

**ACCURACY STATEMENT**

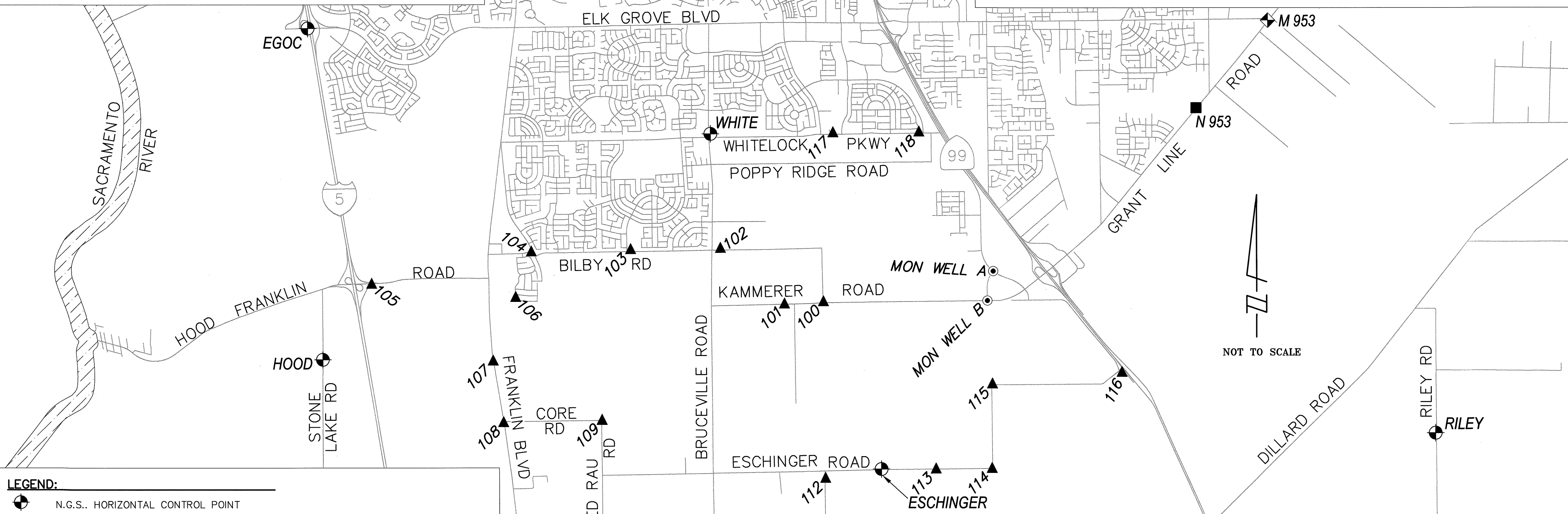
HORIZONTAL COORDINATES AS SHOWN HEREON MEET THE REQUIREMENTS OF THE CALIFORNIA COORDINATE SYSTEM, PUBLIC RESOURCES CODE 8801-8819, INCLUDING AN ACCURACY LEVEL OF 1 CENTIMETER (0.03 FEET) CIRCULAR ERROR PROBABLE ACCORDING TO THE FEDERAL GEOGRAPHIC DATA COMMITTEE "GEOSPATIAL POSITIONING ACCURACY STANDARD, PART 2, GEODETIC CONTROL NETWORKS", FGDC -STD-007.2-1998.

ELEVATIONS SHOWN HEREON ARE LEVELED CALIFORNIA ORTHOMETRIC HEIGHTS OF 1988 (COH88) IN ACCORDANCE WITH THE FEDERAL GEODETIC CONTROL SUBCOMMITTEE DOCUMENT ENTITLED "FGCS SPECIFICATIONS AND PROCEDURES TO INCORPORATE ELECTRONIC DIGITAL/BAR-CODE LEVELING SYSTEMS". THE VALUES SHOWN HEREON ARE A PRODUCT OF CLOSED LEVEL LOOPS WHICH DID NOT EXCEED THE MISCLOSURE TOLERANCE FOR SECOND ORDER CLASS I ACCORDING TO SAID DOCUMENT.

**RECORD OF SURVEY**  
**G.P.S. STATIC SURVEY**  
**ELK GROVE**  
**CITY OF ELK GROVE G.P.S. STATIC SURVEY**  
 Sacramento County - California  
 June, 2018  
 SHEET 1 OF 3

**PURPOSE OF SURVEY:**  
 THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH A PRIMARY HORIZONTAL AND VERTICAL CONTROL NETWORK FOR THE CITY OF ELK GROVE THAT WAS CONSTRAINED HORIZONTALLY TO THE CALIFORNIA SPATIAL REFERENCE NETWORK BASED UPON THE 1983 NORTH AMERICAN DATUM AND REFERENCED TO NAD83(2011), (2010.00 EPOCH) AND VERTICALLY TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

92-5-1



**LEGEND:**

- ⊕ N.G.S. HORIZONTAL CONTROL POINT
- N.G.S. BENCHMARK
- ⊕ N.G.S. HORIZONTAL AND VERTICAL CONTROL POINT
- ▲ SET CITY OF ELK GROVE CONTROL POINT
- ⊙ EXISTING MONUMENT WELL PER 372 B.M. 27

N.G.S. NATIONAL GEODETIC SURVEY	SE	SOUTHEAST
INTX INTERSECTION	NE	NORTHEAST
N NORTH	BOW	BACK OF WALK
S SOUTH	DI	DROP INLET
E EAST	EP	EDGE OF PAVEMENT
W WEST	TRI	TRIANGULATION
NW NORTHWEST	CL	CENTERLINE
SW SOUTHWEST	DWY	DRIVEWAY

**COUNTY RECORDER'S STATEMENT:**  
 FILED THIS 15TH DAY OF FEBRUARY 2019 AT 11:59 A.M. IN BOOK 92 OF SURVEYS, AT PAGE 5, AT THE REQUEST OF PSOMAS.

DONNA ALLRED, COUNTY RECORDER  
 BY: *[Signature]*  
 DEPUTY COUNTY RECORDER  
 FILE NO. 201902150555

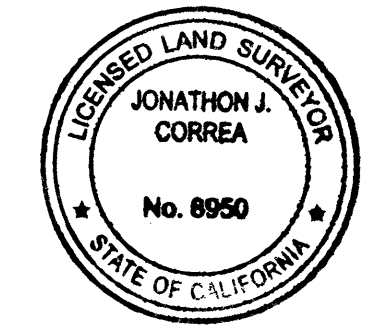
NO FEE DOCUMENT PER GOVERNMENT CODE 6103

**SURVEYOR'S STATEMENT:**  
 THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT AT THE REQUEST OF THE CITY OF ELK GROVE, IN JUNE, 2018.  
*Scott A. Bryant* 2/10/19  
 SCOTT A. BRYANT P.L.S. 7228



**COUNTY SURVEYOR'S STATEMENT:**  
 THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYOR'S ACT THIS 13TH DAY OF FEBRUARY, 2019.

JON D. SCARPA, PLS 7554  
 COUNTY SURVEYOR  
 BY: *[Signature]*  
 JONATHAN J. CORREA, PLS 8950  
 DEPUTY COUNTY SURVEYOR



**BASIS OF ELEVATIONS:**  
 THIS SURVEY ESTABLISHES THE BASIS OF ELEVATIONS FOR THE SURVEY CONTROL NETWORK CREATED FOR THE CITY OF ELK GROVE TO BE ON THE CALIFORNIA ORTHOMETRIC HEIGHTS OF 1988 (COH88) DATUM BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DEFINED BY THE NATIONAL GEODETIC SURVEY.

**BASIS OF BEARINGS:**  
 THIS SURVEY ESTABLISHES THE BASIS OF BEARINGS FOR THE SURVEY CONTROL NETWORK CREATED FOR THE SOUTHERLY PORTION OF ELK GROVE TO BE ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) BASED UPON THE NORTH AMERICAN DATUM OF 1983 AS REFERENCED TO THE 2011 (EPOCH 2010.00) ADJUSTMENT AS DEFINED BY THE NATIONAL GEODETIC SURVEY.

**PSOMAS**  
 1075 Creekside Ridge Dr., Ste 200  
 Roseville, CA. 95678  
 (916) 788-8122 Fax: 788-0600

Plotted: Feb/06/2019 3:00 PM | By: Josie.campbell  
 DWG: P:\6W1100400-GPS Network\SURVEY\CIVIL3D\ROS\ROS\_ElkGrove\_v4.dwg

**RECORD OF SURVEY**  
**G.P.S. STATIC SURVEY**  
**ELK GROVE**  
**CITY OF ELK GROVE G.P.S. STATIC SURVEY**  
 Sacramento County - California  
 June, 2018  
 SHEET 2 OF 3



92-5-2

**NOTE:**

ALL MONUMENTS SET CONSIST OF A 3-1/4" DOMED BRASS DISK STAMPED "CITY OF ELK GROVE SURVEY CONTROL MONUMENT" ALONG WITH A THREE-DIGIT CONTROL POINT NUMBER, AS SHOWN HERE, ALL MONUMENTS BEING SET ATOP A 36"X 3/4" REBAR SET INSIDE AN 8" DIAMETER X 12" DEEP CONCRETE COLLAR, SET 6" BELOW EXISTING GRADE.

HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 - NAD83(2011) (2010.00 EPOCH)  
 PLANE COORDINATES: CALIFORNIA COORDINATE SYSTEM, ZONE 2 (0402)  
 VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

STATION	DESCRIPTION	LATITUDE (N.)	LONGITUDE (W.)	(US FT.) NORTHING	(US FT.) EASTING	(US FT.) ELEV	CONVERGENCE ANGLE	SCALE FACTOR	ELEVATION FACTOR	COMBINED FACTOR	
100	SET 3-1/4" BRASS DISK	38°22'21.39973"	121°23'56.51927"	1898088.258	6733960.833	33.12	0°22'44"	0.99999133	1.00000326	0.99999459	NE CORNER OF KAMMERER RD AND MCMILLAN RD. 32' S OF A SIGN; 21' N OF THE CL OF KAMMERER RD; 35' NE OF A POWER POLE
101	SET 3-1/4" BRASS DISK	38°22'20.47999"	121°24'19.76719"	1897983.041	6732110.061	29.70	0°22'29"	0.99999138	1.00000343	0.99999481	AT 8158 KAMMERER RD; 20.5' S OF KAMMERER RD CL; 49' SW OF POWER POLE; 12' SE OF INTX OF EP WITH CONCRETE DRWY
102	SET 3-1/4" BRASS DISK	38°22'46.73639"	121°24'57.68045"	1900619.542	6729073.707	29.73	0°22'05"	0.99998982	1.00000343	0.99999325	N SIDE BILBY RD; 385' E OF INTX BILBY RD WITH BRUCEVILLE RD; 7' NE OF HANDICAP SIGN; 1' E OF BOW; 10' E OF DI
103	SET 3-1/4" BRASS DISK	38°22'46.47147"	121°25'51.28735"	1900565.662	6724805.231	25.31	0°21'32"	0.99998984	1.00000365	0.99999348	SE OF PARKING LOT AT THE INTX OF BILBY RD W/ STATHOS DR; 18.5' NE OF CORNER TBC; 3' SE OF TBC; 18.9' SW OF CORNER TBC
104	SET 3-1/4" BRASS DISK	38°22'45.87131"	121°26'50.63167"	1900475.788	6720080.084	19.60	0°20'54"	0.99998987	1.00000393	0.99999380	S CORNER OF INTX OF BILBY RD WITH WILLARD PKWY; 23' S OF SIGNAL LIGHT; 20' SW OF POWER POLE; 2' W OF BOW
105	SET 3-1/4" BRASS DISK	38°22'31.17087"	121°28'26.17245"	1898943.545	6712480.866	13.07	0°19'54"	0.99999074	1.00000425	0.99999500	SE CORNER OF INTX OF NB I-5 OFFRAMP WITH HOOD FRANKLIN RD; 13' NE OF CORNER FENCE POST; 5' N OF BARBED WIRE FENCE
106	SET 3-1/4" BRASS DISK	38°22'24.53727"	121°27'00.29731"	1898312.978	6719323.478	24.67	0°20'48"	0.99999114	1.00000369	0.99999483	W SIDE TUSK WY; S OF AMMOLITE WY; 13.5' E OF BLOCK WALL; 10' W OF BOW; 72' NW OF BEGINNING OF CURVE OF BOW
107	SET 3-1/4" BRASS DISK	38°21'54.81341"	121°27'13.89522"	1895299.595	6718258.670	15.96	0°20'40"	0.99999292	1.00000411	0.99999703	0.55 MI. N OF CORE RD; SE SIDE OF A RED BARN; 21' SE OF TELEPHONE POLE; 5' NE OF DI; 21' W OF CL FRANKLIN BLVD
108	SET 3-1/4" BRASS DISK	38°21'25.94116"	121°27'08.04773"	1892381.692	6718741.996	15.67	0°20'43"	0.99999467	1.00000412	0.99999880	SW CORNER OF INTX OF FRANKLIN BLVD WITH CORE RD; 50' S OF GRAVEL DWY; 8' E OF METAL FENCE; 19' W OF EP
109	SET 3-1/4" BRASS DISK	38°21'26.69334"	121°26'09.15662"	1892486.479	6723432.420	19.40	0°21'20"	0.99999463	1.00000394	0.99999857	NE CORNER OF INTX OF CORE RD WITH ED RAU RD; 52' SW OF TRANSMISSION POLE; 16' E OF N'LY PROJECTION OF CL ED RAU RD
110	SET 3-1/4" BRASS DISK	38°20'35.17281"	121°26'09.33601"	1887274.598	6723450.481	21.62	0°21'20"	0.99999780	1.00000384	1.00000164	0.25 MI. N OF INTX OF ED RAU RD WITH POINT PLEASANT RD; 13' N OF EDGE GRAVEL DRWY; 8' W OF EP; 39' NE OF POWER POLE
111	SET 3-1/4" BRASS DISK	38°20'36.90344"	121°25'02.37565"	1887483.326	6728784.045	25.09	0°22'02"	0.99999769	1.00000366	1.00000136	0.47 MI. S OF INTX OF ESCHINGER RD WITH BRUCEVILLE RD; 8' E OF EP; 20' SW OF DAIRY SIGN; 22.2' W OF METAL FENCE
112	SET 3-1/4" BRASS DISK	38°20'58.64431"	121°23'56.05312"	1889717.031	6734053.327	31.27	0°22'44"	0.99999635	1.00000336	0.99999970	370' S OF INTX OF ESCHINGER RD WITH CARROLL RD; 40' S OF INTX CONC DWY W/ EP; 6' E OF EP; 12' W OF CHAINLINK FENCE
113	SET 3-1/4" BRASS DISK	38°21'02.67080"	121°22'50.04946"	1890159.655	6739308.525	36.15	0°23'26"	0.99999610	1.00000312	0.99999922	2 MI. E OF BRUCEVILLE RD; W OF DRWY FOR 8700 ESCHINGER RD; 14' S OF EP; 9' N OF BARBED FENCE; 15.5' NW OF MAILBOX
114	SET 3-1/4" BRASS DISK	38°21'02.74833"	121°22'16.58639"	1890185.805	6741974.157	39.53	0°23'47"	0.99999609	1.00000295	0.99999905	2.5 MI. E OF INTX OF ESCHINGER RD WITH BRUCEVILLE RD; 18' S OF EP; 8' N OF METAL FENCE; 9' W OF POWER POLE
115	SET 3-1/4" BRASS DISK	38°21'42.34669"	121°22'16.03572"	1894191.840	6741990.303	41.52	0°23'47"	0.99999368	1.00000285	0.99999653	1.2 MI. SW OF HWY 99 ONRAMP ALONG ESCHINGER RD; 5' S OF SIGN; 14' SW OF POWER POLE; 10.5' SW OF GUY ANCHOR
116	SET 3-1/4" BRASS DISK	38°21'47.41756"	121°20'58.63899"	1894748.192	6748151.140	48.01	0°24'36"	0.99999337	1.00000253	0.99999590	S CORNER OF INTX OF ESCHINGER RD WITH W STOCKTON BLVD; 15' SE OF SIGN; 14.5' SW OF EP; 4.5' NE OF WIRE FENCE
117	SET 3-1/4" BRASS DISK	38°23'40.47213"	121°23'49.96694"	1906090.608	6734429.579	34.40	0°22'48"	0.99998668	1.00000319	0.99998987	E OF ENTRANCE TO ELIZABETH PINKERTON MIDDLE SCHOOL; 27' E OF SIDEWALK; 15' W OF STREET LIGHT; 2' N OF TOP BACK CURB
118	SET 3-1/4" BRASS DISK	38°23'40.58425"	121°22'58.61797"	1906129.386	6738517.487	39.24	0°23'21"	0.99998667	1.00000296	0.99998963	150' W OF LOTZ PKWY; N SIDE OF WHITELOCK PKWY; 3' E OF EDGE OF SIDEWALK; 2' N OF TOP BACK CURB; 10' SW OF TREE
MON WELL A	FD 2-1/2" BRASS DISK	38°22'35.48526"	121°22'14.92417"	1899567.896	6742041.619	42.21	0°23'48"	0.99999049	1.00000282	0.99999330	MONUMENT WELL AT THE INTERSECTION OF LENT RANCH PKWY WITH PROMENADE PKWY
MON WELL B	FD 2-1/2" BRASS DISK	38°22'21.72486"	121°22'18.51845"	1898173.928	6741765.022	43.90	0°23'46"	0.99999131	1.00000274	0.99999404	MONUMENT WELL AT THE INTERSECTION OF LENT RANCH PKWY WITH KAMMERER ROAD
BM 4 103*	FD SURVEY DISK	38°25'49.95175"	121°23'52.94134"	1919187.07	6734106.02	35.	0°22'46.3"	0.99997938	1.00000314	0.99998252	SACRAMENTO COUNTY PUBLIC WORKS BRASS DISK SET IN CONCRETE SIDEWALK OVER BRIDGE ABUTMENT
EGOC*	FD SURVEY DISK	38°24'31.40818"	121°29'03.00812"	1911089.90	6709478.46	40.2	0°19'30.8"	0.99998376	1.00000295	0.99998671	STANDARD 3.5" DEPARTMENT OF WATER RESOURCES BRASS DISK SET FLUSH IN CONCRETE BRIDGE DECK
ESCHINGER*	FD SURVEY DISK	38°21'02.99589"	121°23'22.46689"	1890175.07	6736725.91	33.45	0°23'05.5"	0.99999608	1.00000325	0.99999933	2.5" DOMED ALUMINUM CAP WITH MAGNET STAMPED "ESCHINGER 1997" SET FLUSH IN CONCRETE COLLAR
HOOD	FD TRI STATION DISK	38°21'56.16750"	121°28'55.40277"	1895389.24	6710173.33	10.31	0°19'35.6"	0.99999284	1.00000439	0.99999723	TRIANGULATION STATION DISK STAMPED "HOOD 1959", SET IN TOP OF A 10-INCH SQUARE CONCRETE MONUMENT
J463	FD BENCHMARK DISK	38°18'09.56566"	121°25'15.52840"	1872572.00	6727831.15	21.1	0°21'54.2"	1.00000710	1.00000388	1.00001098	CGS BENCHMARK DISK "STAMPED J 463 1951", SET IN CONCRETE FOUNDATION FOR FLAG POLE
RILEY*	FD SURVEY DISK	38°21'18.16327"	121°17'51.61000"	1891899.74	6763070.19	50.1	0°26'34.1"	0.99999515	1.00000241	0.99999756	2.5" DOMED ALUMINUM CAP WITH MAGNET STAMPED "RILEY 1997" SET FLUSH IN CONCRETE COLLAR
WHITE*	FD SURVEY DISK	38°23'40.66531"	121°25'02.94497"	1906072.26	6728619.53	30.43	0°22'02.1"	0.99998667	1.00000339	0.99999006	3.5" BRASS DISK, STAMPED "WHITE 2008", SET IN CONCRETE SIDEWALK EAST SIDE OF BRIDGE OVER DRAINAGE CANAL
N953**	FD BENCHMARK DISK					55.31					CGS BENCHMARK DISK STAMPED "N 953 1962", SET IN CONCRETE POST PROJECTING 0.4' ABOVE GROUND
M953***	FD BENCHMARK DISK	38°24'32.02815"	121°19'29.68930"	1911451.62	6755111.97	63.69	0°25'32.2"	0.99998372	1.00000176	0.99998548	CGS BENCHMARK DISK, STAMPED "M 953 1962" SET IN CONCRETE POST PROJECTING 0.2' ABOVE GROUND
CALIFORNIA SPATIAL REFERENCE CENTER CONTINUOUSLY OPERATING REFERENCE STATIONS: HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 - NAD83(2011) (2017.50 EPOCH)											
P268*	CORS	38°28'24.68323"	121°38'47.03080"	(CONVERTED) 1934465.719	(CONVERTED) 6662900.223	N/A					CALIFORNIA SPATIAL REFERENCE NETWORK UNAVCO, DIXON, CALIFORNIA
P274*	CORS	38°16'59.23296"	121°27'37.79425"	1865387.350	6716532.744	N/A					CALIFORNIA SPATIAL REFERENCE NETWORK UNAVCO, THORTON, CALIFORNIA
P275*	CORS	38°19'17.49309"	121°12'52.46084"	1879888.066	6787004.402	N/A					CALIFORNIA SPATIAL REFERENCE NETWORK UNAVCO, GALT, CALIFORNIA
P276*	CORS	38°38'43.09650"	121°05'42.54440"	1998114.689	6820091.062	N/A					CALIFORNIA SPATIAL REFERENCE NETWORK UNAVCO, FOLSOM, CALIFORNIA

\*FIXED HORIZONTAL STATION \*\*FIXED VERTICAL STATION \*\*\*FIXED HORIZONTAL AND VERTICAL STATION

**NOTES:**

NATIONAL GEODETIC SURVEY (NGS) STATIONS BM 4 103, EGOC, ESCHINGER, RILEY, WHITE, M953 AND CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) P268, P274, P275, AND P276 WERE CONSTRAINED FOR THE HORIZONTAL ADJUSTMENT. THE NGS POINTS WERE ON THE 2010.00 EPOCH AND WERE TRANSFORMED TO THE DATE OF THE SURVEY (JUNE 6, 2018(2018.43)) USING THE NGS HORIZONTAL TIME-DEPENDENT POSITIONING (HTDP) SOFTWARE (V 3.2.5). THE CSRS CORS POINTS WERE PUBLISHED ON THE 2017.50 EPOCH, THEY WERE ALSO TRANSFORMED TO THE DATE OF THE SURVEY USING NGS HTDP SOFTWARE. THE BASELINES WERE PROCESSED USING TRIMBLE BUSINESS CENTER (V 4.00). THE COORDINATES WERE THEN TRANSFORMED BACK TO THE 2010.00 EPOCH USING THE NGS HTDP SOFTWARE.

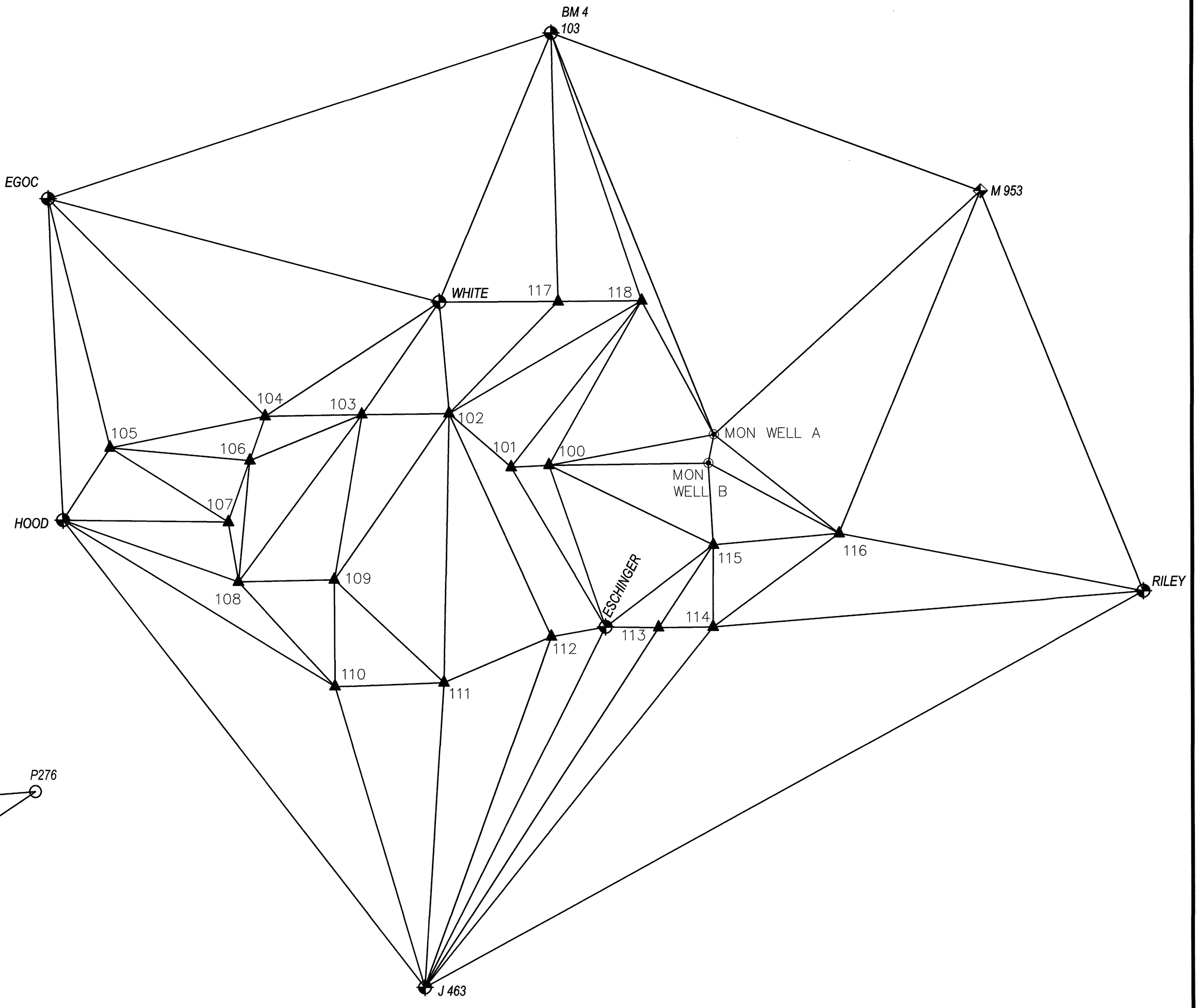
THE LEVELED COH88 VALUES FOR CONTROL MONUMENTS 100 THRU 118, MON WELLS A & B AND NGS CONTROL MONUMENTS ESCHINGER, HOOD AND WHITE, WERE BASED UPON DIFFERENTIAL LEVELING SURVEYS COMPLETED IN JUNE OF 2018 UTILIZING A LEICA HIGH PRECISION DIGITAL LEVEL WITH BAR CODED INVAR RODS. THE PRIMARY BENCHMARK FOR THE LEVELING WAS NGS CONTROL MONUMENT M953. ALL LEVEL LOOPS WERE ADJUSTED USING AN ORGANICALLY WRITTEN MICROSOFT EXCEL ROUTINE AND CHECKED BY HAND AS A QUALITY CONTROL MEASURE.

COORDINATES SHOWN ARE GRID. TO CALCULATE THE GROUND DISTANCE BETWEEN ANY TWO STATIONS, USE THE AVERAGE OF THE COMBINED GRID FACTORS AT EACH STATION.

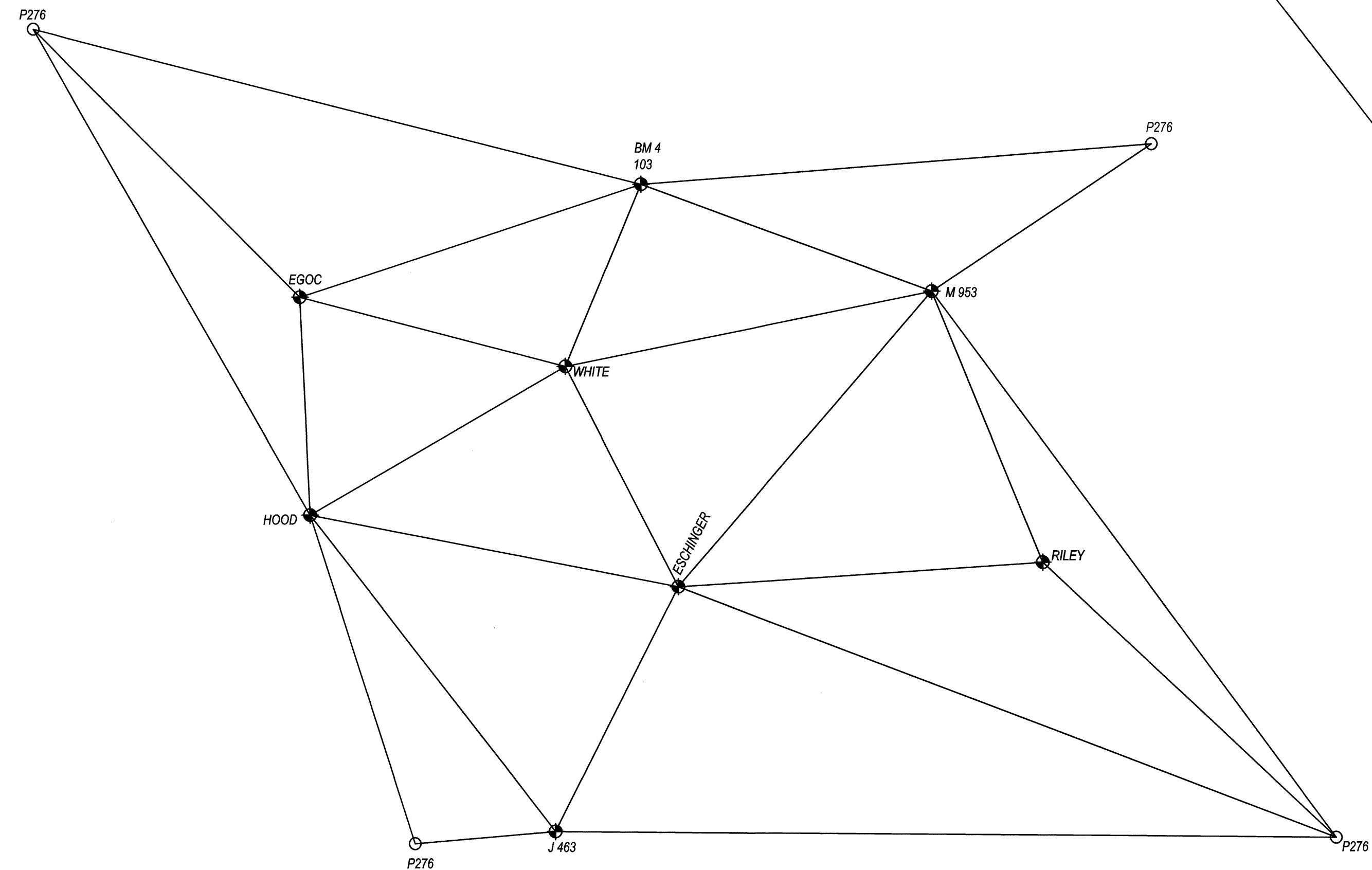
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**CITY OF ELK GROVE G.P.S. STATIC SURVEY**  
 Sacramento County - California  
 June, 2018  
 SHEET 3 OF 3

NOT TO SCALE

- LEGEND:**
- N.G.S. HORIZONTAL CONTROL POINT
  - ◆ N.G.S. HORIZONTAL AND VERTICAL CONTROL POINT
  - ▲ SET CITY OF ELK GROVE CONTROL POINT
  - ⊙ EXISTING MONUMENT WELL PER 372 B.M. 27
  - CSRC CORS STATION



SECONDARY CONTROL DIAGRAM



PRIMARY CONTROL DIAGRAM

92-5-3