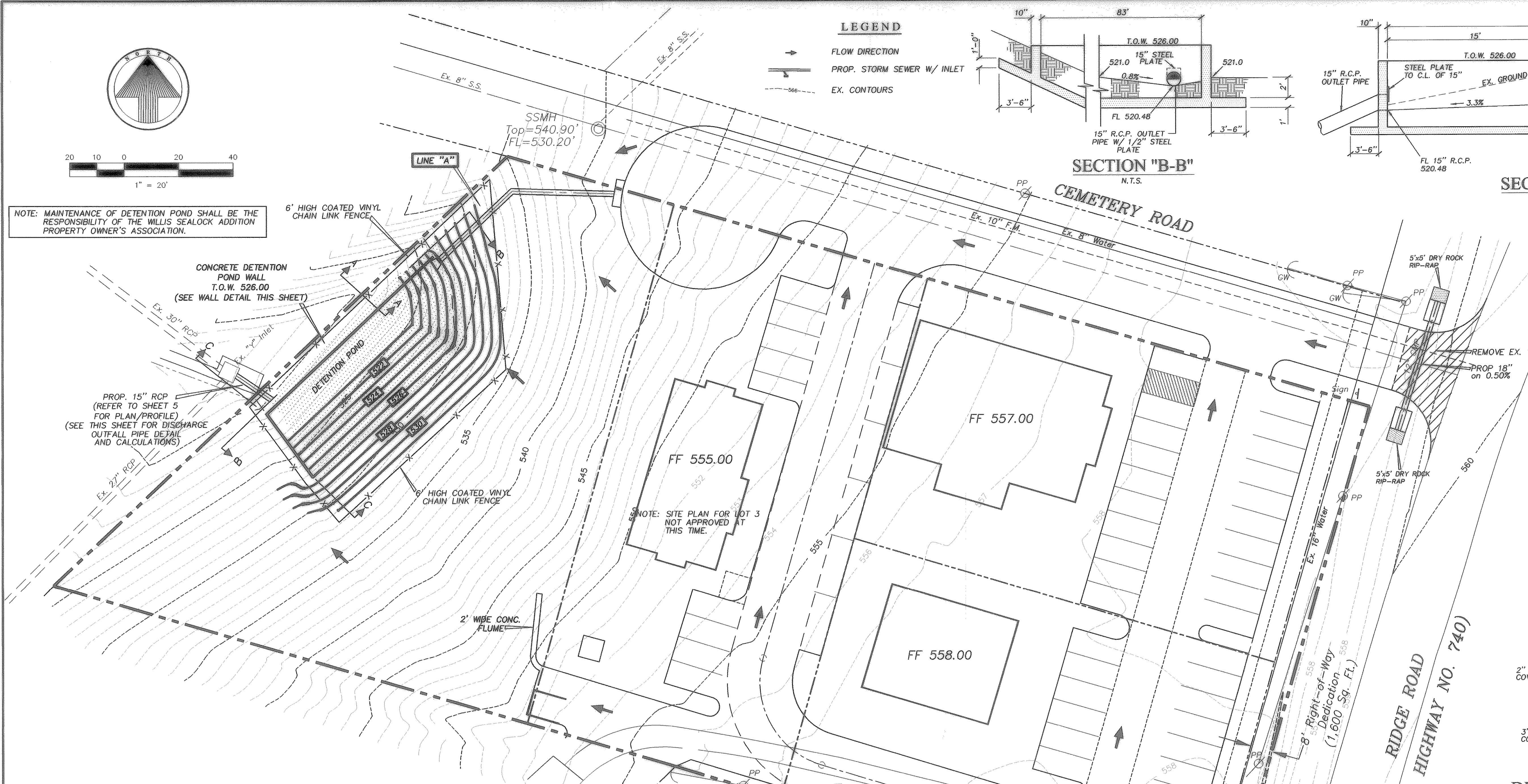
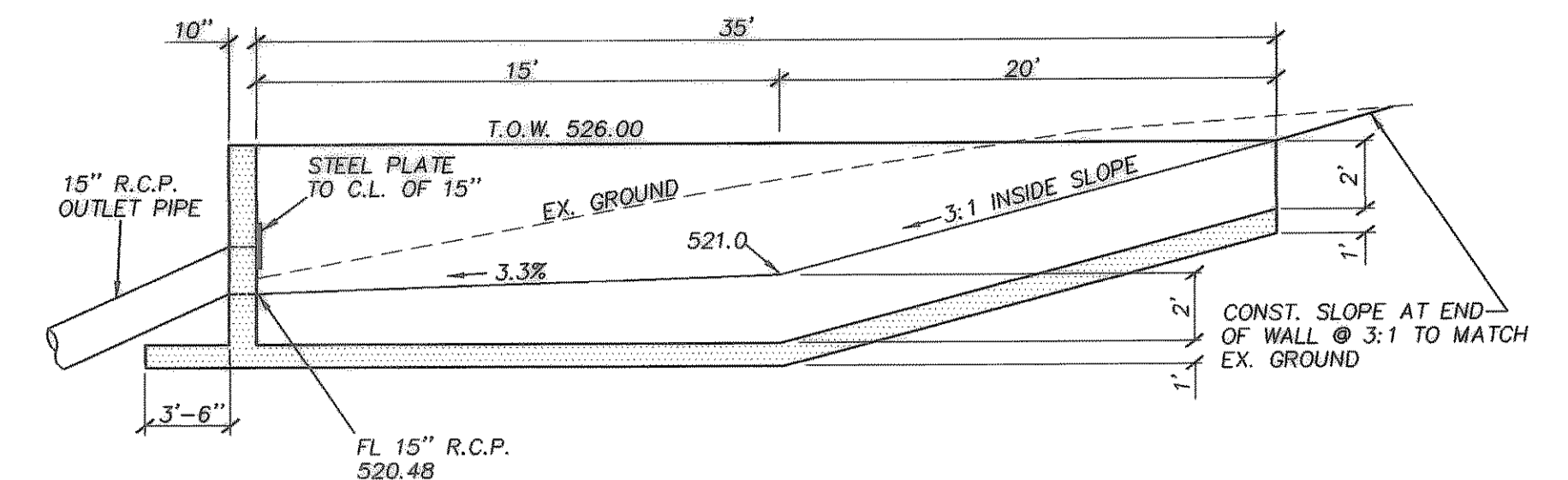
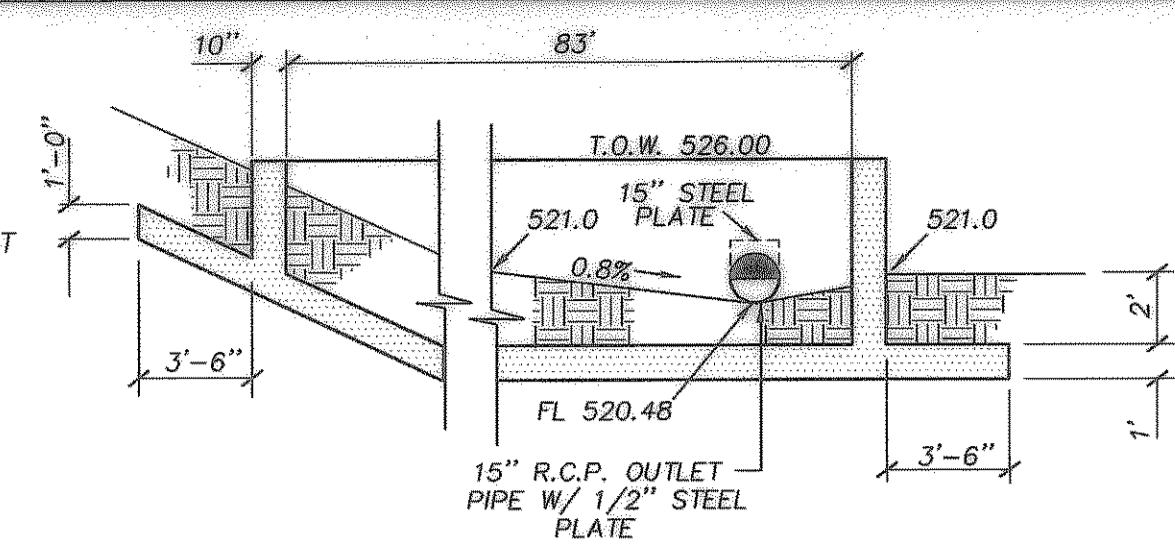


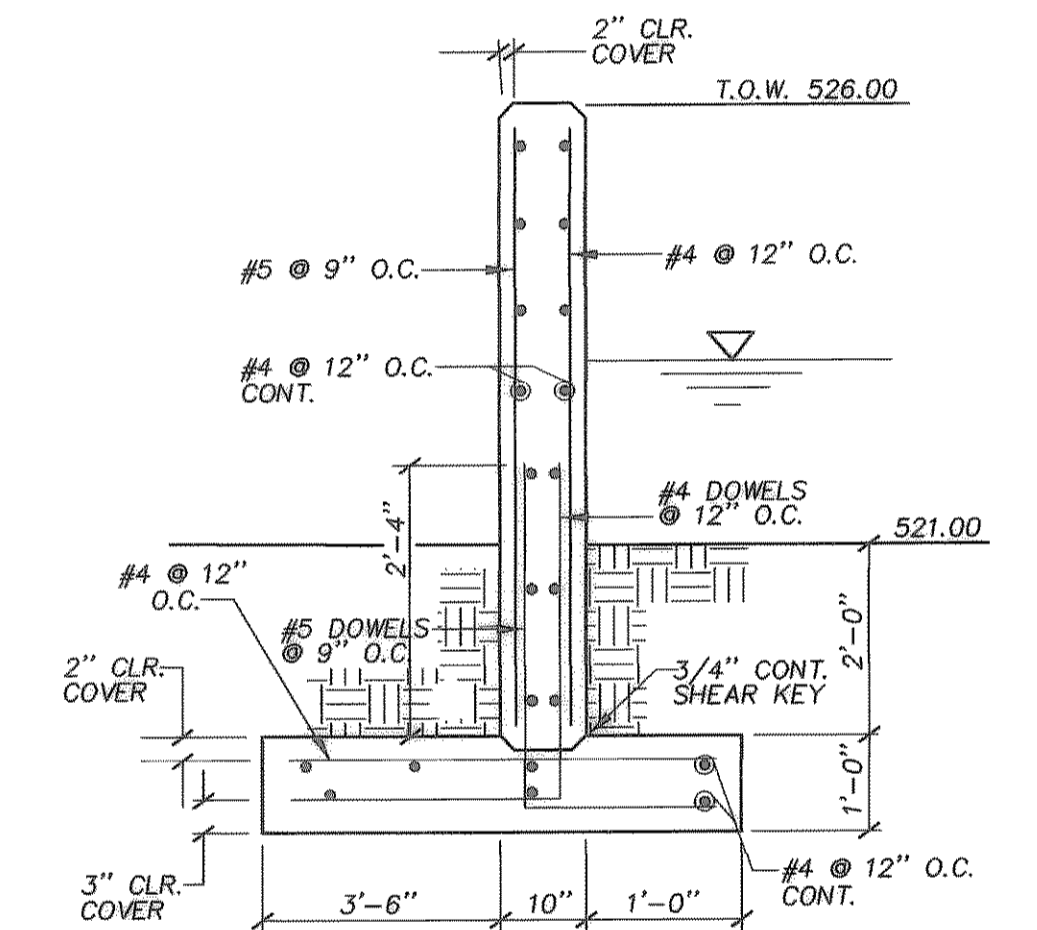
NOTE: MAINTENANCE OF DETENTION POND SHALL BE THE RESPONSIBILITY OF THE WILLIS SEALOCK ADDITION PROPERTY OWNER'S ASSOCIATION.

LEGEND

- FLOW DIRECTION
- PROP. STORM SEWER W/ INLET
- - - EX. CONTOURS



SECTION "C-C"
N.T.S.



Allowable flow	Area A	Area B	Area C	Area D
Area	1.11	0.34	0.26	0.23
C	0.35	0.9	0.35	0.35
Tc	20	10	20	20
I100	8.3	9.8	8.3	8.3
Q100	3.22	3.00	0.76	0.67
Q100 total =	7.65			

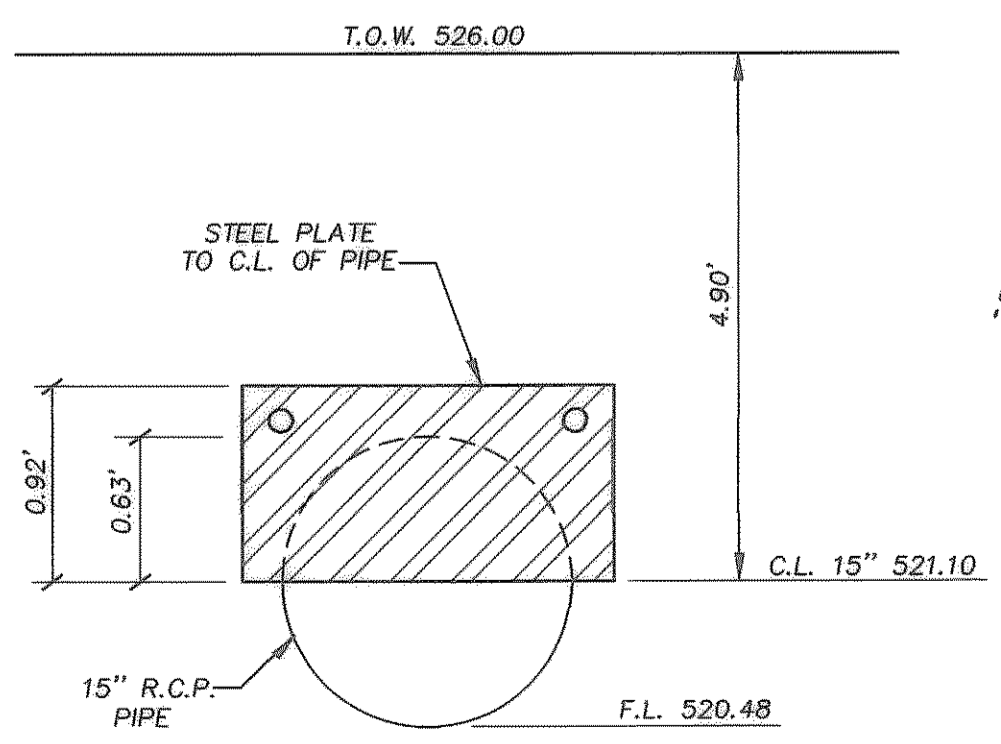
Developed Conditions	Area A	Area B	Area C	Area D
Area	1.11	0.34	0.26	0.23
C	0.9	0.9	0.35	0.35
Tc	10	10	20	20
I100	9.8	9.8	8.3	8.3
Q100	9.79	3.00	0.76	0.67
Qmax =	14.21			

Rockwall IDF - Max Inflow										
Duration	I100	Area A	Area B	Area C	Area D	cA	cB	cC	cD	Q100
10	9.80	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	14.47
15	9.50	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	14.03
20	8.30	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	12.25
30	6.90	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	10.19
40	5.80	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	8.56
50	5.00	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	7.38
60	4.45	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	6.57
70	4.16	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	6.14
80	3.87	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	5.71
90	3.57	1.11	0.34	0.26	0.23	0.9	0.9	0.35	0.35	5.27

Detention Volume (Modified Rational Method)										
10	0.5	10	14.47	60	9682	4094				
15	0.5	15	14.03	60	12624	6889				
20	0.5	20	12.25	60	14706	7824				
30	0.5	30	10.19	60	18338	9162				
40	0.5	40	8.56	60	20553	11470				
50	0.5	50	7.38	60	22148	13764				
60	0.5	60	6.57	60	23654	16058				
70	0.5	70	6.14	60	25797	18352				
80	0.5	80	5.71	60	27427	20646				
90	0.5	90	5.27	60	29122	22940				

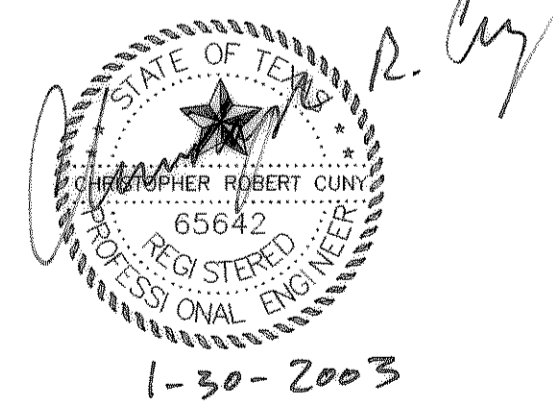
Pond Storage Volume Required = 9,162 cubic feet
 Pond Storage Volume Provided = 9,560 cubic feet

NOTE: DRAINAGE AREAS "C" & "D" WERE DESIGNED TO REMAIN AS UNDEVELOPED AREAS. PROPERTY OWNER AGREES THAT NO DEVELOPMENT IN THIS AREA IS TO BE DONE WITHOUT MODIFICATIONS TO OR ADDITION OF DETENTION FACILITIES.



DISCHARGE FLOW ORIFICE EQUATION
 $C \times A \times \sqrt{2gh}$
 $0.70 \times 1.23 \times \sqrt{2 \times 32.2 \times 4.90} = 15.28$ TOTAL CFS FOR 15" PIPE
 $\frac{15.28}{2} = 7.64$ cfs

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHRISTOPHER R. CUNY, P.E. 65642



CONSTRUCTION RECORD DRAWING

DETENTION POND					
WILLIS SEALOCK ADDITION					
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS					
Michael Willis					
2235 Ridge Road • Rockwall, Texas 75087 • (972) 722-1846					
F.C. CUNY CORPORATION					
4222 Rosehill Rd, Suite 7 • Garland, Texas 75043 • (972) 240-7700					
Drawn By:	Checked By:	Date:	Scale:	Project No.:	Sheet No.:
DM	C.C.	01/03	H:1"-20"	01-000	6 of 10

BENCHMARK: RAILROAD SPIKE EMBEDDED IN THE EAST SIDE OF POWER POLE LOCATED AT THE NORTHWEST CORNER OF CEMETERY ROAD AND F.M. 740 (RIDGE ROAD)