

CITY OF NORTH MIAMI

PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT

RELIABILITY IMPROVEMENTS

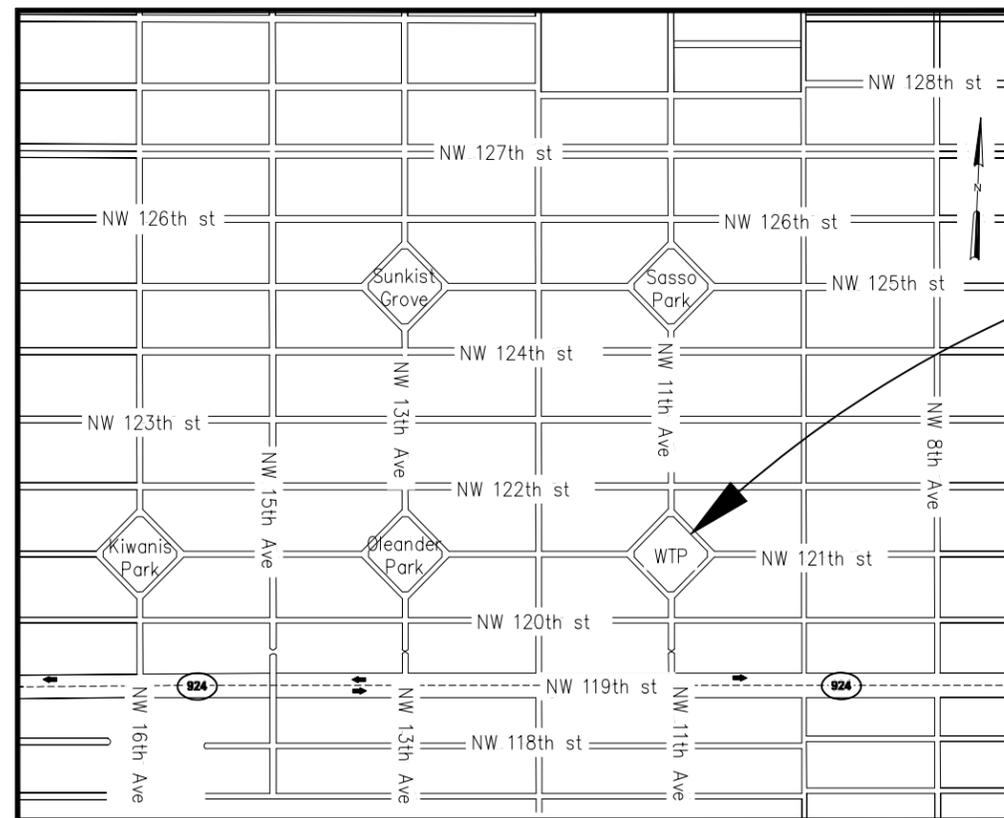
VOLUME B: WTP REHAB

**VOLUME B: GENERAL,
CIVIL, MECHANICAL AND
STRUCTURAL**



HAZEN AND SAWYER
Environmental Engineers & Scientists

4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771



PROJECT LOCATION:
12098 NORTHWEST 11th AVE
NORTH MIAMI, FLORIDA 33168

LOCATION MAP

NOT TO SCALE

**JULY 2015
REQUEST FOR PROPOSAL**

TITLE SHEET AND LOCATION MAP
SHEET 1 OF 335
DRAWING No. G-01

LIST OF DRAWINGS

VOLUME A : FILTER REHAB

Addendum No. 2, RFP No. 45-08-15 Winson Water Treatment Plant Reliability Improvements

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
GENERAL		
1	G-01	COVER SHEET
2	G-02	LIST OF DRAWINGS SHEET 1
3	G-03	LIST OF DRAWINGS SHEET 2
4	G-04	LIST OF DRAWINGS SHEET 3
5	G-05	ABBREVIATIONS, SYMBOLS AND LEGEND
CIVIL		
6	C-01	EXISTING SITE PLAN
7	C-02	STAGING PLAN AND PROJECT AREA LOCATION
8	C-03	CIVIL DETAILS
MECHANICAL		
9	M-01	EXISTING CONDITIONS LOWER PLAN
10	M-02	EXISTING CONDITIONS UPPER PLAN
11	M-03	EXISTING CONDITIONS PHOTOS - SHEET 1
12	M-04	EXISTING CONDITIONS PHOTOS - SHEET 2
13	M-05	EXISTING CONDITIONS PHOTOS - SHEET 3
14	M-06	EXISTING CONDITIONS PHOTOS - SHEET 4
15	M-07	FILTER DEMOLITION LOWER PLAN
16	M-08	FILTER POST-DEMOLITION LOWER PLAN
17	M-09	FILTER DEMOLITION UPPER PLAN
18	M-10	FILTER POST-DEMOLITION UPPER PLAN
19	M-11	FILTER DEMOLITION SECTION 1
20	M-12	FILTER POST-DEMOLITION SECTION 1
21	M-13	FILTER DEMOLITION SECTION 2
22	M-14	FILTER POST-DEMOLITION SECTION 2
23	M-15	FILTER DEMOLITION SECTION 3
24	M-16	FILTER POST-DEMOLITION SECTION 3
25	M-17	MECHANICAL PIPING SCHEMATIC
26	M-18	PROPOSED FILTERS LOWER PLAN AND LIFE SAFETY PLAN
27	M-19	PROPOSED FILTERS UPPER PLAN
28	M-20	PROPOSED FILTERS SECTION 1 AND HEAD ROOM CLEARANCE
29	M-21	PROPOSED FILTERS SECTION 2
30	M-22	PROPOSED FILTERS SECTION 3
31	M-23	PROPOSED FILTERS SECTION 4
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INSTRUMENTATION		
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36	I-03	PROCESS AND INSTRUMENTATION DIAGRAM FILTER NO. 1
37	I-04	PROCESS AND INSTRUMENTATION DIAGRAM FILTER NO. 2
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40	I-07	INSTRUMENTATION DETAILS SHEET 1
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SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
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43	S-02	EXISTING CONDITIONS LOWER PLAN
44	S-03	EXISTING CONDITIONS UPPER PLAN
45	S-04	EXISTING CONDITIONS PHOTOS
46	S-05	FILTER DEMOLITION LOWER PLAN
47	S-06	FILTER DEMOLITION UPPER PLAN
48	S-07	FILTER DEMOLITION SECTION 1
49	S-08	FILTER DEMOLITION SECTION 2
50	S-09	PROPOSED FILTERS LOWER PLAN
51	S-10	PROPOSED FILTERS UPPER PLAN
52	S-11	SECTIONS
53	S-12	DETAILS - SHEET 1
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57	E-01	ELECTRICAL LEGEND AND NOTES
58	E-02	GENERAL NOTES AND SPECIFICATIONS
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61	E-05	ELECTRICAL PLAN PIPE GALLERY LOWER PLAN
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68	E-12	MISCELLANEOUS ELECTRICAL STANDARD DETAILS SHEET 1
69	E-13	MISCELLANEOUS ELECTRICAL STANDARD DETAILS SHEET 2

PLOT DATE: 7/29/2015 2:55 PM BY: TBCCS

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	G.N.C.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

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GEORGE A. BROWN	P.E.
No. 56076	

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Certificate of Authorization Number: 2771

SCALE	
N.T.S.	

CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G02A

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
LIST OF DRAWINGS SHEET 1

DATE:	JULY 2015
SHEET:	2A OF 335
DRAWING:	G-2A

REQUEST FOR PROPOSAL

LIST OF DRAWINGS

VOLUME B : WTP REHAB

Addendum No. 2, RFP No. 45-08-15 Winson Water Treatment Plant Reliability Improvements

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION	SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION	SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION	SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION			
GENERAL														
1	G-01	COVER SHEET	51	C-34	CIVIL DETAILS SHEET 7	103	M-42	LIME SLAKER AND SILO MODIFICATIONS SECTION AND DETAILS	155	S-15	AERATOR MIST PANEL IMPROVEMENTS SECTIONS AND DETAILS			
2A	G-2A	LIST OF DRAWINGS SHEET 1	52	C-35	CIVIL DETAILS SHEET 8	104	M-43	LIME SLAKER AND SILO MODIFICATIONS DIAGRAMS	156	S-16	AERATOR/LIME CONTACTOR ACCESS STAIRS SECTIONS AND DETAILS -SHEET 1			
2	G-02	LIST OF DRAWINGS SHEET 2	53	C-36	CIVIL DETAILS SHEET 9	105	M-44	MASTER PUMP STATION KEY PLAN	157	S-17	AERATOR/LIME CONTACTOR ACCESS STAIRS SECTIONS AND DETAILS -SHEET 2			
3	G-03	LIST OF DRAWINGS SHEET 3	54	C-37	CIVIL DETAILS SHEET 10	106	M-45	HIGH SERVICE PUMPS PLAN	158	S-18	AERATOR/LIME CONTACTOR ACCESS STAIRS SECTIONS AND DETAILS -SHEET 3			
4	G-04	ABBREVIATIONS, SYMBOLS AND LEGEND	55	C-38	CIVIL DETAILS SHEET 11	107	M-46	BACKWASH AND TRANSFER PUMPS PLAN	159	S-19	LIME SLAKER AND SILO MODIFICATIONS PLANS			
5	G-05	GENERAL NOTES	56	C-39	CIVIL DETAILS SHEET 12	108	M-47	MASTER PUMP STATION SECTIONS AND DETAILS	160	S-20	LIME SLAKER AND SILO MODIFICATIONS SECTIONS AND DETAILS			
6	G-06	EXISTING SITE PLAN	57	C-40	CIVIL DETAILS SHEET 13	109	M-48	MASTER PUMP STATION SECTIONS	161	S-21	WASTE LIME SLUDGE PUMP STATION PROPOSED PLAN, SECTIONS AND DETAILS			
7	G-07	EXISTING SITE AERIAL AND ZONING MAP	58	C-41	CIVIL DETAILS SHEET 14	110	M-49	MASTER PUMP STATION SECTIONS AND DETAILS	162	S-22	EXISTING FILTER CONTROL ROOM STAIRS PLAN			
8	G-08	PROPOSED SITE PLAN	59	C-42	CIVIL DETAILS SHEET 15	111	M-50	INTERM CHEMICAL STORAGE AND FEED SYSTEMS	163	S-23	FILTER/OPS BUILDINGS STAIRS ELEVATIONS AND DETAILS			
9	G-09	PROPOSED STAGING PLAN - PHASE I	60	C-43	CIVIL DETAILS SHEET 16	112	M-51	CHEMICAL HANDLING FACILITY KEY PLAN AND SIGNAGE	164	S-24	HIGH SERVICE PUMP STATION AND ELECTRICAL ROOM 1 STRUCTURAL MODIFICATIONS - SHEET 1			
10	G-10	PROPOSED STAGING PLAN DEMOLITION PLAN - PHASE I	61	C-44	CIVIL DETAILS SHEET 17	113	M-52	CHEMICAL HANDLING FACILITY ANTI-COAGULANT AND COAGULANT AID	165	S-25	HIGH SERVICE PUMP STATION AND ELECTRICAL ROOM 1 STRUCTURAL MODIFICATIONS - SHEET 2			
11	G-11	PROPOSED STAGING PLAN CONSTRUCTION PLAN - PHASE I	MECHANICAL									166	S-26	HIGH SERVICE PUMP STATION AND ELECTRICAL ROOM 1 STRUCTURAL MODIFICATIONS - SHEET 3
12	G-12	PROPOSED STAGING PLAN PHASES II, III & IV	62	M-01	EXISTING PROCESS FLOW DIAGRAM	114	M-53	CHEMICAL HANDLING FACILITY FLUORIDE AND AQUEOUS AMMONIA	167	S-27	MASTER PUMP STATION PROPOSED PLAN			
13	G-13	PROPOSED STAGING PLAN DEMOLITION AND CONSTRUCTION PLAN - PHASE II	63	M-02	PROPOSED PROCESS FLOW DIAGRAM	115	M-54	CHEMICAL HANDLING FACILITY SECTIONS	168	S-28	MASTER PUMP STATION SECTIONS AND DETAILS			
14	G-14	PROPOSED STAGING PLAN DEMOLITION PLAN - PHASE III	64	M-03	DEMOLITION AERIAL PLAN KEY PLAN	116	M-55	CHEMICAL HANDLING FACILITY SECTIONS AND DETAILS	169	S-29	MASTER PUMP STATION SECTIONS			
15	G-15	PROPOSED STAGING PLAN CONSTRUCTION PLAN - PHASE III	65	M-04	RAW WATER WELL NO. 1 DEMOLITION PLAN AND PHOTOS	117	M-56	BACKWASH HOLDING BASIN PROPOSED PLAN	170	S-30	CHEMICAL HANDLING FACILITY PROPOSED PLAN			
16	G-16	PROPOSED STAGING PLAN DEMOLITION PLAN - PHASE IV	66	M-05	RAW WATER WELL NO. 2 DEMOLITION PLAN AND PHOTOS	118	M-57	BACKWASH HOLDING BASIN SECTIONS AND DETAILS	171	S-31	CHEMICAL HANDLING FACILITY SECTIONS AND DETAILS SHEET 1			
17	G-17	PROPOSED STAGING PLAN CONSTRUCTION PLAN - PHASE IV	67	M-06	LIME CONTACTOR REHABILITATION DEMOLITION PLAN	119	M-58	BACKWASH BASIN SLUDGE PUMP PLAN AND SECTIONS	172	S-32	CHEMICAL HANDLING FACILITY SECTIONS AND DETAILS SHEET 2			
CIVIL														
18	C-01	YARD PIPING - EXISTING PLAN	68	M-07	LIME CONTACTOR REHABILITATION DEMOLITION PHOTOS - SHEET 1	120	M-59	BACKWASH BASIN DECANT PUMP PLAN AND SECTIONS	173	S-33	CHEMICAL HANDLING FACILITY SECTIONS AND DETAILS SHEET 3			
19	C-02	YARD PIPING - DEMOLITION PLAN SEQUENCING	69	M-08	LIME CONTACTOR REHABILITATION DEMOLITION PHOTOS - SHEET 2	121	M-60	WASTE LIME SLUDGE PUMP STATION PLAN AND DETAILS	174	S-34	BACKWASH HOLDING BASIN DEMOLITION PLAN			
20	C-03	YARD PIPING - PROPOSED PLAN	70	M-09	LIME CONTACTOR REHABILITATION DEMOLITION PHOTOS - SHEET 3	122	M-61	WASTE LIME SLUDGE PUMP STATION SECTIONS	175	S-35	BACKWASH HOLDING BASIN REHABILITATION PLANS AND DETAILS			
21	C-04	YARD PIPING - DETAILS SHEET 1	71	M-10	LIME CONTACTOR REHABILITATION DEMOLITION PHOTOS - SHEET 4	123	M-62	SODIUM HYPOCHLORITE FACILITIES PROPOSED PLAN	176	S-36	BACKWASH HOLDING BASIN REHABILITATION DETAILS			
22	C-05	YARD PIPING - DETAILS SHEET 2	72	M-11	LIME CONTACTOR REHABILITATION DEMOLITION PHOTOS - SHEET 5	124	M-63	SODIUM HYPOCHLORITE FACILITIES SECTIONS - SHEET 1	177	S-37	SODIUM HYPOCHLORITE FACILITIES LIFE SAFETY AND PROPOSED PLANS			
23	C-06	YARD PIPING - DETAILS SHEET 3	73	M-12	LIME SLAKER AND SILO MODIFICATIONS DEMOLITION PLAN	125	M-64	SODIUM HYPOCHLORITE FACILITIES SECTIONS - SHEET 2	178	S-38	SODIUM HYPOCHLORITE FACILITIES SECTIONS AND DETAILS			
24	C-07	YARD PIPING - DETAILS SHEET 4	74	M-13	LIME SLAKER AND SILO MODIFICATIONS DEMOLITION PHOTOS	126	M-65	SODIUM HYPOCHLORITE FACILITIES SECTIONS - SHEET 3	179	S-39	SODIUM HYPOCHLORITE FACILITIES GRATING PLAN AND DETAILS			
25	C-08	YARD PIPING - DETAILS SHEET 5	75	M-14	HIGH SERVICE PUMP STATION DEMOLITION PLAN	127	M-66	SODIUM HYPOCHLORITE FACILITIES DETAILS	180	S-40	CHEMICAL INJECTION VAULT PLAN AND SECTION			
26	C-09	PAVING, GRADING & DRAINAGE EXISTING PLAN	76	M-15	HIGH SERVICE PUMP STATION DEMOLITION PHOTOS - SHEET 1	128	M-67	SAMPLE PUMP DETAILS	181	S-41	CLEARWELL EXTENSION PLAN AND SECTION			
27	C-10	PAVING, GRADING & DRAINAGE EXISTING CONDITION PHOTOS	77	M-16	HIGH SERVICE PUMP STATION DEMOLITION PHOTOS - SHEET 2	129	M-68	EXISTING FILTER CONTROL ROOM WATER QUALITY ANALYZERS	182	S-42	STRUCTURAL DETAILS SHEET 1			
28	C-11	PAVEMENT MARKING AND SIGNAGE PLAN	78	M-17	HIGH SERVICE PUMP STATION DEMOLITION PHOTOS - SHEET 3	130	M-69	EXISTING FILTER CONTROL ROOM WATER QUALITY ANALYZERS - SECTION	183	S-43	STRUCTURAL DETAILS SHEET 2			
29	C-12	SITE PLAN DETAILS	79	M-18	HIGH SERVICE PUMP STATION DEMOLITION PHOTOS - SHEET 4	131	M-70	EXISTING FILTERS HYPOCHLORITE INJECTION	184	S-44	STRUCTURAL DETAILS SHEET 3			
30	C-13	SETBACK PLAN	80	M-19	BACKWASH & WASTE SLUDGE HOLDING BASIN DEMOLITION PLAN	132	M-71	MECHANICAL DETAILS - SHEET 1	185	S-45	STRUCTURAL DETAILS SHEET 4			
31	C-14	PAVING, GRADING & DRAINAGE PROPOSED PLAN	81	M-20	BACKWASH & WASTE SLUDGE HOLDING BASIN DEMOLITION PHOTOS - SHEET 1	133	M-72	MECHANICAL DETAILS - SHEET 2	186	S-46	STRUCTURAL DETAILS SHEET 5			
32	C-15	SWALES DRAINAGE PROPOSED PLAN	82	M-21	BACKWASH & WASTE SLUDGE HOLDING BASIN DEMOLITION PHOTOS - SHEET 2	134	M-73	MECHANICAL DETAILS - SHEET 3	187	S-47	STRUCTURAL DETAILS SHEET 6			
33	C-16	GATE NO. 1	83	M-22	BACKWASH & WASTE SLUDGE HOLDING BASIN DEMOLITION PHOTOS - SHEET 3	135	M-74	MECHANICAL DETAILS - SHEET 4	188	S-48	STRUCTURAL DETAILS SHEET 7			
34	C-17	GATE NO. 2	84	M-23	WATER STORAGE TANK 0.75 MG EXISTING PLAN	136	M-75	MECHANICAL DETAILS - SHEET 5	189	S-49	STRUCTURAL DETAILS SHEET 8			
35	C-18	GATE NO. 3	85	M-24	WATER STORAGE TANK 0.75 MG AND LP TANK PHOTOS	137	M-76	MECHANICAL DETAILS - SHEET 6						
36	C-19	GATE NO. 5	86	M-25	WATER STORAGE TANK 1.5 MG DEMOLITION PLAN	138	M-77	MECHANICAL DETAILS - SHEET 7						
37	C-20	GATE NO. 6	87	M-26	WATER STORAGE TANK 1.5 MG DEMOLITION PHOTOS	139	M-78	MECHANICAL DETAILS - SHEET 8						
38	C-21	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 1	88	M-27	SODIUM HYPOCHLORITE FACILITY DEMOLITION PLAN	140	M-79	MECHANICAL DETAILS SHEET 9						
39	C-22	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 2	89	M-28	SODIUM HYPOCHLORITE FACILITY DEMOLITION PHOTOS	STRUCTURAL								
40	C-23	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 3	90	M-29	COAGULANT FEED SYSTEM DEMOLITION PLAN AND PHOTOS	141	S-01	GENERAL STRUCTURAL NOTES						
41	C-24	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 4	91	M-30	FLUORIDE FEED SYSTEM DEMOLITION PLAN AND PHOTOS	142	S-02	NEW ADMINISTRATION BUILDING FOUNDATION PLAN						
42	C-25	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 5	92	M-31	AMMONIA FEED SYSTEM DEMOLITION PLAN AND PHOTOS	143	S-03	NEW ADMINISTRATION BUILDING FIRST FLOOR PLAN						
43	C-26	PAVING, GRADING & DRAINAGE SECTIONS - SHEET 6	93	M-32	RAW WATER WELL NO. 1 PROPOSED PLAN, SECTIONS AND DETAILS	144	S-04	NEW ADMINISTRATION BUILDING SECOND FLOOR PLAN						
44	C-27	BREEZEWAY PLANS AND DETAILS	94	M-33	RAW WATER WELL NO. 2 PROPOSED PLAN, SECTIONS AND DETAILS	145	S-05	NEW ADMINISTRATION BUILDING ROOF PLAN						
45	C-28	CIVIL DETAILS SHEET 1	95	M-34	RAW WATER WELL DETAILS	146	S-06	NEW ADMINISTRATION BUILDING ROOF TRUSS PLANS						
46	C-29	CIVIL DETAILS SHEET 2	96	M-35	LIME CONTACTOR REHABILITATION PROPOSED PLAN	147	S-07	NEW ADMINISTRATION BUILDING ACCESS AND SIDEWALK						
47	C-30	CIVIL DETAILS SHEET 3	97	M-36	LIME CONTACTOR REHABILITATION SECTIONS AND DETAILS	148	S-08	NEW ADMINISTRATION BUILDING SECTIONS SHEET 1						
48	C-31	CIVIL DETAILS SHEET 4	98	M-37	LIME CONTACTOR REHABILITATION SECTIONS AND DETAILS	149	S-09	NEW ADMINISTRATION BUILDING SECTIONS SHEET 2						
49	C-32	CIVIL DETAILS SHEET 5	99	M-38	LIME CONTACTOR REHABILITATION DETAILS	150	S-10	NEW ADMINISTRATION BUILDING DETAILS SHEET 1						
50	C-33	CIVIL DETAILS SHEET 6	100	M-39	LIME CONTACTOR REHABILITATION SECTIONS AND DETAILS	151	S-11	NEW ADMINISTRATION BUILDING DETAILS SHEET 2						
			101	M-40	LIME SLAKER AND SILO MODIFICATIONS PLAN	152	S-12	NEW ADMINISTRATION BUILDING BEAM AND COLUMN SCHEDULES						
			102	M-41	LIME SLAKER AND SILO MODIFICATIONS PLANS	153	S-13	AERATOR EXISTING PLAN AND PHOTOS						
						154	S-14	AERATOR SUPPORT STRUCTURE IMPROVEMENTS PLAN AND SECTIONS						

PLOT DATE: 7/29/2015 2:58 PM BY: TBODAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
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NTS

CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-G02



CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT	
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB	
LIST OF DRAWINGS	
SHEET 2	

DATE:	JULY 2015
SHEET:	2 OF 335
DRAWING:	G-02

REQUEST FOR PROPOSAL

LIST OF DRAWINGS

VOLUME C : WTP REHAB

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
GENERAL		
1	G-01	COVER SHEET
2A	G-2A	LIST OF DRAWINGS SHEET 1
2	G-02	LIST OF DRAWINGS SHEET 2
3	G-03	LIST OF DRAWINGS SHEET 3
ARCHITECTURAL		
190	A-01	NEW ADMINISTRATION BUILDING SCHEDULES
191	A-02	NEW ADMINISTRATION BUILDING LIFE SAFETY PLANS
192	A-03	NEW ADMINISTRATION BUILDING FIRST FLOOR PLAN
193	A-04	NEW ADMINISTRATION BUILDING SECOND FLOOR PLAN
194	A-05	NEW ADMINISTRATION BUILDING ROOF PLAN
195	A-06	NEW ADMINISTRATION BUILDING FIRST FLOOR REFLECTED CEILING PLAN
196	A-07	NEW ADMINISTRATION BUILDING SECOND FLOOR REFLECTED CEILING PLAN
197	A-08	NEW ADMINISTRATION BUILDING SOUTH AND EAST ELEVATIONS
198	A-09	NEW ADMINISTRATION BUILDING NORTH AND WEST ELEVATIONS
199	A-10	NEW ADMINISTRATION BUILDING WALL SECTIONS - SHEET 1
200	A-11	NEW ADMINISTRATION BUILDING WALL SECTIONS - SHEET 2
201	A-12	NEW ADMINISTRATION BUILDING ENLARGED FLOOR PLAN AND ELEVATIONS SHEET 1
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203	A-14	NEW ADMINISTRATION BUILDING DETAILS
204	A-15	NEW ADMINISTRATION BUILDING FIRST FLOOR FURNITURE PLAN
205	A-16	NEW ADMINISTRATION BUILDING SECOND FLOOR FURNITURE PLAN
206	A-17	CHEMICAL HANDLING FACILITY LIFE SAFETY PLAN
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208	A-19	CHEMICAL HANDLING FACILITY SECTIONS AND DETAILS
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210	A-21	EXISTING WTP EXTERIOR PAINTING
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217	I-2	SYSTEM BLOCK DIAGRAM
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220	I-5	LIME CONTACTOR AND WASTE SLUDGE BLOWDOWN
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224	I-9	MASTER PUMP STATION BACKWASH AND TRANSFER PUMPS
225	I-10	MASTER PUMP STATION HIGH SERVICE PUMPS
226	I-11	CHEMICAL HANDLING FACILITY AMMONIA FEED SYSTEMS
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234	I-19	ENCLOSURE DETAILS
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SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
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238	I-23	INSTALLATION AND MISCELLANEOUS DETAILS SHEET 2
239	I-24	INSTALLATION AND MISCELLANEOUS DETAILS SHEET 3
ELECTRICAL		
240	E-01	ELECTRICAL LEGEND AND SYMBOLS
241	E-02	ELECTRICAL NOTES
242	E-03	ELECTRICAL SITE PLAN EXISTING
243	E-04	ELECTRICAL SITE PLAN PROPOSED
244	E-05	EXISTING FACILITY SINGLE LINE DIAGRAM
245	E-06	PROPOSED FACILITY SINGLE LINE DIAGRAM SHEET 1 OF 2
246	E-07	PROPOSED FACILITY SINGLE LINE DIAGRAM SHEET 2 OF 2
247	E-08	EXISTING FILTER BUILDING FIRST FLOOR ELECTRICAL PLAN
248	E-09	EXISTING FILTER CONTROL ROOM ELECTRICAL PLAN
249	E-10	NEW ADMINISTRATION BUILDING FIRST FLOOR PLAN
250	E-11	NEW ADMINISTRATION BUILDING ELECTRICAL ROOM PLAN
251	E-12	NEW ADMINISTRATION BUILDING SECOND FLOOR PLAN
252	E-13	NEW ADMINISTRATION BUILDING ROOF POWER
253	E-14	NEW ADMINISTRATION BUILDING FIRST FLOOR LIGHTING
254	E-15	NEW ADMINISTRATION BUILDING SECOND FLOOR LIGHTING
255	E-16	NEW ADMINISTRATION BUILDING FIRST FLOOR FIRE ALARM PLAN
256	E-17	NEW ADMINISTRATION BUILDING SECOND FLOOR FIRE ALARM PLAN
257	E-18	NEW ADMINISTRATION BUILDING FIRE ALARM RISER AND CALCULATIONS
258	E-19	NEW ADMINISTRATION BUILDING FIRE ALARM NOTES AND LEGENDS
259	E-20	SECURITY ACCESS ELECTRICAL DETAILS SHEET 1
260	E-21	SECURITY ACCESS ELECTRICAL DETAILS SHEET 2
261	E-22	SECURITY ACCESS ELECTRICAL DETAILS SHEET 3
262	E-23	ELECTRICAL ROOM 1 DEMOLITION AND PROPOSED PLAN
263	E-24	ELECTRICAL ROOM 2 EQUIPMENT MODIFICATIONS
264	E-25	RAW WATER WELL NOS. 1 AND 2 POWER AND LIGHTING PLAN
265	E-26	AERATOR / LIME CONTACTOR ACCESS STAIRS POWER AND LIGHTING PLAN
266	E-27	LIME CONTACTOR POWER AND LIGHTING PLAN
267	E-28	LIME SLAKER AND SILO MODIFICATIONS POWER AND LIGHTING PLAN
268	E-29	MASTER PUMP STATION POWER AND LIGHTING PLAN
269	E-30	HIGH SERVICE PUMPS SECTION
270	E-31	BACKWASH AND TRANSFER PUMPS SECTION
271	E-32	INTERIM CHEMICAL STORAGE AND FEED SYSTEM POWER AND LIGHTING PLAN
272	E-33	CHEMICAL HANDLING FACILITY POWER AND LIGHTING PLAN
273	E-34	BACKWASH HOLDING BASINS POWER PLAN
274	E-35	WASTE LIME SLUDGE PUMP STATION POWER PLAN
275	E-36	SODIUM HYPOCHLORITE FACILITIES POWER AND LIGHTING
276	E-37	LIGHTNING PROTECTION SYSTEM
277	E-38	SITE LIGHTING PLAN
278	E-39	SITE SECURITY PLAN
279	E-40	SECURITY SCHEDULES
280	E-41	PANEL SCHEDULES ADMINISTRATION BUILDING
281	E-42	PANEL SCHEDULES PROCESS AREA SHEET 1
282	E-43	PANEL SCHEDULES PROCESS AREA SHEET 2
283	E-44	PANEL SCHEDULES PROCESS AREA SHEET 3
284	E-45	PANEL SCHEDULES PROCESS AREA SHEET 4
285	E-46	SCHEMATICS SHEET 1
286	E-47	SCHEMATICS SHEET 2
287	E-48	SCHEMATICS SHEET 3

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
288	E-49	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 1
289	E-50	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 2
290	E-51	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 3
291	E-52	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 4
292	E-53	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 5
293	E-54	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 6
294	E-55	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 7
295	E-56	ELECTRICAL CONTROL AND SIGNAL RISER DIAGRAMS 8
296	E-57	DUCT BANK SECTIONS
297	E-58	DUCT BANK SCHEDULES
298	E-59	MANHOLES - E1 AND C1 CONDUIT RISERS
299	E-60	MANHOLES - E2 AND C2 CONDUIT RISERS
300	E-61	MANHOLES - E3 AND E4 CONDUIT RISERS
301	E-62	MANHOLES - C3 AND C4 CONDUIT RISERS
302	E-63	ELECTRICAL DETAILS SHEET 1
303	E-64	ELECTRICAL DETAILS SHEET 2
304	E-65	ELECTRICAL DETAILS SHEET 3
305	E-66	ELECTRICAL DETAILS SHEET 4
306	E-67	ELECTRICAL DETAILS SHEET 5
307	E-68	ELECTRICAL DETAILS SHEET 6
308	E-69	ELECTRICAL DETAILS SHEET 7
309	E-70	ELECTRICAL DETAILS SHEET 8
HVAC		
310	H-01	HVAC SYMBOLS, ABBREVIATIONS AND NOTES
311	H-02	NEW ADMINISTRATION BUILDING FIRST FLOOR - HVAC PLAN
312	H-03	NEW ADMINISTRATION BUILDING SECOND FLOOR - HVAC PLAN
313	H-04	NEW ADMINISTRATION BUILDING ROOF - HVAC PLAN
314	H-05	CHEMICAL HANDLING FACILITY HVAC PLAN
315	H-06	HVAC SCHEDULES
316	H-07	HVAC DETAILS SHEET 1
317	H-08	HVAC DETAILS SHEET 2
PLUMBING		
318	P-01	PLUMBING SYMBOLS, ABBREVIATIONS, AND NOTES
319	P-02	NEW ADMINISTRATION BUILDING FIRST FLOOR SANITARY PLAN
320	P-03	NEW ADMINISTRATION BUILDING SECOND FLOOR SANITARY PLAN
321	P-04	NEW ADMINISTRATION BUILDING FIRST FLOOR POTABLE WATER PLAN
322	P-05	NEW ADMINISTRATION BUILDING SECOND FLOOR POTABLE WATER PLAN
323	P-06	NEW ADMINISTRATION BUILDING ROOF DRAINAGE PLAN
324	P-07	NEW ADMINISTRATION BUILDING SANITARY ISOMETRIC
325	P-08	NEW ADMINISTRATION BUILDING FIRST FLOOR POTABLE WATER ISOMETRIC
326	P-09	NEW ADMINISTRATION BUILDING SECOND FLOOR POTABLE WATER ISOMETRIC
327	P-10	PLUMBING DETAILS SHEET 1
328	P-11	LANDSCAPE ELEVATIONS - CODE MINIMUM
LANDSCAPING		
329	L-1	LANDSCAPE PLAN
330	L-2	LANDSCAPE NOTES
331	L-3	LANDSCAPE DETAILS
IRRIGATION		
332	IR-1	IRRIGATION PLAN
333	IR-2	IRRIGATION DETAILS
334	IR-3	IRRIGATION DETAILS & NOTES
335	IR-4	IRRIGATION NOTES

Addendum No. 2, RFP No. 45-08-15 Winson Water Treatment Plant Reliability Improvements

PLOT DATE: 7/29/2015 2:58 PM BY: TB004S

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

 Hazen and Sawyer Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771	SCALE NTS CLIENTS PROJECT: - ENGINEERS PROJECT: 44238-004 CAD REFERENCE: 44238-004BP3-G03
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 CITY OF NORTH MIAMI PUBLIC WORKS UTILITIES	WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB LIST OF DRAWINGS SHEET 3
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DATE: JULY 2015 SHEET: 3 OF 335 DRAWING: G-03

REQUEST FOR PROPOSAL

SYMBOLS	ABBREVIATIONS			
SOLENOID VALVE MOTOR OPERATED VALVE BALL VALVE BUTTERFLY VALVE/DAMPER DIAPHRAGM VALVE CHECK VALVE GATE VALVE PLUG VALVE PRESSURE REDUCING VALVE GLOBE VALVE HOSE BIBB (PLAN) HOSE BIBB (ELEVATION) REDUCER (SINGLE LINE) REDUCER (DOUBLE LINE) VENTURI METER UNION MECHANICAL COUPLING HARNESSED MECHANICAL COUPLING GROOVED COUPLING FLANGED JOINT MECHANICAL JOINT PIPE SUPPORT FIRE HYDRANT MANHOLE SEALED MANHOLE EXISTING STRUCTURE OR UTILITY NEW STRUCTURE OR UTILITY—THIS CONTRACT EXISTING PIPELINE (DOUBLE LINE IF SCALE OF DRAWING PERMITS) IF SCALE OF DRAWING PERMITS) NEW PIPELINE—THIS CONTRACT (DOUBLE LINE SLUICE GATE) SLIDE GATE STOP LOG PIPE MATERIAL CHANGE PROPERTY LINE PROPOSED STORM WATER SWALE PROPOSED ASPHALT PAVEMENT PROPOSED SIDEWALK PROPOSED PAVERS MILL EXISTING ASPHALT AND RESURFACE PROPOSED CONCRETE PAVEMENT	<p style="text-align: center;">VALVES, FITTINGS, ETC.</p> ARV AIR RELIEF VALVE BF BLIND FLANGE BFV BUTTERFLY VALVE BV BALL VALVE CLV CHLORINE GAS VALVE UNDER VACUUM CPLG COUPLING CV CHECK VALVE EXP. JT. EXPANSION JOINT FD FLOOR DRAIN FDA FOOD AND DRUG ADMINISTRATION FH FIRE HYDRANT FLG, F FLANGE FTG FITTING GV GATE VALVE HB HOSE BIBB HIC HAND INDICATING CONTROL LR LONG RADIUS MC MECHANICAL COUPLING MJ MECHANICAL JOINT NPT NATIONAL PIPE THREAD PE PLAIN END PO PUSH ON PRV PRESSURE RELIEF VALVE P.S. PUMP STATION PV PLUG VALVE RD ROOF DRAIN RJ RESTRAINED JOINT SOV SOLENOID OPERATED VALVE THD THREADED VAC VACUUM <p style="text-align: center;">PIPING</p> CIP CAST IRON PIPE CMP CORRUGATED METAL PIPE CPLG, C COUPLING CU COPPER DIP DUCTILE IRON PIPE FM FORCE MAIN FRP FIBERGLASS REINFORCED PIPE GSP GALVANIZED STEEL PIPE HDPE HIGH DENSITY POLYETHYLENE IPS IRON PIPE SIZE PCCP PRESTRESSED CONCRETE CYLINDER PIPE PVC POLYVINYLCHLORIDE RCP REINFORCED CONCRETE PIPE RCPP REINFORCED CONCRETE PRESSURE PIPE <p style="text-align: center;">GENERAL</p> AA AQUEOUS AMMONIA A/C AIR CONDITIONER AB ANCHOR BOLT AIR AIR SCOUR AL, ALUM ALUMINUM ∠ ANGLE APPROX. APPROXIMATE ARCH. ARCHITECTURAL BD BASIN DRAIN BLDG BUILDING BLK. BLOCK BS BACKWASH SUPPLY BOTT BOTTOM	BP BID PACKAGE BWV BACKWASH WASTE BWS BACKWASH SUPPLY CB CATCH BASIN CC CENTER TO CENTER CHK'D CHECKERED CHLOR, CL 2 CHLORINE ∅ CLEAR CLR. CLEAR CO CLEAN OUT CO. COMPANY COL COLUMN CONC. CONCRETE CONST. CONSTRUCTION CONT. CONTINUOUS CONTR. CONTRACTOR DEC DECANT DET DETAIL DIA DIAMETER DIAG DIAGONAL DIM DIMENSION DISCH DISCHARGE DN DOWN DR DRAIN DWG DRAWING DWL DOWEL EA EACH ECC ECCENTRIC EE EACH END EF EACH FACE EFF EFFLUENT EL ELEV ELEVATION ELEC. ELECTRIC EPA ENVIRONMENTAL PROTECTION AGENCY EQUIP EQUIPMENT CU COPPER EW EACH WAY EXH EXHAUST EXIST EXISTING EXP EXPANSION EXT EXTERIOR FD FILTER DRAIN FE FIRE EXTINGUISHER OR FILTER EFFLUENT FF FINISHED FLOOR FI FILTER INFLUENT OR FILTER FEED FIG FIGURE FIN FINISH FL FLOOR FT FOOT FTG FOOTING FW FILTERED WATER GALV GALVANIZED GD GRAVITY DRAIN GR GRADE HORIZ HORIZONTAL HP HIGH POINT HS HYPOCHLORITE SOLUTION HSP HIGH SERVICE PUMP HSPS HIGH SERVICE PUMP STATION HWH HOT WATER HEATER	HWL HIGH WATER LEVEL ID INSIDE DIAMETER IF INSIDE FACE INF INFLUENT INJ INJECTION INSUL INSULATION INT INTERIOR INV INVERT IQ IRRIGATION QUALITY ISO ISOLATION JB JUNCTION BOX JT, J JOINT LAT. LATERAL LBS POUNDS LBS/FT POUNDS PER FOOT LG LONG LGTH LENGTH LN LINE LOC LOCATION LP LOW POINT OR LIQUID PETROLEUM L.P. LIGHT POLE LWL LOW WATER LEVEL MAX MAXIMUM MB MAILBOX MECH, M MECHANICAL MFGR MANUFACTURER MG MILLON GALLON MH MANHOLE MIN MINIMUM MO MASONRY OPENING NIC NOT IN CONTRACT No. NUMBER NSF NATIONAL SCIENCE FOUNDATION NTS NOT TO SCALE OC ON CENTER OD OUTSIDE DIAMETER OF OUTSIDE FACE P POLYMER OPNG OPENING P/L, P PROPERTY LINE PC POINT OF CURVATURE PI PRESSURE INDICATOR (GAUGE) P.I. POINT OF INTERSECTION PO POLYMER SOLUTION POT POTABLE PROP PROPOSED PSI POUNDS PER SQUARE INCH PT POINT OF TANGENCY PVT PAVEMENT PW POTABLE WATER R/W, ROW RIGHT OF WAY RAD, R RADIUS RECIR RECIRCULATION RED REDUCER REHAB REHABILITATION REINF REINFORCING REQ'D REQUIRED REST. RESTRAINED REV REVISION RJ RESTRAINED JOINT	RW RAW WATER SA SAMPLE WATER SAN SANITARY SECT SECTION ∅ SECTION LINE SH SODIUM HYPOCHLORITE SHT SHEET SL SAMPLE LINE SPEC SPECIFICATION SQ SQUARE SS STAINLESS STEEL SSS SURFACE SCOUR SUPPLY STA STATION STD STANDARD STL STEEL STRUC STRUCTURAL SYMM SYMMETRICAL T&B TOP AND BOTTOM TBD TO BE DETERMINED TEMP TEMPORARY THK THICK TI TEMPERATURE INDICATOR TOC TOP OF CONCRETE TOS TOP OF SLAB TYP TYPICAL VERT VERTICAL VTR VENT THROUGH ROOF W WIDE W/ WITH W/L WATER LEVEL W/MO WITH MOTOR OPERATOR W/O WITH OUT WTR WATER WWF WELDED WIRE FABRIC

SECTION AND DETAIL IDENTIFICATION

SECTION IDENTIFICATION

(1) SECTION CUT ON DRAWING C-1:

(2) ON DRAWING C-2 THIS SECTION IS IDENTIFIED AS:

DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON DRAWING C-1 AS:

(2) ON DRAWING C-2 THIS DETAIL IDENTIFIED AS:

STANDARD DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON PLAN OR SECTION:

(2) ON DRAWING C-4 THIS DETAIL IDENTIFIED AS:

NOTE: IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A DASH.

NOTES:

(1) ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL SHEETS.

(2) FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

* DENOTES DIMENSIONS OR ELEVATIONS DEPENDENT ON EQUIPMENT SUPPLIED.

DESIGNED	G.A.B.	DRAWN	L.M.S.	CHECKED	J.N.M.	PROJ. ENGR.	G.A.B.
NO.	DATE	ISSUED FOR	BY				
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.				

HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771	SCALE CLIENTS PROJECT: - ENGINEERS PROJECT: 44238-004 CAD REFERENCE: 44238-004BP3-004
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CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB

ABBREVIATIONS, SYMBOLS AND LEGEND

DATE: **JULY 2015**

SHEET: **4** OF **335**

DRAWING: **G-04**

GENERAL NOTES:

1. DRAWINGS THAT ILLUSTRATE EXISTING STRUCTURES, PIPING, ELECTRICAL AND EQUIPMENT ARE BASED UPON RECORD DRAWINGS AVAILABLE UPON REQUEST FOR GENERAL INFORMATION PURPOSES ONLY. REFERENCE THE SECTION ENTITLED "SUMMARY OF WORK".
2. FIELD OBSERVATIONS INDICATE THAT FIELD CONDITIONS DO NOT FULLY MATCH THE ABOVE REFERENCED RECORD DRAWINGS.
3. EXISTING SITE PLAN IS BASED UPON A BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES, INC. (CTA) DATED 03-10-10 AND LABELED CTA PROJECT No. 10-0013-001
4. ALL ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD '29) AND REFERENCED TO MIAMI-DADE COUNTY BENCHMARK N-384, A PK NAIL IN SQUARE BRASS WASHER, TOP OF CURB INLET STRUCTURE AT SOUTHEAST CORNER OF N.W. 17 AVENUE AND N.W. 119 STREET. ELEVATION = 12.52.
5. YARD PIPING DRAWINGS WERE GENERATED FROM A COMBINATION OF NEW TOPOGRAPHIC SURVEY DATA AND EXISTING RECORD DRAWINGS. COORDINATES PROVIDED ARE FOR GENERAL INFORMATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PREPARATION OF PIPE SYSTEM LAYOUT SUBMITTALS FOR ENGINEER REVIEW, COMMENT AND ACCEPTANCE. REFERENCE THE SECTIONS ENTITLED "SUMMARY OF WORK", "FIELD ENGINEERING", "SUBMITTALS" AND "PIPING, GENERAL" FOR ADDITIONAL DETAILS AND REQUIREMENTS.
6. LOCATION, SIZE, MATERIAL, ALIGNMENT AND ELEVATIONS OF EXISTING FACILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS. THIS INFORMATION IS FURNISHED AS A GUIDE FOR THE CONTRACTOR. THE ENGINEER AND THE OWNER DO NOT GUARANTEE THE ACCURACY OF THESE DATA. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE LOCATION AND PROTECTING ALL TYPES OF UTILITIES AND STRUCTURES ENCOUNTERED DURING THE COURSE OF OPERATION ON THIS PROJECT.
7. CONTRACTOR RETAINS FULL RESPONSIBILITY FOR FIELD VERIFICATION OF ALL IMPROVEMENTS TO BE REMOVED FOR THIS WORK. VERIFICATION SHALL INCLUDE STRUCTURAL, ARCHITECTURAL, HVAC, PLUMBING, PROCESS PIPING, ELECTRICAL, IRRIGATION, CONTROLS, EQUIPMENT, FILTER MEDIA AND ANY AND ALL OTHER EXISTING EQUIPMENT WITHIN THE BOUNDARY OF THE WORK, WHETHER SHOWN OR NOT.
8. THE CONTRACTOR IS REQUIRED TO OBTAIN WRITTEN APPROVAL FROM THE ENGINEER FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
9. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY REQUIRED PLAN DEVIATIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT IF REQUIRED.
11. RESTRAINED JOINT PIPE SHALL BE USED FOR ALL PIPING ON THIS PROJECT. THRUST BLOCKS SHALL NOT BE PERMITTED.
12. CONTRACTOR SHALL PROVIDE A MINIMUM VERTICAL CLEARANCE OF 6" BETWEEN ALL LINES THAT CROSS. CROSSINGS WITH POTABLE WATER LINES SHALL BE AS SHOWN ON THE DRAWINGS.
13. THE CONTRACTOR SHALL RECORD ELEVATIONS OF EXISTING BURIED UTILITIES AT ALL ENCOUNTERED CROSSINGS WITH NEW WORK.
14. ALL CONNECTIONS TO EXISTING PIPING SHALL BE MADE UNDER THE DIRECTION OF THE CITY.
15. MINIMUM DEPTH OF COVER FOR ALL UNDERGROUND PIPING SHALL BE 36" EXCEPT WHERE SHOWN OTHERWISE ON PLANS.
16. PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE WORK FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE.
18. THE CONTRACTOR SHALL ADJUST TO FINAL GRADE ALL EXISTING UTILITY CASTINGS INCLUDING VALVE BOXES, MANHOLES, HAND HOLES, PULL BOXES, INLETS AND SIMILAR STRUCTURES IN CONSTRUCTION AREA TO BE OVERLAID WITH ASPHALT.
19. EXISTING BURIED PIPE AND CONDUIT 2" DIAMETER AND SMALLER IS NOT NECESSARILY SHOWN. ELECTRICAL AND INSTRUMENTATION DUCT BANKS NOT SHOWN. WHEN EXCAVATING, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO UNDERGROUND UTILITIES.
20. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS TO VERIFY LOCATIONS AND ELEVATIONS OF UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE WORK. THE NUMBER OF EXPLORATORY EXCAVATIONS SHALL BE SUFFICIENT TO DETERMINE ALIGNMENT, LOCATION AND ELEVATION.
21. THE WORK TO BE PERFORMED UNDER THESE CONTRACT DOCUMENTS IS AT A FUNCTIONING WATER TREATMENT PLANT WITH A PERMITTED WATER SUPPLY WELLFIELD. THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS, REGULATORY AGENCIES, AND FACILITY OPERATIONS STAFF AT ALL TIMES.
22. CONTRACTOR SHALL REFER TO DIVISION 1 FOR FIELD ENGINEERING, SURVEY CONTROL AND RECORD DRAWING REQUIREMENTS.
23. THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF N.W. 121 STREET BEARING NORTH 87°08'29" EAST. SAID LINE BEING BASED ON THE FLORIDA STATE PLANE EAST ZONE SYSTEM AS COMPUTED USING REAL TIME KINEMATICS (RTK) VECTOR OBSERVATIONS AS OBTAINED USING A TRIMBLE R8 ROVER AS OBSERVED FROM A NATIONAL GEODETIC STATION (NGS) STATION AC2415" (H-120) AND FROM TWO CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) "LAUDERDALE" AND "MIAMI 3", AS OPERATED BY FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) STATE-WIDE PERMANENT REFERENCE NETWORK.
24. THE ABOVE MENTIONED RTK VECTOR OBSERVATIONS WERE PROCESSED AND COORDINATES WERE CALCULATED UTILIZING F.D.O.T. "VECTOR NT" LEAST SQUARE ADJUSTMENT SOFTWARE FROM THE FOLLOW REFERENCE STATIONS:

F.D.O.T. - "LAUDERDALE"	N: 677867.5511	E: 927328.4435 (LAUD)
F.D.O.T. - "MIAMI 3"	N: 509427.4891	E: 931640.1497 (MIAMI)
NGS - "AC2415"	N: 570080.0519	E: 896958.5443 (H-120)

Addendum No. 2, RFP No. 45-08-15 Winson Water Treatment Plant Reliability Improvements

PLOT DATE: 7/24/2015 11:08 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	REQUEST FOR PROPOSAL	G.A.B.
1	07/24/15	ISSUED FOR	BY

DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN P.E.
No. 56076

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE
NTS

CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-G05

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
GENERAL NOTES

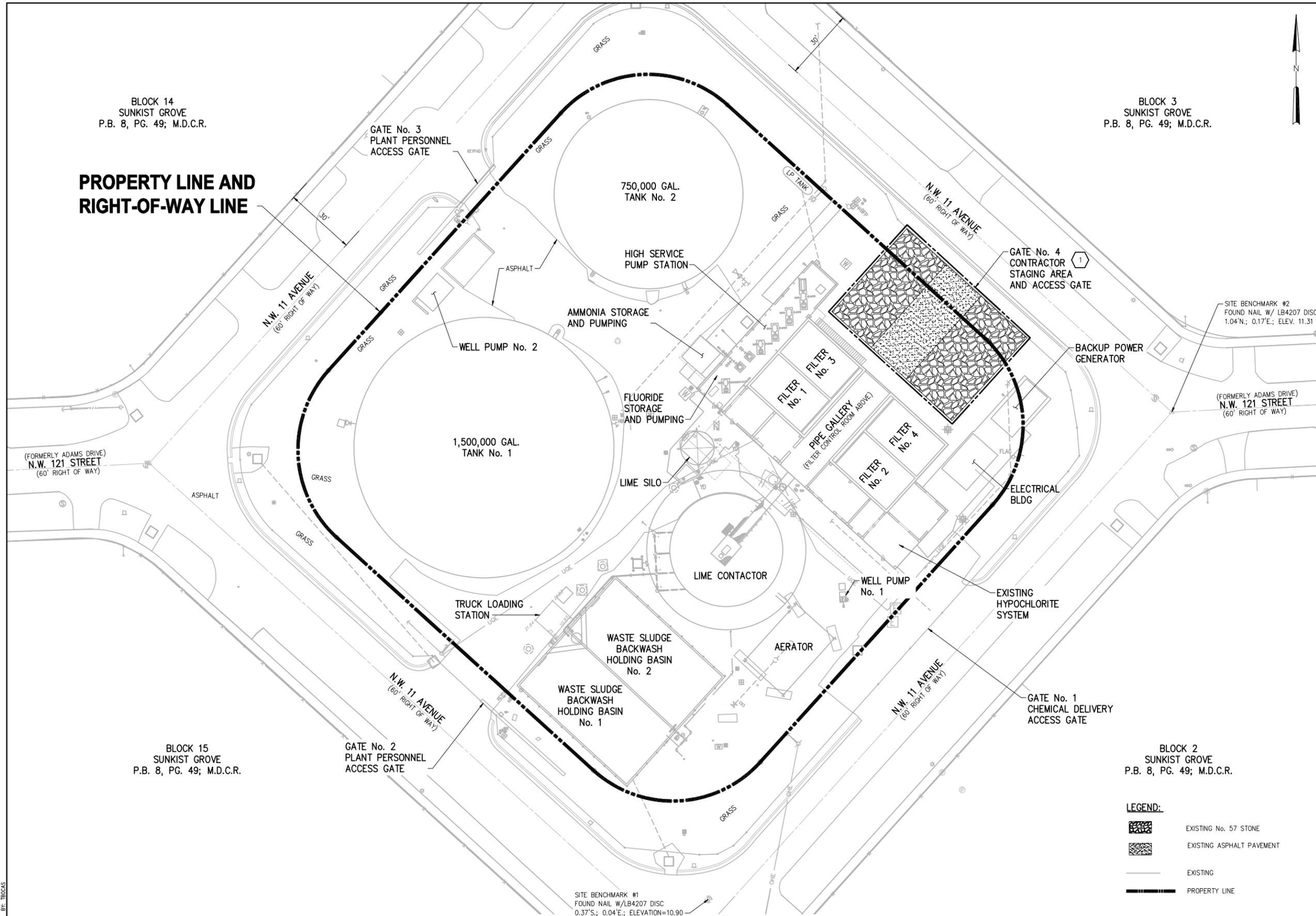
DATE: JULY 2015
SHEET: 5 OF 335
DRAWING: G-05

REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

**PROPERTY LINE AND
RIGHT-OF-WAY LINE**



**SYMBOL LEGEND
(THIS SHEET ONLY)**

- ELECTRICAL JUNCTION BOX
- ANCHOR
- BOLLARD
- BACKFLOW PREVENTOR
- CATCH BASIN
- CENTERLINE
- CONCRETE POWER POLE
- CONCRETE LIGHT POLE
- DECORATIVE CONCRETE LIGHT POLE
- DOUBLE DETECTOR CHECK VALVE
- DRAINAGE MANHOLE
- ELECTRICAL CONTROL BOX
- ELECTRICAL METER
- ELECTRICAL PULL BOX
- FIRE HYDRANT
- IRRIGATION VALVE
- METAL STREET LIGHT POLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SIGN
- SPOT ELEVATION
- SPOT/LANDSCAPE LIGHTING
- TELEPHONE MANHOLE
- WATER GATE VALVE
- WOOD POWER POLE
- WOOD STREET LIGHT POLE
- WATER VAULT
- SPOT HARD SURFACE ELEVATION
- SPOT GROUND ELEVATION
- SHADE TREE
- PALM TREE
- CHAIN LINK FENCE
- OHC OVER HEAD WIRES
- SS SANITARY SEWER MAIN
- SD STORM DRAINAGE

KEYED NOTES:

- 1 CONTRACTOR ACCESS GATE AND STAGING AREA TO BE INSTALLED DURING BID PACKAGE 1 (FILTER REHABILITATION). THIS AREA WILL REMAIN UNTIL THE CONSTRUCTION OF OTHER PLANT IMPROVEMENTS. DEMOLITION OF THIS AREA WILL BE INCLUDED IN BID PACKAGE 3.

GENERAL NOTE:

1. THIS DRAWING IS BASED UPON AND BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES, INC. (CTA) DATED 03-10-10. CTA PROJECT No. 10-0013-001.
2. UNDERGROUND AND OVERHEAD UTILITIES NOT SHOWN FOR CLARITY. SEE DISCIPLINE DRAWINGS FOR EXISTING UTILITIES.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

LEGEND:

- EXISTING No. 57 STONE
- EXISTING ASPHALT PAVEMENT
- EXISTING
- PROPERTY LINE



SITE BENCHMARK #1
FOUND NAIL W/LB4207 DISC
0.37°S.; 0.04°E.; ELEVATION=10.90

PLOT DATE: 7/24/2015 11:08 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	<p>HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771</p>
DRAWN	L.M.S.	
CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	
PROJ. ENGR.	GEORGE A. BROWN No. 56076	

SCALE
1"=20'-0"

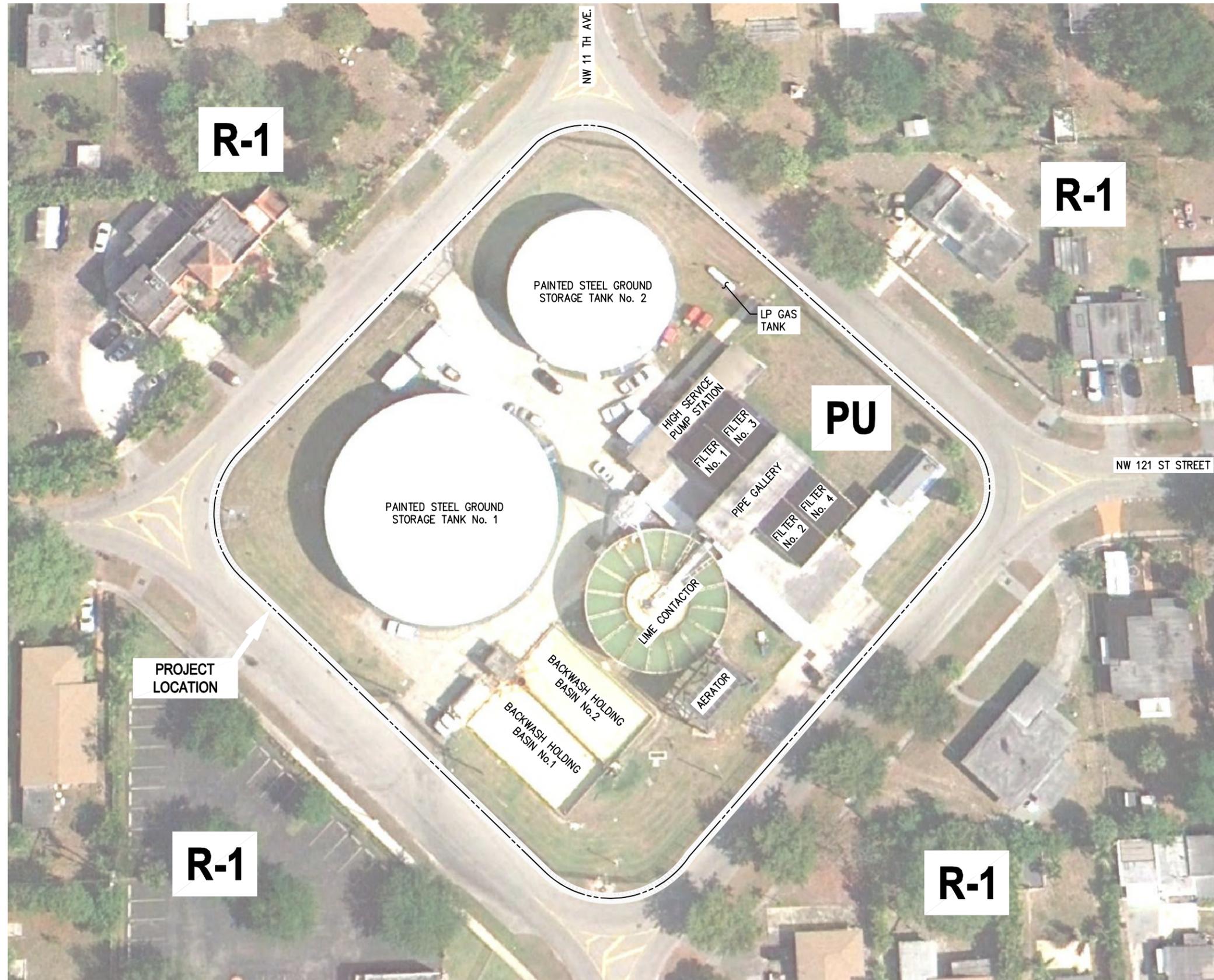
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G06

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT	
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB	
EXISTING SITE PLAN	

DATE:	JULY 2015
SHEET:	6 OF 335
DRAWING:	G-06

REQUEST FOR PROPOSAL



PROPERTY ADDRESS:

12098 NORTHWEST 11 th Ave
NORTH MIAMI, FLORIDA 33168

PROPERTY INFORMATION:

FOLIO: 06-2126-016-7320
ZONING: PUBLIC USE

PROPERTY OWNER INFORMATION:

OWNER: CITY OF NORTH MIAMI
CONTACT: PAUL VIDA
PHONE: 305-953-2854

PROPERTY LOCATION:

COUNTY: MIAMI DADE
TOWNSHIP: 52S
RANGE: 41E
SECTION: 26
LATITUDE: 25° 53' 08" N
LONGITUDE: 80° 13' 01" W

FLOOD INFORMATION:

FLOOD ZONE: ZONE X (PER FEDERAL EMERGENCY
MANAGEMENT AGENCY FLOOD
INSURANCE RATE MAP NUMBER
12086C0139L, REVISED SEPTEMBER 11, 2009)

ZONING NOTE:

ZONING INFORMATION BASED UPON CITY OF NORTH
MIAMI ZONING MAP.

ZONING LEGEND:

PU : PUBLIC USE
R-1: RESIDENTIAL

PLOT DATE: 7/24/2015 11:08 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN	P.E.
No. 56076	

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

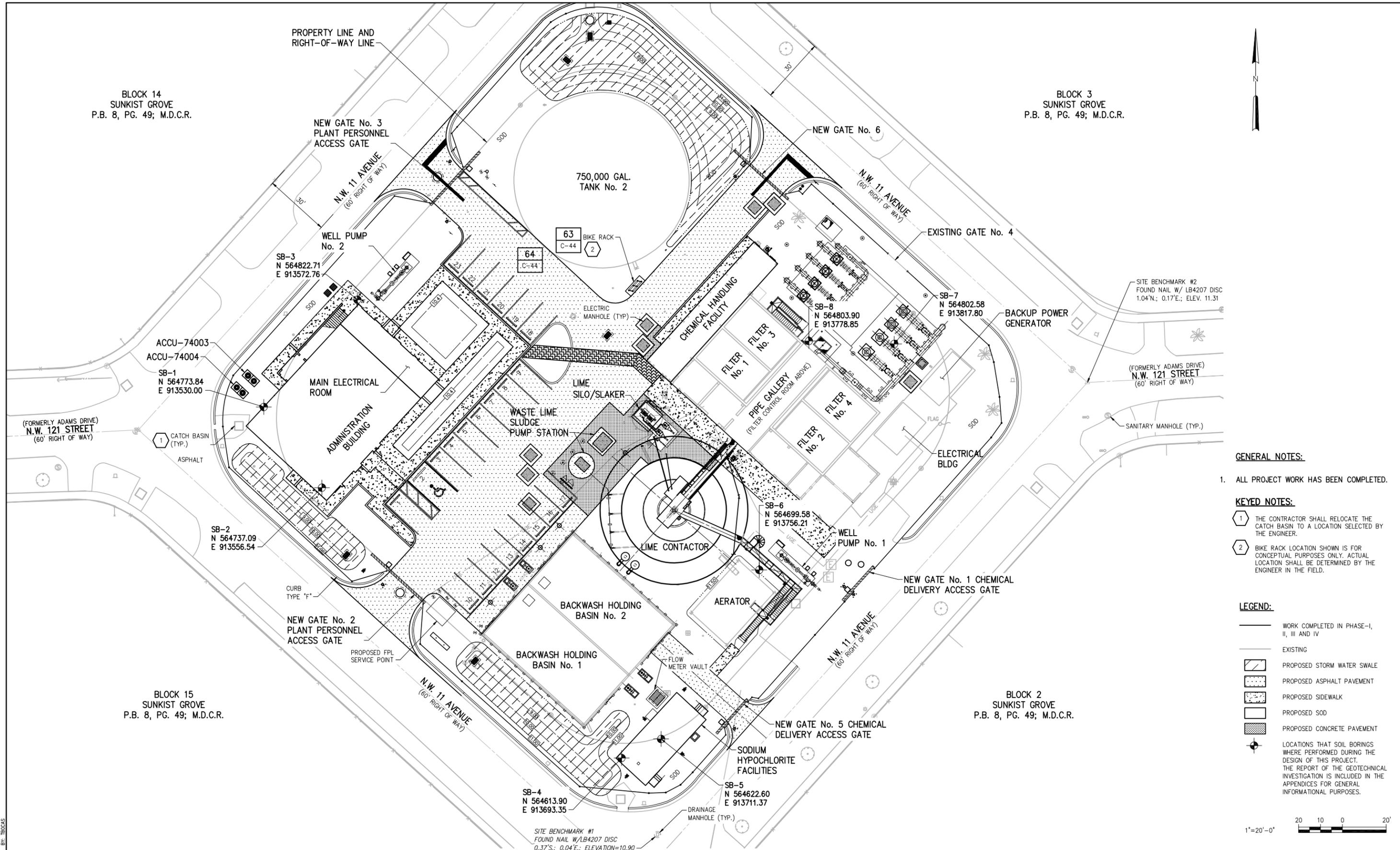
SCALE
NTS

CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G07

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
EXISTING SITE AERIAL AND ZONING MAP

DATE:	JULY 2015
SHEET:	7 OF 335
DRAWING:	G-07



GENERAL NOTES:
 1. ALL PROJECT WORK HAS BEEN COMPLETED.

KEYED NOTES:
 1 THE CONTRACTOR SHALL RELOCATE THE CATCH BASIN TO A LOCATION SELECTED BY THE ENGINEER.
 2 BIKE RACK LOCATION SHOWN IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATION SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

LEGEND:
 — WORK COMPLETED IN PHASE-I, II, III AND IV
 — EXISTING
 [Hatched Box] PROPOSED STORM WATER SWALE
 [Dotted Box] PROPOSED ASPHALT PAVEMENT
 [Stippled Box] PROPOSED SIDEWALK
 [White Box] PROPOSED SOD
 [Grid Box] PROPOSED CONCRETE PAVEMENT
 [Circle with Cross] LOCATIONS THAT SOIL BORINGS WERE PERFORMED DURING THE DESIGN OF THIS PROJECT. THE REPORT OF THE GEOTECHNICAL INVESTIGATION IS INCLUDED IN THE APPENDICES FOR GENERAL INFORMATIONAL PURPOSES.



DESIGNED	G.A.B.
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CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

DATE	07/24/15	ISSUED FOR	REQUEST FOR PROPOSAL
NO.	1	BY	G.A.B.

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 4000 Hollywood Boulevard, Suite 750N
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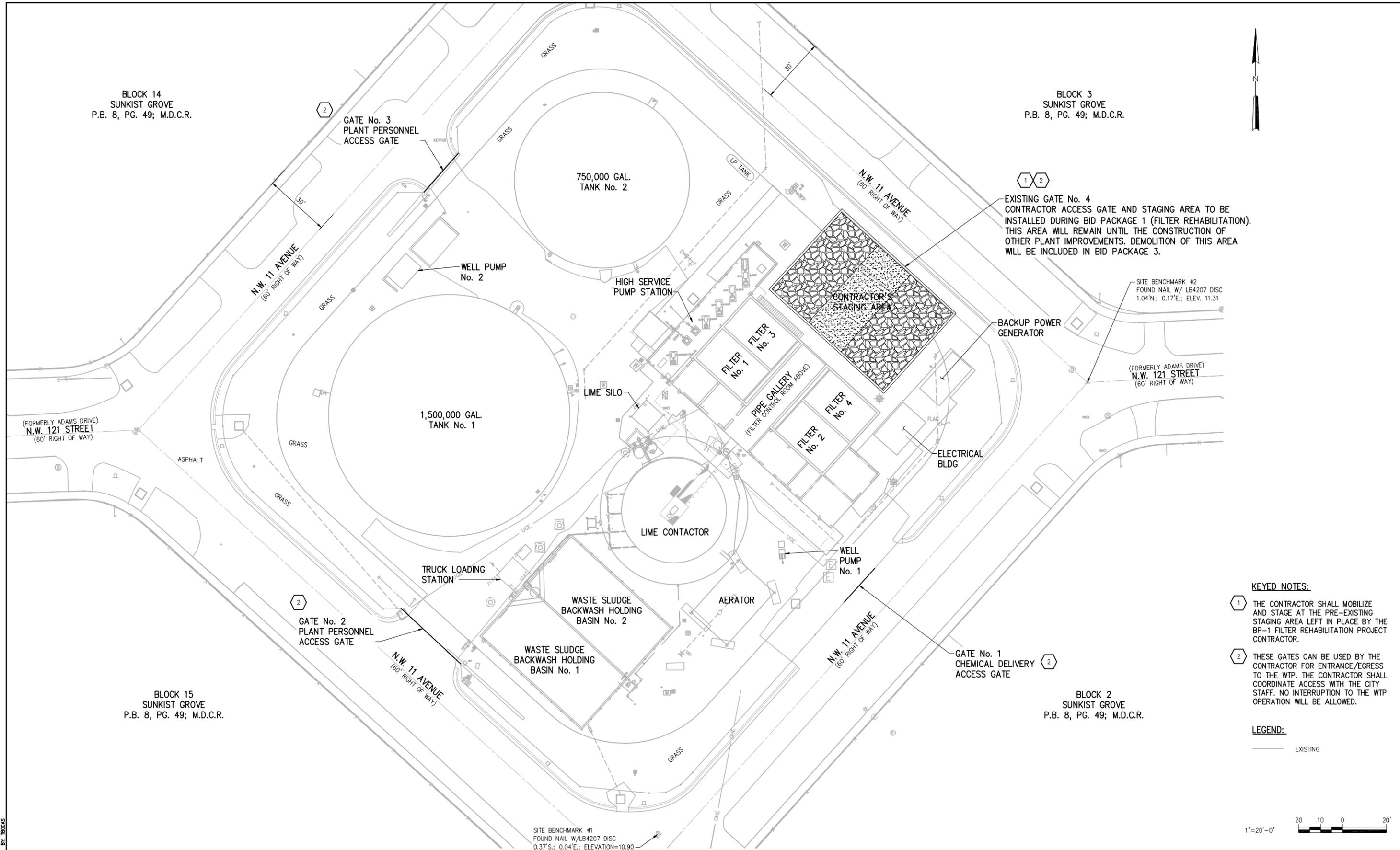
SCALE	1"=20'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G08

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED SITE PLAN

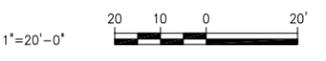
DATE:	JULY 2015
SHEET:	8 OF 335
DRAWING:	G-08

REQUEST FOR PROPOSAL



- KEYED NOTES:**
- ① THE CONTRACTOR SHALL MOBILIZE AND STAGE AT THE PRE-EXISTING STAGING AREA LEFT IN PLACE BY THE BP-1 FILTER REHABILITATION PROJECT CONTRACTOR.
 - ② THESE GATES CAN BE USED BY THE CONTRACTOR FOR ENTRANCE/EGRESS TO THE WTP. THE CONTRACTOR SHALL COORDINATE ACCESS WITH THE CITY STAFF. NO INTERRUPTION TO THE WTP OPERATION WILL BE ALLOWED.

LEGEND:
 ——— EXISTING



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SCALE
 1"=20'-0"

CLIENTS PROJECT: —
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-009

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

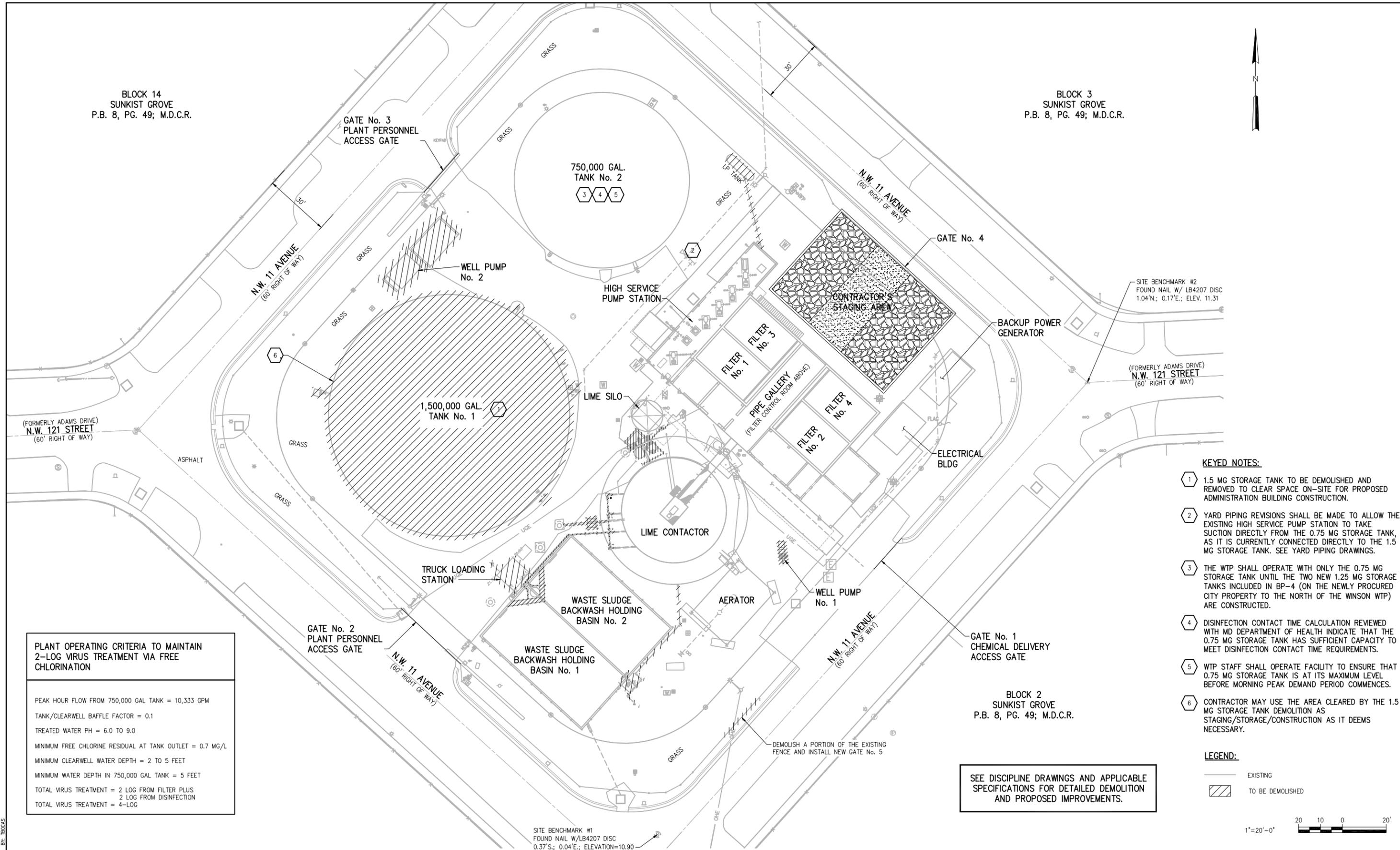
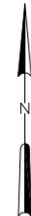
WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS — VOLUME B: WTP REHAB
PROPOSED STAGING PLAN — PHASE I

DATE: JULY 2015
 SHEET: 9 OF 335
 DRAWING: G-09

REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

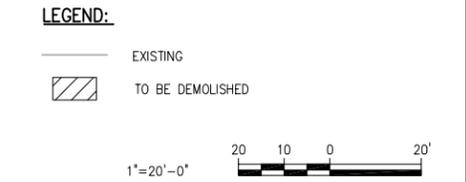
BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.



PLANT OPERATING CRITERIA TO MAINTAIN 2-LOG VIRUS TREATMENT VIA FREE CHLORINATION

PEAK HOUR FLOW FROM 750,000 GAL TANK = 10,333 GPM
 TANK/CLEARWELL BAFFLE FACTOR = 0.1
 TREATED WATER PH = 6.0 TO 9.0
 MINIMUM FREE CHLORINE RESIDUAL AT TANK OUTLET = 0.7 MG/L
 MINIMUM CLEARWELL WATER DEPTH = 2 TO 5 FEET
 MINIMUM WATER DEPTH IN 750,000 GAL TANK = 5 FEET
 TOTAL VIRUS TREATMENT = 2 LOG FROM FILTER PLUS
 2 LOG FROM DISINFECTION
 TOTAL VIRUS TREATMENT = 4-LOG

- KEYED NOTES:**
- 1 1.5 MG STORAGE TANK TO BE DEMOLISHED AND REMOVED TO CLEAR SPACE ON-SITE FOR PROPOSED ADMINISTRATION BUILDING CONSTRUCTION.
 - 2 YARD PIPING REVISIONS SHALL BE MADE TO ALLOW THE EXISTING HIGH SERVICE PUMP STATION TO TAKE SUCTION DIRECTLY FROM THE 0.75 MG STORAGE TANK, AS IT IS CURRENTLY CONNECTED DIRECTLY TO THE 1.5 MG STORAGE TANK. SEE YARD PIPING DRAWINGS.
 - 3 THE WTP SHALL OPERATE WITH ONLY THE 0.75 MG STORAGE TANK UNTIL THE TWO NEW 1.25 MG STORAGE TANKS INCLUDED IN BP-4 (ON THE NEWLY PROCURED CITY PROPERTY TO THE NORTH OF THE WINSON WTP) ARE CONSTRUCTED.
 - 4 DISINFECTION CONTACT TIME CALCULATION REVIEWED WITH MD DEPARTMENT OF HEALTH INDICATE THAT THE 0.75 MG STORAGE TANK HAS SUFFICIENT CAPACITY TO MEET DISINFECTION CONTACT TIME REQUIREMENTS.
 - 5 WTP STAFF SHALL OPERATE FACILITY TO ENSURE THAT 0.75 MG STORAGE TANK IS AT ITS MAXIMUM LEVEL BEFORE MORNING PEAK DEMAND PERIOD COMMENCES.
 - 6 CONTRACTOR MAY USE THE AREA CLEARED BY THE 1.5 MG STORAGE TANK DEMOLITION AS STAGING/STORAGE/CONSTRUCTION AS IT DEEMS NECESSARY.



SEE DISCIPLINE DRAWINGS AND APPLICABLE SPECIFICATIONS FOR DETAILED DEMOLITION AND PROPOSED IMPROVEMENTS.

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SCALE
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CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-G10

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB

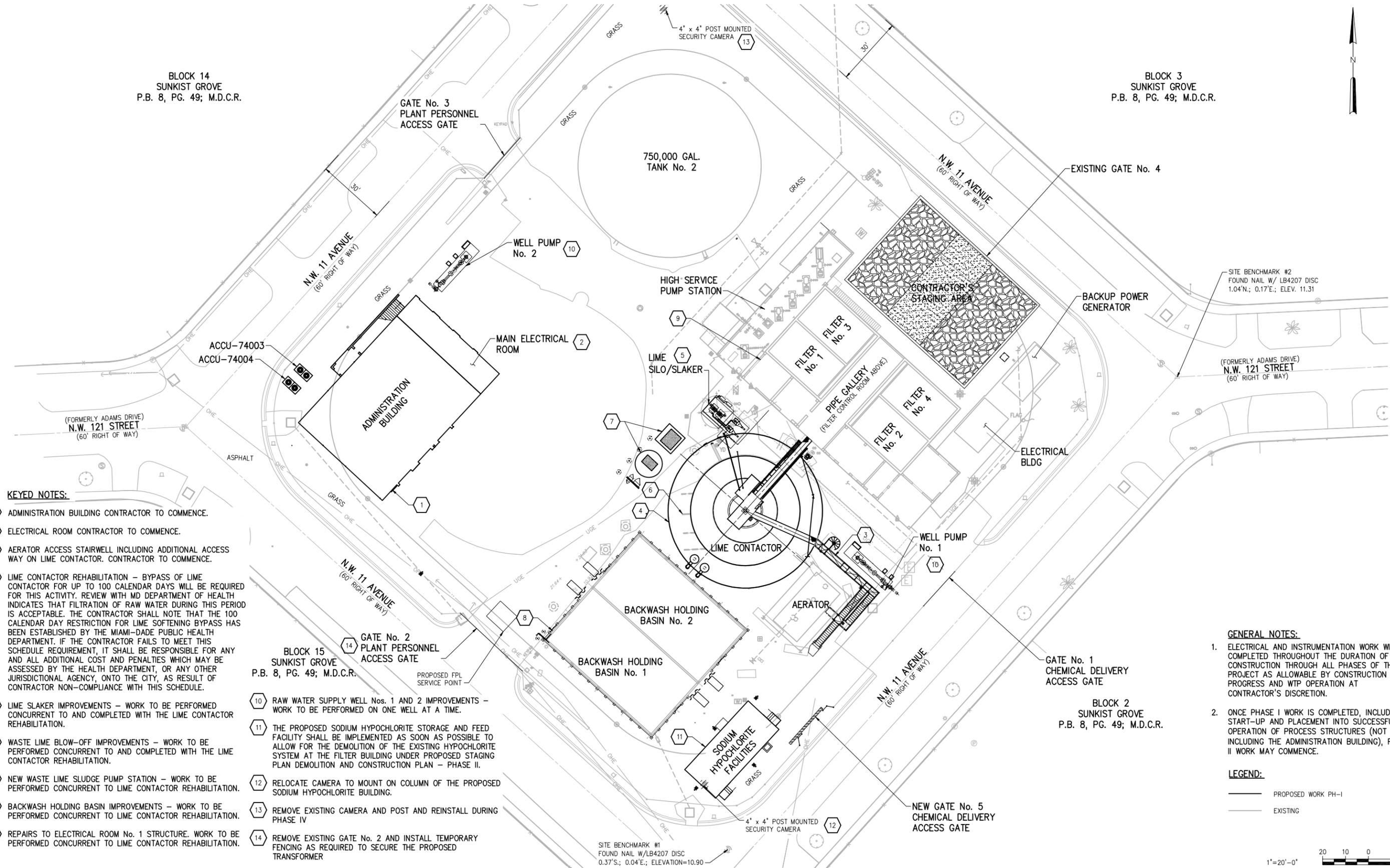
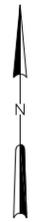
**PROPOSED STAGING PLAN
 DEMOLITION PLAN - PHASE I**

DATE: **JULY 2015**
 SHEET: **10** OF **335**
 DRAWING: **G-10**

REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.



KEYED NOTES:

- 1 ADMINISTRATION BUILDING CONTRACTOR TO COMMENCE.
- 2 ELECTRICAL ROOM CONTRACTOR TO COMMENCE.
- 3 AERATOR ACCESS STAIRWELL INCLUDING ADDITIONAL ACCESS WAY ON LIME CONTACTOR. CONTRACTOR TO COMMENCE.
- 4 LIME CONTACTOR REHABILITATION - BYPASS OF LIME CONTACTOR FOR UP TO 100 CALENDAR DAYS WILL BE REQUIRED FOR THIS ACTIVITY. REVIEW WITH MD DEPARTMENT OF HEALTH INDICATES THAT FILTRATION OF RAW WATER DURING THIS PERIOD IS ACCEPTABLE. THE CONTRACTOR SHALL NOTE THAT THE 100 CALENDAR DAY RESTRICTION FOR LIME SOFTENING BYPASS HAS BEEN ESTABLISHED BY THE MIAMI-DADE PUBLIC HEALTH DEPARTMENT. IF THE CONTRACTOR FAILS TO MEET THIS SCHEDULE REQUIREMENT, IT SHALL BE RESPONSIBLE FOR ANY AND ALL ADDITIONAL COST AND PENALTIES WHICH MAY BE ASSESSED BY THE HEALTH DEPARTMENT, OR ANY OTHER JURISDICTIONAL AGENCY, ONTO THE CITY, AS RESULT OF CONTRACTOR NON-COMPLIANCE WITH THIS SCHEDULE.
- 5 LIME SLAKER IMPROVEMENTS - WORK TO BE PERFORMED CONCURRENT TO AND COMPLETED WITH THE LIME CONTACTOR REHABILITATION.
- 6 WASTE LIME BLOW-OFF IMPROVEMENTS - WORK TO BE PERFORMED CONCURRENT TO AND COMPLETED WITH THE LIME CONTACTOR REHABILITATION.
- 7 NEW WASTE LIME SLUDGE PUMP STATION - WORK TO BE PERFORMED CONCURRENT TO LIME CONTACTOR REHABILITATION.
- 8 BACKWASH HOLDING BASIN IMPROVEMENTS - WORK TO BE PERFORMED CONCURRENT TO LIME CONTACTOR REHABILITATION.
- 9 REPAIRS TO ELECTRICAL ROOM No. 1 STRUCTURE. WORK TO BE PERFORMED CONCURRENT TO LIME CONTACTOR REHABILITATION.

- 10 RAW WATER SUPPLY WELL Nos. 1 AND 2 IMPROVEMENTS - WORK TO BE PERFORMED ON ONE WELL AT A TIME.
- 11 THE PROPOSED SODIUM HYPOCHLORITE STORAGE AND FEED FACILITY SHALL BE IMPLEMENTED AS SOON AS POSSIBLE TO ALLOW FOR THE DEMOLITION OF THE EXISTING HYPOCHLORITE SYSTEM AT THE FILTER BUILDING UNDER PROPOSED STAGING PLAN DEMOLITION AND CONSTRUCTION PLAN - PHASE II.
- 12 RELOCATE CAMERA TO MOUNT ON COLUMN OF THE PROPOSED SODIUM HYPOCHLORITE BUILDING.
- 13 REMOVE EXISTING CAMERA AND POST AND REINSTALL DURING PHASE IV
- 14 REMOVE EXISTING GATE No. 2 AND INSTALL TEMPORARY FENCING AS REQUIRED TO SECURE THE PROPOSED TRANSFORMER

GENERAL NOTES:

1. ELECTRICAL AND INSTRUMENTATION WORK WILL BE COMPLETED THROUGHOUT THE DURATION OF CONSTRUCTION THROUGH ALL PHASES OF THE PROJECT AS ALLOWABLE BY CONSTRUCTION PROGRESS AND WTP OPERATION AT CONTRACTOR'S DISCRETION.
2. ONCE PHASE I WORK IS COMPLETED, INCLUDING START-UP AND PLACEMENT INTO SUCCESSFUL OPERATION OF PROCESS STRUCTURES (NOT INCLUDING THE ADMINISTRATION BUILDING), PHASE II WORK MAY COMMENCE.

LEGEND:

- PROPOSED WORK PH-I
- EXISTING



PLOT DATE: 7/24/2015 11:09 AM BY: TBCCAS

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NO.	DATE	ISSUED FOR	BY
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Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
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Certificate of Authorization Number: 2771

SCALE	1"=20'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G11

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED STAGING PLAN
CONSTRUCTION PLAN - PHASE I

DATE:	JULY 2015
SHEET:	11 OF 335
DRAWING:	G-11

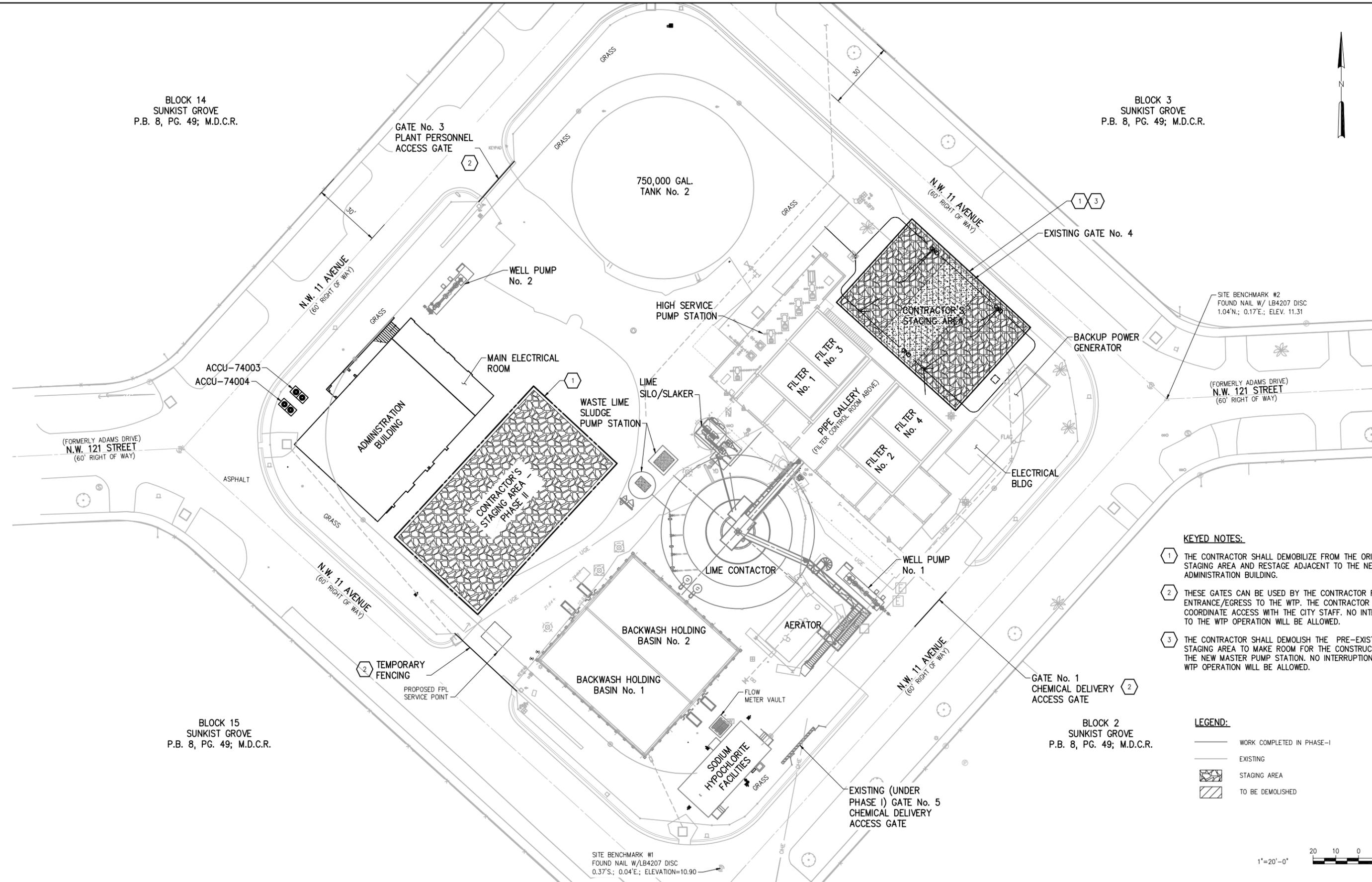
REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 15
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.



- KEYED NOTES:**
- 1 THE CONTRACTOR SHALL DEMOBILIZE FROM THE ORIGINAL STAGING AREA AND RESTAGE ADJACENT TO THE NEW ADMINISTRATION BUILDING.
 - 2 THESE GATES CAN BE USED BY THE CONTRACTOR FOR ENTRANCE/EGRESS TO THE WTP. THE CONTRACTOR SHALL COORDINATE ACCESS WITH THE CITY STAFF. NO INTERRUPTION TO THE WTP OPERATION WILL BE ALLOWED.
 - 3 THE CONTRACTOR SHALL DEMOLISH THE PRE-EXISTING STAGING AREA TO MAKE ROOM FOR THE CONSTRUCTION OF THE NEW MASTER PUMP STATION. NO INTERRUPTION TO THE WTP OPERATION WILL BE ALLOWED.

- LEGEND:**
- WORK COMPLETED IN PHASE-I
 - EXISTING
 - ▨ STAGING AREA
 - ▩ TO BE DEMOLISHED



PLOT DATE: 7/24/2015 11:09 AM BY: TBCCAS

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SCALE
 1"=20'-0"

CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-G12

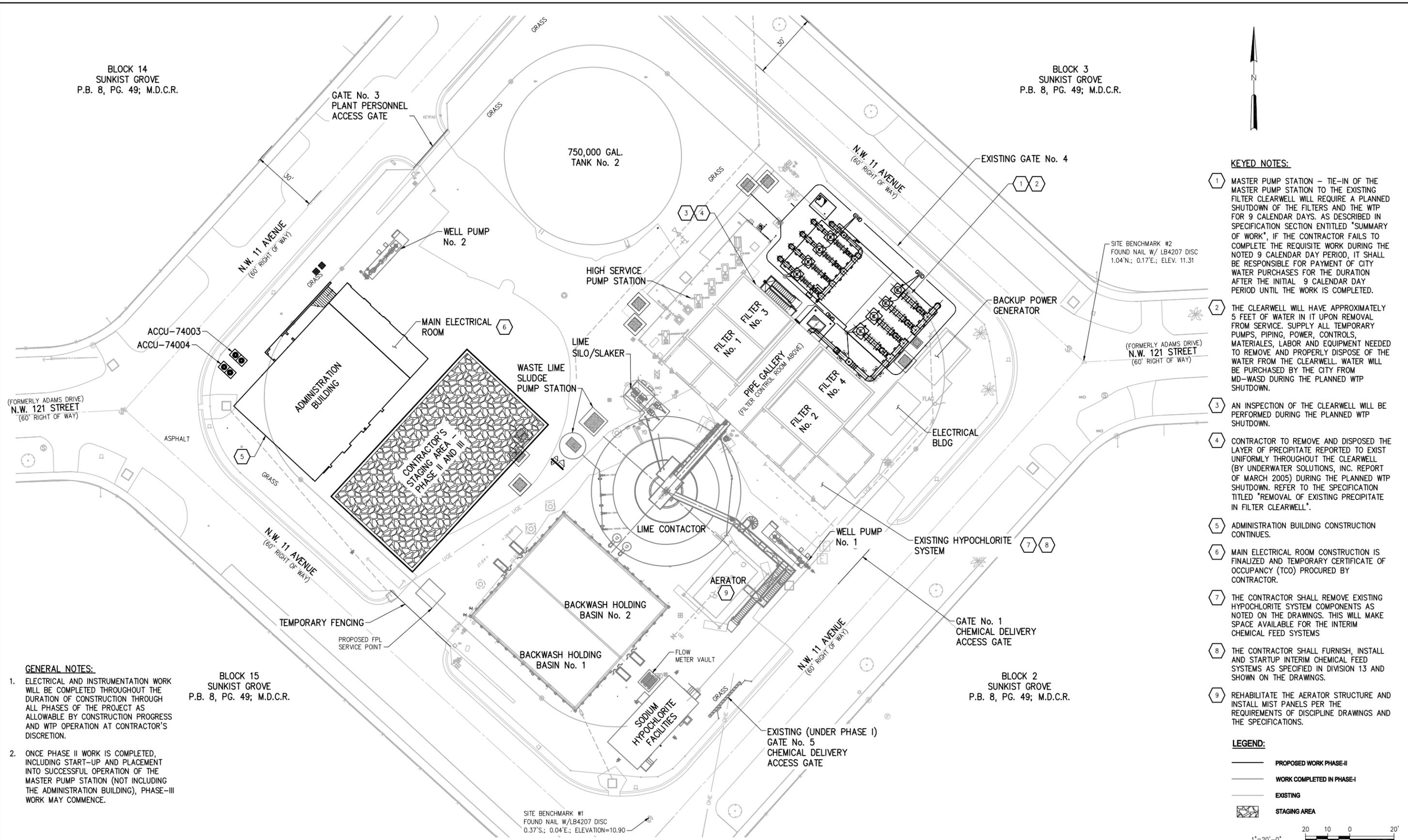
CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB

**PROPOSED STAGING PLAN
 PHASES II, III & IV**

DATE: **JULY 2015**
 SHEET: **12** OF **335**
 DRAWING: **G-12**

REQUEST FOR PROPOSAL



- KEYED NOTES:**
- 1 MASTER PUMP STATION - TIE-IN OF THE MASTER PUMP STATION TO THE EXISTING FILTER CLEARWELL WILL REQUIRE A PLANNED SHUTDOWN OF THE FILTERS AND THE WTP FOR 9 CALENDAR DAYS. AS DESCRIBED IN SPECIFICATION SECTION ENTITLED "SUMMARY OF WORK", IF THE CONTRACTOR FAILS TO COMPLETE THE REQUISITE WORK DURING THE NOTED 9 CALENDAR DAY PERIOD, IT SHALL BE RESPONSIBLE FOR PAYMENT OF CITY WATER PURCHASES FOR THE DURATION AFTER THE INITIAL 9 CALENDAR DAY PERIOD UNTIL THE WORK IS COMPLETED.
 - 2 THE CLEARWELL WILL HAVE APPROXIMATELY 5 FEET OF WATER IN IT UPON REMOVAL FROM SERVICE. SUPPLY ALL TEMPORARY PUMPS, PIPING, POWER, CONTROLS, MATERIALES, LABOR AND EQUIPMENT NEEDED TO REMOVE AND PROPERLY DISPOSE OF THE WATER FROM THE CLEARWELL. WATER WILL BE PURCHASED BY THE CITY FROM MD-WASD DURING THE PLANNED WTP SHUTDOWN.
 - 3 AN INSPECTION OF THE CLEARWELL WILL BE PERFORMED DURING THE PLANNED WTP SHUTDOWN.
 - 4 CONTRACTOR TO REMOVE AND DISPOSED THE LAYER OF PRECIPITATE REPORTED TO EXIST UNIFORMLY THROUGHOUT THE CLEARWELL (BY UNDERWATER SOLUTIONS, INC. REPORT OF MARCH 2005) DURING THE PLANNED WTP SHUTDOWN. REFER TO THE SPECIFICATION TITLED "REMOVAL OF EXISTING PRECIPITATE IN FILTER CLEARWELL".
 - 5 ADMINISTRATION BUILDING CONSTRUCTION CONTINUES.
 - 6 MAIN ELECTRICAL ROOM CONSTRUCTION IS FINALIZED AND TEMPORARY CERTIFICATE OF OCCUPANCY (TCO) PROCURED BY CONTRACTOR.
 - 7 THE CONTRACTOR SHALL REMOVE EXISTING HYPOCHLORITE SYSTEM COMPONENTS AS NOTED ON THE DRAWINGS. THIS WILL MAKE SPACE AVAILABLE FOR THE INTERIM CHEMICAL FEED SYSTEMS
 - 8 THE CONTRACTOR SHALL FURNISH, INSTALL AND STARTUP INTERIM CHEMICAL FEED SYSTEMS AS SPECIFIED IN DIVISION 13 AND SHOWN ON THE DRAWINGS.
 - 9 REHABILITATE THE AERATOR STRUCTURE AND INSTALL MIST PANELS PER THE REQUIREMENTS OF DISCIPLINE DRAWINGS AND THE SPECIFICATIONS.

GENERAL NOTES:

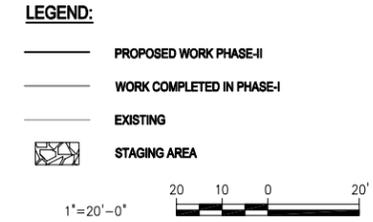
1. ELECTRICAL AND INSTRUMENTATION WORK WILL BE COMPLETED THROUGHOUT THE DURATION OF CONSTRUCTION THROUGH ALL PHASES OF THE PROJECT AS ALLOWABLE BY CONSTRUCTION PROGRESS AND WTP OPERATION AT CONTRACTOR'S DISCRETION.
2. ONCE PHASE II WORK IS COMPLETED, INCLUDING START-UP AND PLACEMENT INTO SUCCESSFUL OPERATION OF THE MASTER PUMP STATION (NOT INCLUDING THE ADMINISTRATION BUILDING), PHASE-III WORK MAY COMMENCE.

BLOCK 15
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

SITE BENCHMARK #1
FOUND NAIL W/LB4207 DISC
0.37'S.; 0.04'E.; ELEVATION=10.90

SITE BENCHMARK #2
FOUND NAIL W/ LB4207 DISC
1.04'N.; 0.17'E.; ELEV. 11.31



DESIGNED	G.A.B.
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SCALE
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CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G13

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT	
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB	
PROPOSED STAGING PLAN DEMOLITION AND CONSTRUCTION PLAN - PHASE II	

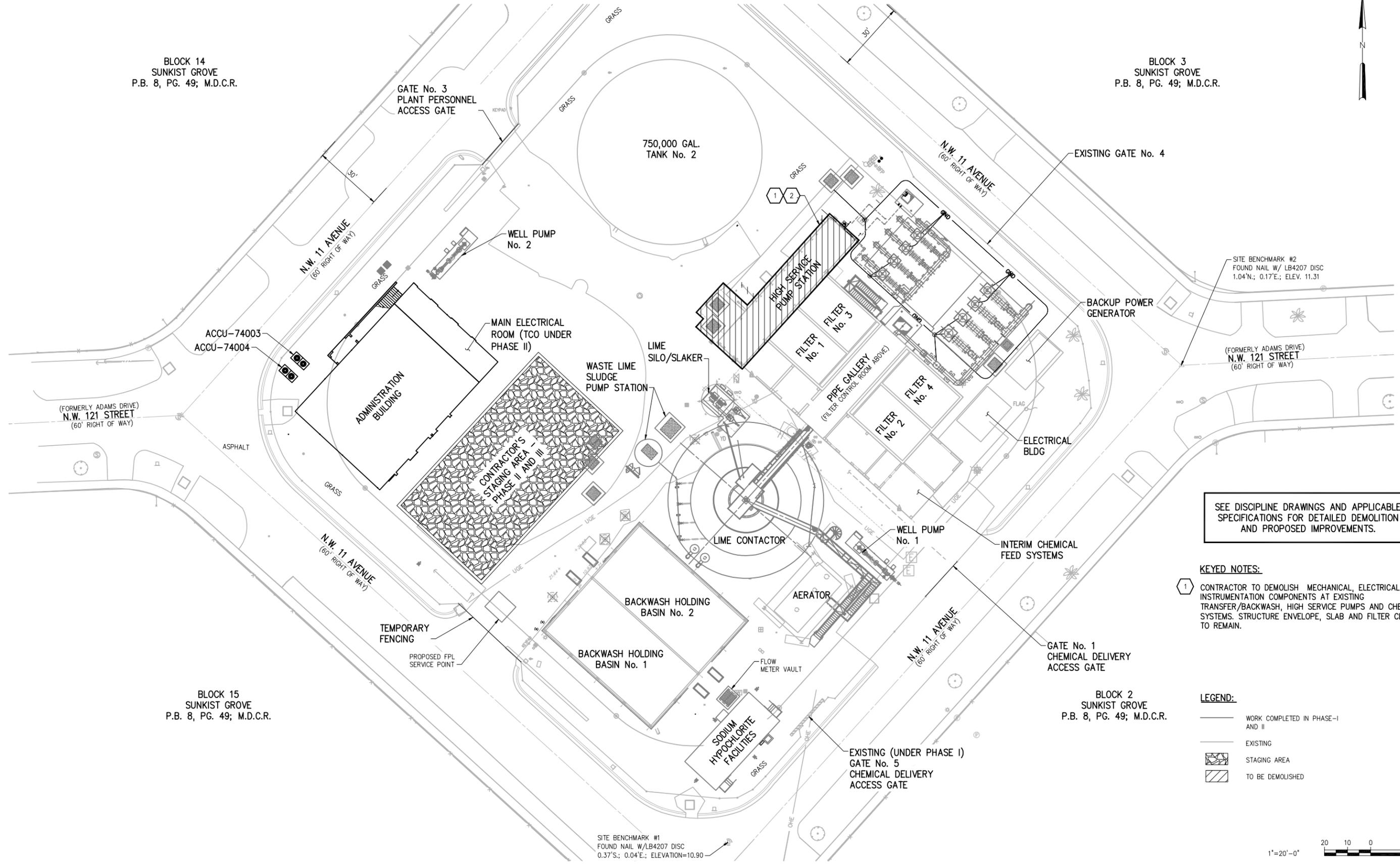
DATE:	JULY 2015
SHEET:	13 OF 335
DRAWING:	G-13

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
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SEE DISCIPLINE DRAWINGS AND APPLICABLE SPECIFICATIONS FOR DETAILED DEMOLITION AND PROPOSED IMPROVEMENTS.

KEYED NOTES:
 1 CONTRACTOR TO DEMOLISH MECHANICAL, ELECTRICAL AND INSTRUMENTATION COMPONENTS AT EXISTING TRANSFER/BACKWASH, HIGH SERVICE PUMPS AND CHEMICAL SYSTEMS. STRUCTURE ENVELOPE, SLAB AND FILTER CLEARWELL TO REMAIN.

LEGEND:
 — WORK COMPLETED IN PHASE-I AND II
 — EXISTING
 [Hatched Box] STAGING AREA
 [Diagonal Lines Box] TO BE DEMOLISHED

1"=20'-0"

PLOT DATE: 7/24/2015 11:09 AM BY: TBCCAS

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 CLIENTS PROJECT: —
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-G14

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB
PROPOSED STAGING PLAN
DEMOLITION PLAN – PHASE III

DATE: **JULY 2015**
 SHEET: **14** OF **335**
 DRAWING: **G-14**

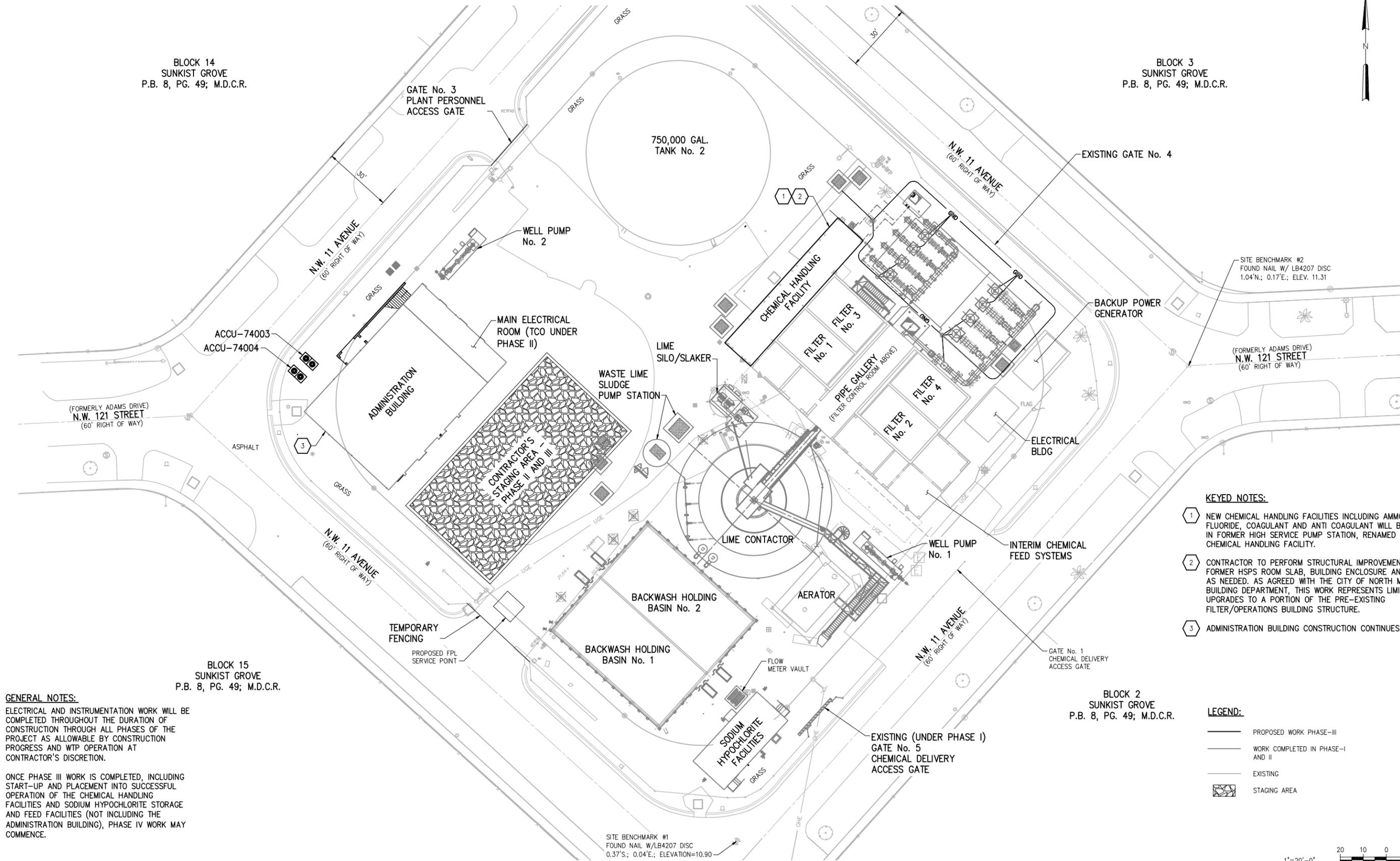
REQUEST FOR PROPOSAL

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SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.



KEYED NOTES:

- 1 NEW CHEMICAL HANDLING FACILITIES INCLUDING AMMONIA, FLUORIDE, COAGULANT AND ANTI COAGULANT WILL BE LOCATED IN FORMER HIGH SERVICE PUMP STATION, RENAMED TO CHEMICAL HANDLING FACILITY.
- 2 CONTRACTOR TO PERFORM STRUCTURAL IMPROVEMENTS TO FORMER HSPS ROOM SLAB, BUILDING ENCLOSURE AND HVAC, AS NEEDED. AS AGREED WITH THE CITY OF NORTH MIAMI BUILDING DEPARTMENT, THIS WORK REPRESENTS LIMITED UPGRADES TO A PORTION OF THE PRE-EXISTING FILTER/OPERATIONS BUILDING STRUCTURE.
- 3 ADMINISTRATION BUILDING CONSTRUCTION CONTINUES.

LEGEND:

- PROPOSED WORK PHASE-III
- WORK COMPLETED IN PHASE-I AND II
- EXISTING
- STAGING AREA

GENERAL NOTES:

1. ELECTRICAL AND INSTRUMENTATION WORK WILL BE COMPLETED THROUGHOUT THE DURATION OF CONSTRUCTION THROUGH ALL PHASES OF THE PROJECT AS ALLOWABLE BY CONSTRUCTION PROGRESS AND WTP OPERATION AT CONTRACTOR'S DISCRETION.
2. ONCE PHASE III WORK IS COMPLETED, INCLUDING START-UP AND PLACEMENT INTO SUCCESSFUL OPERATION OF THE CHEMICAL HANDLING FACILITIES AND SODIUM HYPOCHLORITE STORAGE AND FEED FACILITIES (NOT INCLUDING THE ADMINISTRATION BUILDING), PHASE IV WORK MAY COMMENCE.

SITE BENCHMARK #1
FOUND NAIL W/LB4207 DISC
0.37'S.; 0.04'E.; ELEVATION=10.90

1"=20'-0"

PLOT DATE: 7/24/2015 11:10 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
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PROJ. ENGR.	G.A.B.
GEORGE A. BROWN	P.E.
No. 56076	

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE	1"=20'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G15

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED STAGING PLAN
CONSTRUCTION PLAN - PHASE III

DATE:	JULY 2015
SHEET:	15 OF 335
DRAWING:	G-15

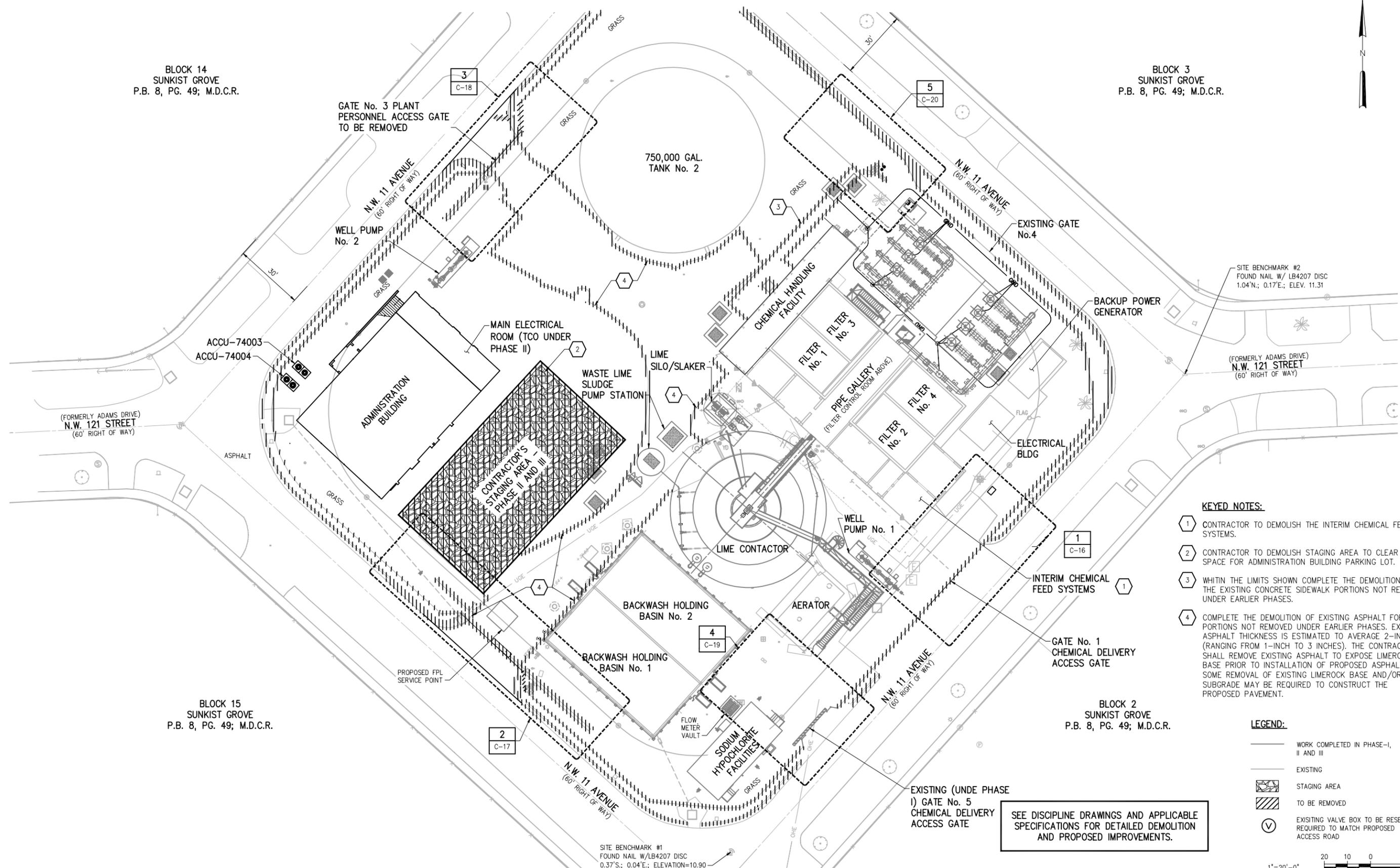
REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 15
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.



KEYED NOTES:

- 1 CONTRACTOR TO DEMOLISH THE INTERIM CHEMICAL FEED SYSTEMS.
- 2 CONTRACTOR TO DEMOLISH STAGING AREA TO CLEAR SPACE FOR ADMINISTRATION BUILDING PARKING LOT.
- 3 WITHIN THE LIMITS SHOWN COMPLETE THE DEMOLITION OF THE EXISTING CONCRETE SIDEWALK PORTIONS NOT REMOVED UNDER EARLIER PHASES.
- 4 COMPLETE THE DEMOLITION OF EXISTING ASPHALT FOR PORTIONS NOT REMOVED UNDER EARLIER PHASES. EXISTING ASPHALT THICKNESS IS ESTIMATED TO AVERAGE 2-INCHES (RANGING FROM 1-INCH TO 3 INCHES). THE CONTRACTOR SHALL REMOVE EXISTING ASPHALT TO EXPOSE LIMEROCK BASE PRIOR TO INSTALLATION OF PROPOSED ASPHALT. SOME REMOVAL OF EXISTING LIMEROCK BASE AND/OR SUBGRADE MAY BE REQUIRED TO CONSTRUCT THE PROPOSED PAVEMENT.

LEGEND:

- WORK COMPLETED IN PHASE-I, II AND III
- EXISTING
- STAGING AREA
- TO BE REMOVED
- EXISTING VALVE BOX TO BE RESET AS REQUIRED TO MATCH PROPOSED ACCESS ROAD

SEE DISCIPLINE DRAWINGS AND APPLICABLE SPECIFICATIONS FOR DETAILED DEMOLITION AND PROPOSED IMPROVEMENTS.



PLOT DATE: 7/24/2015 11:10 AM BY: TBOSAS

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GEORGE A. BROWN
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SCALE
1"=20'-0"

CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-G16

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED STAGING PLAN
DEMOLITION PLAN - PHASE IV

DATE: JULY 2015
SHEET: 16 OF 335
DRAWING: G-16

REQUEST FOR PROPOSAL

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

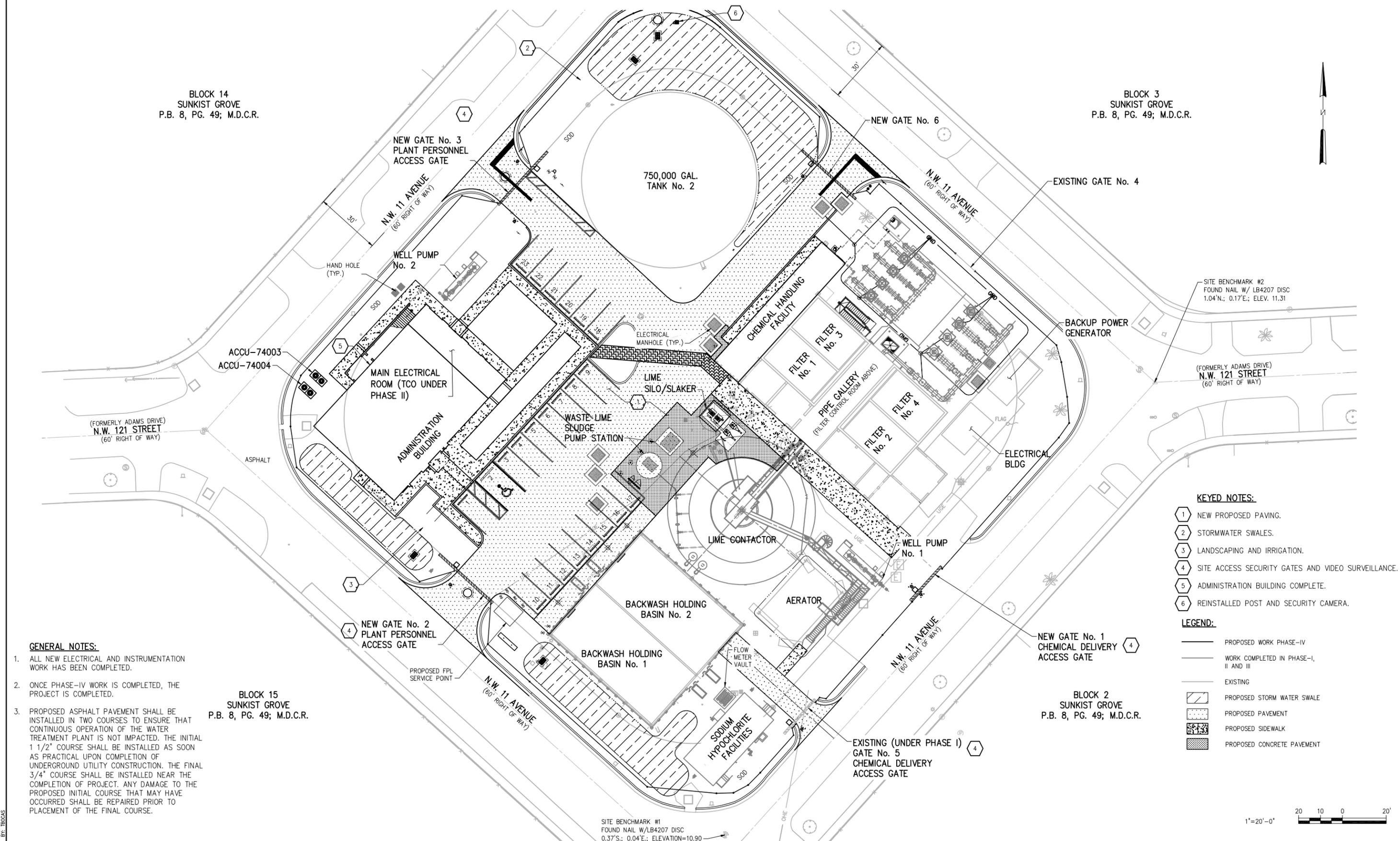
BLOCK 15
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

- GENERAL NOTES:**
- ALL NEW ELECTRICAL AND INSTRUMENTATION WORK HAS BEEN COMPLETED.
 - ONCE PHASE-IV WORK IS COMPLETED, THE PROJECT IS COMPLETED.
 - PROPOSED ASPHALT PAVEMENT SHALL BE INSTALLED IN TWO COURSES TO ENSURE THAT CONTINUOUS OPERATION OF THE WATER TREATMENT PLANT IS NOT IMPACTED. THE INITIAL 1 1/2" COURSE SHALL BE INSTALLED AS SOON AS PRACTICAL UPON COMPLETION OF UNDERGROUND UTILITY CONSTRUCTION. THE FINAL 3/4" COURSE SHALL BE INSTALLED NEAR THE COMPLETION OF PROJECT. ANY DAMAGE TO THE PROPOSED INITIAL COURSE THAT MAY HAVE OCCURRED SHALL BE REPAIRED PRIOR TO PLACEMENT OF THE FINAL COURSE.

- KEYED NOTES:**
- 1 NEW PROPOSED PAVING.
 - 2 STORMWATER SWALES.
 - 3 LANDSCAPING AND IRRIGATION.
 - 4 SITE ACCESS SECURITY GATES AND VIDEO SURVEILLANCE.
 - 5 ADMINISTRATION BUILDING COMPLETE.
 - 6 REINSTALLED POST AND SECURITY CAMERA.

- LEGEND:**
- PROPOSED WORK PHASE-IV
 - WORK COMPLETED IN PHASE-I, II AND III
 - EXISTING
 - ▨ PROPOSED STORM WATER SWALE
 - ▤ PROPOSED PAVEMENT
 - ▥ PROPOSED SIDEWALK
 - ▧ PROPOSED CONCRETE PAVEMENT



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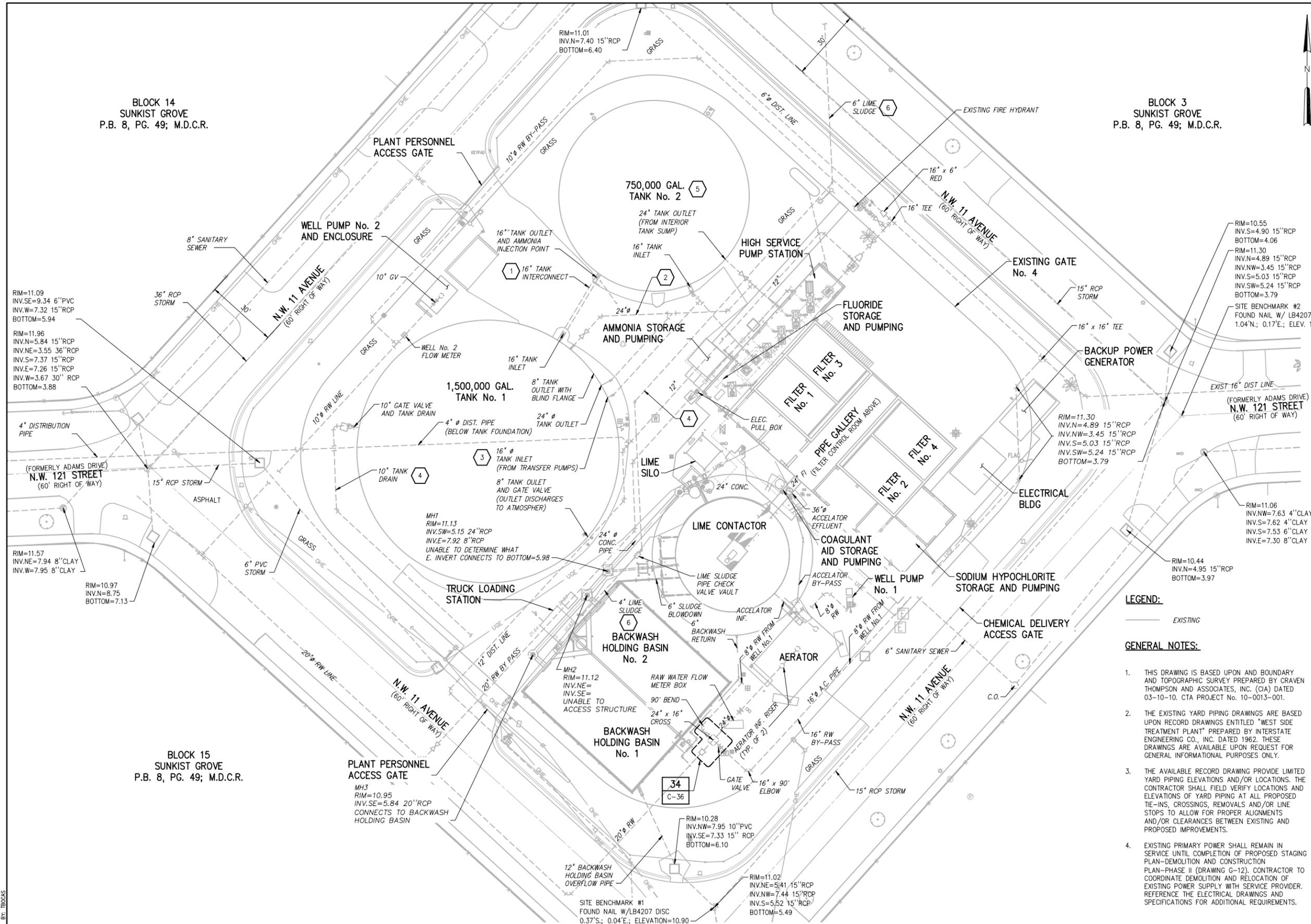
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CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-G17

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED STAGING PLAN
CONSTRUCTION PLAN - PHASE IV

DATE:	JULY 2015
SHEET:	17 OF 335
DRAWING:	G-17

REQUEST FOR PROPOSAL



SYMBOL LEGEND
(THIS SHEET ONLY)

- ELECTRICAL JUNCTION BOX
- ANCHOR
- BOLLARD
- BFP BACKFLOW PREVENTOR
- CATCH BASIN
- CENTERLINE
- CONCRETE POWER POLE
- CONCRETE LIGHT POLE
- ★ DECORATIVE CONCRETE LIGHT POLE
- DOUBLE DETECTOR CHECK VALVE
- DRAINAGE MANHOLE
- ELECTRICAL CONTROL BOX
- ELECTRICAL METER
- ELECTRICAL PULL BOX
- FIRE HYDRANT
- IRRIGATION VALVE
- METAL STREET LIGHT POLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- SIGN
- SPOT ELEVATION
- SPOT/LANDSCAPE LIGHTING
- TELEPHONE MANHOLE
- WATER GATE VALVE
- WOOD POWER POLE
- WOOD STREET LIGHT POLE
- WATER VAULT
- 10.00 + SPOT HARD SURFACE ELEVATION
- 10.0 + SPOT GROUND ELEVATION
- SHADE TREE
- PALM TREE
- CHAIN LINK FENCE
- OHC OVER HEAD WIRES
- SS SANITARY SEWER MAIN
- SD STORM DRAINAGE

KEYED NOTES:

- 1 BASED ON DISCUSSION WITH THE WPT STAFF, THIS PIPE IS ASSUMED TO EXIST. HOWEVER, THE RECORD DRAWINGS DO NOT SHOW THIS PIPE. THE CONTRACTOR SHALL CONFIRM IF THIS PIPE EXISTS AND ITS ORIENTATION. IF THIS PIPE EXISTS, IT SHALL BE REMOVED PER DRAWINGS C-02. BASED ON DISCUSSION WITH THE WPT STAFF, IT IS ASSUMED THAT THE TRANSFER PUMP No. 1 AND No. 2 ARE INTERCONNECTED WITH THE ASSUMED PIPE SHOWN.
- 2 THE WPT STAFF INDICATES THAT THIS PIPE DOES NOT EXIST. HOWEVER, THE RECORD DRAWINGS INDICATE THAT THIS PIPE EXISTS. THE CONTRACTOR SHALL CONFIRM IF THIS PIPE EXISTS AND ITS ORIENTATION. IF THIS PIPE EXISTS THEN REMOVE PER DRAWINGS C-02.
- 3 ACCORDING TO WPT STAFF THIS PIPE IS CURRENTLY NOT USED.
- 4 BASED ON DISCUSSION WITH THE WPT STAFF, THIS PIPE IS ASSUMED TO EXIST. HOWEVER, THE RECORD DRAWINGS DO NOT SHOW THIS PIPE. THE CONTRACTOR SHALL CONFIRM IF THIS PIPE EXISTS AND ITS ORIENTATION. IF THIS PIPE EXISTS, IT SHALL BE REMOVED PER DRAWINGS C-02.
- 5 THE REPORT TITLED "INSPECTION AND CLEANING OF THE 750,000 GALLON WELDED STEEL WATER STORAGE TANK" DATED FEBRUARY 10, 2009 PREPARED FOR CITY OF NORTH MIAMI BY UNDERWATER SOLUTION, INC. INDICATES THAT AN INTERIOR SUMP WITH A 6" TANK DRAIN EXISTS. HOWEVER, NO RECORD DRAWING SHOW THIS PIPE. THE CONTRACTOR SHALL PERFORM EXPLORATORY INVESTIGATION TO DETERMINE IF A DRAIN PIPE EXISTS AND ITS ORIENTATION. IF A DRAIN PIPE IS FOUND THEN THE CONTRACTOR SHALL REVIEW WITH THE OWNER TO AVOID IMPACTS TO WPT OPERATIONS.
- 6 WPT STAFF REPORTS THAT THIS PIPE WAS INSTALLED AT A DEPTH OF COVER OF APPROXIMATELY 1'-6" IN THE GENERAL ORIENTATION SHOWN. THE INFORMATION ON THE LOCATION AND ORIENTATION OF THIS EXISTING PIPELINE WAS SUPPLIED BY THE CITY ON MARCH 11, 2013.

LEGEND:

— EXISTING

GENERAL NOTES:

1. THIS DRAWING IS BASED UPON AND BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES, INC. (CIA) DATED 03-10-10. CTA PROJECT No. 10-0013-001.
2. THE EXISTING YARD PIPING DRAWINGS ARE BASED UPON RECORD DRAWINGS ENTITLED "WEST SIDE TREATMENT PLANT" PREPARED BY INTERSTATE ENGINEERING CO., INC. DATED 1962. THESE DRAWINGS ARE AVAILABLE UPON REQUEST FOR GENERAL INFORMATIONAL PURPOSES ONLY.
3. THE AVAILABLE RECORD DRAWING PROVIDE LIMITED YARD PIPING ELEVATIONS AND/OR LOCATIONS. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF YARD PIPING AT ALL PROPOSED TIE-INS, CROSSINGS, REMOVALS AND/OR LINE STOPS TO ALLOW FOR PROPER ALIGNMENTS AND/OR CLEARANCES BETWEEN EXISTING AND PROPOSED IMPROVEMENTS.
4. EXISTING PRIMARY POWER SHALL REMAIN IN SERVICE UNTIL COMPLETION OF PROPOSED STAGING PLAN-DEMOLITION AND CONSTRUCTION PLAN-PHASE II (DRAWING C-12). CONTRACTOR TO COORDINATE DEMOLITION AND RELOCATION OF EXISTING POWER SUPPLY WITH SERVICE PROVIDER. REFERENCE THE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	G.N.C.
PROJ. ENGR.	G.A.B.
DATE	07/24/15
ISSUED FOR	REQUEST FOR PROPOSAL
BY	G.A.B.

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SCALE	1"=20'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C01

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
YARD PIPING - EXISTING PLAN

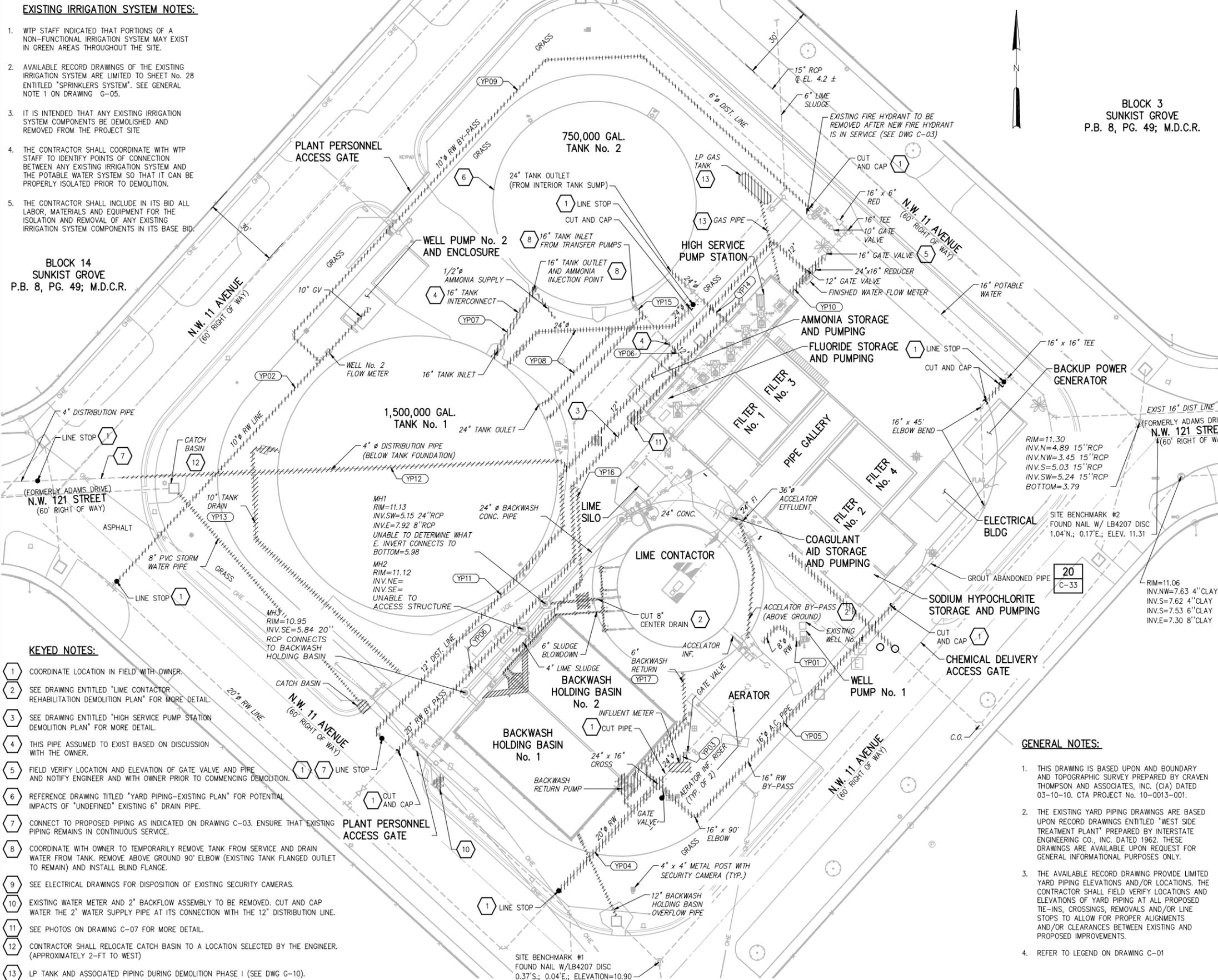
DATE:	JULY 2015
SHEET:	18 OF 335
DRAWING:	C-01

EXISTING IRRIGATION SYSTEM NOTES:

1. WTP STAFF INDICATED THAT PORTIONS OF A NON-FUNCTIONAL IRRIGATION SYSTEM MAY EXIST IN GREEN AREAS THROUGHOUT THE SITE.
2. AVAILABLE RECORD DRAWINGS OF THE EXISTING IRRIGATION SYSTEM ARE LIMITED TO SHEET No. 28 ENTITLED "SPRINKLERS SYSTEM". SEE GENERAL NOTE 1 ON DRAWING G-05.
3. IT IS INTENDED THAT ANY EXISTING IRRIGATION SYSTEM COMPONENTS BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE.
4. THE CONTRACTOR SHALL COORDINATE WITH WTP STAFF TO IDENTIFY POINTS OF CONNECTION BETWEEN ANY EXISTING IRRIGATION SYSTEM AND THE POTABLE WATER SYSTEM SO THAT IT CAN BE PROPERLY ISOLATED PRIOR TO DEMOLITION.
5. THE CONTRACTOR SHALL INCLUDE IN ITS BID ALL LABOR, MATERIALS AND EQUIPMENT FOR THE ISOLATION AND REMOVAL OF ANY EXISTING IRRIGATION SYSTEM COMPONENTS IN ITS BASE BID.

**BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.**

**BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.**



KEYED NOTES:

- 1 COORDINATE LOCATION IN FIELD WITH OWNER.
- 2 SEE DRAWING ENTITLED "LIME CONTACTOR REHABILITATION DEMOLITION PLAN" FOR MORE DETAIL.
- 3 SEE DRAWING ENTITLED "HIGH SERVICE PUMP STATION DEMOLITION PLAN" FOR MORE DETAIL.
- 4 THIS PIPE ASSUMED TO EXIST BASED ON DISCUSSION WITH THE OWNER.
- 5 FIELD VERIFY LOCATION AND ELEVATION OF GATE VALVE AND PIPE AND NOTIFY ENGINEER AND WITH OWNER PRIOR TO COMMENCING DEMOLITION.
- 6 REFERENCE DRAWING TITLED "YARD PIPING-EXISTING PLAN" FOR POTENTIAL IMPACTS OF "UNDEFINED" EXISTING 6" DRAIN PIPE.
- 7 CONNECT TO PROPOSED PIPING AS INDICATED ON DRAWING C-03. ENSURE THAT EXISTING PIPING REMAINS IN CONTINUOUS SERVICE.
- 8 COORDINATE WITH OWNER TO TEMPORARILY REMOVE TANK FROM SERVICE AND DRAIN WATER FROM TANK. REMOVE ABOVE GROUND 90° ELBOW (EXISTING TANK FLANGED OUTLET TO REMAIN) AND INSTALL BLIND FLANGE.
- 9 SEE ELECTRICAL DRAWINGS FOR DISPOSITION OF EXISTING SECURITY CAMERAS.
- 10 EXISTING WATER METER AND 2" BACKFLOW ASSEMBLY TO BE REMOVED. CUT AND CAP WATER THE 2" WATER SUPPLY PIPE AT ITS CONNECTION WITH THE 12" DISTRIBUTION LINE.
- 11 SEE PHOTOS ON DRAWING C-07 FOR MORE DETAIL.
- 12 CONTRACTOR SHALL RELOCATE CATCH BASIN TO A LOCATION SELECTED BY THE ENGINEER. (APPROXIMATELY 2'-FT TO WEST)
- 13 LP TANK AND ASSOCIATED PIPING DURING DEMOLITION PHASE I (SEE DWG G-10).

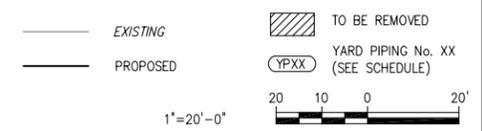
GENERAL NOTES:

1. THIS DRAWING IS BASED UPON AND BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES, INC. (CIA) DATED 03-10-10. CTA PROJECT No. 10-0013-001.
2. THE EXISTING YARD PIPING DRAWINGS ARE BASED UPON RECORD DRAWINGS ENTITLED "WEST SIDE TREATMENT PLANT" PREPARED BY INTERSTATE ENGINEERING CO., INC. DATED 1962. THESE DRAWINGS ARE AVAILABLE UPON REQUEST FOR GENERAL INFORMATIONAL PURPOSES ONLY.
3. THE AVAILABLE RECORD DRAWING PROVIDE LIMITED YARD PIPING ELEVATIONS AND/OR LOCATIONS. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF YARD PIPING AT ALL PROPOSED TIE-INS, CROSSINGS, REMOVALS AND/OR LINE STOPS TO ALLOW FOR PROPER ALIGNMENTS AND/OR CLEARANCES BETWEEN EXISTING AND PROPOSED IMPROVEMENTS.
4. REFER TO LEGEND ON DRAWING C-01

YARD PIPING SCHEDULE

YARD PIPING NO. (YPXX)	DESCRIPTION	PROPOSED PIPE SIZE (INCHES)	SEQUENCE REQUIREMENTS
YP01	ON-SITE PRODUCTION WELL NO. 1 TO INFLUENT METER	10	DEMOLISH EXISTING 6-INCH AND REPLACE WITH PROPOSED 10-INCH MAIN DURING FILTER CLEARWELL SHUTDOWN (9 DAYS) DURING PROPOSED STAGING PLAN- DEMOLITION AND CONSTRUCTION PLAN - PHASE II (SHEET G-12).
YP02	ON-SITE PRODUCTION WELL NO. 2 DISCHARGE PIPE	10	DEMOLISH EXISTING 10-INCH AND REPLACE WITH PROPOSED 10-INCH MAIN. REQUIRES ISOLATION VIA INSTALLATION OF A LINE STOP AT WTP BOUNDARY.
YP03	AERATOR FEED LINE - UP TO GATE VALVE AFTER FLOW METER	24	DEMOLISH EXISTING 24-INCH AND METER UP TO EXISTING GATE VALVE AND REPLACE WITH NEW DURING FILTER CLEARWELL SHUTDOWN (9 DAYS) DURING PROPOSED STAGING PLAN - DEMOLITION AND CONSTRUCTION PLAN - PHASE II (SHEET G-12).
YP04	COMBINED OFF-SITE RAW WATER FEED LINE TO AERATOR	20	DEMOLISH EXISTING 20-INCH AND REPLACE WITH PROPOSED 20-INCH MAIN DURING FILTER CLEARWELL SHUTDOWN (9 DAYS) DURING PROPOSED STAGING PLAN - DEMOLITION AND CONSTRUCTION PLAN - PHASE II (SHEET G-12).
YP05	RAW WATER BYPASS ON SE END OF WTP	16	DEMOLISH EXISTING 16-INCH AS SHOWN WITH CUT, GROUT FILL AND CAP REMAINING MAIN. REQUIRES ISOLATION VIA INSTALLATION OF A LINE STOP AT WTP BOUNDARY.
YP06	RAW WATER BYPASS IN MIDDLE OF WTP TO HSPS	20	DEMOLISH EXISTING 20-INCH DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE I (SHEET G-09).
YP07	INTERCONNECT BETWEEN 0.75 MG AND 1.5 MG TANKS	16	LOCATION OF THIS LINE IS INFERRED AS IT DOES NOT APPEAR ON ANY AVAILABLE RECORD DRAWINGS BUT HAS BEEN VERBALLY VERIFIED BY CITY. THIS WORK SHALL BE IMPLEMENTED DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE I (SHEET G-09).
YP08	STORAGE TANK 1.5 MG CONNECTION TO HSPS	24	PORTIONS OF THE LOCATION OF THIS LINE ARE INFERRED AS IT DOES NOT APPEAR ON ANY AVAILABLE RECORD DRAWINGS BUT HAS BEEN VERBALLY VERIFIED BY CITY. THIS WORK SHALL BE IMPLEMENTED DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE I (SHEET G-09).
YP09	RAW WATER BYPASS ON SE END OF WTP	10	ISOLATE LINE AT BOTH ENDS THROUGH EXISTING GATE VALVES DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE I (SHEET G-09).
YP10	EXISTING HSPS DISCHARGE TO DISTRIBUTION WATER METER	24	DEMOLISH EXISTING 24-INCH DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE III (SHEET G-13).
YP11	EXISTING DISTRIBUTION LINE FROM NW 11TH AVENUE TO CONNECTION WITH TANK NO. 1	16	DEMOLISH EXISTING 12-INCH DISTRIBUTION LINE DURING PROPOSED STAGING PLAN - DEMOLITION PLAN - PHASE I (SHEET G-09). PRIOR TO THE DEMOLITION OF THE EXISTING 12" DISTRIBUTION LINE CONSTRUCT THE PROPOSED 16" POTABLE WATER PIPE FROM THE EXISTING HIGH SERVICE PUMP STATION DISCHARGE MANIFOLD TO THE CONNECTION WITH THE EXISTING TO REMAIN PORTION OF THE 12" DISTRIBUTION PIPE. SEE DRAWING C-03 FOR CONNECTION OF EXISTING AND PROPOSED.
YP12	EXISTING 4" DISTRIBUTION PIPE	4	DEMOLISH EXISTING 4" DISTRIBUTION DURING PROPOSED STAGING PLAN-DEMOLITION PLAN PHASE 1. (SHEET G-09) PRIOR TO THE DEMOLITION OF THE EXISTING 4" PIPE PROPOSED 16-INCH POTABLE WATER PIPE FROM THE EXISTING HIGH SERVICE PUMP STATION DISCHARGE MANIFOLD TO THE CONNECTION WITH THE EXISTING TO REMAIN PORTION OF THE 4" DISTRIBUTION PIPE. SEE DRAWING C-03 FOR CONNECTION OF EXISTING 4" DISTRIBUTION PIPE TO 16" POTABLE WATER PIPE.
YP13	10" TANK DRAIN	N/A	LOCATION OF THIS PIPE IS INFERRED AS IT DOES NOT APPEAR ON ANY RECORD DRAWINGS BUT HAS BEEN VERBALLY VERIFIED BY THE CITY. THIS PIPE SHALL BE REMOVED DURING PROPOSED STAGING PLAN-DEMOLITION PLAN-PHASE I (SEE SHEET G-09)
YP14	EXISTING 24-INCH HIGH SERVICE PUMP STATION SUCTION HEADER CONNECTION WITH 750,000 GALLON TANK (PORTION OF PIPE FROM PUMP STATION HEADER TO EXISTING GATE VALVE)	24	COMPLETE THE TIE-IN (VIA HOT TAP) OF THE PROPOSED HSPS SUCTION PIPING WITH THE EXISTING 24" TANK OUTLET OF THE 750,000 GALLON TANK PRIOR TO INITIATING DEMOLITION OF YP14. DEMOLISH THE PORTION OF THE EXISTING 24-INCH PIPE FROM THE EXISTING HIGH SERVICE PUMP STATION HEADER TO THE EXISTING GATE VALVE DURING PROPOSED STAGING PLAN-DEMOLITION PLAN-PHASE III (SHEET G-13)
YP15	EXISTING 16-INCH TRANSFER PUMP DISCHARGE HEADER CONNECTION WITH 750,000 GALLON TANK	16	COMPLETE THE TIE-IN OF THE PROPOSED TRANSFER PUMPS DISCHARGE CONNECTION WITH THE 750,000 GALLON TANK PRIOR TO INITIATING DEMOLITION OF YP14. DEMOLISH THE 16-INCH PIPE FROM THE EXISTING TRANSFER PUMPS TO THE ABOVE GROUND 16" TANK INLET DURING PROPOSED STAGING PLAN-DEMOLITION PLAN - PHASE III (SHEET G-13).
YP16	4" AND 6" LIME SLUDGE	6	DEMOLISH THE PORTION OF THE EXISTING 4-INCH AND 6-INCH LIME SLUDGE PIPING AS INDICATED DURING PROPOSED STAGING PLAN-CONSTRUCTION PLAN - PHASE I (SHEET G-10).
YP17	6" BACKWASH RETURN	6	DEMOLISH THE EXISTING 6-INCH BACKWASH RETURN PIPE DURING PROPOSED STAGING PLAN-CONSTRUCTION PLAN - PHASE I (SHEET G-10).

LEGEND:



DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	G.N.C.
PROJ. ENGR.	G.A.B.

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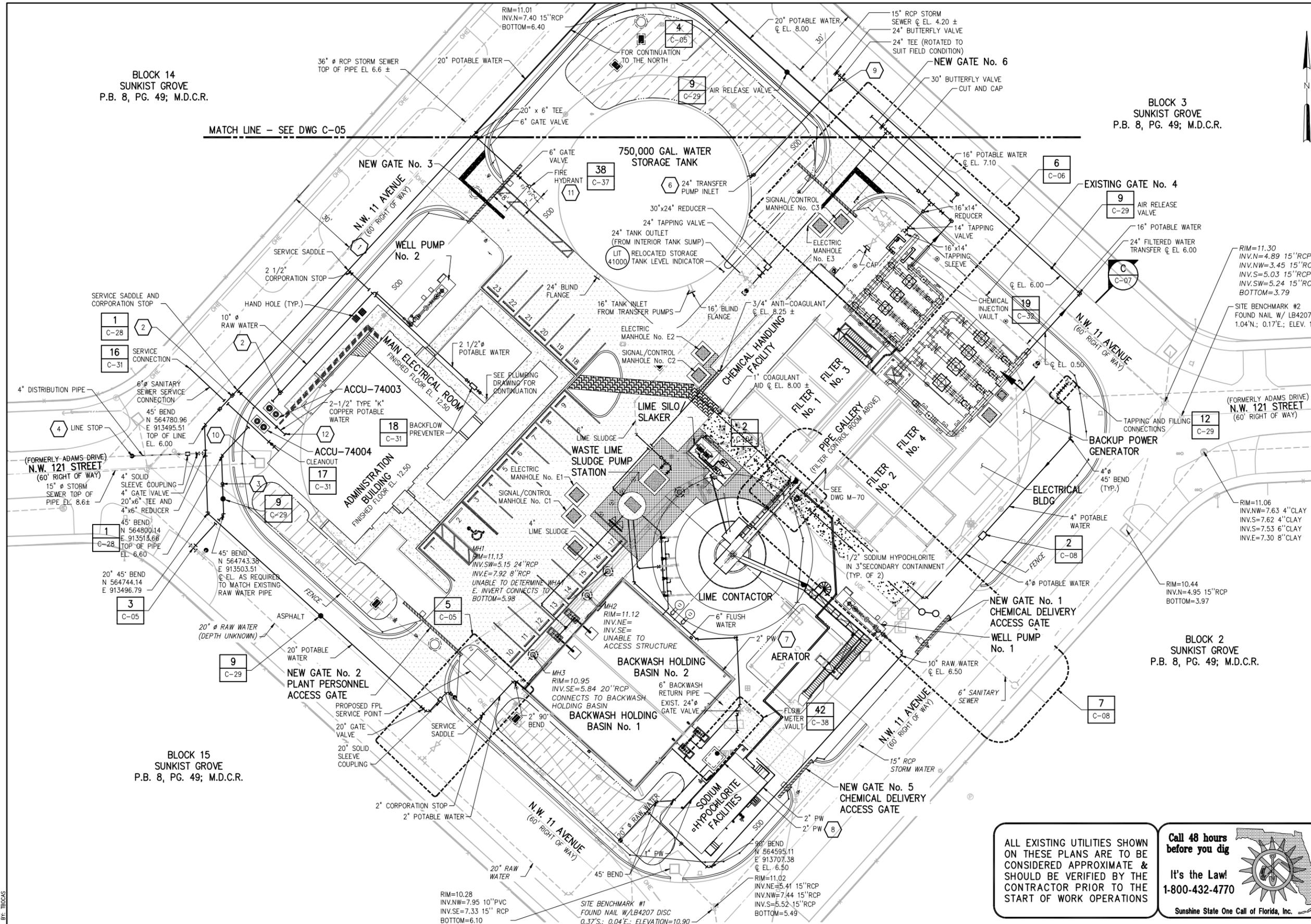
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ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C02

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
YARD PIPING - DEMOLITION PLAN SEQUENCING

DATE:	JULY 2015
SHEET:	19 OF 335
DRAWING:	C-02



- GENERAL NOTES:**
1. WORK SHOWN ON THIS SHEET IS BASED UPON THE SEQUENCING RESTRICTION SHOW ON THE DRAWING ENTITLED "YARD PIPING - DEMOLITION PLAN - SEQUENCING" AND THE SECTION ENTITLED "SUMMARY OF WORK".
 2. THE AVAILABLE RECORD DRAWING PROVIDE LIMITED YARD PIPING ELEVATIONS AND/OR LOCATIONS. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF YARD PIPING AT ALL PROPOSED TIE-INS, CROSSINGS, REMOVALS AND/OR LINE STOPS TO ALLOW FOR PROPER ALIGNMENTS AND/OR CLEARANCES BETWEEN EXISTING AND PROPOSED IMPROVEMENTS.
 3. ORIENT GATE VALVE OPERATORS AS NECESSARY TO MATCH EXISTING PIPE AND GRADE ELEVATIONS. PROVIDE BEVEL GEAR OPERATORS WHERE NEEDED AT NO ADDITIONAL COST.
 4. RESTRAIN ALL JOINTS.
 5. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.

- KEYED NOTES:**
- 1 MAINTAIN A 5'-0" HORIZONTAL SEPARATION DISTANCE BETWEEN THE WATER PIPE AND STORM SEWER.
 - 2 PROVIDE FITTINGS AS REQUIRED TO CROSS 12" BELOW THE SANITARY SEWER AND STORM SEWER PER DETAILS ON DRAWING C-28.
 - 3 PROVIDE FITTINGS AS REQUIRED TO MATCH THE ELEVATION OF THE EXISTING 20" RAW WATER PIPE.
 - 4 REFER TO DRAWING C-02 FOR LINE STOP LOCATION.
 - 5 PROVIDE FITTINGS AS REQUIRED TO MATCH ELEVATION OF PROPOSED 16" POTABLE WATER.
 - 6 THE MODIFICATION OF TANK No. 2 TO CONSTRUCT THE PROPOSED TRANSFER PUMP INLET, REQUIRES TANK No. 2 TO BE REMOVED FOR SERVICE WHILE TANK No. 1 IS IN SERVICE. HENCE, THIS WORK SHALL BE PERFORMED PRIOR TO INITIATING PROPOSED STAGING PLAN-DEMOLITION PLAN-PHASE 1 (SHEET G-09).
 - 7 2" POTABLE WATER MOUNTED ON TOP THE BACKWASH HOLDING BASINS. SEE DRAWING XXX FOR MORE DETAILS.
 - 8 SEE DRAWING M-62 FOR 2" POTABLE WATER AROUND THE SODIUM HYPOCHLORITE FACILITY.
 - 9 FURNISH AND INSTALL FITTINGS AS NEEDED TO SUIT FIELD CONDITIONS AND AVOID CONFLICTS BETWEEN EXISTING AND PROPOSED PIPING AT NO ADDITIONAL COST TO THE OWNER.
 - 10 THE CONTRACTOR SHALL RELOCATE THE CATCH BASIN TO A LOCATION SELECTED BY THE ENGINEER.
 - 11 THE PROPOSED FIRE HYDRANT MUST BE IN SERVICE PRIOR TO THE DEMOLITION OF THE EXISTING HYDRANT SHOWN ON DRAWING C-02.
 - 12 CONNECT TO IRRIGATION METER (SEE IRRIGATION DRAWINGS).

- LEGEND:**
- WORK COMPLETED IN PHASE-I, II, III AND IV
 - EXISTING
 - PROPOSED
 - ▨ PROPOSED STORM WATER SWALE
 - ▨ PROPOSED ASPHALT PAVEMENT
 - ▨ PROPOSED SIDEWALK
 - ▨ PROPOSED SOD
 - ▨ PROPOSED CONCRETE PAVEMENT

ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE & SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF WORK OPERATIONS

Call 48 hours before you dig
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Sunshine State One Call of Florida, Inc.



DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

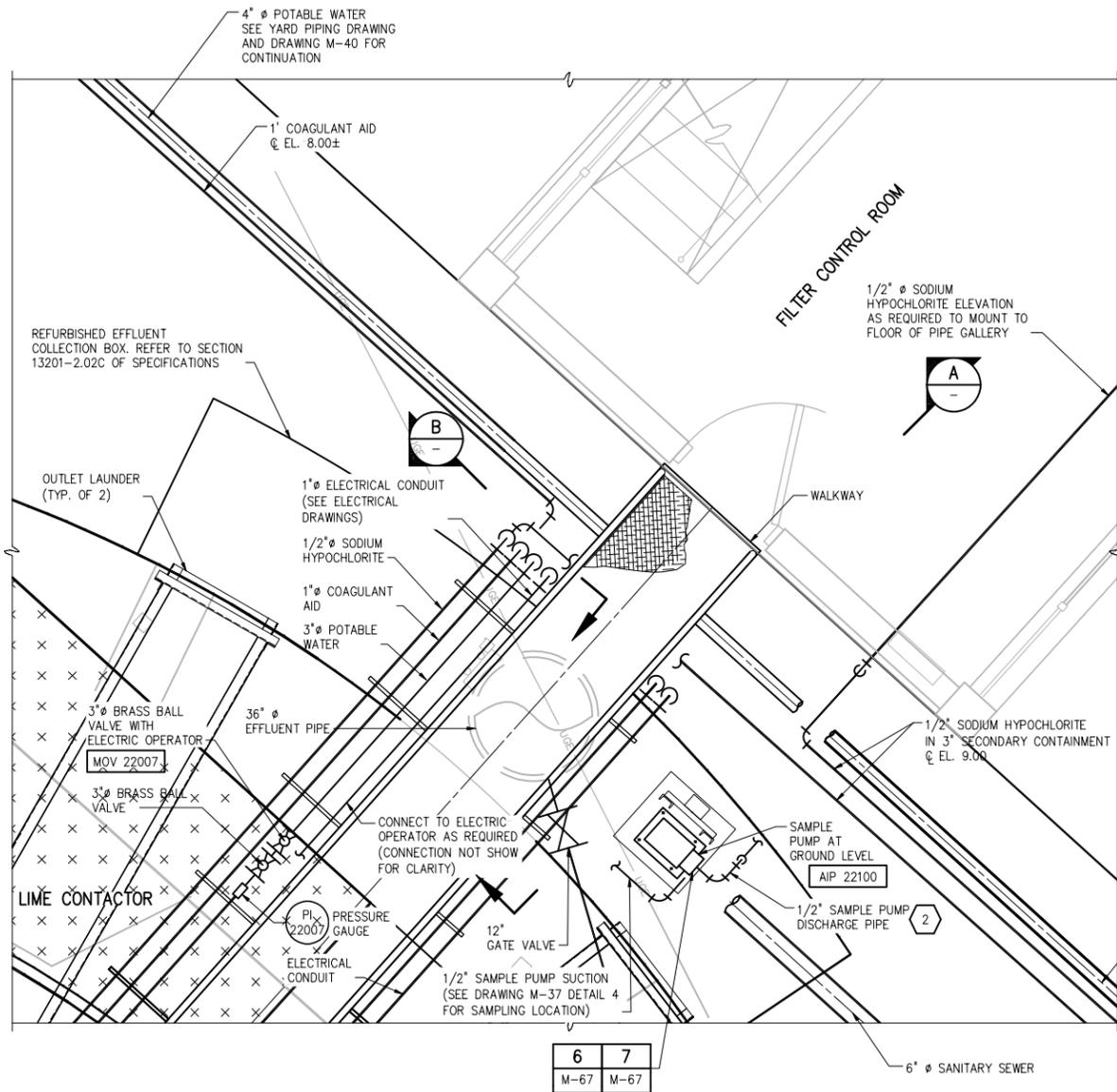
HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE	1"=20'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C03

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

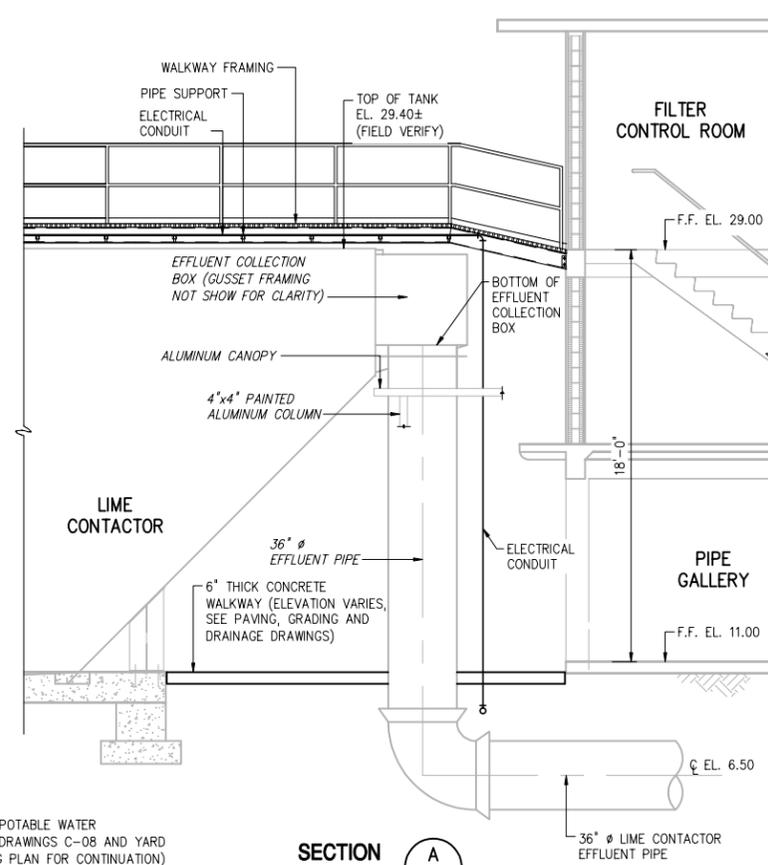
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
YARD PIPING - PROPOSED PLAN

DATE:	JULY 2015
SHEET:	20 OF 335
DRAWING:	C-03

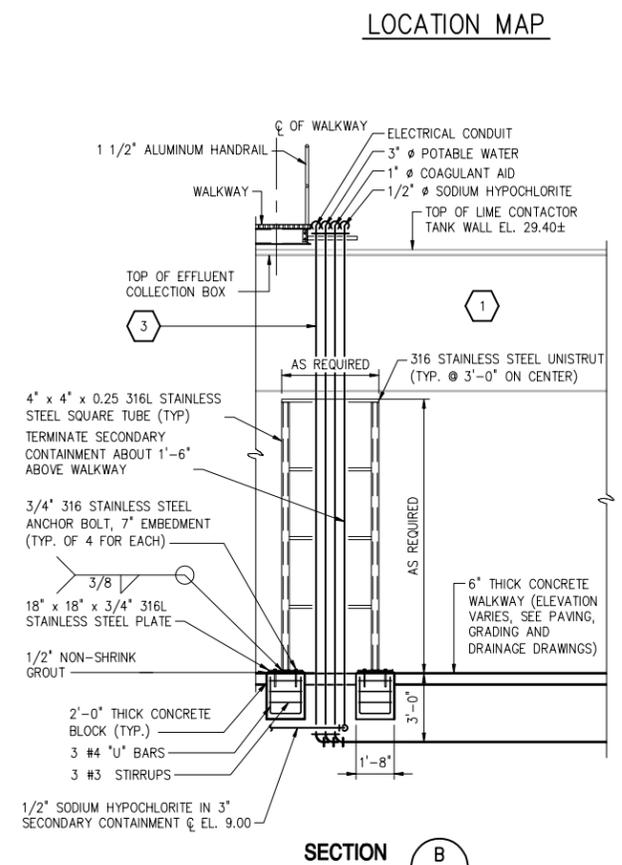


PLAN AT ELEVATION 35 ±

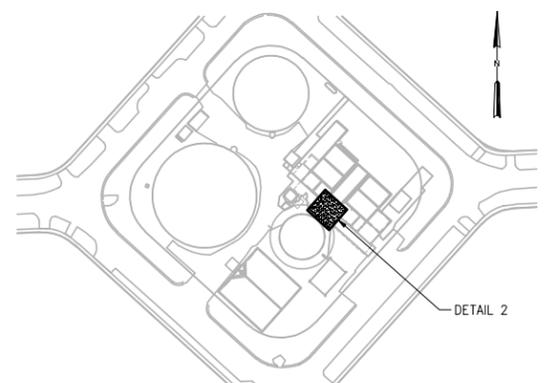
1/2"=1'-0"



SECTION A
1/4"=1'-0"



SECTION B
1/4"=1'-0"



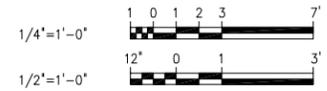
LOCATION MAP

KEYED NOTES:

- 1 EXISTING ALUMINUM CANOPY NOT SHOWN IN SECTION VIEW FOR CLARITY.
- 2 FIELD ROUTE THE PROPOSED SAMPLE PUMP DISCHARGE PIPE (WITH OWNER'S ASSISTANCE) TO THE EXISTING FILTER CONTROL ROOM LABORATORY FOR CONNECTION WITH THE PROPOSED WATER QUALITY ANALYZERS. (REFER TO DRAWING M-68 FOR PROPOSED ANALYZERS). FURNISH AND INSTALL PIPE SUPPORTS NEEDED. FOR PURPOSES OF BIDDING, ASSUME 200 FEET OF PROPOSED SAMPLE PUMP DISCHARGE PIPING.
- 3 THE LOCATION SHOWN FOR THE VERTICAL PIPING (AND CONDUIT) IS FOR CONCEPTUAL PURPOSES ONLY. COORDINATE ACTUAL LOCATION OF VERTICAL PIPES/CONDUITS TO SUIT FIELD CONDITIONS SO THAT PIPING/CONDUITS DO NOT CONFLICT WITH THE EXISTING ALUMINUM CANOPY.

LEGEND:

- EXISTING
- PROPOSED



DETAIL 2
VARIES C-03

PLOT DATE: 7/24/2015 11:11 AM BY: TBGAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771
DRAWN	G.P.B.	
CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	
GEORGE A. BROWN No. 56076		P.E.

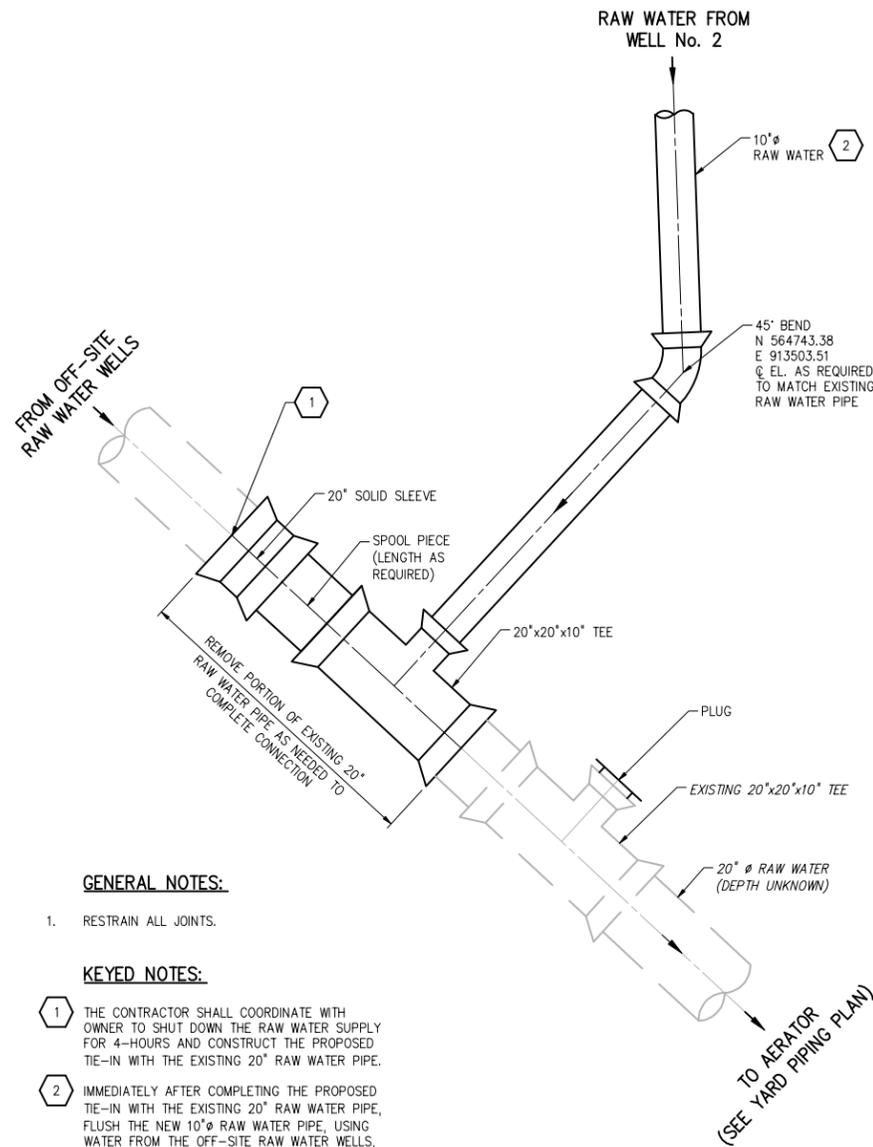
SCALE	AS NOTED
CLIENTS PROJECT:	—
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C04


CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB	
YARD PIPING – DETAILS SHEET 1	

DATE:	JULY 2015
SHEET:	21 OF 335
DRAWING:	C-04

REQUEST FOR PROPOSAL



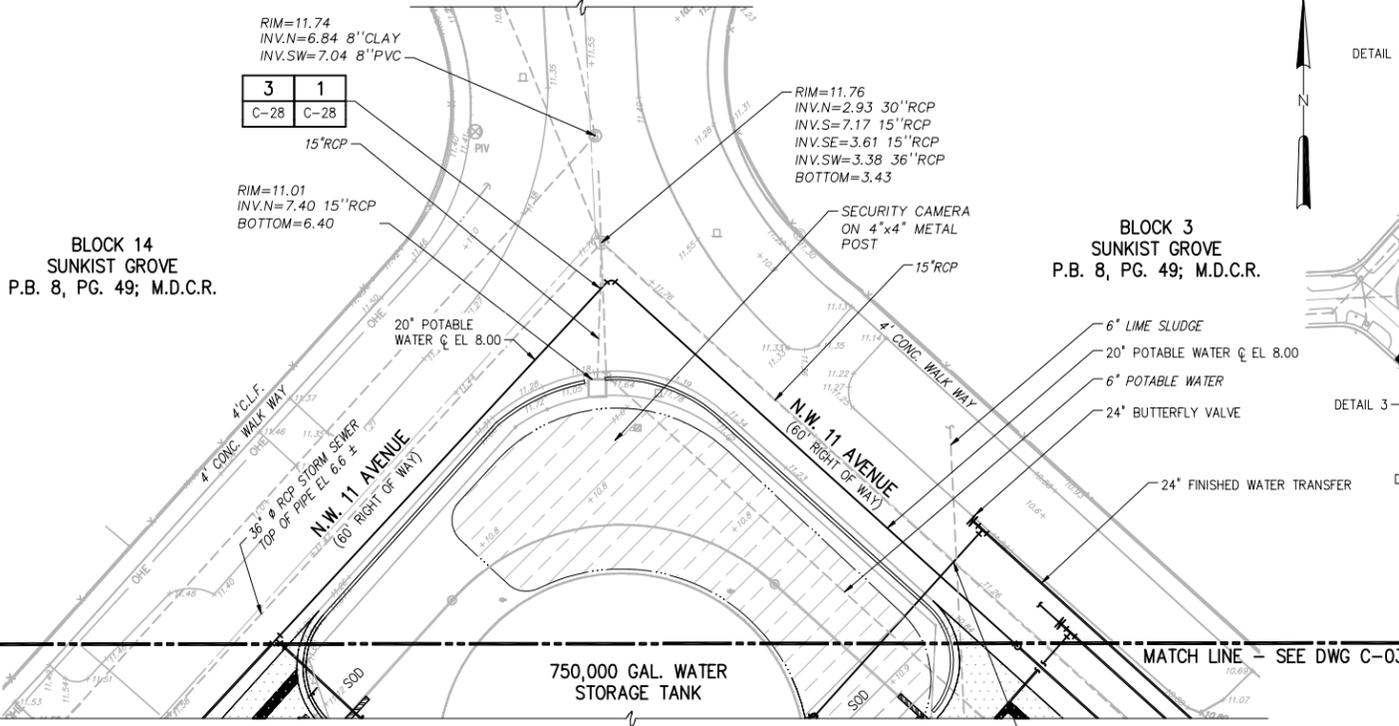
DETAIL 3
6" = 1'-0" C-03

GENERAL NOTES:

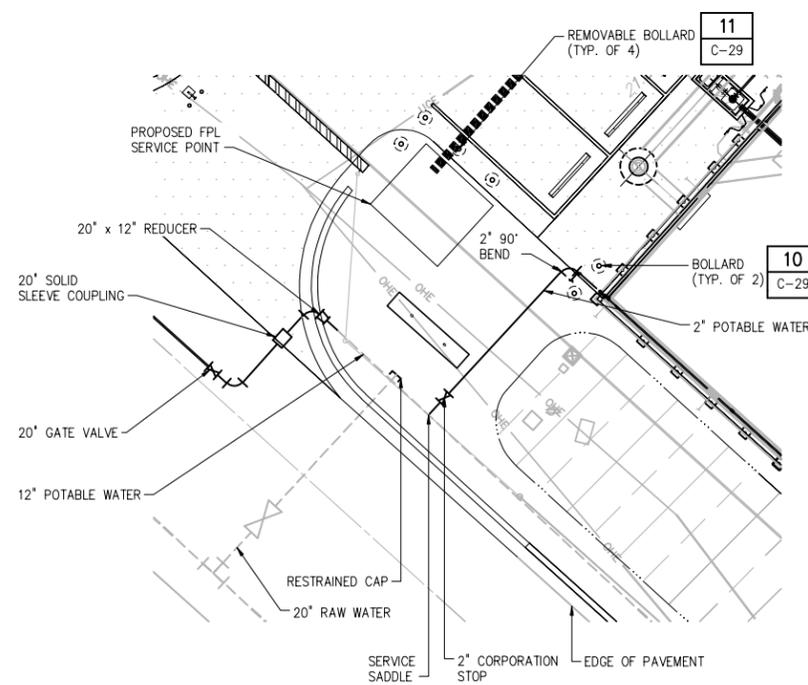
- RESTRAIN ALL JOINTS.

KEYED NOTES:

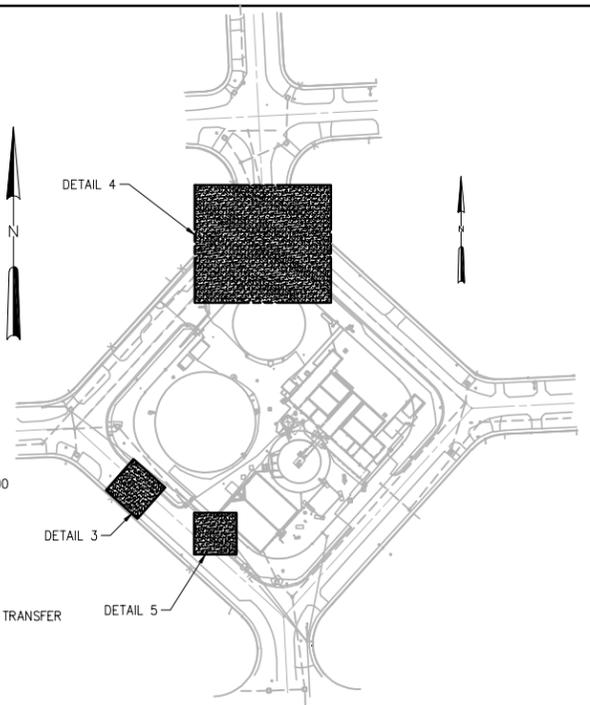
- THE CONTRACTOR SHALL COORDINATE WITH OWNER TO SHUT DOWN THE RAW WATER SUPPLY FOR 4-HOURS AND CONSTRUCT THE PROPOSED TIE-IN WITH THE EXISTING 20" RAW WATER PIPE.
- IMMEDIATELY AFTER COMPLETING THE PROPOSED TIE-IN WITH THE EXISTING 20" RAW WATER PIPE, FLUSH THE NEW 10" RAW WATER PIPE, USING WATER FROM THE OFF-SITE RAW WATER WELLS, FROM THE CONNECTION WITH THE EXISTING 20" RAW WATER PIPE TO THE WATER TREATMENT PLANT. PROVIDE ALL NEEDED TEMPORARY PIPING, ACCESSORIES AND VALVES AT THE WATER TREATMENT PLANT TO DISPOSE OF FLUSHING WATER.



DETAIL 4
1" = 20'-0" C-03

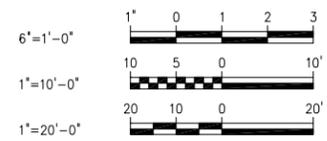


DETAIL 5
1" = 10'-0" C-03



LOCATION MAP

- LEGEND:**
- WORK COMPLETED IN PHASE-I, II, III AND IV
 - EXISTING
 - PROPOSED
 - PROPOSED STORM WATER SWALE
 - PROPOSED PAVEMENT
 - PROPOSED SIDEWALK
 - PROPOSED SOD



PLOT DATE: 7/24/2015 11:11 AM BY: TBGCS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771
DRAWN	G.P.B.	
CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	
GEORGE A. BROWN No. 56076		P.E.

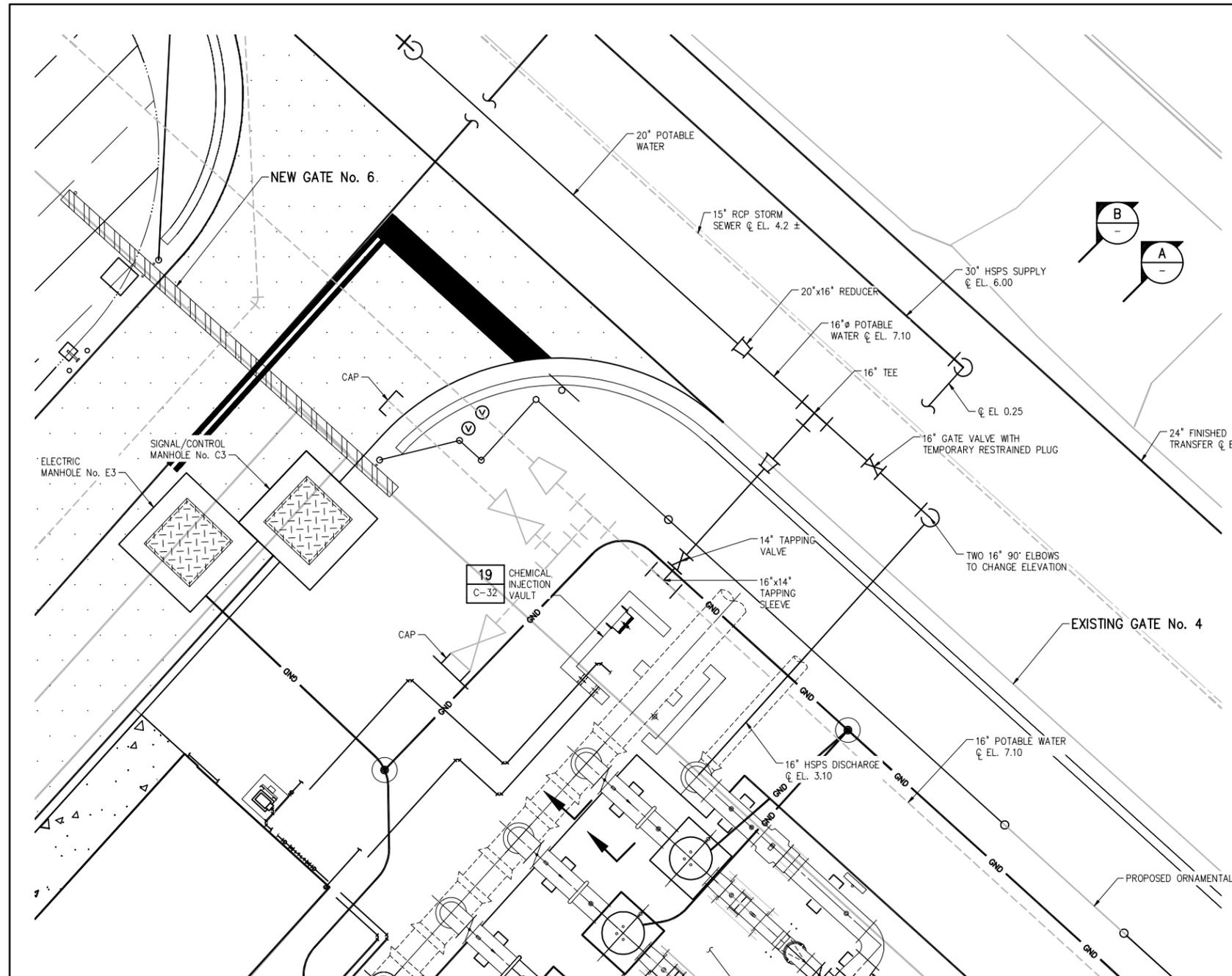
SCALE	AS NOTED	CLIENTS PROJECT:	-
		ENGINEERS PROJECT:	44238-004
		CAD REFERENCE:	44238-004BP3-C05

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

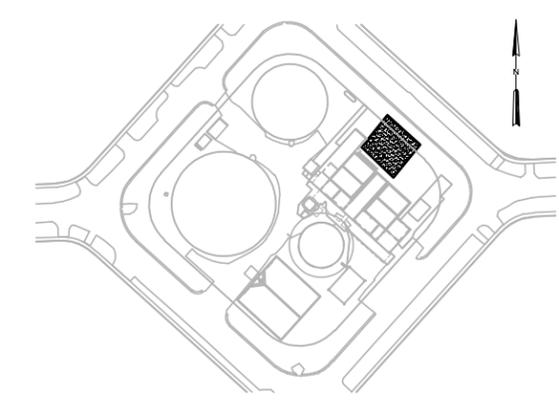
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
YARD PIPING - DETAILS
SHEET 2

DATE:	JULY 2015
SHEET:	22 OF 335
DRAWING:	C-05

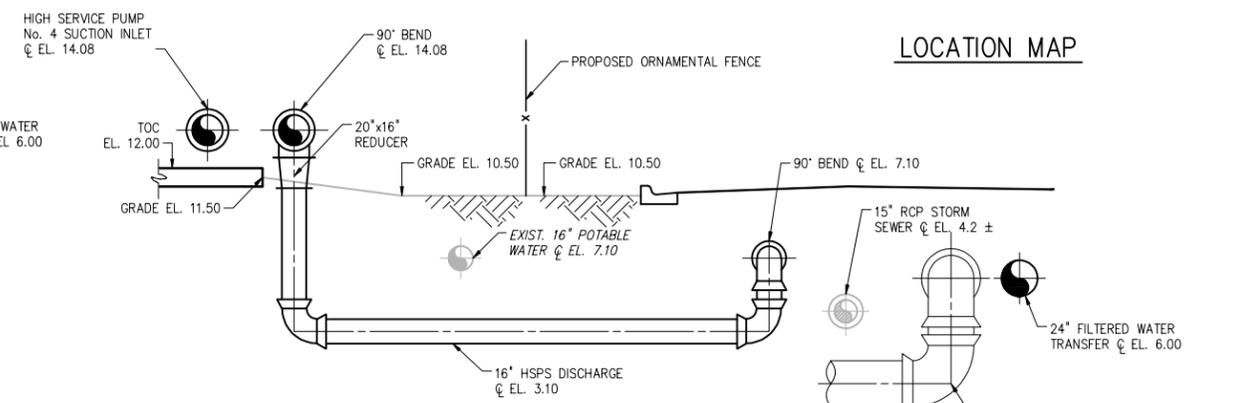
REQUEST FOR PROPOSAL



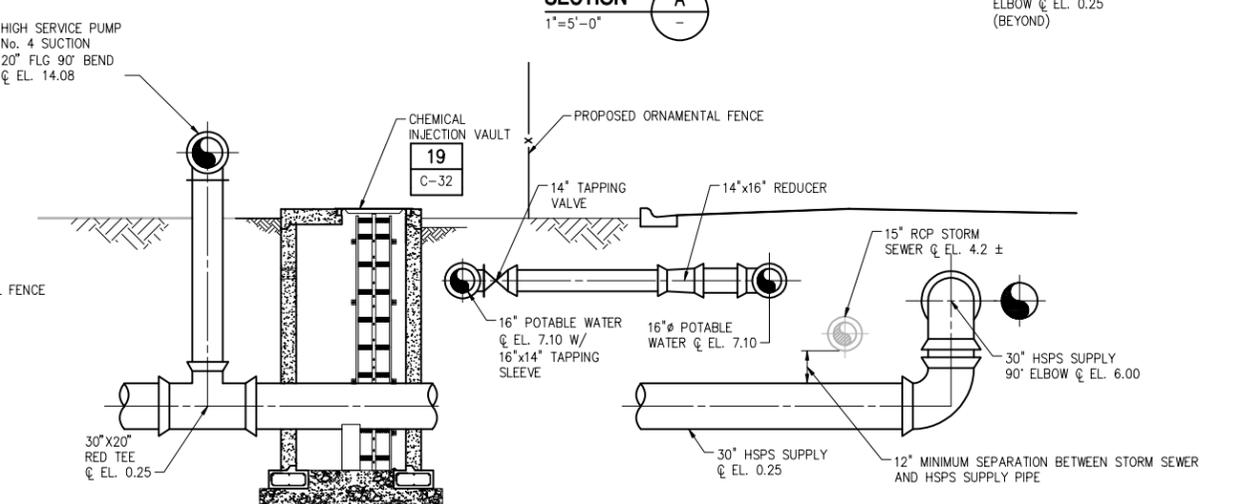
ENLARGED PLAN
DETAIL 6
 1"=5'-0" C-03



LOCATION MAP



SECTION A
 1"=5'-0"



SECTION B
 1"=5'-0"

- LEGEND:**
- WORK COMPLETED IN PHASE-I, II, III AND IV
 - EXISTING
 - PROPOSED
 - ▨ PROPOSED STORM WATER SWALE
 - ▩ PROPOSED PAVEMENT
 - ▤ PROPOSED SIDEWALK
 - ▥ PROPOSED SOD
- 5' 2.5' 0' 5'
 1"=5'-0"

PLOT DATE: 7/24/2015 11:11 AM BY: TBGAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

GEORGE A. BROWN
 No. 56076

HAZEN AND SAWYER
 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
 Hollywood, Florida 33021
 Certificate of Authorization Number: 2771

SCALE
 1"=5'-0"

CLIENTS PROJECT: —
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C06

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB
YARD PIPING – DETAILS
SHEET 3

DATE: JULY 2015
 SHEET: 23 OF 335
 DRAWING: C-06

REQUEST FOR PROPOSAL



PLANT POTABLE WATER FLOW METER VAULT TO BE REMOVED

PLANT POTABLE WATER FLOW METER VAULT PHOTO 1
NTS



PLANT POTABLE WATER FLOW METER VAULT TO BE REMOVED

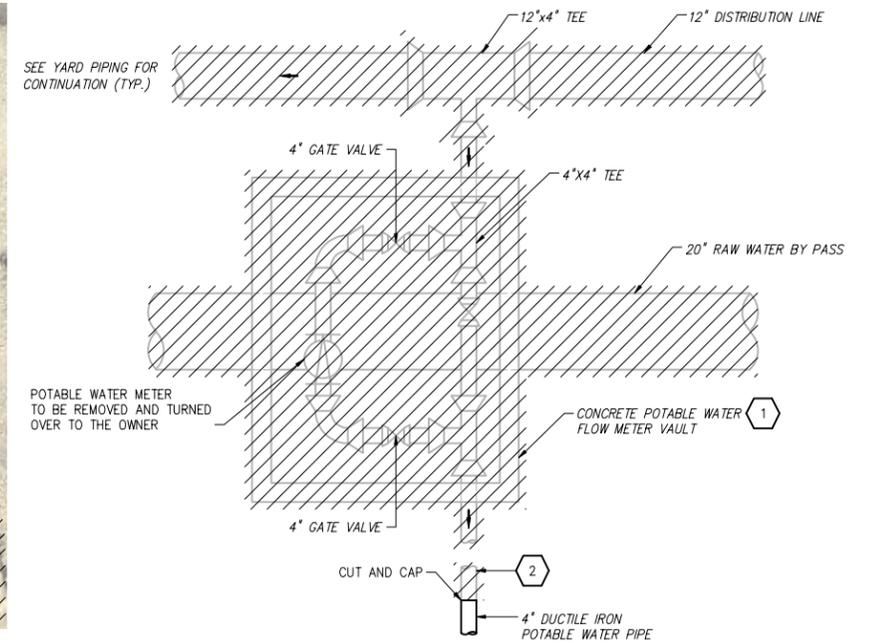
PLANT POTABLE WATER FLOW METER VAULT PHOTO 2
NTS



2" PIPE, SERVICE UNKNOWN (TO REMAIN)

PLANT POTABLE WATER FLOW METER VAULT TO BE REMOVED

PLANT POTABLE WATER FLOW METER VAULT PHOTO 3
NTS



PLANT POTABLE WATER FLOW METER VAULT DEMOLITION PLAN
NTS

KEYED NOTES:

- 1 RECORD DRAWINGS OF THE PIPING WITHIN THE POTABLE WATER FLOW METER VAULT DO NOT EXIST.
- 2 DUE TO THE LACK OF RECORD DRAWINGS, THE QUANTITY OF EXISTING 4" POTABLE WATER PIPING TO BE REMOVED CAN NOT BE DETERMINED. FOR THE PURPOSE OF BIDDING ASSUME 200FT OF 4" PIPE SHALL BE REMOVED. THE ACTUAL AMOUNT SHALL BE DETERMINED BY THE OWNER DURING CONSTRUCTION TO SUIT FIELD CONDITIONS.

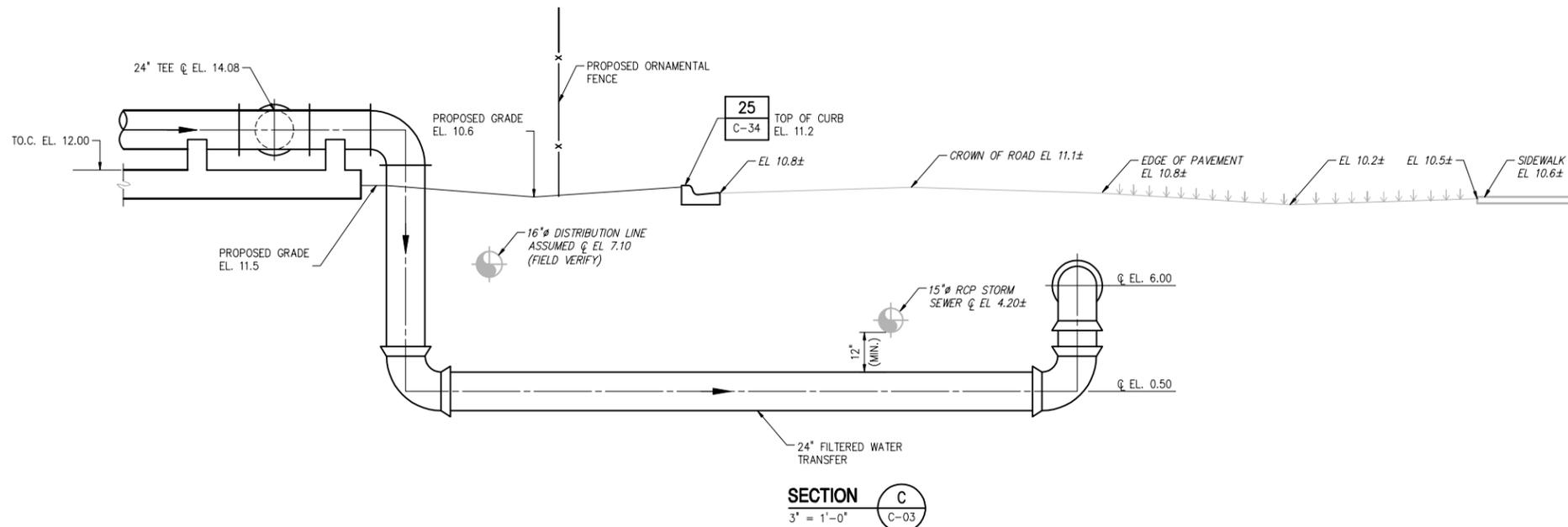
GENERAL NOTES:

- 1. BASED ON DISCUSSION WITH THE OWNER, THE OWNER HAS DETERMINED THAT POTABLE SERVICE TO THE WTP IS SUPPLIED THROUGH THE FLOW METER IN THIS VAULT.
- 2. THE EXISTING POTABLE WATER SERVICE TO THE PLANT SHALL REMAIN OPERATIONAL UNTIL A NEW SERVICE IS CONSTRUCTED AND ACCEPTED BY THE OWNER.

LEGEND:

- EXISTING
- PROPOSED
- ▨ TO BE REMOVED

3"=1'-0"



DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.
1	07/24/15
NO.	DATE
	ISSUED FOR
	BY

DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN	P.E.
No. 56076	

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

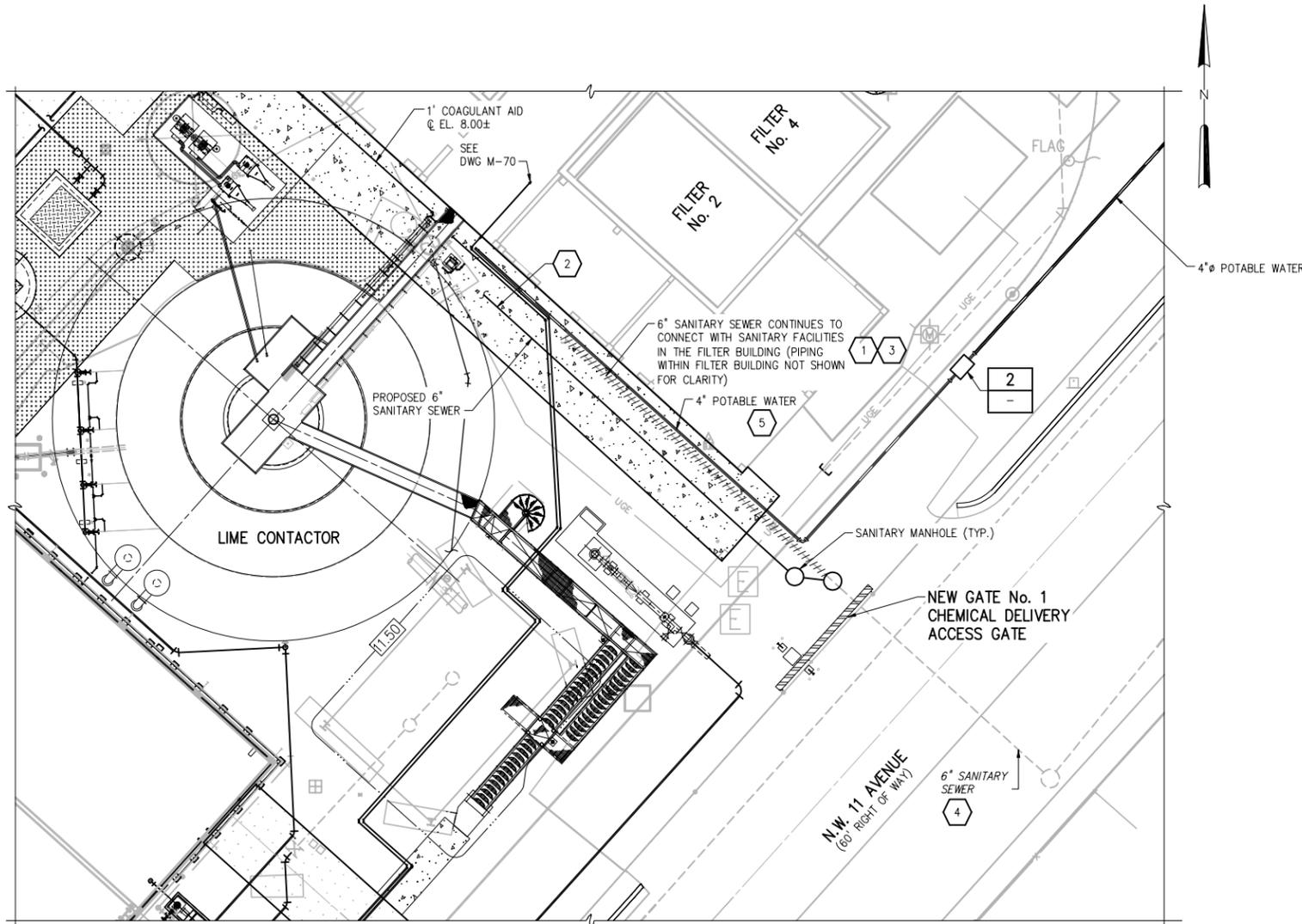
SCALE
AS NOTED

CLIENTS PROJECT:	—
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C07

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

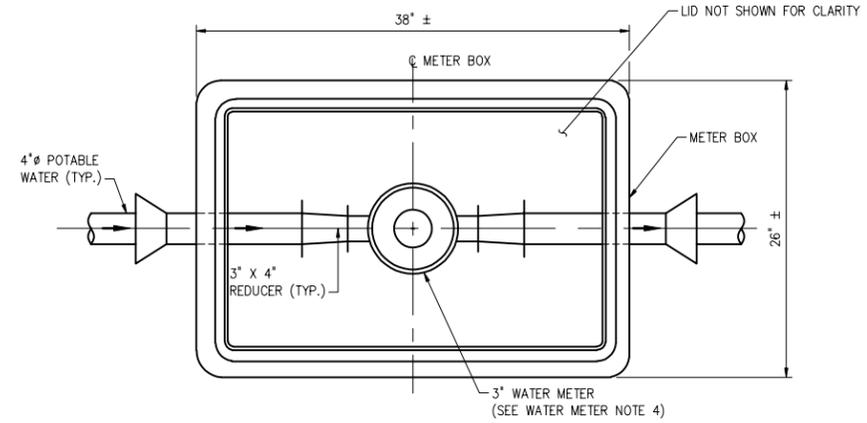
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB
YARD PIPING – DETAILS
SHEET 4

DATE:	JULY 2015
SHEET:	24 OF 335
DRAWING:	C-07



POTABLE WATER SERVICE PLAN

DETAIL	7
NTS	-

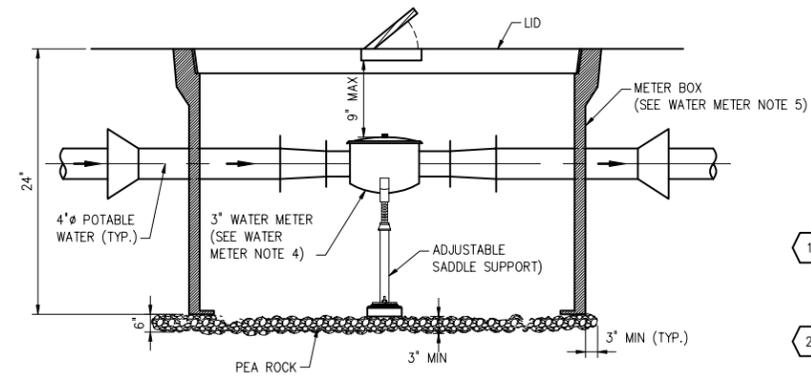


WATER METER NOTES:

- ALL STRUCTURES SHALL BE TRAFFIC BEARING TYPE.
- ALL METERS WILL BE SUPPLIED AND INSTALLED BY THE OWNER; ALL OTHER EQUIPMENT FOR A COMPLETE AND OPERABLE SYSTEM IS THE CONTRACTOR'S RESPONSIBILITY.
- METER SHALL BE CENTERED IN BOX DIRECTLY UNDER THE ACCESS LID.
- WATER METER SHALL BE WJ SERIES TURBINE METER BY SEA METRICS OR EQUAL AS APPROVED BY THE OWNER.
- METER BOX SHALL BE POLYMER CONCRETE MODEL H2436-24 BY OLD CASTLE PRECAST OR EQUAL.

WATER METER INSTALLATION

DETAIL	2
NTS	-



KEYED NOTES:

- FURNISH AND INSTALL NEW SANITARY SEWER ALONG WITH ALL NEEDED MANHOLES AND SERVICE CONNECTIONS SUCH THAT THE SEPARATION DISTANCE WITH THE PROPOSED POTABLE WATER MEETS THE REQUIREMENTS OF DETAIL 1 ON DRAWING C-28.
- QUANTITY OF PROPOSED SANITARY SEWER, SERVICE CONNECTIONS AND CLEANOUTS CANNOT BE DETERMINED BASED ON EXISTING RECORD DRAWINGS. SUPPLY ALL NECESSARY MATERIAL, EQUIPMENT AND LABOR FOR A COMPLETE, OPERABLE AND PERMITTABLE SYSTEM.
- REMOVE EXISTING 6" SANITARY SEWER AS REQUIRED BY OWNER IN THE FILED. ASSUME A MINIMUM OF 200 FEET OF PIPE.
- DEPTH AND LOCATION OF EXISTING SEWER IS UNKNOWN; FIELD VERIFY. FOR THE PURPOSE OF BIDDING ASSUME THE TOP OF PIPE IS A MAXIMUM OF 6.0 FEET BELOW GROUND SURFACE.
- LOCATION OF EXISTING WATER SERVICE CONNECTION FOR THE FILTER BUILDING IS UNKNOWN. FURNISH AND INSTALL ALL WATER PIPING NEEDED TO CONNECT PROPOSED WATER SUPPLY TO EXISTING FILTER BUILDING.

LEGEND:

- EXISTING
- PROPOSED
- ▨ TO BE REMOVED



PLOT DATE: 7/24/2015 11:12 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.
GEORGE A. BROWN No. 56076	
P.E.	

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

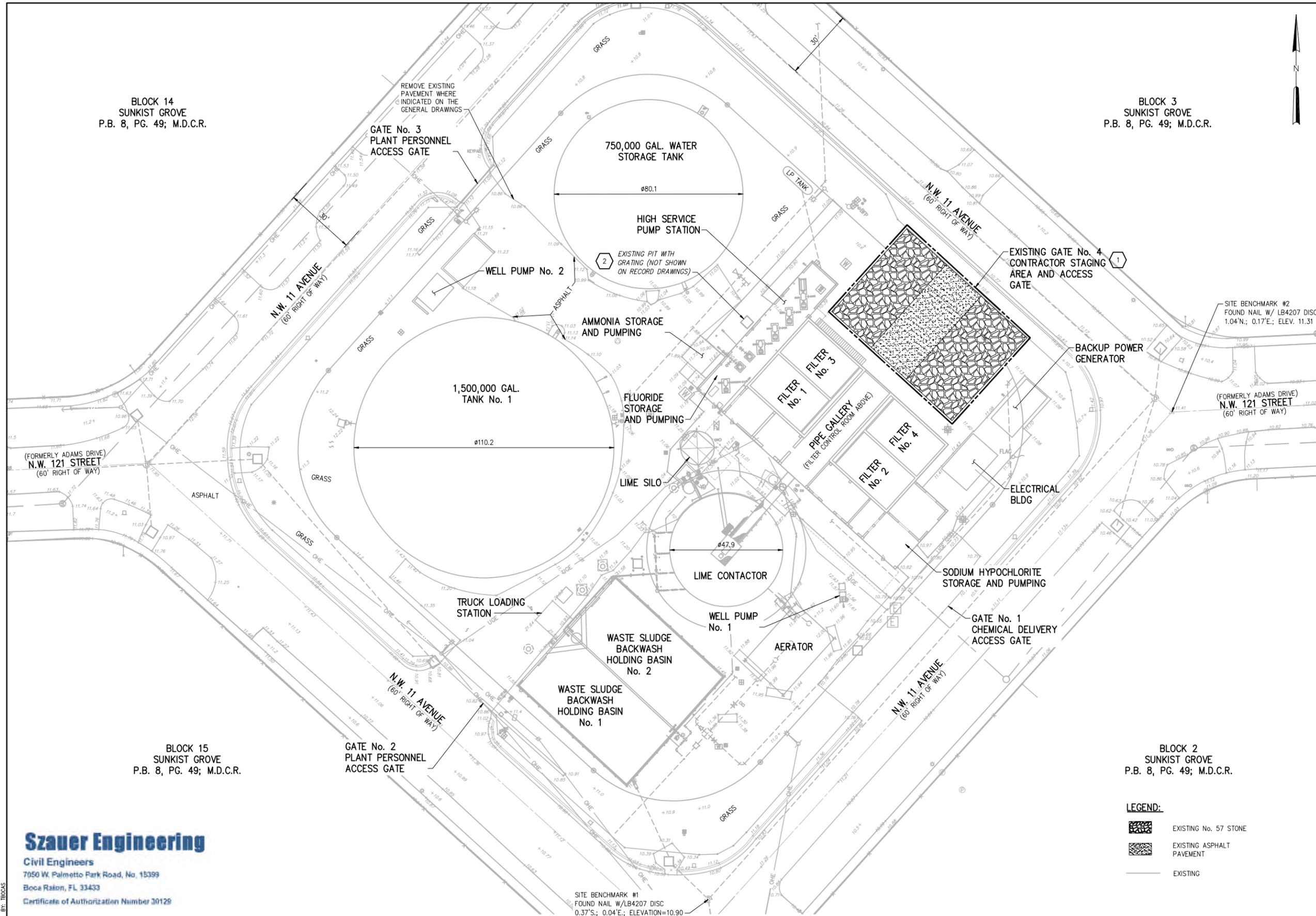
SCALE	AS NOTED
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C08



WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
YARD PIPING - DETAILS
SHEET 5

DATE:	JULY 2015
SHEET:	25 OF 335
DRAWING:	C-08

REQUEST FOR PROPOSAL



SYMBOL LEGEND
(THIS SHEET ONLY)

	ELECTRICAL JUNCTION BOX
	ANCHOR
	BOLLARD
	BACKFLOW PREVENTOR
	CATCH BASIN
	CENTERLINE
	CONCRETE POWER POLE
	CONCRETE LIGHT POLE
	DECORATIVE CONCRETE LIGHT POLE
	DOUBLE DETECTOR CHECK VALVE
	DRAINAGE MANHOLE
	ELECTRICAL CONTROL BOX
	ELECTRICAL METER
	ELECTRICAL PULL BOX
	FIRE HYDRANT
	IRRIGATION VALVE
	METAL STREET LIGHT POLE
	SANITARY SEWER MANHOLE
	SANITARY SEWER CLEANOUT
	SIGN
	SPOT ELEVATION
	SPOT/LANDSCAPE LIGHTING
	TELEPHONE MANHOLE
	WATER GATE VALVE
	WOOD POWER POLE
	WOOD STREET LIGHT POLE
	WATER VAULT
	SPOT HARD SURFACE ELEVATION
	SPOT GROUND ELEVATION
	SHADE TREE
	PALM TREE
	CHAIN LINK FENCE
	OHC - OVER HEAD WIRES
	SS - SANITARY SEWER MAIN
	SD - STORM DRAINAGE

- KEYED NOTES:**
- CONTRACTOR ACCESS GATE AND STAGING AREA TO BE INSTALLED DURING BID PACKAGE 1 (FILTER REHABILITATION). THIS AREA WILL REMAIN UNTIL THE CONSTRUCTION OF OTHER PLANT IMPROVEMENTS. DEMOLITION OF THIS AREA WILL BE INCLUDED IN BID PACKAGE 3.
 - REMOVE GRATING AND FILL PIT WITH STRUCTURAL FILL AS REQUIRED FOR PROPOSED SIDEWALK (SEE PROPOSED PLAN).

GENERAL NOTE:

- THIS DRAWING IS BASED UPON AND BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAVEN THOMPSON AND ASSOCIATES, INC. (CTA) DATED 03-10-10. CTA PROJECT No. 10-0013-001

BLOCK 2
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

LEGEND:

	EXISTING No. 57 STONE
	EXISTING ASPHALT PAVEMENT
	EXISTING



BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 15
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

Szauer Engineering
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Boca Raton, FL 33433
Certificate of Authorization Number 30128

HAZEN AND SAWYER
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4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE
1"=20'-0"

CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C09

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE EXISTING PLAN

DATE: JULY 2015
SHEET: 26 OF 335
DRAWING: C-09

DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.
DATE	07/24/15
ISSUED FOR	REQUEST FOR PROPOSAL
BY	G.A.B.

JORGE M. SZAUER
No. 62579 P.E.



PHOTO 1
NTS

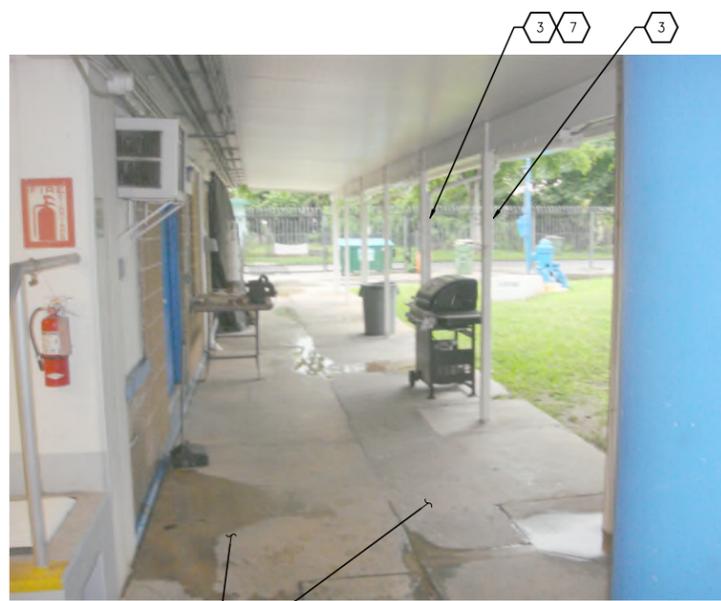


PHOTO 2
NTS

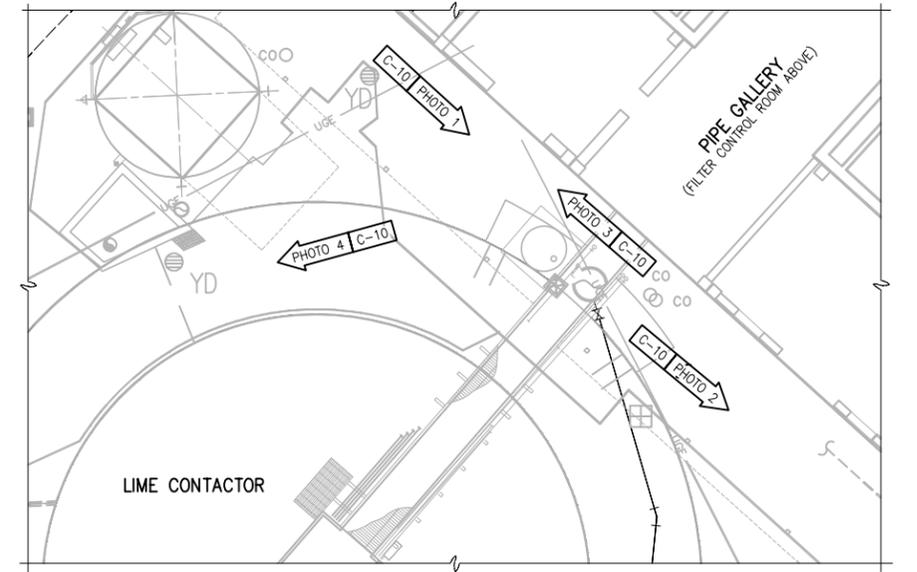


PHOTO LOCATION PLAN



PHOTO 3
NTS



PHOTO 4
NTS

GENERAL NOTES:

1. NO RECORD DRAWINGS EXIST FOR THIS STRUCTURE AND/OR AREA. PHOTOS PROVIDED FOR GENERAL INFORMATION PURPOSES.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID.
3. CONTRACTOR RETAINS FULL RESPONSIBILITY FOR FIELD VERIFICATION OF ALL ABOVE GROUND IMPROVEMENTS TO BE REMOVED FOR THIS WORK. SUCH VERIFICATION SHALL INCLUDE: STRUCTURAL, ARCHITECTURAL, HVAC, PLUMBING, ELECTRICAL, IRRIGATION, CONTROLS, FREE STANDING EQUIPMENT, LANDSCAPING, AND ANY AND ALL OTHER EXISTING IMPROVEMENTS WITHIN THE BOUNDARY OF THE WORK WHETHER SHOWN HEREIN OR NOT.
4. FOR BELOW GRADE IMPROVEMENTS TO BE REMOVED REFERENCE APPLICABLE CIVIL AND ELECTRICAL DRAWINGS ACCORDINGLY.
5. REFER TO SPECIFICATION SECTION ENTITLED "DEMOLITION OF EXISTING FACILITIES".
6. PRE-BID ACCESS TO THE SITE SHALL BE COORDINATED BY THE CONTRACTOR UPON REQUEST THROUGH A CONTACT TO BE DETERMINED BY THE CITY OF NORTH MIAMI.
7. FOR CONSTRUCTION SEQUENCING RESTRICTIONS FOR THE WORK SHOWN ON THIS SHEET REFERENCE THE SPECIFICATION ENTITLED "SUMMARY OF WORK".
8. FOR REQUIREMENTS RELATED TO DEMOLITION WORK, PROTECTION OF EXISTING FACILITIES AND MAINTENANCE OF OPERATIONS REFERENCE APPLICABLE SPECIFICATIONS IN DIVISION 1.

KEYED NOTES:

- 1 REMOVE CONCRETE WALKWAY.
- 2 REMOVE COAGULANT SYSTEM (SEE MECHANICAL).
- 3 PROTECT EXISTING CANOPY COLUMNS. (TYPICAL AT 12 LOCATIONS)
- 4 REMOVE OVERFLOW/SIDE DRAIN BOX (SEE MECHANICAL).
- 5 PROTECT LIME SILO COLUMNS AND CONCRETE FOOTINGS.
- 6 PROTECT LIME CONTACTOR AND ASSOCIATED FOUNDATION.
- 7 REMOVE AND REPLACE THE RAIN LEADER IN-KIND. REMOVE LEADER UP TO GUTTER; GUTTER TO REMAIN. PAINT THE NEW LEADER. TYPICAL AT 7 LOCATIONS.

LEGEND:

- ← PHOTO # - ARROW INDICATES DIRECTION AND POINT OF VIEW OF PHOTO
- TO BE REMOVED

Szauer Engineering
Civil Engineers
7050 W. Palmetto Park Road, No. 15399
Boca Raton, FL 33433
Certificate of Authorization Number 30128

PLOT DATE: 7/24/2015 11:13 AM BY: TBGCS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	JORGE M. SZAUER P.E. No. 62579
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CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	

HAZEN AND SAWYER
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Certificate of Authorization Number: 2771

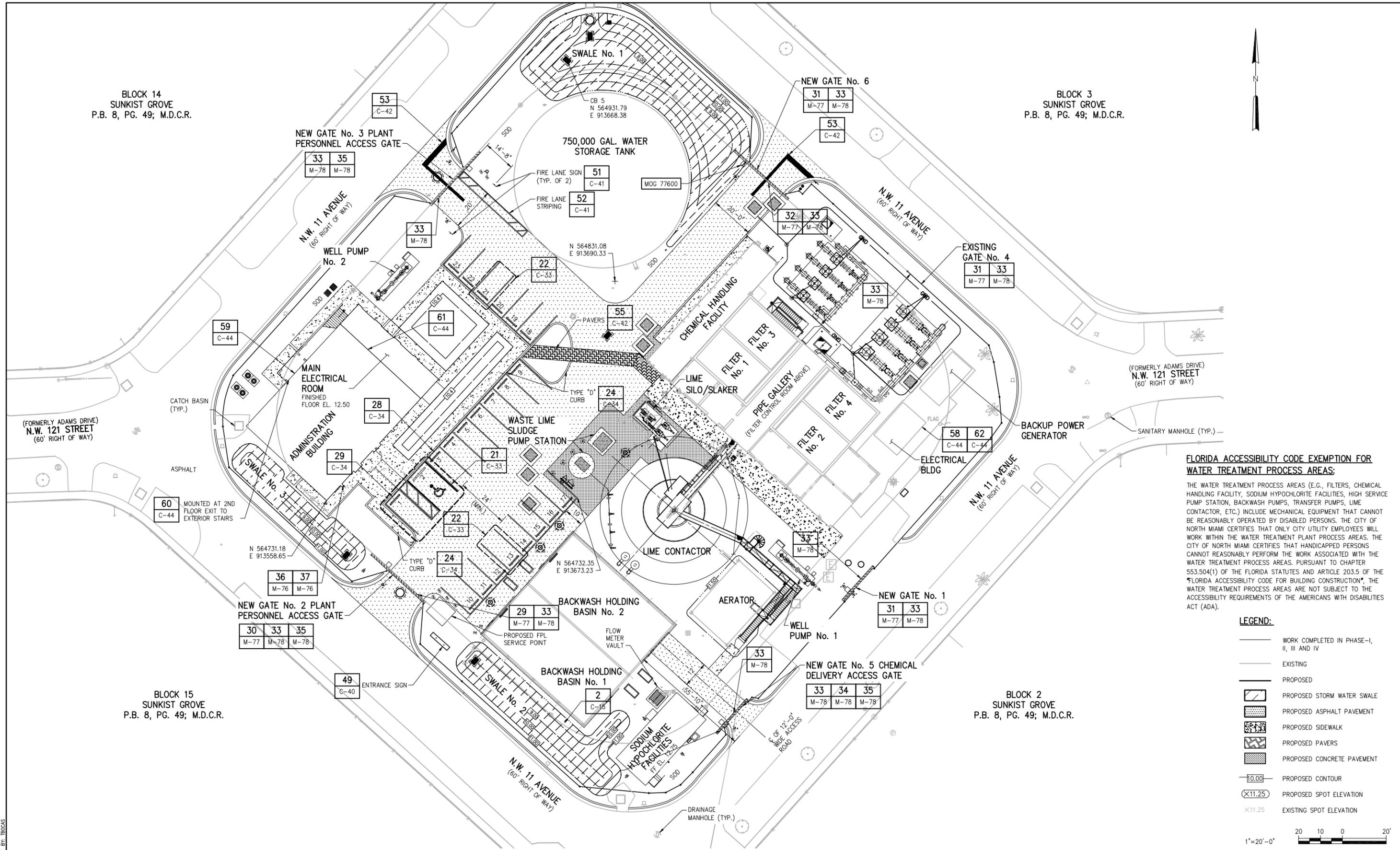
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C10

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
EXISTING CONDITION PHOTOS

DATE:	JULY 2015
SHEET:	27 OF 335
DRAWING:	C-10

REQUEST FOR PROPOSAL



FLORIDA ACCESSIBILITY CODE EXEMPTION FOR WATER TREATMENT PROCESS AREAS:

THE WATER TREATMENT PROCESS AREAS (E.G., FILTERS, CHEMICAL HANDLING FACILITY, SODIUM HYPOCHLORITE FACILITIES, HIGH SERVICE PUMP STATION, BACKWASH PUMPS, TRANSFER PUMPS, LIME CONTACTOR, ETC.) INCLUDE MECHANICAL EQUIPMENT THAT CANNOT BE REASONABLY OPERATED BY DISABLED PERSONS. THE CITY OF NORTH MIAMI CERTIFIES THAT ONLY CITY UTILITY EMPLOYEES WILL WORK WITHIN THE WATER TREATMENT PLANT PROCESS AREAS. THE CITY OF NORTH MIAMI CERTIFIES THAT HANDICAPPED PERSONS CANNOT REASONABLY PERFORM THE WORK ASSOCIATED WITH THE WATER TREATMENT PROCESS AREAS. PURSUANT TO CHAPTER 553.504(1) OF THE FLORIDA STATUTES AND ARTICLE 203.5 OF THE "FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION", THE WATER TREATMENT PROCESS AREAS ARE NOT SUBJECT TO THE ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).

LEGEND:

- WORK COMPLETED IN PHASE-I, II, III AND IV
- EXISTING
- PROPOSED
- ▨ PROPOSED STORM WATER SWALE
- ▩ PROPOSED ASPHALT PAVEMENT
- ▧ PROPOSED SIDEWALK
- ▦ PROPOSED PAVERS
- ▤ PROPOSED CONCRETE PAVEMENT
- 10.00— PROPOSED CONTOUR
- ×11.25 PROPOSED SPOT ELEVATION
- ×11.25 EXISTING SPOT ELEVATION



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GEORGE A. BROWN
No. 56076
P.E.

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SCALE
1"=20'-0"

CLIENTS PROJECT: —
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C11

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB
PAVEMENT MARKING AND SIGNAGE PLAN

DATE: JULY 2015
SHEET: 28 OF 335
DRAWING: C-11

REQUEST FOR PROPOSAL

DEVELOPMENT DATA:

JURISDICTION: CITY OF NORTH MIAMI, FLORIDA
 COUNTY: MIAMI-DADE
 WATER PROVIDER: CITY OF NORTH MIAMI, FLORIDA
 WASTEWATER PROVIDER: MIAMI-DADE WATER AND SEWER DEPARTMENT

ZONING AND LAND USE:

ZONING OF ABUTTING PROPERTIES: RESIDENTIAL R2
 ZONING OF PROJECT SITE: PUBLIC UTILITY
 CURRENT LAND USE: DRINKING WATER STORAGE TANK AND WATER TREATMENT PLANT
 PROPOSED LAND USE: DRINKING WATER STORAGE TANK AND WATER TREATMENT PLANT
 PERMITTED USE: WATER TREATMENT FACILITIES ARE A PERMITTED USE

SITE DATA:

ZONING CLASSIFICATION	PUBLIC UTILITY (PU)
ADJACENT ZONING CLASSIFICATION	RESIDENTIAL-2
MAXIMUM HEIGHT ALLOWABLE	55 FT
GROSS SITE AREA	1.82 ACRES
EXISTING SITE CONDITIONS (SQ FT/% OF TOTAL AREA)	
PERVIOUS AREA	0.83 AC/46%
IMPERVIOUS AREA	0.35 AC/19%
BUILDING AREA	0.64 AC/35%
PROPOSED SITE CONDITIONS (SQ FT/% OF TOTAL AREA)	
PERVIOUS AREA	0.72 AC/40%
IMPERVIOUS AREA	0.59 AC/32%
BUILDING AREA	0.51 AC/28%

ADMINISTRATION BUILDING DATA

BUILDING LENGTH	62.875 FT
BUILDING WIDTH	50.5 FT
GROSS AREA	6,350 SQ FT
NUMBER OF FLOORS	2
FIRST FLOOR AREA	3,175 SQ FT
SECOND FLOOR AREA	3,175 SQ FT
LEED CLASSIFICATION (PER CODE SECTION 5-805)	SILVER
MAX STRUCTURE HEIGHT	35.33 FT
SETBACK FROM PROPERTY LINE (SW CORNER)	10 FT

ON-SITE VEHICLE PARKING DATA (PER CODE SECTION 5-1402)

No. OF SPACES PER 300 SQFT GROSS AREA	1
TOTAL No. OF NON-HANDICAP SPACES PROPOSED	6,350/300=22 SPACES
No. OF HANDICAP ACCESSIBLE SPACES PER FAC 11-4.4.2(5)	1 SPACE
TOTAL No. OF SPACES PROPOSED	23 SPACES
PARKING SPACE DIMENSIONS	
A) SPACES 1,3 THRU 9	9 FT BY 20 FT
B) SPACES 10 THRU 23	9 FT BY 18 FT
C) SPACE 2 (HANDICAP)	12 FT BY 20 FT
MINIMUM AISLE WIDTH-TWO WAY	24 FT
NUMBER OF BICYCLE PARKING SPACES	4 SPACES
PER CHAPTER 29, ARTICLE 5, SECTION 5-803.E.2.a	

MISCELLANEOUS NOTES:

PROJECT WILL BE CONSTRUCTED IN ONE STAGE BY A SINGLE CONTRACTOR.
 FIRE PREVENTION: SMOKE DETECTORS, UNSPRINKLERED.

ACCESSIBILITY REQUIREMENTS:

THE WATER TREATMENT PROCESS AREAS (E.G., FILTERS, CHEMICAL HANDLING FACILITY, SODIUM HYPOCHLORITE FACILITIES, HIGH SERVICE PUMP STATION, BACKWASH PUMPS, TRANSFER PUMPS, LIME CONTACTOR, ETC.) INCLUDE MECHANICAL EQUIPMENT THAT CANNOT BE REASONABLY OPERATED BY DISABLED PERSONS. THE CITY OF NORTH MIAMI CERTIFIES THAT ONLY CITY UTILITY EMPLOYEES WILL WORK WITHIN THE WATER TREATMENT PLANT PROCESS AREAS. THE CITY OF NORTH MIAMI CERTIFIES THAT HANDICAPPED PERSONS CANNOT REASONABLY PERFORM THE WORK ASSOCIATED WITH THE WATER TREATMENT PROCESS AREAS. PURSUANT TO CHAPTER 553.504(1) OF THE FLORIDA STATUTES AND ARTICLE 203.5 OF THE "FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION", THE WATER TREATMENT PROCESS AREAS ARE NOT SUBJECT TO THE ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).

FIRE HYDRANTS:

THE PROPOSED FACILITY WILL BE SERVED BY THE PROPOSED HYDRANT LOCATED NEAR THE NEW GATE No.3.

NEEDED FIRE FLOW (NFF) CALCULATIONS:

STANDARD: CALCULATED USING THE "GUIDE FOR THE CALCULATION OF NEEDED FIRE FLOW", EDITION 05-2008, AS PUBLISHED BY THE INSURANCE SERVICES OFFICE (ISO).
 ISO CONSTRUCTION CLASS: NON-COMBUSTIBLE CLASS IV
 F = COEFFICIENT RELATED TO CLASS OF CONSTRUCTION = 0.8
 A = EFFECTIVE AREA (SQUARE FEET) = 3,969 SQUARE FEET
 CI = 907 = BASE FLOW (GALLONS PER MINUTE, GPM)
 CI = 907 (CALCULATED), CI = 1,000 GPM (ROUNDED TO THE NEAREST 250 GPM)
 OCCUPANCY COMBUSTIBILITY CLASS = C-2 (LIMITED COMBUSTIBLE)
 OI = OCCUPANCY FACTOR = 0.85
 DISTANCE TO OTHER BUILDINGS: 31 TO 60 FEET
 X = FACTOR FOR EXPOSURE = 0.13 (ALL FOUR SIDES)
 NEEDED FIRE FLOW (NFF): 850 GPM
 NFF ROUNDED TO NEAREST 250 GPM: 1,000 GPM
 DISTANCE TO CLOSEST FIRE HYDRANT: LESS THAN 300 FEET
 MAXIMUM FLOW CREDIT FOR FIRE HYDRANT (<300 FT AWAY): 1,000 GPM

FIRE PROTECTION NOTES:

- FIRE HYDRANT CLEARANCE:** CLEARANCES OF 7'-6" IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT, WITH A FOUR FOOT (4') CLEARANCE TO THE REAR. NOTE: "NO PARKING" SIGNS OR OTHER DESIGNATION INDICATING THAT PARKING IS PROHIBITED SHALL BE PROVIDED IN THE 7'-6" SPACE ON BOTH SIDES OF THE CENTER LINE OF THE HYDRANT. ALL PAVEMENT MARKINGS SHALL BE OF THERMOPLASTIC PAINT. (FLORIDA FIRE PREVENTION CODE 2010 EDITION, SECTION 18.3.4.1).
- FIRE HYDRANT VISIBILITY AND ACCESS:** NO PERSON SHALL PLACE OR KEEP ANY POST, FENCE, VEHICLE, GROWTH, VEGETATION, TRASH OR STORAGE OR OTHER MATERIALS THAT WOULD OBSTRUCT A FIRE HYDRANT OR FIRE PROTECTION APPLIANCE AND HINDER OR PREVENT ITS IMMEDIATE USE BY FIRE DEPARTMENT PERSONNEL. NOTE: ONE (1) BLUE DOUBLE-REFLECTIVE DEPARTMENT OF TRANSPORTATION TYPE ROAD MARKER IS TO BE ADHERED TO THE HARD SURFACES ROADWAY IN THE MIDDLE OF THE LANE NEAREST TO, AND DIRECTLY IN FRONT OF THE FIRE HYDRANTS.
- ACCESS GATES:** ALL ACCESS GATES SHALL BE EQUIPPED WITH A KNOX BOX MODEL 3502 ELECTRIC OVERRIDE KEY SWITCH AS REQUIRED BY MIAMI-DADE FIRE RESCUE.

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	REQUEST FOR PROPOSAL	G.A.B.
1	07/24/15	ISSUED FOR	BY

DESIGNED	G.A.B.	 <p>4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771</p>	SCALE	CLIENTS PROJECT:	-
DRAWN	L.M.S.		-	ENGINEERS PROJECT:	44238-004
CHECKED	J.N.M.		CAD REFERENCE:	44238-004BP3-C12	
PROJ. ENGR.	G.A.B.				
DESIGNED	GEORGE A. BROWN	P.E.	WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS -- VOLUME B: WTP REHAB		
NO.	DATE	ISSUED FOR	DATE: JULY 2015 SHEET: 29 OF 335 DRAWING: C-12		



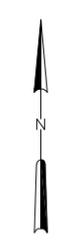
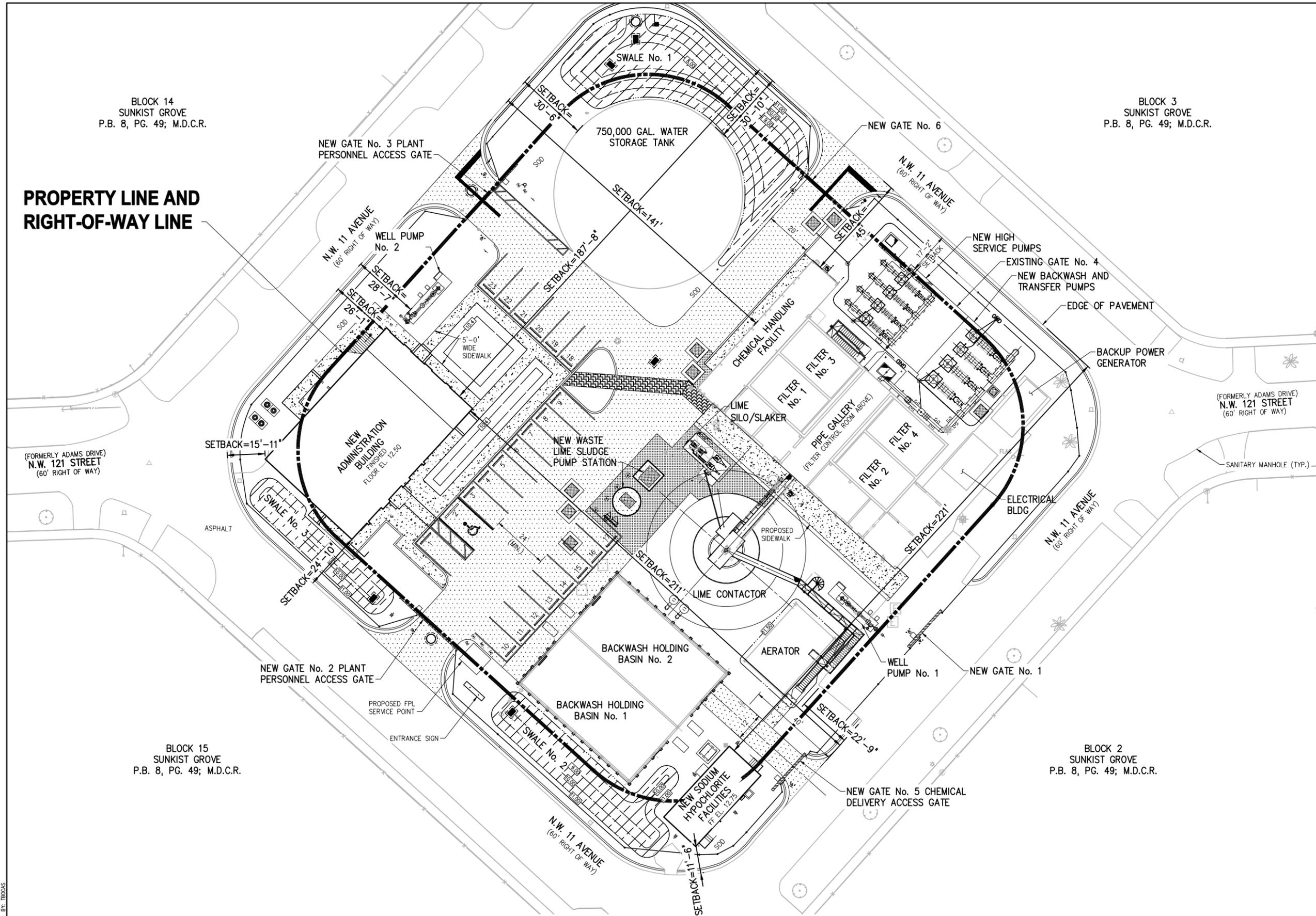
DESIGNED	GEORGE A. BROWN	P.E.
NO.	DATE	ISSUED FOR

DESIGNED	GEORGE A. BROWN	P.E.
NO.	DATE	ISSUED FOR

BLOCK 14
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

BLOCK 3
SUNKIST GROVE
P.B. 8, PG. 49; M.D.C.R.

**PROPERTY LINE AND
RIGHT-OF-WAY LINE**



GENERAL NOTE:

- IT IS THE ENGINEER'S UNDERSTANDING THAT THE PRE-EXISTING STRUCTURES WERE SETBACK BASED UPON EDGE OF PAVEMENT.

LEGEND:

	EXISTING
	PROPOSED
	PROPOSED STORM WATER SWALE
	PROPOSED PAVEMENT
	PROPOSED SIDEWALK
	PROPOSED PAVERS
	PROPOSED CONCRETE PAVEMENT
	PROPERTY LINE



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SCALE
1"=20'-0"

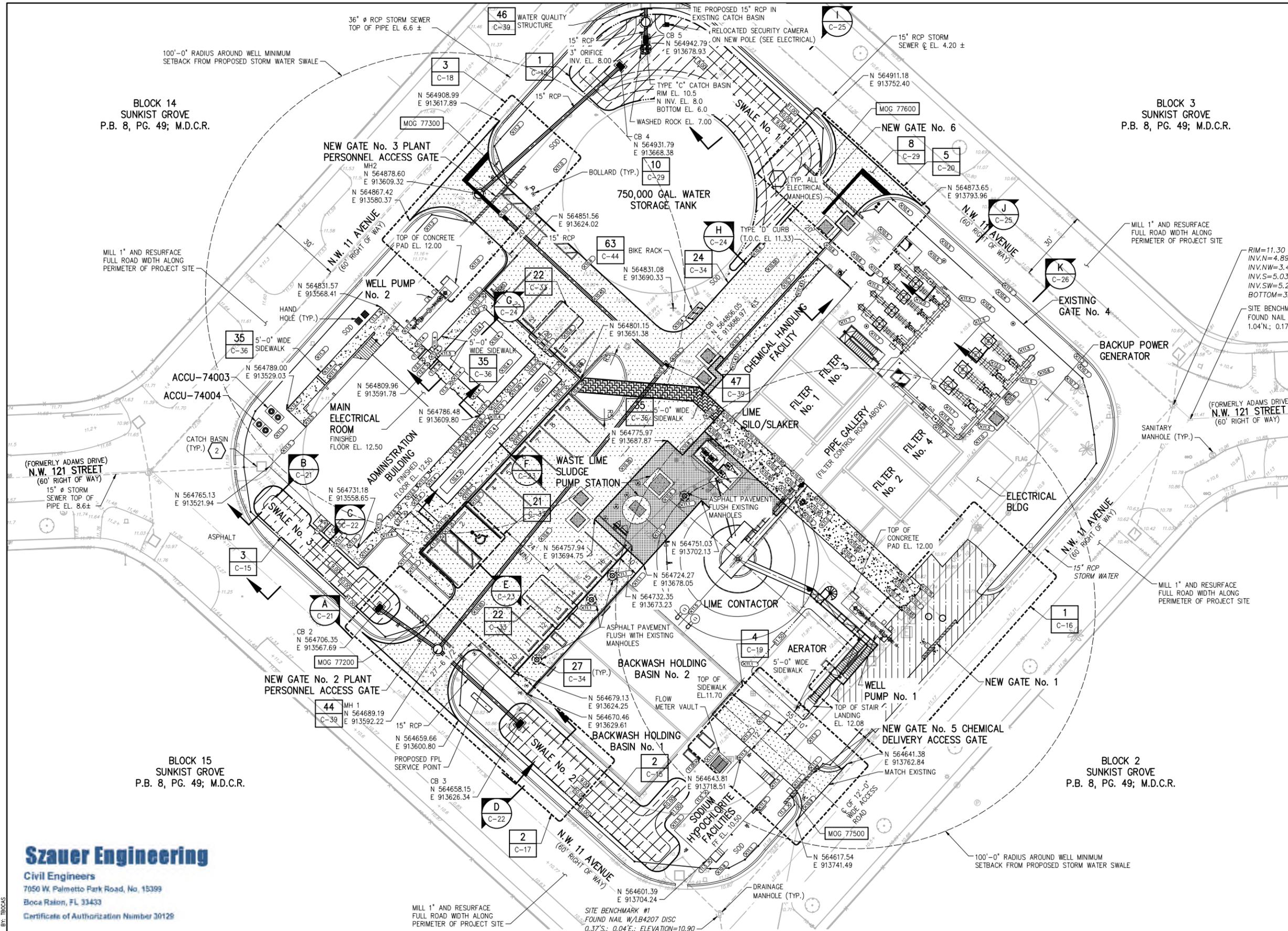
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ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C13

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
SETBACK PLAN

DATE:	JULY 2015
SHEET:	30 OF 335
DRAWING:	C-13

REQUEST FOR PROPOSAL



- GENERAL NOTES:**
- CONTRACTOR SHALL PLACE CONCRETE PAVEMENT IN LIEU OF ASPHALTIC PAVEMENT AT ALL AREAS WHEN LESS THAN 6-INCHES OF CLEARANCE EXISTS BETWEEN ADJACENT STRUCTURES IMPROVEMENTS, MANHOLES AND/OR PROPOSED IMPROVEMENTS.
- KEY NOTES:**
- MANHOLES IN PAVED AREAS SHALL BE SET WITH TOP 1-INCH HIGHER THAN FINAL ASPHALT (FEATHER ASPHALT TO MATCH TOP OF MANHOLE.)
 - CONTRACTOR SHALL RELOCATE CATCH BASIN TO A LOCATION SELECTED BY THE ENGINEER.

FLORIDA ACCESSIBILITY CODE EXEMPTION FOR WATER TREATMENT PROCESS AREAS:

THE WATER TREATMENT PROCESS AREAS (E.G., FILTERS, CHEMICAL HANDLING FACILITY, SODIUM HYPOCHLORITE FACILITIES, HIGH SERVICE PUMP STATION, BACKWASH PUMPS, TRANSFER PUMPS, LIME CONTACTOR, ETC.) INCLUDE MECHANICAL EQUIPMENT THAT CANNOT BE REASONABLY OPERATED BY DISABLED PERSONS. THE CITY OF NORTH MIAMI CERTIFIES THAT ONLY CITY UTILITY EMPLOYEES WILL WORK WITHIN THE WATER TREATMENT PLANT PROCESS AREAS. THE CITY OF NORTH MIAMI CERTIFIES THAT HANDICAPPED PERSONS CANNOT REASONABLY PERFORM THE WORK ASSOCIATED WITH THE WATER TREATMENT PROCESS AREAS. PURSUANT TO CHAPTER 553.504(1) OF THE FLORIDA STATUTES AND ARTICLE 203.5 OF THE "FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION", THE WATER TREATMENT PROCESS AREAS ARE NOT SUBJECT TO THE ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).

- LEGEND:**
- WORK COMPLETED IN PHASE-I, II, III AND IV
 - EXISTING
 - PROPOSED
 - PROPOSED STORM WATER SWALE
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED SIDEWALK
 - PROPOSED PAVERS
 - MILL 1" OF EXISTING ASPHALT AND RESURFACE
 - PROPOSED CONCRETE PAVEMENT
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION



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PROJ. ENGR.	G.A.B.

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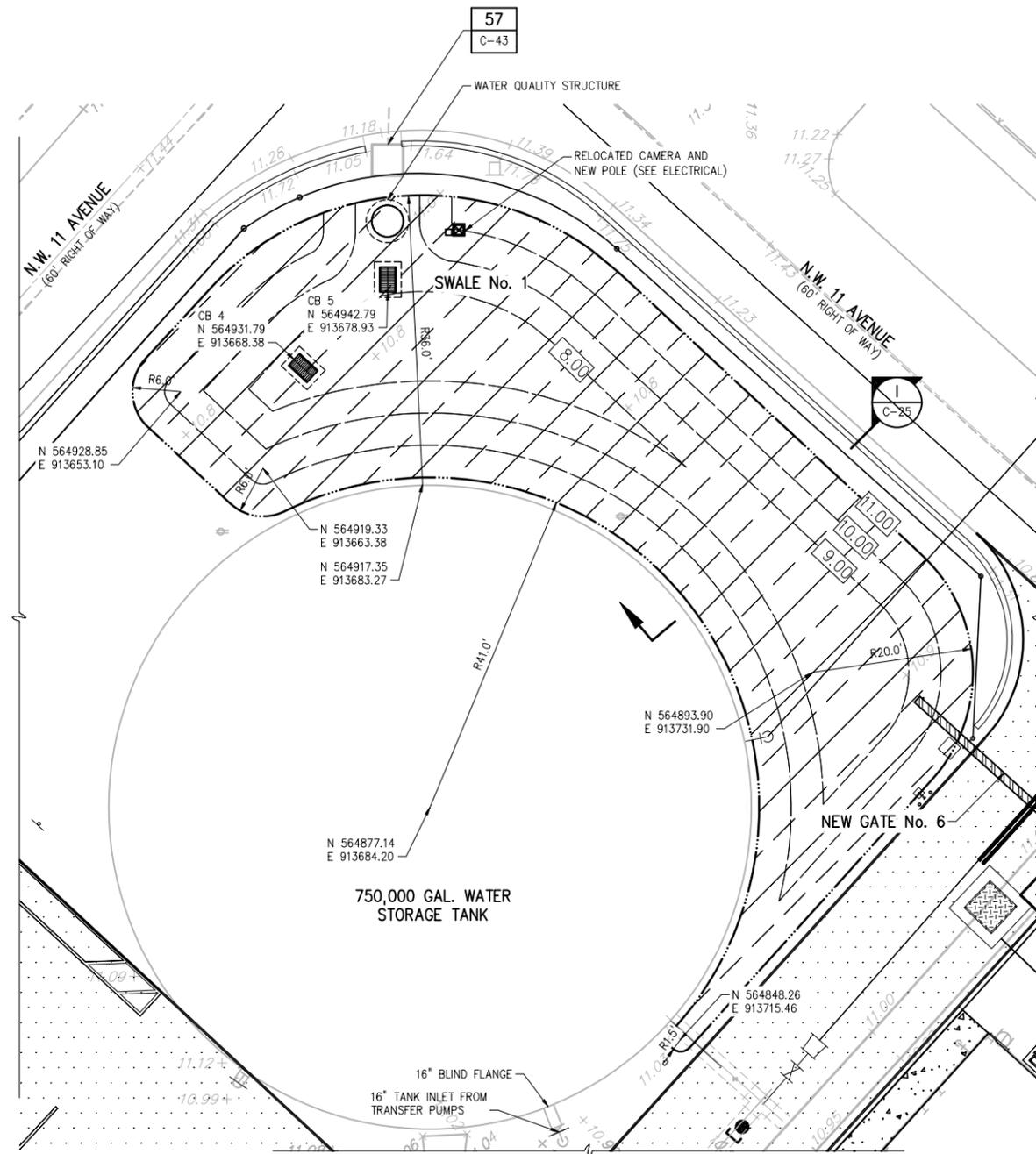
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CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C14

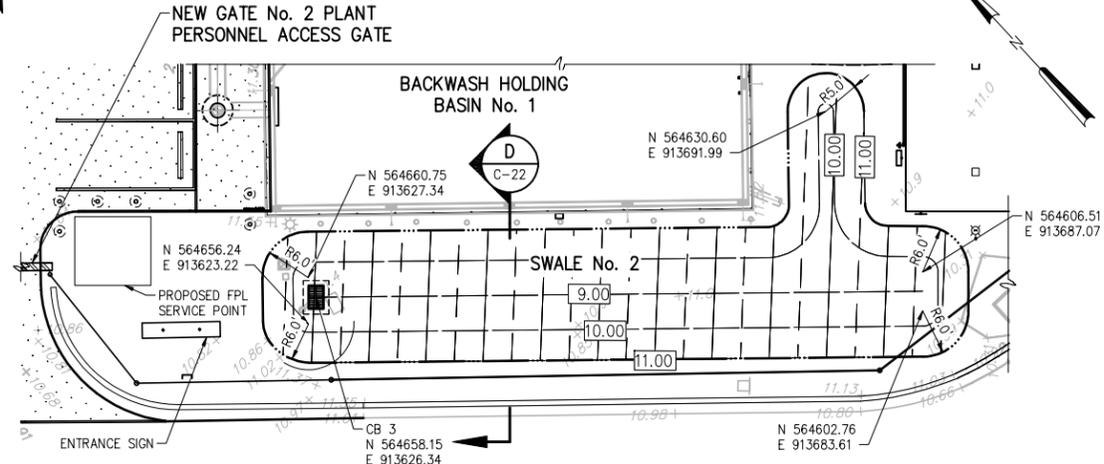
CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
PROPOSED PLAN

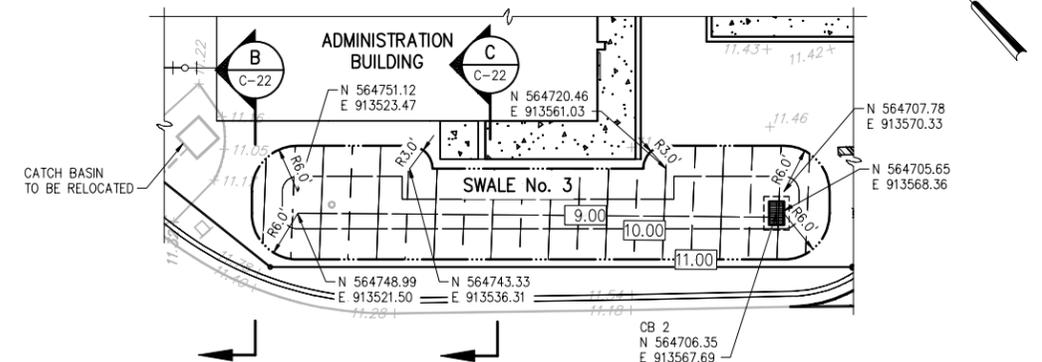
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SHEET: 31 OF 335
DRAWING: C-14



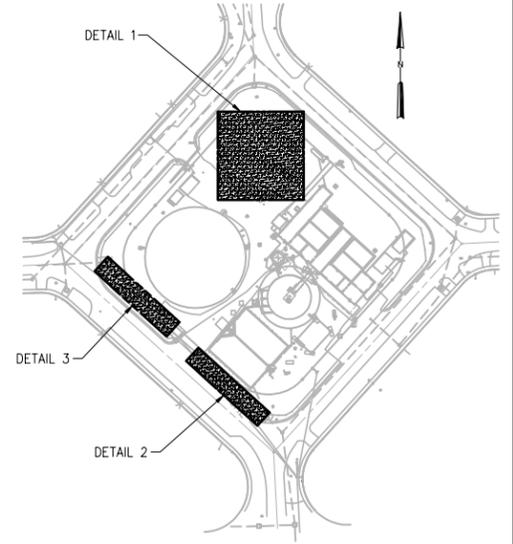
PLAN
DETAIL 1
1"=10'-0" C-14



PLAN
DETAIL 2
1"=10'-0" C-14



PLAN
DETAIL 3
1"=10'-0" C-14



LOCATION MAP

- LEGEND:**
- WORK COMPLETED IN PHASE-I, II, III AND IV
 - EXISTING
 - PROPOSED
 - ▨ PROPOSED STORM WATER SWALE
 - ▩ PROPOSED ASPHALT PAVEMENT
 - ▧ PROPOSED SIDEWALK
 - ⊠ PROPOSED CONTOUR
 - ⊗11.25 PROPOSED SPOT ELEVATION
 - ⊗11.25 EXISTING SPOT ELEVATION



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PLOT DATE: 7/24/2015 11:14 AM BY: TBGCS

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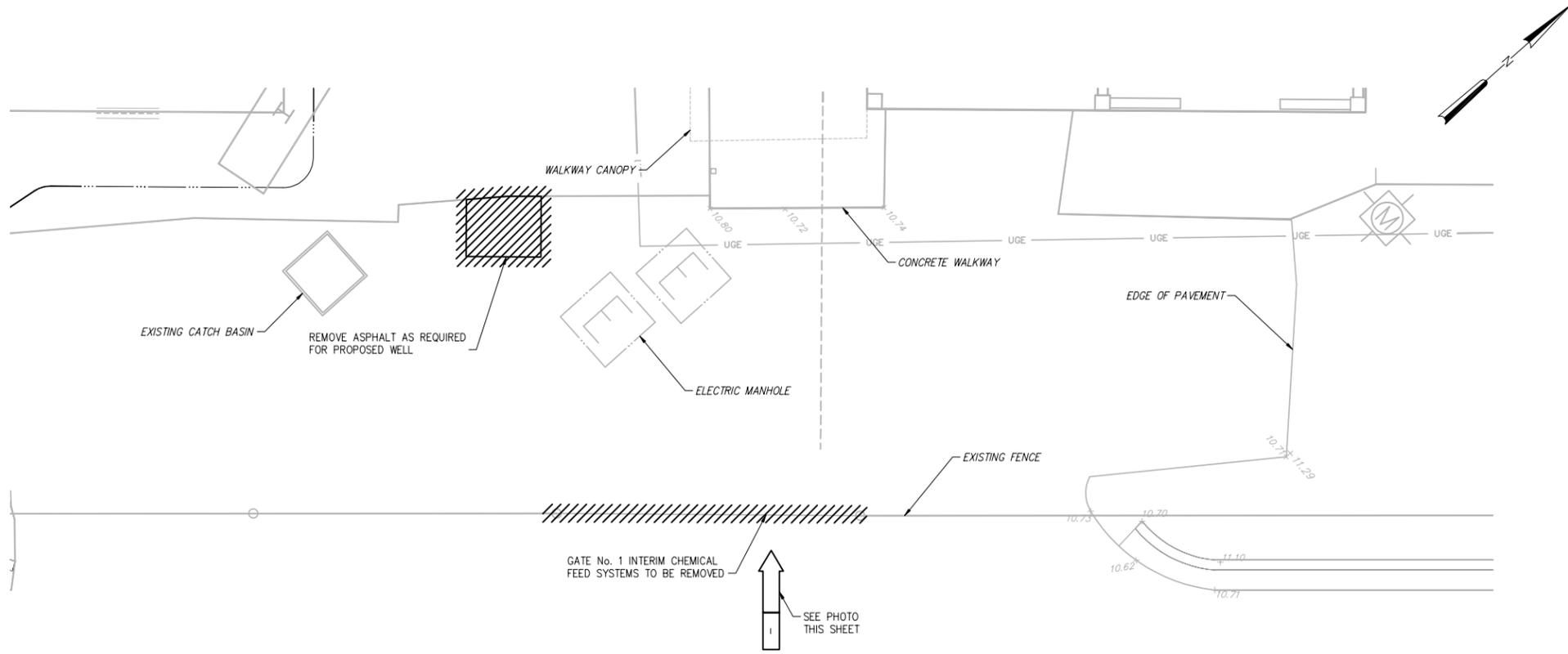
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ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C15

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS – VOLUME B: WTP REHAB
SWALES DRAINAGE PROPOSED PLAN

DATE:	JULY 2015
SHEET:	32 OF 335
DRAWING:	C-15

REQUEST FOR PROPOSAL

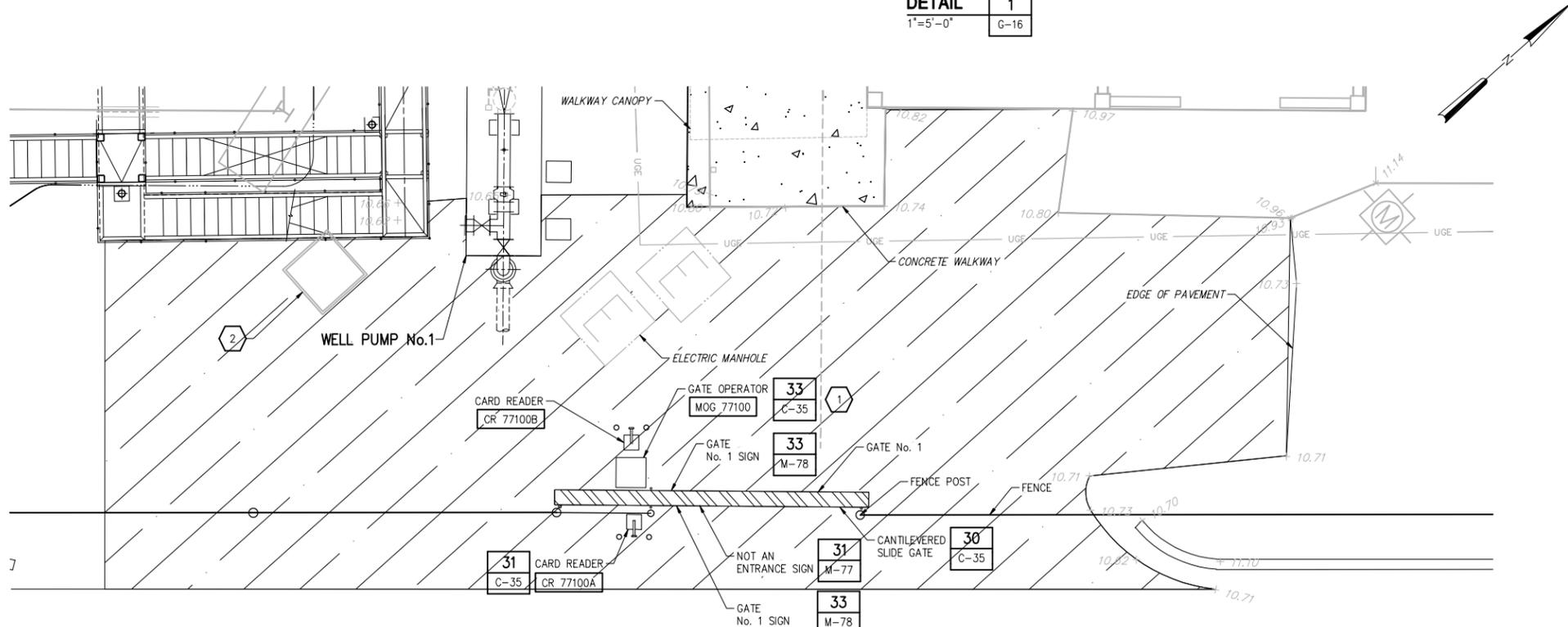


PLAN - EXISTING GATE NO. 1

DETAIL 1
1"=5'-0" G-16



PHOTO - EXISTING GATE NO 1
NTS

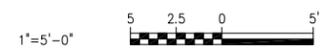


PLAN - PROPOSED GATE NO. 1

DETAIL 1
1"=5'-0" C-14

- KEYED NOTES:**
- 1 ALL MOTORIZED GATES SHALL BE PROVIDED WITH VEHICLE DETECTION LOOPS PER THE ELECTRICAL DRAWINGS.
 - 2 REMOVE AND DISPOSE OF ALL DEBRIS IN EXISTING CATCH BASIN. FOR THE PURPOSE OF BIDDING ASSUME 50 CUBIC FEET OF DEBRIS.

- LEGEND:**
- EXISTING
 - PROPOSED
 - ▨ PROPOSED STORM WATER SWALE
 - ▨ PROPOSED ASPHALT PAVEMENT
 - ▨ MILL 1" OF EXISTING ASPHALT AND RESURFACE (MATCH EXISTING GRADE)
 - ▨ TO BE REMOVED
 - 10.00- PROPOSED CONTOUR
 - ⊗11.25 PROPOSED SPOT ELEVATION
 - ×11.25 EXISTING SPOT ELEVATION



PLOT DATE: 7/24/2015 11:14 AM BY: TBCCAS

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GEORGE A. BROWN P.E.
 No. 56076

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SCALE
 1"=5'-0"

CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
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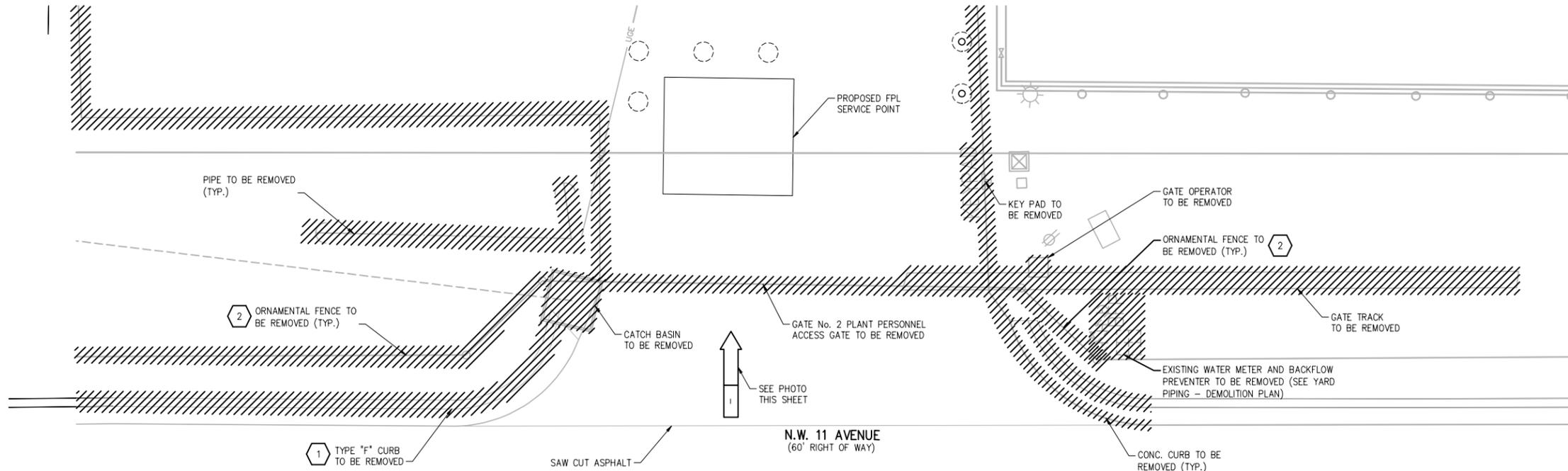
CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB

GATE NO. 1

DATE: **JULY 2015**
 SHEET: **33** OF **335**
 DRAWING: **C-16**

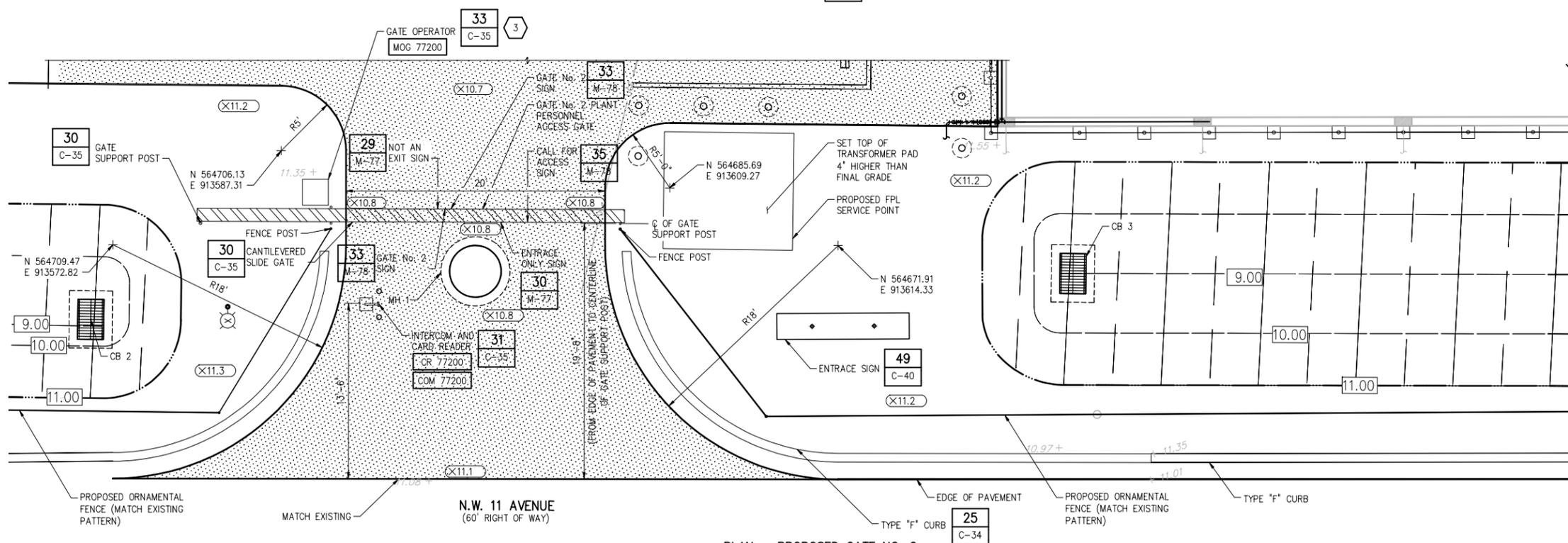
REQUEST FOR PROPOSAL



PLAN - EXISTING GATE NO. 2
 DETAIL 2
 1" = 5'-0" G-16



PHOTO - EXISTING GATE NO. 2
 NTS



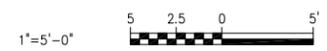
PLAN - PROPOSED GATE NO. 2
 DETAIL 2
 1" = 5'-0" C-14

KEYED NOTES:

- 1 REMOVE LENGTH OF EXISTING CURB AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 2 REMOVE THE LENGTH OF EXISTING FENCE AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 3 ALL MOTORIZED GATES SHALL BE PROVIDED WITH VEHICLE DETECTION LOOPS PER THE ELECTRICAL DRAWINGS.

LEGEND:

- EXISTING
- PROPOSED
- ▨ PROPOSED STORM WATER SWALE
- ▨ PROPOSED ASPHALT PAVEMENT
- ▨ TO BE REMOVED
- 10.00— PROPOSED CONTOUR
- ⊗11.25⊗ PROPOSED SPOT ELEVATION
- ⊗11.25⊗ EXISTING SPOT ELEVATION



PLOT DATE: 7/24/2015 11:15 AM BY: TBCCS

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1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

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SCALE	1" = 5'-0"
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ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C17

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
GATE NO. 2

DATE:	JULY 2015
SHEET:	34 OF 335
DRAWING:	C-17

REQUEST FOR PROPOSAL

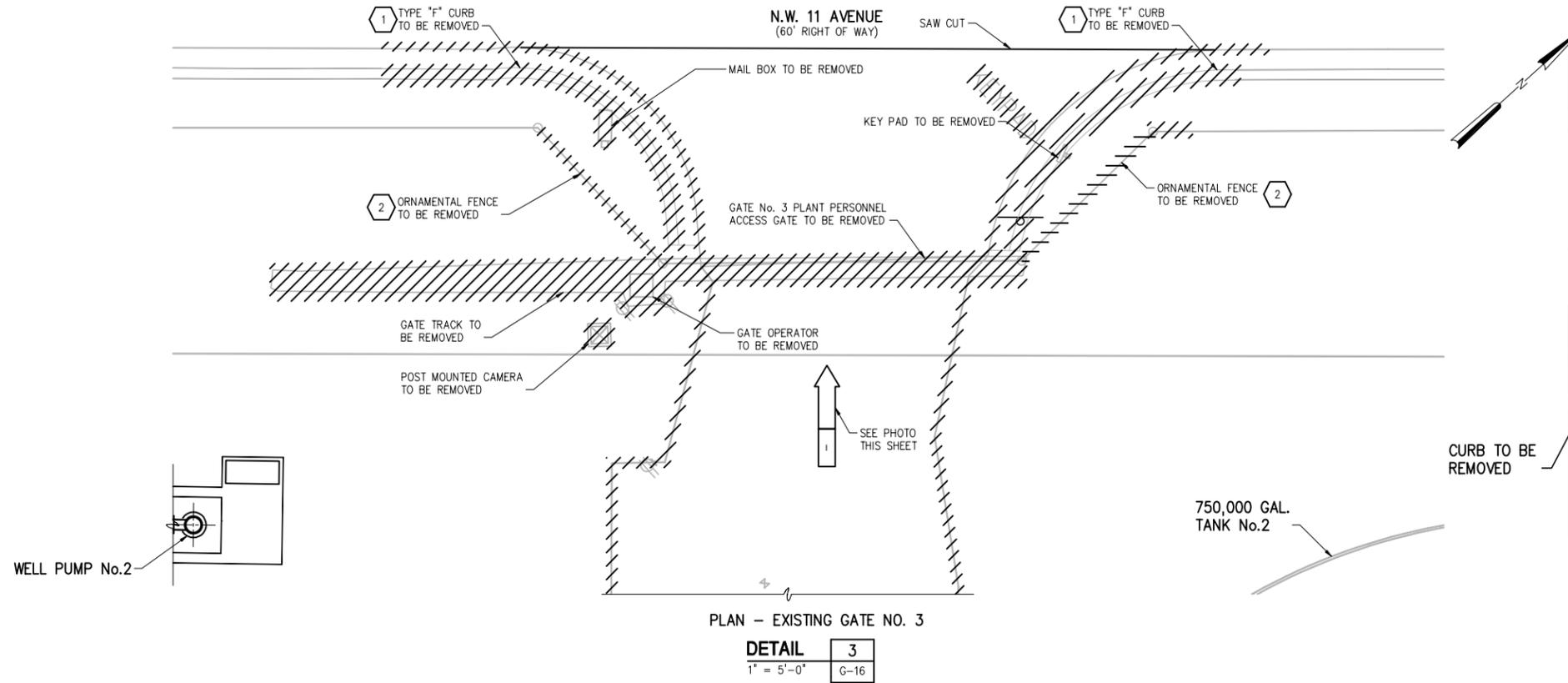
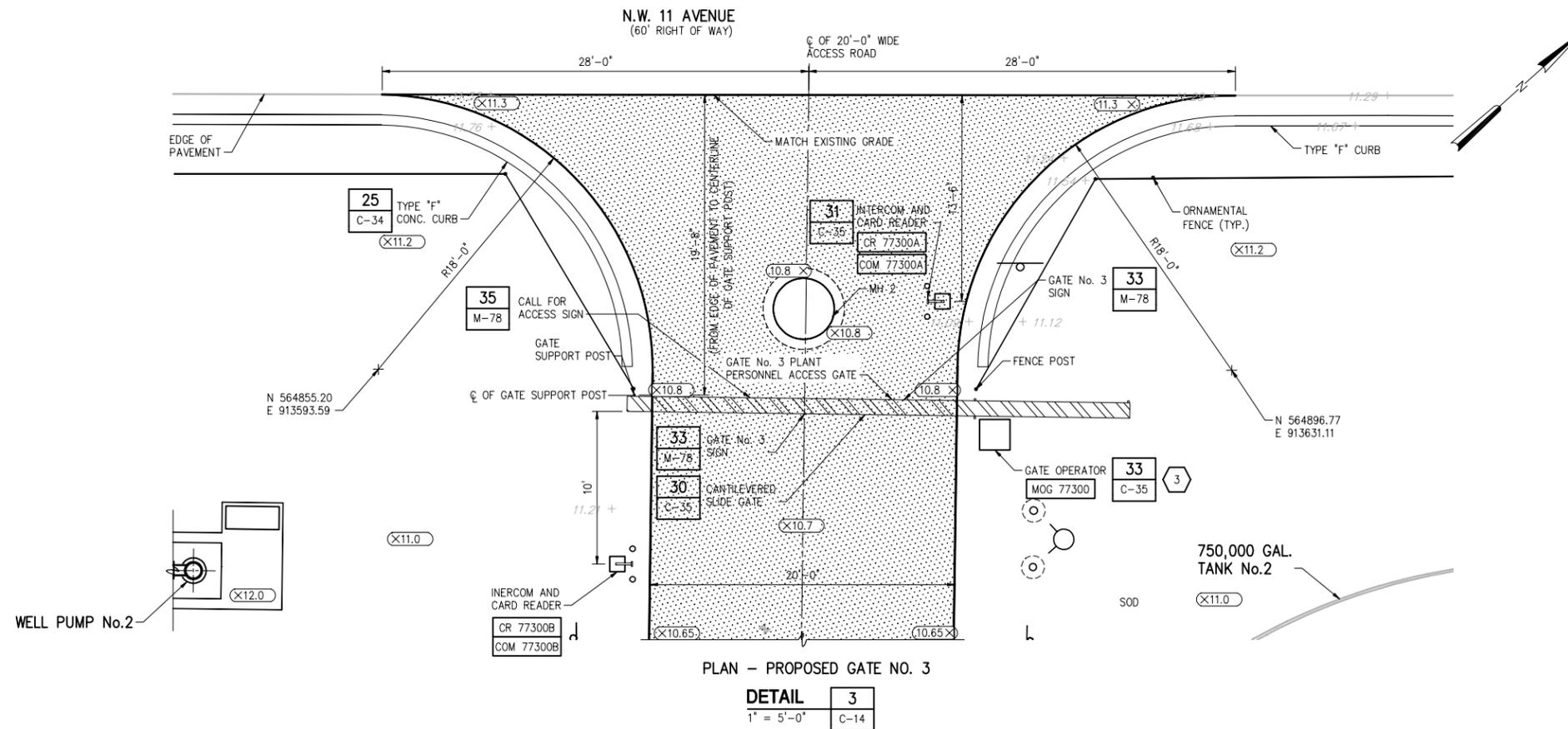


PHOTO - EXISTING GATE NO. 3
NTS

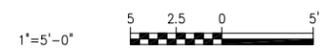


KEYED NOTES:

- 1 REMOVE LENGTH OF EXISTING CURB AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 2 REMOVE THE LENGTH OF EXISTING FENCE AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 3 ALL MOTORIZED GATES SHALL BE PROVIDED WITH VEHICLE DETECTION LOOPS PER THE ELECTRICAL DRAWINGS.

LEGEND:

- EXISTING
- PROPOSED
- ▨ PROPOSED STORM WATER SWALE
- ▨ PROPOSED PAVEMENT
- 10.00— PROPOSED CONTOUR
- ⊗11.25⊗ PROPOSED SPOT ELEVATION
- ⊗11.25⊗ EXISTING SPOT ELEVATION



PLOT DATE: 7/24/2015 11:15 AM BY: TBCCAS

NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN
No. 56076 P.E.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE
1" = 5'-0"

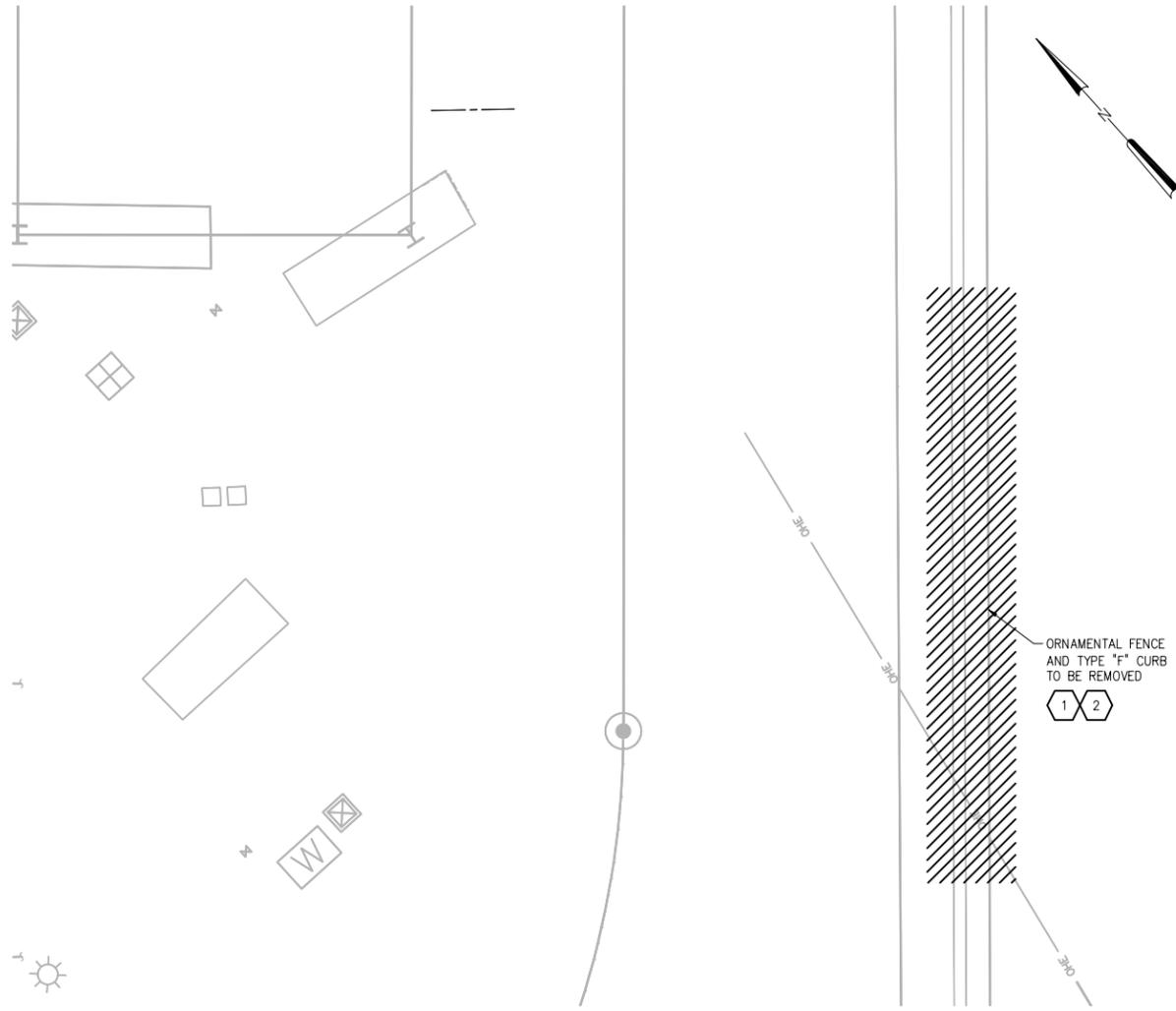
CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C18

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

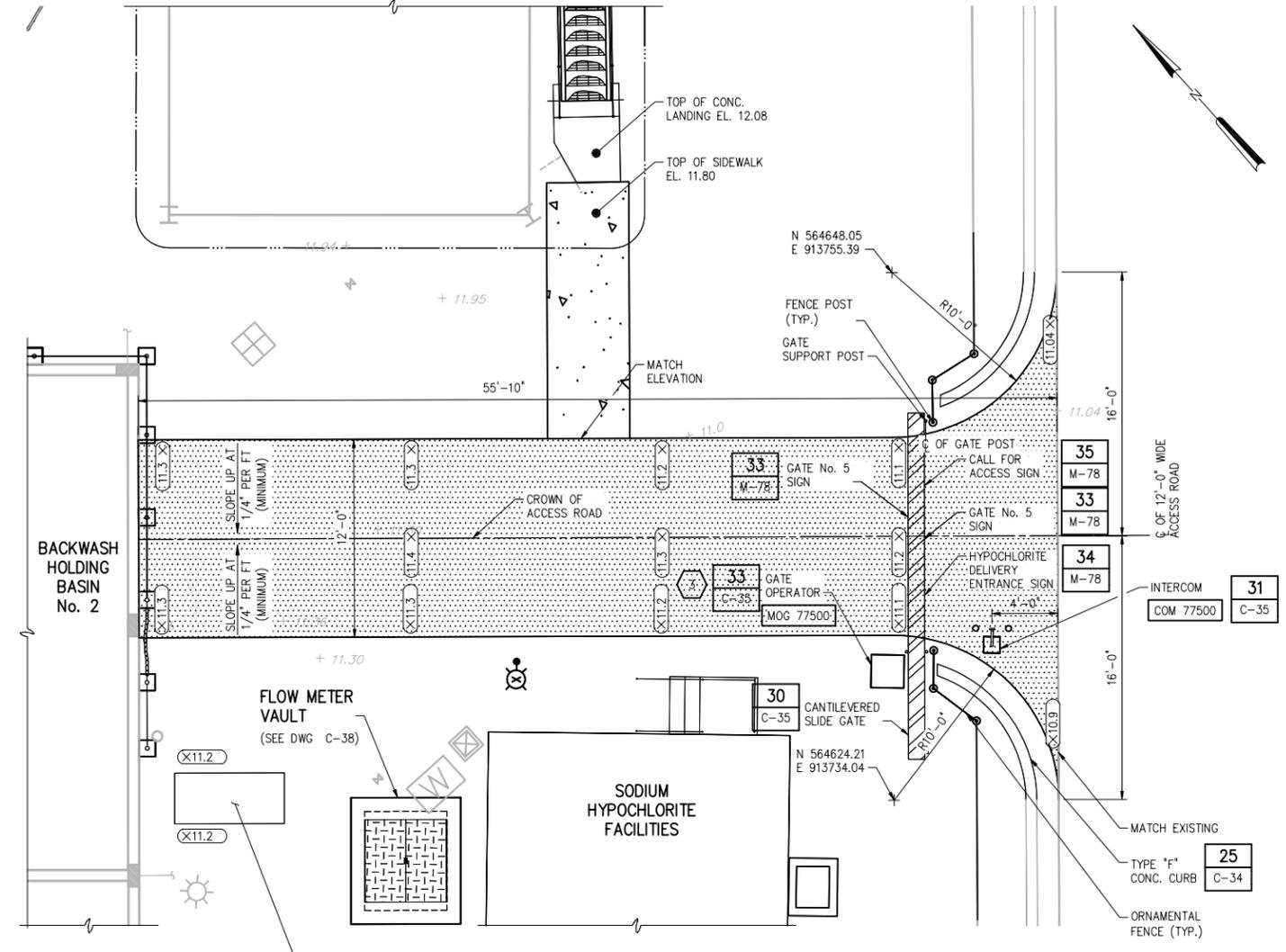
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
GATE NO. 3

DATE:	JULY 2015
SHEET:	35 OF 335
DRAWING:	C-18

REQUEST FOR PROPOSAL



PLAN - EXISTING
DETAIL 4
 1" = 5'-0" C-16



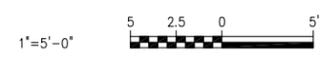
PLAN - PROPOSED GATE NO. 5
DETAIL 4
 1" = 5'-0" C-14

KEYED NOTES:

- 1 REMOVE LENGTH OF EXISTING CURB AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 2 REMOVE THE LENGTH OF EXISTING FENCE AS REQUIRED TO CONSTRUCT THE PROPOSED IMPROVEMENTS.
- 3 ALL MOTORIZED GATES SHALL BE PROVIDED WITH VEHICLE DETECTION LOOPS PER THE ELECTRICAL DRAWINGS.

LEGEND:

- EXISTING
- PROPOSED
- ▨ PROPOSED STORM WATER SWALE
- ▩ PROPOSED ASPHALT PAVEMENT
- 10.00- PROPOSED CONTOUR
- ⊗11.25 PROPOSED SPOT ELEVATION
- ⊗11.25 EXISTING SPOT ELEVATION



DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
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GEORGE A. BROWN	P.E.
No. 56076	

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 4000 Hollywood Boulevard, Suite 750N
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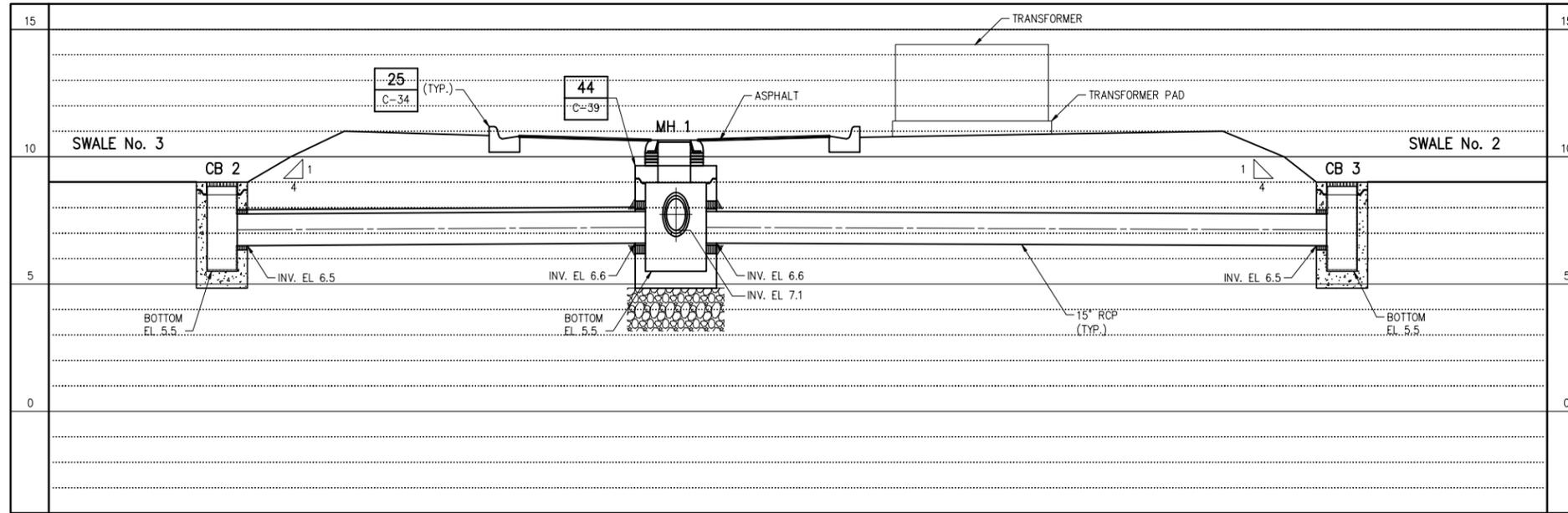
SCALE
 1"=5'-0"

CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C19

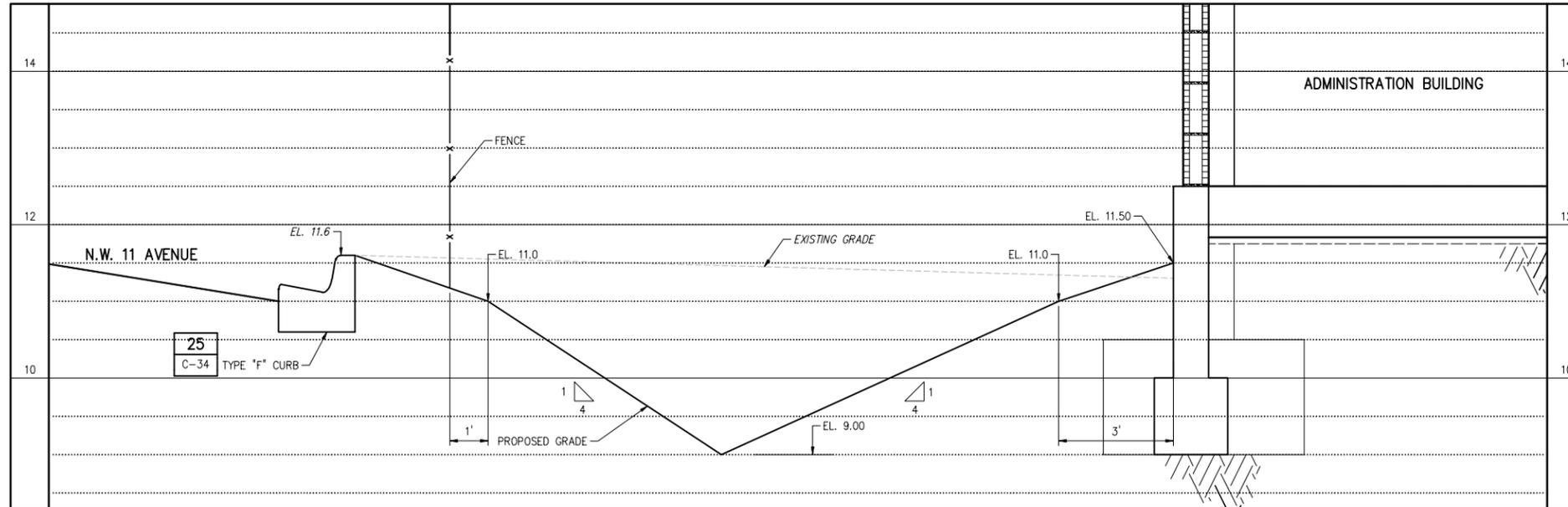
CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
GATE NO. 5

DATE:	JULY 2015
SHEET:	36 OF 335
DRAWING:	C-19

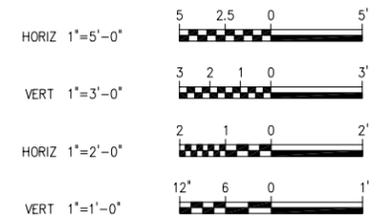


SECTION A
 HORIZ 1"=5'-0"
 VERT 1"=3'-0"



SECTION B
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

LEGEND:
 ——— EXISTING
 ——— PROPOSED



Szauer Engineering
 Civil Engineers
 7050 W. Palmetto Park Road, No. 15399
 Boca Raton, FL 33433
 Certificate of Authorization Number 30128

PLOT DATE: 7/24/2015 11:16 AM BY: TBOS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	JORGE M. SZAUER No. 62579 P.E.
DRAWN	G.P.B.	
CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	

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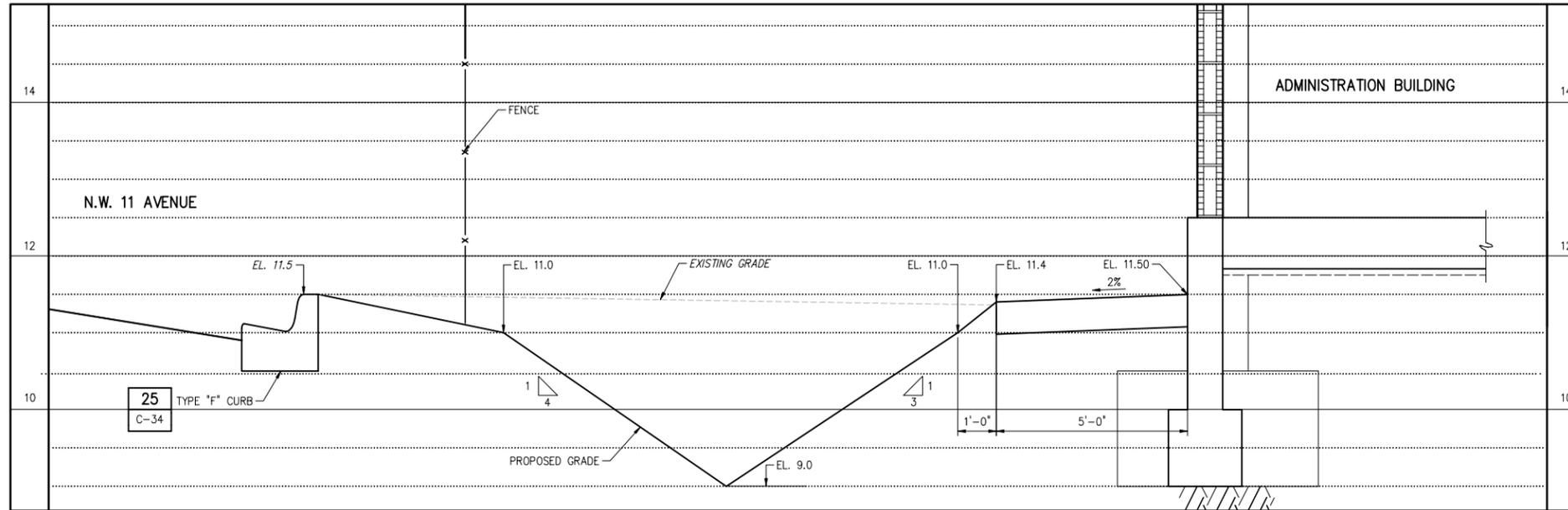
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CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C21



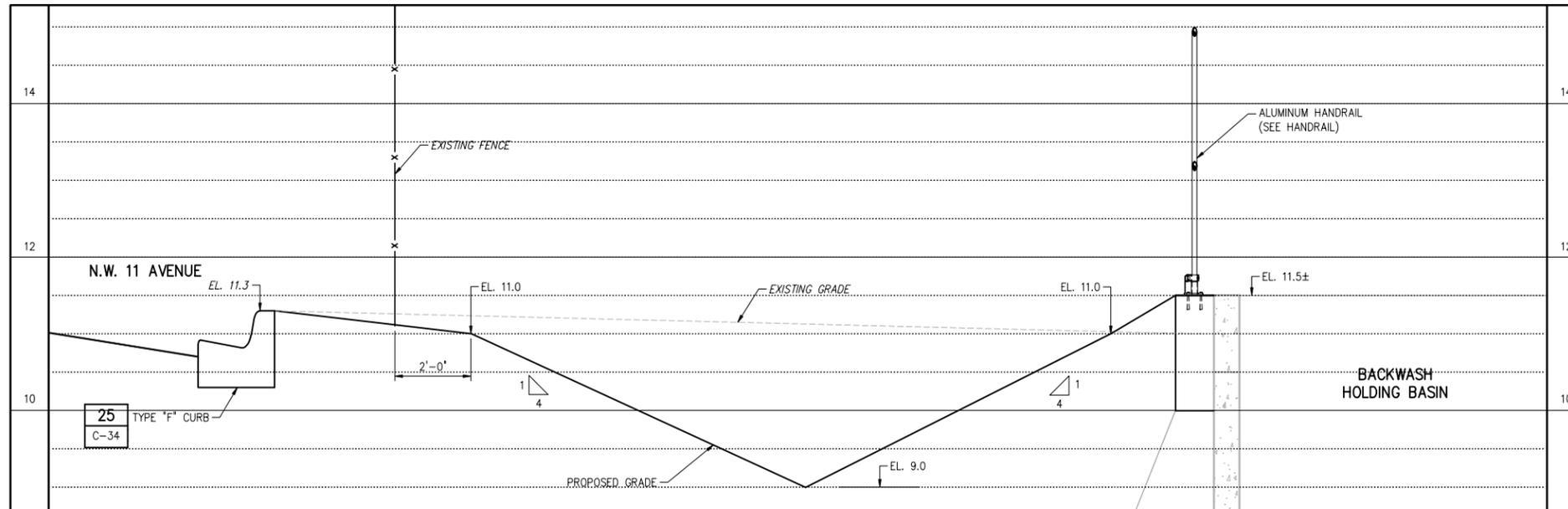
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
SECTIONS - SHEET 1

DATE:	JULY 2015
SHEET:	38 OF 335
DRAWING:	C-21

REQUEST FOR PROPOSAL

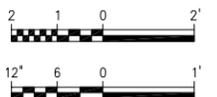


SECTION C
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"



SECTION D
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

HORIZ 1"=2'-0"
 VERT 1"=1'-0"



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DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
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DRAWN	G.P.B.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.
DESIGNED BY	JORGE M. SZAUER No. 62579
SCALE	P.E.

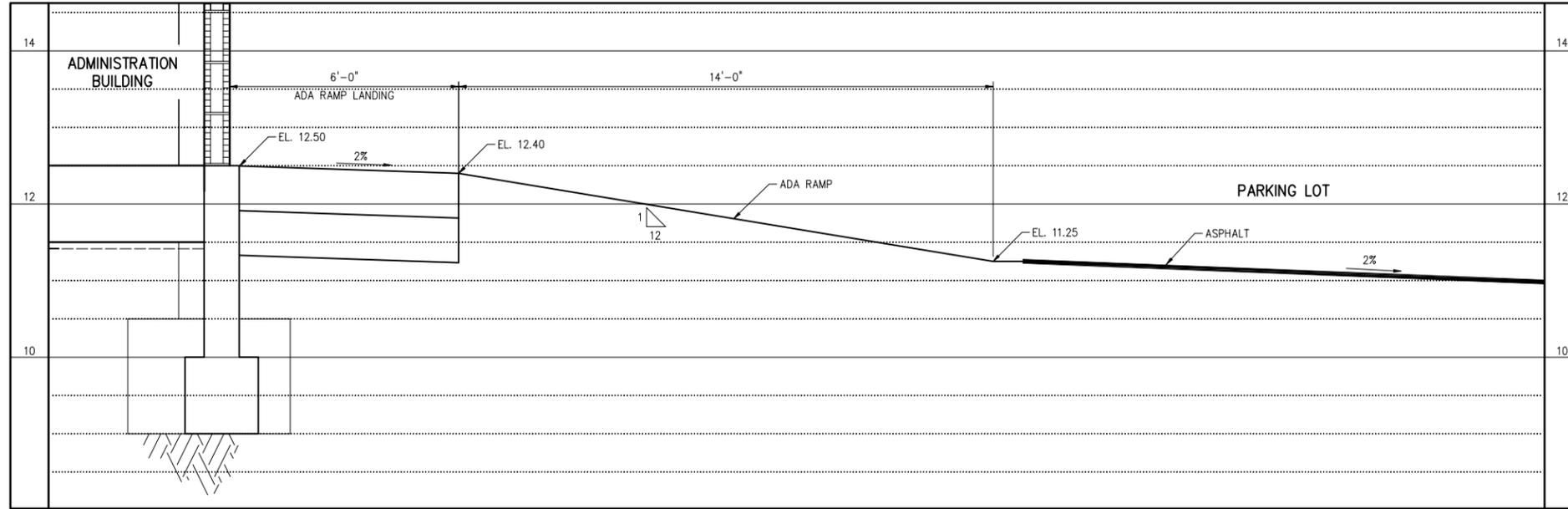
HAZEN AND SAWYER
 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
 Hollywood, Florida 33021
 Certificate of Authorization Number: 2771

SCALE
 AS NOTED
 CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C22

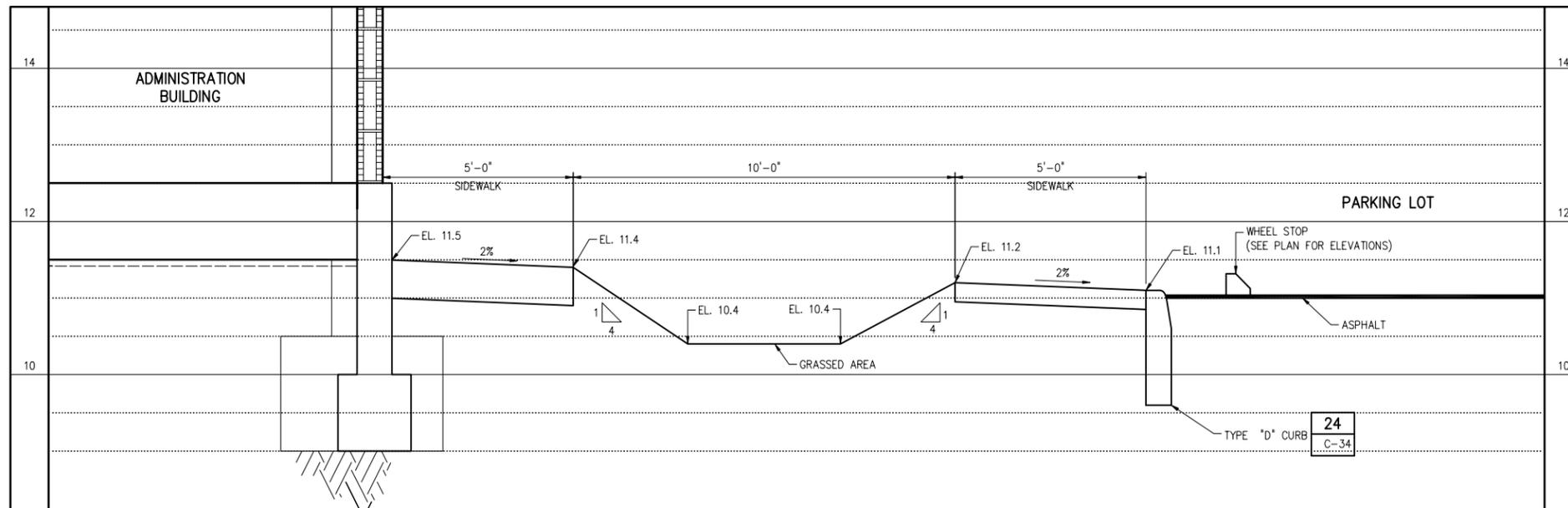


WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
 SECTIONS - SHEET 2

DATE: JULY 2015
 SHEET: 39 OF 335
 DRAWING: C-22



SECTION E
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"



SECTION F
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

HORIZ 1"=2'-0"
 VERT 1"=1'-0"



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DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	JORGE M. SZAUER No. 62579 P.E.
DRAWN	G.P.B.	
CHECKED	J.N.M.	
PROJ. ENGR.	G.A.B.	
NO.	DATE	

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 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
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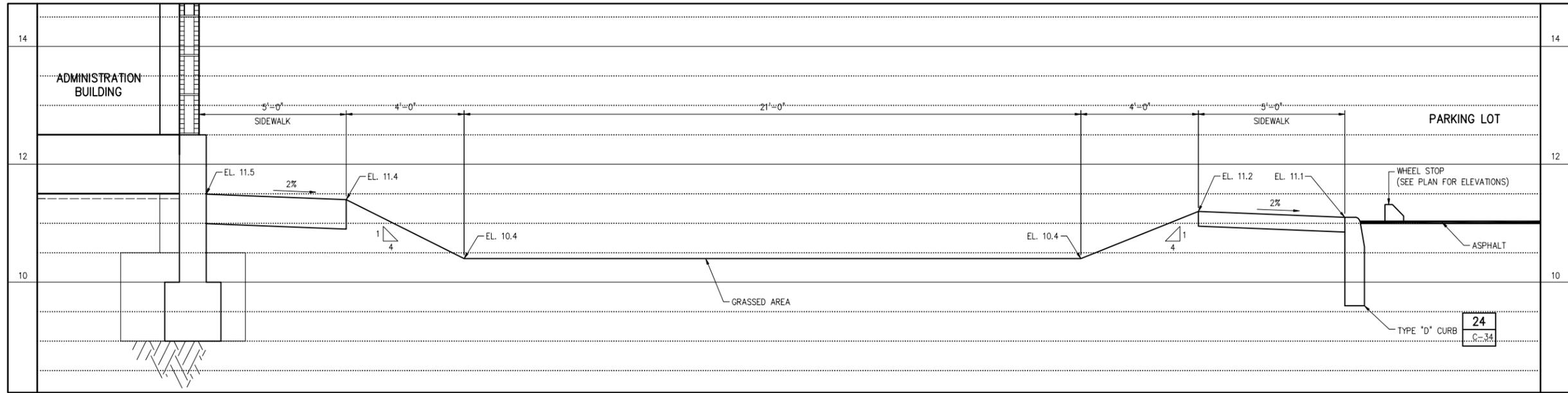
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ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C23



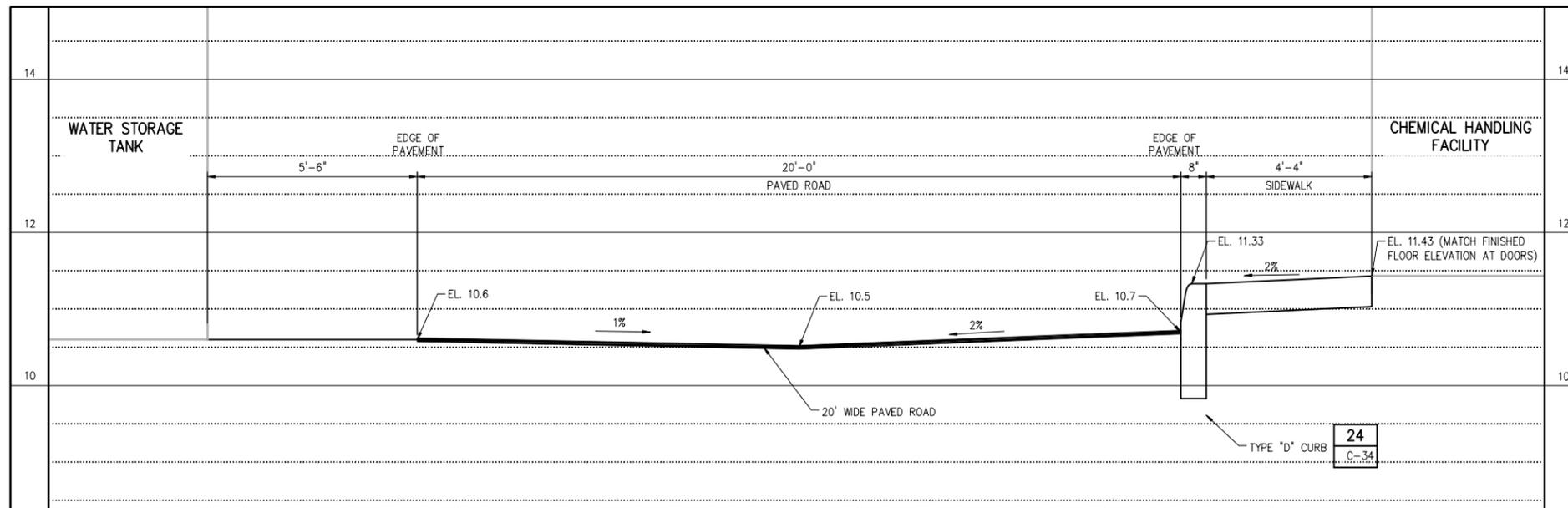
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
SECTIONS - SHEET 3

DATE:	JULY 2015
SHEET:	40 OF 335
DRAWING:	C-23

REQUEST FOR PROPOSAL



SECTION G
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"



SECTION H
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

HORIZ 1"=2'-0"
 VERT 1"=1'-0"



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 Boca Raton, FL 33433
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DESIGNED	G.A.B.		
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CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

JORGE M. SZAUER
 No. 62579
 P.E.

HAZEN AND SAWYER
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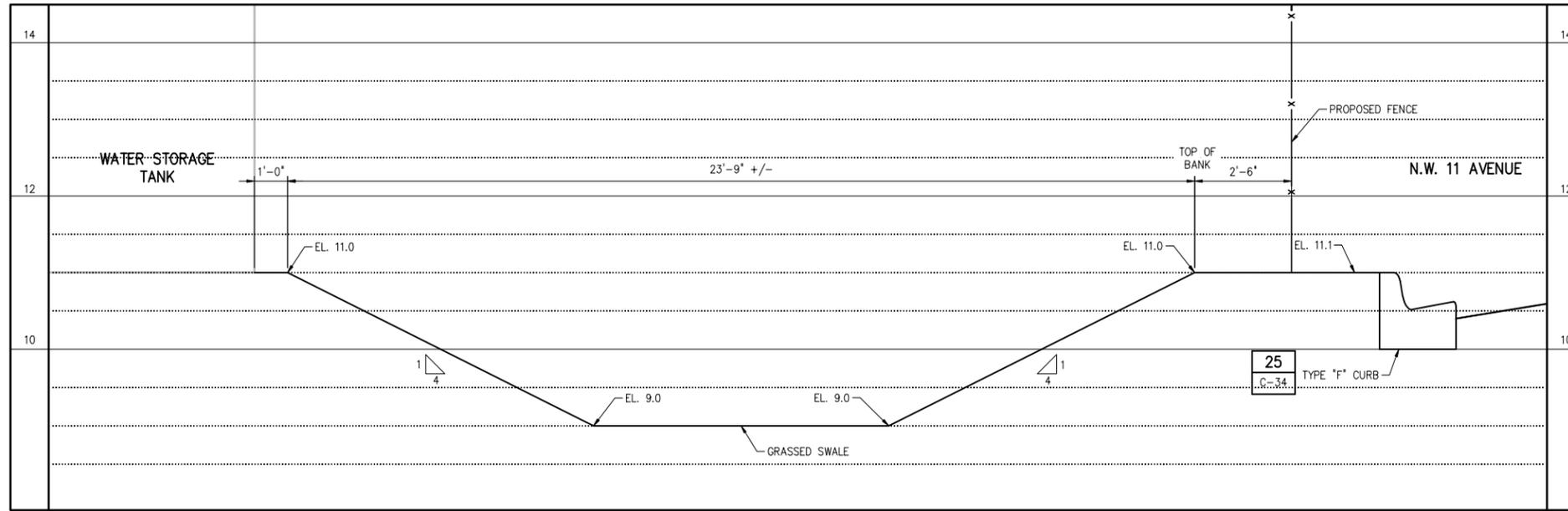
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 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C24



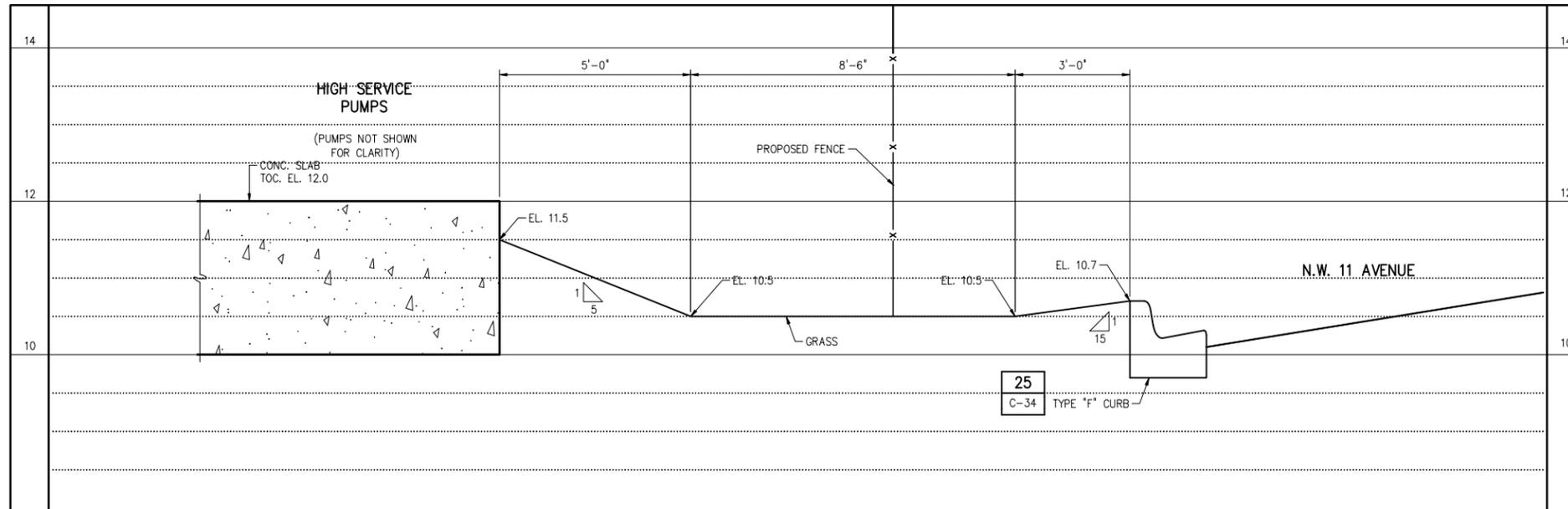
WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
 SECTIONS - SHEET 4

DATE: JULY 2015
 SHEET: 41 OF 335
 DRAWING: C-24

REQUEST FOR PROPOSAL



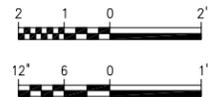
SECTION I
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"



SECTION J
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

Szauer Engineering
 Civil Engineers
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 Boca Raton, FL 33433
 Certificate of Authorization Number 30128

HORIZ 1"=2'-0"
 VERT 1"=1'-0"



DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
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PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

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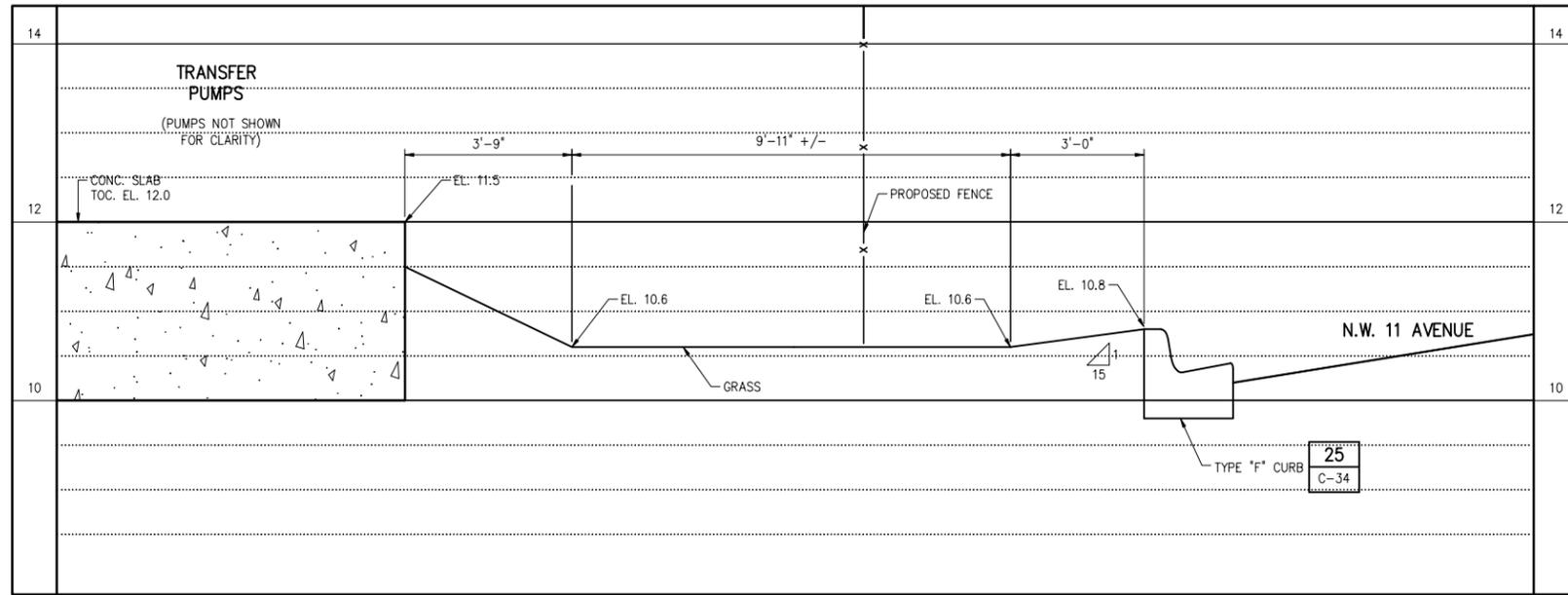
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 AS NOTED
 CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C25



WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
 PAVING, GRADING & DRAINAGE
 SECTIONS - SHEET 5

DATE: JULY 2015
 SHEET: 42 OF 335
 DRAWING: C-25

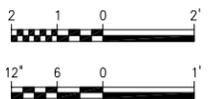
REQUEST FOR PROPOSAL



SECTION K
 HORIZ 1"=2'-0"
 VERT 1"=1'-0"

Szauer Engineering
 Civil Engineers
 7050 W. Palmetto Park Road, No. 15399
 Boca Raton, FL 33433
 Certificate of Authorization Number 30128

HORIZ 1"=2'-0"
 VERT 1"=1'-0"



PLOT DATE: 7/24/2015 11:17 AM BY: TBOS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
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1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

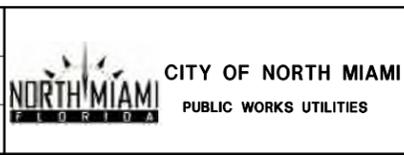
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 No. 62579

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 4000 Hollywood Boulevard, Suite 750N
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SCALE
 AS NOTED

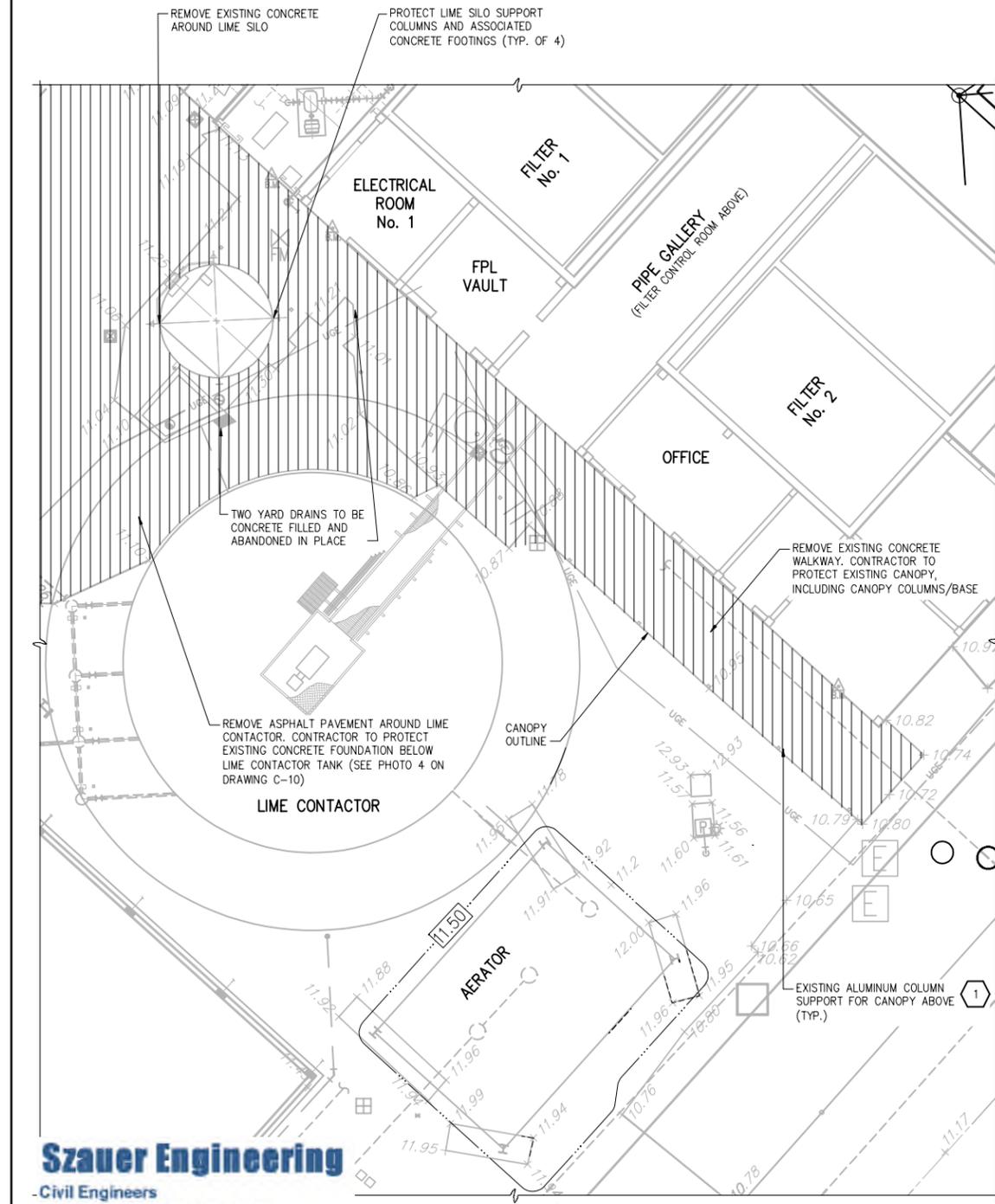
CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C26



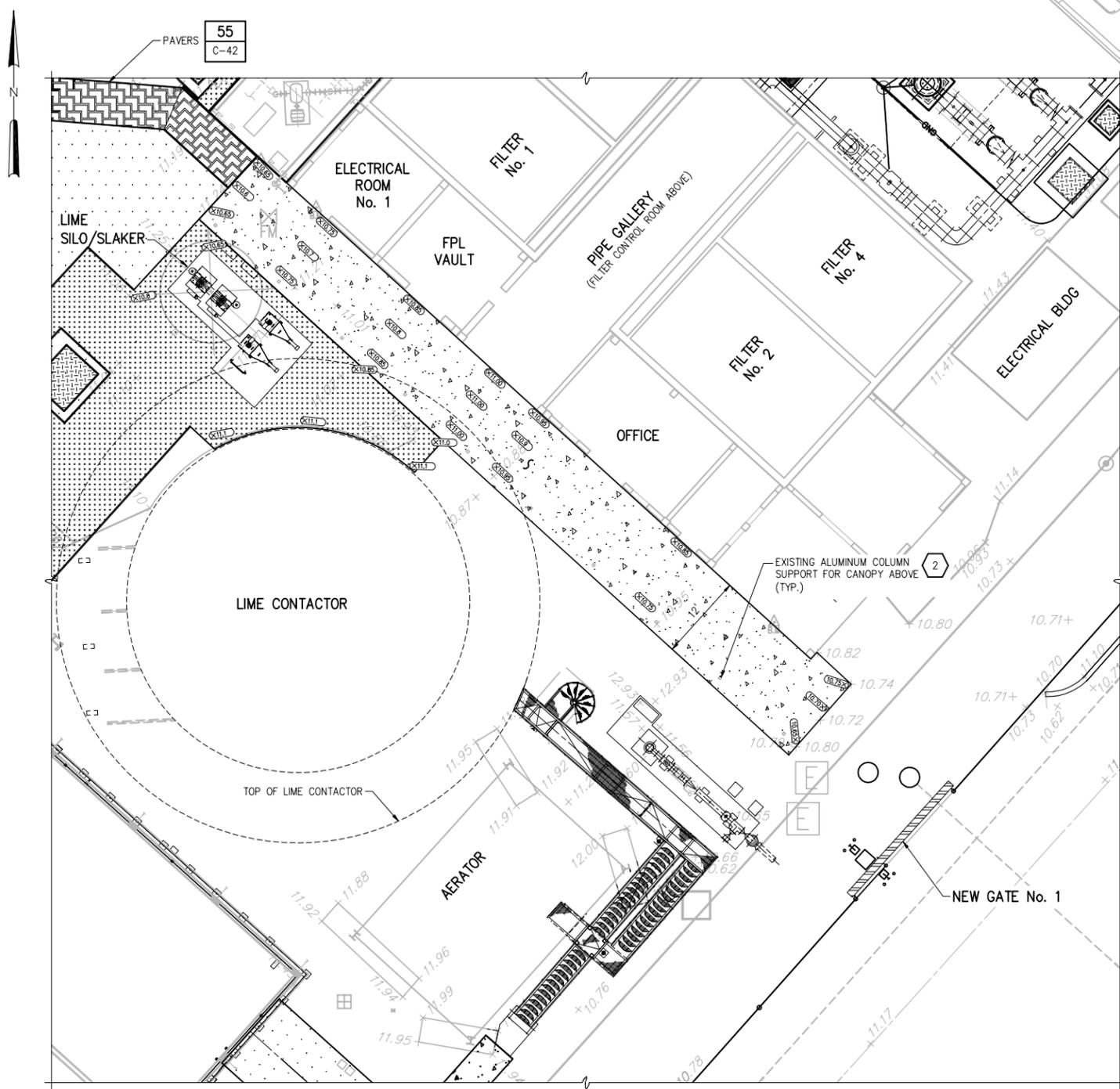
WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PAVING, GRADING & DRAINAGE
 SECTIONS - SHEET 6

DATE: JULY 2015
 SHEET: 43 OF 335
 DRAWING: C-26

REQUEST FOR PROPOSAL

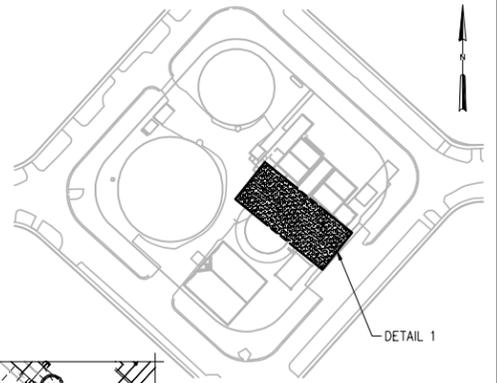


EXISTING PLAN / DEMOLITION
1"=10'-0"

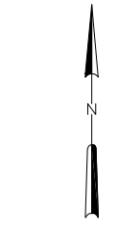


DETAIL 1
1"=10'-0"

PROPOSED PLAN
1"=10'-0"



LOCATION MAP

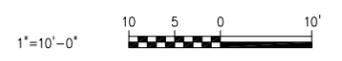


KEYED NOTES:

- 1 PROJECT CANOPY SUPPORT COLUMNS.
- 2 REMOVE AND REPLACE RAIN LEADERS UP TO EXISTING GUTTER, REPLACE IN KIND. EXISTING GUTTER TO REMAIN. SEE PHOTO 3 ON DRAWING C-10 FOR PHOTO OF AN EXISTING LEADER.

LEGEND:

- WORK COMPLETED IN PHASE-I, II, III AND IV
- EXISTING
- PROPOSED
- TO BE REMOVED
- PROPOSED STORM WATER SWALE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED SOD
- PROPOSED CONCRETE PAVEMENT



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PROJ. ENGR.	G.A.B.
DATE	07/24/15
ISSUED FOR	REQUEST FOR PROPOSAL
BY	G.A.B.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE	1"=10'-0"
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C27



WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
BREEZEWAY PLANS AND DETAILS

DATE:	JULY 2015
SHEET:	44 OF 335
DRAWING:	C-27

WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314

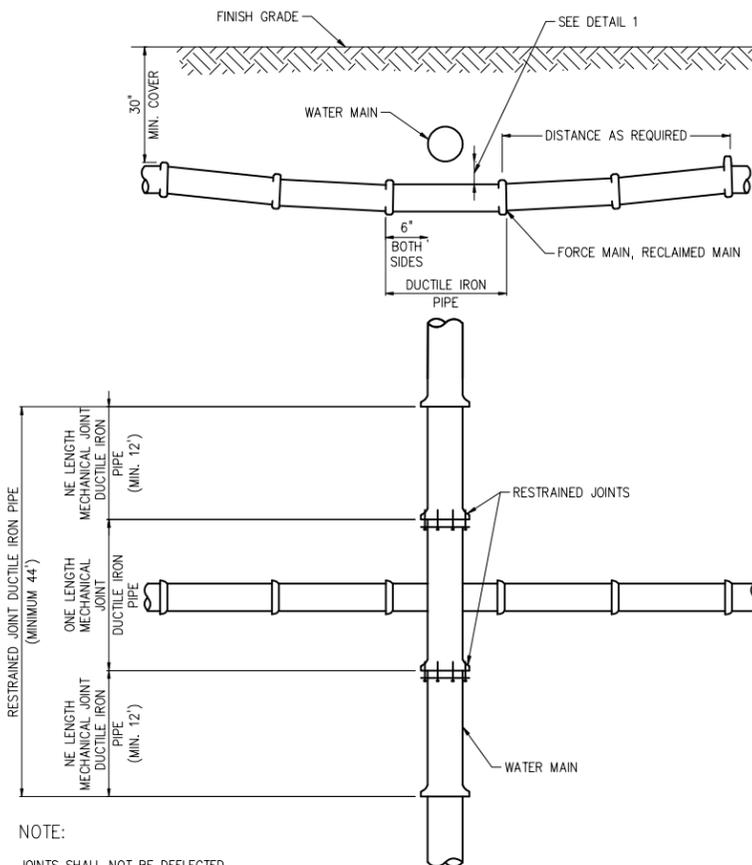
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (NOTE 1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORM WATER FORCE MAIN, RECLAIMED WATER (NOTE 2)	<p>3 FT. MINIMUM</p>	<p>12 INCHES IS THE MINIMUM, EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED</p>	<p>ALTERNATE 3 FT. MINIMUM</p>
VACUUM SANITARY SEWER	<p>10 FT. PREFERRED 3 FT. MINIMUM</p>	<p>12 INCHES PREFERRED 6 INCHES MINIMUM</p>	<p>ALTERNATE 3 FT. MINIMUM</p>
GRAVITY SANITARY SEWER, (NOTE 3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER	<p>10 FT. PREFERRED 6 FT. MINIMUM</p>	<p>12 INCHES IS THE MINIMUM, EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED</p>	<p>ALTERNATE 6 FT. MINIMUM</p>
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 FT. MINIMUM		

NOTES:

1. WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.

WATER MAIN SEPERATION

DETAIL	1
NTS	C-03

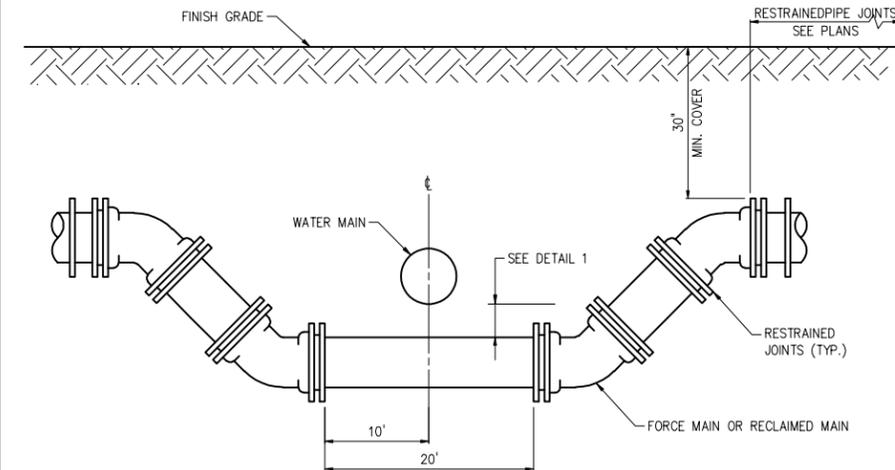


NOTE:

JOINTS SHALL NOT BE DEFLECTED MORE THAN 50% OF MANUFACTURER'S RECOMMENDED DEFLECTION

STANDARD UTILITY CROSSING

DETAIL	2
NTS	-

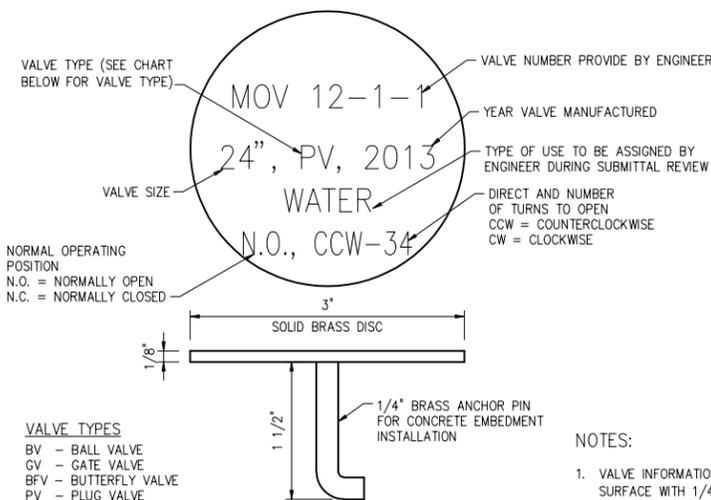


NOTE:

WHEREVER POSSIBLE DEFLECTION OF THE PIPE PER DETAIL 2 SHALL BE USED TO AVOID EXISTING OBSTRUCTIONS. THIS DETAIL SHALL BE USED ONLY WHEN APPROVED BY ENGINEER.

FITTING TYPE UTILITY CROSSING

DETAIL	3
NTS	-

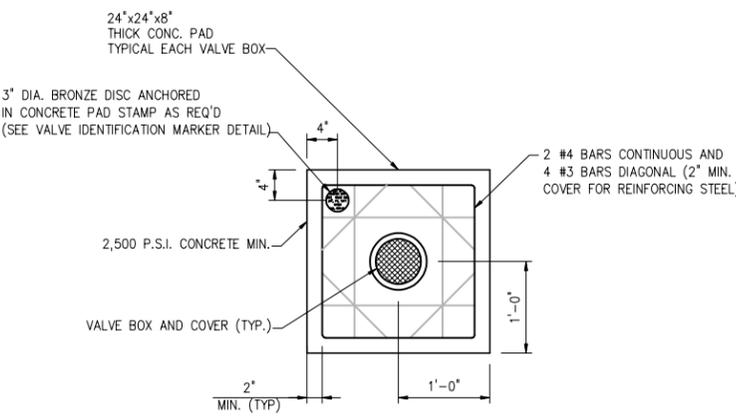


VALVE IDENTIFICATION MARKER

DETAIL	4
NTS	-

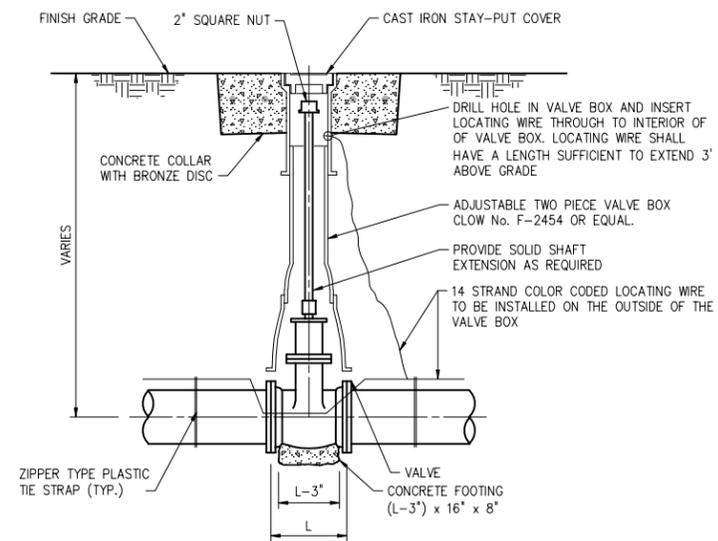
NOTES:

1. VALVE INFORMATION TO BE ENGRAVED INTO TOP SURFACE WITH 1/4" CAPITAL LETTERS.
2. ENTIRE MARKER TO BE COATED WITH CLEAR EPOXY TO PREVENT TARNISHING.
3. MARKERS SHALL BE MANUFACTURED BY WAGCO MARKERS, OR APPROVED EQUAL.



VALVE BOX

DETAIL	5
NTS	-



VALVE BOX

DETAIL	6
NTS	-

PLOT DATE: 7/24/2015 11:17 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	G.N.C.		
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PROJ. ENGR.	G.A.B.
DESIGNED BY	GEORGE A. BROWN
PROJ. ENGR.	GEORGE A. BROWN
DATE	07/24/15
PROJECT	REQUEST FOR PROPOSAL
NO.	1
DATE	07/24/15
ISSUED FOR	REQUEST FOR PROPOSAL
BY	G.A.B.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

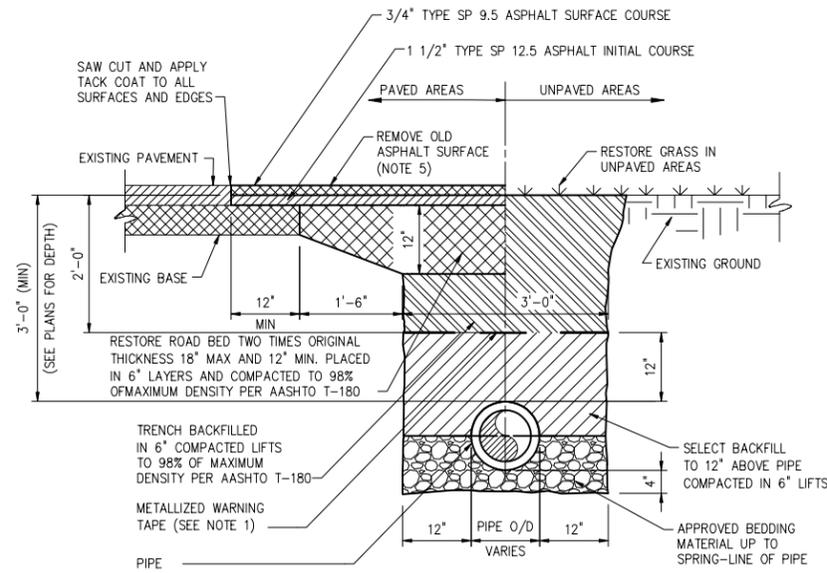
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C28

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSLOW WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 1

DATE:	JULY 2015
SHEET:	45 OF 335
DRAWING:	C-28

REQUEST FOR PROPOSAL

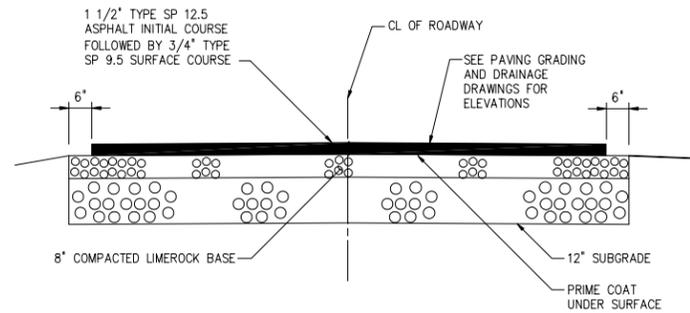


NOTES:

1. METALLIZED WARNING TAPES SHALL BE INSTALLED 24" BELOW FINISH GRADE CENTERED ABOVE THE PIPE.
2. SELECTED BACKFILL MATERIAL SHALL BE FREE OF STONES LARGER THAN 3/4" DIA.
3. REPLACE ALL LANE MARKINGS AND REFLECTIVE MARKERS.
4. DEPTH OF PIPE VARIES. SEE PIPING PLANS FOR PROPOSED DEPTHS. MINIMUM DEPTH OF COVER SHALL BE 36 INCHES.
5. EXISTING ASPHALT THICKNESS IS ESTIMATED TO AVERAGE 2-INCHES (RANGING FROM 1-INCH TO 3-INCHES). THE CONTRACTOR SHALL REMOVE EXISTING ASPHALT TO EXPOSE LIMEROCK BASE PRIOR TO INSTALLATION OF PROPOSED ASPHALT. SOME REMOVAL OF EXISTING LIMEROCK BASE AND/OR SUBGRADE MAY BE REQUIRED TO CONSTRUCT THE PROPOSED PAVEMENT.

TYPICAL TRENCH AND PAVEMENT RESTORATION

DETAIL	7
NTS	-

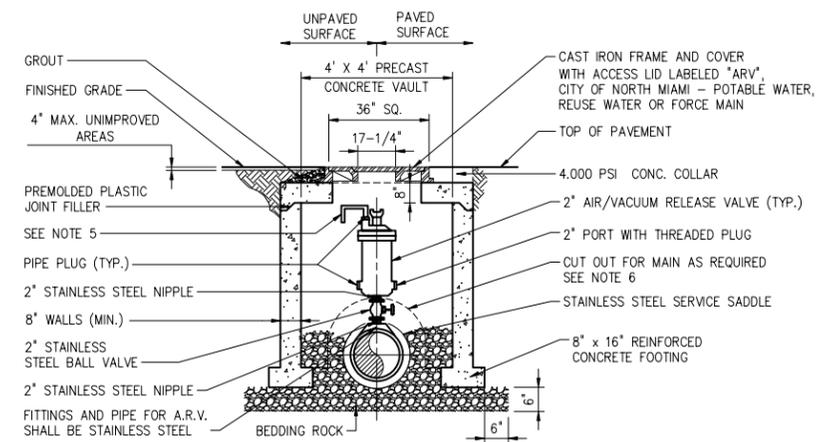


NOTES:

1. REFERENCE SEQUENCING RESTRICTIONS BETWEEN PLACEMENT OF INITIAL AND SURFACE COURSES AS NOTED ON THE STAGING PLANS.

TYPICAL PAVEMENT DETAIL

DETAIL	8
NTS	-

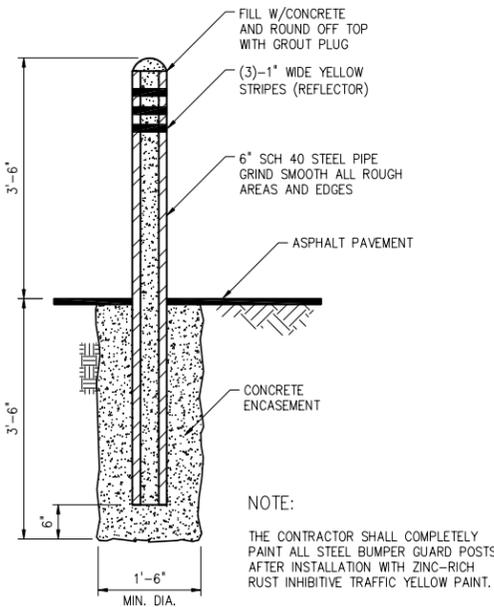


NOTES:

1. ADOBE DETAIL IS BASED ON 2" COMBINATION AIR/VACUUM RELEASE VALVE, CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE BOTTOM OF THE PRECAST VAULT SHALL BE PLACED AT THE SAME ELEVATION AS THE BOTTOM OF THE PIPE.
3. ARV VAULT WALLS TO BE COATED INSIDE AND OUTSIDE WITH 16 MIL. THK. APPROVED ASPHALTIC COATING.
4. LIFT HOLES ARE TO BE SEALED WITH MORTAR INSIDE AND OUTSIDE AFTER INSTALLATION. ALL OPENINGS SHALL BE SEALED WITH WATERPROOF, EXPANDING GROUT.
5. WASTEWATER VALVES TO BE EQUIPPED WITH THREADED VENT PIPE THAT DIRECTS VENT DOWNWARD.
6. VAULT SHALL NOT REST ON PIPE. ALLOW 9" MIN. SEPARATION.
7. WHEN USED ON A FORCE MAIN ALL FITTING SHALL BE STAINLESS STEEL.

AIR RELEASE VALVE

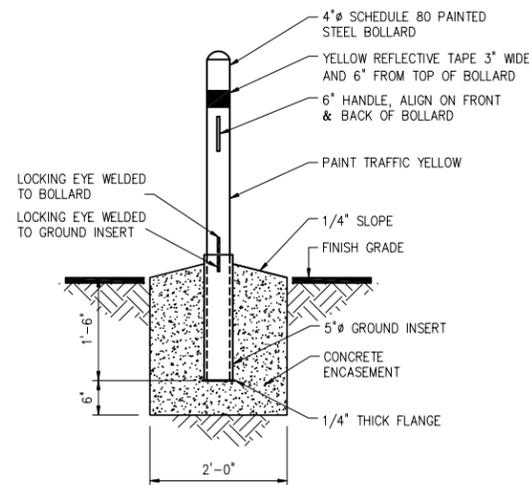
DETAIL	9
NTS	-



NOTE:
THE CONTRACTOR SHALL COMPLETELY PAINT ALL STEEL BUMPER GUARD POSTS AFTER INSTALLATION WITH ZINC-RICH RUST INHIBITIVE TRAFFIC YELLOW PAINT.

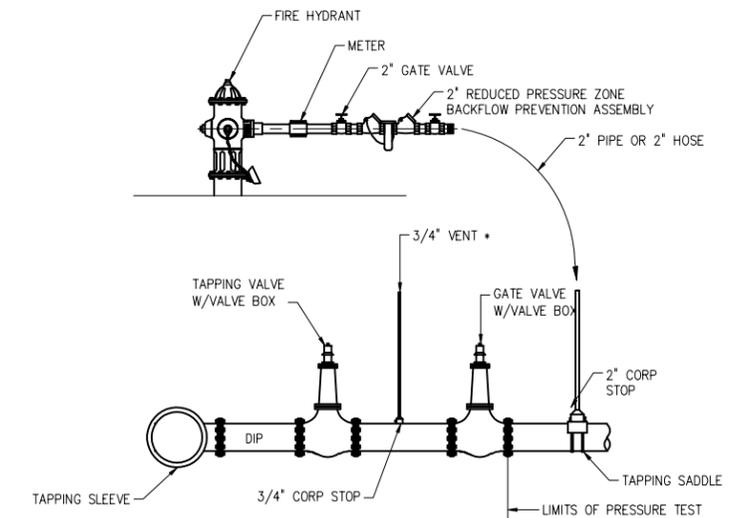
BOLLARD

DETAIL	10
NTS	-



REMOVABLE BOLLARD

DETAIL	11
NTS	-



NOTES:

1. AFTER TESTS REMOVE 3/4" TUBING AND 2" GALVANIZED PIPE AND INSTALL PLUGS ON CORPORATION STOPS.

TAPPING AND FILLING CONNECTION

DETAIL	12
NTS	-

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	G.N.C.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	G.N.C.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN
No. 56076 P.E.

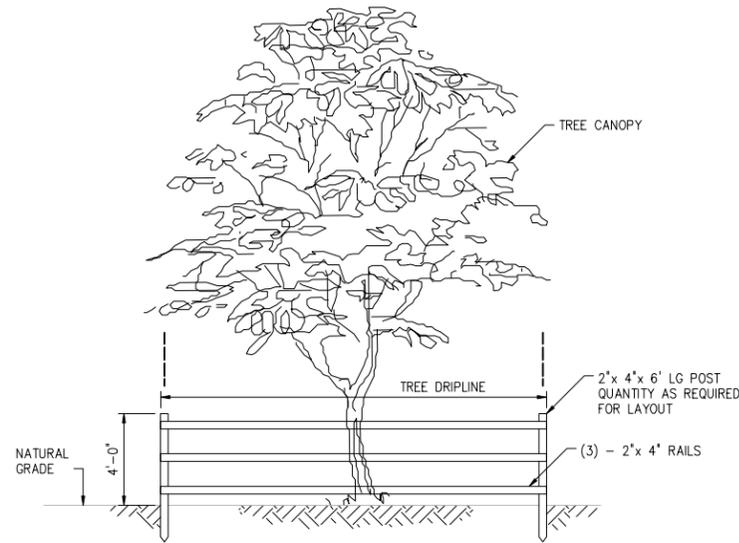
HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE: NTS
CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C29

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 2

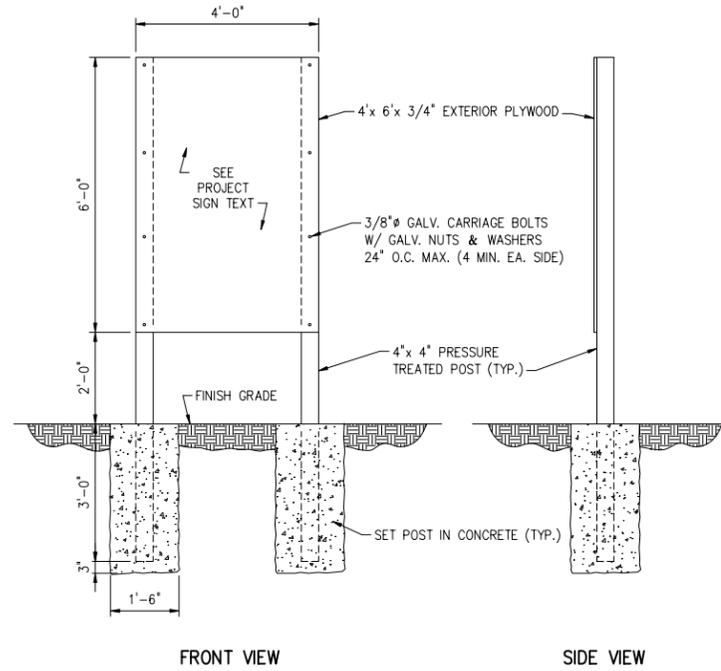
DATE: JULY 2015
SHEET: 46 OF 335
DRAWING: C-29



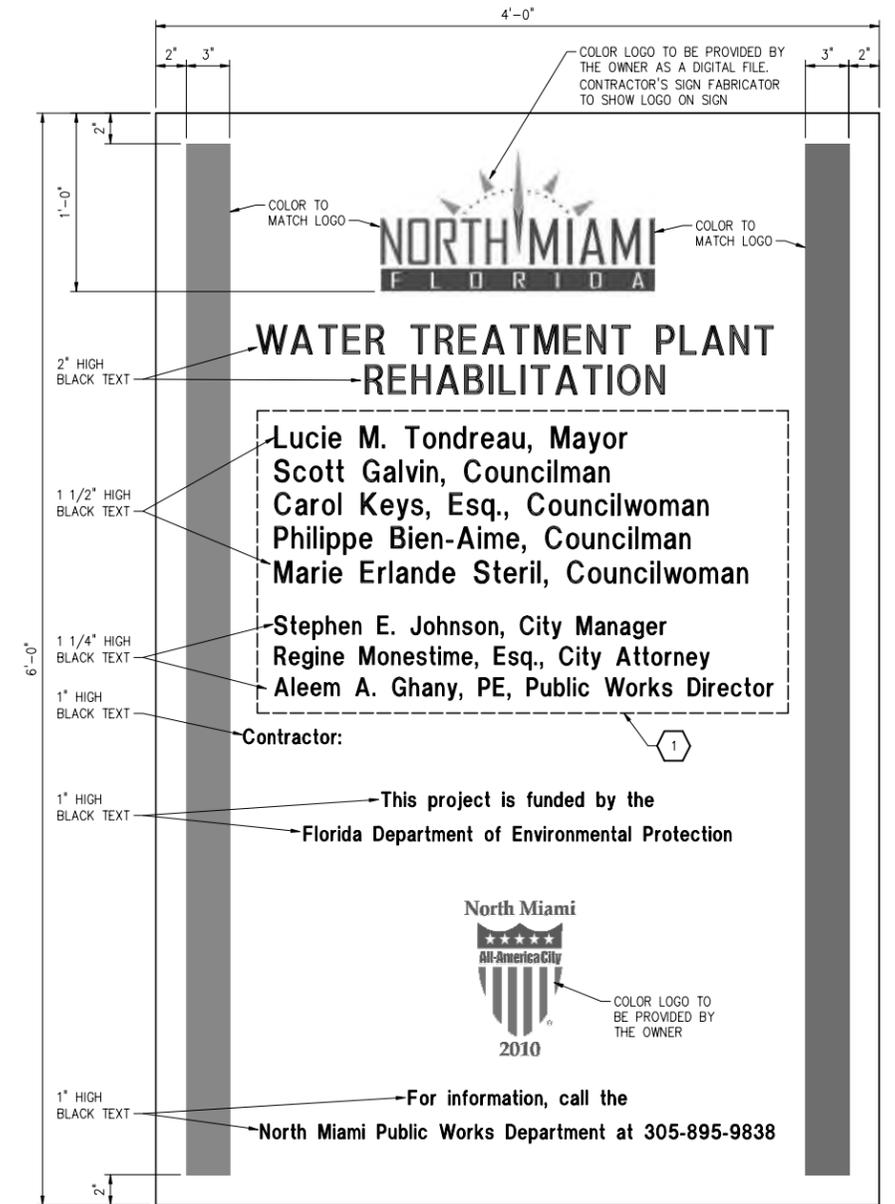
NOTE:
EXISTING TREES TO REMAIN PER TREE REMOVAL PLAN (SHEET G-09) AND THE MECHANICAL YARD PIPING PLANS DIRECTLY ADJACENT (I.E. WITHIN 10 FEET) OF WORK AREA SHALL RECEIVE TEMPORARY TREE PROTECTION BARRIERS PER THIS DETAIL AND AS NOTED IN DIVISION OF THE SPECIFICATIONS.

TEMPORARY TREE PROTECTION BARRIER

DETAIL	13
NTS	-



FRONT VIEW SIDE VIEW



NOTE:
THE TEXT FONT SHALL BE AS SELECTED BY THE OWNER.

PROJECT SIGN TEXT

PROJECT SIGN

DETAIL	14
NTS	-

KEYED NOTES:

1 UPDATE NAMES AND TITLES AS REQUIRED TO MATCH ELECTED OFFICIALS AND CITY STAFF AT DATE OF PROJECT AWARD.

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	G.N.C.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	G.N.C.
PROJ. ENGR.	G.A.B.
GEORGE A. BROWN	P.E.
No. 56076	

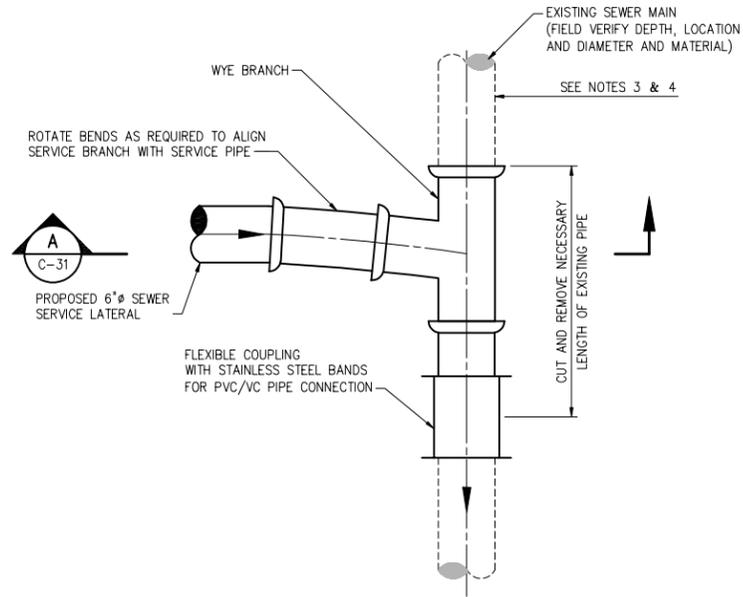
HAZEN AND SAWYER
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4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
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SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C30

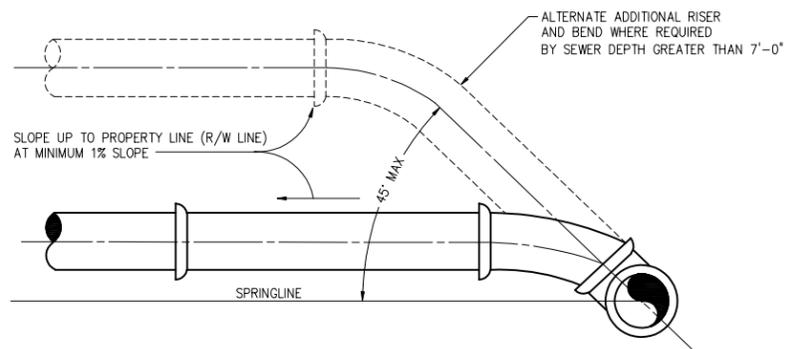


WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 3

DATE:	JULY 2015
SHEET:	47 OF 335
DRAWING:	C-30



TOP PLAN



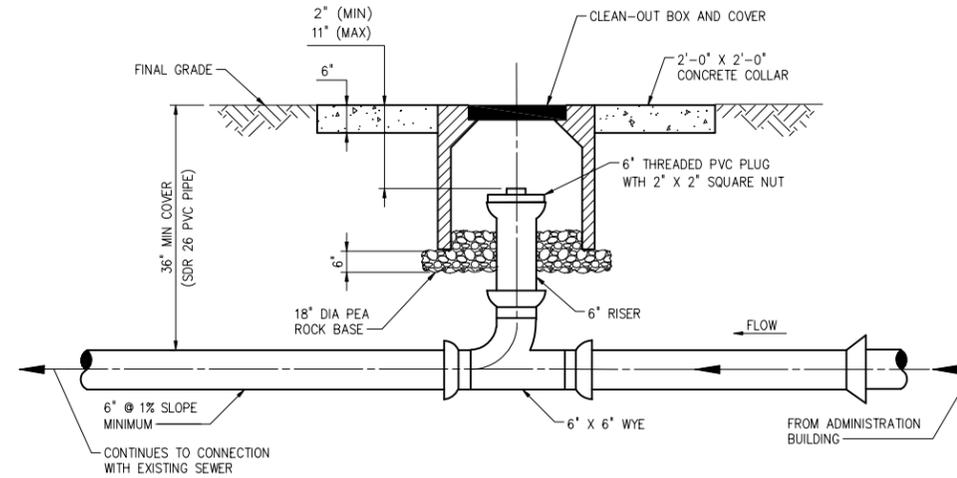
SECTION A

NOTES:

1. SINGLE SERVICE CONNECTIONS SHALL USE 6" SDR 26 PVC PIPE AND FITTINGS.
2. USE RISER CONNECTIONS WHERE INVERT OF SEWER IS MORE THAN 7'-0" DEEP.
3. WHERE BELL OF WYE AND SPIGOT OF EXISTING MAIN ARE NOT COMPATIBLE, USE A SECOND FLEXIBLE COUPLING.
4. RIGID COUPLINGS MAY BE USED IN LIEU OF FLEXIBLE COUPLINGS.
5. MAINTAIN 36" MINIMUM COVER FROM TOP OF SERVICE TO FINISH GRADE.
6. PVC SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH MINIMUM STANDARDS OF THE UNI-BELL HANDBOOK OF PVC PIPE DESIGN AND CONSTRUCTION, LATEST EDITION.

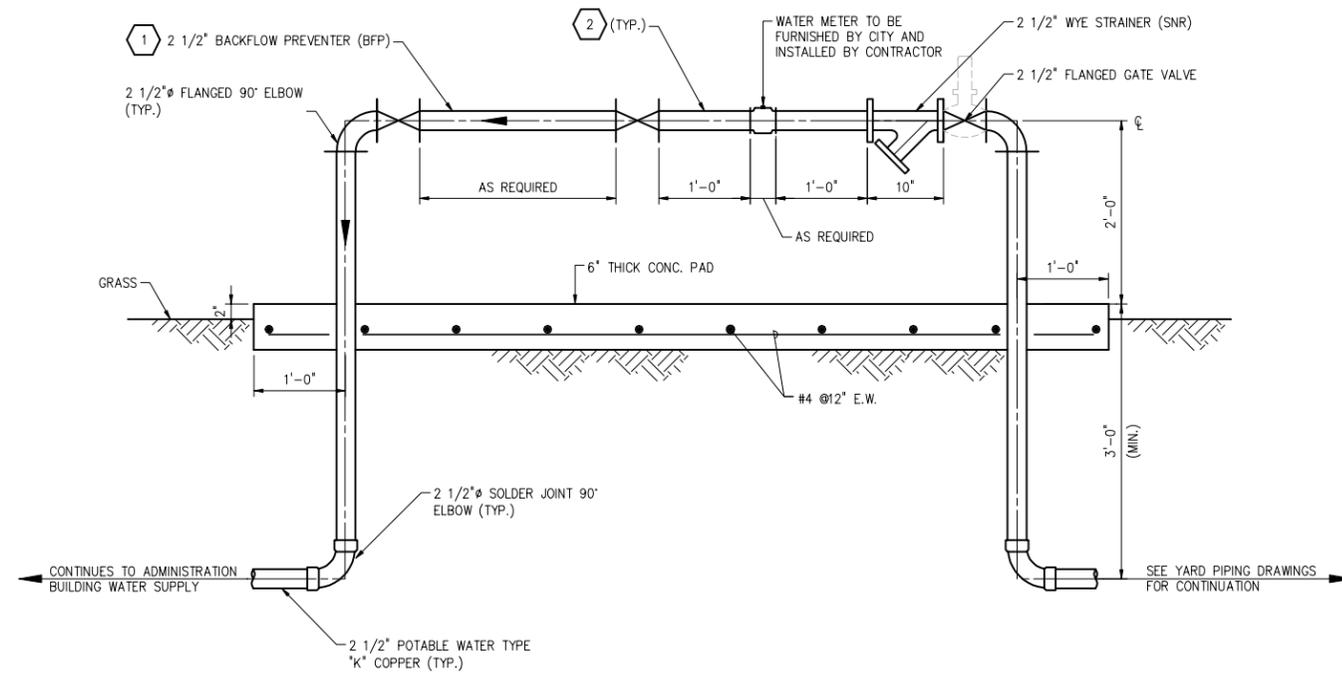
WYE SEWER SERVICE CONNECTION

DETAIL 16
NTS C-03



SEWER CLEANOUT

DETAIL 17
NTS C-03



PLUMBING EQUIPMENT SCHEDULE		
ITEM No.	ITEM	DESCRIPTION
BFP	BACKFLOW PREVENTER	2 1/2" DIAMETER REDUCED PRESSURE ZONE TYPE BACKFLOW PREVENTER WITH STAINLESS STEEL BODY AND TWO FLANGED NON-RISING STEM RESILIENT SEATED GATE VALVES. THE WETTED SURFACES SHALL CONTAIN LESS THAN 0.25% BY WEIGHT OF LEAD. BACKFLOW PREVENTER SHALL BE SERIES 4000SS BY AMES FIRE AND WATERWORKS, OR EQUAL.
SNR	STRAINER	2 1/2" FLANGED END 304 STAINLESS STEEL BODY WYE PATTERN STRAINER. STRAINER SHALL BE SERIES B000F BY AMES FIRE AND WATERWORKS, OR EQUAL.

BLACKFLOW PREVENTER

DETAIL 18
NTS C-03

KEYED NOTES:

- 1 DIMENSION MAY VARY BASED ON SUPPLIER.
- 2 THE CONTRACTOR SHALL SUPPLY AS NECESSARY ADAPTERS AND ACCESSORIES FOR A COMPLETE AND OPERABLE SYSTEM.

PLOT DATE: 7/24/2015 11:17 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

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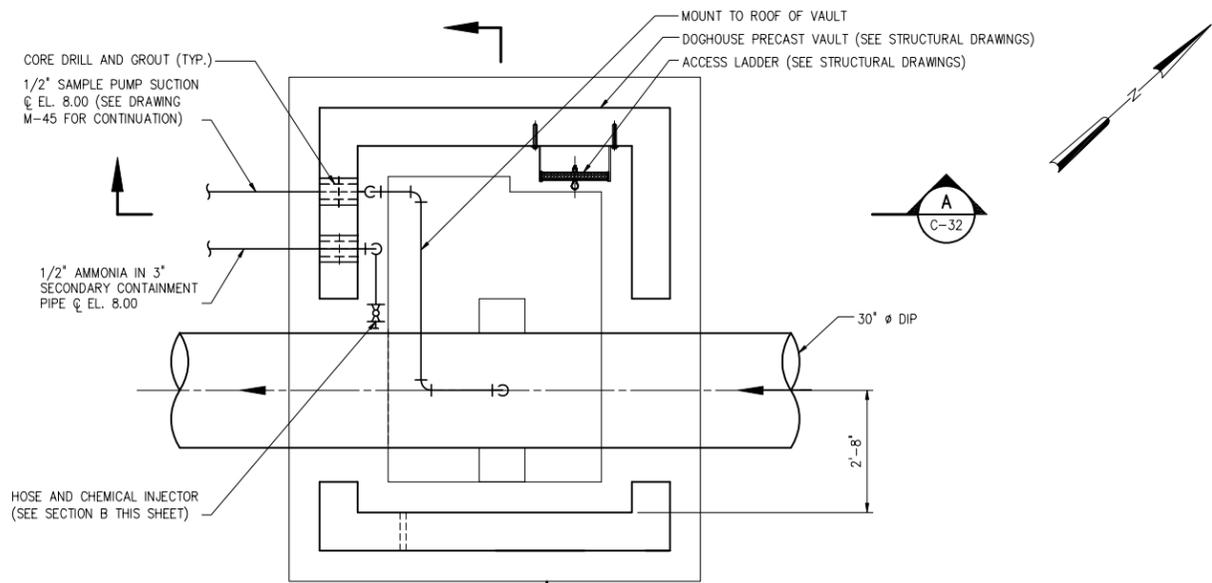
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C31

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 4

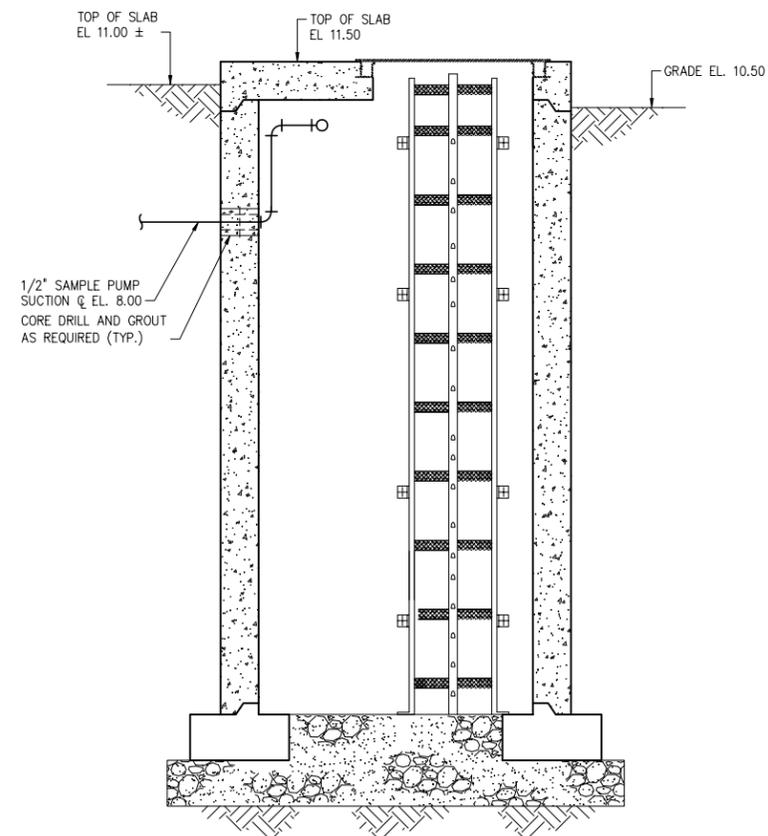
DATE:	JULY 2015
SHEET:	48 OF 335
DRAWING:	C-31

REQUEST FOR PROPOSAL



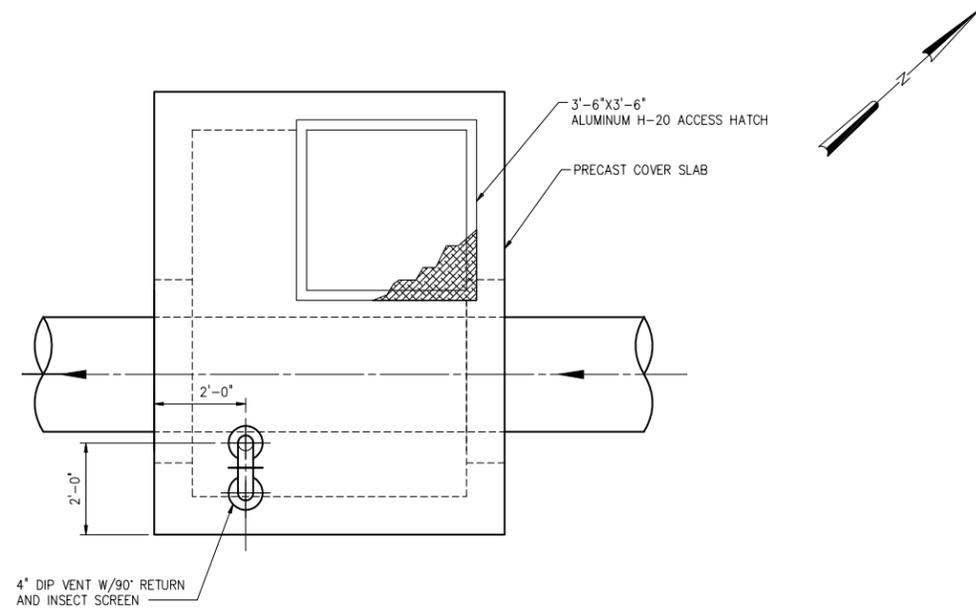
BOTTOM PLAN

1/2" = 1'-0"



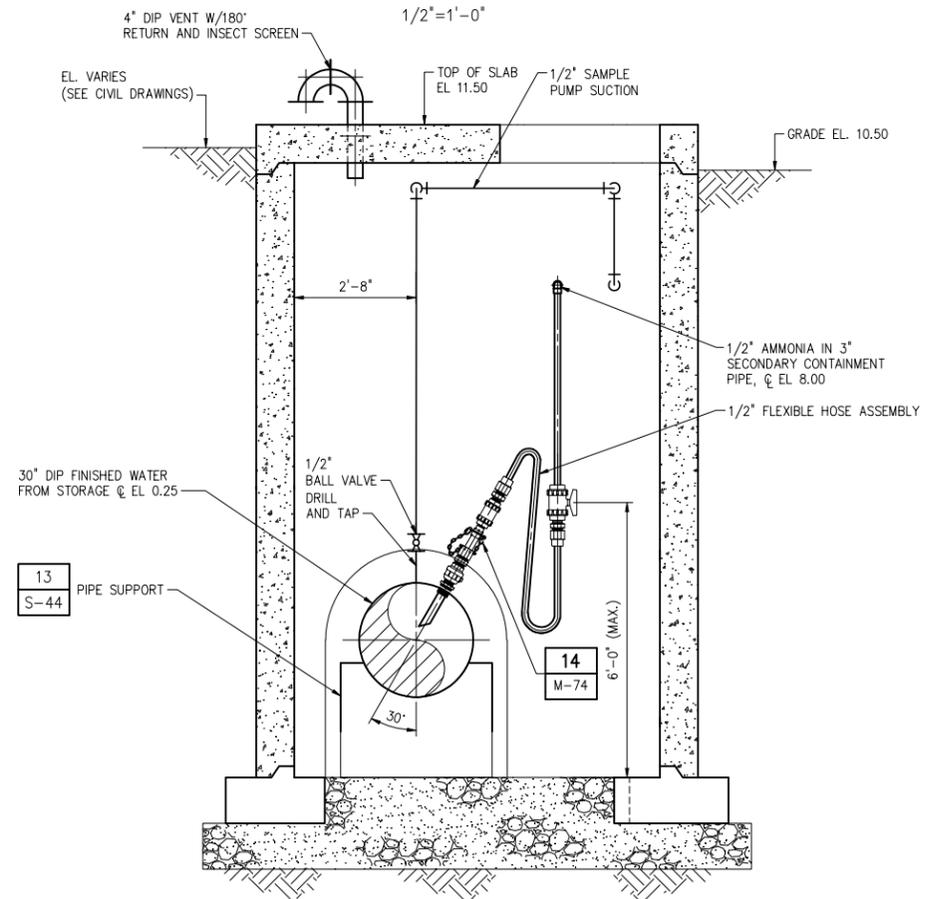
SECTION A

1/2" = 1'-0"



TOP PLAN

1/2" = 1'-0"



SECTION B

1/2" = 1'-0"



CHEMICAL INJECTION VAULT

DETAIL 19
1/2" = 1'-0" C-03

PLOT DATE: 7/24/2015 11:17 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	5/15/15	PERMITTING	G.A.B.

DESIGNED	G.A.B.
DRAWN	H.F.M.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.
GEORGE A. BROWN	P.E.
No. 56076	

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Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
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SCALE
1/2" = 1'-0"

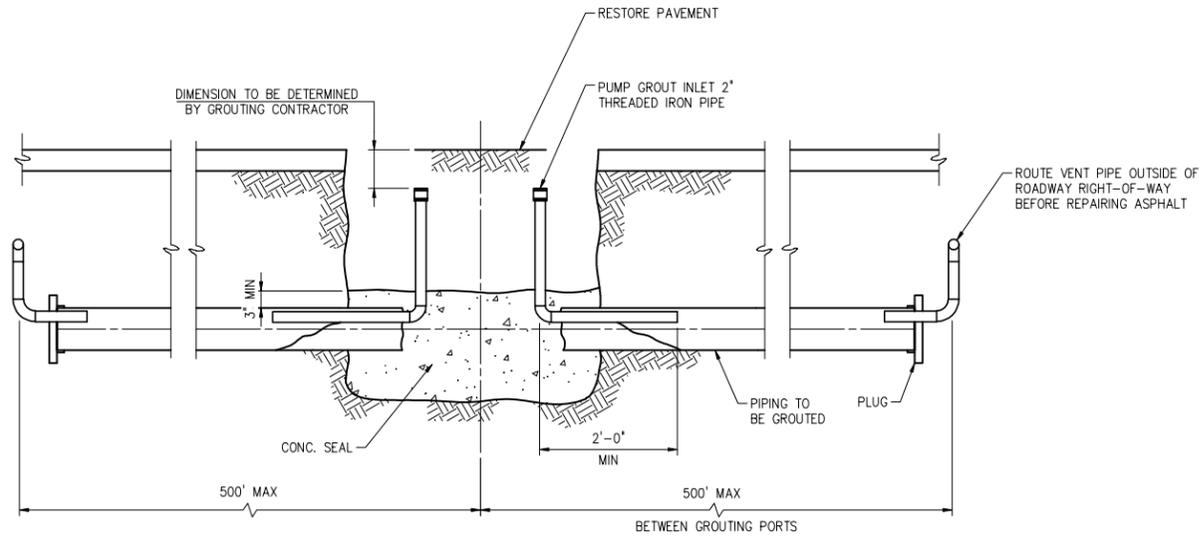
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C32

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
BID PACKAGE 3: WTP REHABILITATION
CIVIL DETAILS
SHEET 5

DATE:	DECEMBER 2012
SHEET:	49 OF 160
DRAWING:	C-32

REQUEST FOR PROPOSAL



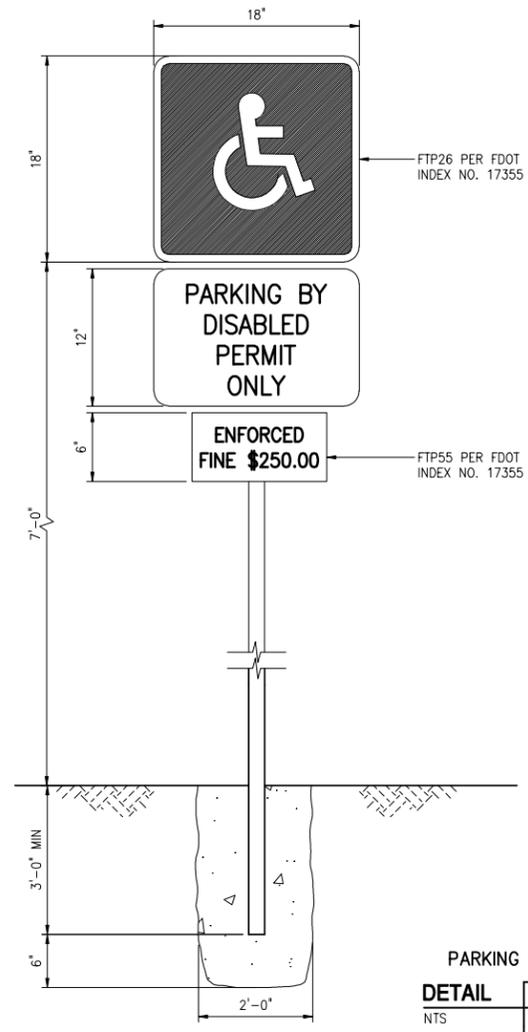
NOTE:

PROVIDE PLUGS, CORPORATION STOPS AND PIPING AS REQUIRED TO REMOVE AIR FROM THE ABANDONED PIPELINES WHILE GROUTING

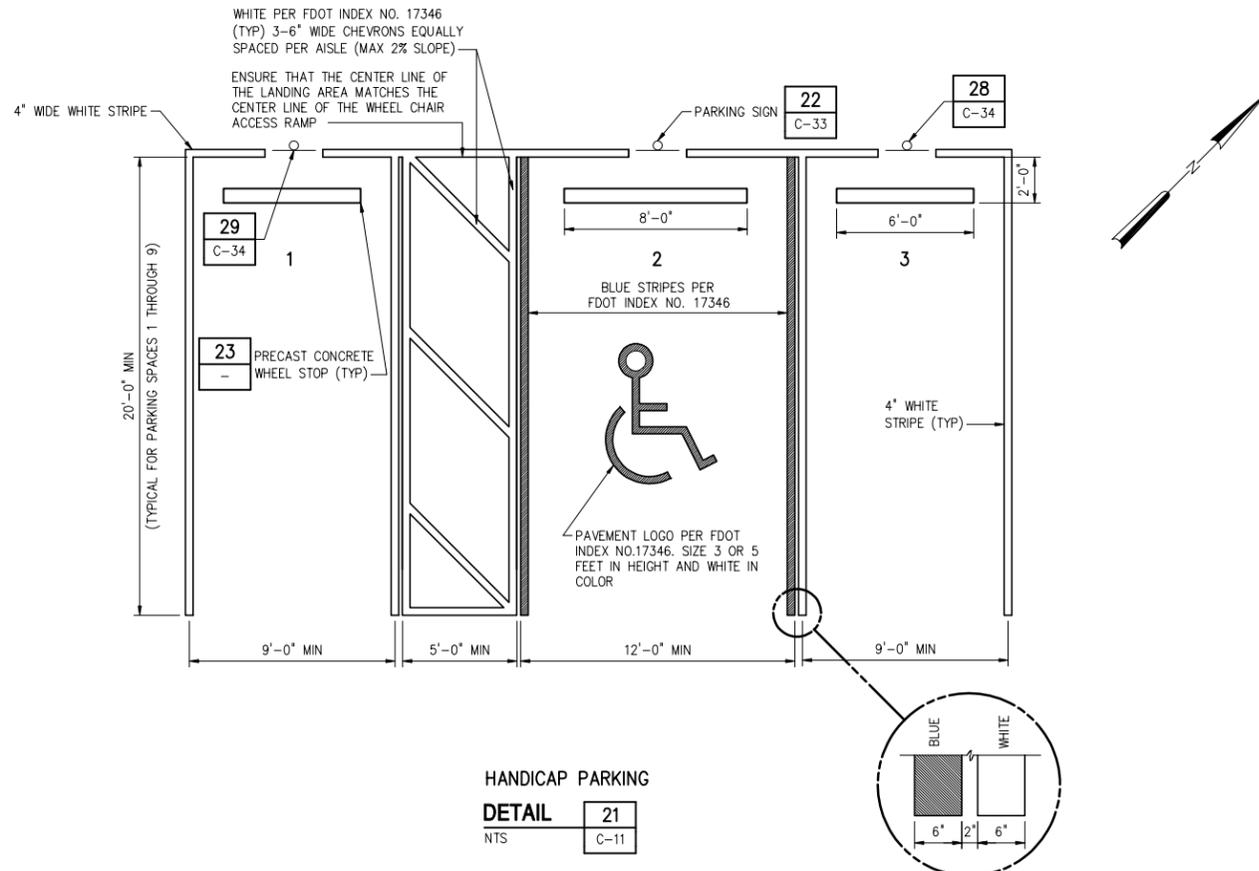
PIPE GROUTING
DETAIL 20
NTS C-02

NOTE:

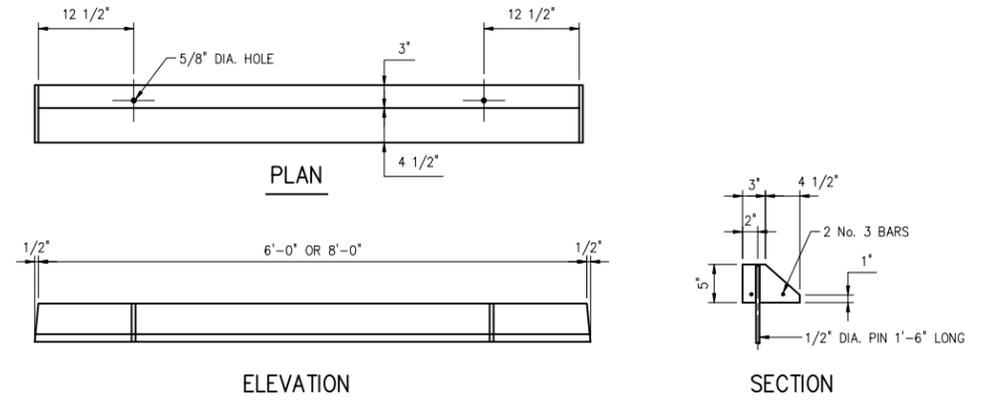
PROVIDE PLUGS, CORPORATION STOPS AND PIPING AS REQUIRED TO REMOVE AIR FROM THE ABANDONED PIPELINES WHILE GROUTING



PARKING SIGN
DETAIL 22
NTS C-11



HANDICAP PARKING
DETAIL 21
NTS C-11



WHEEL STOP DETAIL
DETAIL 23
NTS -

NOTE:
ALL CONCRETE SHALL BE CLASS "B"

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
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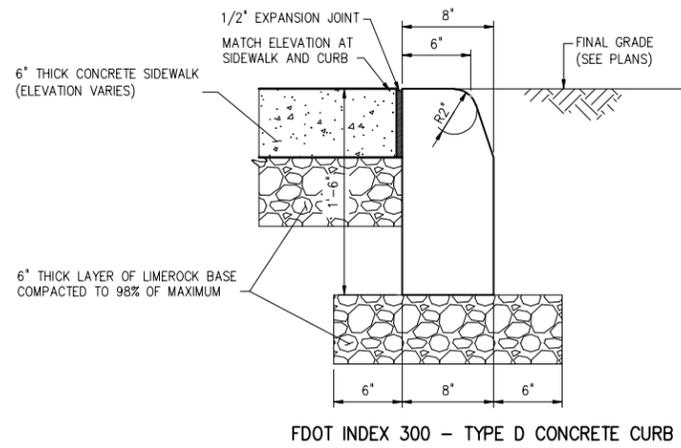
<p>HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771</p>	<p>SCALE NTS</p>	<p>CLIENTS PROJECT: - ENGINEERS PROJECT: 44238-004 CAD REFERENCE: 44238-004BP3-C33</p>	<p>WILSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB</p>	<p>DATE: JULY 2015 SHEET: 50 OF 335 DRAWING: C-33</p>
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CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

CIVIL DETAILS
SHEET 6

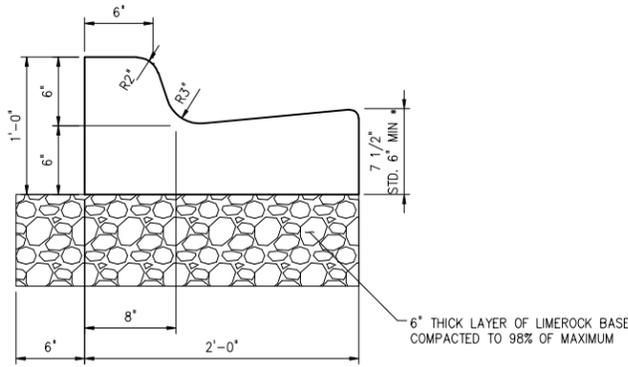
GEORGE A. BROWN
No. 56076
P.E.

REQUEST FOR PROPOSAL



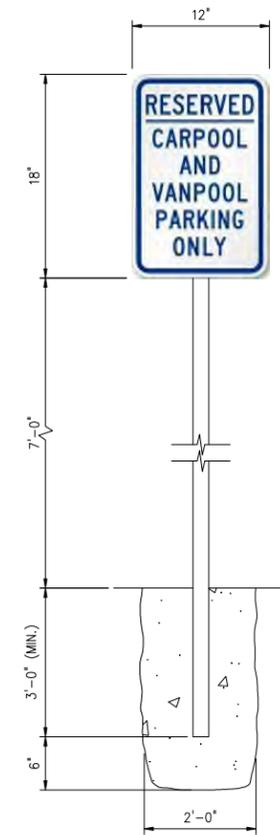
FDOT INDEX 300 - TYPE D CONCRETE CURB

DETAIL	24
NTS	-

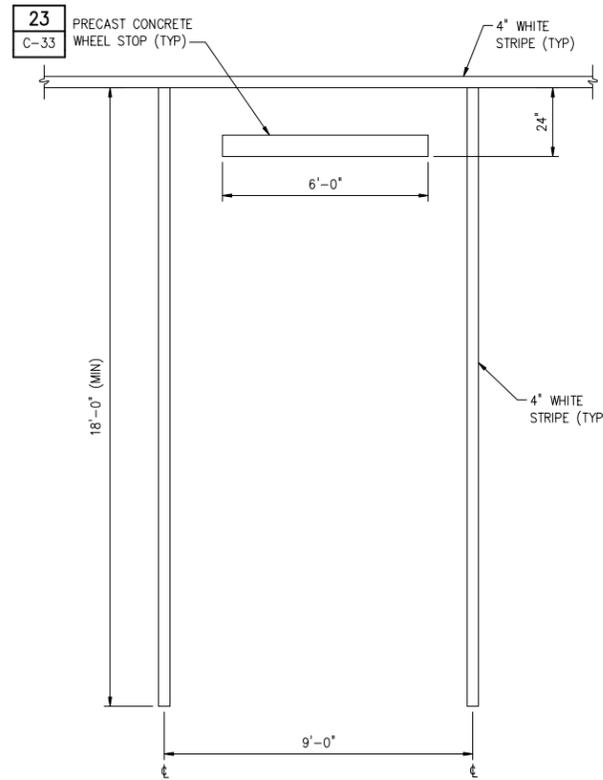


FDOT INDEX 300 - TYPE F CONCRETE CURB & GUTTER

DETAIL	25
NTS	C-17

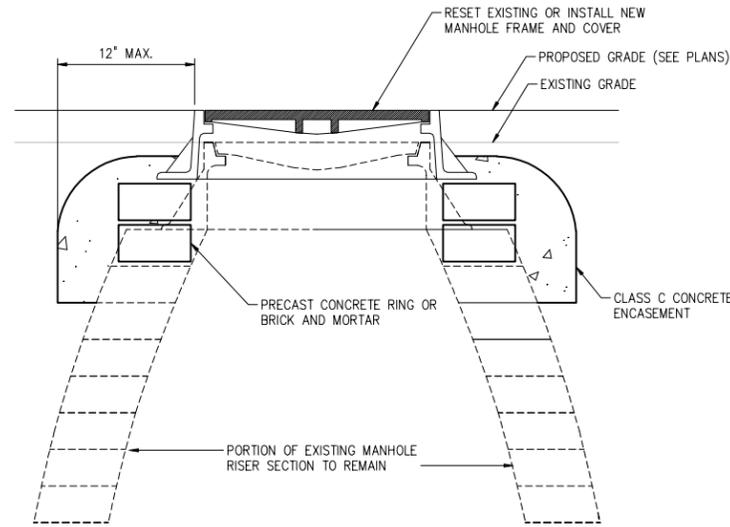


SIGN 1
DETAIL 28
NTS -



PARKING PLAN
DETAIL 23
NTS -

NOTE:
DETAIL IS TYPICAL FOR PARKING SPACES 10 THROUGH 23.

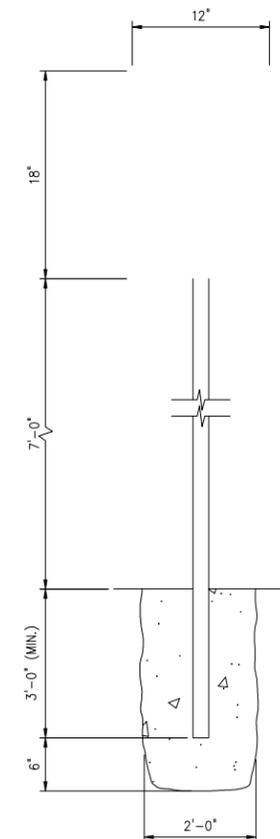


SEWER MANHOLE FRAME AND COVER

DETAIL	27
NTS	C-11

NOTES:

1. PREVENT SURFACE WATER, MUD AND FOREIGN MATERIAL FROM ENTERING SYSTEM DURING CONSTRUCTION.
2. REMOVE PORTION OF EXISTING SEWER MANHOLE RISER AS NECESSARY TO RETROFIT FRAME AND COVER TO REQUIRED FINISHED ELEVATION. FOR ADJUSTMENT USE NEW CONCRETE ADJUSTMENT RING SET ON 1/2 INCH MORTAR BED, OR BRICK AND MORTAR.
3. ALL COURSES ARE TO BE COATED INTERIOR AND EXTERIOR WITH 2 COATS OF COAL TAR EPOXY 10 MILS PER COAT.
4. ALL NEW BRICK IS TO BE 8000 PSI RED SEWER BRICK.



SIGN 2
DETAIL 29
NTS -

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
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GEORGE A. BROWN P.E.
No. 56076

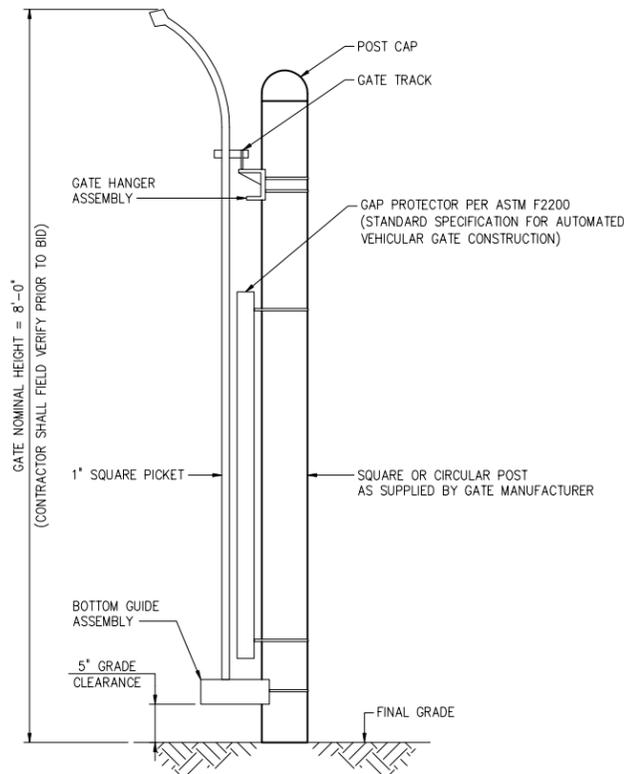
HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE: NTS
CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C34

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 7

DATE: JULY 2015
SHEET: 51 OF 335
DRAWING: C-34

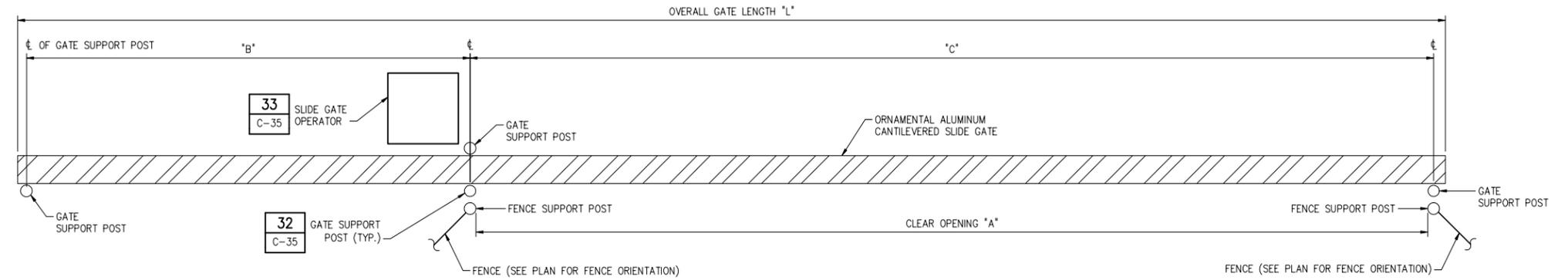


SIDE VIEW

GATE SCHEDULE				
GATE NO.	OVERALL LENGTH (L)	CLEAR OPENING "A"	COUNTERBALANCE POST SPACING CENTERLINE TO CENTERLINE "B"	"C"
1	21'-0"	14'-0"	6'-1"	14'-4"
2	33'-0"	22'-0"	10'-1"	22'-4"
3	33'-0"	22'-0"	10'-1"	22'-4"
5	21'-0"	14'-0"	6'-1"	14'-4"
6	33'-0"	22'-0"	10'-1"	22'-4"

NOTES:

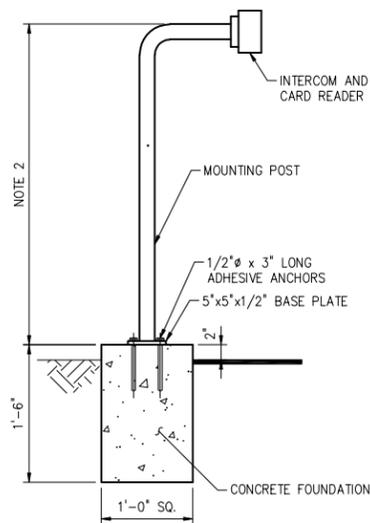
- ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY WITH MANUFACTURER SUPPLIED.
- NOMINAL GATE HEIGHT SHALL BE 8'-0" (FIELD VERIFY AND MATCH EXISTING).
- DIRECTION OF GATE OPENING VARIES, SEE PLAN FOR GATE ORIENTATION AND GATE OPENING DIRECTION.
- THE CENTERLINE TO CENTERLINE DIMENSION BETWEEN THE PICKETS SHALL MATCH THE EXISTING FENCE.
- PRIOR TO BIDDING THE CONTRACTOR SHALL REVIEW THE EXISTING FIELD CONDITION TO SELECT FENCE AND GATE PICKET STYLE, HEIGHT AND COLOR TO MATCH THE EXISTING.
- LOCATION SHOWN FOR SLIDE GATE OPERATOR IS APPROXIMATE. INSTALL PER MANUFACTURE'S DIRECTIONS.



PLAN

CANTILEVERED SLIDE GATE

DETAIL	30
NTS	C-16

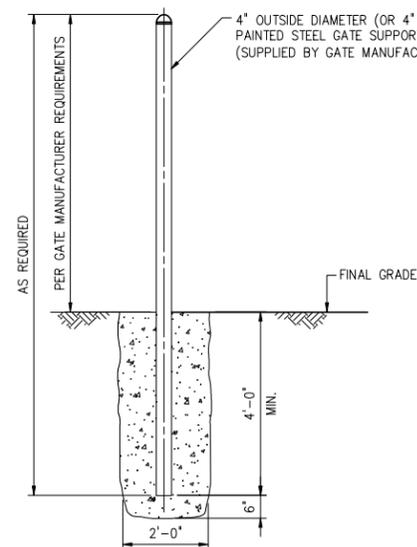


ACCESS PEDESTAL

DETAIL	31
NTS	C-16

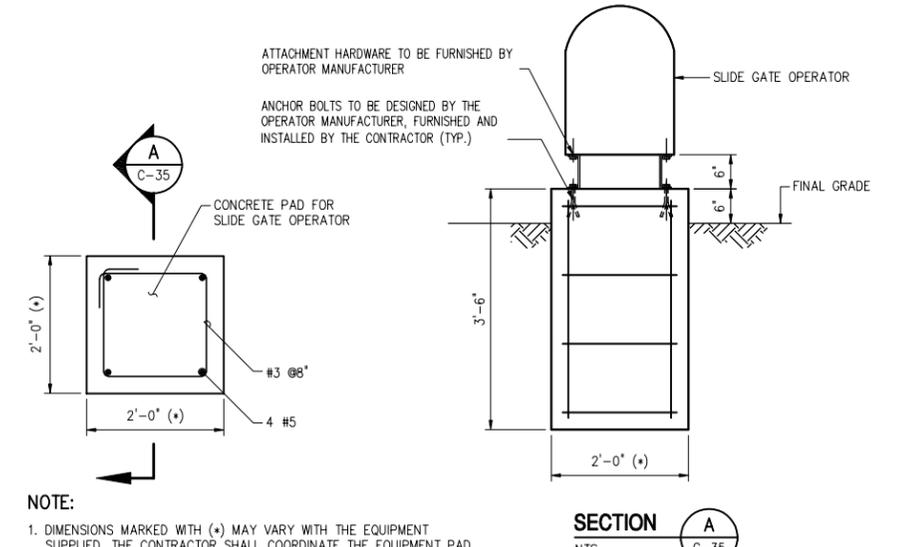
NOTES:

- ALL ACCESS PEDESTALS MOUNTED ON THE EXTERIOR OF A PROPOSED ACCESS GATE SHALL BE EQUIPPED WITH A KNOX BOX MODEL 3502 ELECTRIC OVERRIDE KEY SWITCH AS REQUIRED BY MIAMI-DADE FIRE RESCUE.
- COORDINATE HEIGHT OF MOUNTING POST WITH THE TYPICAL VEHICLES USED BY THE CITY OF NORTH MIAMI PUBLIC WORKS DEPARTMENT.



GATE SUPPORT POST

DETAIL	32
NTS	-



SLIDE GATE OPERATOR EQUIPMENT PAD

DETAIL	33
NTS	C-16

NOTE:

- DIMENSIONS MARKED WITH (+) MAY VARY WITH THE EQUIPMENT SUPPLIED. THE CONTRACTOR SHALL COORDINATE THE EQUIPMENT PAD SIZE AND LOCATION WITH THE GATE MANUFACTURER.

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
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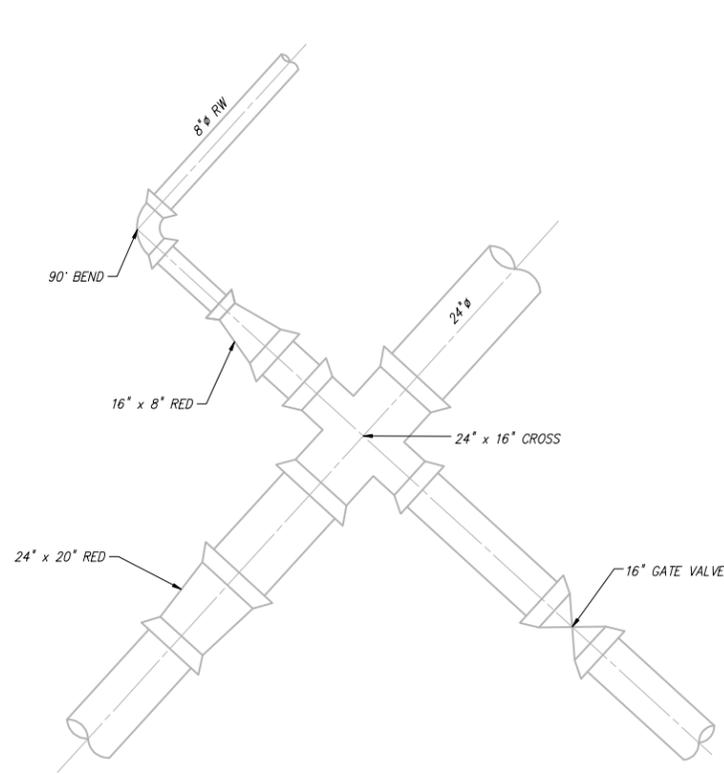
SCALE: NTS
CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C35

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

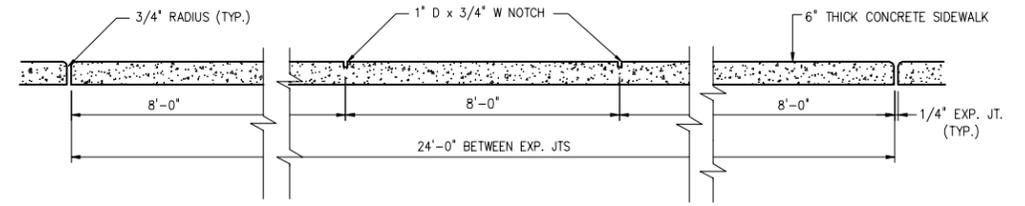
WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS SHEET 8

DATE: JULY 2015
SHEET: 52 OF 335
DRAWING: C-35

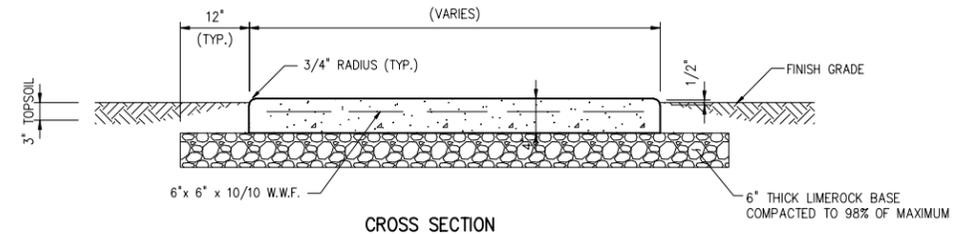
REQUEST FOR PROPOSAL



DETAIL 34
3/8" = 1'-0"
C-01



LONGITUDINAL SECTION



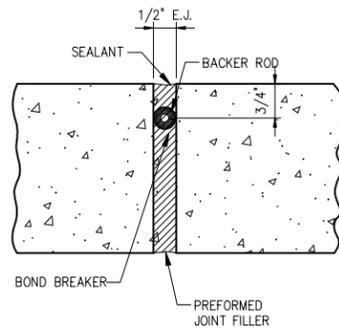
CROSS SECTION

NOTES:

1. THE CONTRACTOR SHALL CONSTRUCT AN EXPANSION JOINT AT SPACINGS SHOWN ABOVE, AT THE END OF DAYS WORK, POINTS OF CURVATURE, AND AT ADJOINING STRUCTURES.
2. WHERE SIDEWALKS ARE SHOWN PARALLEL AND ADJACENT WITH FACE OF A BUILDING, THE CROSS SLOPE OF THE SIDEWALK SHALL SLOPE AWAY FROM THE BUILDING FACE AT A MAXIMUM OF 1/4" PER FOOT.

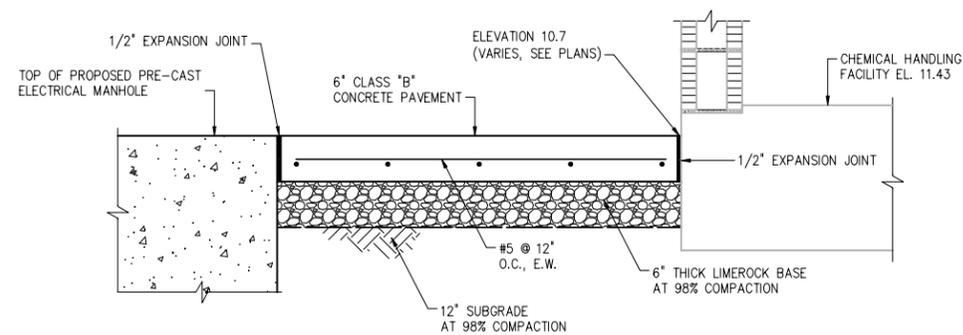
TYPICAL SIDEWALK - WALKWAY

DETAIL 35
NTS
C-11



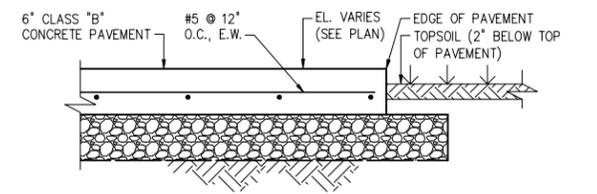
CONCRETE WALKWAY EXPANSION

DETAIL 36
NTS



SECTION AT CHEMICAL HANDLING FACILITY

DETAIL 37
NTS

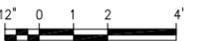


SECTION AT EDGE OF PAVEMENT

NOTES:

1. WHERE AGREED TO BY THE ENGINEER, CONCRETE PAVEMENT SHALL BE USED AT AREAS SHOWN TO BE PAVED WITH ASPHALT THAT ARE NOT ACCESSIBLE DUE TO SITE CONSTRAINTS AT NO ADDITIONAL COST TO THE OWNER.

3/8" = 1'-0"



PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	L.M.S.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	L.M.S.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

<p>GEORGE A. BROWN No. 56076</p>	<p>P.E.</p>
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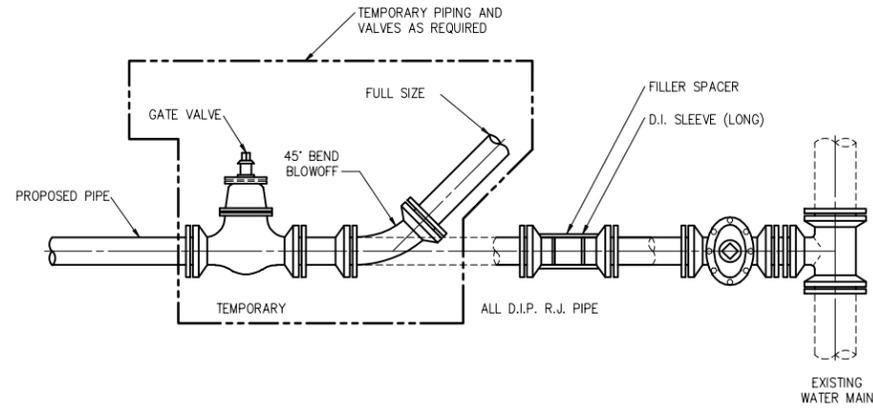
HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE	AS NOTED
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C36

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

<p>WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB</p>	<p>DATE: JULY 2015</p>
<p>CIVIL DETAILS SHEET 9</p>	<p>SHEET: 53 OF 335</p>
	<p>DRAWING: C-36</p>

REQUEST FOR PROPOSAL

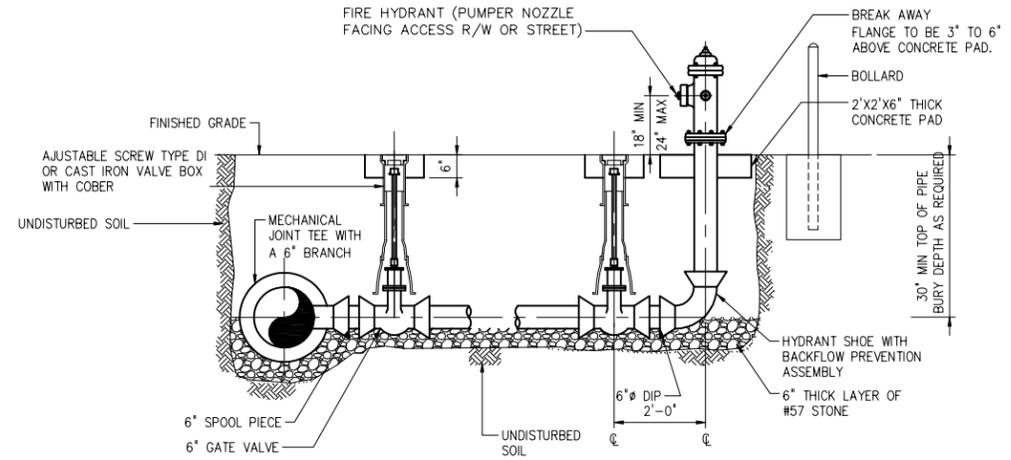
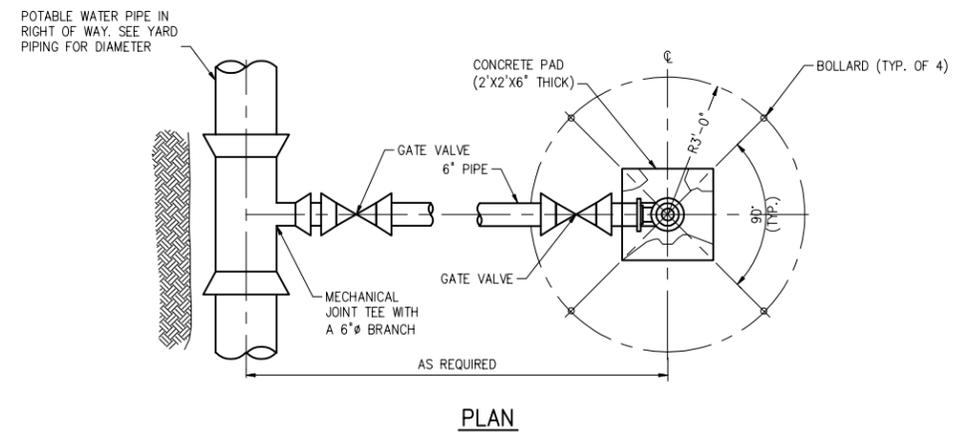


NOTES:

- UPON COMPLETION OF THE PIPE INSTALLATION FOR ANY SECTION, THE MAINS SHALL BE SWABBED AND FLUSHED TO REMOVE DIRT AND ANY OTHER FOREIGN MATTER BY ACHIEVING A MINIMUM VELOCITY OF 2.5 FEET PER SECOND IN THE PIPE. TEMPORARY FITTINGS, PIPE, ETC. MAY BE NEEDED TO FACILITATE FLUSHING.
- INSTALL A 45° BEND AND ASSOCIATED PIPING AS SHOWN TO DIRECT THE FLUSHING WATER AWAY FROM THE IMMEDIATE WORK AREA AND EXERCISE DUE CARE SO AS TO ENSURE THAT THE WATER USED IN FLUSHING DOES NOT CAUSE A NUISANCE OR PROPERTY DAMAGE.
- TEMPORARY BENDS AND PIPING SHALL BE THE SAME SIZE AS THE LINE TO BE FLUSHED.
- PRIOR TO THE ACTUAL FLUSHING OPERATION, THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR OF SUCH INTENDED WATER USE.
- NO EXISTING VALVES SHALL BE TURNED ON OR OFF, EXCEPT BY AUTHORIZED CITY PERSONNEL.
- FLUSHING SHALL NOT BE INITIATED WITHOUT THE ACTUAL PRESENCE OF THE CITY INSPECTOR.
- AFTER THE LINE UNDER CONSTRUCTION HAS BEEN SUCCESSFULLY FLUSHED, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPING ARRANGEMENT AND PROCEED WITH THE REMAINING CONSTRUCTION AS SPECIFIED.

FLUSHING CONNECTION

DETAIL	37
NTS	-

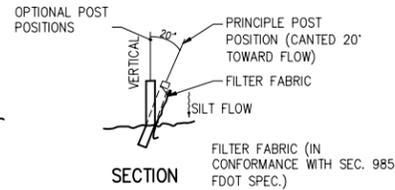
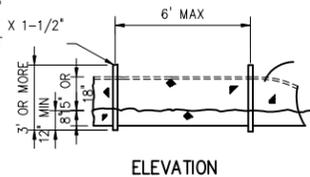


NOTES:

- RESTRAIN ALL JOINTS.
 - A BLUE REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED IN THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT ADJACENT TO ALL FIRE HYDRANT LOCATIONS.
 - CONTRACTOR SHALL COLOR CODE THE TOP OF EACH HYDRANT INDICATED BY THE GALLONS PER MINUTE OF FLOW. THE BODY OF ALL FIRE HYDRANT SHALL BE PAINTED YELLOW (RUST-OLEUM #944 SAFETY YELLOW, O.A.E. WITH A 40 MIL DFT.) AND THE TOP COLOR CODED AS FOLLOWS:
- | | |
|---------------------|-------------------------|
| FLOW | COLOR OF BONNETS & CAPS |
| 1500 GPM OR GREATER | BLUE |
| 1000 GPM OR GREATER | GREEN |
| 500 TO 1000 GPM | ORANGE |
| LESS THAN 500 GPM | RED |

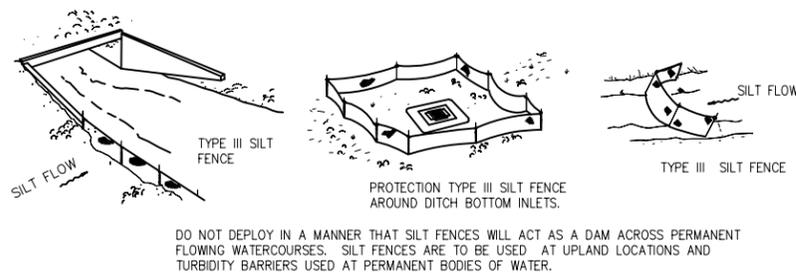
DETAIL	38
NTS	C-03

POST OPTIONS:
 SOFTWOOD 2-1/2" DIA.
 SOFTWOOD 2" X 4"
 HARDWOOD 1-1/2" X 1-1/2"
 STEEL 1.33 LBS/FT

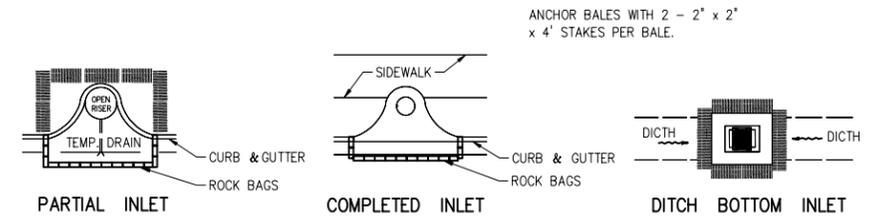


SILT FENCE DETAIL

DETAIL	39
NTS	-



DETAIL	40
NTS	-



DETAIL	41
NTS	-

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	H.F.M.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	H.F.M.
CHECKED	J.N.M.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN P.E.
 No. 56076

HAZEN AND SAWYER
 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
 Hollywood, Florida 33021
 Certificate of Authorization Number: 2771

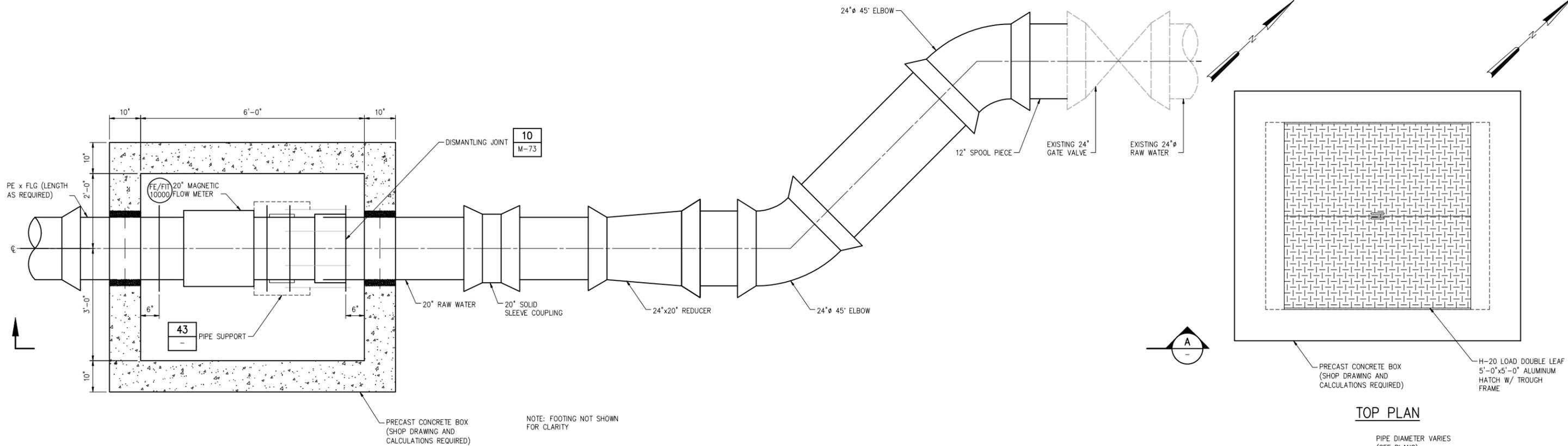
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C37

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

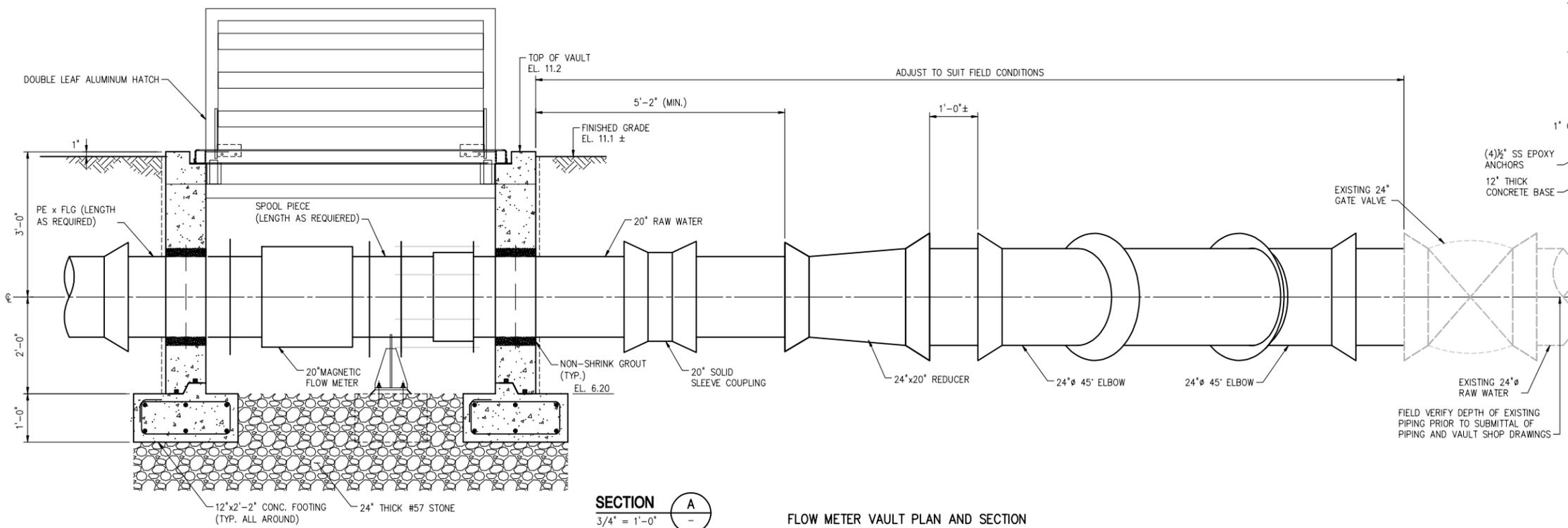
WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 10

DATE:	JULY 2015
SHEET:	54 OF 335
DRAWING:	C-37

REQUEST FOR PROPOSAL

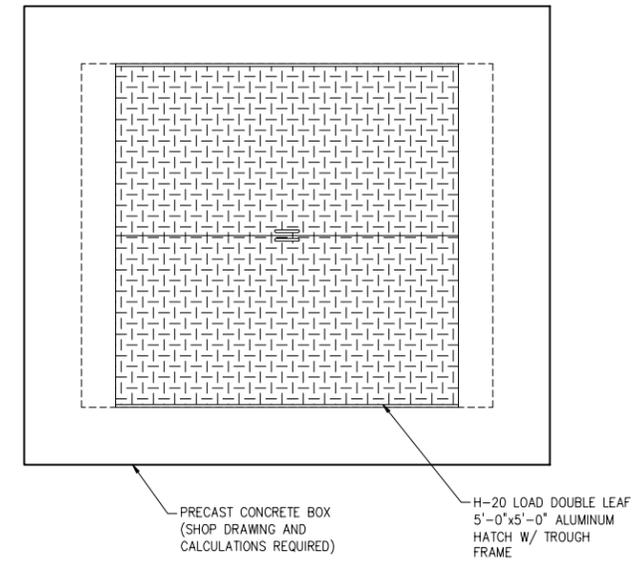


INTERMEDIATE PLAN

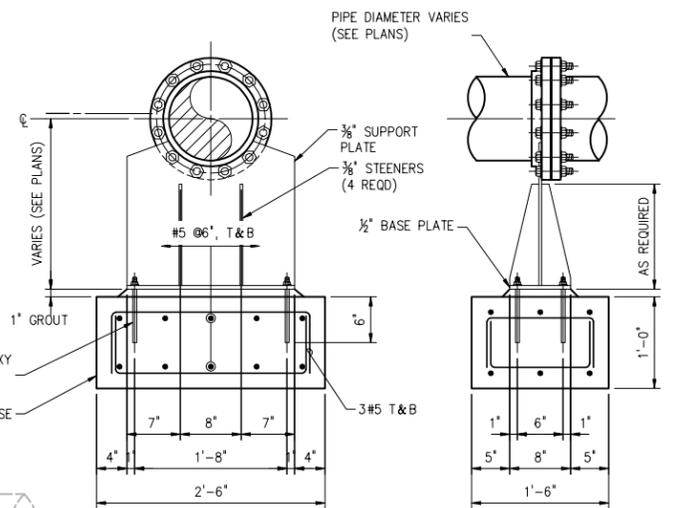


FLOW METER VAULT PLAN AND SECTION

DETAIL 42
3/4" = 1'-0" C-03



TOP PLAN



ELEVATION SECTION PIPE SUPPORT AT FLANGE

DETAIL 43
NTS

GENERAL NOTES:

1. RESTRAIN ALL JOINTS
2. ALL PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C478.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR ENGINEER'S REVIEW AND APPROVAL SHOP DRAWING SHALL INCLUDE DESIGN CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.



PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

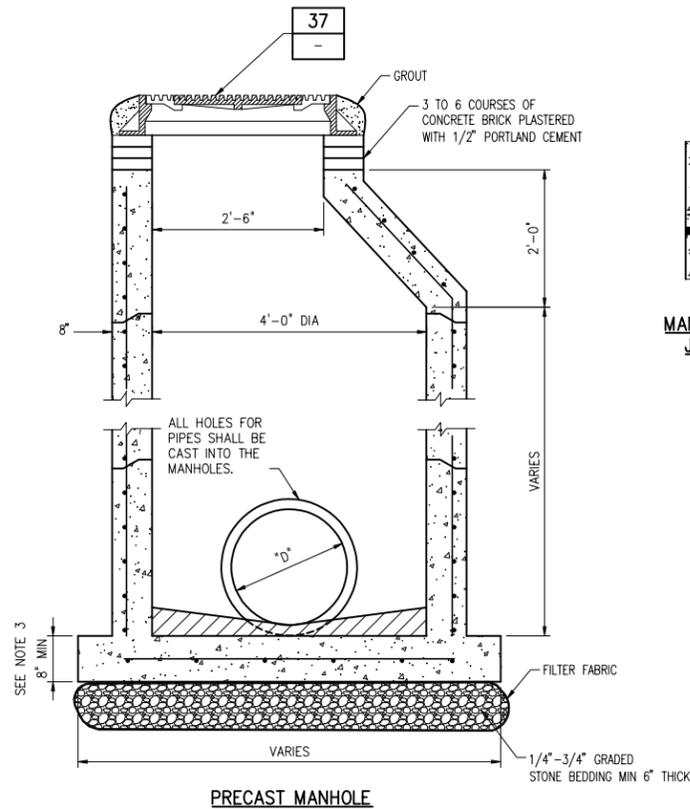
SCALE	AS NOTED
CLIENTS PROJECT:	-
ENGINEERS PROJECT:	44238-004
CAD REFERENCE:	44238-004BP3-C38

CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 11

DATE:	JULY 2015
SHEET:	55 OF 335
DRAWING:	C-38

REQUEST FOR PROPOSAL

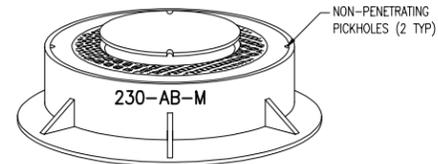
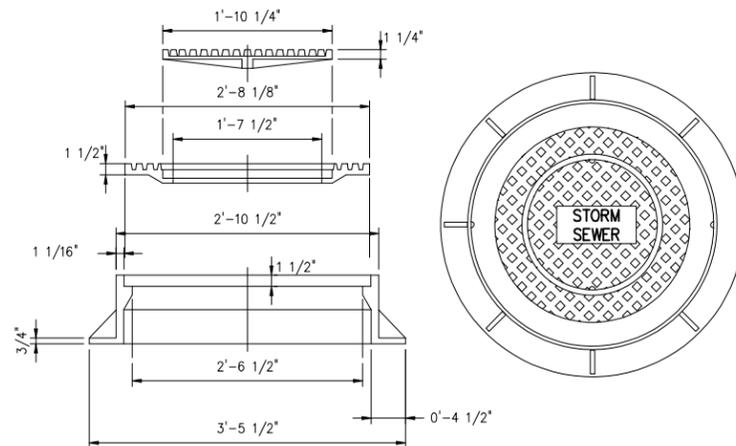


PRECAST MANHOLE

STORM SEWER PRECAST MANHOLE

DETAIL	44
NTS	C-11

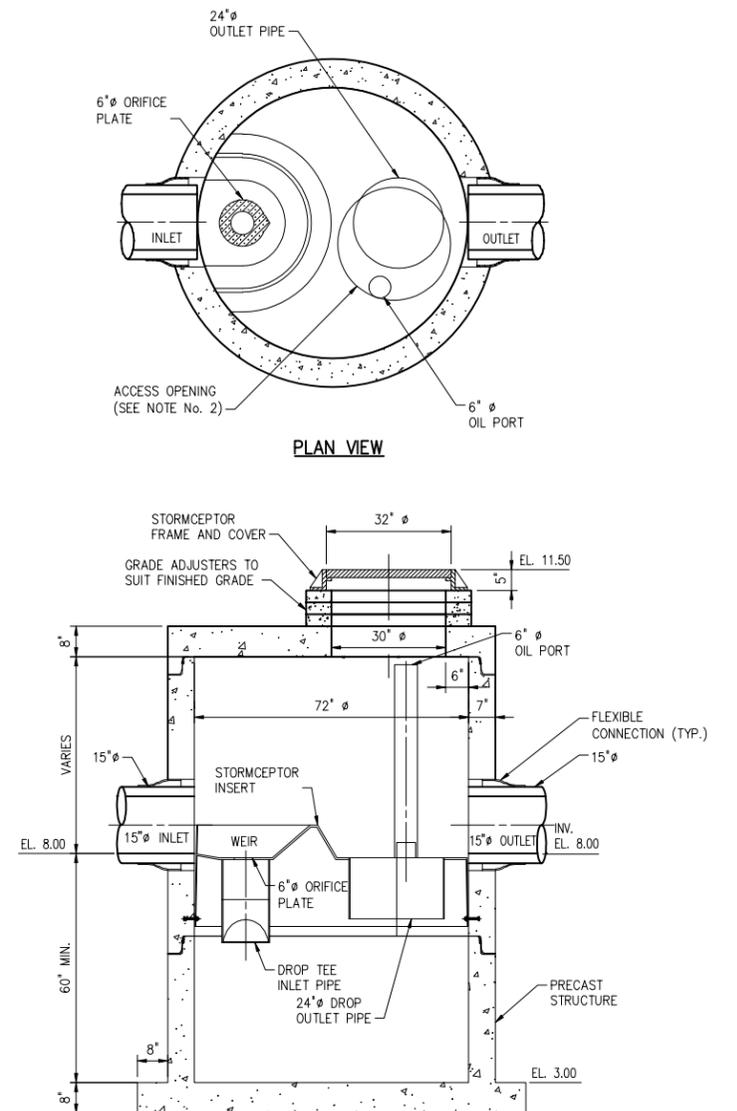
- NOTES:**
1. MANHOLE SHALL CONFORM TO ASTM C478 WITH 4000 PSI CONCRETE.
 2. CONE SECTION MAY BE EITHER CONCENTRIC OR ECCENTRIC.
 3. BASE SHALL BE A MINIMUM OF 8" AND PRECAST WITH BOTTOM SECTION.
 4. ONE GAGE #5 @ 12" CTRS., BOTH WAYS, IN CENTER 1/3 OF CONCRETE WALL.
 5. COMPLETELY FILL ANNULUS BETWEEN PIPE AND M/H WALL WITH CLAY BRICK AND PORTLAND TYPE II CEMENT.
 6. FOR ADDITIONAL INFORMATION AND CLARIFICATION CONCERNING MANHOLE AND INLET CONSTRUCTION DETAILS AND SPECIFICATIONS, REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (STANDARD INDEX MANUAL) LATEST EDITION



STORM SEWER MANHOLE FRAME AND RING

DETAIL	45
NTS	-

- NOTES:**
1. U.S.F. #230-AB-M MANHOLE RING AND DOUBLE COVER. APPROXIMATE TOTAL WEIGHT 605 POUNDS.
 2. MANHOLE COVER SHALL BE IMPRINTED WITH "STORM SEWER" AND WITH NOTE "CONFINED SPACE".
 3. PAVED AREAS - SET FRAMES AT FINISH GRADE, UNPAVED AREAS - SET FRAMES AT FINISH GRADE + 0.15'



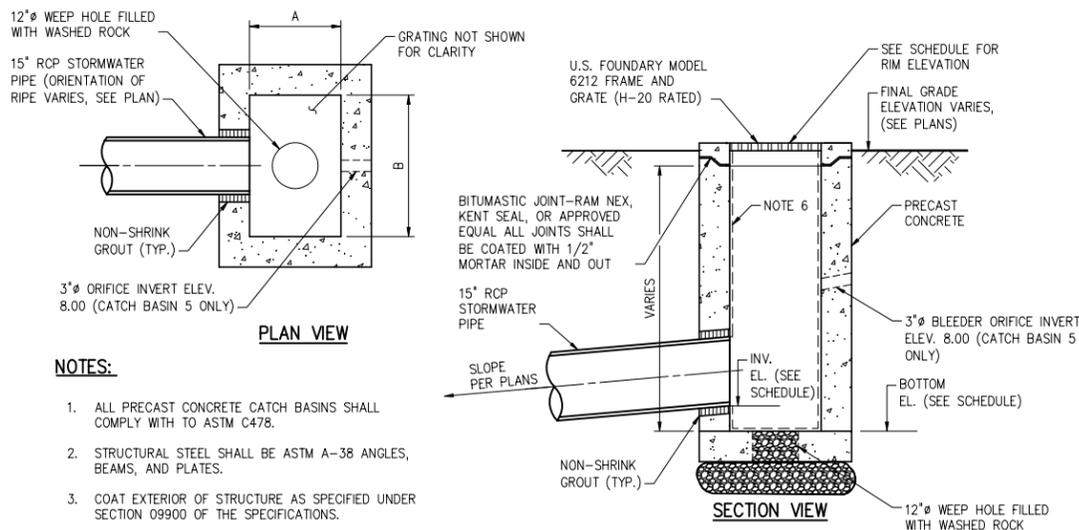
PLAN VIEW

SECTION

WATER QUALITY STRUCTURE

DETAIL	46
NTS	C-14

- NOTES:**
1. FLEXIBLE CONNECTION SHALL BE FURNISHED AND INSTALLED AT THE INLET AND OUTLET.
 2. THE COVER SHALL BE POSITIONED OVER THE OUTLET DROP PIPE AND THE OIL PORT.



PLAN VIEW

SECTION VIEW

CATCH BASIN

DETAIL	47
NTS	C-11

- NOTES:**
1. ALL PRECAST CONCRETE CATCH BASINS SHALL COMPLY WITH TO ASTM C478.
 2. STRUCTURAL STEEL SHALL BE ASTM A-38 ANGLES, BEAMS, AND PLATES.
 3. COAT EXTERIOR OF STRUCTURE AS SPECIFIED UNDER SECTION 09900 OF THE SPECIFICATIONS.
 4. JOINTS SHALL BE SEALED WITH RAMNECK GASKETS OR EQUAL.
 5. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 6. COAT INTERIOR OF MANHOLE WITH 30 MILS OF COAL TAR EPOXY.
 7. SEE DETAIL 64 ON DRAWING C-43 FOR ADDITIONAL INFORMATION FOR CATCH BASIN 5.

STORM SEWER CATCH BASIN AND MANHOLE SCHEDULE										
ID NO.	DESCRIPTION	RIM EL.	INVERT ELEVATION					BOTTOM ELEV.	A	B
			NE	NW	SE	SW	N			
CB 1	TYPE D CATCH BASIN	10.3	7.8	7.8	N/A	7.8	N/A	6.5	3'-1"	4'-1"
CB 2	TYPE C CATCH BASIN	9.0	N/A	N/A	6.5	N/A	N/A	5.5	2'-0"	3'-1"
CB 3	TYPE C CATCH BASIN	9.0	N/A	6.5	N/A	N/A	N/A	5.5	2'-0"	3'-1"
CB 4	TYPE C CATCH BASIN	8.0	N/A	N/A	N/A	6.5	N/A	5.5	2'-0"	3'-1"
CB 5	TYPE C CATCH BASIN	10.5	N/A	N/A	N/A	N/A	8.0	6.0	2'-0"	3'-1"
MH 1	48" DIAM MANHOLE	10.8	7.1	6.6	6.6	N/A	N/A	5.5	N/A	N/A
MH 2	48" DIAM MANHOLE	10.8	6.6	N/A	7.3	N/A	N/A	5.5	N/A	N/A

- NOTE:**
1. TYPE C AND D CATCH BASINS PER FLORIDA DEPARTMENT OF TRANSPORTATION INDEX 232

DETAIL	48
NTS	-

PLOT DATE: 7/24/2015 11:18 AM BY: TBK/CS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.	<p>HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771</p>	SCALE	CLIENTS PROJECT:	-
DRAWN	G.P.B.		NTS	ENGINEERS PROJECT:	44238-004
CHECKED	J.N.M.		CAD REFERENCE:	44238-004BP3-C39	
PROJ. ENGR.	G.A.B.				
<p>JORGE M. SZAUER No. 62579</p>		P.E.			

HAZEN AND SAWYER
Environmental Engineers & Scientists
4000 Hollywood Boulevard, Suite 750N
Hollywood, Florida 33021
Certificate of Authorization Number: 2771

SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C39

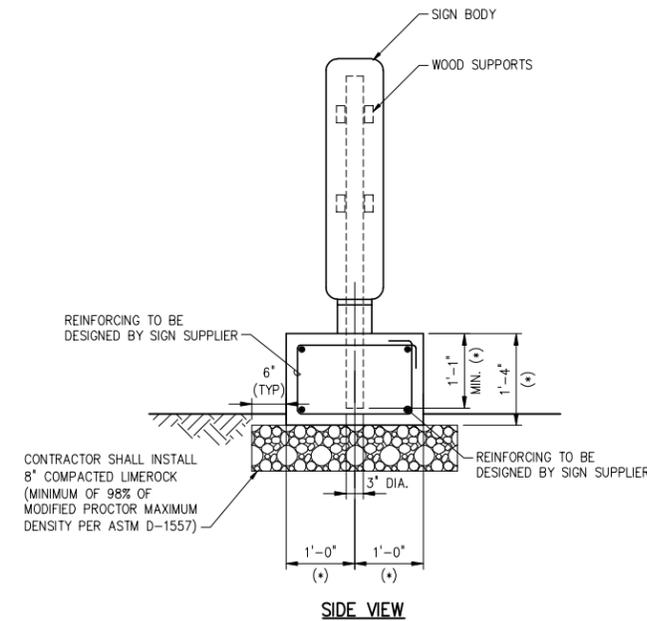
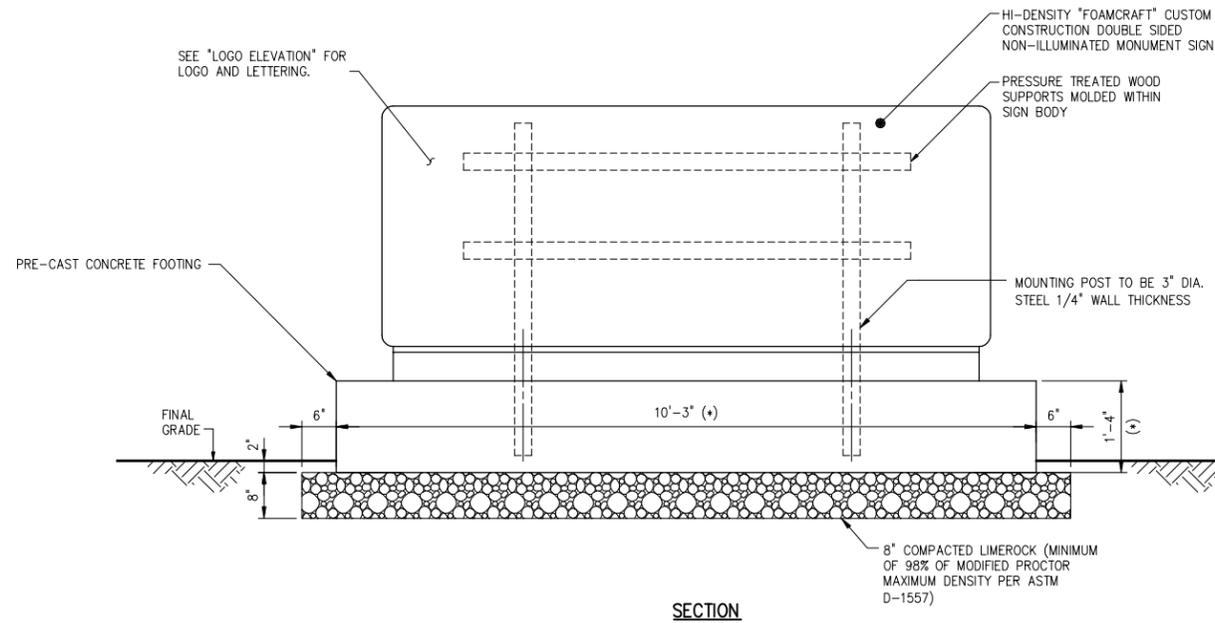
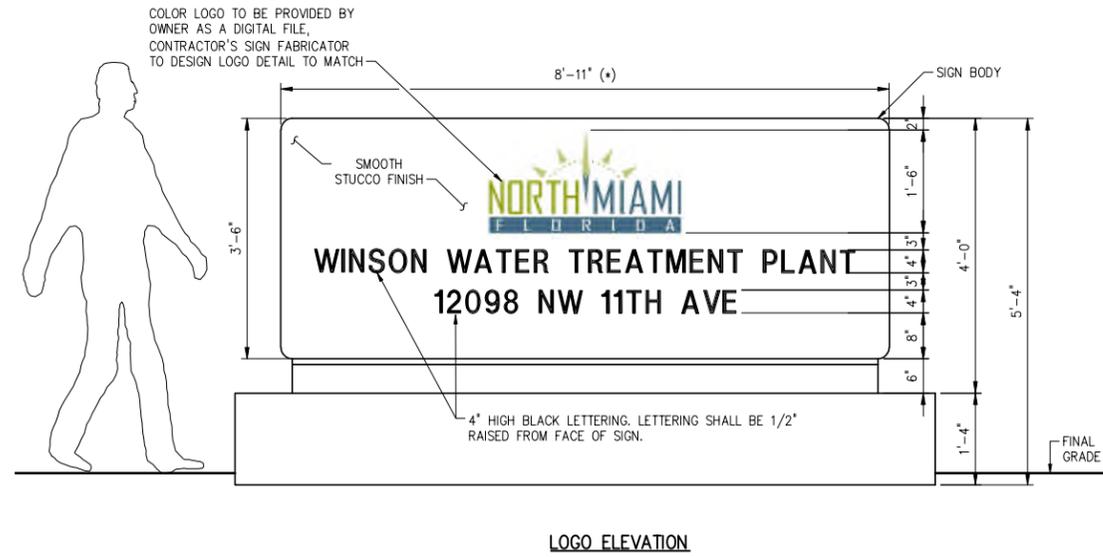
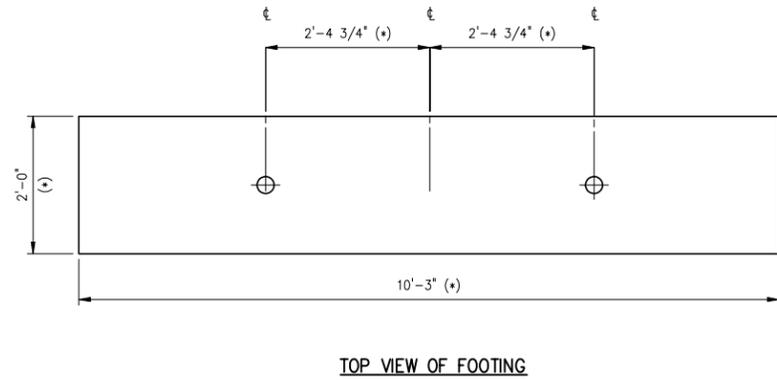
CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT	
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB	
CIVIL DETAILS SHEET 12	

DATE:	JULY 2015
SHEET:	56 OF 335
DRAWING:	C-39

Szauer Engineering
Civil Engineers
7050 W. Palmetto Park Road, No. 15399
Boca Raton, FL 33433
Certificate of Authorization Number 30129

REQUEST FOR PROPOSAL



ENTRANCE SIGN
DETAIL 49
 3/4" = 1'-0"

NOTES:

1. THE CONTRACTOR SHALL RETAIN GRAPHPLEX SIGNAGE, OR EQUAL (PHONE: 954-920-0905) TO DESIGN, FABRICATE AND INSTALL THE PROPOSED ENTRANCE SIGN.
2. THE DRAWINGS INCLUDED HERewith ARE CONCEPTUAL ILLUSTRATIONS OF THE PROPOSED SIGN. THE CONTRACTOR, THROUGH THE SIGN SUPPLIER, SHALL TAKE FULL RESPONSIBILITY FOR THE DESIGN OF THE SIGN.
3. THE SIGN SUPPLIER, THROUGH THE CONTRACTOR, SHALL SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SECTION 01300 OF THE SPECIFICATIONS. THE SHOP DRAWINGS SHALL INCLUDE DETAILED DIMENSIONS AND REINFORCING DESIGN FOR FOOTING. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS DEMONSTRATING COMPLIANCE WITH THE FLORIDA BUILDING CODE. THE CALCULATIONS SHALL BE SIGNED AND SEALED BY PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS NEEDED FOR THE SIGN.
5. (*) ALL DIMENSIONS SHOWN ARE APPROXIMATE.



PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	G.N.C.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.
DRAWN	G.P.B.
CHECKED	G.N.C.
PROJ. ENGR.	G.A.B.

GEORGE A. BROWN P.E.
 No. 56076

HAZEN AND SAWYER
 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
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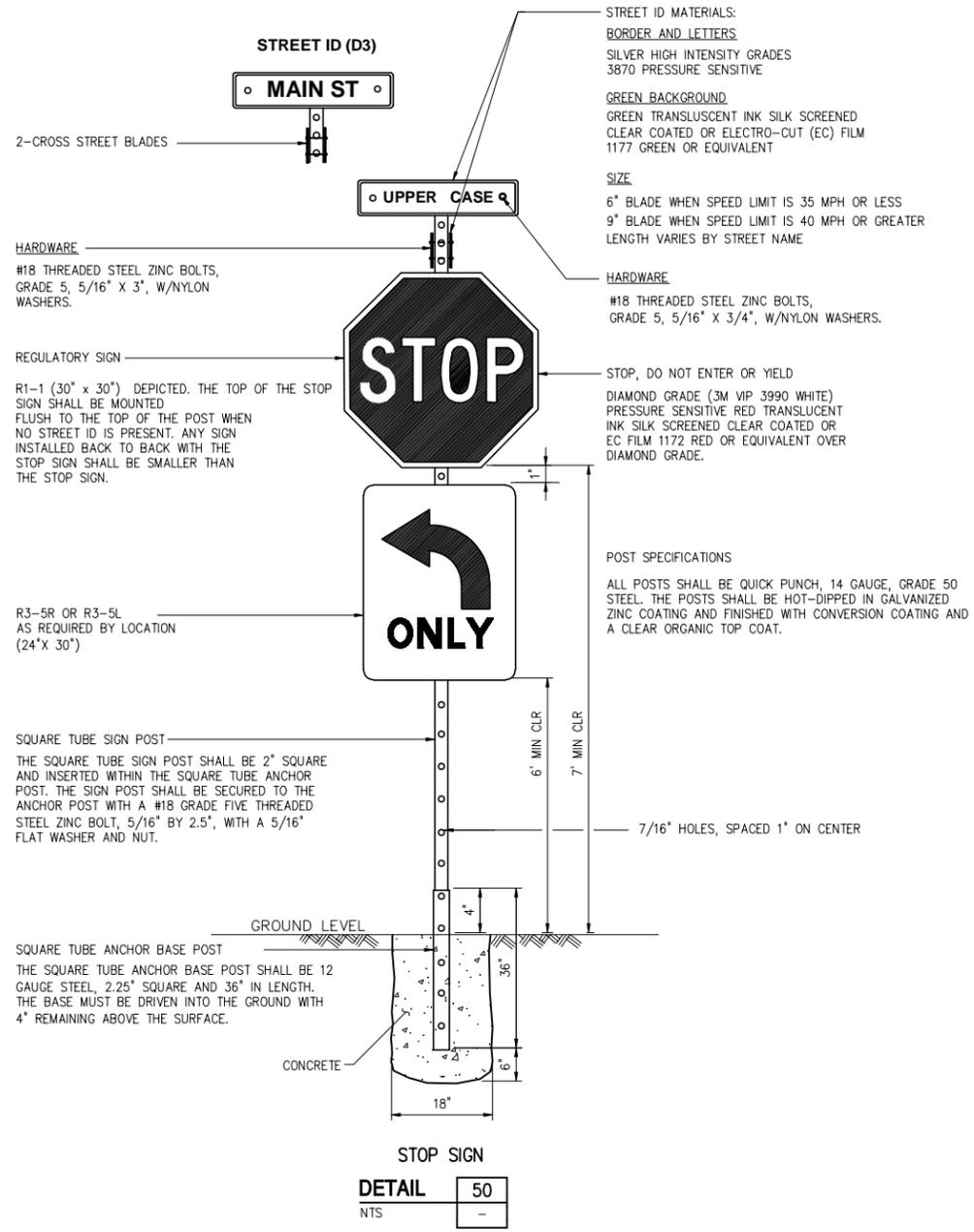
SCALE
 3/4" = 1'-0"

CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C40

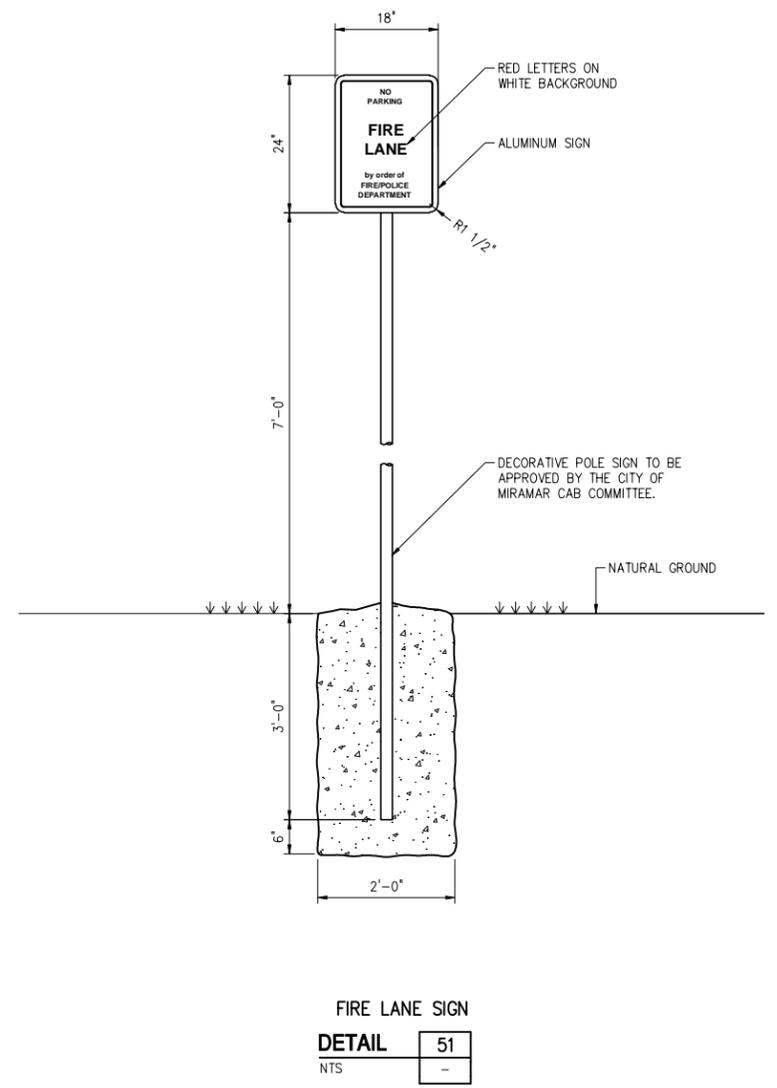


WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS SHEET 13

DATE: **JULY 2015**
 SHEET: **57** OF **335**
 DRAWING: **C-40**



STOP SIGN
DETAIL 50
 NTS



FIRE LANE SIGN
DETAIL 51
 NTS



FIRE LANE STRIPING
DETAIL 52
 NTS

- FIRE LANE GUIDELINES**
1. LETTER SIZE: MINIMUM OF 18" HIGH AND 2" WIDE
 2. PAINT COLOR: YELLOW
 3. PAINT TYPE: THERMOPLASTIC
 4. DIAGONAL STRIPES & PARALLEL LINES: MINIMUM OF 4" WIDE
 5. ANGLES BETWEEN THE PARALLEL LINES AT 4'-0" INTERVALS

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
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PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

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 Environmental Engineers & Scientists
 4000 Hollywood Boulevard, Suite 750N
 Hollywood, Florida 33021
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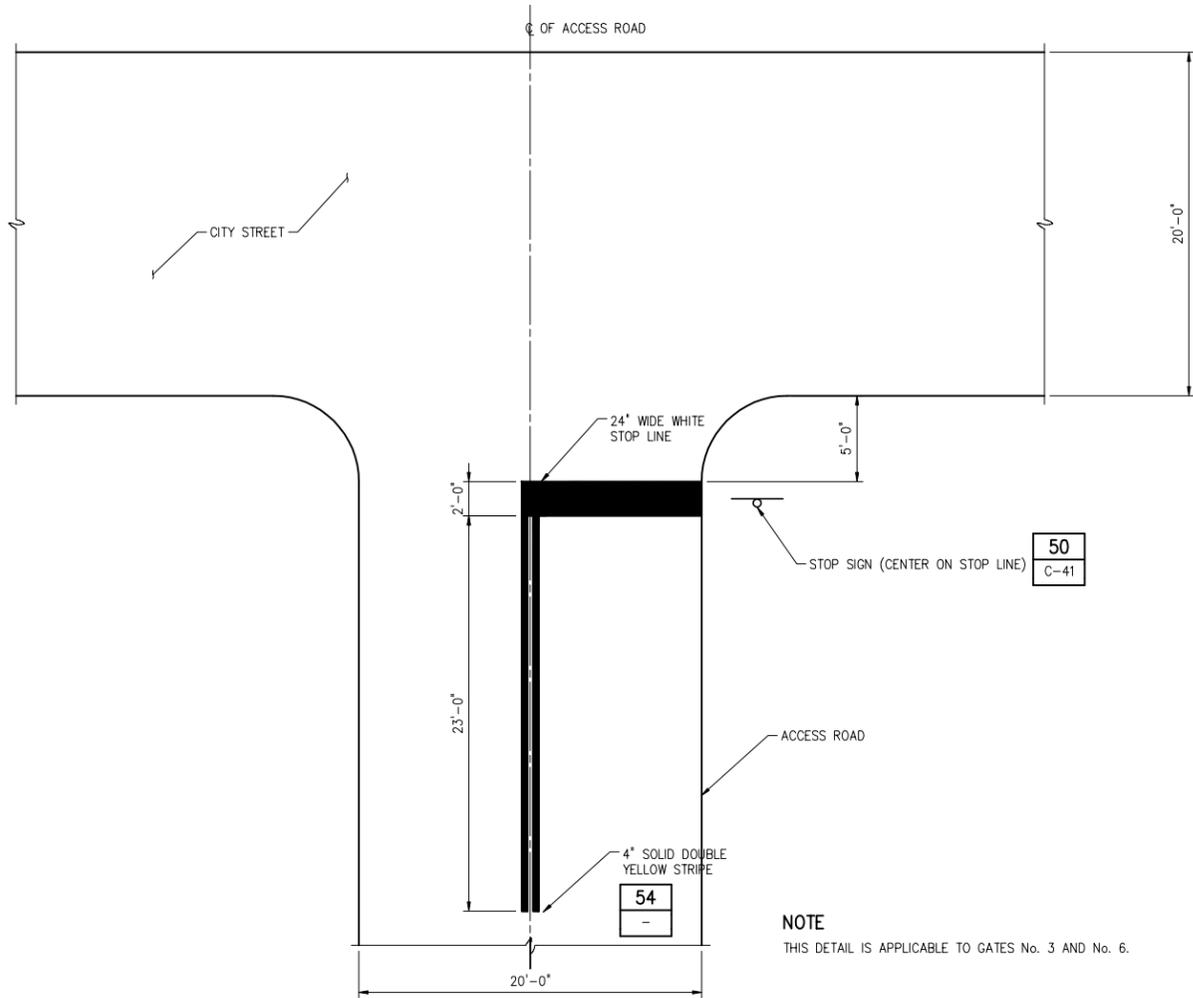
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C41

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT	
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB	
CIVIL DETAILS	
SHEET 14	

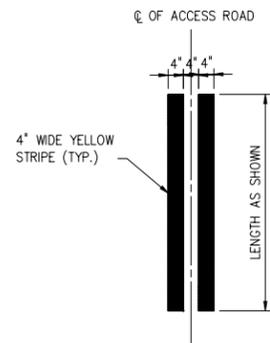
DATE:	JULY 2015
SHEET:	58 OF 335
DRAWING:	C-41

REQUEST FOR PROPOSAL



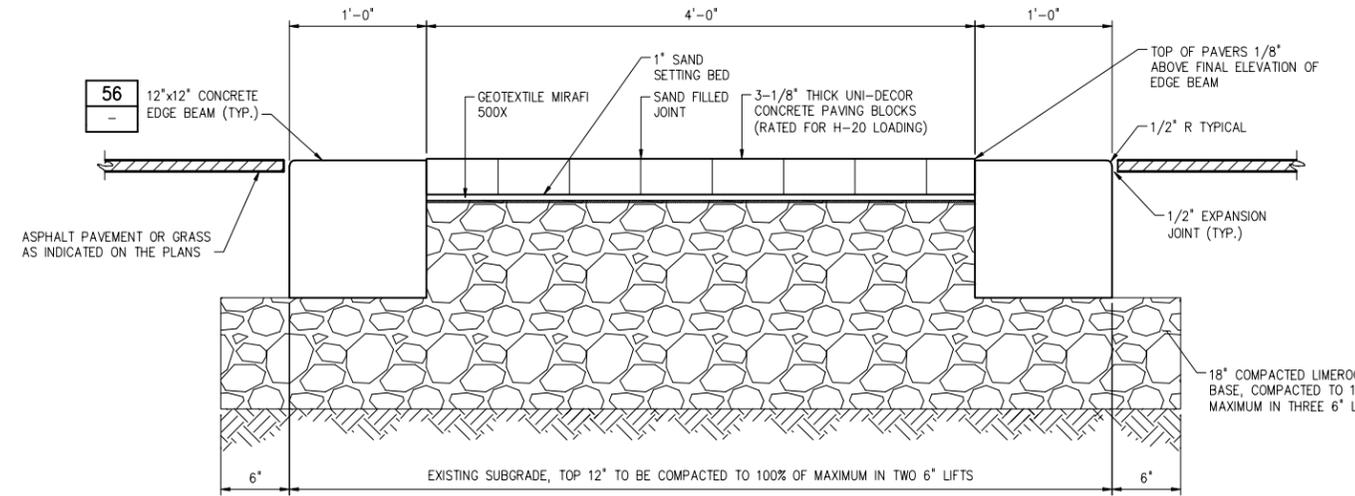
STOP LINE AND STOP SIGN LOCATION PLAN

DETAIL	53
NTS	-



PLAN

DETAIL	54
NTS	-

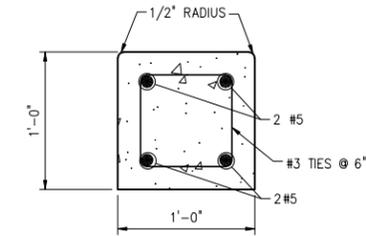


NOTES:

- CONTRACTOR SHALL GIVE SPECIAL ATTENTION TO ACHIEVE COMPACTION REQUIREMENTS AT AREAS ADJACENT TO EDGE RESTRAINTS, CATCH BASINS, AND UTILITY STRUCTURES.
- CONTRACTOR SHALL FORM THE INTENDED SURFACE PROFILE OF THE BASE SO THAT THE PAVERS CAN BE PLACED ON A UNIFORM THICKNESS OF BEDDING SAND.
- SURFACE OF COMPACTED BASE SHALL BE SMOOTH WITH A SURFACE SMOOTHNESS MAXIMUM TOLERANCE OF $\pm 3/8$ " OVER A 10' STRAIGHTEDGE. UNEVEN AREAS OF THE LIMEROCK BASE SURFACE MUST BE MADE LEVEL PRIOR TO PLACING THE BEDDING SAND. BEDDING SAND SHALL NOT BE USED TO COMPENSATE FOR AN UNEVEN BASE.
- CONTRACTOR SHALL ENSURE THAT ALL SURROUNDINGS CONTAINING EDGES, AND COMPACTED BASE ARE COMPLETED PRIOR TO INITIATING PAVER INSTALLATION.
- BEDDING SAND SHALL CONFORM TO ASTM C33 (CONCRETE SAND) WITH 0% PASSING No. 200 SIEVE. SPREAD BEDDING SAND AT OPTIMUM MOISTURE CONTENT EVENLY OVER BASE AND SCREED SAND TO AN EVEN THICKNESS OF 1" ($\pm 3/16$ "). THE SCREEDD SAND SHALL NOT BE DISTURBED.
- LAY PAVERS IN THE PATTERN INDICATED. MAINTAIN STRAIGHT JOINT LINES. JOINTS BETWEEN PAVERS SHALL BE CONSISTENT AND BETWEEN 1/16 TO 1/8 INCH WIDE.
- AFTER AN AREA OF PAVERS ARE PLACED, IT SHALL BE COMPACTED WITH A VIBRATING PLATE COMPACTOR, EXERTING 5000 LBS. OF CENTRIFUGAL COMPACTION FORCE, WITH SURFACE CLEAN AND JOINTS UNSANDED. A MINIMUM OF THREE PASSES SHALL BE MADE. PLATE VIBRATOR SHALL HAVE A RUBBER MAT OR ROLLER FEET TO AVOID CHIPPING THE PAVERS.
- JOINT SAND SHALL BE FINER THAN THE BEDDING SAND TO FACILITATE FILLING OF THE JOINTS. THIS CAN BE OBTAINED BY PASSING THE BEDDING SAND THROUGH A No. 8 SIEVE. AFTER THE FIRST PASS OF THE PLATE COMPACTOR, DRY JOINT SAND SHALL BE SWEEPED INTO THE JOINTS AND THE PAVERS COMPACTED. REPEAT THE PROCESS UNTIL THE JOINT ARE FILLED WITH SAND. WET SAND SHALL NOT BE INSTALLED.
- CONTRACTOR SHALL LEAVE TOP OF PAVERS 1/8" ABOVE FINAL ELEVATION TO COMPENSATE FOR POSSIBLE MINOR SETTLING.
- ALL CUTS TO BE VERTICAL AND TRUE, NO EDGE PIECE TO BE SMALLER THAN 1/3 FULL PAVER SIZE.
- GEOTEXTILE WOVEN MIRAFI 500X. FABRIC SHALL BE INSTALLED WITHOUT WRINKLES AND LAPPED 3" AT THEIR EDGES.

SECTION

DETAIL	55
NTS	-



SECTION

DETAIL	56
NTS	-

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
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No. 56076			

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 Hollywood, Florida 33021
 Certificate of Authorization Number: 2771

SCALE
NTS

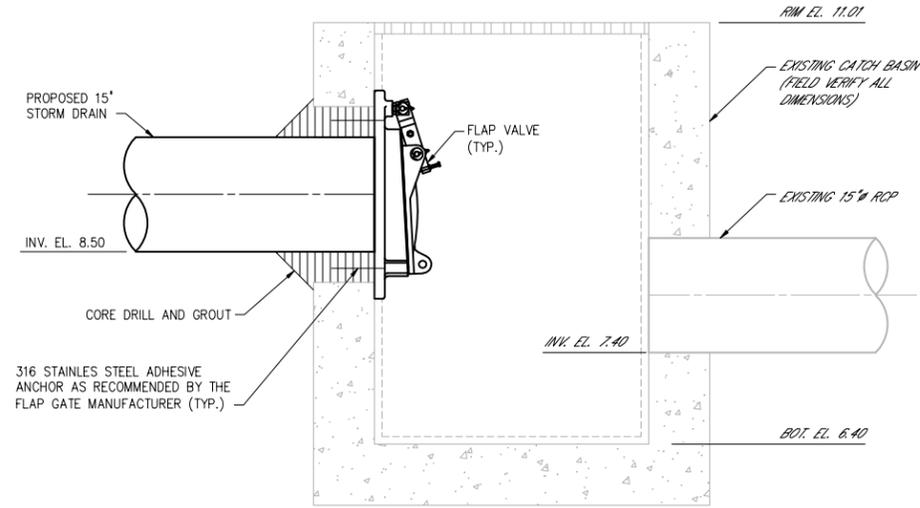
CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-C42

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

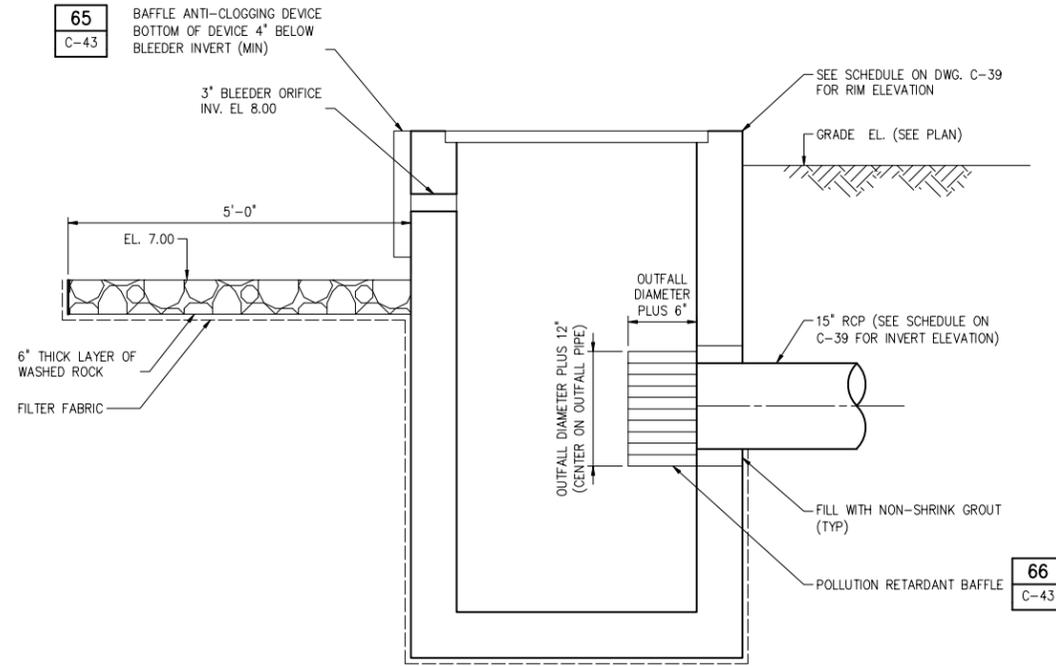
WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS
SHEET 15

DATE: JULY 2015
 SHEET: 59 OF 335
 DRAWING: C-42

REQUEST FOR PROPOSAL



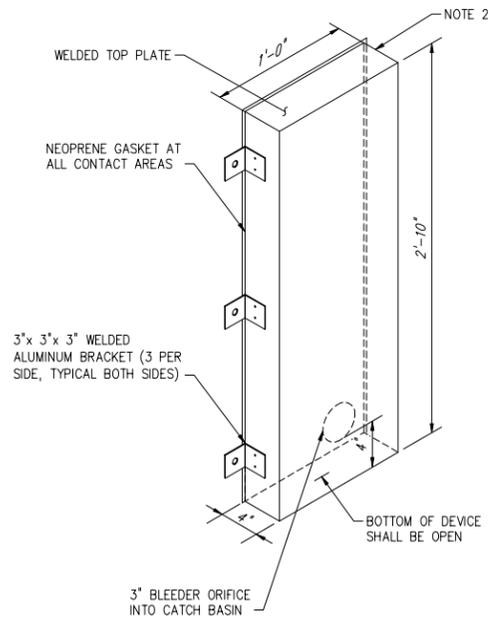
SECTION
CATCH BASIN MODIFICATION
DETAIL 57
NTS C-15



65 BAFFLE ANTI-CLOGGING DEVICE
C-43
BOTTOM OF DEVICE 4' BELOW BLEEDER INVERT (MIN)

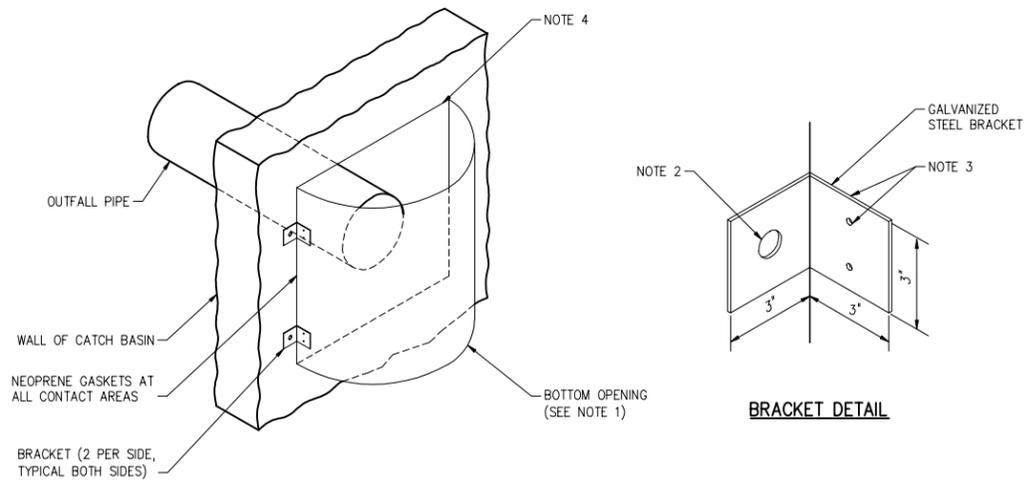
66 POLLUTION RETARDANT BAFFLE
C-43

CATCH BASIN 5
DETAIL 64
NTS C-43



- NOTES:**
1. DEVICE TO BE BOLTED TO CATCH BASIN USING 1/2" Ø 316 STAINLESS STEEL EXPANSION ANCHORS.
 2. DEVICE SHALL BE FABRICATED FROM 1/8" THICK WELDED ALUMINUM.

BAFFLE ANTI-CLOGGING DEVICE
DETAIL 65
NTS C-43



- BRACKET DETAIL**
- NOTES:**
1. BAFFLE SHALL BE CORRUGATED METAL PIPE SECTION (OUTFALL DIAMETER PLUS 6").
 2. 1/2" GALV. WEDGE ANCHORS.
 3. WELD OR 2-3/8" THRU BOLTS.
 4. BOLTED TO WALL WITH TOP CAPPED. (WATER TIGHT)

POLLUTION RETARDANT BAFFLE
DETAIL 66
NTS C-43

Szauer Engineering
Civil Engineers
7050 W. Palmetto Park Road, No. 15399
Boca Raton, FL 33433
Certificate of Authorization Number 30128

PLOT DATE: 7/24/2015 11:18 AM BY: TBPCS

DESIGNED	J.M.S.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	J.M.S.		
NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED	J.M.S.	<p>HAZEN AND SAWYER Environmental Engineers & Scientists 4000 Hollywood Boulevard, Suite 750N Hollywood, Florida 33021 Certificate of Authorization Number: 2771</p>
DRAWN	G.P.B.	
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PROJ. ENGR.	J.M.S.	
<p>JORGE M. SZAUER No. 62579</p>		P.E.

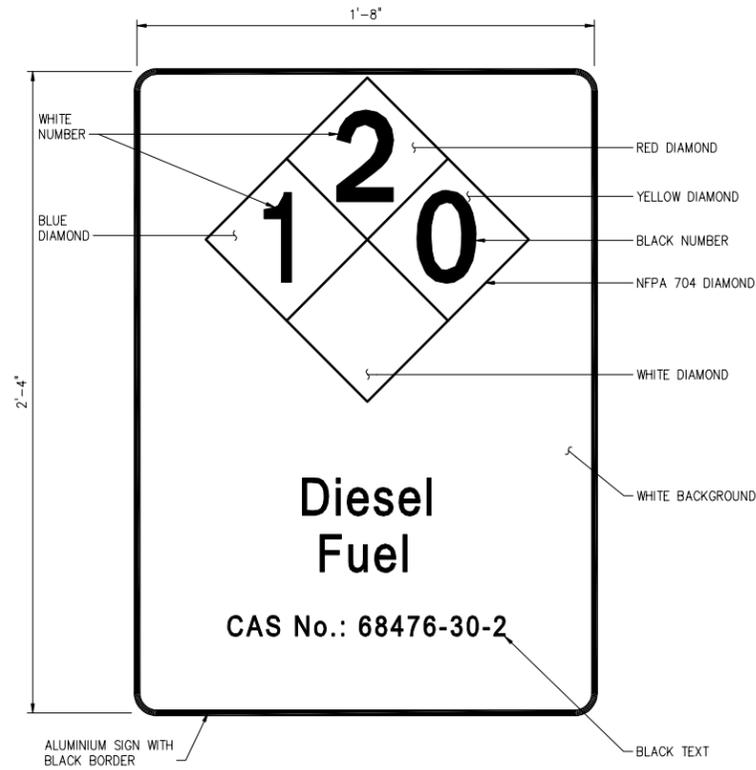
SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-C43

<p>CITY OF NORTH MIAMI PUBLIC WORKS UTILITIES</p>	
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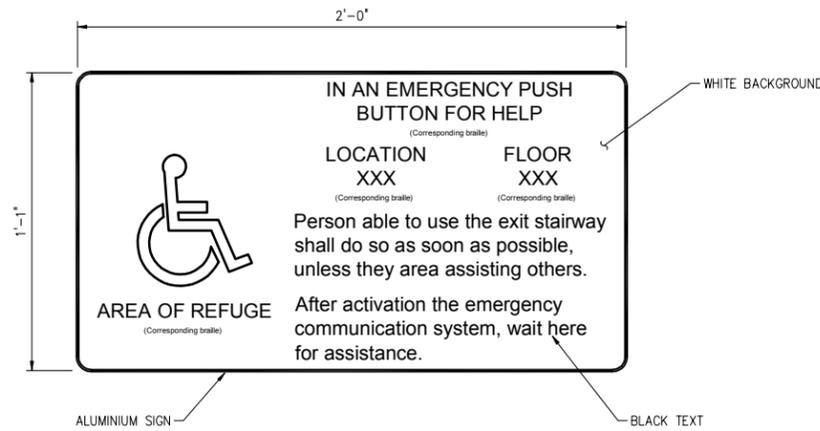
<p>WINSON WATER TREATMENT PLANT RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB</p>	
<p>CIVIL DETAILS SHEET 16</p>	

DATE:	JULY 2015
SHEET:	60 OF 335
DRAWING:	C-43

REQUEST FOR PROPOSAL

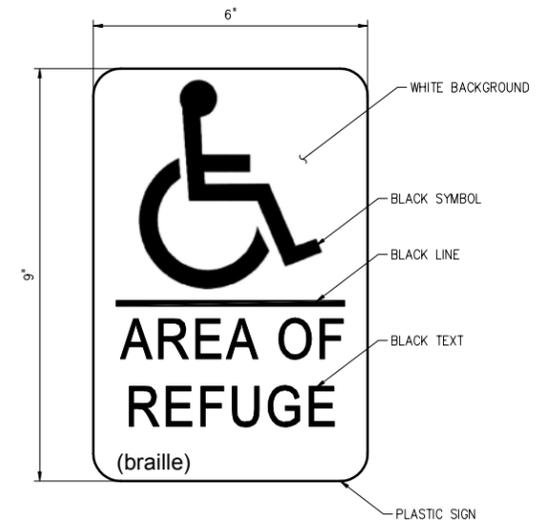


DETAIL 58
NTS C-11

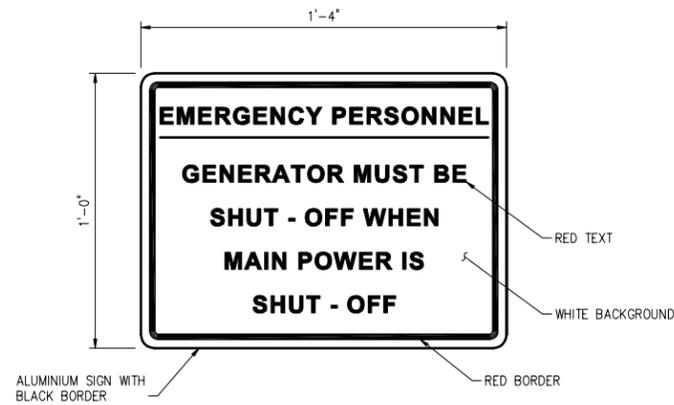


AREA OF REFUGE SIGN AT TWO - WAY COMMUNICATION DEVICE

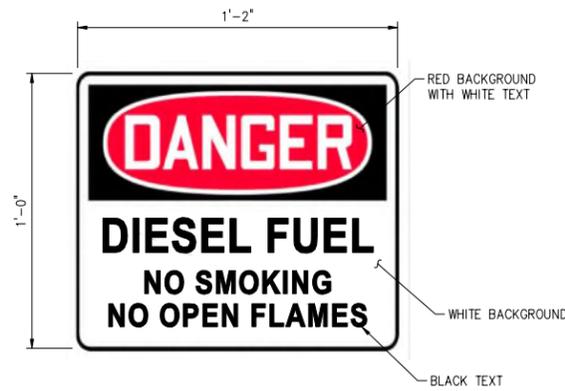
DETAIL 59
NTS C-11



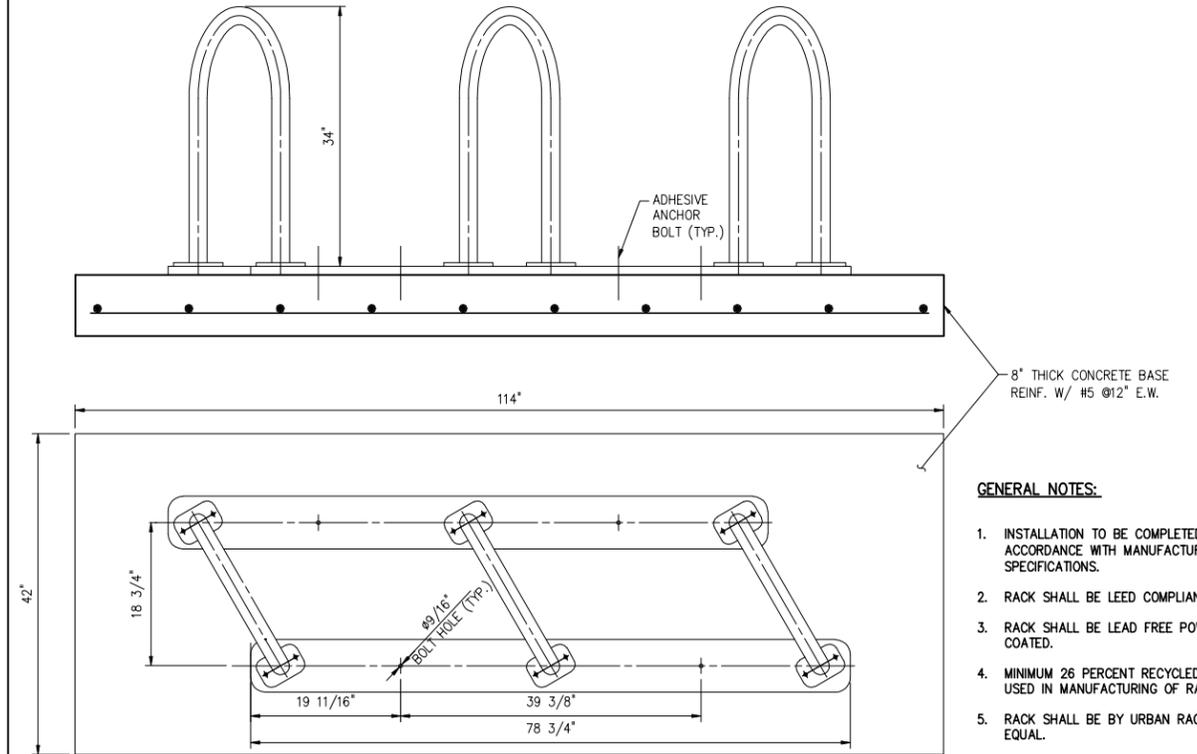
DETAIL 60
NTS C-11



DETAIL 61
NTS C-11



DETAIL 62
NTS C-11



BIKE RACK (4 BIKE MINIMUM CAPACITY)

DETAIL 63 63
NTS G-08 C-14

GENERAL NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. RACK SHALL BE LEED COMPLIANT.
3. RACK SHALL BE LEAD FREE POWER COATED.
4. MINIMUM 26 PERCENT RECYCLED MATERIAL USED IN MANUFACTURING OF RACK.
5. RACK SHALL BE BY URBAN RACKS, OR EQUAL.

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	J.N.M.		
PROJ. ENGR.	G.A.B.		
NO.	DATE	ISSUED FOR	BY
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SCALE: NTS
CLIENTS PROJECT: -
ENGINEERS PROJECT: 44238-004
CAD REFERENCE: 44238-004BP3-C44

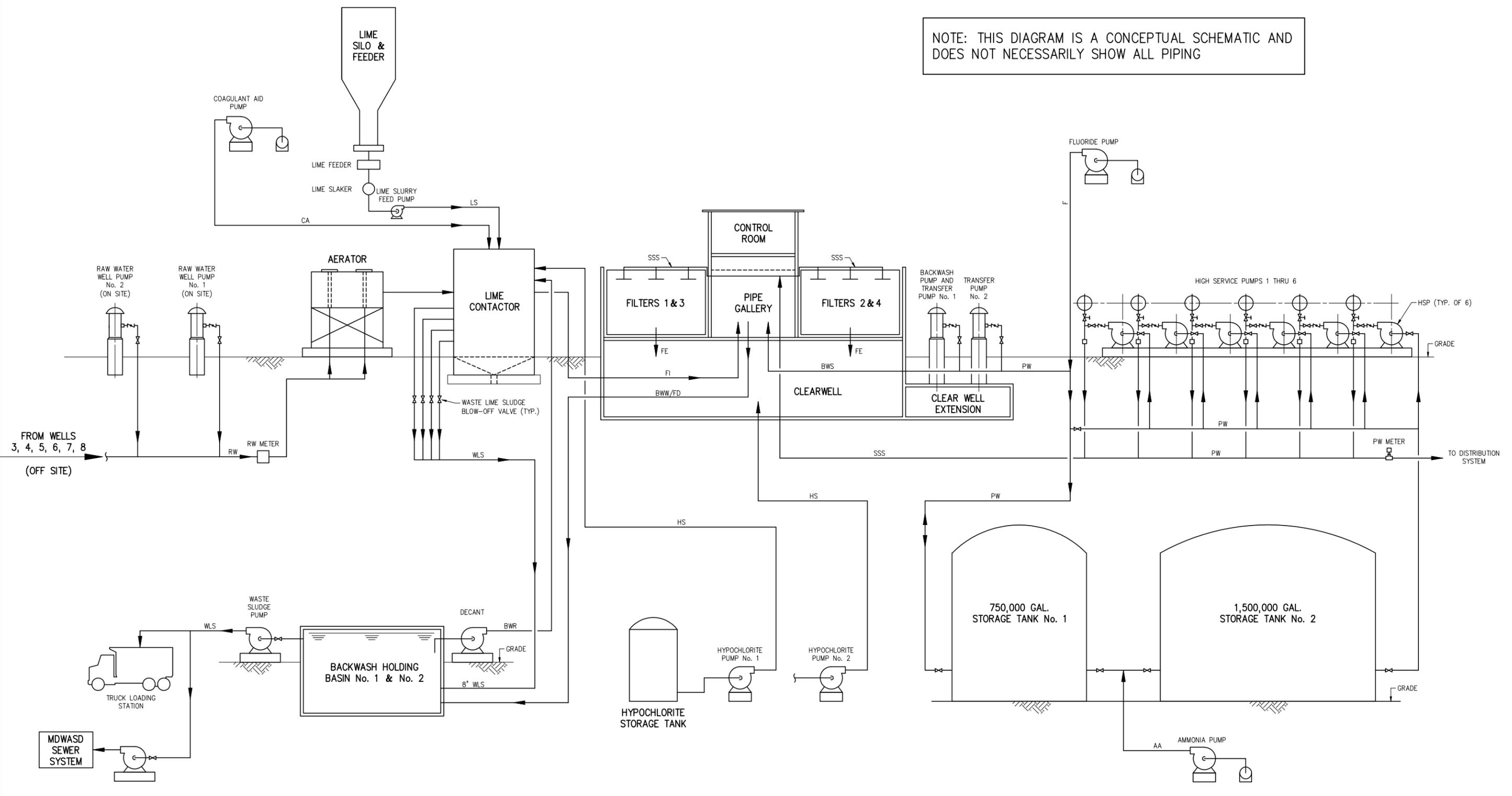
CITY OF NORTH MIAMI
PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
CIVIL DETAILS SHEET 17

DATE: JULY 2015
SHEET: 61 OF 335
DRAWING: C-44

REQUEST FOR PROPOSAL

NOTE: THIS DIAGRAM IS A CONCEPTUAL SCHEMATIC AND DOES NOT NECESSARILY SHOW ALL PIPING



- AA - AQUEOUS AMMONIA
- BWS - BACKWASH SUPPLY
- BWR - BACKWASH RETURN
- BWW/FD - BACKWASH WASTE
- CA - COAGULANT AID
- F - FLUORIDE SOLUTION
- FD - FILTER DRAIN
- FE - FILTER EFFLUENT
- FI - FILTER INFLUENT
- HS - HYPOCHLORITE SOLUTION
- HSP - HIGH SERVICE PUMP
- LS - LIME SLURRY
- PW - POTABLE WATER
- RW - RAW WATER
- SSS - SURFACE SCOUR SUPPLY
- WLS - WASTE LIME SLUDGE

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCAS

NO.	DATE	ISSUED FOR	BY
1	07/24/15	REQUEST FOR PROPOSAL	G.A.B.

DESIGNED **G.A.B.**
 DRAWN **G.P.B.**
 CHECKED **G.N.C.**
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SCALE: NTS
 CLIENTS PROJECT: -
 ENGINEERS PROJECT: 44238-004
 CAD REFERENCE: 44238-004BP3-M01

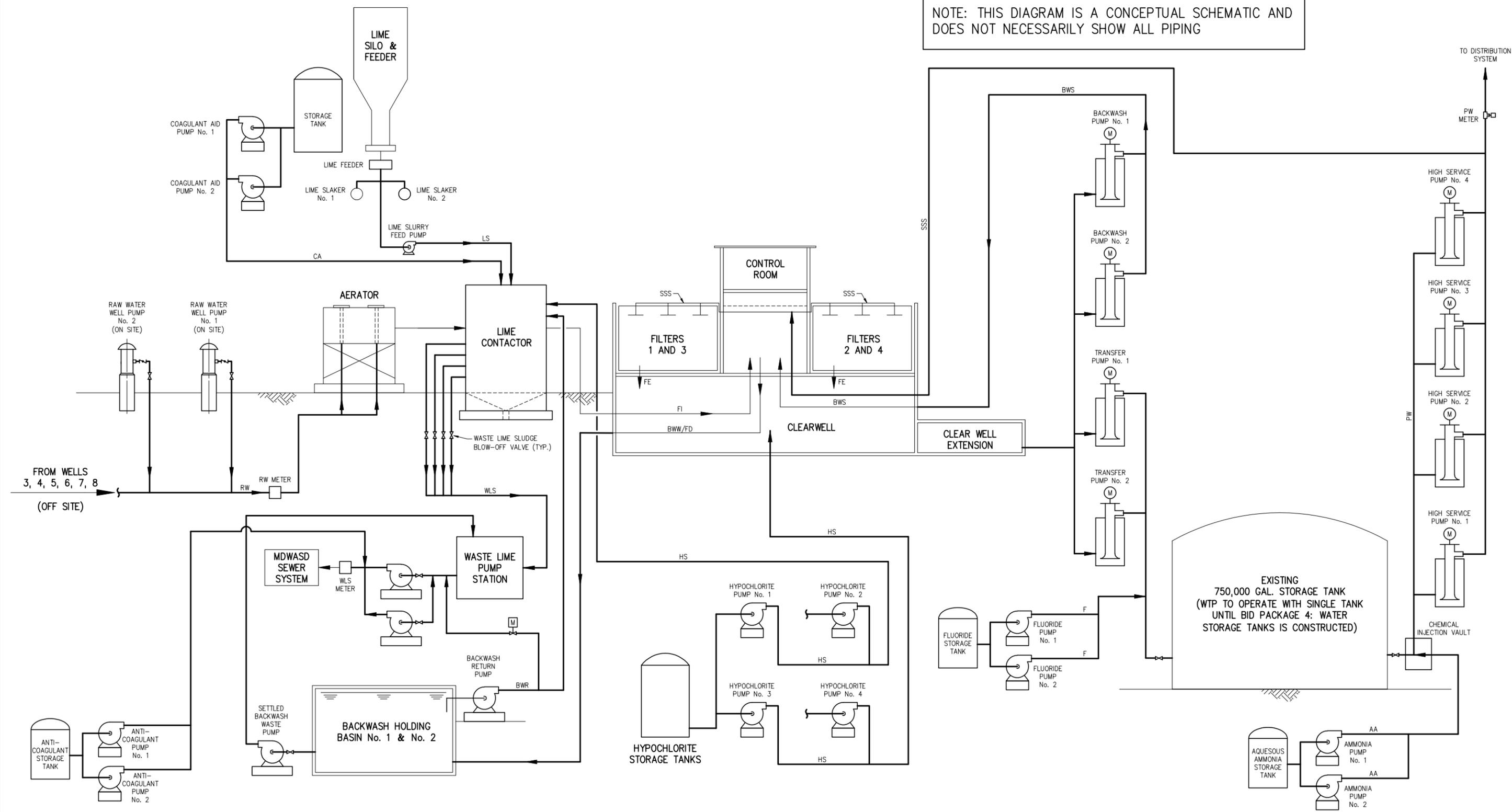
CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
EXISTING PROCESS FLOW DIAGRAM

DATE: **JULY 2015**
 SHEET: **62** OF **335**
 DRAWING: **M-01**

REQUEST FOR PROPOSAL

NOTE: THIS DIAGRAM IS A CONCEPTUAL SCHEMATIC AND DOES NOT NECESSARILY SHOW ALL PIPING



- | | |
|-----------------------|----------------------------|
| AA - AQUEOUS AMMONIA | HS - HYPOCHLORITE SOLUTION |
| BWR - BACKWASH RETURN | HSP - HIGH SERVICE PUMP |
| BWS - BACKWASH SUPPLY | LS - LIME SLURRY |
| BWW - BACKWASH WASTE | PW - POTABLE WATER |
| CA - COAGULANT AID | RW - RAW WATER |
| F - FLUORIDE SOLUTION | SSS - SURFACE SCOUR SUPPLY |
| FD - FILTER DRAIN | WLS - WASTE LIME SLUDGE |
| FI - FILTER INFLUENT | |
| FE - FILTER EFFLUENT | |

LEGEND:
 EXISTING
 PROPOSED

PLOT DATE: 7/24/2015 11:18 AM BY: TBCCS

DESIGNED	G.A.B.		
DRAWN	G.P.B.		
CHECKED	G.N.C.		
PROJ. ENGR.	G.A.B.		
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SCALE	CLIENTS PROJECT:	-
NTS	ENGINEERS PROJECT:	44238-004
	CAD REFERENCE:	44238-004BP3-M02

CITY OF NORTH MIAMI
 PUBLIC WORKS UTILITIES

WINSON WATER TREATMENT PLANT
 RELIABILITY IMPROVEMENTS - VOLUME B: WTP REHAB
PROPOSED PROCESS FLOW DIAGRAM

DATE:	JULY 2015
SHEET:	63 OF 335
DRAWING:	M-02

REQUEST FOR PROPOSAL