FILED
Date: 2-19-2020 By: DS
This survey consist of:
Map: St. Hwy I5-032 A-E
Narrative: _____
Corner Rpt: _____
DOUGLAS COUNTY
SURVEYOR

NARRATIVE

PURPOSE
THE PURPOSE OF THIS SURVEY IS TO MONUMENT THE ACQUIRED RIGHT OF WAY SHOWN ON RIGHT OF WAY DRAWING (DRG) 11B-9-22 FOR A PROJECT NAMED "I-5: EXIT 124 SIGNAL UPGRADES & BELLOWS ST. REALIGN.". SURVEY FIELD WORK WAS PERFORMED IN JANUARY OF 2020. THE RIGHT OF WAY MONUMENTED ON SHEET 5 WAS ALSO INCLUDED AS PART OF THIS PROJECT.

COORDINATES & BASIS OF BEARING
THE BEARINGS ARE BASED ON THE OREGON COORDINATE REFERENCE SYSTEM (OCRS) COTTAGE GROVE - CANYONVILLE ZONE, NAD 83(CORS96) EPOCH2002. THE OCRS COORDINATES ARE EQUAL TO OR CLOSE TO TRUE GROUND DISTANCES. ALL COORDINATES ARE IN INTERNATIONAL FEET.

HORIZONTAL CONTROL
ORIGINAL STATIC NETWORK POINT HILL, AND TERRESTRIAL NETWORK POINTS ANNIE AND 15 FROM FILED SURVEYS ST. HWY. I5-029, 138-015 & 138-016 FORM THE BASIS OF BEARING FOR THIS PROJECT AND WERE USED AS PRIMARY PROJECT CONTROL. A TOTAL STATION WAS USED TO COMPLETE A HORIZONTAL CONTROL NETWORK CONSTRAINING TO THE PRIMARY CONTROL POINTS AND A LEAST SQUARES ADJUSTMENT WAS APPLIED. POINTS SHOWN IN THE NETWORK OBSERVATION TABLE HAVE AN EXPECTED HORIZONTAL ACCURACY OF 0.03 FEET OR LESS. ALL OTHER HORIZONTAL CONTROL POINTS & RECOVERED MONUMENTS WERE DOUBLE TIED USING TERRESTRIAL OR REAL TIME KINEMATIC (RTK) GPS METHODS AND HAVE AN EXPECTED HORIZONTAL ACCURACY OF 0.06 FEET OR LESS.

HORIZONTAL CONTROL EQUIPMENT
A LEICA VIVA TS16 TOTAL STATION WAS USED FOR RUNNING THE HORIZONTAL CONTROL NETWORK AND SETTING RIGHT OF WAY MONUMENTS. IT HAS THE FOLLOWING ACCURACY: STANDARD ANGULAR ERROR +/- 1 SECOND; STANDARD DISTANCE ERROR OF +/- 1MM, + 1.5 PPM.

A LEICA GS14 DUAL FREQUENCY GPS RECEIVER WAS USED FOR GPS OBSERVATIONS AND WAS ALSO USED TO SET RIGHT OF WAY MONUMENTS. IT HAS THE FOLLOWING ACCURACY: POST PROCESSED PHASED DIFFERENTIAL STATIC METHOD HORIZONTAL ERROR OF 3 MM + 0.5 PPM, AND A VERTICAL ERROR OF 5 MM, + 0.5 PPM; NETWORK REAL-TIME KINEMATIC (RTK) METHOD HORIZONTAL ERROR OF 8 MM + 0.5 PPM, AND A VERTICAL ERROR OF 15 MM, + 0.5 PPM.

VERTICAL CONTROL
BENCH MARKS "A253", "N554" AND "N749" WITH NAVD 88 DATUM ELEVATIONS WERE HELD FOR VERTICAL CONTROL. A LEVEL CIRCUIT WAS RUN TO ESTABLISH ELEVATIONS ON SELECTED CONTROL AND STRATEGIC POINTS. ALL ELEVATIONS SHOWN IN TABLES ON THIS SURVEY ARE FROM THE LEVEL CIRCUIT HOLDING SAID BENCHMARKS AND HAVE AN EXPECTED VERTICAL ACCURACY OF 0.03 FEET OR LESS.

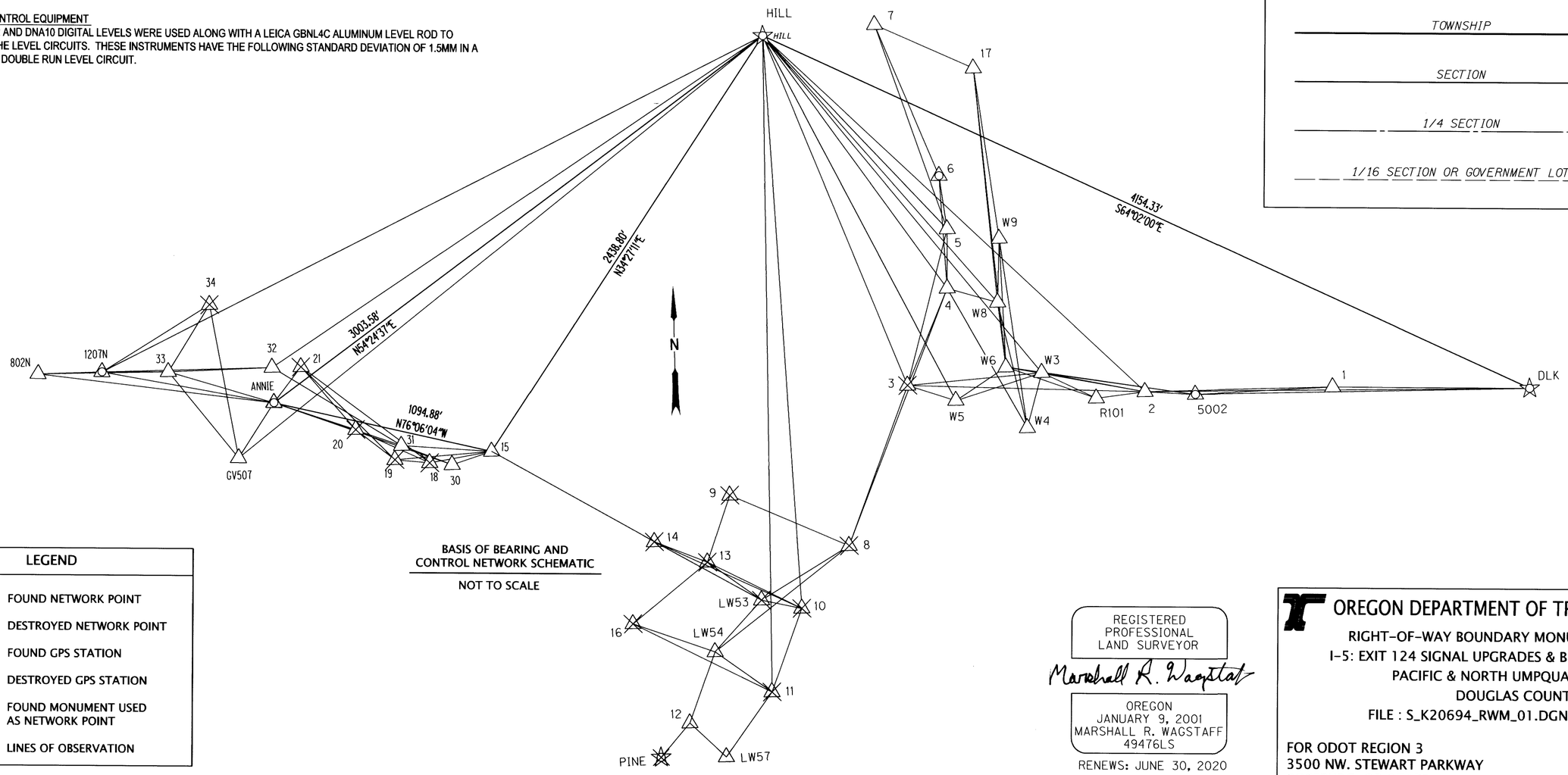
VERTICAL CONTROL EQUIPMENT
LEICA NA2002 AND DNA10 DIGITAL LEVELS WERE USED ALONG WITH A LEICA GBNL4C ALUMINUM LEVEL ROD TO COMPLETE THE LEVEL CIRCUITS. THESE INSTRUMENTS HAVE THE FOLLOWING STANDARD DEVIATION OF 1.5MM IN A 1 KILOMETER DOUBLE RUN LEVEL CIRCUIT.

NORTH UMPQUA HIGHWAY (OR 138E HARVARD PORTION)
THE "H2C" CENTER LINE AS SHOWN ON DRG. 11B-9-22 AND ON THIS SURVEY IS THE SAME AS THE "H2" CENTER LINE ON FILED SURVEY ST. HWY. I5-029 EXCEPT A CURVE WAS ADDED BETWEEN "H2C"26+10.46 P.C. AND "H2C"28+58.61 P.T. AND THAT CHANGED THE STATIONING BETWEEN SAID P.C. AND THE END OF THE "H2C" CENTER LINE. THIS CURVE WAS ADDED TO FACILITATE THE POSSIBLE FUTURE ABANDONMENT OR SALE AT THE CORNER OF OLD HARVARD AVENUE AND CORY STREET RIGHT OF WAY WHICH LIES IN THE HIGH SCHOOL PARKING LOT AS A TRIANGULAR AREA BEHIND THE HIGHWAY SIDEWALK BETWEEN STATIONS "H2C"26+41.02 AND "H2C"28+02.69.

PLEASE NOTE:
CONTROL MONUMENTS SHOWN ON THIS SURVEY DO NOT REPRESENT PROPERTY LINES OR RIGHT OF WAY LINES. THEY ARE INTENDED TO PERPETUATE THE ALIGNMENTS AND RIGHT OF WAY DEVELOPED FOR THIS PROJECT IN CONFORMANCE WITH ORS 209, SECTION 155.

MONUMENTS FROM SURVEY M175-63 WERE SET PRIOR TO THE COMPLETION OF CONSTRUCTION AND WERE FOUND MOSTLY DISTURBED, LEANING, OR BENT. THESE POINTS WERE FOUND OUT OF POSITION ENOUGH THAT WE SET OUR OWN MONUMENTS (5106, 5111 & 5112). SEE SHEET 4 FOR MONUMENTS SET AND FALLINGS.

THE BELOW CONTROL NETWORK SCHEMATIC WAS EXPANDED TO SHOW THE RELATIONSHIP AND BASIS OF CONTROL FOR BOTH THE HARVARD AVENUE AND THE DIAMOND LAKE BOULAVARD PORTIONS OF THIS PROJECT. COORDINATES FOR MONUMENTS SHOWN ON THIS CONTROL NETWORK SCHEMATIC NOT FOUND ON THIS SURVEY CAN BE FOUND ON SURVEYS ST. HWY. 138-015 AND 138-016 (BOTH OF WHICH SHARE THE SAME COORDINATE SYSTEM AND BASIS OF BEARING AS THIS PROJECT).



BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC

NOT TO SCALE

BOUNDARY LINE LEGEND

- EXISTING HIGHWAY RIGHT OF WAY — ACCESS CONTROLLED / NOT CONTROLLED
- ACQUIRED HIGHWAY RIGHT OF WAY — ACCESS CONTROLLED / NOT CONTROLLED
- EXISTING STREET RIGHT OF WAY
- EXISTING PROPERTY
- EXISTING SUBDIVISION
- DONATION LAND CLAIM (THIS SIDE)
- TOWNSHIP
- SECTION
- 1/4 SECTION
- 1/16 SECTION OR GOVERNMENT LOT

LEGEND

- FOUND NETWORK POINT
- DESTROYED NETWORK POINT
- FOUND GPS STATION
- DESTROYED GPS STATION
- FOUND MONUMENT USED AS NETWORK POINT
- LINES OF OBSERVATION

REGISTERED PROFESSIONAL LAND SURVEYOR
Marshall R. Wagstaff
OREGON
JANUARY 9, 2001
MARSHALL R. WAGSTAFF
49476LS
RENEWS: JUNE 30, 2020

OREGON DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY BOUNDARY MONUMENTATION MAP
I-5: EXIT 124 SIGNAL UPGRADES & BELLOWS ST. REALIGN.
PACIFIC & NORTH UMPQUA HIGHWAYS
DOUGLAS COUNTY
FILE : S_K20694_RWM_01.DGN MODEL : RWM

FOR ODOT REGION 3
3500 NW. STEWART PARKWAY
ROSEBURG, OR 97470

FEBRUARY 18, 2020
SHEET 2 OF 5

ST. HWY. I5-032 B