NAVIGATING ODOT’s WEBSITE TO FIND SURVEY DATA

2019 PLSO Conference

- January 16-18 2019
- Eugene, Oregon

Mike Fallert, PLS
Lead Right of Way Surveyor
Engineering Automation Section
Geometronics Unit

January 16, 2019
Finding us on ODOT’S New Web Site
Search “Surveying”

https://www.oregon.gov/ODOT/Pages/index.aspx
ODOT’S Available Survey Data on the Web

Survey OPS/Engineering Automation Group

January 16, 2019
ODOT’S Available Survey Data on the Web

Engineering Automation/Geometronotics

https://www.oregon.gov/ODOT/ETA/Pages/Surveying.aspx

Surveying

TOOLS AND RESOURCES
- Manuals

SURVEYING
- Geographic Control and Benchmark Retrieval
- Right of Way Engineering
- Mobile LiDAR
- Oregon Coordinate Reference System

ENGINEERING TECHNOLOGY
- 3D Design
- Automated Machine Guidance
- Intelligent Construction

Manuals
- Survey Policy and Procedure Manual
- Survey Safety Manual
- Construction Surveying Manual for Contractors
- Survey Filing Map Standards: Control, Recovery, and Retracement Survey
- Survey Filing Map Standards: Right of Way Monumentation Survey

Forms
- 734-2533 Geometrics Project Request form
- 734-2533A Project Notification to County Surveyor
- 734-2532 Benchmark Request form

Additional Resources
- Baseline Spreadsheet
- Local Datum Plane Computation Spreadsheet

Services
The Survey Operations Group is responsible for establishing project-specific geodetic control, placement and survey of aerial photography ground control, and applications involving specialized field techniques or equipment, i.e. use of GPS receivers, high-accuracy leveling equipment and reflector-less measurement systems.

Survey Work
The Remote Sensing Group performs survey work to produce base maps, mosaic images and digital terrain models from aerial photography and other tools. Development of photography mission plans, flight paths and ground control plans is also available.

Aerial Photography
Contact the Maps and Plans Center for archived aerial photographs.

Contact the Geometrics Unit
500 Airport Road SE
Salem, Oregon 97301
Phone: 503-986-3013
Email: the Geometrics Unit

Program Leads
Kevin LaVerne, PLS - Survey Operations Group Lead
Phone: 503-986-3017

Chris Gantzi, PLS - Remote Sensing Group Lead
Phone: 503-986-3543

Resources and Related Content
- The ORG
- Oregon Coordinate Reference System
- National Geodetic Survey
- NGS Oregon Calibration Baselines
- Oregon GPS Users Group
- Professional Land Surveyors of Oregon
- Oregon State Board of Examiners for Engineers and Land Surveyors
- National Council of Examiners for Engineering and Surveying
ODOT’S Available Survey Data on the Web

Manuals

https://www.oregon.gov/ODOT/ETA/Pages/Manuals.aspx

## Manuals

The Engineering Automation Section has a wide selection of manuals that provide guidance for the general public and Oregon Department of Transportation staff. The following manuals are related to Geomatics and Engineering Technology Advancement disciplines.

### Can’t find the manual you need?

A complete list of all engineering manuals has been assembled for your reference.

### Geomatics and Engineering Technology Advancement Manuals

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODRS Handbook &amp; User Guide</td>
<td>This document contains the history, development, best practice methods, and technical creation of the Oregon Coordinate Reference System for the state of Oregon. The ODRS is based on a series of “foc” distortion map projections (zones) whose parameters have been defined such that linear distortion is very minimal for certain geographic areas.</td>
</tr>
<tr>
<td>GNSS Guidelines Manual</td>
<td>This manual is intended for use by ODOT crews to increase their understanding of ODOT’s GPS survey methodology. The guidelines included aim to expose the benefits of GNSS, while limiting the potential errors that are encountered with this technology. This is not a step-by-step technical document, nor does it address all the complexities of GNSS.</td>
</tr>
<tr>
<td>Construction Surveying Manual for Contractors</td>
<td>This manual is a companion document to Special Provision 00306, providing detailed information regarding construction survey work for highways, bridges, signs, signals, illumination and other associated work.</td>
</tr>
<tr>
<td>History of State Highways in Oregon</td>
<td>This guide is intended to assist researchers in locating documentation pertaining to the creation, relocation, and abandonment of state highways in Oregon.</td>
</tr>
</tbody>
</table>

Contact the Engineering Automation Section

800 Airport Road SE
Salem, Oregon 97301
Phone: 503-946-3333
Fax: 503-946-3648
Email the Engineering Technology Advancement Unit
Email the Geomatics Unit
Right of Way Engineering provides expertise to Oregon Department of Transportation staff and consultants in the preparation of right-of-way drawings and property descriptions.

Services
- Drafting of property descriptions in preparation for sale, and leasing or renting of ODOT-owned property for the Right of Way Section;
- Preparation of exhibits for the jurisdictional transfer of obsolete segments of the state highway system to cities or counties;
- Preparation of drawings and descriptions for highway corridor and design resolution for the realignment of state highways;
- Preparation of exhibit drawings for use in legal proceedings that involve ODOT land acquisitions;
- Serve as a resource to ODOT and other state agencies, local governments and the public on right of way drawings and descriptions; and
- Assist in determining existing right-of-way widths and alignments and ODOT's property rights.

To request service, please contact Mike Faller or Paul Morin.

Manuals, Guidance and Tools
- Right of Way Engineering Manual
- Right of Way Engineering Process Overview
- Survey Filing Map Standards: Right of Way Monetization
- Survey Filing Map Standards: Control, Recovery, and Retraction Surveys
- Right of Way Monetization Policy
- History of State Highways in Oregon
- Working with the RVMid.dgn file
- Updates and Tips
- RTO Metadata Worksheet
- Approved Easements

Forms
- Right of Way File Change Request
ODOT’S Available Survey Data on the Web

RIGHT OF WAY ENGINEERING

YouTube Videos

https://www.youtube.com/playlist?list=PLp1ZCHBNZL8eb3HS7x1ux1FXsynBcMm4o
ODOT’S Available Survey Data on the Web

History of the State Highways

https://www.oregon.gov/ODOT/ETA/Pages/ROW-Engineering.aspx
History of the State Highways

Sun Mountain Highway No. 428

Introduction

Historical Notes

References

Road Establishment File

County

Sun Mountain Highway No. 428

Oregon Department of Transportation - Geomatics
January 28, 2019
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MAPS AND PLANS

https://www.oregon.gov/ODOT/ETA/Pages/Tools.aspx
ODOT’S Available Survey Data on the Web

MAPS AND PLANS ONLINE MAP CENTER

Tools and Resources

Reference Materials
- Engineering Automation Section Manuals
- Highway Division Manual Directory
- Highway Division Technical Guidance Directory

Maps and Plans Requests
The Maps and Plans Center maintains documentation of ODOT’s survey, engineering and construction activities. Documentation types include:
- Field survey notes,
- Right-of-way maps, and
- As-constructed drawings.

Request Documentation
- Access the online Map Center
- 734-2923 MAP Center Document Number Request
- Contact the Maps and Plans Center for more information.

Resources
- Highway Division Forms Directory
- TransGIS
- Geomatics Online Toolkit
- Online Map Center
- The Oregon Real-time GNSS Network
- Oregon Coordinate Reference System
- Standard Drawings and Details
- Standard Specifications
ODOT’S Available Survey Data on the Web

ONLINE MAP CENTER

https://ecmnet.odot.state.or.us/mapcenter
Oregon Department of Transportation

ODOT’S Available Survey Data on the Web

RIGHT OF WAY MAP SEARCH

For support, please contact MapsandPlans@odot.state.or.us
ODOT’S Available Survey Data on the Web

RIGHT OF WAY MAP SEARCH

Map Center

Criteria

Right of Way Map Number | Township | Range | Section
------------------------|----------|-------|-------
Highway Number | Beginning Milepoint | Ending Milepoint
Key Number | Transit Notes
Map Name | County | Route Number | Non-ODOT Road Name
Latitude | Longitude

Check Keep Open on Search

Results

Max Rows: | # Per Page:
----------------------|--------
200 | 20

Right of Way Map Number | Name | Type | Scale | Key Number
------------------------|------|------|-------|--------
18-4-816 | Washington St. - High St. (Eugene) Section | Right Of Way | 1”=50’ |
18-5-1573 | I-105 Intermediate Control Section | Other | No Scale |
SB-24-4 | Junction City to Eugene | Constructed Line | 1”=400’ |
6B-22-3 | East Broadway - Ferry St. Bridge Section (Eugene) | Right Of Way | 1”=50’ |

Showing 1 to 4 of 4 entries

Download | Select All on Page | Unselect All on Page

For support, please contact MapsandPlans@odot.state.or.us
ODOT’S Available Survey Data on the Web

CONTRACT PLANS SEARCH

For support, please contact MapsAndPlans@odot.state.or.us

January 16, 2019
### ODOT’S Available Survey Data on the Web

**CONTRACT PLANS SEARCH**


**Map Center**

- **Off State Highway**: ▼
- **Region**: ▼
- **County**: ▼
- **Beginning Station**: ▼
- **Ending Station**: ▼
- **Type of Work**: ▼
- **Key Number**: ▼
- **Funding Source**: ▼
- **Construction Contract Number**: ▼
- **Structure Number**: ▼
- **Latitude**: ▼
- **Longitude**: ▼
- **Highway Number**: 091
- **Beginning Milepoint**: 123
- **Ending Milepoint**: 123

**Results**

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<th>Project Title</th>
<th>Bid Let Date</th>
<th>Key Number</th>
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<tbody>
<tr>
<td>02-153</td>
<td>Eugene Sec</td>
<td>12/01/1933</td>
<td></td>
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<tr>
<td>02-091</td>
<td>Junction City - Eugene (Aubrey - Eugene Section)</td>
<td>01/01/1939</td>
<td></td>
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<tr>
<td>04V-022</td>
<td>High St.-Walnut St. Section (Eugene)</td>
<td>05/01/1948</td>
<td></td>
</tr>
<tr>
<td>04V-012</td>
<td>High St.-Judson Pt. Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06V-240</td>
<td>Franklin Blvd. (University St.-Walnut St.) Section</td>
<td>06/01/1951</td>
<td></td>
</tr>
<tr>
<td>06V-363</td>
<td>Ferry St. Southbound Off Ramp Sec</td>
<td>03/01/1960</td>
<td></td>
</tr>
<tr>
<td>11V-029</td>
<td>Garfield St.-High St. (Eugene) Sec</td>
<td>11/01/1972</td>
<td></td>
</tr>
</tbody>
</table>

For support, please contact MapsandPlans@odot.state.or.us

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CONTRACT PLANS SEARCH
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TransGIS

https://gis.odot.state.or.us/transgis/
ODOT’S Available Survey Data on the Web

ODOT data available online through TransGIS
ODOT’S Available Survey Data on the Web

Highways, MP, and Highway No’s needed for Searching and data requests.
Several Different Base Map overlays

ODOT’S Available Survey Data on the Web
Any Questions, Comments or Concerns Please Contact RW Engineering Section at:

Michael R. Fallert  PLS
Lead Right of Way Surveyor
Oregon Department of Transportation
Geometronics Unit
800 Airport Rd. Se.
Salem, Oregon 97301
(503)986-7143
Michael.Fallert@odot.state.or.us