

AS-12483

17.

BOCC Agenda

Meeting Date: 12/20/2022

RESOLUTION - Adopting a Survey Monument Preservation Policy

Submitted For: Susan Eugenis, Public Works

Submitted By: Emilie Cochrane, Public Works

Department: Public Works

Information

Subject and Summary Statement

The Department of Public Works is requesting adoption of the attached Survey Monument Protection Policy. This policy is required by the County Road Administration Board (CRAB) as part of the Standards of Good Practice. It lays out the method that the Department uses to protect survey monuments during construction projects.

Will Staff Attend - NAME OF STAFF or No

Yes

Department Recommendation

It is the recommendation of the Department of Public Works that the Board move to adopt the resolution in the matter of a Survey Monument Protection Policy.

Attachments

Resolution - Adopting Policy

Survey Monument Preservation Policy

DIST: 12/28/22

Form Review

Inbox

Susan Eugenis

Mike Moss, Public Works

Form Started By: Emilie Cochrane

Reviewed By

Susan Eugenis

Mike Moss

Date

12/13/2022 03:46 PM

12/14/2022 08:47 AM

Started On: 12/13/2022 01:51 PM

*Susan
Paul
Scan*

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF COWLLITZ COUNTY, WASHINGTON

In the Matter of Adopting a)
Survey Monument Preservation)
Policy

RESOLUTION NO. 22-142

WHEREAS, WAC 136-50-050 requires that a policy be adopted for survey monument preservation within the county road right-of-way; and

WHEREAS, the preservation of survey monuments should be good practice for the Public Works Department.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Cowlitz County, Washington that the enclosed Survey Monument Preservation Policy is hereby adopted.

EFFECTIVE this 20 day of December 2022.

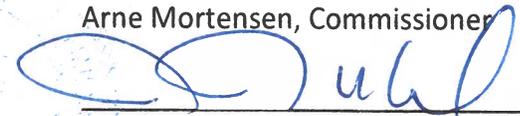
BOARD OF COUNTY COMMISSIONERS
OF COWLITZ COUNTY, WASHINGTON



Dennis P. Weber, Chairman

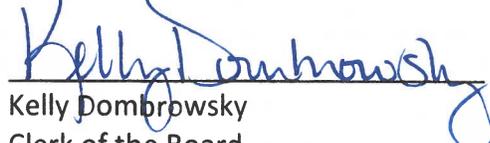


Arne Mortensen, Commissioner



Richard R. Dahl, Commissioner

ATTEST:



Kelly Dombrowsky
Clerk of the Board

COWLITZ COUNTY SURVEY MONUMENT PRESERVATION POLICY

Introduction

This policy is to ensure that Cowlitz County Department of Public Works (The Department and the Office of the Cowlitz County Road Engineer) continues to protect and preserve survey monuments during its operations as well as the records of these survey monuments.

Definitions

Survey Monument: As defined in WAC 332 - 120 - 020 being “The physical structure, along with any references or accessories thereto, used to mark the location of a land boundary survey corner, geodetic control point, or local control point.”

Professional Land Surveyor (PLS): Professional Land Surveyor, licensed by the Washington Board of Registration for Professional Engineers and Land Surveyors

The Department PLS: A Professional Land Surveyor working as an employee in The Department (under the authority of the Cowlitz County Road Engineer), with the job title of “Professional Land Surveyor” (sometimes referred to as The County Surveyor).

Relevant Statutes

The Department of Natural Resources (DNR) has rule making responsibility regarding property corner monument protection within Washington State. See RCW 58.24, RCW 58.09, and 332-120 WAC.

The Board of Registration for Professional Engineers and Land Surveyors has regulatory authority over individual professional engineers and land surveyors regarding monument protection. See RCW 58.09, 332-120 WAC, 196-27A-030(5) WAC, and RCW 58.04.015.

The County Road Administration Board (CRAB) has regulatory authority over County Road Departments regarding “provisions of law relating to county road administration and the standards of good practice”. See RCW’s 36.78.070(3), 090(1)(b), 100, RCW 36.86.050, RCW 58.09, 332-132 WAC, and 136-50-050(5) WAC.

Department Records Related to Monument Preservation

The Cowlitz County Surveyor (1855 - original name) / Engineer (1907 - name change)/Engineer in Charge (1926 - name change)/Road Engineer’s (1937 - name change) Office has a long history of survey monument preservation ever since its creation in 1855. The major records regarding this preservation, and the overseeing, coordinating, recording, and maintaining records of department and outside (private and public practice) monument preservation are located in:

- 1) County Survey Field Notes from 1885 to present, detailing thousands of GLO, private, and public monuments either set, reset, found, or calculated. RPs to monuments (prior to

construction) can also be found in these field books, which are associated with the County Road Plans that were created from them.

- 2) Surveys recorded by the County Surveyor/Engineer/Engineer in Charge/Road Engineer (both private and public) in the “Surveyor’s Record Book” under the 1895 County Surveyor recording law which was retroactive (prior to 1895) and was utilized in this office until at least 1973 when the “new” Auditor’s Office recording law was enacted.
- 3) Corner visitation/creation records recorded/filed in this office by the various timber companies, the DNR, and other government agencies, filed/recorded in this office under the different laws over the year.
- 4) Various private surveys done by others recorded/filed in this office (mostly prior to 1973).
- 5) Those records attributed to the County Road Engineer’s Office, as documented in “Inventory of the County Archives of Washington – No. 8 – Cowlitz County”, pages 249 - 260, published by the Work Projects Administration in 1942 (Seattle), not already stated above. Some of these records may currently be at the Cowlitz County Museum or State Archives, though the majority are housed in The Office of the Cowlitz County Road Engineer.
- 6) Post 1973 records under the survey recording act making the County Road Engineer’s Office responsible to hold and maintain surveys for its own projects and other government agencies (except the Bureau of Land Management). See RCW 58.09.090(1)(a).

Prior to 1937, the Cowlitz County Surveyor/Engineer/Engineer in Charge was responsible for virtually all “official” surveys (private and public) in the County. After 1937 and prior to 1973, the majority of Cowlitz County Road Engineers were licensed as PLSs and some still did private surveys in addition to their public work, which means that this department completed and therefore has, the majority of survey records in this County prior to 1973, when the “new” mandatory survey recording act was created.

These records (in addition to DNR PLSO and County Auditor’s Records) must be consulted to check for their effect on every project (private or public).

The County has already made the majority of these records available on its website, in order to make this research easier for outside parties and will make every effort (as available) to share the above documents with the Department of Natural Resources Public Land Survey Office (DNR PLSO) as a backup to prevent destruction or loss of public access to these vital records in the future.

Training of Staff

It is imperative that unlicensed (non-PLS) Public Works Staff be properly trained in Monument Preservation and have the tools to do the job effectively and efficiently.

Engineering Staff – all engineering design staff (and consultant engineers) will be trained to show survey monuments (as provided by a PLS) on their design plans, and account for DNR Destruction

Permitting, monument replacement, and Record of Survey filing (by a PLS) in their project documents (Engineer's Estimate, contract documents, etc.).

Survey Staff – all unlicensed Survey Staff (and consultant surveyors) will be trained (under the direction of a Washington licensed Professional Land Surveyor) to properly research and locate all record survey monuments within the upcoming project limits (including any offsite temporary roads/bridges, equipment parking, stockpile locations, etc. which could lead to survey monument destruction). They will also be trained on how to properly fill out the Application to Remove a Monument, and submit it to the DNR for approval, and to complete the report and file the required Record of Survey (again, under the direction of a Washington licensed PLS).

Inspectors/Road Supervisors - All inspectors and Road Supervisors will be trained in how to use metal Detectors/Cell Phones with the survey monument layer on them, which will be made available to these staff members in order for them to locate above ground, visible property corner monuments as necessary, during their regular operations.

Maintenance and Operations Staff - All maintenance and operations staff will be trained on when to coordinate with their supervisors/inspectors as necessary when doing operations that might destroy property corner monuments.

Survey Monument GIS Layer

In order for unlicensed (PLS) County staff, other Land Surveyors, contractors, and the General Public to have tools for locating monuments prior to any construction project in Cowlitz County, and for County inspectors and others to check that private engineers/surveyors are showing all monuments to be possibly destroyed by construction on their projects, The Office of the Cowlitz County Road Engineer will create and maintain a layer for its current/past projects. All County Public Works survey projects (whether by County staff or by consultants) where monuments have been located/tied will create/provide coordinates in WA S State Plane to a real-world accuracy of plus or minus 0.5' or better (or as required by the Cowlitz County Road Engineer and/or The Department PLS). These coordinates (X, Y, Z), and metadata associated with them (Designation, Description, Date Set, Recorded/Filed Survey it was set on, Date last visited, 1/4-1/4 Section it lies in, accuracy data, and photographs of the monument) will be delivered to this office for inclusion into this GIS. This layer will be available on the Public Works Research website.

Survey and Engineering Community Engagement

Reporting process for buried monuments: If a surveyor or landowner discovers that one of their monuments has been overlaid or chip sealed over, that person can contact Public Works (through the department website or phone) to have the monument uncovered or a surface monument set (at the discretion of The Department PLS). A survey or corner record will then be recorded by said PLS, if a surface monument or replacement monument was set. If it is a previously set monument box, and the box is still in good condition, then it can be raised. Otherwise, the department will set surface monuments as an alternative to monument boxes, due to their installation and maintenance costs.

When completing survey work in relation to a county project where a survey monument is dug up below the pavement, that most likely won't be destroyed by an upcoming County project, and it isn't possible to counter sink the monument in the pavement such that it is still visible above the pavement, the survey crew will set a magnetic nail with County PLS washer as a surface monument above the buried monument, and The Department PLS will record a survey for this and all monuments found, set, and referenced during the project. This may occur before the project (usually in the case of a longer time-line project) or after construction, at the discretion of the PLS in charge.

As described above, Cowlitz County will create and maintain a GIS layer of survey monuments set and found during current/future projects. The Department will request that private surveyors start providing these coordinates/meta data during their private projects as well, especially on short plat and subdivision plat reviews, where the Cowlitz County Road Engineer has review/approval authority. This information will be added to said GIS layer.

Procedures For County Maintenance and Construction Projects

For maintenance and construction projects where there is actual removal or physical destruction of monuments (say grind and overlay or reconstruction projects) then The Department PLS (or consultant PLS) will be responsible for locating all record (County Road Engineer's Records, County Auditor's Survey and Deed Records, and DNR PLSO Records) monuments prior to the project beginning. A permit to destroy monuments (with all monument references) will be submitted by a PLS at least one-week prior to construction beginning. After construction is completed, then the PLS will cause new monuments to be set and a Record of Survey (or Land Corner Record) as appropriate, to be recorded in the County Auditor's Office. Then a completion report will be filed with the DNR.

For maintenance and construction projects where there is no actual removal or physical destruction of monuments, only covering by asphalt or oil (say chipseal and straight overlay projects without any grinding), then the Inspectors and Road Supervisors will be responsible for locating above ground, visible monuments and existing survey monument boxes and making sure that they stay visible after the project, in compliance with the Survey Monument Preservation MOU signed with the Department of Natural Resources by Susan Eugenis, Cowlitz County Road Engineer on 6/24/2020, a copy of which is available in this office.