VILLAGE OF WINDSOR
RESOLUTION 2020-73

APPROVAL OF A REDUCTION IN THE LETTER OF CREDIT FOR BEAR TREE FARMS - PHASE 2

WHEREAS, Bear Tree Farms, Inc. ("Developer") has requested a reduction in the Letter of Credit which serves as surety for completion of infrastructure for Bear Tree Farms – Phases 1 & 2; and

WHEREAS, the Developer has completed to the satisfaction of the Village Engineer the infrastructure set forth in the attached Baxter & Woodman correspondence, and dedicated same to the Village; and

WHEREAS, the Village Engineer has reviewed the Developer's request and recommends approval of same; and

WHEREAS, at its regularly scheduled meeting on September 3, 2020, the Village Board reviewed the dedication, request for a reduction in the Letter of Credit, and the information provided by the Village Engineer.

NOW, THEREFORE, BE IT RESOLVED by the Village Board of the Village of Windsor as follows:

A. The Village accepts dedication of the infrastructure from the Developer to the Village as set forth in the attached Baxter & Woodman correspondence.

B. The Developer's Letter of Credit for Bear Tree Farms – Phases 1 & 2 shall be reduced to $75,000 as approved by the Village Engineer, contingent upon receipt by the Village of lien waivers in a form satisfactory to the Village Engineer for all work upon which the reduction is based.

C. The Developer may provide a copy of this Resolution and the attachments thereto to any third-party requesting verification of the Village's approval of the reduction.

D. An updated Letter of Credit, in the same form as the previous Letter of Credit, shall be issued and provided to the Village simultaneous with or prior to the Village's surrender of the existing Letter of Credit.

E. Notwithstanding this reduction in the Letter of Credit, the Developer shall remain obligated to timely satisfy all of the conditions imposed by the Village Board to which the Letter of Credit serves as a surety, and to provide satisfactory verification of compliance to the Village. Any necessary or requested reviews or submissions to the Village for determinations of compliance shall be made at least ten (10) business days prior to the date upon which verification of compliance is required.

The above and foregoing Resolution was duly adopted by the Village Board of the Village of Windsor, Dane County, Wisconsin at a meeting held on September 3, 2020 by a vote of 5 in favor and 0 opposed.

VILLAGE OF WINDSOR

Robert E. Wipperfurth

Robert E. Wipperfurth, President

Attested by:

Christine Capstran

Christine Capstran, Clerk

Incorporated by Reference:
Petitioner Request for Reduction in Letter of Credit
Baxter & Woodman Correspondence dated 7/28/2020

SNYDER & ASSOCIATES

IOWA | MISSOURI | NEBRASKA | SOUTH DAKOTA | WISCONSIN

July 20, 2020

Amy Anderson-Schweppe
Village of Windsor
4084 Mueller Road
DeForest, WI 53532

RE: BEAR TREE FARMS PHASE 2

Dear Ms. Anderson-Schweppe,

On behalf of our client, Bear Tree Farms, Inc. we hereby request a reduction to the Letter of Credit for the Bear Tree Farms Phase 2 public improvements. The enclosed spreadsheet outlines the Phase 2 improvements that are left to complete. We are requesting the total surety amount equal $90,000.00. The stormwater management portion of the surety held by the County would be $15,000.00 and the surety to cover the surface paving would be $75,000.000.

Please note that the full amount for the 24" ribbon curb is part of the proposed surety. The replacement costs for the curb damage caused by the snow plowing operation is approximately the same amount as the original installation costs. The curb that exists is structurally sound and the majority of the replacement as marked by Village staff is for cosmetic reasons. We are requesting that the Village reconsider the limits of the curb replacements before surface paving commences.

Sincerely,

SNYDER & ASSOCIATES, INC.

Michael L. Calkins
Project Engineer

MLC/mlc

Enclosure

cc: Bear Tree Farms, Inc.

5010 VOGES ROAD | MADISON, WI 53718-6928
P 608-838-0444 | F 608-838-0455 | SNYDER-ASSOCIATES.COM

PROJECT: Bear Tree Farms - Phase 2

ENGINEER'S PROJECT # 116.0177.30

OWNER Bear Tree Farms
370 Campbell Hill Ct
DeForest WI 53532

CONTRACTOR. Parisi Construction Co Inc
508 S Nine Mound Road
Verona, WI 53593

ENGINEER Snyder & Associates Inc

LOC REDUCTION REQUEST

REQUEST DATE: 7/20/20

Item No (A)	Description of Work (B)	Unit of Measure	Scheduled Quantity (C)	Unit Price (D)	Item Total (C*D)	Work Completed: Previous Requests (E) Quantity	Previous Requests (E) Amount	Left To Complete (F) Quantity	Left To Complete (F) Amount	Contract Total (E+F) Quantity	Contract Total (E+F) Amount	% Complete
PHASE 2A												
1	Mobilization	LS	1	$ 30,000.00	$30,000.00	1	$30,000.00		$0.00	1	$30,000.00	100.00%
2	Unclassified Excavation	CY	20,029	$ 3.20	$64,092.80	20,029	$64,092.80		$0.00	20,029	$64,092.80	100.00%
3	Topsoil Strip and Stockpile	CY	13,900	$ 2.00	$27,800.00	13,900	$27,800.00		$0.00	13,900	$27,800.00	100.00%
4	Clear and Grub	LS	1	$ 1,100.00	$1,100.00	1	$1,100.00		$0.00	1	$1,100.00	100.00%
5	8" Sanitary Sewer	LF	1,262	$ 39.25	$49,533.50	1,262	$49,533.50		$0.00	1,262	$49,533.50	100.00%
6	4' Sanitary Lateral	LF	760	$ 41.50	$31,540.00	760	$31,540.00		$0.00	760	$31,540.00	100.00%
7	Sanitary Sewer Trench Compaction	LF	2,022	$ 5.40	$10,918.80	2,022	$10,918.80		$0.00	2,022	$10,918.80	100.00%
8	Standard Sanitary Sewer Manhole	EA	7	$ 4,200.00	$29,400.00	7	$29,400.00		$0.00	7	$29,400.00	100.00%
9	Connect to Existing Sanitary Sewer	EA	2	$ 2,000.00	$4,000.00	2	$4,000.00		$0.00	2	$4,000.00	100.00%
10	Televise Sanitary Sewer	LF	1,262	$ 3.10	$3,912.20	1,262	$3,912.20		$0.00	1,262	$3,912.20	100.00%
11	Adjust Castings	EA	7	$ 370.00	$2,590.00	7	$2,590.00		$0.00	7	$2,590.00	100.00%
12	6 D.I. Water Main	LF	50	$ 60.00	$3,000.00	50	$3,000.00		$0.00	50	$3,000.00	100.00%
13	8' D.I. Water Main	LF	1,330	$ 48.00	$63,840.00	1,330	$63,840.00		$0.00	1,330	$63,840.00	100.00%
14	1 Copper Water Service	EA	20	$ 1,400.00	$28,000.00	20	$28,000.00		$0.00	20	$28,000.00	100.00%
15	Water Main Trench Compaction	LF	1,380	$ 3.40	$4,692.00	1,380	$4,692.00		$0.00	1,380	$4,692.00	100.00%
16	6 Valve w/ Box	EA	3	$ 2,100.00	$6,300.00	3	$6,300.00		$0.00	3	$6,300.00	100.00%
17	8" Valve w/ Box	EA	6	$ 2,500.00	$15,000.00	6	$15,000.00		$0.00	6	$15,000.00	100.00%
18	Hydrant w/ Flag	EA	4	$ 4,300.00	$17,200.00	4	$17,200.00		$0.00	4	$17,200.00	100.00%
19	Adjust Water Service Boxes and Valves	EA	29	$ 200.00	$5,800.00	29	$5,800.00		$0.00	29	$5,800.00	100.00%
20	Connect to Existing Water Main	EA	2	$ 1,800.00	$3,600.00	2	$3,600.00		$0.00	2	$3,600.00	100.00%
21	12' RCP Storm Sewer	LF	52	$ 35.75	$1,859.00	52	$1,859.00		$0.00	52	$1,859.00	100.00%
22	15' RCP Storm Sewer	LF	82	$ 41.25	$3,382.50	82	$3,382.50		$0.00	82	$3,382.50	100.00%
23	36 RCP Storm Sewer	LF	203	$ 88.00	$17,864.00	203	$17,864.00		$0.00	203	$17,864.00	100.00%
24	42' RCP Storm Sewer	LF	269	$ 100.00	$26,900.00	269	$26,900.00		$0.00	269	$26,900.00	100.00%
25	34' x 53' HERCP Storm Sewer	LF	172	$ 150.00	$25,800.00	172	$25,800.00		$0.00	172	$25,800.00	100.00%
26	42' Apron Endwall w/ Grate	EA	1	$ 3,800.00	$3,800.00	1	$3,800.00		$0.00	1	$3,800.00	100.00%
27	2.5' x 8' MS Inlet	EA	4	$ 2,900.00	$11,600.00	4	$11,600.00		$0.00	4	$11,600.00	100.00%
28	6 Storm Sewer Manhole	EA	2	$ 5,000.00	$10,000.00	2	$10,000.00		$0.00	2	$10,000.00	100.00%
29	8' Storm Sewer Manhole	EA	1	$ 7,100.00	$7,100.00	1	$7,100.00		$0.00	1	$7,100.00	100.00%
30	Adjust Castings	EA	7	$ 380.00	$2,660.00	7	$2,660.00		$0.00	7	$2,660.00	100.00%
31	Sawcut Pavement	LF	60	$ 8.20	$492.00	60	$492.00		$0.00	60	$492.00	100.00%
32	Finish Grading	STA	11	$ 630.00	$6,930.00	11	$6,930.00		$0.00	11	$6,930.00	100.00%
33	10' Crushed Stone Base Course	SY	3,395	$ 8.30	$28,178.50	3,395	$28,178.50		$0.00	3,395	$28,178.50	100.00%
34	24' Ribbon Curb W/ 10' Stone Base	LF	3,176	$ 11.75	$37,318.00	3,176	$37,318.00		$0.00	3,176	$37,318.00	100.00%
35	10' Wide Asphalt Pedestrian Path	SY	626	$ 21.00	$13,146.00	626	$13,146.00		$0.00	626	$13,146.00	100.00%
36	Undercut & Crushed Stone Backfill (20%)	CY	190	$ 34.50	$6,555.00	1,344	$46,368.00		$0.00	1,344	$46,368.00	707.37%
37	1.75' Asphaltic Binder Course	SY	3,395	$ 6.60	$22,407.00	3,395	$22,407.00		$0.00	3,395	$22,407.00	100.00%
38	1.75' Asphaltic Surface Course (June 2019)	SY	3,395	$ 6.30	$21,388.50	3,395	$21,388.50		$0.00	3,395	$21,388.50	100.00%
39	Mill, Clean, & Tack (June 2019)	SY	3,395	$ 0.60	$2,037.00	3,395	$2,037.00		$0.00	3,395	$2,037.00	100.00%
40	Restore Electrical Trenches	LS	1	$ 1,300.00	$1,300.00	1	$1,300.00		$0.00	1	$1,300.00	100.00%
41	Street Sign w/ Stop Sign	EA	2	$ 410.00	$820.00	2	$820.00		$0.00	2	$820.00	100.00%
42	Type III Barricades w/ Road Closed Sign	EA	2	$ 550.00	$1,100.00	2	$1,100.00		$0.00	2	$1,100.00	100.00%
43	Gravel Construction Entrance	EA	2	$ 670.00	$1,340.00	2	$1,340.00		$0.00	2	$1,340.00	100.00%
44	Silt Fence	LF	1,150	$ 1.60	$1,840.00	1,150	$1,840.00		$0.00	1,150	$1,840.00	100.00%
45	Erosion Matting	SY	5,645	$ 1.30	$7,338.50	5,349	$6,953.70		$0.00	5,349	$6,953.70	94.76%
46	Stone Ditch Check	EA	29	$ 200.00	$5,800.00		$0.00		$0.00	0	$0.00	0.00%
47	6" Topsoil, Fertilizer, Seed, & Mulch	SY	41,000	$ 1.10	$45,100.00	36,122	$39,734.20		$0.00	36,122	$39,734.20	88.10%
PHASE 2B												
48	Mobilization	LS	1	$ 25,000.00	$25,000.00	1	$25,000.00		$0.00	1	$25,000.00	100.00%
49	Unclassified Excavation	CY	30,000	$ 3.20	$96,000.00	30,000	$96,000.00		$0.00	30,000	$96,000.00	100.00%
50	Topsoil Strip and Stockpile	CY	25,000	$ 2.00	$50,000.00	25,000	$50,000.00		$0.00	25,000	$50,000.00	100.00%
51	Clear and Grub	LS	1	$ 1,600.00	$1,600.00	1	$1,600.00		$0.00	1	$1,600.00	100.00%
52	8' Sanitary Sewer	LF	1,854	$ 38.50	$71,379.00	1,800	$69,300.00		$0.00	1,800	$69,300.00	97.09%
53	4' Sanitary Lateral	LF	950	$ 40.50	$38,475.00	900	$36,450.00		$0.00	900	$36,450.00	94.74%
54	Sanitary Sewer Trench Compaction	LF	2,804	$ 5.40	$15,141.60	2,700	$14,580.00		$0.00	2,700	$14,580.00	96.29%
55	Standard Sanitary Sewer Manhole	EA	9	$ 4,100.00	$36,900.00	9	$36,900.00		$0.00	9	$36,900.00	100.00%
56	Connect to Existing Sanitary Sewer	EA	2	$ 990.00	$1,980.00	2	$1,980.00		$0.00	2	$1,980.00	100.00%
57	Televise Sanitary Sewer	LF	1,854	$ 3.10	$5,747.40	1,854	$5,747.40		$0.00	1,854	$5,747.40	100.00%
58	Adjust Castings	EA	9	$ 370.00	$3,330.00	9	$3,330.00		$0.00	9	$3,330.00	100.00%
59	6 D.I. Water Main	LF	50	$ 60.00	$3,000.00	50	$3,000.00		$0.00	50	$3,000.00	100.00%
60	8' D.I. Water Main	LF	1,813	$ 48.25	$87,477.25	1,800	$86,850.00		$0.00	1,800	$86,850.00	99.28%
61	1 Copper Water Service	EA	25	$ 1,400.00	$35,000.00	25	$35,000.00		$0.00	25	$35,000.00	100.00%
62	Water Main Trench Compaction	LF	1,863	$ 3.40	$6,334.20	1,850	$6,290.00		$0.00	1,850	$6,290.00	99.30%
63	6 Valve w/ Box	EA	3	$ 2,100.00	$6,300.00	3	$6,300.00		$0.00	3	$6,300.00	100.00%
64	8' Valve w/ Box	EA	6	$ 2,500.00	$15,000.00	6	$15,000.00		$0.00	6	$15,000.00	100.00%
65	Hydrant w/ Flag	EA	5	$ 4,300.00	$21,500.00	5	$21,500.00		$0.00	5	$21,500.00	100.00%

Item No. (A)	Description of Work (B)	Unit of Measure	Scheduled Quantity (C)	Unit Price (D)	Item Total (C*D)	Work Completed: Previous Requests (E) Quantity	Previous Requests (E) Amount	Left To Complete (F) Quantity	Left To Complete (F) Amount	Contract Total (E+F) Quantity	Contract Total (E+F) Amount	% Complete
66	Adjust Water Service Boxes and Valves	EA	34	$ 210.00	$7,140.00	34	$7,140.00		$0.00	34	$7,140.00	100.00%
67	Connect to Existing Water Main	EA	2	$ 1,800.00	$3,600.00	2	$3,600.00		$0.00	2	$3,600.00	100.00%
68	18' RCP Storm Sewer	LF	33	$ 51.00	$1,683.00	33	$1,683.00		$0.00	33	$1,683.00	100.00%
69	36 RCP Storm Sewer	LF	155	$ 92.00	$14,260.00	155	$14,260.00		$0.00	155	$14,260.00	100.00%
70	2.5' x 8' MS Inlet	LF	2	$ 2,900.00	$5,800.00	2	$5,800.00		$0.00	2	$5,800.00	100.00%
71	Adjust Castings	LF	2	$ 380.00	$760.00	2	$760.00		$0.00	2	$760.00	100.00%
72	Sawcut Pavement	LF	60	$ 8.20	$492.00	60	$492.00		$0.00	60	$492.00	100.00%
73	Finish Grading	EA	17	$ 630.00	$10,710.00	17	$10,710.00		$0.00	17	$10,710.00	100.00%
74	10' Crushed Stone Base Course	EA	4,027	$ 8.50	$34,229.50	4,000	$34,000.00		$0.00	4,000	$34,000.00	99.33%
75	24' Ribbon Curb W/ 10' Stone Base	EA	3,176	$ 11.75	$37,318.00		$0.00	3,176	$37,318.00	3,176	$37,318.00	100.00%
76	10' Wide Asphalt Pedestrian Path	EA	1,860	$ 20.50	$38,130.00	1,860	$38,130.00		$0.00	1,860	$38,130.00	100.00%
77	Undercut & Crushed Stone Backfill (20%)	EA	225	$ 33.25	$7,481.25	225	$7,481.25		$0.00	225	$7,481.25	100.00%
78	1.75' Asphaltic Binder Course	LF	4,027	$ 6.50	$26,175.50	4,027	$26,175.50		$0.00	4,027	$26,175.50	100.00%
79	1.75' Asphaltic Surface Course (June 2019)	STA	4,027	$ 6.20	$24,967.40		$0.00	4,027	$24,967.40	4,027	$24,967.40	100.00%
80	Mill, Clean, & Tack (June 2019)	SY	4,027	$ 0.50	$2,013.50		$0.00	4,027	$2,013.50	4,027	$2,013.50	100.00%
81	Restore Electrical Trenches	LF	1	$ 1,300.00	$1,300.00	1	$1,300.00		$0.00	1	$1,300.00	100.00%
82	Street Sign w/ Stop Sign	SY	2	$ 410.00	$820.00	2	$820.00		$0.00	2	$820.00	100.00%
83	Type III Barricades w/ Road Closed Sign	CY	2	$ 550.00	$1,100.00	2	$1,100.00		$0.00	2	$1,100.00	100.00%
84	Gravel Construction Entrance	SY	2	$ 670.00	$1,340.00	2	$1,340.00		$0.00	2	$1,340.00	100.00%
85	Silt Fence	SY	1,850	$ 1.60	$2,960.00	3,700	$5,920.00		$0.00	3,700	$5,920.00	200.00%
86	Erosion Matting	SY	6,690	$ 1.30	$8,697.00	6,715	$8,729.50		$0.00	6,715	$8,729.50	100.37%
87	Stone Ditch Check	LS	28	$ 200.00	$5,600.00	28	$5,600.00		$0.00	28	$5,600.00	100.00%
88	6 Topsoil, Fertilizer, Seed, & Mulch	EA	58,500	$ 1.10	$64,350.00	58,500	$64,350.00		$0.00	58,500	$64,350.00	100.00%
	Original Contract TOTAL				**$1,537,466.90**		**$1,498,856.35**		**$64,298.90**		**$1,563,155.25**	
Change Orders/Additions												
CO#1 - PARK GRADING & SANITARY SEWER EXTENSION												
89	Mobilization	LS	1	$ 1,500.00	$1,500.00	1	$1,500.00		$0.00	1	$1,500.00	100.00%
90	Unclassified Excavation	CY	25,600	$ 3.00	$76,800.00	25,600	$76,800.00		$0.00	25,600	$76,800.00	100.00%
91	Clay Liner	LS	1	$ 6,200.00	$6,200.00	1	$6,200.00		$0.00	1	$6,200.00	100.00%
92	Topsoil Strip and Stockpile	CY	9,500	$ 2.20	$20,900.00	9,500	$20,900.00		$0.00	9,500	$20,900.00	100.00%
93	Clear and Grub	LS	1	$ 4,100.00	$4,100.00	1	$4,100.00		$0.00	1	$4,100.00	100.00%
94	8' Sanitary Sewer	LF	967	$ 40.00	$38,680.00	967	$38,680.00		$0.00	967	$38,680.00	100.00%
95	Sanitary Sewer Trench Compaction	LF	967	$ 5.00	$4,835.00	967	$4,835.00		$0.00	967	$4,835.00	100.00%
96	Standard Sanitary Sewer Manhole	EA	3	$ 4,500.00	$13,500.00	3	$13,500.00		$0.00	3	$13,500.00	100.00%
97	Televise Sanitary Sewer	LF	967	$ 2.30	$2,224.10	967	$2,224.10		$0.00	967	$2,224.10	100.00%
98	Adjust Casting	EA	3	$ 390.00	$1,170.00	3	$1,170.00		$0.00	3	$1,170.00	100.00%
99	Gravel Construction Entrance	EA	1	$ 660.00	$660.00	1	$660.00		$0.00	1	$660.00	100.00%
100	Silt Fence	LF	400	$ 1.80	$720.00	400	$720.00		$0.00	400	$720.00	100.00%
101	Erosion Mat - Class II, Type B	SY	4,140	$ 2.30	$9,522.00	4,140	$9,522.00		$0.00	4,140	$9,522.00	100.00%
102	Erosion Mat - Class I, Type A	SY	5,800	$ 1.60	$9,280.00	5,800	$9,280.00		$0.00	5,800	$9,280.00	100.00%
103	Stone Ditch Check	EA	4	$ 560.00	$2,240.00	4	$2,240.00		$0.00	4	$2,240.00	100.00%
104	Riprap - Medium	TON	190	$ 37.00	$7,030.00	190	$7,030.00		$0.00	190	$7,030.00	100.00%
105	Riprap Heavy	TON	820	$ 37.00	$30,340.00	820	$30,340.00		$0.00	820	$30,340.00	100.00%
106	6 Topsoil, Fertilizer, Seed & Mulch	SY	25,000	$ 1.20	$30,000.00	25,000	$30,000.00	6,000	$7,200.00	31,000	$37,200.00	124.00%
107	4 Topsoil & Prairie Seed - Infiltration Basins	SY	1,200	$ 1.60	$1,920.00		$0.00	1,200	$1,920.00	1,200	$1,920.00	100.00%
108	TRM NAC C350	SY	190	$ 31.00	$5,890.00	190	$5,890.00		$0.00	190	$5,890.00	100.00%
109	Provide and Till Compost	CY	100	$ 60.00	$6,000.00	100	$6,000.00		$0.00	100	$6,000.00	100.00%
110	Infiltration Seed & Mat	SY	1,240	$ 2.40	$2,976.00		$0.00	1,240	$2,976.00	1,240	$2,976.00	100.00%
CO#2 - REGRADE LOTS 22-26												
111	Unclassified Excavation	CY	4,200	$ 3.20	$13,440.00	4,200	$13,440.00		$0.00	4,200	$13,440.00	100.00%
112	Topsoil Strip and Stockpile	CY	2,850	$ 2.00	$5,700.00	2,850	$5,700.00		$0.00	2,850	$5,700.00	100.00%
CO#3 - STORM SEWER - BEAR TREE PARK PONDS												
113	12" RCP Storm Sewer	LF	56	$ 35.75	$2,002.00	56	$2,002.00		$0.00	56	$2,002.00	100.00%
114	15' RCP Storm Sewer	LF	84	$ 41.25	$3,465.00	84	$3,465.00		$0.00	84	$3,465.00	100.00%
115	12' Apron Endwall	EA	4	$ 1,800.00	$7,200.00	4	$7,200.00		$0.00	4	$7,200.00	100.00%
116	15' Apron Endwall	EA	6	$ 1,900.00	$11,400.00	6	$11,400.00		$0.00	6	$11,400.00	100.00%
	Subtotal Change Orders/Additions:				**$319,694.10**		**$314,798.10**		**$12,096.00**		**$326,894.10**	
	TOTAL				**$1,857 161.00**		**$1,813,654.45**		**$76,394.90**		**$1,890,049.35**	

Windsor

Growing Forward

Dedication of Public Improvements

The undersigned hereby dedicates the below listed public improvements to the Village of Windsor, and represents in their individual capacity they possess the legal authority to do so. The undersigned further acknowledges no dedication is effective until accepted by resolution of the Windsor Village Board.

Property Owner / Petitioner

Bear Tree Farms, Inc.

Name

370 Campbell Hill Court

Address

DeForest, WI 53532

City, State, Zip Code

608-846-2800

Phone (Residence / Business / Cell)

Dbzig64@gmail.com

Email

Signature

If signing on behalf of a corporation, limited liability company or partnership indicate your full name and title:

Dwight E. Ziegler

Name

President

Title

Acceptance of Public Improvements and Reduction in Letter of Credit will require submittal of:
(1) Computation of Quantities Completed, and (2) As-Built Plan Set for the Development Phase.

Bear Tree Farms Phase 2	VARIOUS	7/28/20
Plat Name & Phase	*Date Inspected by Village or County*	*Date Accepted*

x Right-of-Way (ALL ITEMS BELOW) 2022
- x Street
- x Sanitary Sewer Main
- x Water Main
- x Storm Sewer Main
- x Culvert and Ditch
- x Sidewalk or Path
- x Trees
- x Lighting
- x Signage

x Park, Conservancy, and/or Open Space (Site Stabilization – Grade, Seed, & Matte)
- ☐ Park
- x Conservancy 2022
- x Open Space 2022

x Stormwater System (per Stormwater Management Agreement) (DANE COUNTY LAND & WATER RESOURCES APPROVAL REQUIRED)
- x Swales
- x Culverts and Storm Sewers
- x Wet Detention Basins
- x Infiltration Basins
- x Vegetative Buffers
- ☐ Other: _____

Gerald D. Roth
Village Engineer
7/28/20

From:	Gerald D. Groth
To:	Amy Anderson Schweppe
Cc:	Jamie Rybarczyk; Davis Clark
Subject:	RE. Bear Tree Farms Letter of Credit
Date:	Tuesday, July 28, 2020 3 16 02 PM
Attachments:	image001.jpg image002.png Bear Tree Farms Phase 2 Dedication of Public Improvements.pdf

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Amy

I talked with Davis about Bear Tree Farms LOC and we are fine with accepting the LOC reduction to $75,000.

I attach a signed Dedication of Public Improvements form and initialed each item, except for the Storm Water System that Dane County needs to sign off on. Inspection dates actually span from last fall to a few weeks ago

Let me know if the above makes sense and/or if you want a separate letter from me addressing the above?

Thanks.

Jerry

Gerald D. Groth, P.E.
Madison Office Regional Manager

Description: Baxter & Woodman Logo

Main Phone 608 277 1230, Ext 3264
Desk Phone (direct) 815-444-3264
Mobile Phone 608 347 1542
email ggroth@baxterwoodman com
www.baxterwoodman.com
2005 W Beltline Hwy, Suite 201
Madison, WI 53713

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From: Amy Anderson Schweppe <amy@windsorwi gov>
Sent: Tuesday, July 21, 2020 2 56 PM
To: Gerald D Groth <ggroth@baxterwoodman com>
Cc: Jamie Rybarczyk <Jamie@windsorwi gov>, Davis Clark <davis@windsorwi gov>
Subject: FW Bear Tree Farms Letter of Credit

Hi Jerry,

Please review the request for a Letter of Credit reduction for Bear Tree Farms. I have attached the current Letter of Credit for both Windsor and Dane County. Mike Calkins is requesting reducing the

Village portion from $350,000 to $75,000. I would assume there would need to be some coordination with Dane County to reduce their Letter of Credit as well. Please let me know if I need to share anything with Dane County

We are planning to address this request at the September 3rd, 2020 Village Board meeting. I will need your Staff Report by August 21, 2020.

Please reach out to me if you need anything.

Thanks ☺

Amy Anderson Schweppe
Director of Planning | Zoning Administrator
Village of Windsor
4084 Mueller Road, DeForest, WI 53532
(608) 888-0066

From: Mike Calkins <mcalkins@snyder-associates.com>
Sent: Monday, July 20, 2020 3 05 PM
To: Amy Anderson Schweppe <amy@windsorwi.gov>; Dwight Ziegler <dbzig64@gmail.com>; Rich Arneson <rarneson@wisconsinriverbank.com>
Cc: Jamie Rybarczyk <Jamie@windsorwi.gov>, Jerry Groth (ggroth@baxterwoodman.com) <ggroth@baxterwoodman.com>
Subject: RE: Bear Tree Farms Letter of Credit

Amy,

The documents requesting public improvements acceptance and a reduction to the Phase 2 LOC can be downloaded from the link below. Please let me know if you need anything else to process the requests. Thank you.

1 **Doc_LOC_Reduction_Request_2020-07-20.zip** (12 34 MB) in FileDrop
https://snyder-associates.filegenius.com/downloadPublic/omzu615rwkrqkln
This link will expire on **08/04/20 at 03:01 pm CDT**

Mike Calkins, PE
Business Unit Leader
SNYDER & ASSOCIATES, INC.
P.608-838-0444 ext 223, C:608-209-5177

From: Amy Anderson Schweppe <amy@windsorwi.gov>
Sent: Friday, July 17, 2020 10 41 AM
To: Dwight Ziegler <dbzig64@gmail.com>, Rich Arneson <rarneson@wisconsinriverbank.com>, Mike

Calkins <mcalkins@snyder-associates.com>
Cc: Jamie Rybarczyk <Jamie@windsorwi.gov>, Jerry Groth (ggroth@baxterwoodman.com) <ggroth@baxterwoodman.com>; Amy Anderson Schweppe <amy@windsorwi.gov>
Subject: Bear Tree Farms Letter of Credit

Dear Dwight Ziegler – Bear Tree Farms

The Village of Windsor has a Letter of Credit for Bear Tree Farms that expires on September 12, 2020 At this time, the Village of Windsor requests a renewal of the Letter of Credit. If you believe the Letter of Credit may be reduced or released, the request to reduce or release the Letter of Credit will require action by the Village Board

If you are requesting to reduce the Letter of Credit, you will need to provide the following·

- *A cover letter requesting to reduce the Letter of Credit*
- *A spreadsheet computation of the quantities and estimate of the remainder of work, plus 10% contingency guarantee*
- *Completion of the Dedication of Public Improvements form*

If you are requesting a release in the Letter of Credit, you will need to provide the following

- *A cover letter requesting release of the Letter of Credit*
- *A spreadsheet computation of the quantities and estimate of the completion of work*
- *As-Built Survey for the public improvements*
- *Completion of the Dedication of Public Improvements form*

In order to schedule Village Board action, Village Staff will need a complete submittal 30 days before a regularly scheduled Village Board meeting The Village Board typically meets on the 1st and 3rd Thursday of the month

Please let me know if I can be of any further assistance,

Amy Anderson Schweppe
Director of Planning | Zoning Administrator
Village of Windsor
4084 Mueller Road, DeForest, WI 53532
(608) 888-0066

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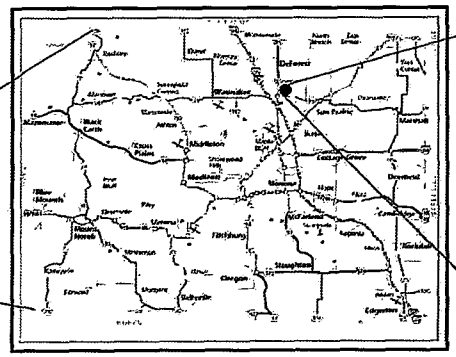
PHASE 2 BEAR TREE FARMS CONSTRUCTION PLANS

VILLAGE OF WINDSOR

SECTION 28, TOWNSHIP 9N, RANGE 10E

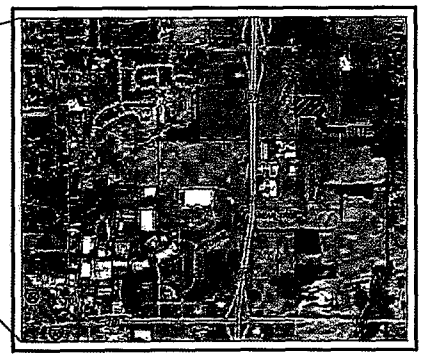
As-Builts
03-19-2020

REGIONAL MAP



DANE COUNTY

DANE COUNTY, WISCONSIN



SITE LOCATION MAP

VILLAGE OF WINDSOR,
DANE COUNTY, WISCONSIN

SHEET #	SHEET TITLE
G 1.0	TITLE SHEET
C 1.0-1.1	NOTES
C 1.2	TYPICAL ROAD SECTIONS
C 1.3	PHASING EXHIBIT
C 1.4	SHEET INDEX
C 1.5	PHASE 2A GRADING
C 1.6	OVERALL GRADING PLAN
C 1.7	EROSION CONTROL PLAN
C 1.8	LOTS 20-25 GRADING PLAN
C 3.0	OVERALL SANITARY SEWER & WATER PLAN
C 3.1	OVERALL STORM SEWER PLAN
C 4.0	WARNER FARM DRIVE - PLAN / PROFILE - PHASE 2A
C 4.1	WARNER FARM DRIVE - PLAN / PROFILE - PHASE 2B
C 5.0 C 5.1	CUBS WAY - PLAN / PROFILE
C 6.0 - C 6.2	PAINTED ARABIAN RUN - PLAN / PROFILE
C 7.0	GOLDEN WHEAT RUN - PLAN / PROFILE - PHASE 2A
C 7.1	GOLDEN WHEAT RUN - PLAN / PROFILE - PHASE 2B
C 10.0-10.1	EROSION CONTROL DETAILS
C 11.0	UTILITY DETAILS - WATER
C 12.0	UTILITY DETAILS - SANITARY SEWER
C 13.0-13.1	UTILITY DETAILS - STORM SEWER
C 14.0	MISC. DETAILS

BENCHMARK #1
PK NAIL IN PAVEMENT ±7' FROM THE END OF THE PAVEMENT ON WARNER FARM DRIVE
ELEVATION = 864.14

BENCHMARK #2
PK NAIL IN PAVEMENT ±50' FROM THE END OF THE PAVEMENT ON GOLDEN WHEAT RUN
ELEVATION = 849.12

CAUTION:
CERTAIN UNDERGROUND UTILITIES HAVE BEEN LOCATED ON THE PLANS. THESE LOCATIONS SHALL NOT BE TAKEN AS CONCLUSIVE. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITES, WHETHER SHOWN ON THE DRAWING OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. FOR EXACT LOCATION CONTACT DIGGERS HOTLINE 1-800-242-8511

WISCONSIN
MICHAEL L. CALKINS
E-27693
Sun Prairie, Wis.
PROFESSIONAL ENGINEER
7/23/18
REV 10/18/18

EROSION CONTROL MATTING NOTES MODIFIED ON 10/18/18 SHEETS C1.0 AND C10.0

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182.0175 (1974) REQUIRES MIN OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

LEGEND	PROPOSED	EXISTING
PROPERTY LINE		
PHASING LINE		
INDEX CONTOUR		
INTERMEDIATE CONTOUR		
WATER MAIN	W	W
SANITARY SEWER		
STORM SEWER		
SANITARY MANHOLE		
STORM MANHOLE		
STORM INLET		
FIRE HYDRANT		

MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZJA | Scale: 1" = 20'
Technician: MW | Date: 07/23/2018 | Field Bk: Pgs

BEAR TREE FARMS - PHASE 2

VILLAGE OF WINDSOR, WI

TITLE SHEET

SNYDER & ASSOCIATES, INC.
5510 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

PROJECT # 118.0177.00

G 1.0

CONSTRUCTION SEQUENCE

1. INSTALL AND MAINTAIN THE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT'S AS DESCRIBED IN THE DANE COUNTY EROSION CONTROL AND STORMWATER MANAGEMENT MANUAL. ADDITIONALLY INSTALL CONSTRUCTION EQUIPMENT PARKING AREAS. STABILIZE BARE AREAS IMMEDIATELY WITH GRAVEL AND TEMPORARY VEGETATION AS CONSTRUCTION TAKES PLACE. THE TEMPORARY ACCESS POINT SHALL BE PLACED IN THE LOCATION SHOWN ON THE GRADING AND EROSION CONTROL PLAN. THE ENTRANCE/EXITS WILL BE INSPECTED DAILY IF THE AGGREGATE WITHIN THE TEMPORARY ACCESS PADS BECOMES COVERED WITH SOIL OR IF SIGNIFICANT QUANTITIES OF SOIL ARE TRACKED ONTO THE EXISTING ROADWAY THEN ADDITIONAL AGGREGATE WILL BE INSTALLED TO ALLOW THE ENTRANCE/EXITS TO FUNCTION PROPERLY.

2. INSTALL EROSION AND SEDIMENT CONTROL BARRIERS (SILT FENCE) IMMEDIATELY DOWNSLOPE OF AREAS TO BE DISTURBED DURING CONSTRUCTION AS SHOWN ON THE APPROVED GRADING PLAN. THE BARRIERS MUST BE INSTALLED PARALLEL TO THE SITE CONTOURS TO THE EXTENT PRACTICABLE WITH THE ENDS EXTENDED UPSLOPE ONE TO TWO FEET TO PREVENT FLANKING OF THE RUNOFF. AT NO TIME FROM THE START OF ROUGH GRADING UNTIL SITE STABILIZATION SHALL AN UNBROKEN SLOPE EXIST BETWEEN DISTURBED AREAS AND THE RECEIVING WATERS. THE DANE COUNTY EROSION CONTROL AND STORMWATER MANAGEMENT MANUAL WILL BE REFERENCED FOR THE PROPER INSTALLATION AND MAINTENANCE OF SILT FENCE AND ALL OTHER EROSION CONTROL MEASURES ON THE SITE.

3. SEDIMENT BASIN SHALL BE CONSTRUCTED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES AND SHALL BE RESTORED AT THE TIME OF SITE STABILIZATION.

4. STRIP TOPSOIL FROM THE AREAS OF THE SITE THAT WILL BE GRADED WITHIN 48 HOURS. ANY AREAS THAT WILL NOT BE IMMEDIATELY GRADED MUST NOT BE STRIPPED OF TOPSOIL UNTIL THE PRECEDING AREAS ARE TOPSOILED, SEEDED AND MULCHED. PLACE SOIL STOCKPILES AT LEAST 25 FEET AWAY FROM ANY DOWNSLOPE STREET DRIVEWAY OR DITCH. ALL TOPSOIL PILES WILL HAVE SILT FENCE PLACED ON THEIR DOWNSLOPE SIDES. TOPSOIL PILES WILL BE SEEDED WITH ANNUAL RYE IF THEY ARE IN PLACE FOR MORE THAN 7 DAYS. ANY AREAS LEFT INACTIVE FOR MORE THAN 7 DAYS WILL BE STABILIZED IMMEDIATELY WITH SEED AND MULCH.

5. GRADING WILL BE PHASED TO THE EXTENT PRACTICABLE TO LIMIT THE AMOUNT OF THE EXPOSED SOIL AT ANY ONE TIME AND TO PROVIDE A BUFFER BETWEEN THE GRADED AREAS AND THE RECEIVING WATERS. THE INTENT OF THESE GRADING RESTRICTIONS IS TO PROVIDE AN UNDISTURBED BUFFER AREA ALLOWING ADDITIONAL EROSION AND SEDIMENTATION PROTECTION DURING CONSTRUCTION.

6. TOPSOIL, SEED AND MULCH ALL AREAS WHICH ARE AT FINAL GRADE AND WHICH WILL NOT BE DISTURBED DURING SUBSEQUENT PHASES OF CONSTRUCTION. ANY AREAS LEFT INACTIVE FOR MORE THAN 7 DAYS MUST BE STABILIZED IMMEDIATELY

7. INSTALL SANITARY SEWER, WATER MAIN, & STORM SEWER.

8. COMPLETE FINAL GRADING FOR ROADWAY AND STABILIZE WITH GRAVEL.

9. COMPLETE FINAL GRADE OF THE SITE.

10. UTILITY TRENCHES SHALL BE FILLED WITH SUITABLE BACKFILL MATERIAL AND COMPACTED AS NEEDED. TOPSOIL SHALL BE REPLACED, FERTILIZED, SEEDED AND PROTECTED AS CALLED FOR BELOW IN ITEMS 11 AND 12. UTILITY CONSTRUCTION SHALL BE COORDINATED WITH OTHER GRADING ACTIVITIES SO THAT RESTORATION CAN BE COMPLETED AS SOON AS POSSIBLE AFTER CONSTRUCTION.

11. WITHIN 7 DAYS OF THE COMPLETION OF FINAL GRADING, A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE REPLACED ON ALL DISTURBED SURFACES THAT ARE TO BE REVEGETATED. TOPSOIL SHALL BE UNIFORMLY PLACED, GRADED SMOOTH AND SCARIFIED FOR SEEDING.

12. FERTILIZE ALL AREAS TO BE SEEDED OR SODDED WITH 500LBS. PER ACRE OF 16-8-8 (MINIMUM). INCORPORATE THE FERTILIZER INTO THE SOIL BY SCARIFYING AS INDICATED ABOVE IN ITEM 11. SEED ALL DISTURBED AREAS WITH THE FOLLOWING SEEDING MIXTURE:

30.50 LBS/ACRE OF KENTUCKY BLUEGRASS
17.50 LBS/ACRE OF RED FESCUE
17.50 LBS/ACRE OF HARD FESCUE
22.00 LBS/ACRE OF PERENNIAL RYE GRASS

THE OWNER RESERVES THE RIGHT TO REVISE THE SEEDING MIXTURE SUBJECT TO APPROVAL BY THE VILLAGE OF DEFOREST.

SOD MAY BE SUBSTITUTED FOR SEEDING ON ALL AREAS TO BE SEEDED AND IS RECOMMENDED FOR ALL AREAS WITH SLOPES OF 5:1 OR STEEPER.

MULCH ALL SEEDED AREAS WITH 1.5 TONS PER ACRE OF CLEAN STRAW. STRAW SHALL BE ANCHORED IN PLACE WITH SUITABLE EQUIPMENT OR STAKING WITH TWINE.

<u>FOR AREAS ON WHICH GRADING IS COMPLETED AFTER SEPTEMBER 30.</u> TEMPORARY SEED SHALL INCLUDE A SOIL STABILIZING POLYMER AND COVER CROP OF WINTER RYE (AT A RATE OF 75#/ACRE) AND MUST BE APPLIED AS SOON AS THESE AREAS REACH THEIR FINAL GRADE. ADDITIONAL EROSION CONTROL BARRIERS MAY BE NEEDED DOWNSLOPE OF THESE AREAS UNTIL FINAL SEEDING OR SODDING IS COMPLETED IN SPRING (BY JUNE 1). ANY AREAS WITH SLOPES GREATER THAN 6:1 MUST BE SEEDED AND MULCHED BUT NOT TOPSOILED. AREAS WITH SLOPED LESS THAN 6:1 MUST BE TOPSOILED, SEEDED AND MULCHED. ALL AREAS MUST BE TOPSOILED, SEEDED AND MULCHED AS DESCRIBED ABOVE IN THE FOLLOWING SPRING.

13. WHENEVER POSSIBLE, PRESERVE EXISTING TREES, SHRUBS, AND OTHER VEGETATION. TO PREVENT ROOT DAMAGE, DO NOT GRADE, PLACE SOIL PILES, OR PARK VEHICLES NEAR TREES MARKED FOR PRESERVATION.

14. <u>SILT FENCE MAINTENANCE;</u> EROSION CONTROL BARRIERS (SILT FENCE) MUST BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OF 0.5-INCHES OR MORE, AND DAILY DURING PERIODS OF PROLONGED RAINFALL. REPAIRS OR REPLACEMENT SHALL BE MADE IMMEDIATELY SEDIMENT DEPOSITS ON THE UPSLOPE SIDE ON THE SILT FENCES SHALL BE REMOVED WHEN THE DEPOSITS REACH HALF THE HEIGHT OF THE SILT FENCE.

15. <u>GRAVEL TRACKING PAD MAINTENANCE;</u> ADDITIONAL STONE IS REQUIRED IF EXISTING STONE BECOMES BURIED OR IF SEDIMENT IS NOT BEING REMOVED EFFECTIVELY FROM TIRES. SEDIMENT THAT IS TRACKED ONTO THE ROADWAY MUST BE REMOVED IMMEDIATELY TRACKING PADS MAY REQUIRE PERIODIC CLEANING TO MAINTAIN THE EFFECTIVENESS OF THE PRACTICE, WHICH MAY INCLUDE THE REMOVAL AND RE-INSTALLATION OF THE STONE.

EROSION CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS, INCLUDING WISDNR WPDES DISCHARGE PERMIT (IF APPLICABLE), COUNTY AND LOCAL EROSION CONTROL PERMIT. CONTRACTOR IS RESPONSIBLE FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBING ACTIVITIES.

3. ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARD, FOUND AT: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html OR THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK IF A TECHNICAL STANDARD IS NOT AVAILABLE.

4. ALL EROSION CONTROL FACILITIES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH ALL APPLICABLE PERMITS ISSUED FOR THE PROJECT.

5. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD. REPAIRS SHALL BE MADE IMMEDIATELY TO EROSION CONTROL PRACTICES AS NECESSARY

6. TEMPORARY STOCKPILES SHALL BE STABILIZED IF NOT REMOVED IN 10 DAYS. PERIMETER CONTROL ON THE DOWNHILL SIDE SHALL BE IN PLACE AT ALL TIMES (SILT FENCE OR APPROVED EQUAL).

7 TEMPORARY SEED MIXTURE SHALL CONFORM TO 630.2.1.5.1.4 OF THE WISDOT STANDARD SPECIFICATIONS USE WINTER WHEAT OR RYE FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 1.

8. DISTURBED AREAS THAT CANNOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION BY SEEDING AND MULCHING DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION, SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050.

9. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASINS TO MAINTAIN A THREE FOOT DEPTH OF TREATMENT, MEASURED BELOW THE NORMAL WATER ELEVATION. SEDIMENT WILL BE REMOVED FROM THE DIVERSION DITCHES WHEN IT REACHES HALF THE HEIGHT OF THE DITCH. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE AND DITCH CHECKS WHEN IT REACHES HALF THE HEIGHT OF THE FENCE/BALE THE SILT FENCE AND DITCH CHECKS SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.

10. ALL WATER FROM CONSTRUCTION DEWATERING SHALL BE TREATED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 PRIOR TO DISCHARGE TO WATERS OF THE STATE, WETLANDS, OR OFFSITE.

11. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING ON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL TEMPORARY EROSION CONTROL AND/OR SEDIMENT TRAPS IN VARIOUS LOCATIONS THROUGHOUT THE PROJECT TEMPORARY SEDIMENT TRAPS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1063.

12. TRACKED MATERIAL TO ADJACENT STREETS SHALL BE COLLECTED AT THE END OF EACH WORKING DAY OR AS REQUIRED BY THE LOCAL MUNICIPALITY

13. DUST CONTROL SHALL BE PROVIDED AS NECESSARY IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1068.

14. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EROSION CONTROL FACILITIES AND MEASURES NECESSARY TO CONTROL EROSION AND SEDIMENTATION AT THE PROJECT SITE. THESE FACILITIES AND MEASURES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS AND THEIR ABSENCE ON THE DRAWINGS DOES NOT ALLEVIATE THE CONTRACTOR FROM PROVIDING THEM. ANY MEASURES AND FACILITIES SHOWN ON THE DRAWINGS ARE THE MINIMUM ACTIONS REQUIRED.

15. ERODED MATERIAL THAT HAS LEFT THE CONSTRUCTION SITE SHALL BE COLLECTED AND RETURNED TO THE SITE BY THE CONTRACTOR.

16. AFTER FINAL VEGETATION IS ESTABLISHED, REMOVE ALL EROSION CONTROL FACILITIES. RESTORE AREAS DISTURBED BY THE REMOVALS.

17. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.

18. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE. CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARDS.

19. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.

20. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES USE CLASS I, TYPE A EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT FACILITIES DEVELOPMENT MANUAL AND INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARDS.

21. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS, PROVIDE CLASS II, TYPE B EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT FACILITIES DEVELOPMENT MANUAL, INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARDS.

22. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE COVERED WITH A BIO-DEGRADABLE EROSION MAT INCLUDING BIO-DEGRADABLE STAPLES.

23. ALL BIO-DEGRADABLE EROSION MAT SHALL BE CURLEX NET FREE OR APPROVED EQUAL.

24. WATERING OF NEW SEEDING SHALL BE OF A DURATION AND FREQUENCY ADEQUATE TO ENSURE PROPER ESTABLISHMENT OF NEW SEEDING.

25. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.

GENERAL CONDITIONS

1. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY TWO WORKING DAYS (48 HOURS) PRIOR TO THE START OF CONSTRUCTION.

2. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

3. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

4. THE BIDDER WILL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES AND SHALL STATE SUCH QUANTITIES IN HIS PROPOSAL. HE SHALL BASE HIS BID ON HIS OWN ESTIMATE OF THE WORK REQUIRED AND SHALL NOT RELY ON THE ENGINEER'S ESTIMATE.

5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT IS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.

6. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS.

7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGER'S HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.

9. CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES.

10. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF THE RESTORATION IS CONSIDERED INCIDENTAL, AND SHOULD BE INCLUDED IN THE BID PRICES.

11. ACCESS TO THE CONSTRUCTION SITE SHALL BE LIMITED TO THE STONE ENTRANCE PADS SHOWN ON THE PLANS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTATION. ANY MONUMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

13. CONTRACTOR IS RESPONSIBLE FOR FACILITATING ESSENTIAL SERVICES SUCH AS EMERGENCY ACCESS, GARBAGE, MAIL, ETC. TEMPORARY PROVISIONS SHALL BE PROVIDED AS NECESSARY

14. CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED.

15. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SANITARY SEWER, WATER MAIN AND STORM SEWER PRIOR TO CONSTRUCTION. CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THE EXISTING UTILITIES AND ANY REPAIRS NEEDED AS A RESULT OF THE DAMAGE SHALL BE AT THE EXPENSE OF THE CONTRACTOR REGARDLESS OF THE LOCATION MARKED IN THE FIELD OR SHOWN ON THE PLANS.

PAVING

1 THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.

2. PAVING SHALL CONSIST OF FINE GRADING PAVEMENT AREAS, INSTALLATION OF CRUSHED STONE BASE, CONCRETE AND/OR BITUMINOUS PAVEMENT, PAVEMENT MARKING, AND CLEANUP. ALL MATERIALS SHALL BE PROVIDED BY THE CONTRACTOR.

3. AGGREGATES USED IN THE CRUSHED AGGREGATE BASE SHALL BE (1.25-INCH) DENSE GRADED BASE IN ACCORDANCE WITH SUBSECTION 305.2.2 OF THE STANDARD SPECIFICATIONS.

4. THE CONSTRUCTED BASE COURSE SHALL PASS A PROOF ROLL PRIOR TO PLACEMENT OF ASPHALT PAVING.

5. GEO-TEXTILE FABRIC SHALL BE PLACED FOLLOWING A PROOF ROLL IF CONDITIONS WARRANT AS DETERMINED BY THE PUBLIC SERVICE DIRECTOR. GEO-TEXTILE SHALL BE MIRAFI 600X OR APPROVED EQUAL.

6. HOT MIX ASPHALT PAVEMENT (HMA) SHALL BE LT 58-28 S IN ACCORDANCE WITH SECTION 460 OF THE STANDARD SPECIFICATIONS.

7. ASPHALTIC MATERIALS SHALL BE PERFORMANCE GRADED (PG) BINDERS IN ACCORDANCE WITH SECTION 455 OF THE STANDARD SPECIFICATIONS.

8. AGGREGATES USED IN THE HMA SHALL BE IN ACCORDANCE WITH SUBSECTION 460.2.2.3 OF THE STANDARD SPECIFICATIONS. THE NOMINAL AGGREGATE SIZE FOR THE UPPER LAYER PAVEMENT FOR THE PARKING LOT SHALL BE (9.5MM), AND THE LOWER LAYER PAVEMENT FOR THE PARKING LOT AND BOTH UPPER AND LOWER LAYERS OF TIMOTHY COURT SHALL BE (12.5MM).

9. TACK COAT SHALL BE IN ACCORDANCE WITH SUBSECTION 455.2.5 OF THE STANDARD SPECIFICATIONS. THE RATE OF APPLICATION SHALL BE 0.025 GAL/SY.

10. CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL BE GRADE A (OR GRADE A2 IF PLACING BY SLIP-FORMED PROCESS) AIR ENTRAINED IN ACCORDANCE WITH SECTION 501 FOR THE STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI.

11. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF THE STANDARD SPECIFICATIONS:
SECTION 415 FOR CONCRETE PAVEMENT
SECTION 601 FOR CONCRETE CURB AND GUTTER
SECTION 602 FOR CONCRETE SIDEWALKS.

12. ALL FINISHED CONCRETE SHALL BE COVERED WITH A LIQUID CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE 2, IN ACCORDANCE WITH SECTION 415 OF THE STANDARD SPECIFICATIONS.

13. PAVEMENT MARKINGS SHALL BE PAINT IN ACCORDANCE WITH SECTION 646 OF THE STANDARD SPECIFICATIONS. THE FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:
PARKING STALLS: WHITE
PEDESTRIAN CROSSWALKS: WHITE
LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN OPPOSITE DIRECTIONS: YELLOW
LANE STRIPING WHERE SEPARATING TRAFFIC IS MOVING IN SAME DIRECTIONS: WHITE
ADA SYMBOLS: BLUE OR PER LOCAL CODE
FIRE LANES: PER LOCAL CODE
EXTERIOR SIDEWALK CURBED, LIGHT POLE BASES, AND GUARD POSTS: YELLOW

MARK	REVISION	DATE	BY
1	EROSION CONTROL MATTING NOTE	10/19/16	MJC

Engineer: MJC | Checked By: ZLR | Scale: 1 NONE
Technician: KAW | Date: 07/23/2019 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

NOTES

VILLAGE OF WINDSOR, WI

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PROJECT # 116.0177.30

C10

GRADING

1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LA TEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING.

3. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE SITE HAS BEEN STABILIZED WITH VEGETATION AND THE APPROVAL OF THE GOVERNING AGENCY

4. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING, CUT AND FILL CALCULATIONS AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.

5. GRADING SHALL CONSIST OF CLEARING AND GRUBBING EXISTING VEGETATION, STRIPPING TOPSOIL, REMOVAL OF EXISTING PAVEMENT OR FOUNDATIONS, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE AND ON-SITE EARTHWORK BALANCE, GRADING THE PROPOSED BUILDING PADS AND PAVEMENT AREAS, SCARIFYING AND FINAL COMPACTION OF THE PAVEMENT SUBGRADE, AND PLACEMENT OF TOPSOIL.

6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE ENGINEER BEFORE ANY MATERIAL IS PLACED.

7. ALL SPOT GRADES SHOWN ON PLAN ARE EDGE OF PAVEMENT OR FINISHED GROUND UNLESS OTHERWISE NOTED.

URBAN FORESTRY NOTES

1. TREES MUST COMPLY TO ANSI Z60.1-1996 "AMERICAN STANDARD NURSERY STOCK" OR MOST RECENT VERSION THEROF.
2. TREES MUST BE A MINIMUM 2" CALIPER.
3. ALL TREES AND LANDSCAPING SHALL BE UNDER WARRANTY FOR ONE FULL GROWING SEASON.
4. THE MINIMUM DISTANCE BETWEEN TREE TRUNKS SHALL BE 30' FOR SMALL TREES AND 45' TO 50' FOR MEDIUM OR LARGE TREES.
5. THE MINIMUM DISTANCE FROM THE FRONT OF A STREET SIGN TO THE TREE TRUNK IS 25' AND THE MINIMUM DISTANCE FROM THE BACK OF THE STREET SIGN IS 10'
6. THE MINIMUM DISTANCE FROM A CURB CUT, CARRIAGE WALK, OR DRIVEWAY IS 10'
7. THE MINIMUM DISTANCE FROM A FIRE HYDRANT IS 10'
8. THE MINIMUM DISTANCE FROM ANY WATER MAIN INCLUDING SERVICES IS 10'
9. IF EITHER INTERSECTING STREET IS CONSIDERED MAJOR OR ARTERIAL, THE MINIMUM DISTANCE FROM THE RIGHT-OF-WAY CORNER IS 50'
10. THE MINIMUM DISTANCE FROM THE RIGHT-OF-WAY CORNER FOR ALL OTHER STREET CLASSIFICATIONS IS 25'
11. NO MORE THAN 20% OF TREES SHALL BE FROM ONE FAMILY.
12. NO MORE THAN 10% OF TREES SHALL BE FROM ONE GENUS.
13. NO MORE THAN 5% OF ANY SINGLE SPECIES, INCLUDING CULTIVARS AND VARIETIES.
14. ANY SPECIES SHALL BE TREE FORM. SHRUB FORM ARE NOT ALLOWED.
15. ALL BURLAP AND WIRE CAGES SHALL BE REMOVED FROM ROOTS PRIOR TO PLANTING.
16. APPLY STARTER FERTILIZER AT THE RATE RECOMMENDED BY THE NURSERY
17. SATURATE SOIL WITH WATER WHEN PIT IS HALF FULL OF TOPSOIL AND AGAIN WHEN FULL.
18. DO NOT PRUNE TREES. INJURED OR DEAD BRANCHES MAY BE REMOVED ACCORDING TO STANDARD HORTICULTURAL PRACTICES. DO NOT CUT LEADER.
19. PROVIDE 4" THICKNESS OF ORGANIC MULCH AROUND ALL TREES. MULCH SHOULD NOT REST AGAINST THE TREE TRUNK. LEAVE ½ AROUND THE TRUNK FREE OF MULCH.
20. PLANTING DEPTH OF TREE SHALL BE SUCH THAT ROOT FLAIR IS VISIBLE JUST ABOVE GRADE.

STREET SIGNS

1. ALL STREET SIGNS MUST MEET ALL MUTCD STANDARDS.
2. ALL STREET SIGNS SHALL MEET THE MINIMUM RETRO REFLECTIVITY GUIDELINES ACCORDING TO THE MUTCD.
3. STREET SIGN POSTS SHALL BE 2" SQUARE GALVANIZED METAL WITH BREAK-AWAY (V-LOCK BREAKAWAYS ACCEPTABLE).
4. STREET NAME SIGNS SHALL BE WHITE LETTERING ON GREEN BACKGROUND.
5. ALL SIGNS SHALL BE APPROVED BY THE DIRECTOR OF PUBLIC SERVICES.

SANITARY SEWER & WATER MAIN NOTES

1 THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE STARY OF CONSTRUCTION.

2. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION SPS 382-384, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.

3. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.

4. ALL CONNECTIONS TO EXISTING PIPES SHALL BE MADE AT A BELL OR IF APPROVED WITH A RIDGED REPAIR SLEEVE OR OTHER APPROVED CONNECTION. PIPE TO MANHOLE CONNECTIONS SHALL BE CORED AND CONNECTED WITH A FLEXIBLE WATERTIGHT PIPE TO MANHOLE CONNECTION (KOR-N-SEAL, OR APPROVED EQUAL).

5. PROPOSED SANITARY SEWER, WATER MAIN, AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT POINT TEN (10) FEET BEYOND THE PROPERTY LINE OR PATH. STORM SEWER CONNECTING TO EXTERIOR DOWN SPOUTS SHALL BE PER DETAILS ON THE ARCHITECTURAL PLANS. THE EXACT LOCATION OF ALL DOWN SPOUTS SHALL BE PER THE ARCHITECTURAL PLANS.

6. MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS:
SANITARY SEWER SHALL BE PVC IN ACCORDANCE WITH ASTM 3034, SDR-35 AND BEDDED WITH CLASS C BEDDING.
BEDDING: ⅜" TO 1 ½" CLEAR STONE
COVER: ⅜" TO 1 ½" CLEAR STONE

TRACER WIRE SHALL BE INSTALLED WITH ALL NEW LATERALS. LEAVE A SPOOL OF WIRE AT THE TOP OF THE MARKER BOARD LONG ENOUGH TO REACH THE BUILDING CLEANOUT.

TRACER WIRE BOXES SHALL BE PROVIDED AND LOCATED 3.5' BEHIND THE BACK OF CURB. "SEWER" SHALL BE STAMPED IN THE LID OF THE ACCESS BOX.
TRACER WIRE SHALL EXTEND TO THE RIGHT OF WAY

ALL LATERAL ENDS SHALL BE MARKED WITH A TREATED 4" X 4" POST AND THE TOP OF THE POST SHALL BE PAINTED GREEN. LATERAL END SHALL BE CAPPED WITH A GLUED ON CAP.

ALL SANITARY MANHOLE CASTINGS SHALL BE NEENAH R-1550 WITH TYPE B NON-ROCKING LIDS AND CONCEALED PICK HOLES.

ALL MANHOLE JOINTS SHALL BE WRAPPED WITH GATOR WRAP OR APPROVED EQUAL.

EXCAVATED MATERIAL FROM THE TRENCH NOT SUITABLE FOR BACKFILL AS DEEMED BY THE UTILITY OR THEIR ENGINEER SHALL BE HAULED OFF-SITE AND SELECT TRENCH BACKFILL WILL BE REQUIRED.

ALL SANITARY SEWER MAINS WILL BE REQUIRED TO BE TELEVISED, 2 COPIES OF THE TELEVISING REPORT AND DVD SHALL BE PROVIDED TO THE UTILITY OR THEIR ENGINEER. MANDRELL TESTING IS ALSO REQUIRED ON ALL SANITARY SEWER. LOW PRESSURE AIR TESTS ARE REQUIRED ON ALL SANITARY SEWER CONSTRUCTION.

ALL MANHOLES INSTALLED OUTSIDE OF THE RIGHT-OF WAY SHALL HAVE A RIM ELEVATION A MINIMUM OF 1' ABOVE THE PROPOSED GROUND AND BE MARKED WITH A TREATED 4" X 4" POST AND HAVE A SIGN WITH THE WORDS "SANITARY SEWER" ATTACHED TO THE POST

LATERAL DEPTH AT THE RIGHT-OF-WAY SHALL NOT EXCEED 12' WITHOUT PROPER JUSTIFICATION. VARIENCES FROM THIS MAP BE APPROVED BY THE UTILITY OR THEIR ENGINEER.

ADJUSTMENT RINGS SHALL HAVE A MINIMUM HEIGHT OF 4" AND A MAXIMUM HEIGHT OF 12" ADJUSTMENT RINGS SHALL BE POLYETHYLENE PLASTIC UNLESS OTHERWISE APPROVED.
MAINTAIN A MINIMUM SEPARATION OF 8' OF HORIZONTAL SEPARATION BETWEEN WATER MAIN AND SANITARY SEWER.

SANITARY MANHOLES SHALL BE CONSTRUCTED WITH STEPS.

7 MATERIALS FOR WATER SERVICE SHALL BE AS FOLLOWS:
WATER MAIN SHALL BE DUCTILE IRON AND BEDDED WITH TYPE 3 EMBEDMENT (SAND OR SAND SCREENINGS)

WATER MAIN SHALL BE INSTALLED WITH TRACER WIRE. TRACER WIRE SHALL SURFACE AT ALL HYDRANTS IN A CONDUIT OR A TRACER WIRE ACCESS BOX.

ALL MAINS SHALL BE A MINIMUM OF 8" IN DIAMETER WITH THE EXCEPTION OF HYDRANT LEADS THAT SHALL BE 6"

WATER MAINS SHALL HAVE A MINIMUM COVER OF 7'

ALL WATER MAINS ARE REQUIRED TO BE LOOPED.

MECHANICAL JOINT FITTINGS WITH MEGA-LUGS ARE REQUIRED FOR ALL DIRECTIONAL CHANGE FITTINGS AND WATER MAIN ENDS. CORPORATION STOPS SHALL BE MUELLER H15008.

WATER VALVES SHALL BE AMERICAN FLOW CONTROL SERIES 2500 RESILIENT WEDGE GATE VALVE.

WATER MAINS SHALL BE A MINIMUM OF 4' OFF THE FLAG OF THE CURB.

FIRE HYDRANTS SHALL BE LOCATED 3.5' BEHIND THE BACK OF CURB AND HYDRANT VALVES SHALL BE PLACED IN THE STREET

A FIRE HYDRANT WILL BE REQUIRED AT THE END OF ALL DEAD END LINES.

FIRE HYDRANTS SHALL BE WATEROUS PACER WB67 WITH A STORZ NOZZLE.

CURB BOXES SHALL BE BINGHAM AND TAYLOR BUFFALO TYPE AND INSTALLED WITH THE EXTENSION ROD AND GUIDE RING.

CURB VALVES SHALL BE MUELLER H15209.

CURB BOXES SHALL BE LOCATED 3.5' BEHIND THE BACK OF CURB.

ALL LATERAL/WATER SERVICE ENDS SHALL BE MARKED WITH A TREATED 4 X 4" POST AND THE TOP OF THE POST SHALL BE PAINTED BLUE.

EXCAVATED MATERIAL FROM THE TRENCH NOT SUITABLE FOR BACKFILL AS DEEMED BY THE UTILITY OR THEIR ENGINEER SHALL BE HAULED OFF-SITE AND SELECT AND SELECT TRENCH BACKFILL WILL BE REQUIRED.

PROVIDE A 2" THICK STYROFOAM INSULATION BETWEEN WATER MAIN AND ALL STORM SEWER CROSSINGS AND WHERE WATER SERVICES CROSS UNDER DITCHES AND 7 FEET OF COVER IS NOT MAINTAINED.

WATER MAINS SHALL UNDERGO A PRESSURE AND LEAKAGE TEST. SERVICES SHALL BE TESTED TO THE CURB STOP.

A SIGN SHALL BE INSTALLED ADJACENT TO ANY VALVES LOCATED OUTSIDE OF THE RIGHT-OF-WAY WITH THE TEXT "WATER VALVE" SIGNS SHALL BE MOUNTED TO A TREATED 4'x4' WOOD POST.

ADDITIONAL UTILITY NOTES

1. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER AND WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY
2. PRIOR TO FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
4. TRACER WIRE SHALL BE INSTALLED ON ALL BURIED NON-METALLIC SANITARY SEWERS, PRIVATE SANITARY INTERCEPTOR MAIN SEWERS, STORM BUILDING SEWERS, AND PRIVATE STORM INTERCEPTOR MAIN SEWERS THAT DISCHARGE TO MUNICIPAL MAINS. TRACER WIRE SHALL BE A MINIMUM OF 12-GAUGE, INSULATED, SINGLE-CONDUCTOR COPPER WIRE OR EQUIVALENT. TRACER WIRE COLOR SHALL BE BLUE FOR POTABLE WATER, GREEN FOR SANITARY SEWER, AND BROWN FOR STORM SEWER.
5. ALL STREET LIGHTING TO BE PROVIDED BY ALLIANT ENERGY.
6. CONTRACTOR SHALL PROVIDE ACCURATE AS-BUILT QUANTITIES FOR ALL UTILITIES INCLUDING ELEVATIONS, PIPE SIZE, STRUCTURE SIZE AND PIPE LENGTHS.

STORM SEWER NOTES

1. STORM SEWER AND STORMWATER MANAGEMENT SHALL BE AS FOLLOWS:

STORM SEWER SHALL BE RCP UNLESS OTHERWISE SPECIFIED ON PLANS.
STORM SEWER PIPE BEDDING SHALL BE CLEAR STONE.
MINIMUM COVER FOR ALL STORM SEWER SHALL BE 2'

2. EXCAVATED MATERIAL FROM THE TRENCH NOT SUITABLE FOR BACKFILL AS DEEMED BY THE PUBLIC SERVICES DIRECTOR SHALL BE HAULED OFF-SITE AND SELECT TRENCH BACKFILL WILL BE REQUIRED.
3. ADJUSTMENT RINGS SHALL HAVE A MINIMUM HEIGHT OF 4" AND A MAXIMUM HEIGHT OF 12" ADJUSTMENT RINGS FOR STORM MANHOLES SHALL BE POLYETHYLENE PLASTIC UNLESS OTHERWISE APPROVED. CURB INLET RINGS SHALL BE CONCRETE.
4. MANHOLES 3' DEEP AND GREATER SHALL BE CONSTRUCTED WITH STEPS.
5. INLETS AT LOW POINTS SHALL HAVE TYPE NEENAH TYPE R GRATES. INLETS ON GRADE SHALL BE DIRECTIONAL TYPE L. INLETS SHALL ALL BE STAMPED "DRAINS TO RIVER"
6. THE LAST TWO PIPES SHALL BE STRAPPED TOGETHER AT END SECTIONS ON ALL PIPES 18" AND GREATER.
7. TRASH GRATES SHALL BE PROVIDED ON ALL END SECTIONS ON ENCLOSED STORM SEWER NETWORKS.
8. EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER AND WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS AND FUTURE PARKING AREA AS SPECIFIED ON PLANS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY
9. PRIOR TO FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
11. ALL INFILTRATION BASINS SHALL INCLUDE ENGINEERED SOILS OR PERMAMATRIX SOIL AMENDMENT APPLIED PER MANUFACTURER RECOMMENDATIONS.
12. ALL STORM WATER MANAGEMENT FACILITIES SHALL BE SEEDED WITH A NATIVE SEED MIXTURE WITHIN THE LIMITS OF THE OUTLOT OR EASEMENT, THE NATIVE SEED MIXTURE SHALL BE APPROVED BY THE DIRECTOR OF PUBLIC SERVICES.
13. ALL STORM WATER FACILITIES SHALL CONFORM TO WDNR TECHNICAL STANDARDS FOR PRE AND POST CONSTRUCTION STORM WATER MANAGEMENT.

AGENCIES

EMERGENCY FIRE, RESCUE, AMBULANCE, POLICE DIAL 911

DEFOREST FIRE DEPARTMENT
DAVID ARNOLD
DEFOREST, WI 53532
608-846-4364 NON-EMERGENCY

DEFOREST POLICE DEPARTMENT
306 DEFOREST ST.
DEFOREST, WI 53532
608-846-6755 NON-EMERGENCY

UNITED STATES POST OFFICE
619 S. MAIN STREET
DEFOREST, WI 53532
608-846-5910

UTILITIES

WINDSOR UTILITY DISTRICT
6716 PARK ST.
WINDSOR, WI 53598
ATTN: JEFF BARTOSIAK - (608) 888-0066

PUBLIC WORKS - VILLAGE OF WINDSOR (WATER)
4084 MUELLER ROAD
DEFOREST, WI 53532
ATTN: JIM FREEDENBERG - (608) 846-3854

CENTURY TELEPHONE
201 STARK ST.
RANDOLPH, WI 53956
ATTN: MARK MURN
(608) 842-1705 / (608) 963-8594

ALLIANT ENERGY (ELECTRIC)
6462 BLANCHAR'S CROSSING
WINDSOR, WI 53598
ATTN: BRAND SMITH
(608) 842-1705
(608) 575-3616 CELL

CHARTER COMMUNICATIONS (CABLE)
2701 DANIELS ST
MADISON, WI 53718
ATTN: KIRK UPPERMAN
DESK: (608) 274-3822 EXT 6741
CELL: (608) 209-3206

MG&E (GAS)
133 S. BLAIR ST.
MADISON, WI 53703
ATTN: JOHN WICHERN
(608) 252-7224

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: JLA | Scale: 1 = NONE
Technician: MW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

NOTES

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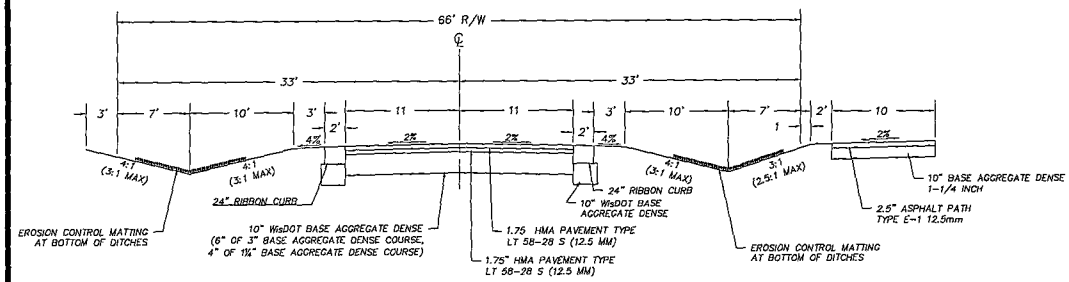
PROJECT # 116.0177.30

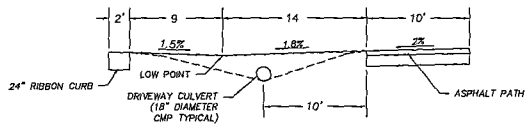
C11

TYPICAL FINISHED SECTION
GOLDEN WHEAT RUN

66' RIGHT-OF-WAY
22' FACE-FACE STREET WIDTH

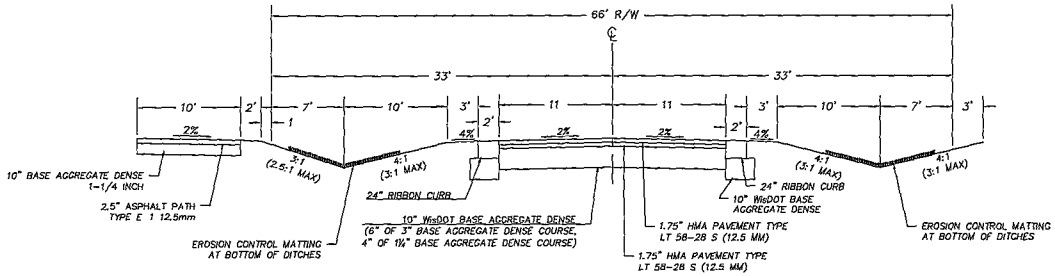


TYPICAL DRIVEWAY SECTION



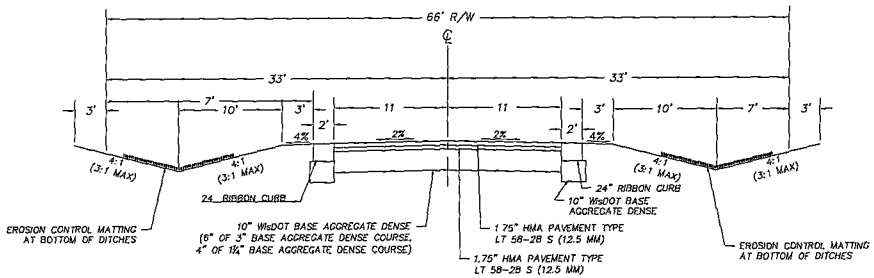
TYPICAL FINISHED SECTION
WARNER FARM DRIVE & PAINTED ARABIAN RUN

66' RIGHT-OF-WAY
22' FACE-FACE STREET WIDTH



TYPICAL FINISHED SECTION
CUBS WAY

66' RIGHT-OF-WAY
22' FACE-FACE STREET WIDTH



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZJS | Scale: 1 | NONE
Tech/Jobs: MW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

TYPICAL ROAD SECTIONS

VILLAGE OF WINDSOR, WI

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SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 1.2

MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZLR | Scale: 1 | NOTED
Technician: MW | Date: 07/23/2018 | Field Bk. | Pg.

BEAR TREE FARMS - PHASE 2

PHASING EXHIBIT

VILLAGE OF WINDSOR, WI

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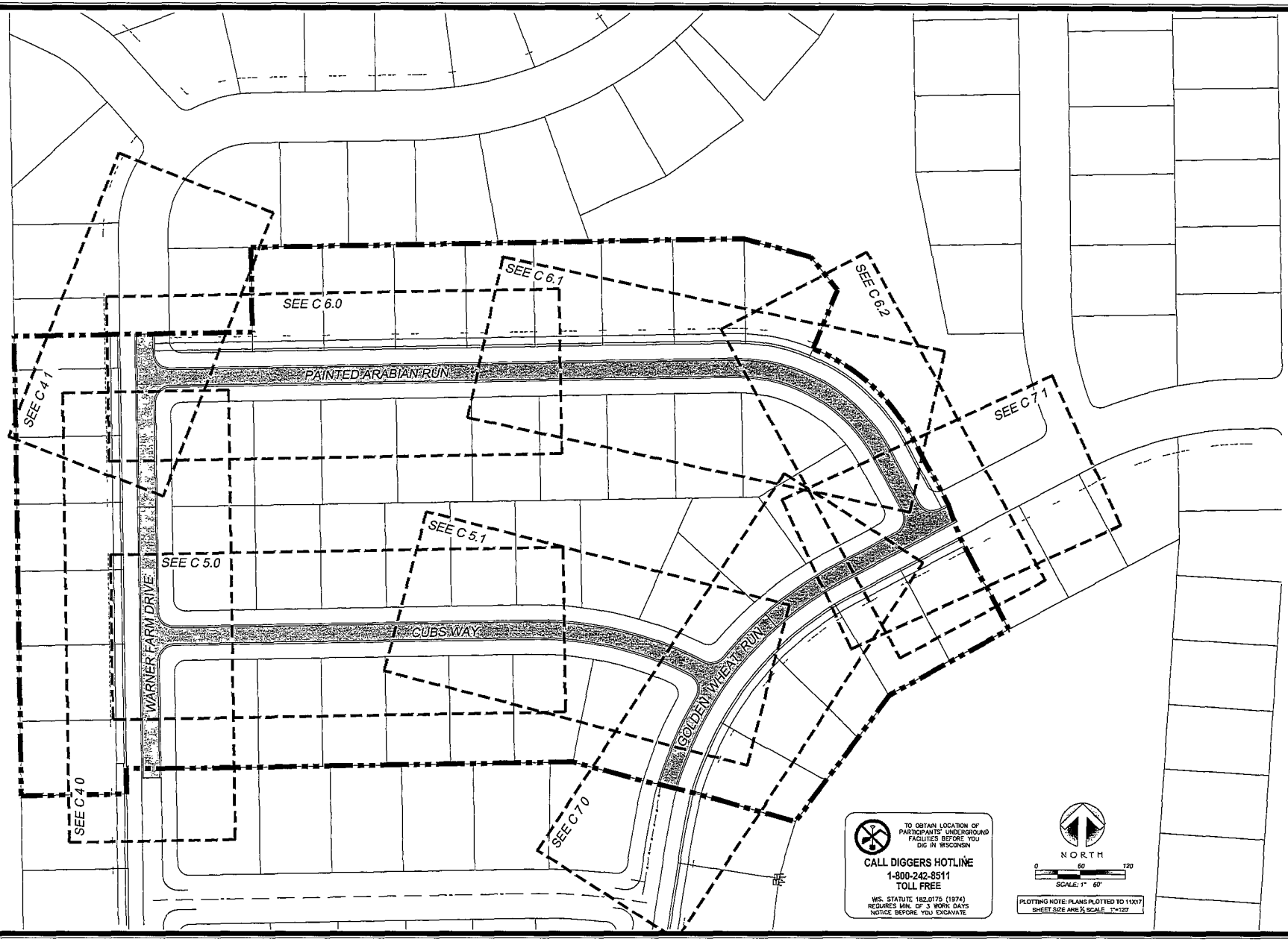
SNYDER & ASSOCIATES

116-0177-30

C1.3



MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1" NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

SHEET INDEX

VILLAGE OF WINDSOR, WI

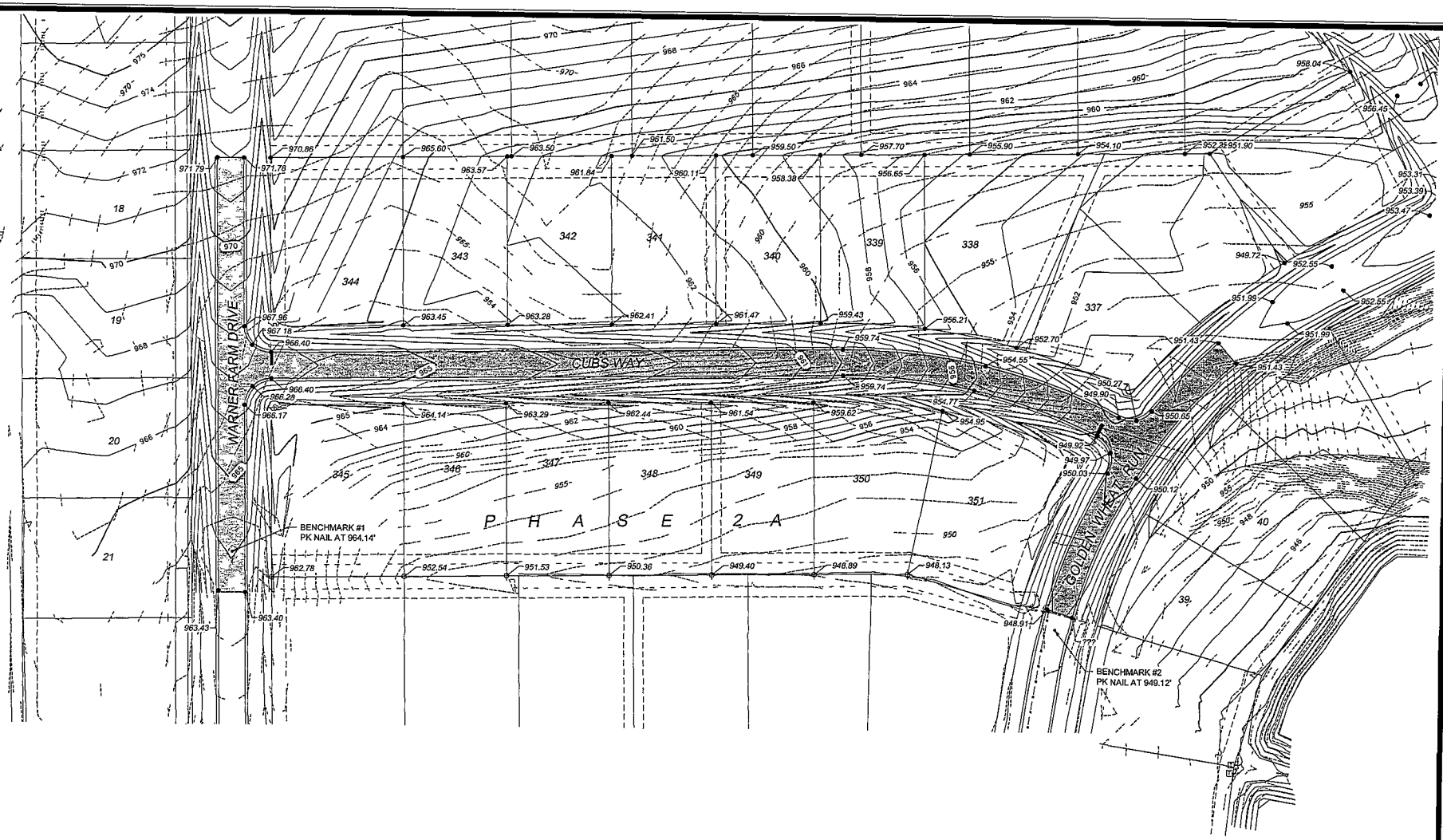
SNYDER & ASSOCIATES, INC.

5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

116-0177-30

C1.4



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NORTH

0 40 80

SCALE: 1" 40'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE 1"=80'

MARK	REVISION	DATE	BY
Engineer: MLC	Checked By: ZLR	Scale: 1	NOTED
Technician: MW	Date: 07/23/2018	Field Bk:	Pg:

BEAR TREE FARMS - PHASE 2

PHASE 2A GRADING

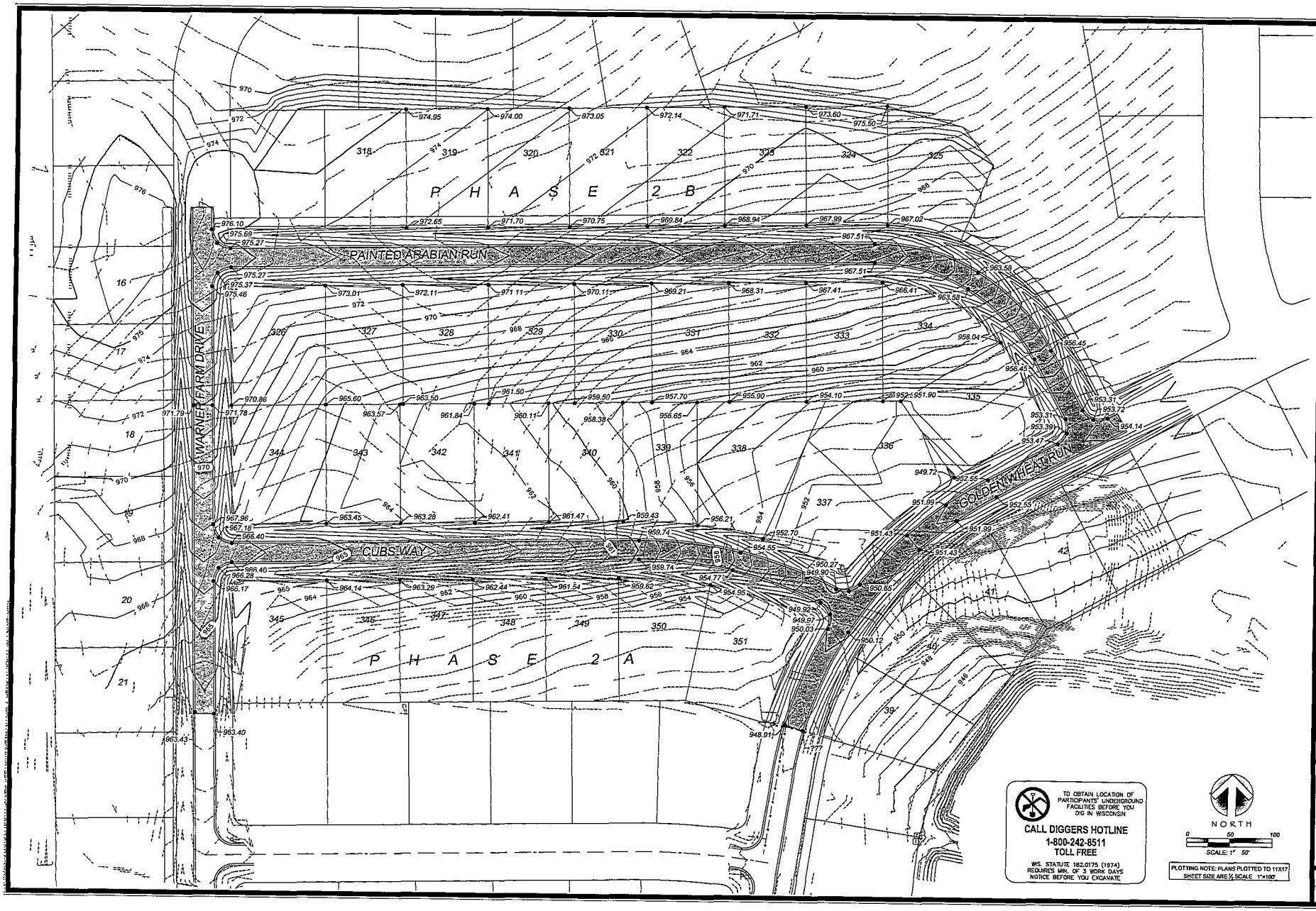
VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 1.5



MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1" = NOTED
Technician: MW | Date: 07/13/2018 | Field Bk: Pg

BEAR TREE FARMS - PHASE 2

OVERALL GRADING PLAN

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.

5010 VOGES ROAD
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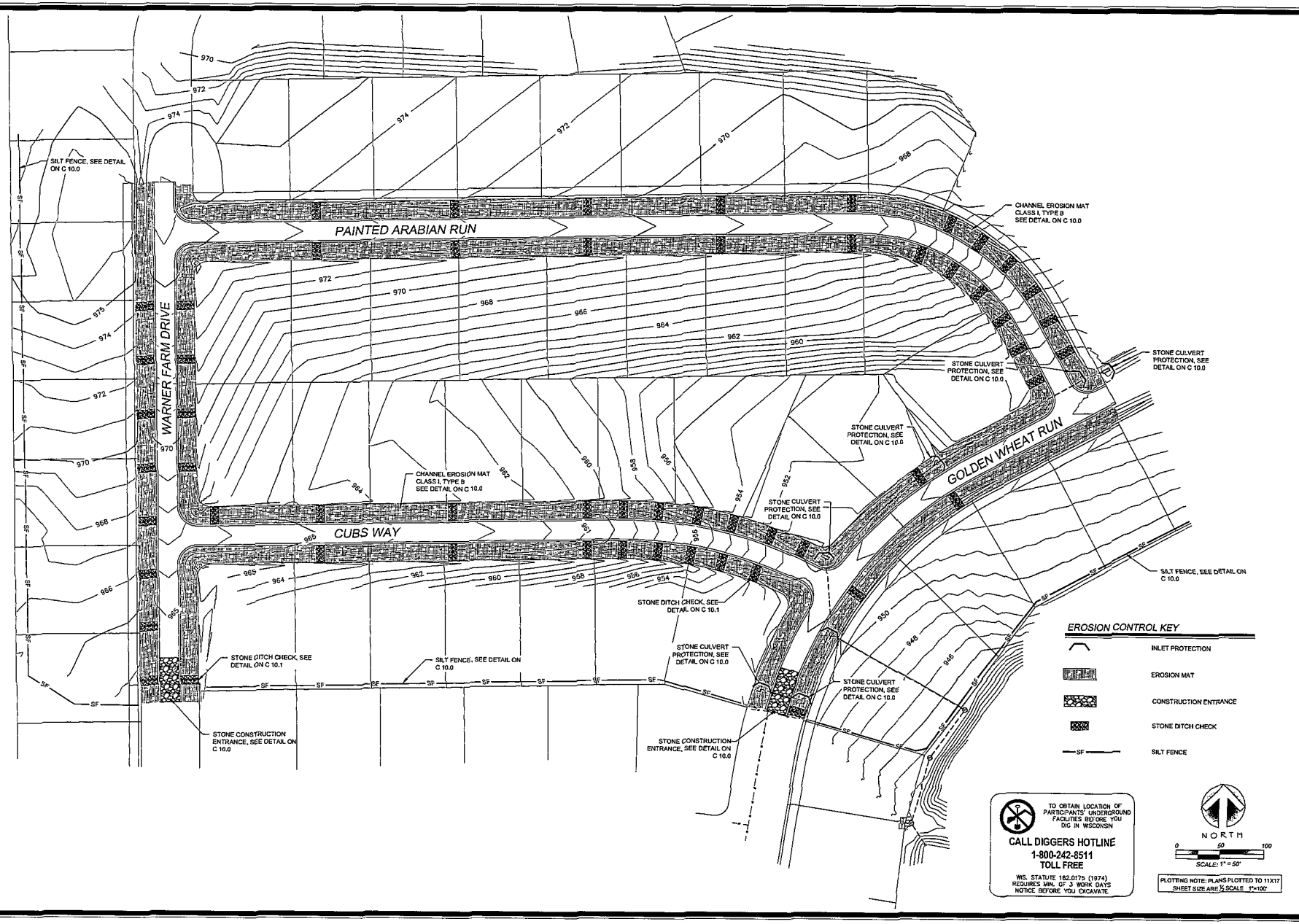
PROJECT # 116.0177.30

C1.6



MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1 | NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

EROSION CONTROL PLAN

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.

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MADISON, WISCONSIN 53718
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SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C17

P:\PROJECTS\2016\116.0177.30 Bear Tree Farm\Design\Phase_2_Design\116.0177.30_PlanSet.dwg

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

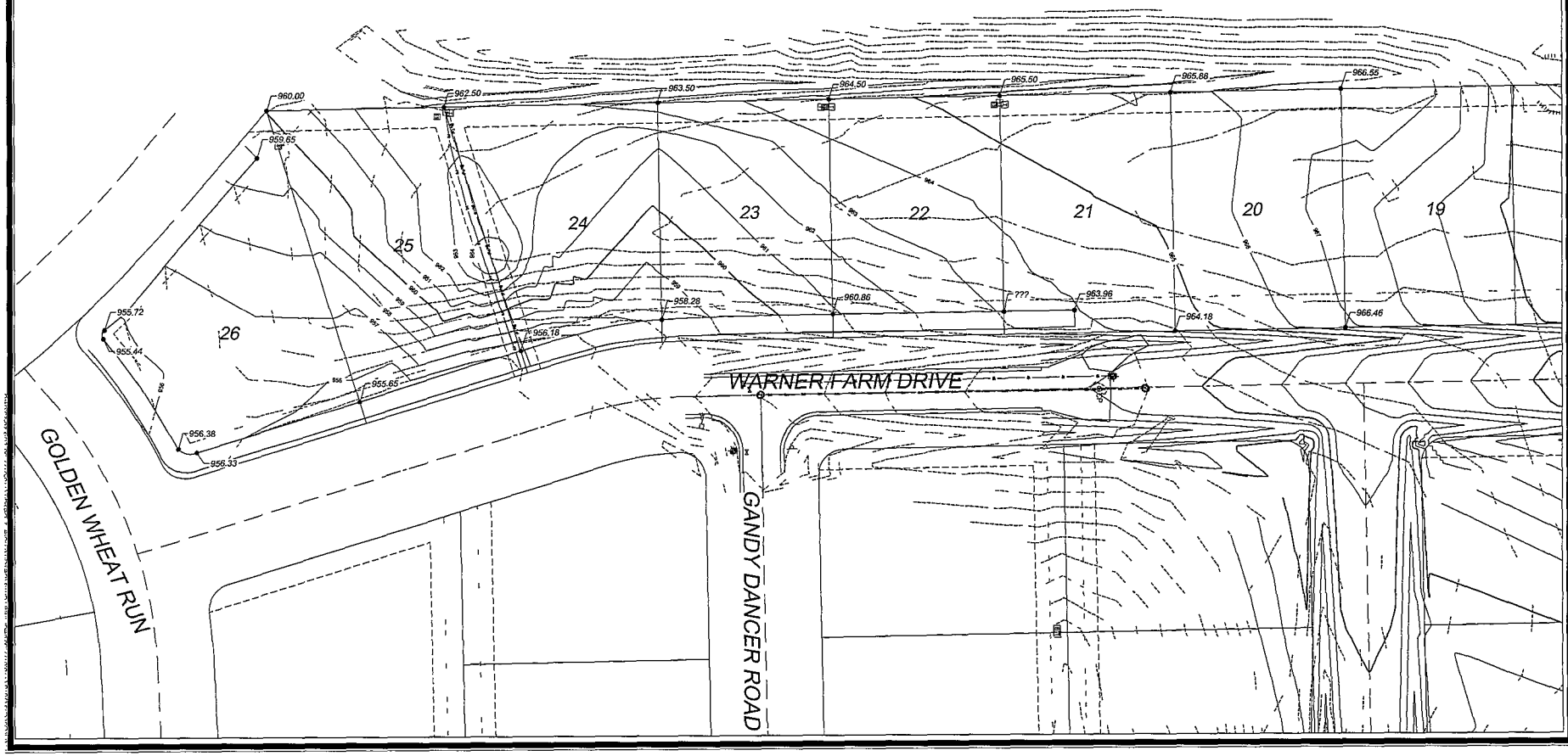
WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NORTH

0 30 60

SCALE: 1" 30'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE 1"=60'



MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZJS | Scale: 1" = NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: Pg

BEAR TREE FARMS - PHASE 2

LOTS 20-25 GRADING PLAN

VILLAGE OF WINDSOR WI

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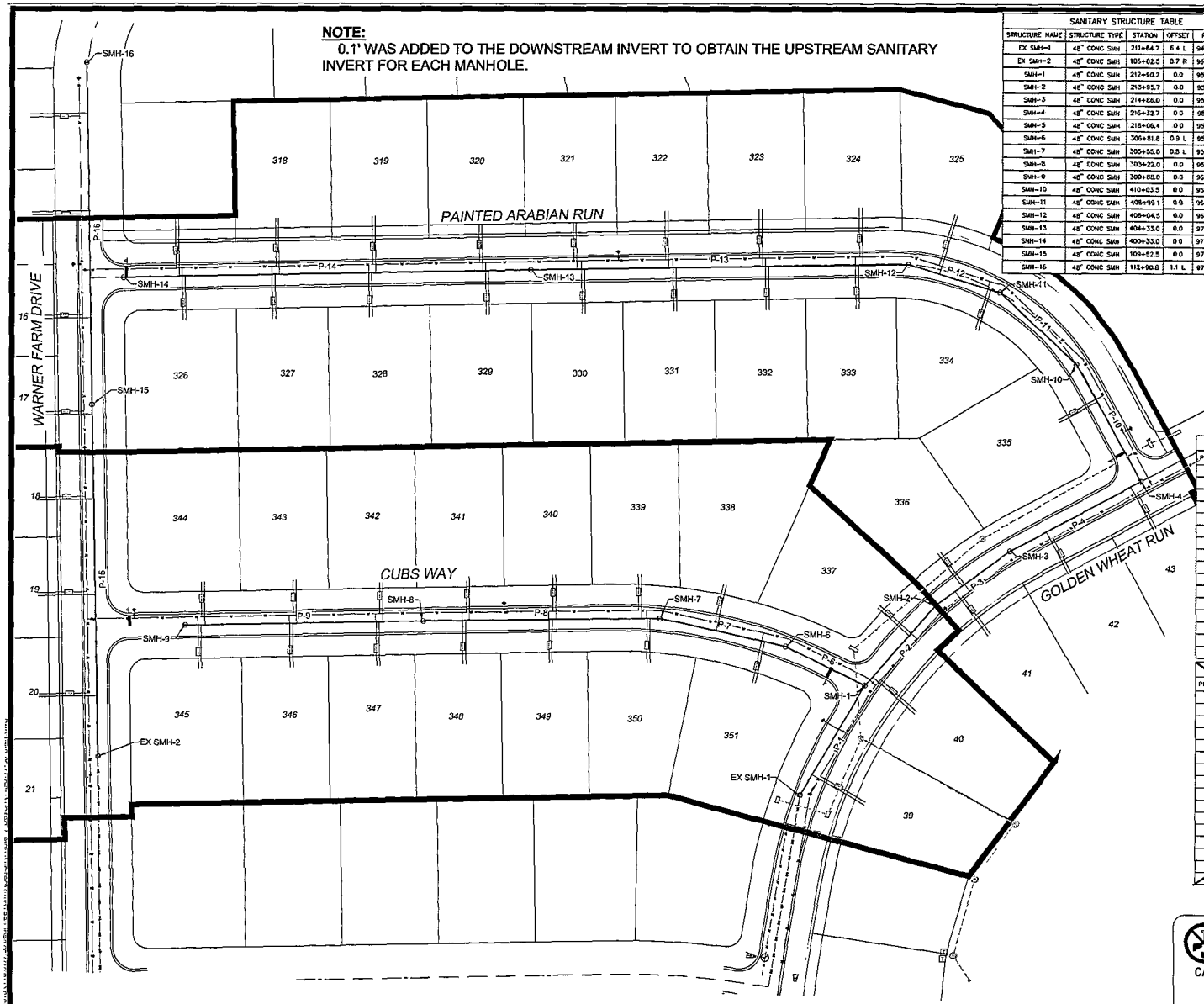
SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C1.8

NOTE:
0.1' WAS ADDED TO THE DOWNSTREAM INVERT TO OBTAIN THE UPSTREAM SANITARY INVERT FOR EACH MANHOLE.



SANITARY STRUCTURE TABLE					
STRUCTURE NAME	STRUCTURE TYPE	STATION	OFFSET	RIM	INVERT
EX SMH-1	48" CONC SMH	211+64.7	6.4 L	949.40	939.66
EX SMH-2	48" CONC SMH	106+02.5	0.7 R	964.51	951.71
SMH-1	48" CONC SMH	212+90.2	0.0	950.54	940.29
SMH-2	48" CONC SMH	213+95.7	0.0	951.46	941.37
SMH-3	48" CONC SMH	214+86.0	0.0	952.45	942.26
SMH-4	48" CONC SMH	216+32.7	0.0	953.93	943.58
SMH-5	48" CONC SMH	218+06.4	0.0	954.83	945.33
SMH-6	48" CONC SMH	306+81.8	0.9 L	952.07	940.97
SMH-7	48" CONC SMH	305+55.0	0.8 L	958.19	943.40
SMH-8	48" CONC SMH	303+22.0	0.0	963.63	948.55
SMH-9	48" CONC SMH	300+88.0	0.0	965.87	953.97
SMH-10	48" CONC SMH	410+03.5	0.0	957.94	945.96
SMH-11	48" CONC SMH	408+99.1	0.0	963.90	951.26
SMH-12	48" CONC SMH	408+04.5	0.0	967.41	954.29
SMH-13	48" CONC SMH	404+33.0	0.0	971.33	957.77
SMH-14	48" CONC SMH	400+33.0	0.0	975.45	959.69
SMH-15	48" CONC SMH	109+52.5	0.0	973.28	956.93
SMH-16	48" CONC SMH	112+90.8	1.1 L	970.92	958.70

SANITARY STRUCTURE TABLE					
STRUCTURE NAME	STRUCTURE TYPE	STATION	OFFSET	RIM	INVERT
EX SMH-1	48" CONC SMH	211+64.7	6.4 L	949.23	939.76
EX SMH-2	48" CONC SMH	106+02.5	0.7 R	954.43	951.67
SMH-1	48" CONC SMH	212+90.2	0.0	950.59	940.34
SMH-2	48" CONC SMH	213+95.7	0.0	951.85	941.40
SMH-3	48" CONC SMH	214+86.0	0.0	952.54	942.30
SMH-4	48" CONC SMH	216+32.7	0.0	954.02	943.72
SMH-5	48" CONC SMH	218+06.4	0.0	955.77	945.51
SMH-6	48" CONC SMH	306+81.8	0.9 L	951.96	940.84
SMH-7	48" CONC SMH	305+55.0	0.8 L	958.03	943.43
SMH-8	48" CONC SMH	303+22.0	0.0	963.48	948.75
SMH-9	48" CONC SMH	300+88.0	0.0	965.82	954.08
SMH-10	48" CONC SMH	410+03.5	0.0	957.80	946.08
SMH-11	48" CONC SMH	408+99.1	0.0	964.02	951.35
SMH-12	48" CONC SMH	408+04.5	0.0	967.38	954.23
SMH-13	48" CONC SMH	404+33.0	0.0	971.24	957.64
SMH-14	48" CONC SMH	400+33.0	0.0	975.49	959.74
SMH-15	48" CONC SMH	109+52.5	0.0	973.32	957.01
SMH-16	48" CONC SMH	112+90.8	1.1 L	971.76	958.88

SANITARY PIPE TABLE								
PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	START INV	END INV	SLOPE
P-14	PVC	8	SMH-14	SMH-13	399	959.69	957.87	0.50%
P-13	PVC	8	SMH-13	SMH-12	372	957.77	954.39	0.91%
P-12	PVC	8	SMH-12	SMH-11	94	954.29	951.36	3.12%
P-11	PVC	8	SMH-11	SMH-10	103	951.26	946.06	5.04%
P-10	PVC	8	SMH-10	SMH-4	132	945.96	943.68	1.80%
P-4	PVC	8	SMH-4	SMH-3	146	943.68	942.36	0.83%
P-3	PVC	8	SMH-3	SMH-2	89	942.26	941.47	0.89%
P-2	PVC	8	SMH-2	SMH-1	107	941.37	940.39	0.92%
P-1	PVC	8	SMH-1	EX SMH-1	125	940.29	939.66	0.34%
P-9	PVC	8	SMH-9	SMH-8	234	953.97	948.68	2.22%
P-8	PVC	8	SMH-8	SMH-7	229	948.58	943.50	2.22%
P-7	PVC	8	SMH-7	SMH-6	131	943.40	941.07	1.77%
P-6	PVC	8	SMH-6	SMH-1	87	940.97	940.39	0.67%
P-5	PVC	8	SMH-5	SMH-4	175	945.33	943.68	0.95%
P-16	PVC	8	SMH-16	SMH-15	337	958.70	957.03	0.50%
P-15	PVC	8	SMH-15	EX SMH-2	351	956.93	951.71	1.49%

SANITARY PIPE TABLE								
PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	START INV	END INV	SLOPE
P-14	PVC	8	SMH-14	SMH-13	400	959.74	957.74	0.50%
P-13	PVC	8	SMH-13	SMH-12	371	957.64	954.33	0.89%
P-12	PVC	8	SMH-12	SMH-11	94	954.23	951.45	2.96%
P-11	PVC	8	SMH-11	SMH-10	103	951.35	946.18	5.00%
P-10	PVC	8	SMH-10	SMH-4	133	946.08	943.82	1.70%
P-4	PVC	8	SMH-4	SMH-3	147	943.72	942.40	0.90%
P-3	PVC	8	SMH-3	SMH-2	90	942.30	941.50	0.89%
P-2	PVC	8	SMH-2	SMH-1	105	941.40	940.44	0.91%
P-1	PVC	8	SMH-1	EX SMH-1	128	940.34	939.76	0.45%
P-9	PVC	8	SMH-9	SMH-8	234	954.08	948.85	2.24%
P-8	PVC	8	SMH-8	SMH-7	233	948.75	943.53	2.24%
P-7	PVC	8	SMH-7	SMH-6	127	943.43	940.94	1.97%
P-6	PVC	8	SMH-6	SMH-1	87	940.84	940.44	0.46%
P-5	PVC	8	SMH-5	SMH-4	174	945.51	943.82	0.97%
P-16	PVC	8	SMH-16	SMH-15	338	958.80	957.11	0.50%
P-15	PVC	8	SMH-15	EX SMH-2	350	957.01	951.67	1.53%

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

W.S. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

NORTH

0 50 100

SCALE: 1" 50'

PLOTTING NOTE: PLANS PLOTTED TO 11X17 SHEET SIZE ARE ½ SCALE 1"=100'

MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZJB | Scale: 1 NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: Pg:

VILLAGE OF WINDSOR, WI

BEAR TREE FARMS - PHASE 2

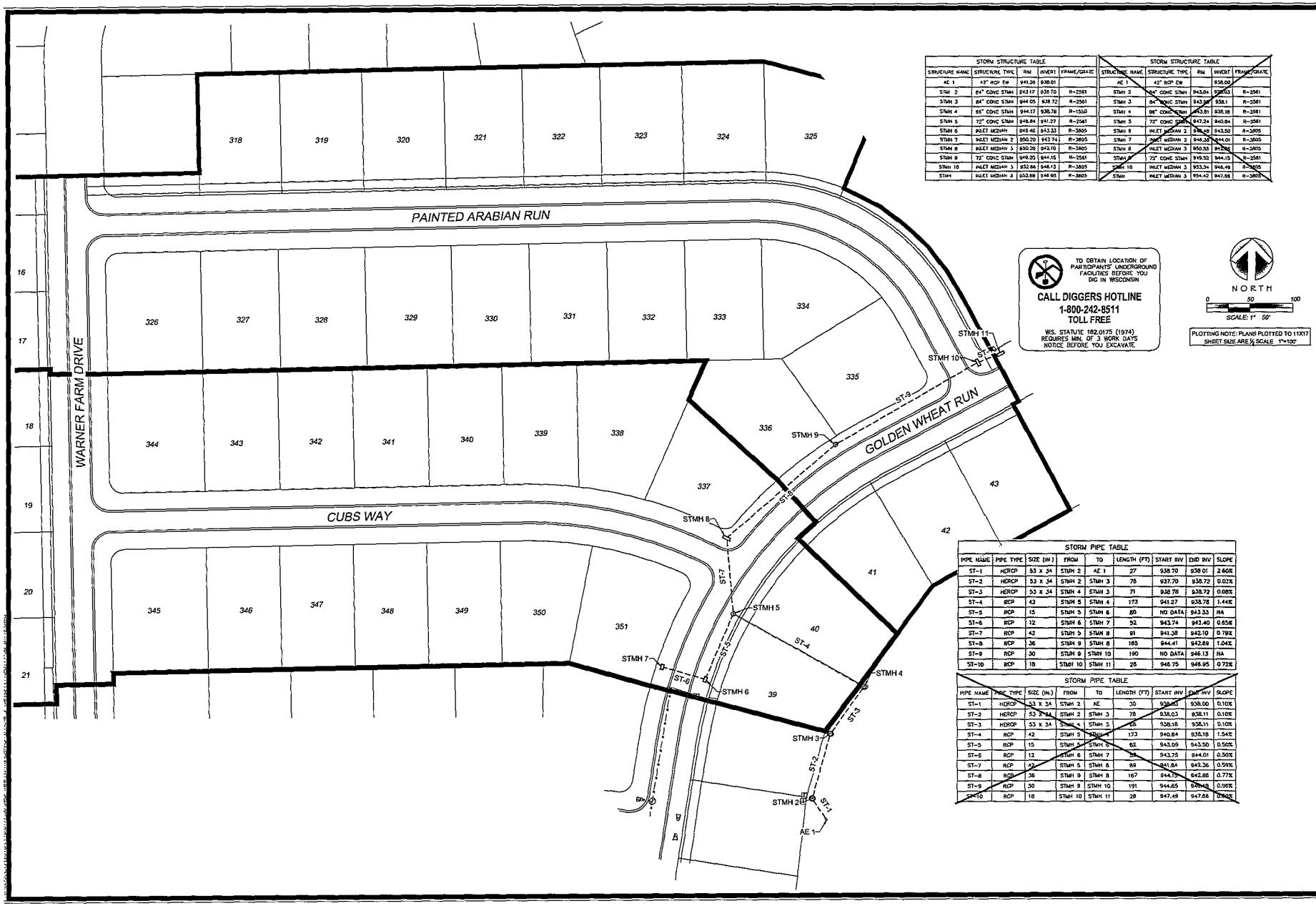
OVERALL SANITARY SEWER & WATER PLAN

SNYDER & ASSOCIATES, INC.
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 3.0



STORM STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM	INVERT	FRAME/GRATE
AE 1	42" RCP EW	941.26	938.01	
STMH 2	84" CONC STMH	943.17	938.70	R-2561
STMH 3	84" CONC STMH	944.05	938.72	R-2561
STMH 4	96" CONC STMH	944.17	938.78	R-1550
STMH 5	72" CONC STMH	948.84	941.27	R-2561
STMH 6	INLET MEDIAN	945.46	943.33	R-3605
STMH 7	INLET MEDIAN 2	950.20	943.74	R-3605
STMH 8	INLET MEDIAN 3	950.20	943.10	R-3605
STMH 9	72" CONC STMH	949.20	944.15	R-2561
STMH 10	INLET MEDIAN 3	952.66	946.13	R-3605
STMH	INLET MEDIAN 3	953.88	946.95	R-3605

STORM STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM	INVERT	FRAME/GRATE
AE 1	42" RCP EW		938.00	
STMH 2	84" CONC STMH	943.04	938.03	R-2561
STMH 3	84" CONC STMH	943.88	938.1	R-2561
STMH 4	96" CONC STMH	943.81	938.18	R-2561
STMH 5	72" CONC STMH	947.34	940.84	R-2561
STMH 6	INLET MEDIAN 2	945.48	943.50	R-3605
STMH 7	INLET MEDIAN 2	948.38	944.01	R-3605
STMH 8	INLET MEDIAN 3	950.53	942.86	R-3605
STMH 9	72" CONC STMH	949.53	944.15	R-2561
STMH 10	INLET MEDIAN 3	953.34	946.49	R-3605
STMH	INLET MEDIAN 3	954.42	947.88	R-3605

STORM PIPE TABLE							
PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	START INV	END INV	SLOPE
ST-1	HERCP	53 X 34	STMH 2	AE 1	27	938.70	938.01	2.60%
ST-2	HERCP	53 X 34	STMH 2	STMH 3	78	937.70	938.72	0.02%
ST-3	HERCP	53 X 34	STMH 4	STMH 3	71	938.78	938.72	0.08%
ST-4	RCP	42	STMH 5	STMH 4	173	941.27	938.78	1.44%
ST-5	RCP	15	STMH 5	STMH 6	80	NO DATA	943.33	NA
ST-6	RCP	12	STMH 6	STMH 7	52	943.74	943.40	0.65%
ST-7	RCP	42	STMH 5	STMH 8	81	943.38	942.10	0.79%
ST-8	RCP	36	STMH 9	STMH 8	163	944.41	942.69	1.04%
ST-9	RCP	30	STMH 9	STMH 10	190	NO DATA	946.13	NA
ST-10	RCP	18	STMH 11	STMH 11	28	946.75	946.95	0.72%

STORM PIPE TABLE								
PIPE NAME	PIPE TYPE	SIZE (IN.)	FROM	TO	LENGTH (FT)	START INV	END INV	SLOPE
ST-1	HERCP	53 X 34	STMH 2	AE	30	938.03	938.00	0.10%
ST-2	HERCP	53 X 34	STMH 2	STMH 3	78	938.03	938.11	0.10%
ST-3	HERCP	53 X 34	STMH 4	STMH 3	68	938.18	938.11	0.10%
ST-4	RCP	42	STMH 5	STMH 4	173	940.84	938.18	1.54%
ST-5	RCP	15	STMH 5	STMH 6	82	943.09	943.50	0.50%
ST-6	RCP	12	STMH 6	STMH 7	58	943.75	944.01	0.50%
ST-7	RCP	42	STMH 5	STMH 8	89	941.84	942.36	0.59%
ST-8	RCP	36	STMH 9	STMH 8	167	944.15	942.88	0.77%
ST-9	RCP	30	STMH 9	STMH 10	191	944.65	946.48	0.95%
ST-10	RCP	18	STMH 10	STMH 11	28	947.49	947.66	0.60%

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1" = NOTED
Technician: NHV | Date: 07/13/2018 | Field Bk: Pg

BEAR TREE FARMS - PHASE 2

OVERALL STORM SEWER PLAN

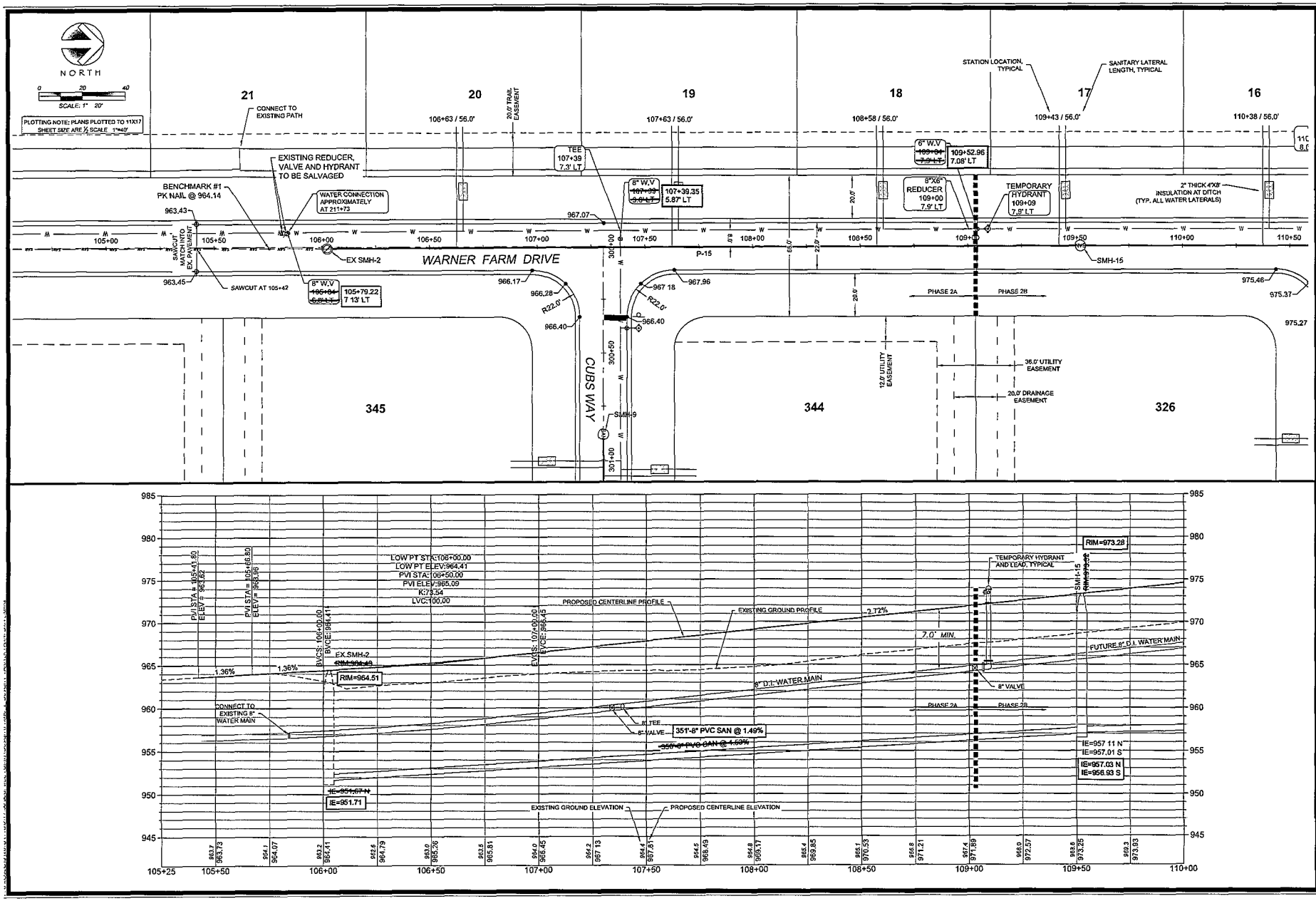
VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 3.1



MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZLK | Scale: 1 | NOTED
Mnnedan: MW | Date: 07/23/2018 | Field Bk: | Pg:

VILLAGE OF WINDSOR, WI

BEAR TREE FARMS - PHASE 2

WARNER FARM DRIVE - PLAN / PROFILE - PHASE 2A

SNYDER & ASSOCIATES, INC.
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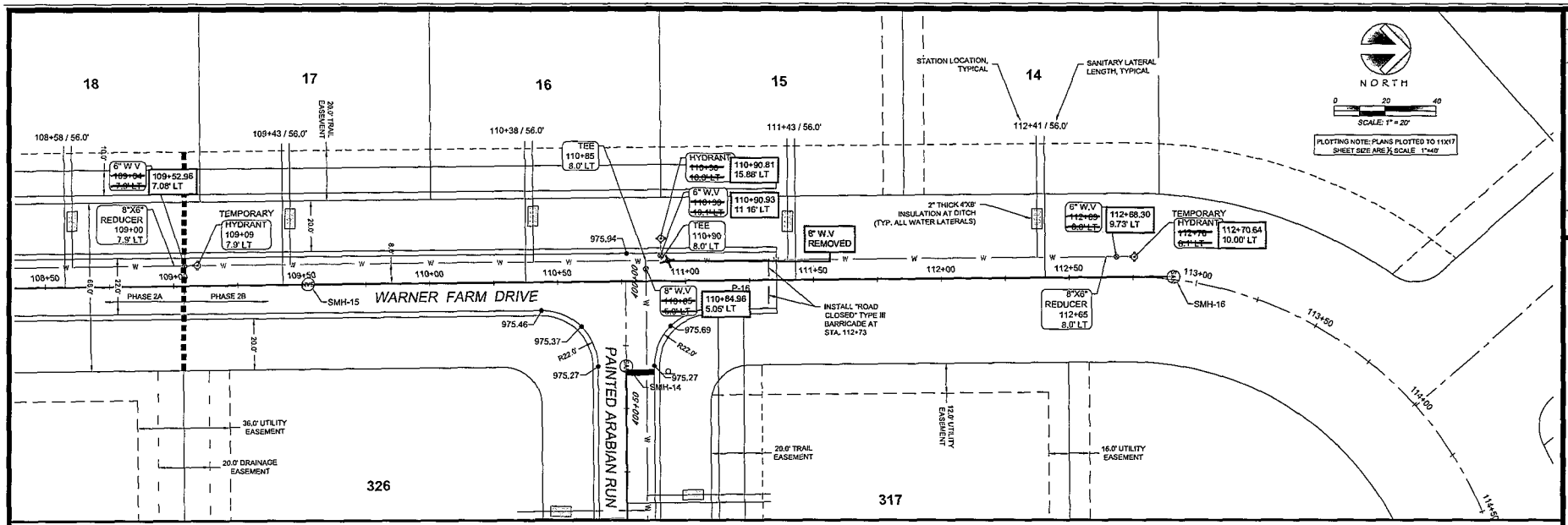
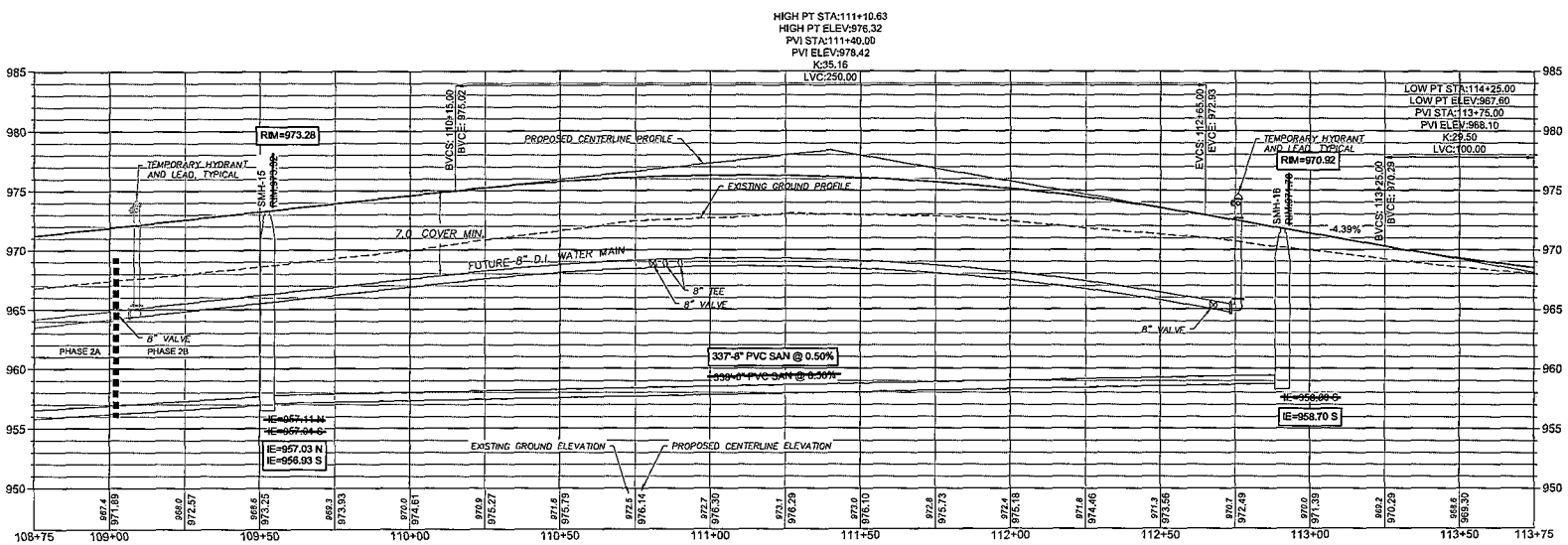
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 4.0





MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZLA | Scale: 1 = NOTED
MWhidden: MW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

WARNER FARM DRIVE - PLAN / PROFILE - PHASE 2B

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
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MADISON, WISCONSIN 53718
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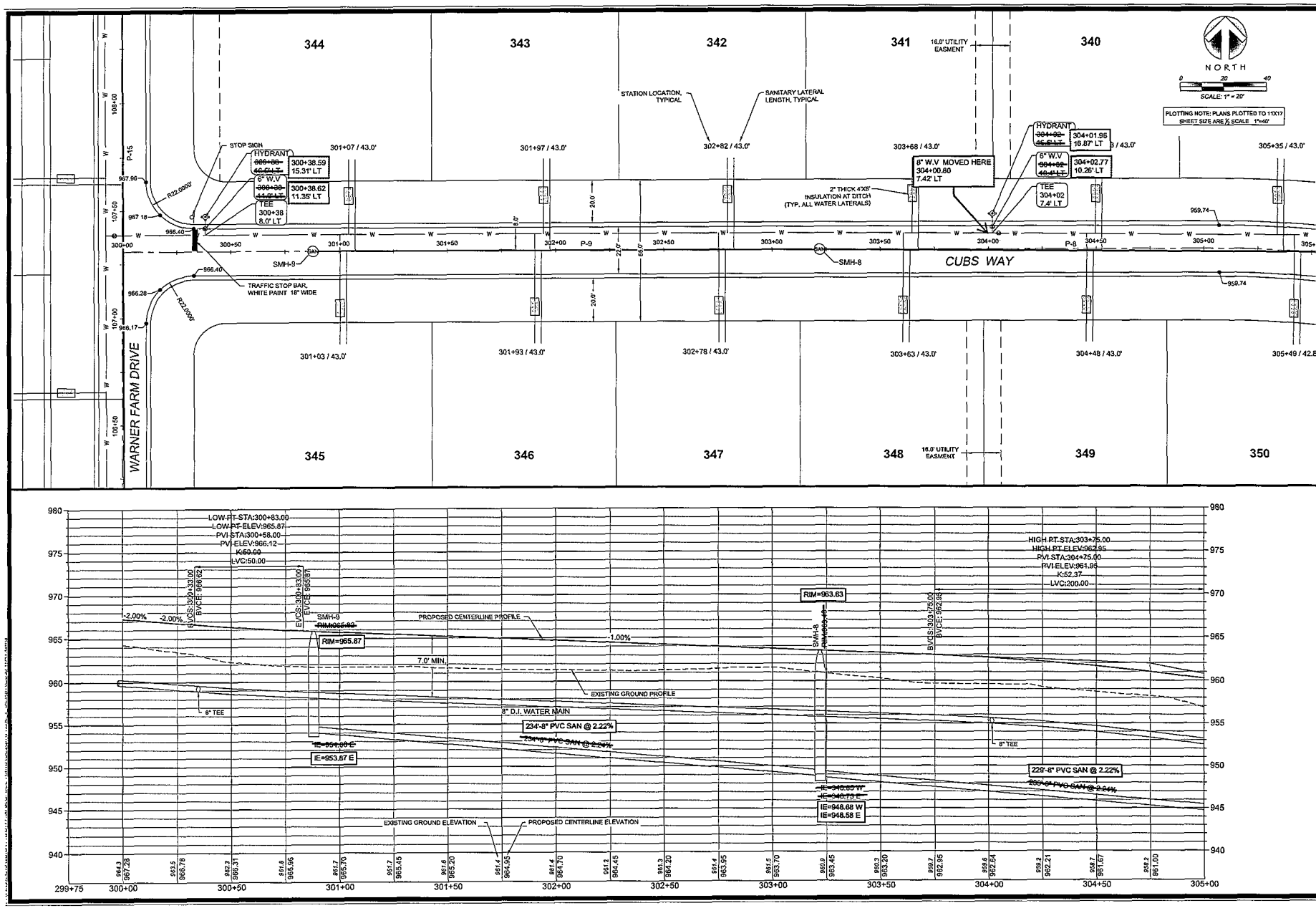
SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 4.1



MARK	REVISION	DATE	BY
Engineer: MLC	Checked By: ZLR	Scale: 1	NOTED
Technician: MW	Date: 07/23/2018	Field Bk:	Pg:

BEAR TREE FARMS - PHASE 2

CUBS WAY - SANITARY, WATER & STORM PLAN / PROFILE

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
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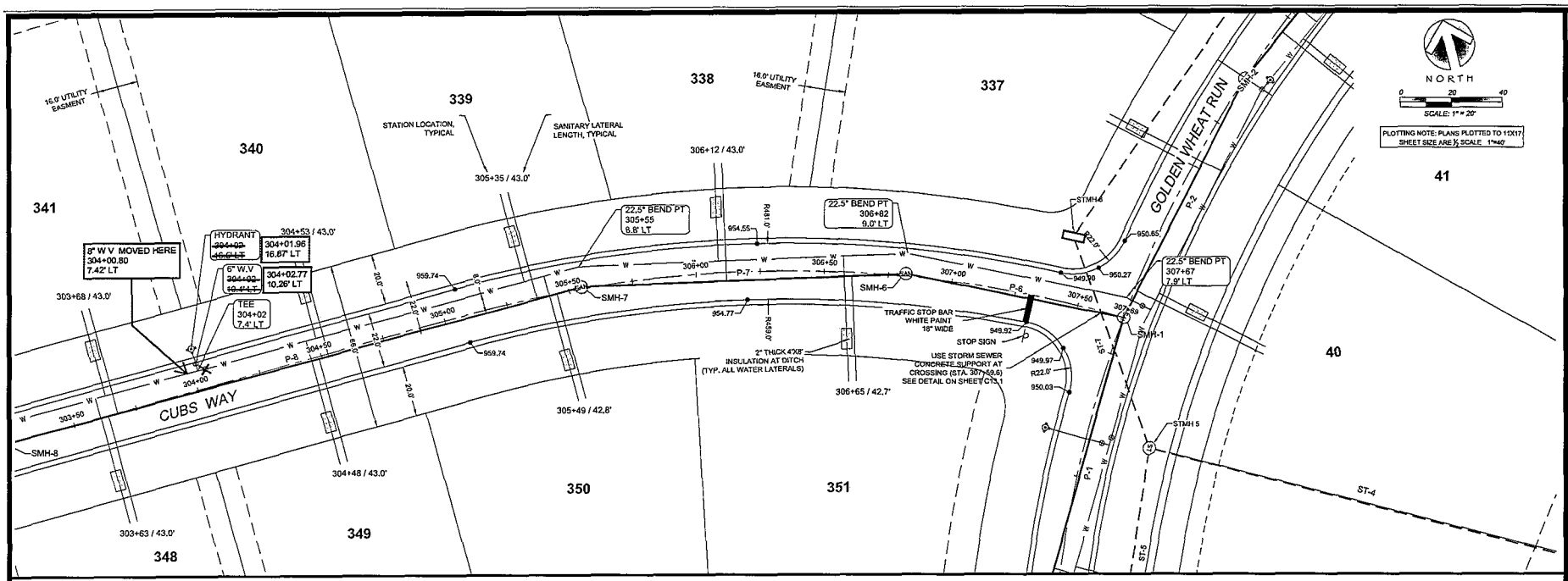
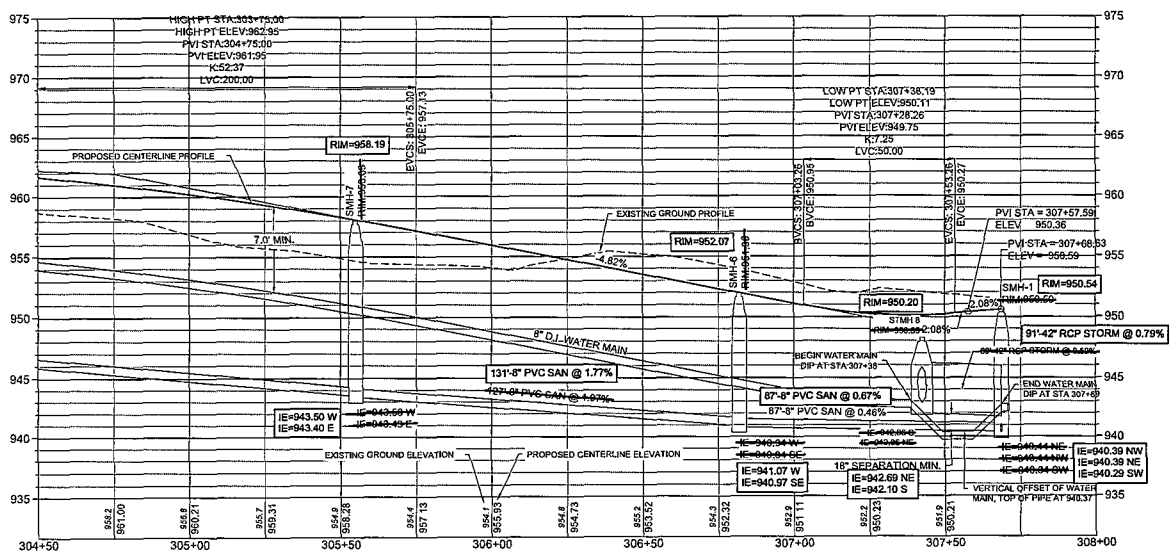
SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 5.0





MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: JLR | Scale: 1 | NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

CUBS WAY - SANITARY WATER & STORM PLAN / PROFILE

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
5010 VOGES ROAD
MADISON, WISCONSIN 53718
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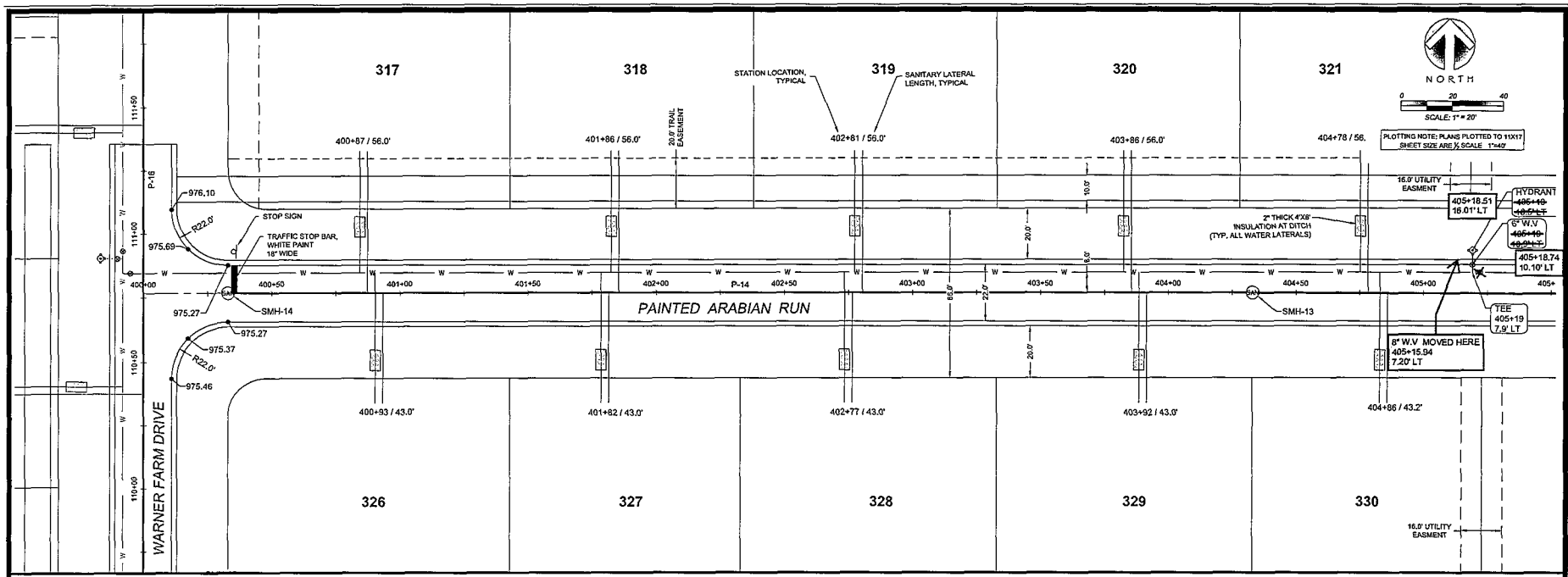
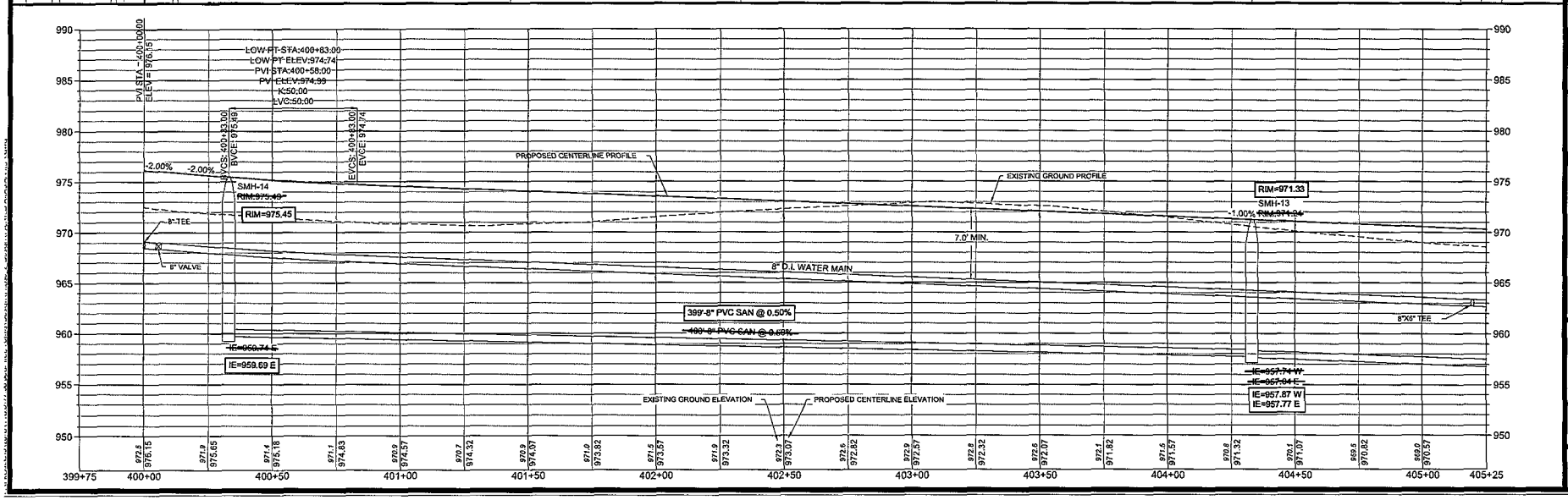
SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 5.1





MARK	REVISION	DATE	BY
Engineer: MJC	Checked By: ZLR	Scale: 1	NOTED
Technician: MW	Date: 07/23/2018	Field Bk:	Pg:

116-0177-30

BEAR TREE FARMS - PHASE 2

PAINTED ARABIAN RUN - PLAN & PROFILE

TOWN OF WINDSOR, WI

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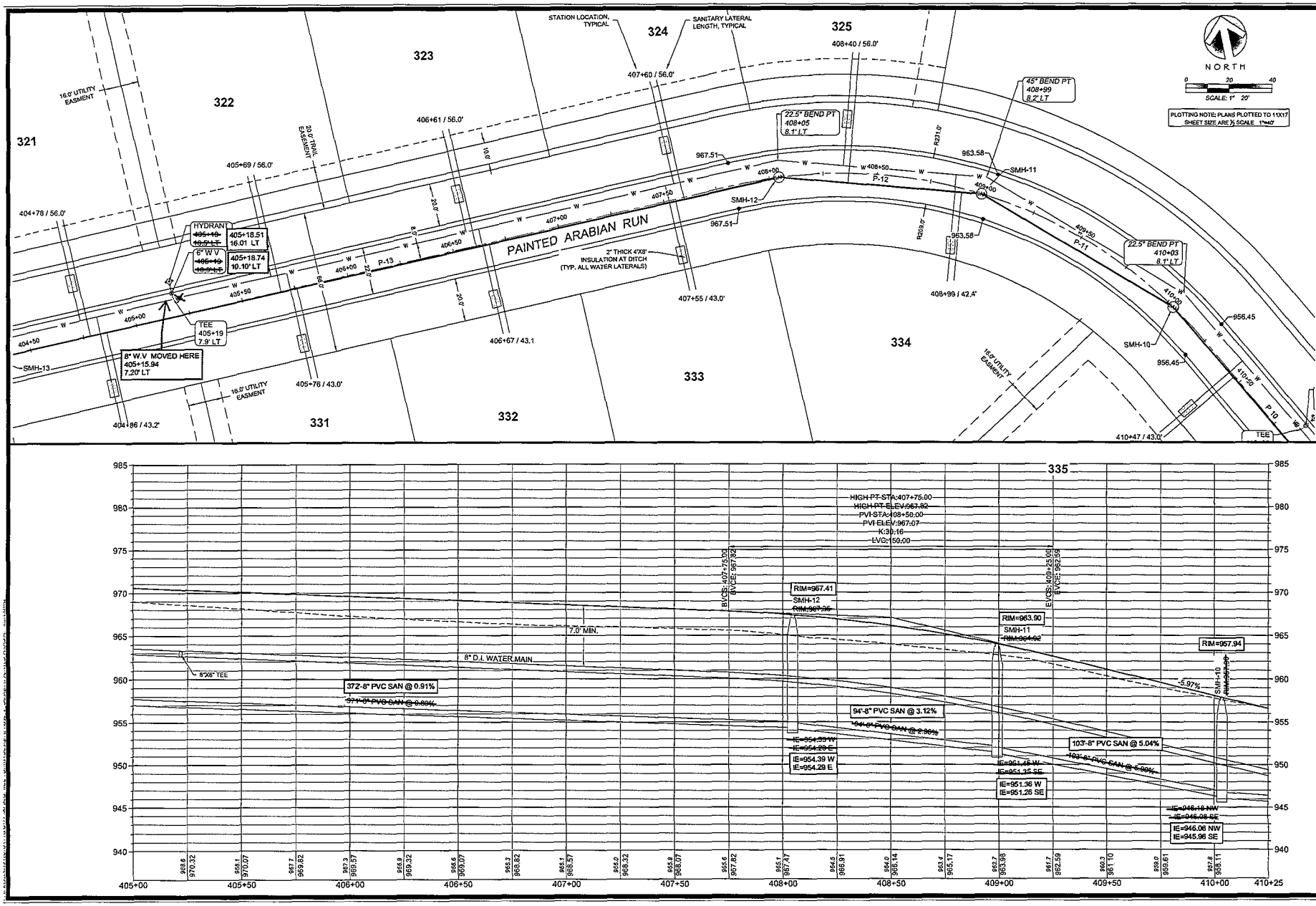

MARK	REVISION	DATE	BY
Engineer: MLC	Checked By: ZLR	Scale: 1	NOTED
Technician: MW	Date: 07/23/2018	Field Bk:	Pg:

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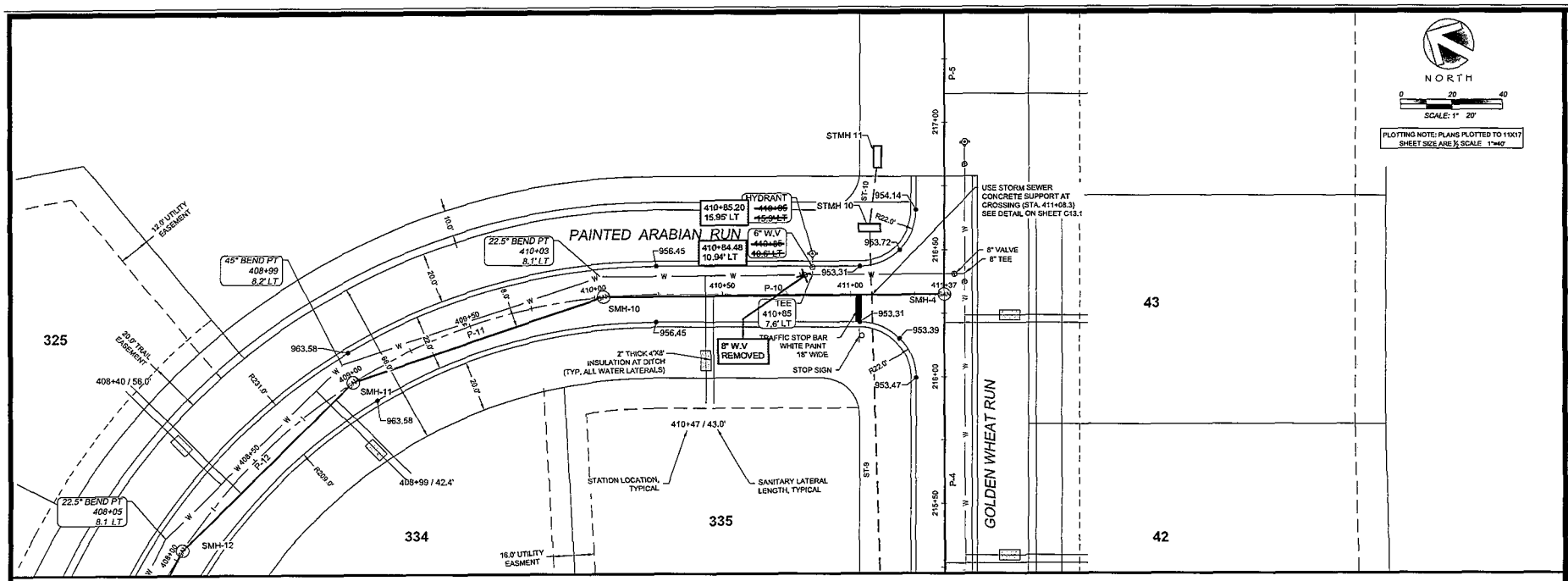

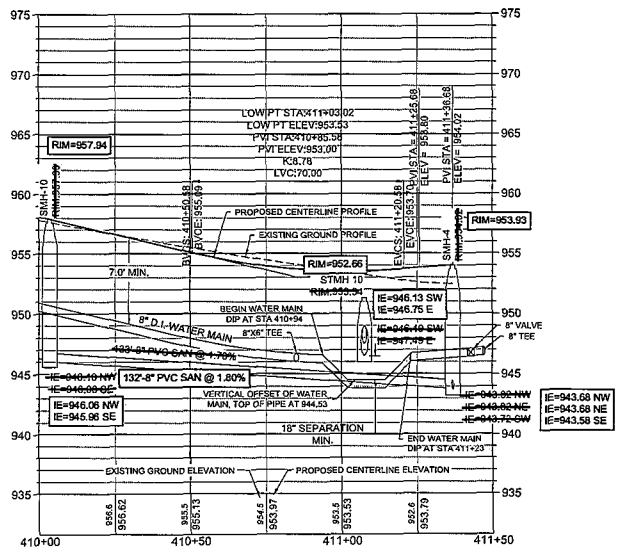

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Engineer: MLC	Checked By: ZLR	Scale: 1 = NOTED	
Technician: MW	Date: 07/23/2018	Field Bk: Pg:	

BEAR TREE FARMS - PHASE 2

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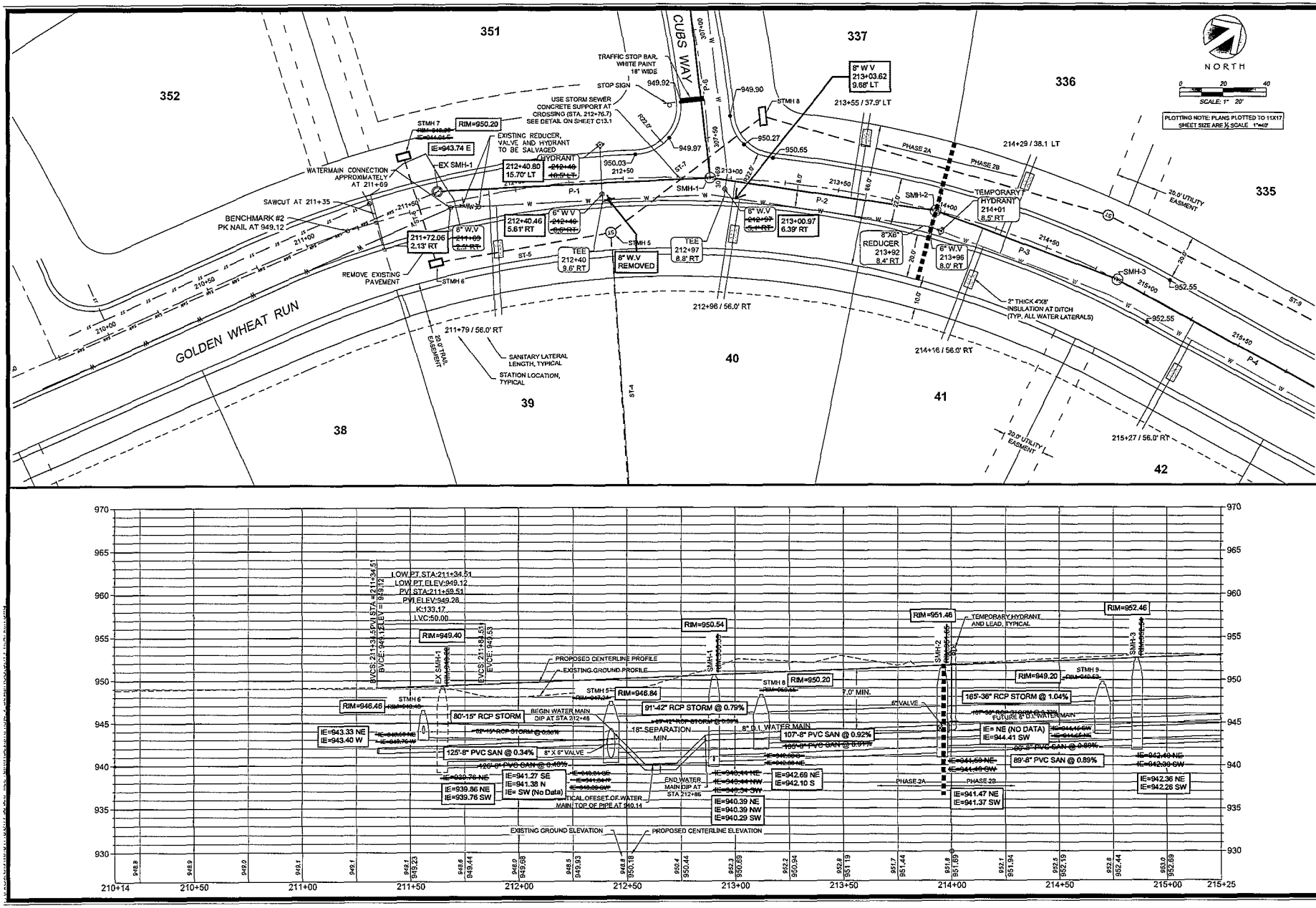

MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZLR | Scale: 1 = NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

GOLDEN WHEAT RUN - PLAN & PROFILE - PHASE 2A

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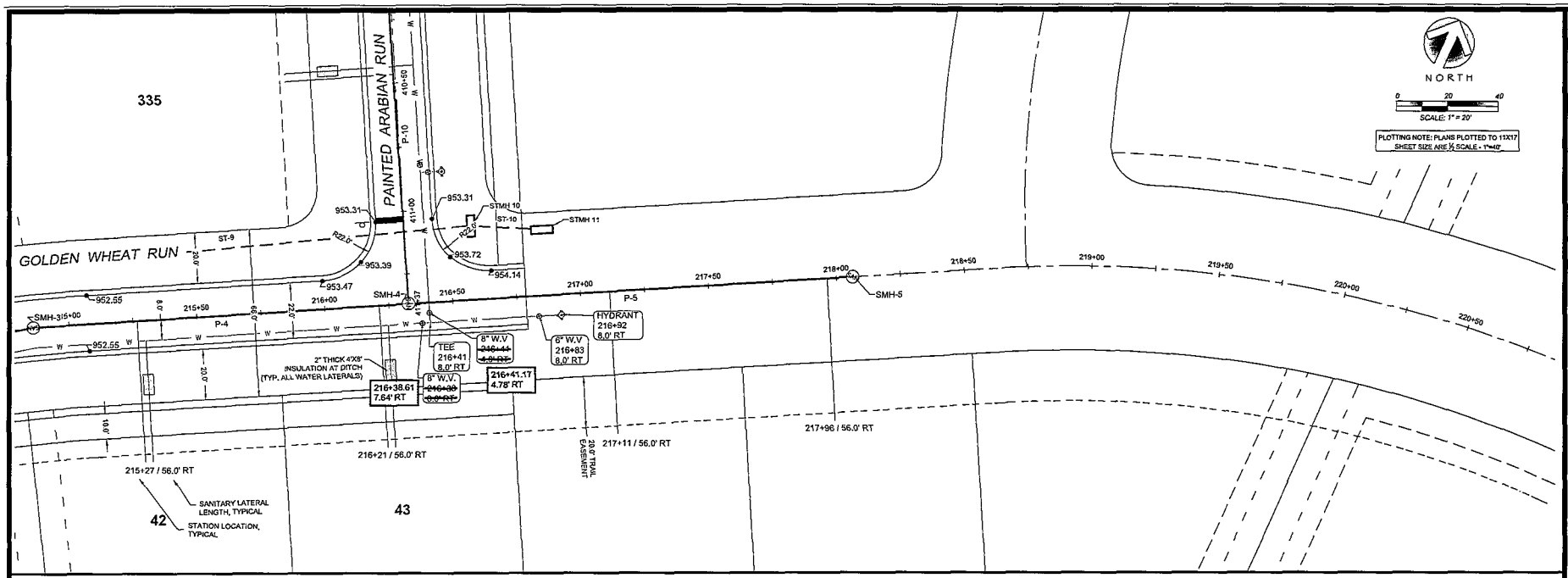

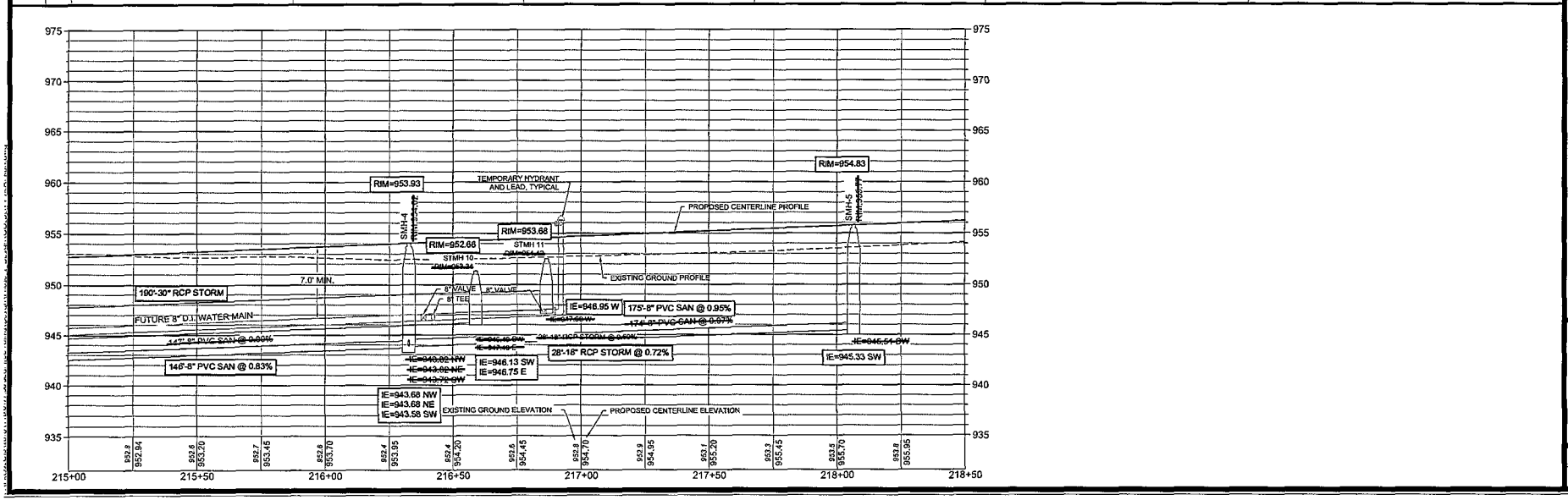

MARK	REVISION	DATE	BY

Engineer: MIC | Checked By: ZLR | Scale: 1 | NOTED
Technician: MW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

GOLDEN WHEAT RUN - PLAN & PROFILE - PHASE 2B

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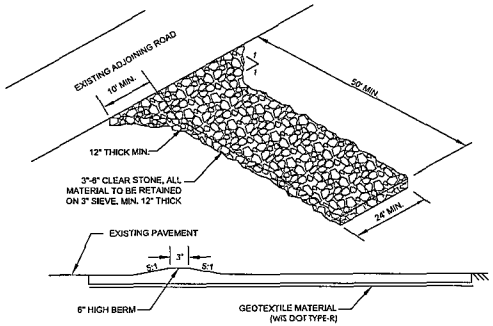
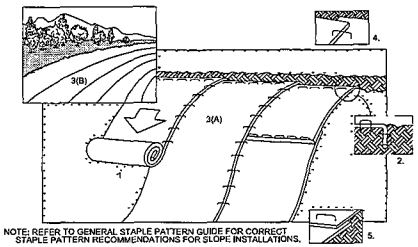


NOTE: MAINTAIN THE ROCK ENTRANCE TO PREVENT TRACKING ONTO PAVEMENT

1 / C10.0 CONSTRUCTION ENTRANCE DETAIL
SCALE: NTS

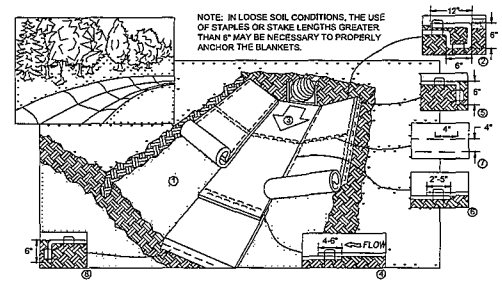
2 / C10.0 NOT USED
SCALE: NTS



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
7. EROSION MAT SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD # 1052.
8. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, USE CLASS I, TYPE A EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT FACILITIES DEVELOPMENT MANUAL AND INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARDS.

4 / C10.0 EROSION CONTROL MAT SLOPE INSTALLATION
SCALE: NTS

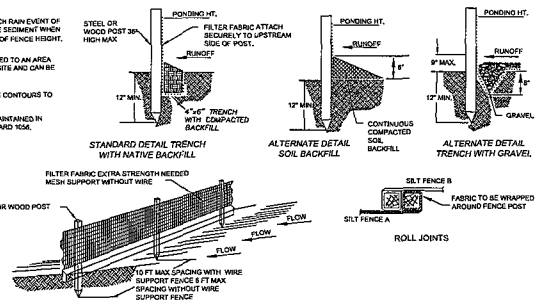


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
7. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
8. EROSION MAT SHALL EXTEND FOR WHICHEVER IS GREATER: UPSLOPE THREE FOOT MIN. VERTICALLY FROM DITCH BOTTOM OR 1' HIGHER THAN DESIGN FLOW DEPTH.
9. EROSION MAT SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS 1053.
10. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS, PROVIDE CLASS II, TYPE B EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT FACILITIES DEVELOPMENT MANUAL, INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARDS.

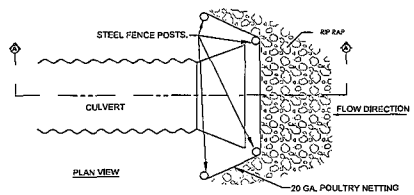
6 / C10.0 EROSION CONTROL MAT CHANNEL INSTALLATION
SCALE: NTS

NOTE:

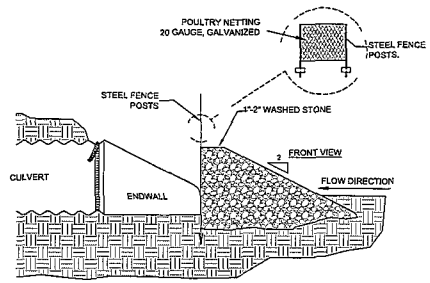
1. INSPECT FENCE WEEKLY AND AFTER EACH RAIN EVENT OF 0.5 INCHES AND REPAIR IF REQUIRED. REMOVE SEDIMENT WHEN NECESSARY OR WHEN SEDIMENT REACHES ½ OF FENCE HEIGHT.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY
4. SILT FENCE SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1056.



3 / C10.0 SILT FENCE DETAIL
SCALE: NTS



5 / C10.0 STONE CULVERT PROTECTION DETAIL
SCALE: NTS



NOTE: STONE CULVERT PROTECTION SHOWN TO BE USED FOR CULVERTS UP TO 18" IN DIAMETER. CONSULT ENGINEER FOR MODIFICATIONS FOR >18" DIAMETER CULVERTS.

MARK	REVISION	DATE	BY
1	EROSION CONTROL MATTING NOTE	10/19/18	MJC

Engineer: MJC | Checked By: ZJK | Scale: 1 NONE
Technician: WW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

EROSION CONTROL DETAILS

VILLAGE OF WINDSOR, WI

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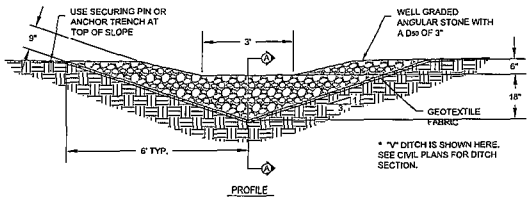
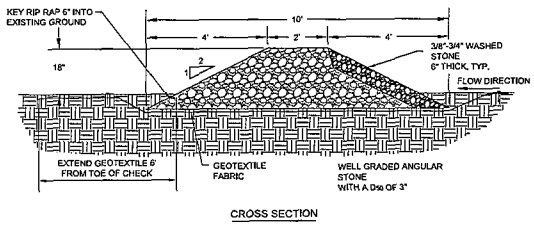
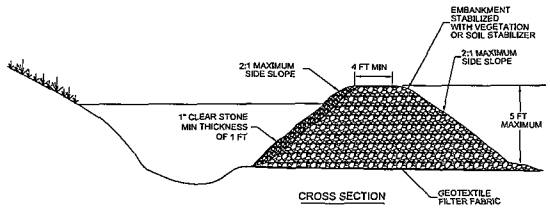
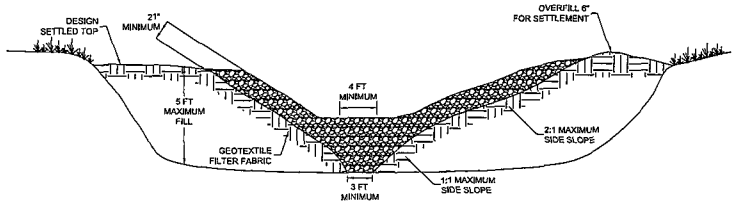




NOTE:
1. STONE DITCH CHECKS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS 1062.

1 / C10.1 STONE DITCH CHECK DETAIL
SCALE: NTS





3 / C10.1 SEDIMENT TRAP
SCALE: NTS

CONSTRUCTION SPECIFICATIONS

SEDIMENT TRAPS SHOULD BE OPERATIONAL BEFORE SITE GRADING BEGINS.

BASIN AREA AND AREAS UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MATERIAL AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.

FILL MATERIAL FOR THE EMBANKMENT SHALL BE MINERAL SOIL, FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS OR OTHER OBJECTIONABLE MATERIAL AND BE SUFFICIENTLY MOIST FOR COMPACTION.

FILL MATERIAL SHALL BE PLACED IN 6-INCH LIFTS, AS CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL.

COMPACTION SHALL BE OBTAINED BY ROUTING THE HAULING EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF THE EQUIPMENT OR BY USE OF A COMPACTOR.

THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION OF 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLEMENT IF COMPACTION IS OBTAINED WITH HAULING EQUIPMENT IF COMPACTORS ARE USED FOR COMPACTING, THE OVERBUILD MAY BE REDUCED TO NOT LESS THAN 5 PERCENT

THE EMBANKMENT SHALL BE STABILIZED WITH VEGETATION OR SOIL STABILIZER IMMEDIATELY FOLLOWING CONSTRUCTION.

CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED.

LOCAL AND STATE REQUIREMENTS SHALL BE MET CONCERNING FENCING AND SIGNS WARNING THE PUBLIC OF HAZARDS OF SOFT SEDIMENT AND FLOODWATER.

MAINTENANCE

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ OF THE OUTLET THIS SEDIMENT SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT ERODE FROM THE SITE.

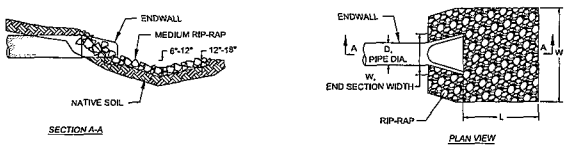
THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT OR IN OR ADJACENT TO A STREAM OR FLOODPLAIN.

SEDIMENT TRAPS SHALL BE INSPECTED FOR DAMAGE AND REPAIRED WEEKLY AND AFTER EACH RAINFALL EVENT ALL DAMAGES SHALL BE REPAIRED BEFORE THE END OF EACH WORKING DAY

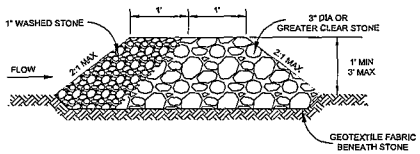
IF THE SEDIMENT TRAP DOES NOT DRAIN COMPLETELY WITHIN 24 HOURS OF A STORM EVENT THE GEOTEXTILE AND STONE OUTLET SHOULD BE CLEANED.

SEDIMENT TRAPS SHOULD BE REMOVED AFTER THE SITE HAS BEEN PERMANENTLY STABILIZED.

RIP-RAP OUTLET PROTECTION DIMENSIONS				
STRUCTURE NUMBER	PIPE DIAMETER INCHES	RIPRAP SIZE	LENGTH (L) FEET (MIN.)	WIDTH (W) FEET (MIN.)
AW-1	30" Ø ADS	WisDOT MEDIUM	12'	6'
AW-3	30" Ø ADS	WisDOT MEDIUM	12'	6'
AW-5	30" Ø ADS	WisDOT MEDIUM	12'	6'



2 / C10.1 ENDWALL RIP-RAP DETAIL
SCALE: NTS



4 / C10.1 STONE WEEPER DETAIL
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZJR | Scale: 1 | NONE
Technician: MW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

EROSION CONTROL DETAILS

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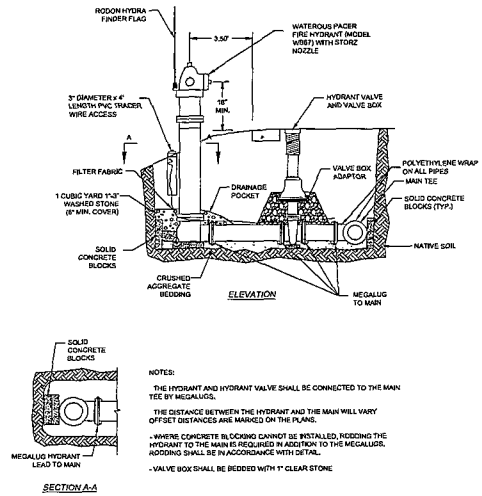


NOTES:

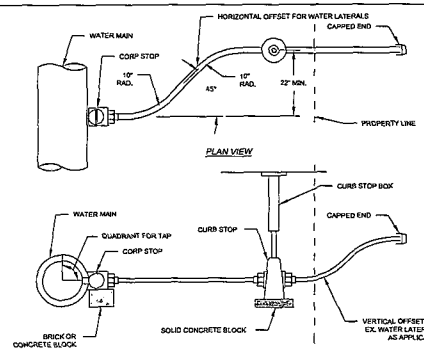
THE HYDRANT AND HYDRANT VALVE SHALL BE CONNECTED TO THE MAIN TEE BY MEGALUGS.

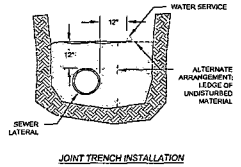
THE DISTANCE BETWEEN THE HYDRANT AND THE MAIN WILL VARY OFFSET DISTANCES ARE MARKED ON THE PLANS.

- WHERE CONCRETE BLOCKING CANNOT BE INSTALLED, RODDING THE HYDRANT TO THE MAIN IS REQUIRED IN ADDITION TO THE MEGALUGS. RODDING SHALL BE IN ACCORDANCE WITH DETAIL.

- VALVE BOX SHALL BE BEDDED WITH 1" CLEAR STONE

1 C11.0 STANDARD HYDRANT DETAIL
SCALE: NTS





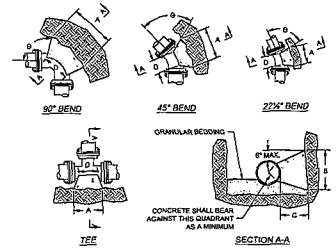
NOTES:
SOLID CONCRETE BLOCKS SHALL BE USED.

HORIZONTAL AND VERTICAL OFFSETS SHALL BE MADE WITH AN APPROVED PIPE BENDING TOOL. SHARP BENDS OR KINKS IN THE WATER SERVICE ARE NOT ALLOWED.

VERTICAL OFFSETS SHALL BE MADE ON THE PROPERTY LINE SIDE OF THE CURB STOP.

- WHERE CURB BOXES ARE INSTALLED IN CONCRETE OR ASPHALT SURFACES NO SLEEVES SHALL BE INSTALLED.

2 C11.0 WATER SERVICE LATERAL DETAIL
SCALE: NTS



WOOD BLOCKING MAY NOT BE USED. ONLY SOLID CONCRETE BLOCKS ARE ALLOWED.

DIMENSION "D" SHALL BE AS LARGE AS POSSIBLE, BUT THE CONCRETE SHALL NOT INTERFERE WITH THE MECHANICAL JOINTS.

DIMENSION "C" SHALL BE AT LEAST 6 INCHES, AND LARGE ENOUGH TO MAKE THE "B" ANGLE EQUAL TO OR GREATER THAN 45 DEGREES WITH THE DIMENSION "A" AS SHOWN ON THE TABLE, OR GREATER, AND WITH DIMENSION "D" AS LARGE AS POSSIBLE.

CONCRETE SHALL BE CLASS "CC"

ALL BUTTRESSED JOINTS SHALL INCLUDE MEGALUGS AND CONCRETE BUTTRESSING.

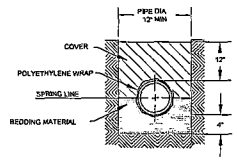
BUTTRESS DIMENSIONS

PIPE SIZE	TEES		22.5 BEND		45 BEND		90 BEND	
	A	B	A	B	A	B	A	B
6	1'-3"	1'-0"	1'-3"	1'-0"	1'-0"	1'-3"	1'-4"	1'-2"
8	1'-6"	1'-4"	1'-6"	1'-0"	1'-4"	1'-2"	1' 10"	1'-6"
10/12	2'-3"	2'-0"	1'-4"	1'-4"	1'-10"	1' 10"	2'-6"	2'-3"

* FOR TEE THIS WILL BE THE BRANCH PIPE

DIMENSIONS IN THE TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI AND SOIL RESISTANCE OF 2000 LBS./SQ.FT.

3 C11.0 THRUST BLOCK DETAILS
SCALE: NTS



INSTALLATION:
PLACE 4" OF BEDDING MATERIAL BENEATH PIPE. PLACE BEDDING MATERIAL AROUND THE PIPE TO THE SPRING LINE. WORK THE MATERIAL IN AND AROUND THE PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. PLACE COVER MATERIAL CAREFULLY TO A LEVEL 6" ABOVE THE PIPE.

BEDDING AND COVER:
CLASS IA - CLEAN, ANGULAR CRUSHED STONE, CRUSHED ROCK, OR CRUSHED GRAVEL CONFORMING TO THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

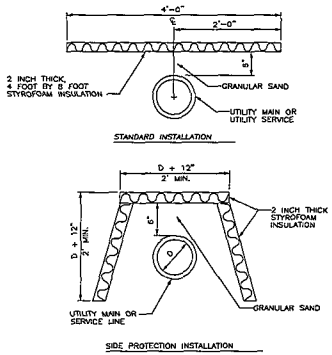
CLASS IB- CLEAN, ANGULAR CRUSHED STONE, CRUSHED ROCK, OR CRUSHED GRAVEL CONFORMING TO THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
NO. 4	10-30
NO. 200	0-5

CLASS II- CLEAN COARSE-GRAINED SOILS CLASSIFIEDIN ASTM D2487 AS GW, GP, SW, SP.

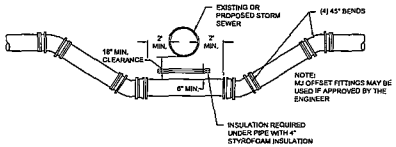
CLASS III- COARSE-GRAINED SOILS WITH FINES CLASSIFIED IN ASTM D2487 AS GM, GC, SM, SC.

5 C11.0 WATER MAIN TRENCHING DETAIL
SCALE: NTS

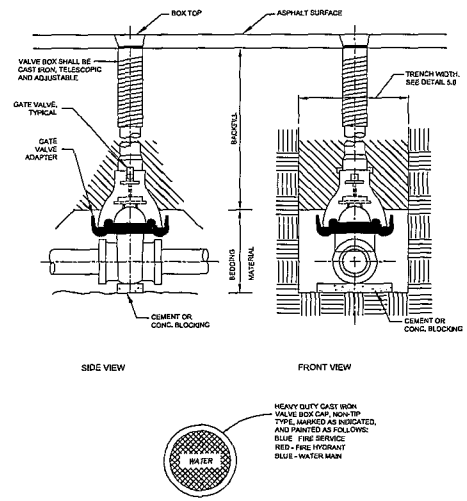


GENERAL NOTES:
1 THE SIDE PROTECTION INSTALLATION SHALL BE USED WHERE FROST WILL PENETRATE BELOW THE PIPE INVERT

6 C11.0 PIPE INSULATION DETAIL
SCALE: NTS



7 C11.0 WATER MAIN VERTICAL OFFSET DETAIL
SCALE: NTS



4 C11.0 WATER VALVE & BOX DETAIL
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1 = NONE
Tech/Mac: MW | Date: 07/23/2018 | Field By: Pip

VILLAGE OF WINDSOR, WI

BEAR TREE FARMS - PHASE 2

UTILITY DETAILS - WATER

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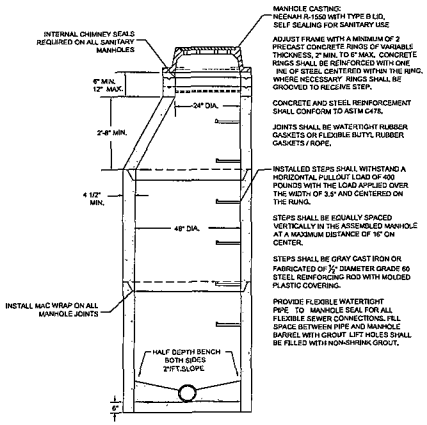
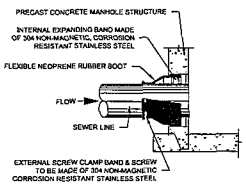
PROJECT # 116.0177.30

C 11.0

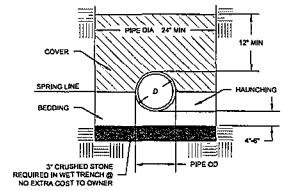


1 / C12.0 SANITARY SEWER MANHOLE DETAIL
SCALE: NTS



2 / C12.0 SANITARY SEWER MANHOLE / BOOT CONNECTION DETAIL
SCALE: NTS

3 / C12.0 NOT USED
SCALE: NTS



BEDDING AND COVER MATERIAL:
CLASS IA: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	80-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

CLASS IB: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
NO. 4	10-30
NO. 8	0-5

CLASS I: SAND, GRAVELS, AND SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES. SOIL TYPES GW, GP, SW, AND SP.

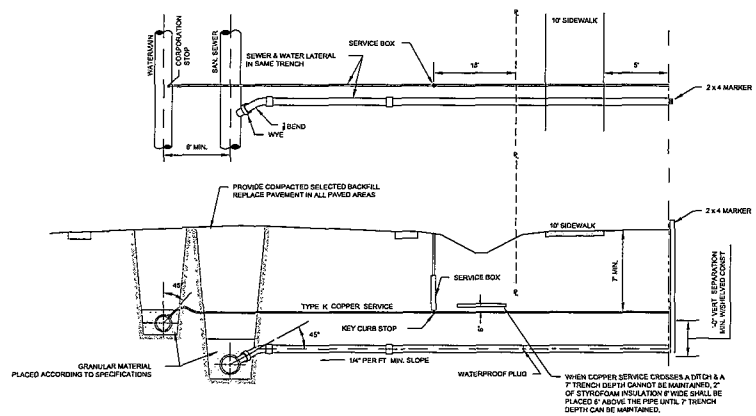
CLASS IB: SANDS, GRAVELS, AND SAND-GRAVEL MIXTURES WITH FINES. SOIL TYPES GM, GC, SM, AND SC.

INSTALLATION:
PLACE AND COMPACT BEDDING AND COVER IN MAXIMUM 6" LAYERS. WORK MATERIAL IN AND AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. COMPACT CLASS IB WITH HAND TAMPER OR VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS I WITH VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS IB WITH VIBRATORY COMPACTOR TO 90% STANDARD PROCTOR.

FLEXIBLE PIPE BEDDING (PVC)

4 / C12.0 TRENCH WIDTH & BEDDING DETAILS
SCALE: NTS

6 / C12.0 NOT USED
SCALE: NTS



NOTE:
CONTRACTOR SHALL ENSURE COMPLIANCE WITH SPS 382.40 (8) FOR WATER AND SEWER SEPARATION.

5 / C12.0 TYPICAL SEWER AND WATER CONNECTION DETAIL
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MLC | Checked By: ZLR | Scale: 1 | NONE
Tech/Disc: MW | Date: 07/23/2013 | Field Bk: | Pg:

VILLAGE OF WINDSOR, WI

BEAR TREE FARMS - PHASE 2

UTILITY DETAILS - SANITARY SEWER

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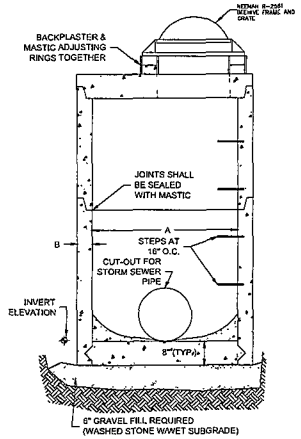


CONCRETE SHALL BE 4000 PSI, 28 DAY COMPRESSIVE STRENGTH, 5.5 BAG MIX WITH 1–2% AIR ENTRAINMENT

MANHOLE STEPS SHALL CONFORM TO ASTM-C478 & SHALL BE NEENAH FOUNDRY R-1981-N OR APPROVED EQUAL. STEPS SHALL BE SPACED 16" ON CENTER.

ADJUST FRAME TO GRADE WITH AT LEAST TWO PRECAST CONCRETE RINGS OF DIFFERENT THICKNESSES.

A MINIMUM OF 2" TO A MAXIMUM OF 9" OF ADJUSTING RINGS SHALL BE USED TO ADJUST THE MANHOLE CASTING TO THE FINISHED GRADE. ALL RINGS SHALL BE SEALED TOGETHER USING MASTIC AND ALL JOINTS SHALL BE BACK PLASTERED INSIDE AND OUT WITH CEMENT MORTAR.

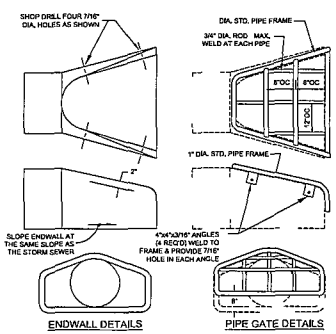
MANHOLE CASTING SHALL BE HEAVY DUTY NEENAH FOUNDRY R-1550-A WITH TYPE "B" NON-ROCKING LID, GASKET SEAL AND CONCEALED PICKHOLES.

STORM MANHOLE DIMENSIONS

MANHOLE SIZE	DIMENSION	
	A	B (MIN.)
48"	48"	5"
60"	60"	6"
72"	72"	7"
84"	84"	7"
96"	96"	9"

1 C13.0 STORM SEWER MANHOLE
SCALE: NTS

3 C13.0 INLETS MEDIAN (3 & 4 GRATE)
SCALE: NTS



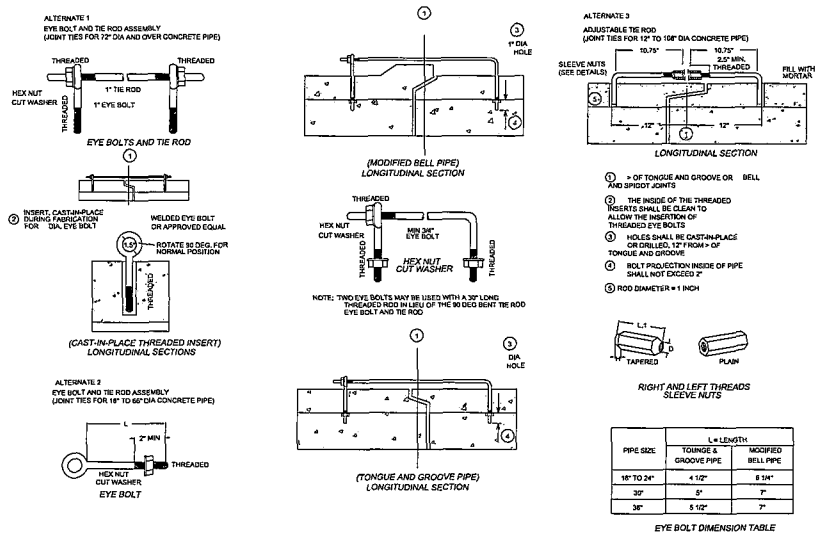
NOTES:
THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x8" MACHINE BOLTS WITH NUTS ON INSIDE WALL.

•ALL ENDWALL SECTIONS SHALL BE STRAPPED TO THE PREVIOUS TWO UPSTREAM PIPE SECTIONS.

PAINTING SPECIFICATIONS:
THE PIPE GATE SHALL RECEIVER THE FOLLOWING PREPARATION & PAINTING. THE FIRST COAT SHALL BE RUS-OLEUM X-60 RED BARE METAL PRIMER OR APPROVED EQUAL. THE SECOND COAT SHALL BE RUST-OLEUM 660 ZINC CHROMATE PRIMER OR APPROVED EQUAL. THE THIRD COAT SHALL BE RUS-OLEUM 1282 HIGH GLOSS METAL FINISH OR APPROVED EQUAL.

PREPARATION STEPS:
1. BARE METAL SURFACES TREAT WITH THE THREE-COAT PAINTING SYSTEM LISTED AFTER A THOROUGH SCRAPING, WIRE BRUSHING & CLEANING.
2. EACH COAT OF PAINT SHALL BE APPLIED OVER THE ENTIRE GATE SURFACE.
3. ALLOW 24-48 HOURS DRYING TIME AT 60° OR ABOVE BETWEEN COATS.

2 C13.0 STANDARD ENDWALL DETAILS
SCALE: NTS



1 = OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS

2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS

3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED, 1.2" FROM > OF TONGUE AND GROOVE

4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2"

5 ROD DIAMETER = 1 INCH

PIPE SIZE	L = LENGTH	
	TOUNGE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"

EYE BOLT DIMENSION TABLE

GENERAL NOTES:
CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AND PER STANDARD SPEC. 520.3 (D) THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2, OR 3 FOR DRAINAGE STRUCTURES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO THE CULVERT PIPE AS SHOWN ON THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE CULVERT PIPE.

PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

4 C13.0 CONCRETE PIPE JOINT TIE DETAILS
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1 | NONE
Technician: AKW | Date: 07/23/2018 | Field Bk: | Pg:

BEAR TREE FARMS - PHASE 2

UTILITY DETAILS - STORM SEWER

VILLAGE OF WINDSOR, WI

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PROJECT # 116.0177.30

C 13.0

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 10-M5", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

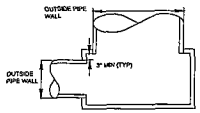
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

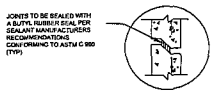
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

PIPE MATRIX

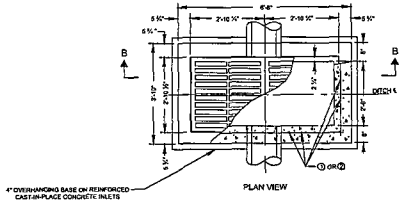
	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	33
2 GRATE	18	43



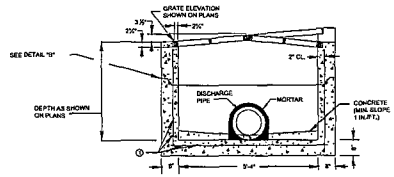
DETAIL "A"



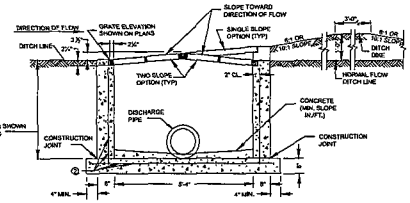
DETAIL "B"



PLAN VIEW



PRECAST REINFORCED CONCRETE
SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE
SECTION B-B

INLETS MEDIAN 2 GRATE

1 / C13.0 INLETS MEDIAN 2 GRATE
SCALE: NTS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

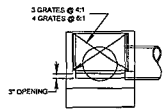
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 30-M5", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

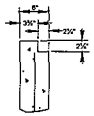
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

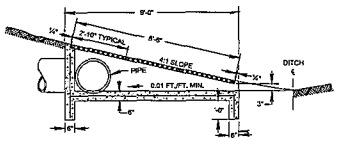
BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.



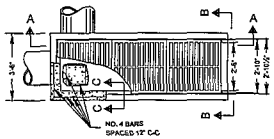
SECTION B-B



SECTION C-C



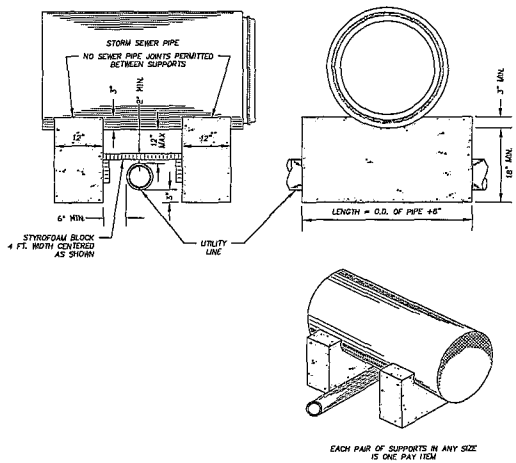
SECTION A-A



PLAN VIEW

INLETS MEDIAN 3 GRATE

2 / C13.0 INLETS MEDIAN 3 GRATE
SCALE: NTS



EACH PAIR OF SUPPORTS IN ANY SIZE IS ONE PAY ITEM

3 / C13.0 STORM SEWER CONCRETE SUPPORTS
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: ZLR | Scale: 1 | NONE
Technician: MW | Date: 07/23/2018 | Field Bk: | Pg:

VILLAGE OF WINDSOR, WI

BEAR TREE FARMS - PHASE 2

UTILITY DETAILS - STORM SEWER

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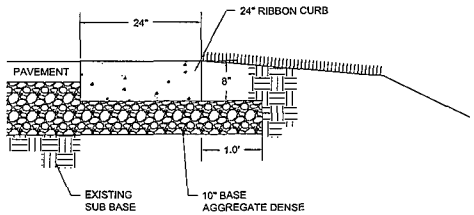
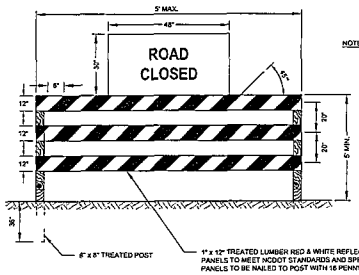
PROJECT # 116.0177.30

C 13.1



1 C14.0 RIBBON CURB DETAILS
SCALE: NTS

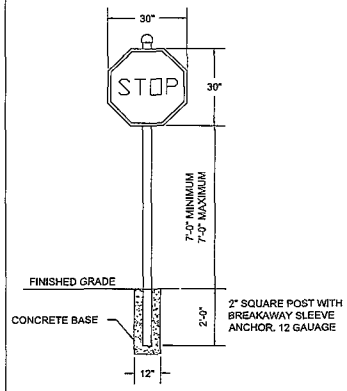


NOTES:

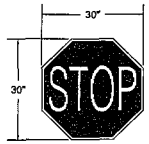
1. BARRICADE(S) TO BE ERECTED ACROSS ENTIRE ROADWAY INCLUDING CURB & GUTTER.
2. ADVANCE WARNING SIGN W14-1 (DEAD END) SHALL BE PLACED JUST AFTER LAST INTERSECTING STREET
3. MARKINGS FOR BARRICADE RAILS SHALL BE REFLECTIVE AND ALTERNATE RED AND WHITE STRIPS.
4. "ROAD CLOSED" SIGN SHALL MEET SPECIFICATIONS OF M.U.T.C.D. R11-2, AND BE REQUIRED ATOP EACH BARRICADE USED.

2 C14.0 TEMPORARY BARRICADE DETAILS
SCALE: NTS

3 C14.0 NOT USED
SCALE: NTS



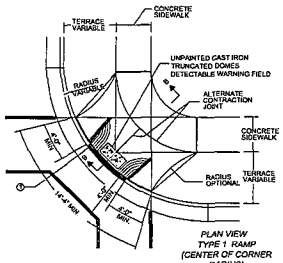
R1-1



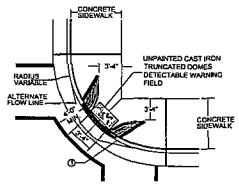
WHITE LEGEND RED BACKGROUND

4 C14.0 STOP SIGN DETAILS
SCALE: NTS

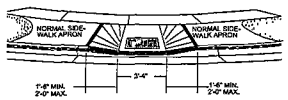
6 C14.0 NOT USED
SCALE: NTS



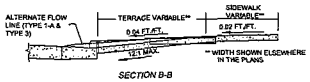
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



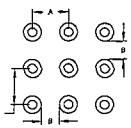
PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



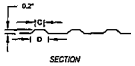
VIEW A-A



SECTION B-B



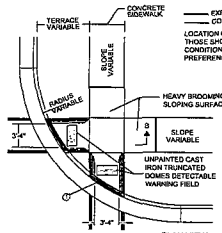
PLAN



SECTION

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C		
D	0.2"	1.4"

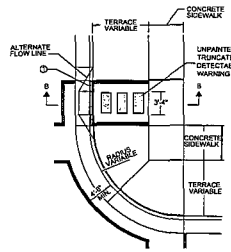
THE C DIMENSION IS 50% TO 65% OF YELLOW TRUNCATED DOMES PER THE D DIMENSION



EXPANSION JOINT-SIDEWALK
CONTRACTION JOINT

LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.

PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

CURB RAMPS AND DETECTABLE WARNING FIELDS WILL BE REQUIRED AT ALL INTERSECTIONS AND ANY MID BLOCK CROSSINGS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

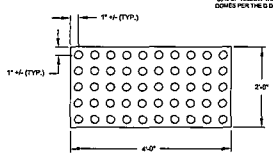
RAMPS SHALL BE BUILT AT 12:1 OR FLATTER. WHEN NECESSARY THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 OR TYPE 1-A RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

CURB RAMPS SHALL BE MEASURED AND PAID FOR AS CONCRETE SIDEWALK AND CONCRETE CURB AND GUTTER.

DETECTABLE WARNING FIELD PLATES SHALL BE NEENAH #4998 (NATURAL) OR METAPANEL BY METADOME, LLC (UNPAINTED).

① THE RAMP SHALL BE BORDERED ON BOTH SIDES AND ON THE CURB LINE WITH A 4 INCH WIDE YELLOW PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED. THE MUNICIPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.



TRUNCATED DOMES
DETECTABLE WARNING FIELDS

5 C14.0 CURB RAMP DETAIL
SCALE: NTS

MARK	REVISION	DATE	BY

Engineer: MJC | Checked By: BJR | Scale: 1 = NONE
Technician: MJW | Date: 07/23/2018 | Field Bk: Pg:

BEAR TREE FARMS - PHASE 2

MISC DETAILS

VILLAGE OF WINDSOR, WI

SNYDER & ASSOCIATES, INC.
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SNYDER & ASSOCIATES

PROJECT # 116.0177.30

C 14.0