

Item E-1  
9-24-08

Figure 6: NCSD System Improvements Option 5a

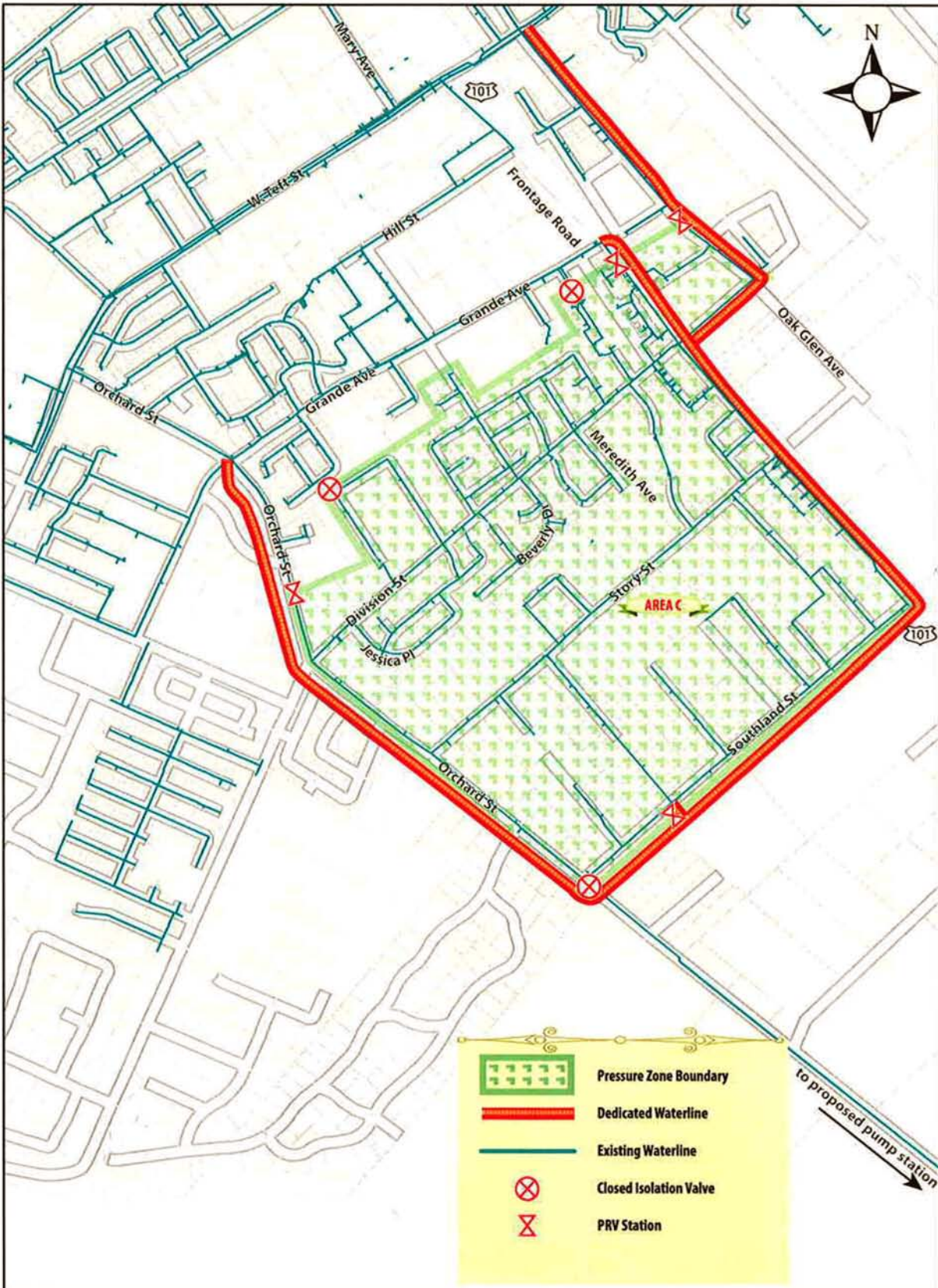
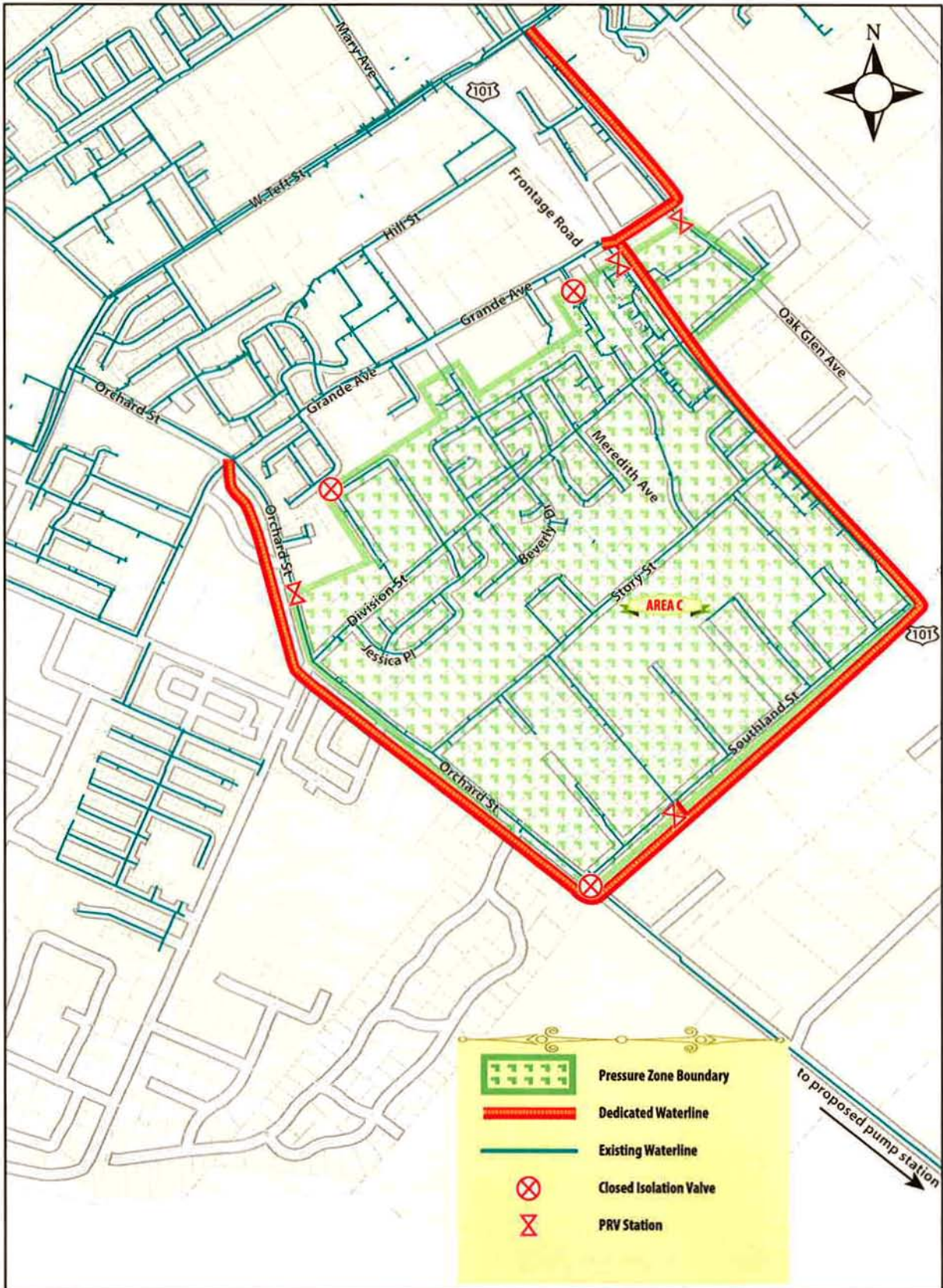




Figure 7: NCS D System Improvements Option 5b





**Table 4**  
**Nipomo Community Services District**  
**WATERLINE INTERTIE PROJECT**  
**NCSD Water Distribution System Improvements**  
**OPINION OF PROBABLE CONSTRUCTION COST**

<b>Supplemental Inflow Rate = 2,000 gpm</b>					
<b>Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Amount</b>
<b>Option 1. As recommended in Preliminary Engineering Memorandum (Boyle, May 2008)</b>					
1	Pressure regulators on individual services in Area A	200	EA	\$200	\$40,000
2	Southland St Incremental Upgrade 10" to 12"	3900	LF	\$40	\$156,000
3	Orchard Rd 12" Upgrade (Southland to Division)	3200	LF	\$145	\$464,000
4	Traffic Control for Orchard Rd	3200	LF	\$7	\$22,400
5	AC Pavement Overlay on Orchard Rd (assume 12-ft lane)	4267	YD <sup>2</sup>	\$36	\$153,600
<i>Option 1 Subtotal</i>					<b>\$836,000</b>
<b>Master Planned Improvements *</b>					
7	Southland St 10" Upgrade (Frontage to Orchard) *	3900	LF	\$160	\$624,000
8	Frontage Rd 12" Upgrade (Southland to Tefft) *	6470	LF	\$200	\$1,294,000
<i>Master planned Improvements Subtotal</i>					<b>\$1,918,000</b>
<i>Option 1 Adjusted Subtotal</i>					<b>\$2,754,000</b>
				<i>Contingency</i> 30%	<b>\$826,200</b>
<i>Option 1 Total</i>					<b>\$3,580,200</b>

<b>Option 4. PRV Zone with Dedicated Lines and Frontage Rd Improvements</b>					
1	Parallel Orchard Rd waterline 12" (Southland to Grande)	5200	LF	\$145	\$754,000
2	Traffic Control	5200	LF	\$7	\$36,400
3	AC Pavement Overlay (assume 12-ft lane)	6933	YD <sup>2</sup>	\$36	\$249,600
4	Parallel Southland St waterline 12"	3900	LF	\$145	\$565,500
5	Traffic Control	3900	LF	\$7	\$27,300
6	AC Pavement Overlay (assume 12-ft lane)	5200	YD <sup>2</sup>	\$36	\$187,200
7	Parallel Frontage Rd waterline 12" (Southland to Tefft)	6470	LF	\$145	\$938,150
8	Traffic Control	6470	LF	\$7	\$45,290
9	AC Pavement Overlay (assume 12-ft lane)	8627	YD <sup>2</sup>	\$36	\$310,560
10	Pressure Reducing Valve Station to isolate zone	4	EA	\$18,000	\$72,000
11	Isolation Valves to isolate zone	3	EA	\$4,000	\$12,000
<i>Option 4 Subtotal</i>					<b>\$3,198,000</b>
				<i>Contingency</i> 30%	<b>\$959,400</b>
<i>Option 4 Total</i>					<b>\$4,157,400</b>

**Notes:**

Costs not included: Engineering and administration, mobilization, pipeline to loop dead-end waterlines

Division Street upgrade (from Preliminary Engineering Memorandum) removed from Option 1, as determined already complete

\* The Master Planned project costs presented in this table have been modified from the Master Plan and the Preliminary Engineering Memorandum to reflect Boyle's opinion of costs and to be consistent with the unit costs used in this comparative analysis. These unit costs include traffic control and pavement overlay for these Master Plan projects, whereas these items are separate in the other opinions.

**Table 4**  
**Nipomo Community Services District**  
**WATERLINE INTERTIE PROJECT**  
**NCSD Water Distribution System Improvements**  
**OPINION OF PROBABLE CONSTRUCTION COST**

<b>Supplemental Inflow Rate = 2,000 gpm</b>					
<b>Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Amount</b>
<b>Option 5a. PRV Zone with Dedicated Lines (limited Frontage Rd. Improvements, cross Hwy 101 @ Amado)</b>					
1	Parallel Orchard Rd waterline 12" (Southland to Grande)	5200	LF	\$145	\$754,000
2	Traffic Control	5200	LF	\$7	\$36,400
3	AC Pavement Overlay (assume 12-ft lane)	6933	YD <sup>2</sup>	\$36	\$249,600
4	Parallel Southland St waterline 12"	3900	LF	\$145	\$565,500
5	Traffic Control	3900	LF	\$7	\$27,300
6	AC Pavement Overlay (assume 12-ft lane)	5200	YD <sup>2</sup>	\$36	\$187,200
7	Parallel Frontage Rd waterline 12" (Southland to Grande)	4400	LF	\$145	\$638,000
8	Traffic Control	4400	LF	\$7	\$30,800
9	AC Pavement Overlay (assume 12-ft lane)	5867	YD <sup>2</sup>	\$36	\$211,200
10	Highway crossed with jacked casing & 12" carrier pipe	220	LF	\$600	\$132,000
11	Parallel Amado (cross Hwy 101) waterline 12"	680	LF	\$145	\$98,600
12	Traffic Control	680	LF	\$7	\$4,760
13	AC Pavement Overlay (assume 12-ft lane)	907	YD <sup>2</sup>	\$36	\$32,640
14	Parallel S. Oakglen Ave waterline 12"	3200	LF	\$145	\$464,000
15	Traffic Control	3200	LF	\$7	\$22,400
16	AC Pavement Overlay (assume 12-ft lane)	4267	YD <sup>2</sup>	\$36	\$153,600
17	Pressure Reducing Valve Station to isolate zone	4	EA	\$18,000	\$72,000
18	Isolation Valves to isolate zone	3	EA	\$4,000	\$12,000
<b>Option 5a Subtotal</b>					<b>\$3,692,000</b>
<b>Contingency 30%</b>					<b>\$1,107,600</b>
<b>Option 5a Total</b>					<b>\$4,799,600</b>
<b>Option 5b. PRV Zone with Dedicated Lines (limited Frontage Rd. Improvements, cross Hwy 101 @ Darby)</b>					
1	Parallel Orchard Rd waterline 12" (Southland to Grande)	5200	LF	\$145	\$754,000
2	Traffic Control	5200	LF	\$7	\$36,400
3	AC Pavement Overlay (assume 12-ft lane)	6933	YD <sup>2</sup>	\$36	\$249,600
4	Parallel Southland St waterline 12"	3900	LF	\$145	\$565,500
5	Traffic Control	3900	LF	\$7	\$27,300
6	AC Pavement Overlay (assume 12-ft lane)	5200	YD <sup>2</sup>	\$36	\$187,200
7	Parallel Frontage Rd waterline 12" (Southland to Grande)	4400	LF	\$145	\$638,000
8	Traffic Control	4400	LF	\$7	\$30,800
9	AC Pavement Overlay (assume 12-ft lane)	5867	YD <sup>2</sup>	\$36	\$211,200
10	Highway crossed with jacked casing & 12" carrier pipe	220	LF	\$600	\$132,000
11	Parallel Darby (cross Hwy 101) waterline 12"	500	LF	\$145	\$72,500
12	Traffic Control	500	LF	\$7	\$3,500
13	AC Pavement Overlay (assume 12-ft lane)	667	YD <sup>2</sup>	\$36	\$24,000
14	Parallel S. Oakglen Ave waterline 12"	2100	LF	\$145	\$304,500
15	Traffic Control	2100	LF	\$7	\$14,700
16	AC Pavement Overlay (assume 12-ft lane)	2800	YD <sup>2</sup>	\$36	\$100,800
17	Pressure Reducing Valve Station to isolate zone	4	EA	\$18,000	\$72,000
18	Isolation Valves to isolate zone	3	EA	\$4,000	\$12,000
<b>Option 5b Subtotal</b>					<b>\$3,436,000</b>
<b>Contingency 30%</b>					<b>\$1,030,800</b>
<b>Option 5b Total</b>					<b>\$4,466,800</b>

**Notes:**

Costs not included: Engineering and administration, mobilization, pipeline to loop dead-end waterlines  
 Division Street upgrade (from Preliminary Engineering Memorandum) removed from Option 1, as determined already complete  
 \* The Master Planned project costs presented in this table have been modified from the Master Plan and the Preliminary Engineering Memorandum to reflect Boyle's opinion of costs and to be consistent with the unit costs used in this comparative analysis. These unit costs include traffic control and pavement overlay for these Master Plan projects, whereas these items are separate in the other opinions.