain sewer flows shall be the Contractor's responsibility.

All sump pumps, bypass pumps, trash pumps or any other type pump which pulls sewage or any type of material out of the sanitary sewer system shall discharge into another sanitary sewer manhole, or appropriate vehicle or container acceptable to the Fayetteville Public Works Commission. Under no circumstances shall untreated sanitary sewer be discharged, stored or deposited on the ground, swale, road or open environment. The Contractor shall not allow any flow of sewage onto private property, streets, or into creeks and drainage systems. Damage due to negligence of the Contractor, including, but not limited to, flooded dwellings, damaged property, damaged driveways, etc., shall be corrected immediately by the Contractor at no additional cost to the Fayetteville Public Works Commission.

### **PLUGGING AND BLOCKING**

In some applications, the wastewater flow may be plugged and contained within the capacity of the collection system. This shall only be done when it has been determined the system can accommodate the surcharging without any adverse impact. The Contractor has the sole responsibility for determining whether the system can accommodate surcharging. If this option is selected, the Contractor shall be responsible for continuously monitoring the system to ensure no sewer spills or overflows occur.

A sewer line plug shall be inserted into the line at a manhole upstream from the section being surveyed or repaired. The plug shall be so designed that all or any portion of the operation flows can be released. The Contractor shall secure the plug, to prevent it from being dislodged and moving downstream. Flows shall be bypassed for the initial CCTV inspection and shall be bypassed throughout the duration of the work, to

include the final CCTV inspection. Flows shall be bypassed in accordance with the approved temporary bypass pumping plan. Upon acceptance of the work by the Fayetteville Public Works Commission, the temporary bypass pumping system shall be removed and flows restored.

### **PUMPING AND BYPASSING**

The Contractor, when and where required, shall divert sewer flows for the sewer pipe rehabilitation process, cleaning, television inspection, pipe repairs, manhole replacement and/or rehabilitation, obstruction removals, or other related as required to complete the Work. The pumps and bypass lines shall be of adequate capacity and size to handle and prevent backup or overflow for all flows.

The temporary bypass pumping system shall be designed to maintain the flows necessary to meet the requirements of each particular location. The temporary sewer bypass system shall have the capacity to handle the flows outlined in these Contract Documents. The temporary sewer bypass system shall be sized to handle 2.5 times the average daily flow rate, or the specified peak flow – whichever is greater.

The Contractor shall be responsible for furnishing the necessary labor and supervision to set up, operate, and maintain the temporary bypass pumping system. A “set up” consists of the necessary pumps, conduits and other equipment to divert the flow of sewage, from the start to finish of work performed. Each “set-up”, regardless of location, shall have Contractor personnel on-site at all times (24 hours a day, 7 days a week) and stationed at the pumps, unless otherwise approved by the Fayetteville Public Works Commission. The temporary bypass pumping system shall include:

- A minimum of one (1) redundant pump so that the temporary bypass pumping system is capable of transmitting the peak flow with the largest duty pump out of service.
- Pumps shall be provided with a means of automatic control via level sensing. Systems requiring manual starting and/or stopping shall not be allowed.
- All equipment (primary and secondary pumps) shall be equipped in a manner to keep noise to a maximum of 65 dBA at 30 feet.
- An automatic dialer (or similar) to immediately notify (in a sequential operation) Contractor and Fayetteville Public Works Commission personnel in the event of equipment failure. The automatic dialer shall be set to issue notifications prior to flow level reaching critical elevations and having a spill occur. All bypass pumps (regardless of location) shall be equipped with an automatic dialer (or similar).

The temporary bypass pumping system shall be provided in such a way as to maintain access for businesses and residences. The Contractor shall be responsible for determining the best location for the bypass equipment, and the need for any special provisions to ensure access for the residents and businesses. Such special provisions include, but are not limited to: installation of ramps, excavation and burial of the bypass lines, etc. The Contractor shall use bridges over the bypass lines, temporary lines under driveways, alternate routes, or other means to accomplish this item. The bypass plan submittal shall indicate the means of maintaining access. The Contractor bears all responsibility for the maintenance of any trenches, ramps, etc. necessary for the bypass operation.

Pumps, equipment, and bypass lines shall be continuously (24 hours a day, 7 days a week) monitored by on site Contractor personnel capable of starting, stopping, refueling and maintaining these pumps during the Work. The temporary bypass pumping system shall be provided with an automatic dialer (or other similar device) that will immediately notify (in a sequential operation) the Contractor and the Fayetteville Public Works Commission in the event of equipment failure. All bypass pumps (regardless of location) shall be

equipped with an automatic dialer. This automatic dialer (or similar) shall be set to issue notifications prior to flow levels reaching critical elevations and having a spill occur.

The automatic dialer shall be set to issue notifications through a sequential operation. Automatic dialers that are not set up for sequential notifications shall not be acceptable. The Contractor's personnel shall be the first to receive any notifications from the automatic dialer. The automatic dialer shall only notify the PWC personnel after all Contractor notifications have been ignored and/or not responded to. The Contractor shall properly adjust the level at which the automatic dialer initiates notification to provide adequate time for the sequential notification to occur. If the PWC personnel are notified by the automatic dialer, the PWC personnel shall assume that a spill is occurring or is imminent, and respond accordingly. The Contractor shall be responsible for all costs for the PWC to mobilize and respond to the notification, regardless if a spill occurred or not.

In some applications, it may be necessary to surcharge the system in order to ensure proper pump operation. This shall only be done when it has been determined the system can accommodate the surcharging without any adverse impact. The Contractor has the sole responsibility for determining whether the system can accommodate surcharging. In the event surcharging is necessary, the Contractor shall be responsible for continuously monitoring the system to ensure no sewer spills occur.

All bypass piping shall successfully pass a hydrostatic test prior to bypassing the sewer flows. The hydrostatic test pressure shall be no less than the expected discharge pressures, and shall be held for a minimum of one (1) hour. All testing shall be observed by the Fayetteville Public Works Commission. Testing shall be coordinated with the Fayetteville Public Works Commission a minimum of 24 hours in advance.

### **SPILL RESPONSE**

The Contractor shall not discharge or pump any sewage, solids, or debris on the ground, streets, storm water system, ditches, or streams. Any sewage spills shall be immediately reported to the Fayetteville Public Works Commission Water Resources Construction Department, (910) 223-4716. After normal business hours, the Contractor shall contact the Fayetteville Public Works Commission Dispatch Center, (910) 678-7400 or (910) 323-0178. The Contractor shall take complete responsibility for all costs related to the clean-up of the spill, including any fines issued by the North Carolina Department of Environmental Quality (NC DEQ).

In the event that raw sewage (in any quantity) is spilled, discharged, leaked or otherwise deposited in the open environment, due to the Contractor's work, the Contractor is responsible for any cleanup of solids and disinfection of the area affected. This work will be performed at the Contractor's expense with no additional cost to the Fayetteville Public Works Commission. The Contractor is also responsible for complying with any and all regulatory requirements in regards to the size spill with no additional cost to the Fayetteville Public Works Commission. The Contractor shall cooperate fully with the Fayetteville Public Works Commission and the applicable State agencies in responding to and cleaning up the spill. Any work completed by the Fayetteville Public Works Commission in responding to a spill caused by the Contractor's operations shall be billed to the Contractor.

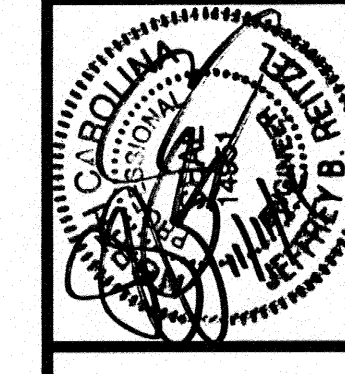
Where sewage has backed up into a property due to any aspect of the Contractor's operation, the Contractor shall immediately notify the Fayetteville Public Works Commission, inspect the property with the Fayetteville Public Works Commission and agree on remedial measures. The Contractor shall be responsible for all cleaning, repair and/or replacement of damaged property, temporary relocation of all occupants of the affected properties, if required, all to the satisfaction of the property owner. These actions shall be undertaken

**Revised September 2019**

immediately upon learning of the backup. Cleaning shall be performed by firms specializing in this type of work. All costs associated with the cleaning, repair, replacement of damages, occupant accommodations, insurance and spill remediation shall be borne by the Contractor. All remediation measures required as part of a spill response are part of acceptance of the project, and final payment shall not be made until such time all required measures are addressed and approved by the appropriate regulatory agency.

\*\*\* END OF SECTION \*\*\*

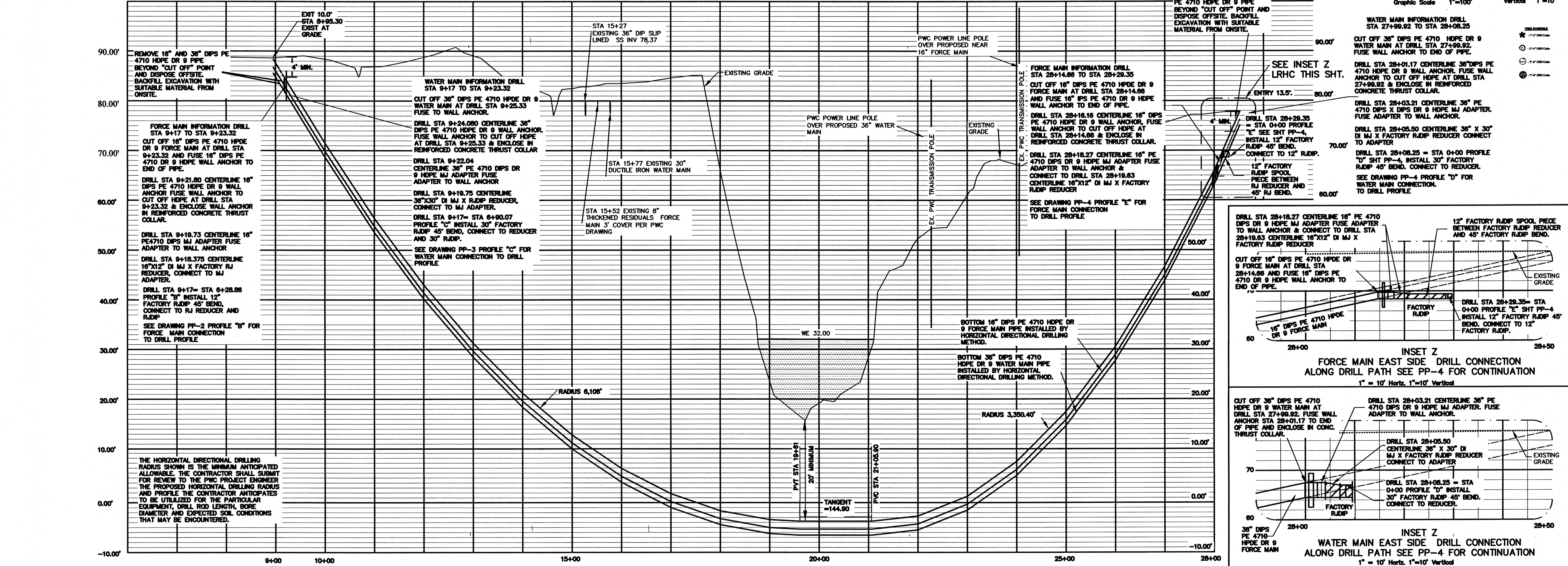
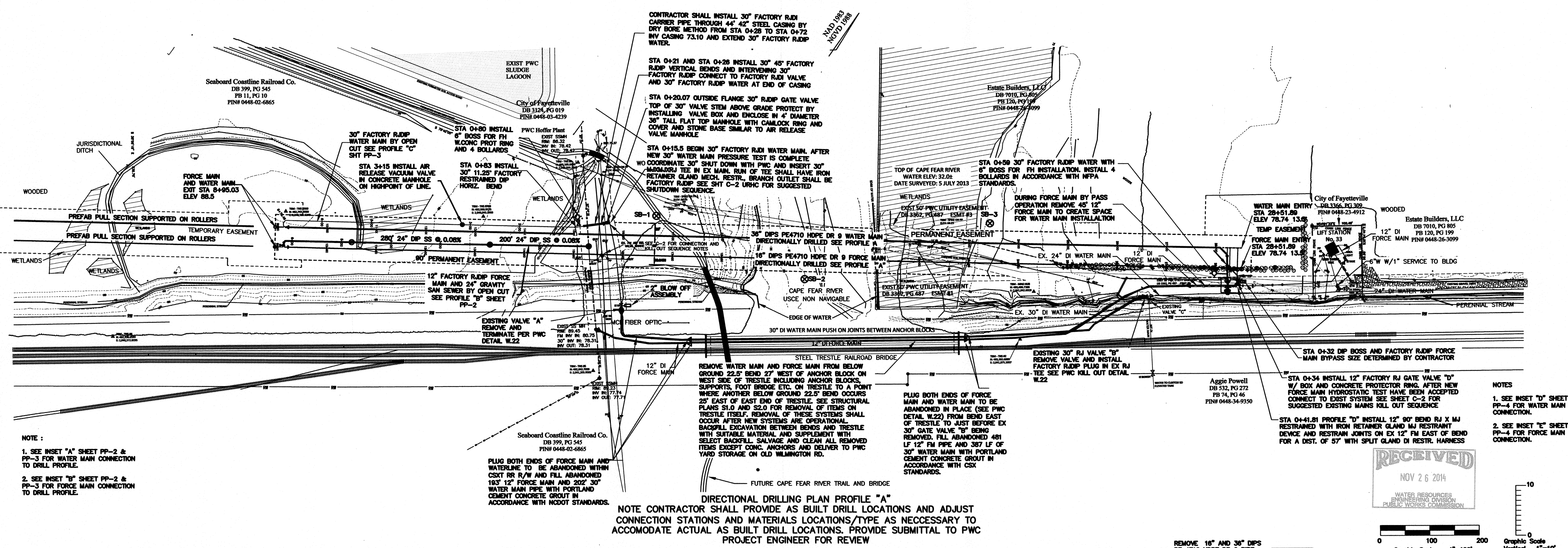
No.	Revision	Date



115 Broadfoot Avenue,  
 Fayetteville, N.C.  
 P.O. Box 53774  
 Phone 910-484-5191

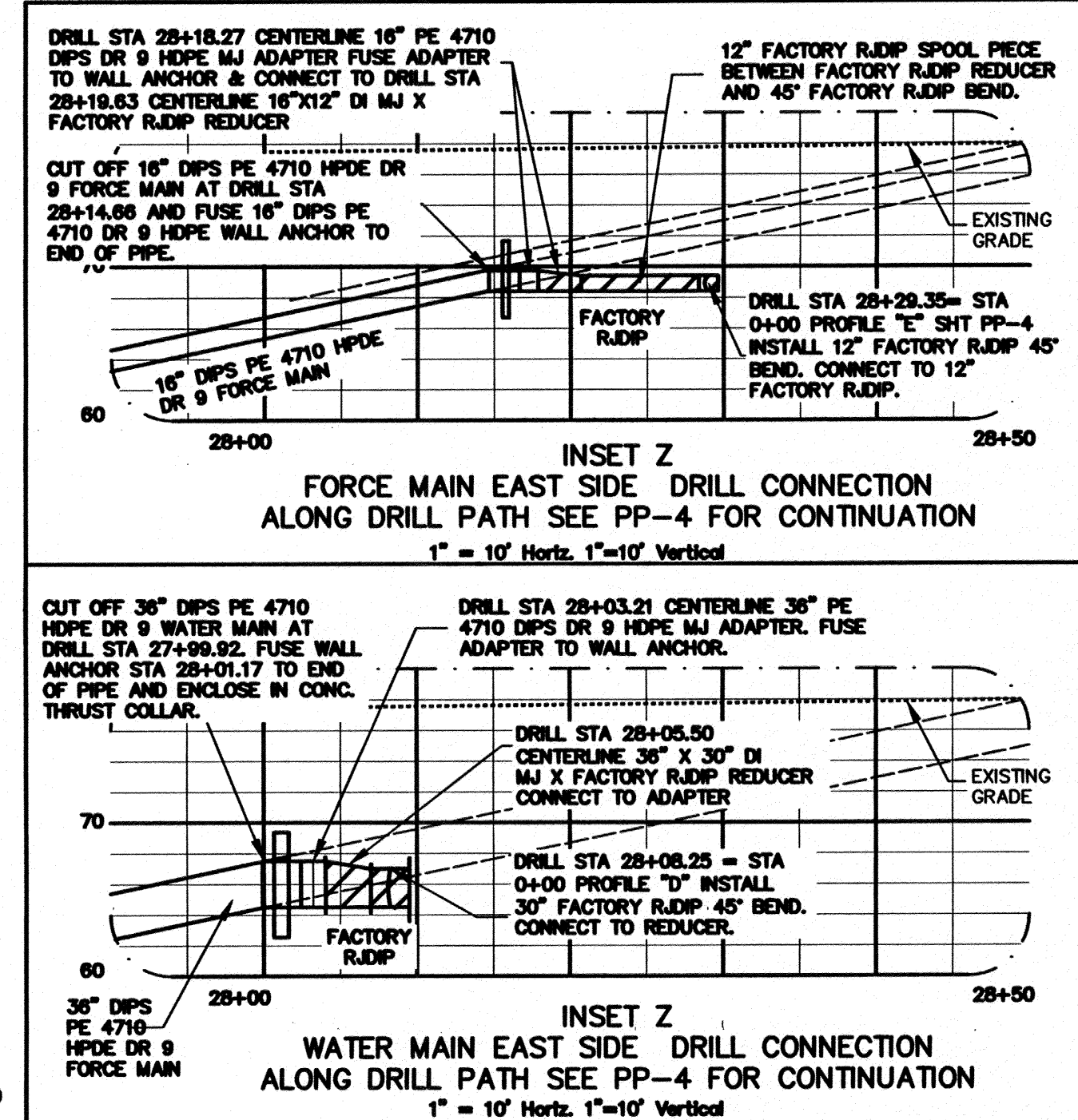
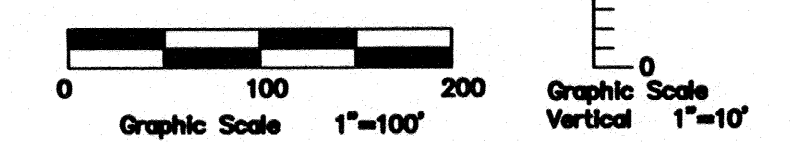
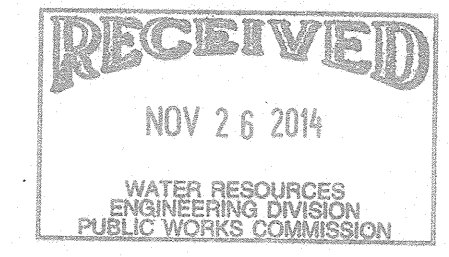
**M&R**  
 ENGINEERS  
 PLANNERS  
 SURVEYORS  
**MOORMAN, KIZER & REITZEL, INC.**

Scale: 1"=100' Horiz.  
 Scale: 1"=10' Vertical



NOTE:  
 1. SEE INSET "A" SHEET PP-2 & PP-3 FOR WATER MAIN CONNECTION TO DRILL PROFILE.  
 2. SEE INSET "D" SHEET PP-2 & PP-3 FOR FORCE MAIN CONNECTION TO DRILL PROFILE.

NOTES  
 1. SEE INSET "D" SHEET PP-4 FOR WATER MAIN CONNECTION.  
 2. SEE INSET "E" SHEET PP-4 FOR FORCE MAIN CONNECTION.



DS-14786





























