

REFERENCE TIES US 20				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
1518	P_US20	466+88.82	57.1601	PK NAIL
1519	P_US20	466+38.13	57.1239	PK NAIL
1520	P_US20	465+87.35	57.2368	PK NAIL
1521	P_US20	465+36.08	57.075	PK NAIL
1523	P_US20	475+77.89	57.1434	PK NAIL
1524	P_US20	475+26.98	57.125	PK NAIL
1525	P_US20	474+75.32	57.1696	PK NAIL
1526	P_US20	474+25.15	57.1483	PK NAIL
1528	P_US20	485+77.99	57.0997	PK NAIL
1529	P_US20	485+26.28	57.0839	PK NAIL
1530	P_US20	484+75.63	57.1681	PK NAIL
1531	P_US20	484+26.04	57.1021	PK NAIL
1535	P_US20	495+75.78	57.1245	PK NAIL
1536	P_US20	495+24.62	57.0838	PK NAIL
1537	P_US20	494+74.55	57.0733	PK NAIL
1538	P_US20	494+26.53	57.0621	PK NAIL
1540	P_US20	505+76.07	57.2126	PK NAIL
1541	P_US20	505+25.46	57.0671	PK NAIL
1542	P_US20	504+76.16	57.064	PK NAIL
1543	P_US20	504+27.67	57.0884	PK NAIL
1545	P_US20	515+73.68	57.1956	PK NAIL
1546	P_US20	515+24.75	57.1359	PK NAIL
1547	P_US20	514+75.15	57.0699	PK NAIL
1548	P_US20	514+26.67	57.1144	PK NAIL
1551	P_US20	525+70.25	57.3989	PK NAIL
1552	P_US20	525+23.26	57.4074	PK NAIL
1553	P_US20	524+74.07	57.3252	PK NAIL
1554	P_US20	524+27.54	57.218	PK NAIL
1557	P_US20	550+71.48	57.1891	PK NAIL
1558	P_US20	550+24.21	57.135	PK NAIL
1559	P_US20	549+75.34	57.1458	PK NAIL
1560	P_US20	549+28.04	57.1914	PK NAIL
1562	P_US20	560+68.22	57.1139	PK NAIL
1563	P_US20	560+22.53	57.0646	PK NAIL
1564	P_US20	559+75.51	57.1128	PK NAIL
1565	P_US20	559+28.01	57.0266	PK NAIL
1568	P_US20	535+72.96	57.5898	PK NAIL
1569	P_US20	535+24.21	57.6218	PK NAIL
1570	P_US20	534+75.62	57.5653	PK NAIL
1571	P_US20	534+26.53	57.624	PK NAIL
1574	P_US20	582+63.37	64.2772	PK NAIL
1575	P_US20	582+13.81	64.1598	PK NAIL
1576	P_US20	581+65.93	63.9732	PK NAIL
1577	P_US20	581+16.10	63.955	PK NAIL
1579	P_US20	585+72.67	64.0593	PK NAIL
1580	P_US20	585+22.21	64.0769	PK NAIL
1581	P_US20	584+72.23	64.0829	PK NAIL
1582	P_US20	584+22.06	64.0979	PK NAIL
1584	P_US20	590+68.97	57.1848	PK NAIL
1585	P_US20	590+19.23	59.0992	PK NAIL
1586	P_US20	589+69.67	59.9629	PK NAIL
1587	P_US20	589+21.93	60.633	PK NAIL
1589	P_US20	597+74.34	56.891	PK NAIL
1590	P_US20	597+25.53	56.9164	PK NAIL
1591	P_US20	596+75.59	57.185	PK NAIL
1592	P_US20	596+26.12	57.1675	PK NAIL
1594	P_US20	600+63.90	56.8828	PK NAIL
1595	P_US20	600+15.44	57.09	PK NAIL
1596	P_US20	599+63.40	56.924	PK NAIL
1597	P_US20	599+12.42	56.9757	PK NAIL
1599	P_US20	610+68.26	56.9648	PK NAIL
1600	P_US20	610+22.67	56.9126	PK NAIL
1601	P_US20	609+75.11	56.9917	PK NAIL
1602	P_US20	609+28.19	56.8824	PK NAIL
1605	P_US20	620+69.62	57.0211	PK NAIL
1606	P_US20	620+23.29	56.9715	PK NAIL
1607	P_US20	619+76.41	57.0431	PK NAIL
1608	P_US20	619+30.38	56.9	PK NAIL
1610	P_US20	630+66.75	56.993	PK NAIL
1611	P_US20	630+22.52	57.0736	PK NAIL

REFERENCE TIES US 20 CONT'D				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
1613	P_US20	629+30.70	56.9891	PK NAIL
1615	P_US20	640+57.06	57.0514	PK NAIL
1616	P_US20	640+12.59	57.0742	PK NAIL
1617	P_US20	639+65.79	57.0291	PK NAIL
1618	P_US20	639+20.66	57.0766	PK NAIL
REFERENCE TIES FRONTAGE ROAD				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
1619	P_FR	-	-	IRON
1620	P_FR	94+39.62	43.1678	IRON
1621	P_FR	-	-	IRON
1622	P_FR	94+39.58	-34.7053	IRON
1623	P_FR	95+90.74	44.7862	IRON
1624	P_FR	97+10.04	46.5983	IRON
1625	P_FR	96+00.31	-39.5476	IRON
1626	P_FR	96+91.59	-41.3742	IRON
1627	P_FR	103+48.13	95.9255	IRON
1628	P_FR	103+55.82	-56.0116	IRON
1629	P_FR	102+54.18	58.4678	IRON
1630	P_FR	102+86.78	-94.194	IRON
1631	P_FR	110+82.81	80.0911	IRON
1632	P_FR	109+59.93	83.1962	IRON
1633	P_FR	109+66.92	-81.1123	IRON
1634	P_FR	110+72.17	-81.3844	IRON
1635	P_FR	115+52.75	79.4339	IRON
1636	P_FR	114+43.22	79.8406	IRON
1637	P_FR	114+51.57	-81.2823	IRON
1638	P_FR	115+52.26	-81.5625	IRON
1639	P_FR	125+57.94	83.062	IRON
1640	P_FR	124+18.30	73.1551	IRON
1641	P_FR	124+04.07	-145.4158	PK NAIL
1642	P_FR	125+74.12	-145.8365	PK NAIL
1643	P_FR	134+46.52	112.0282	IRON
1644	P_FR	136+24.06	76.8964	IRON
1645	P_FR	136+27.29	-42.6989	IRON
1646	P_FR	133+67.78	-145.2179	PK NAIL
1647	P_FR	145+79.48	37.9441	IRON
1648	P_FR	144+73.98	91.1612	IRON
1649	P_FR	146+03.44	-145.3696	PK NAIL
1650	P_FR	143+98.21	-145.3268	PK NAIL
1651	P_FR	149+48.57	112.7153	IRON
1652	P_FR	151+36.45	105.0079	IRON
1653	P_FR	151+43.72	-144.3934	PK NAIL
1654	P_FR	149+91.83	-145.6397	PK NAIL
1655	P_FR	155+23.92	107.7027	IRON
1656	P_FR	153+91.54	110.9102	IRON
1657	P_FR	154+02.92	-136.5303	PK NAIL
1658	P_FR	155+76.55	-125.4879	PK NAIL
1659	P_FR	158+79.70	101.1835	IRON
1660	P_FR	161+27.30	51.775	IRON
1661	P_FR	158+00.16	-128.6242	PK NAIL
1662	P_FR	159+84.34	-146.3051	PK NAIL
1663	P_FR	161+27.30	51.811	IRON
1664	P_FR	162+93.25	83.7169	IRON
1665	P_FR	159+84.38	-146.2832	PK NAIL
1666	P_FR	162+49.51	-200.0289	PK NAIL
1667	P_FR	162+49.48	-200.0212	PK NAIL
1668	P_FR	165+68.32	-165.1842	PK NAIL
1669	P_FR	162+93.17	83.6932	IRON
1670	P_FR	165+28.34	95.9989	IRON
1671	P_FR	165+28.43	96.0199	IRON
1672	P_FR	167+92.41	85.6087	IRON
1673	P_FR	167+74.43	-85.747	PK NAIL
1674	P_FR	165+68.35	-165.2141	PK NAIL
1675	P_FR	169+57.95	-64.4855	PK NAIL
1676	P_FR	171+00.43	-107.5927	PK NAIL
1677	P_FR	170+01.39	79.4096	CROSS CUT
1678	P_FR	171+52.04	59.629	CROSS CUT
1679	P_FR	172+54.18	-54.2387	IRON
1680	P_FR	174+27.68	-105.2669	PK NAIL
1681	P_FR	173+98.06	50.1465	CROSS CUT

REFERENCE TIES FRONTAGE ROAD CONT'D				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
1682	P_FR	172+89.89	62.8107	CROSS CUT
1683	P_FR	176+44.91	-105.5545	PK NAIL
1684	P_FR	175+25.04	-104.5243	PK NAIL
1685	P_FR	176+59.83	33.3374	CROSS CUT
1686	P_FR	173+98.08	50.1871	CROSS CUT
1687	P_FR	181+93.67	-40.8925	IRON
1688	P_FR	110+14.60	6.759.74	PK NAIL
1689	P_FR	181+64.79	67.0429	PK NAIL
1690	P_FR	110+14.60	-6.703.40	PK NAIL
1691	P_FR	177+74.27	-119.5195	PK NAIL
1692	P_FR	177+14.29	43.3784	CROSS CUT

BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
93	2063709.34	2423166.6	829.2100	P_US20	482+50.63	75.3' RT	IRON ROD IN CAP
92	2063637.78	2421105.14	849.1100	P_US20	461+88.60	127.49' RT	IRON ROD IN CAP
91	2063552.36	2419100.34	886.4800	P_US20	441+93.53	101.77' LT	IRON ROD IN CAP
67	2060186.11	2441311.27	812.6500	P_US20	672+73.21	142.49' RT	IRON ROD IN CAP
66	2060436.56	2439790.59	785.3600	P_US20	657+58.33	97.73' RT	IRON ROD IN CAP
65	2061638.39	2437629.75	796.1700	P_US20	632+99.72	84.58' RT	IRON ROD IN CAP
64	2062752.54	2435617.51	770.9700	P_US20	609+99.89	119.64' RT	IRON ROD IN CAP
63	2063573.98	2434224.25	768.6700	P_US20	593+72.27	81.23' RT	IRON ROD IN CAP
62	2063790.44	2432334.4	797.2900	P_US20	574+18.79	80.35' RT	IRON ROD IN CAP
61	2063761.44	2429432.89	770.7700	P_US20	545+17.14	82.09' RT	IRON ROD IN CAP
32	2063761.33	2420684.93	844.4300	P_US20	457+69.59	0' LT/RT	BRASS DISC IN CONC

Note: All coordinates and elevations shown above were obtained in the field by NAKAWATASE, WYNS and ASSOC., except for Pt. 62. Coordinates and elevation for Pt. 62 were given to NWA by IDOT. They were never field checked.

HORIZONTAL CONTROL POINTS US 20						
POINT	NORTH	EAST	CHAIN	STATION	OFFSET	DESCRIPTION
2001	2063752.24	2421526.57	P_US20	466+11.08	0.00	PIPE
2002	2063760.59	2422415.45	P_US20	475+00.00	0.00	PIPE
2003	2063765.29	2422915.43	P_US20	480+00.00	0.00	CHISELED "X"
2004	2063769.99	2423415.41	P_US20	485+00.00	0.00	PIPE
2005	2063774.68	2423915.39	P_US20	490+00.00	0.00	PIPE
2006	2063779.38	2424415.36	P_US20	495+00.00	0.00	PIPE
2007	2063784.08	2424915.34	P_US20	500+00.00	0.00	PIPE
2008	2063788.78	2425415.32	P_US20	505+00.00	0.00	PIPE
2009	2063793.47	2425915.30	P_US20	510+00.00	0.00	PIPE
2010	2063798.17	2426415.28	P_US20	515+00.00	0.00	PIPE
2011	2063802.87	2426915.25	P_US20	520+00.00	0.00	PIPE
2012	2063807.57	2427415.23	P_US20	525+00.00	0.00	PIPE
2013	2063812.26	2427915.21	P_US20	530+00.00	0.00	PIPE
2014	2063816.96	2428415.19	P_US20	535+00.00	0.00	PIPE
2015	2063821.66	2428915.17	P_US20	540+00.01	0.00	PIPE
2016	2063826.36	2429415.14	P_US20	545+00.00	0.00	PIPE
2017	2063831.06	2429915.12	P_US20	550+00.00	0.00	PIPE
2018	2063835.75	2430415.10	P_US20	555+00.00	0.00	PIPE
2019	2063840.45	2430915.08	P_US20	560+00.00	0.00	PIPE
2020	2063845.15	2431415.05	P_US20	565+00.00	0.00	PIPE
2021	2063849.85	2431915.03	P_US20	570+00.00	0.00	PIPE
2022	2063854.54	2432415.01	P_US20	575+00.00	0.00	PIPE
2023	2063859.24	2432914.99	P_US20	580+00.00	0.00	PIPE
2024	2063861.04	2433106.10	P_US20	581+91.12	0.00	PIPE
2025	2063847.19	2433414.52	P_US20	585+00.00	0.00	PIPE
2026	2063754.40	2433905.18	P_US20	590+00.00	0.00	PIPE
2027	2063577.31	2434372.08	P_US20	595+00.00	0.00	PIPE
2028	2063483.					