

Appendix C

Linear Reef and Shoreline Marsh Construction Options

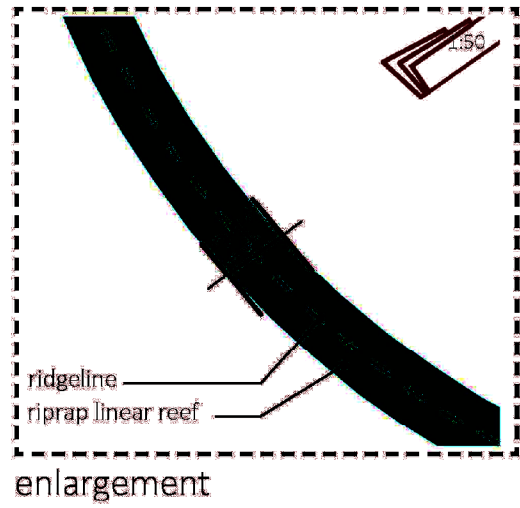
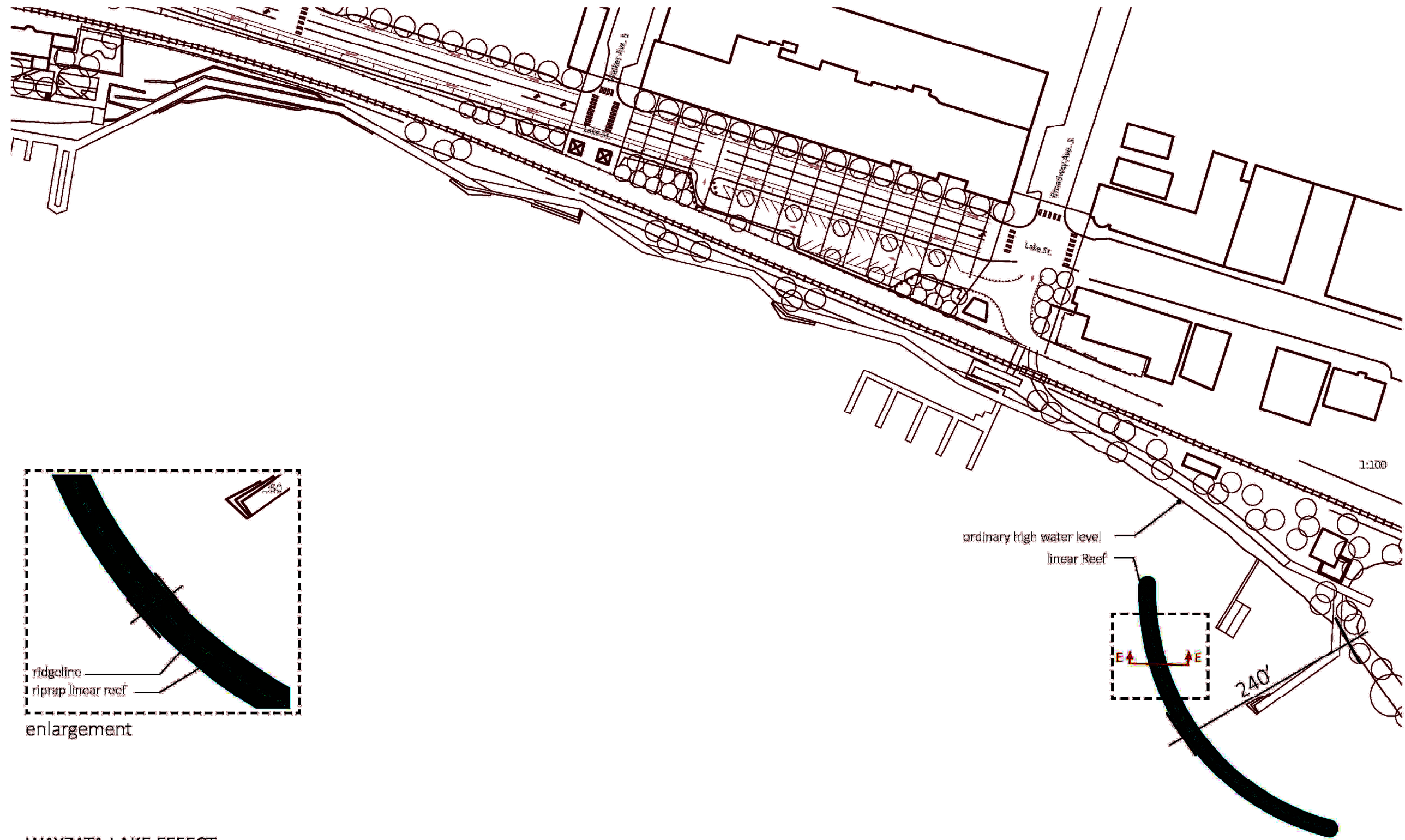
Figures:

- C-1: Option C1 Linear Reef Riprap Plan
- C-2: Option C1 Linear Reef Riprap Section
- C-3: Option C2 Linear Reef Sheet Pile Plan
- C-4: Option C2 Linear Reef Sheet Pile Section

Appendix C Linear Reef and Shoreline Marsh Construction Options

Option C1 Linear Reef – riprap plan. Under this plan, a 394 lf arc of riprap would be placed to depth of approximately 2' below the OHWL (Figure C-1). The riprap would be placed at a width of 21' and to a maximum height of 3.5' (Figure C-2).

Option C2 Linear Reef – sheet pile plan. Under this plan, 394 lf of sheet pile would be placed in an arc to a depth of approximately 2' below the OHWL (Figure C-3). The maximum height of the sheet pile would be approximately 3.5' (Figure C-4).



WAYZATA LAKE EFFECT
Lake Edge Diagrams : Linear Reef- Rip Rap Plan Diagram

OPTION C1 LINEAR REEF RIPRAP PLAN
WAYZATA LAKE EFFECT
WAYZATA, MINNESOTA

CIVITAS
10

Project No:	B1607634
Drawing No.	B1607634_FigC1
Drawn By:	CMF
Date Drawn:	01/20/2017
Checked By:	JBW
Last Modified:	2/9/17
Sheet:	Fig.
1 of 1	C-1

Linear Reef - Rip Rap
Section E-E

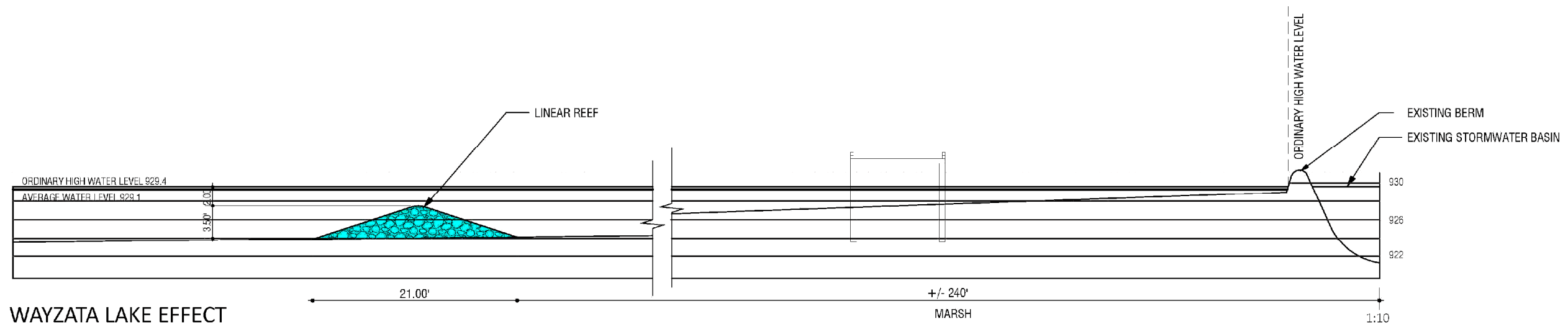
VOLUME CALCULATIONS

Linear Reef - Rip Rap

length of linear reef = 395 lf
Area of section = 39 sf

Lake Bottom Disturbance
8,608 s.f

Volume = 15,405 cf



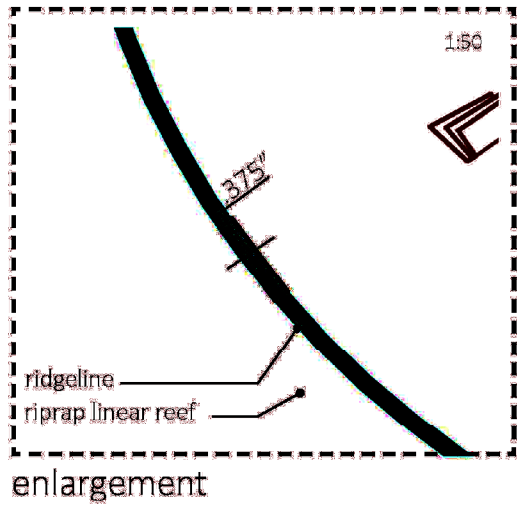
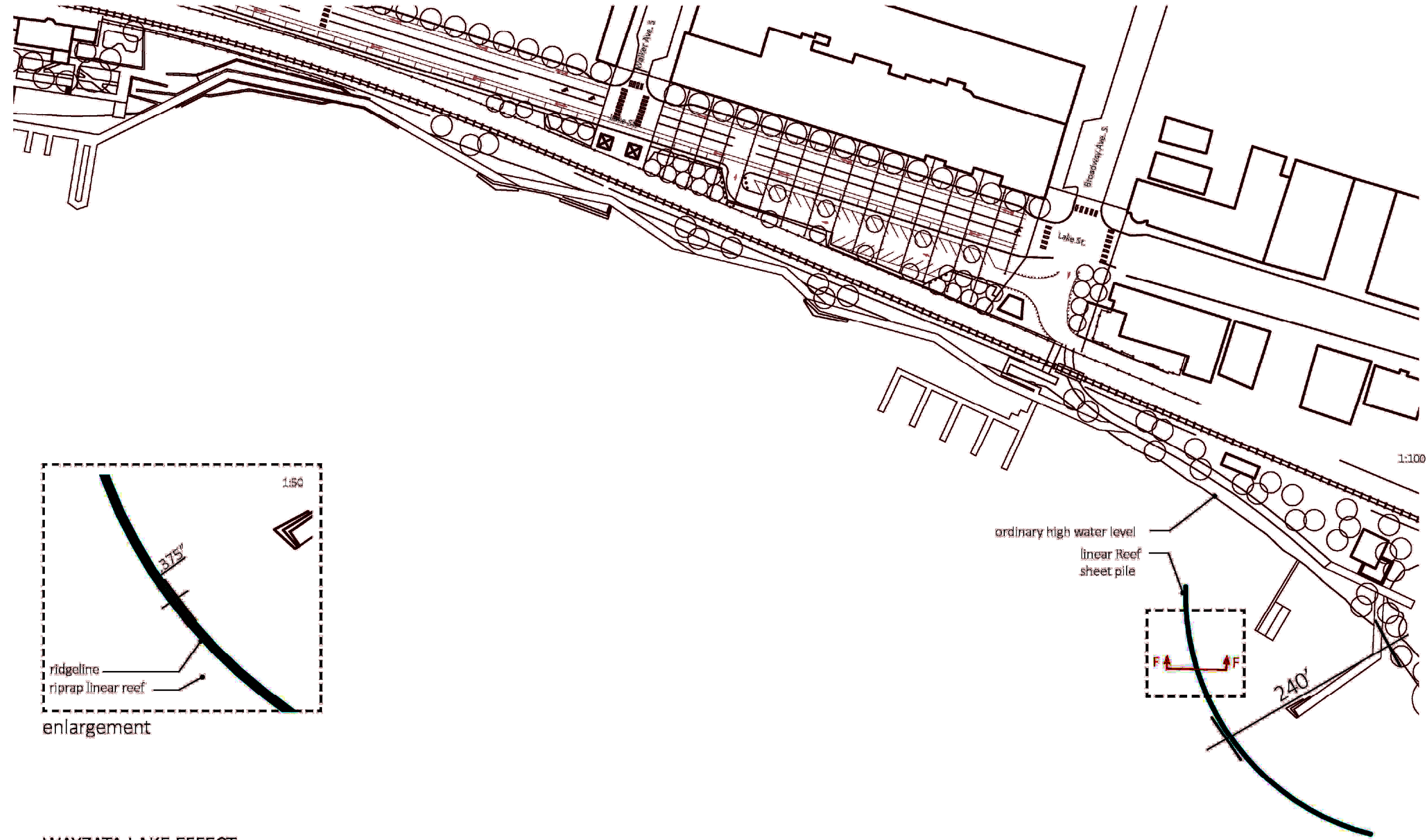
WAYZATA LAKE EFFECT
Lake Edge Diagrams : Linear Reef Section

OPTION C1 LINEAR REEF RIPRAP SECTION
WAYZATA LAKE EFFECT
WAYZATA, MINNESOTA

CIVITAS

11

Project No:	B1607634
Drawing No.	B1607634_FigC2
Drawn By:	CMF
Date Drawn:	01/20/2017
Checked By:	JBW
Last Modified:	2/9/17
Sheet:	1 of 1
Fig.	C-2



WAYZATA LAKE EFFECT
 Lake Edge Diagrams : Linear Reef- Sheet Pile Plan Diagram

OPTION C2 LINEAR REEF SHEET PILE PLAN
 WAYZATA LAKE EFFECT
 WAYZATA, MINNESOTA

Project No:		B1607634
Drawing No.		B1607634_FigC3
Drawn By:		CMF
Date Drawn:		01/20/2017
Checked By:		JBW
Last Modified:		2/9/17
Sheet:	Fig.	
1 of 1	C-3	

F:\2016\B1607634\GIS\EA\Stuff\B1607634_FigC3.mxd

Linear Reef - Sheet Pile
 Section Γ-Γ

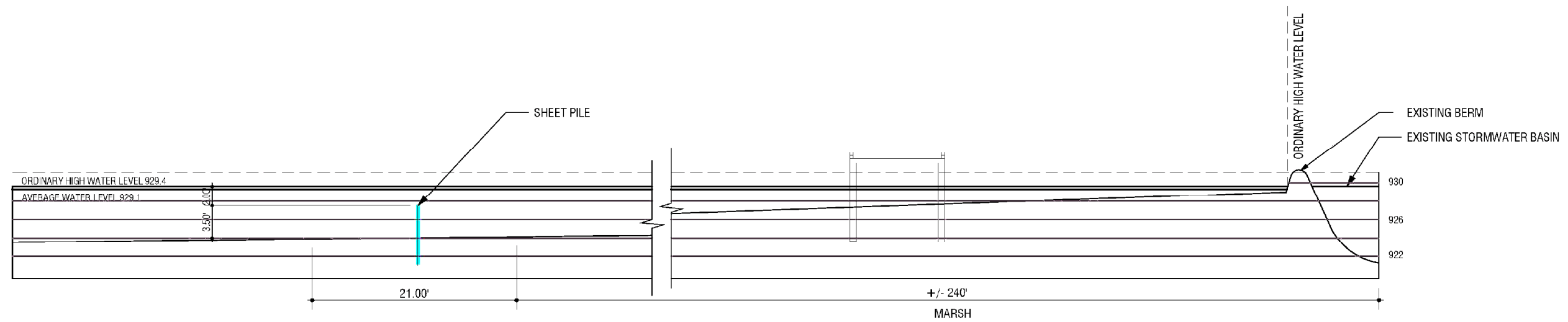
VOLUME CALCULATIONS

Linear Reef - Sheet Pile

length of linear reef = 394 lf
 Area of section = .11 sf
 (width of sheet pile .03125' x 3.5' = .11)

Lake Bottom Disturbance
 13 s.f

Volume = 43 cf



WAYZATA LAKE EFFECT
 Lake Edge Diagrams : Linear Reef Section

1:10

CIVITAS
 13

OPTION C2 LINEAR REEF SHEET PILE SECTION
 WAYZATA LAKE EFFECT
 WAYZATA, MINNESOTA

Project No:	B1607634
Drawing No.	B1607634_FigC4
Drawn By:	CMF
Date Drawn:	01/20/2017
Checked By:	JBW
Last Modified:	2/9/17
Sheet:	1 of 1
Fig.	C-4

F:\2016\B1607634\GIS\EA\W Stuffs\B1607634_FigC4.mxd