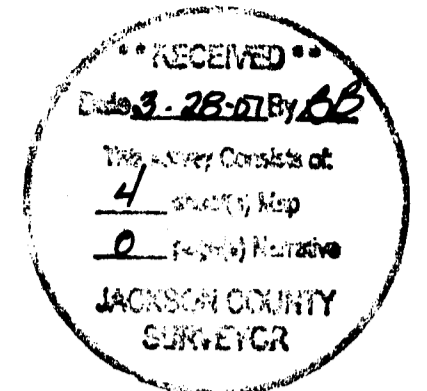


S.E. AND S.W. 1/4, SEC. 33, T.38 S., R.1 E., W. M.;
 N.E. 1/4 SEC. 4 AND N.W. 1/4 AND S.W. 1/4, SEC 11, T.39 S., R.1E., W. M.;
 N.W. 1/4 AND S.W. 1/4, SEC. 31, T.39 S., R.2 E., W. M.



NARRATIVE

THIS SURVEY IS TO ESTABLISH A HORIZONTAL CONTROL NETWORK AND RECOVER THE POSITION OF THE MONUMENTS (MONS) ON PORTIONS OF I-5 AT BRIDGE CROSSING EAGLE MILL ROAD BRIDGE *08738 NORTH BOUND AND *08738 SOUTH BOUND, BRIDGE CROSSING BEAR CREEK BRIDGE *08742 NORTH BOUND AND *08742 SOUTH BOUND, AND BRIDGE CROSSING NEIL CREEK ROAD BRIDGE *09184.

THIS SURVEY WAS DONE IN PREPARATION FOR THE PROPOSED BRIDGE REPLACEMENT AT EAGLE MILL ROAD, BEAR CREEK, AND NEIL CREEK ROAD, OREGON DEPARTMENT OF TRANSPORTATION.

REFERENCE DOCUMENTS USED: ODOT DRG:
 1B-28-23, 4B-20-3, 4B-25-12, 8B-15-22, 8B-15-23, 8B-26-17

COUNTY SURVEY RECORDS:
 2201, 2279, 2383, 2625, 2927, 3160, 3557, 3984, 5011, 5047, 5380, 5576, 6006, 6114, 8466, 9035, 10605, 12063, 12766, 12824, 14207, 15686, 15817, 15820, 16230, 16262, 16282, 16576, 16681, 16686, 18071, 18490, 18696, 18720, 18788

SUBDIVISIONS: ASHLAND ACRES.

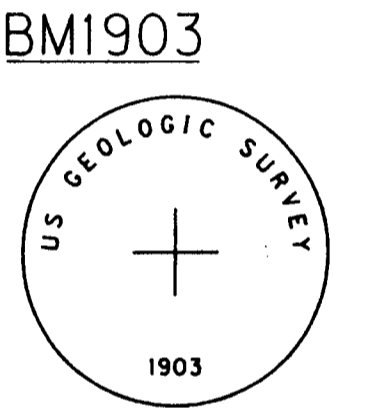
THE BASIS OF BEARING WAS ESTABLISHED BY HOLDING GLOBAL POSITIONING SYSTEM (GPS) POINTS, "ASH" AND F760. DOCUMENTATION OF THESE GPS STATIONS IS FILED WITH THE NATIONAL GEODETIC SURVEY OFFICE.

THIS SURVEY UTILIZES A LOCAL DATUM PLANE (LDP) WHICH IS RELATIVE TO THE OREGON COORDINATE SYSTEM (OCS) OF 1983/98 SOUTH ZONE WITH RESPECT TO THE LOCAL LATITUDE AND GROUND ELEVATION. POINTS ASH, EMI, EM2, BC2, BC22, NC1, AND NC11 WERE LEVELED THROUGH USING LOCAL BENCH MARK INFORMATION. POINTS AT THE EAGLE MILL ROAD BRIDGES ARE CONVERTED TO LDP COORDINATES BY MULTIPLYING THE STATE PLANE COORDINATES BY 1.00005074. POINTS AT THE BEAR CREEK BRIDGES ARE CONVERTED BY MULTIPLYING THE STATE PLANE COORDINATES BY 1.00004764. POINTS AT THE NEIL CREEK ROAD BRIDGE ARE CONVERTED TO LDP COORDINATES BY MULTIPLYING THE STATE PLANE COORDINATES BY 1.00008886. THE LDP COORDINATES DEFINE TRUE GROUND DISTANCES.

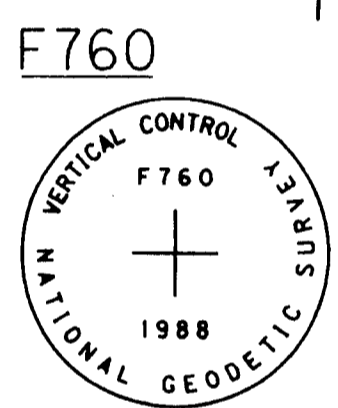
SURVEY WORK WAS PERFORMED BY ARCTIC SLOPE TECHNICAL SERVICES, INC. SURVEY CREWS FROM AUGUST 2006 TO OCTOBER 2006. THE MONUMENTS WERE SURVEYED BY CONVENTIONAL SURVEY METHODS. THE SURVEY EQUIPMENT USED WAS A LEICA 1201 ELECTRONIC THEODOLITE WITH INTEGRATED EDM, S/N 221129.



FOUND 4" BRASS DISK SET IN CONCRETE PEDESTAL FLUSH



FOUND 4" BRASS DISK SET IN CONCRETE.



FOUND 4" BRASS DISK CEMENTED INTO A DRILL HOLE NEAR THE SOUTH END OF A 2' X 10' PORTION OF EXPOSED OUTCROP.

LEGEND

- ☆ FOUND GPS STATION
- ★ SET GPS STATION
- OBSERVATION LINES
- GPS STATIC
- OCS OREGON COORDINATE SYSTEM

GPS CONTROL POINT COORDINATE TABLE

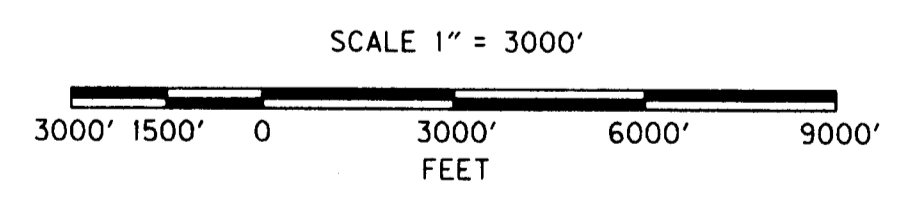
STATION NAME	LAT. '83(98) (NORTH)	LONG. '83(98) (WEST)	ELLIPSE HEIGHT (FT)	OCS NORTHING (FT)	OCS EASTING (FT)	NAVD '88 ORTHO. EL. (FT)	GEOIDAL SEPARATION (FT)	CONVERGENCE ANGLE	SCALE FACTOR	COMBINED FACTOR
BM1903	42°11'47.05732"N	122°41'56.75482"W	1800.74	200890.19	4325388.62	1878.79	-78.05	-01°30'16.22692"	1.000037286	0.999951155
ASH	42°12'56.39412"N	122°42'25.16923"W	1751.86	207963.20	4323435.40	1830.04	-78.00	-01°30'35.66656"	1.000031702	0.999947906
BC2	42°11'32.81285"N	122°40'15.12083"W	1810.71	199249.08	4332999.22	1888.57	-77.86	-01°29'06.69250"	1.000038447	0.999951839
BC22	42°11'50.38037"N	122°40'33.79535"W	1757.16	201063.38	4331640.07	1835.06	-77.90	-01°29'19.46896"	1.000037016	0.999952969
EMI	42°13'03.44166"N	122°42'48.79533"W	1711.94	208723.31	4321676.95	1790.13	-78.13	-01°30'51.83068"	1.000031141	0.999949258
EMI3	42°12'50.11857"N	122°42'17.74433"W	1733.89	207313.41	4323977.22	1811.97	-78.08	-01°30'30.58646"	1.000032203	0.999949270
F760	42°08'31.93061"N	122°37'28.75101"W	2201.67	180622.45	4345055.01	2279.01	-77.34	-01°27'12.87282"	1.000053594	0.999948297
NC1	42°07'58.63307"N	122°38'00.57849"W	2548.57	177313.65	4342571.99	2625.82	-77.25	-01°27'34.64750"	1.000056465	0.999930870
NC11	42°08'06.66206"N	122°38'07.77961"W	2490.96	178140.02	4342050.27	2568.23	-77.27	-01°27'39.57413"	1.000055770	0.999936627

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Gary P. Christerson
 OREGON JANUARY 20, 1989
 GARY P. CHRISTERSON 2377
 RENEWAL 12/31/07

GPS CONTROL SCHEMATIC

BASIS OF BEARINGS IS THE OREGON COORDINATE SYSTEM OF 1983/98, SOUTH ZONE



GPS CONTROL AND I-5 HORIZONTAL RECOVERY MAP

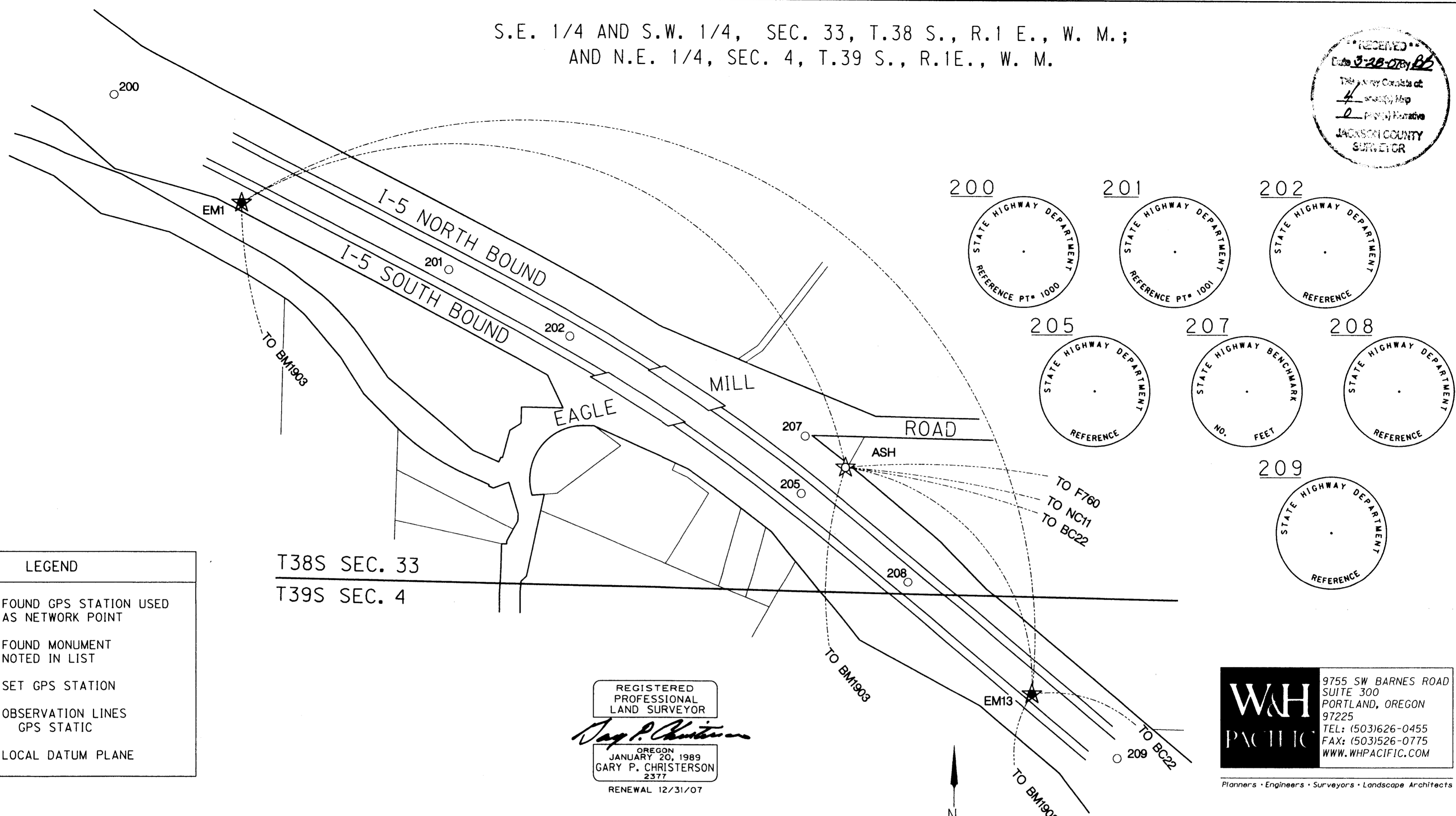
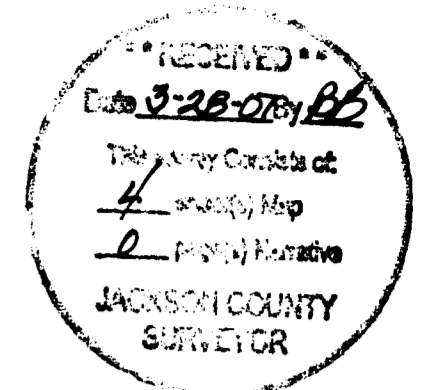
I-5: EAGLE MILL BRIDGE *08738N AND *08738S,
 BEAR CREEK BRIDGE *08742N AND *08742S,
 NEIL CREEK ROAD BRIDGE *09184
 JACKSON COUNTY
 KEY NO. 14040



PROJECT NO. 034071
 14040REC.dgn

NOVEMBER 30, 2006
 SHEET 1 OF 4

S.E. 1/4 AND S.W. 1/4, SEC. 33, T.38 S., R.1 E., W. M.;
AND N.E. 1/4, SEC. 4, T.39 S., R.1E., W. M.



LEGEND

- ☆ FOUND GPS STATION USED AS NETWORK POINT
- FOUND MONUMENT NOTED IN LIST
- ★ SET GPS STATION
- OBSERVATION LINES GPS STATIC
- LDP LOCAL DATUM PLANE

T38S SEC. 33
T39S SEC. 4

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EAGLE MILL ROAD LDP GPS COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	ELEVATION	DESCRIPTION
EMI	208733.90	4321896.24	1790.13	SET 5/8" x30" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"
ASH	207973.75	4323654.78	1830.04	FOUND " BRASS DISK WITH PUNCH. (SEE SKETCH ON SHEET 1)
EM13	207323.93	4324196.63	1811.97	SET 5/8" x30" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"

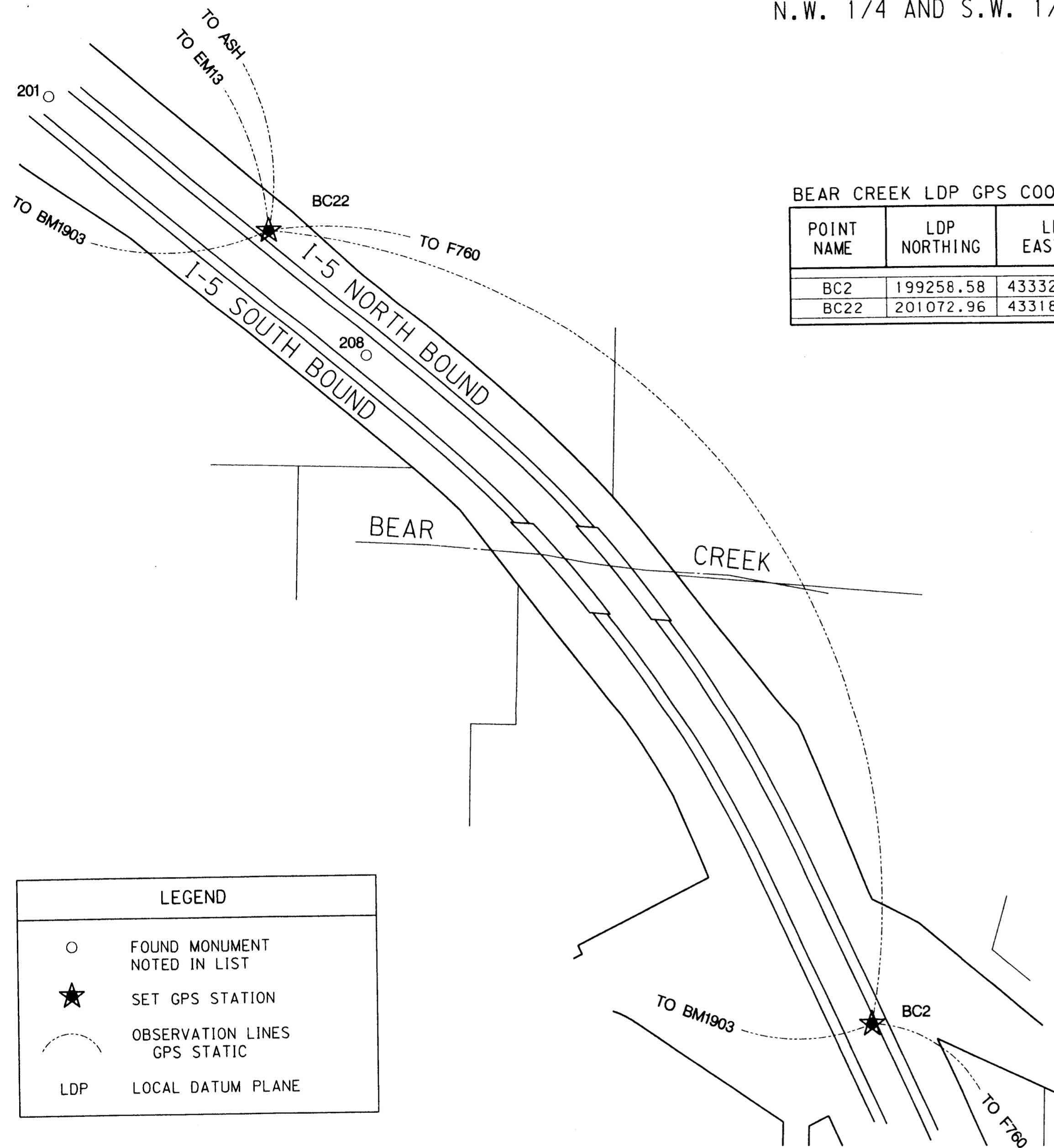
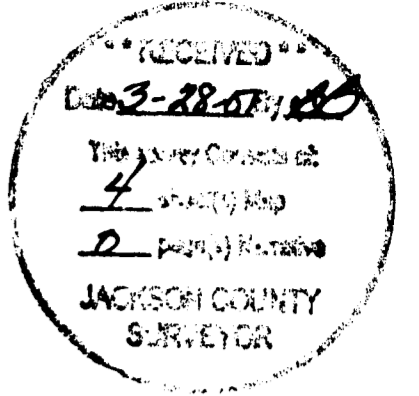
EAGLE MILL ROAD LDP MONUMENT COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	DESCRIPTION
200	209049.66	4321525.39	FOUND 2-1/2" BRASS DISK IN CONCRETE WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE. PT *1000"
201	208540.03	4322498.07	FOUND 2-1/2" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY BENCHMARKPT *1001 NE (6?) FEET"
202	208350.33	4322850.12	FOUND 2-1/2" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE."
205	207899.58	4323525.96	FOUND 2-1/2" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE."
207	208063.14	4323537.02	FOUND 2-1/2" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY BENCHMARK NO. --- FEET"
208	207647.09	4323836.25	FOUND 2-1/2" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE."
209	207141.16	4324443.84	FOUND 3" BRASS DISK WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE."

GPS CONTROL SCHEMATIC
BASIS OF BEARINGS IS THE OREGON COORDINATE SYSTEM OF 1983/98, SOUTH ZONE
SCALE 1" = 200'
200' 100' 0 200' 400' 600'
FEET

GPS CONTROL AND I-5 HORIZONTAL RECOVERY MAP
I-5: EAGLE MILL BRIDGE *08738N AND *08738S,
BEAR CREEK BRIDGE *08742N AND *08742S,
NEIL CREEK ROAD BRIDGE *09184
JACKSON COUNTY
KEY NO. 14040
PROJECT NO. 034071
14040REC.dgn
NOVEMBER 30, 2006
SHEET 2 OF 4

N.W. 1/4 AND S.W. 1/4, SEC 11, T.39 S., R.1E., W. M.



BEAR CREEK LDP GPS COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	ELEVATION	DESCRIPTION
BC2	199258.58	4333205.65	1888.57	SET 5/8" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"
BC22	201072.96	4331846.44	1835.06	SET 5/8" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"



LEGEND	
○	FOUND MONUMENT NOTED IN LIST
★	SET GPS STATION
---	OBSERVATION LINES GPS STATIC
LDP	LOCAL DATUM PLANE

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GPS CONTROL SCHEMATIC
 BASIS OF BEARINGS IS THE OREGON COORDINATE SYSTEM OF 1983/98, SOUTH ZONE
 SCALE 1" = 200'

BEAR CREEK LDP MONUMENT COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	DESCRIPTION
201	201382.05	4331345.72	FOUND 2-1/2" ALUMINIUM CAP IN CONCRETE WITH PUNCH MARKED "STATE HIGHWAY DEPARTMENT REFERENCE"
208	200781.65	4332066.72	FOUND BRASS DISK IN CONCRETE

GPS CONTROL AND I-5 HORIZONTAL RECOVERY MAP

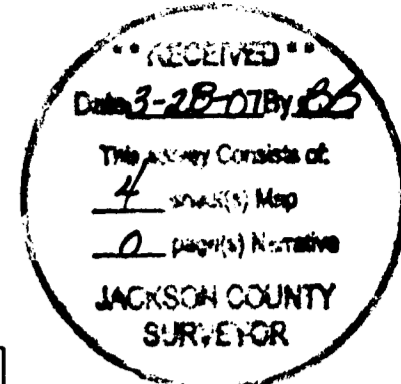
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FEET

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NOVEMBER 30, 2006
 SHEET 3 OF 4

N.W. 1/4 AND S.W. 1/4, SEC. 31, T.39 S., R.2 E., W. M.

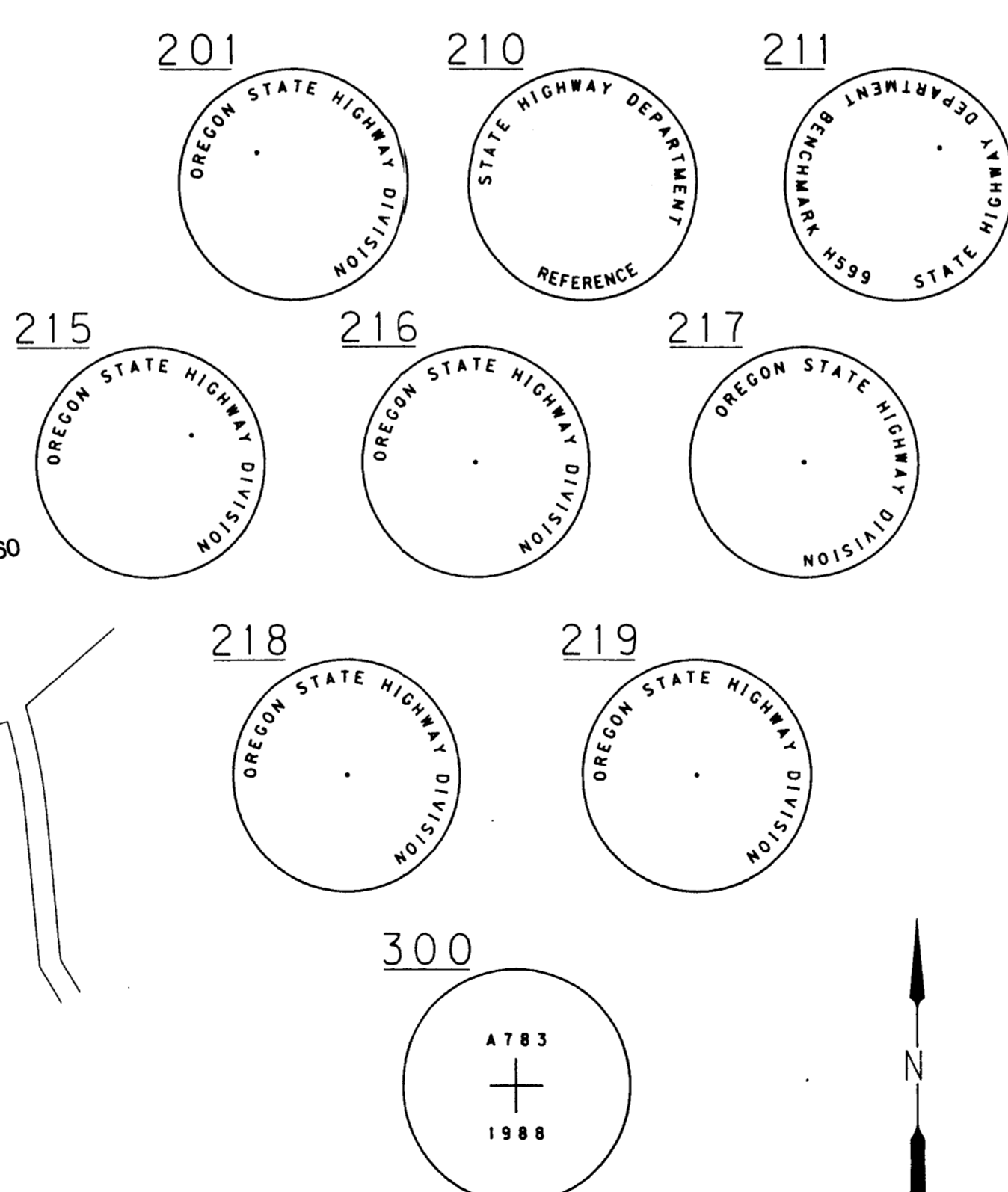
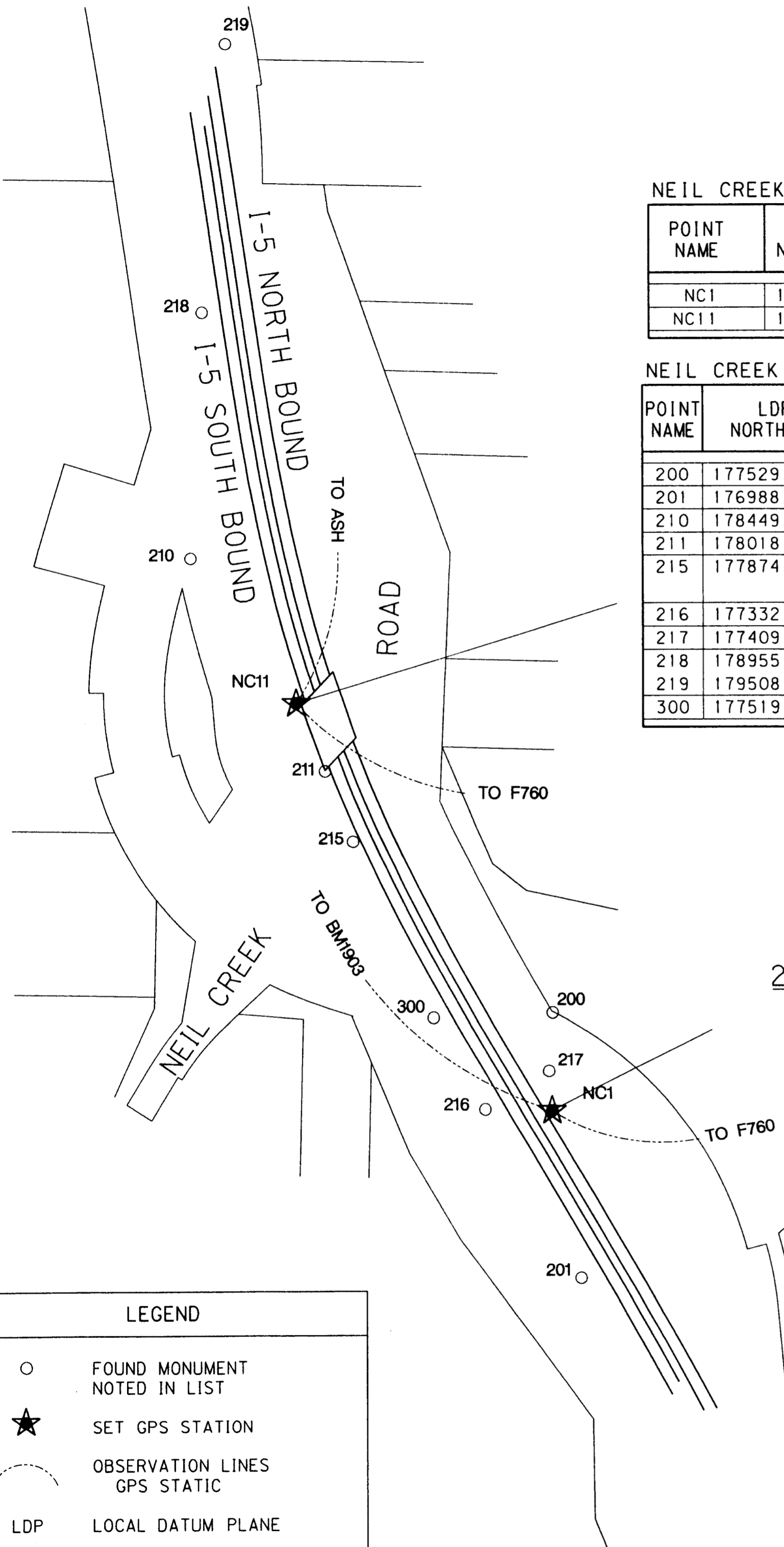


NEIL CREEK ROAD LDP GPS COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	ELEVATION	DESCRIPTION
NC1	177329.41	4342957.87	2625.86	SET 5/8" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"
NC11	178155.85	4342436.10	2568.19	SET 5/8" IRON ROD WITH RED PLASTIC CAP MARKED "W&H PACIFIC CONTROL"

NEIL CREEK ROAD LDP MONUMENT COORDINATE TABLE

POINT NAME	LDP NORTHING	LDP EASTING	DESCRIPTION
200	177529.4590	4342959.7800	FOUND 5/8" IRON ROD WITH NO CAP (STATE HWY. RIGHT-OF-WAY STA. 277+99..47)
201	176988.5920	4343016.3800	FOUND 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "OREG. STATE HWY DIV." UP 0.3'
210	178449.0100	4342220.9960	FOUND 1/2" IRON ROD IN CONCRETE 6" NORTH OF 4"x4"x18" TALL WITNESS POST.
211	178018.1170	4342494.8390	FOUND BENCH MARK MARKED "H599"
215	177874.6790	4342551.4410	FOUND 1-1/2" ALUMINUM CAP WITH PUNCH LEANING EAST SET IN CONCRETE MARKED "ORG. STATE HIGHWAY DEPT." 0.85' DOWN.
216	177332.0040	4342820.4240	FOUND 1-1/2" ALUMINUM CAP WITH PUNCH MARKED "OREGON STATE HWY DIV"
217	177409.5910	4342951.8450	FOUND 1-1/2" ALUMINUM CAP WITH PUNCH MARKED "OREGON STATE HWY DIV"
218	178955.0170	4342245.5200	FOUND 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP WITH PUNCH MARKED "OREGON STATE HWY DIV" DOWN 0.5'
219	179508.4440	4342294.7280	FOUND 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP WITH PUNCH MARKED "OREGON STATE HWY DIV" DOWN 0.1'
300	177519.6490	4342715.2050	FOUND 3-1/2" BRASS DISK BENCH MARK MARKED "NATIONAL GEODETIC SURVEY A783+1988"



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LEGEND	
○	FOUND MONUMENT NOTED IN LIST
★	SET GPS STATION
---	OBSERVATION LINES
---	GPS STATIC
LDP	LOCAL DATUM PLANE

GPS CONTROL AND I-5 HORIZONTAL RECOVERY MAP

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 SHEET 4 OF 4