Survey work to generate maps and 3D models
If you’re out on 1st Avenue or the central waterfront in the next several weeks, chances are you’ll see a small crew wearing orange vests and hard hats and carrying a tripod. Most likely they are members of the Waterfront Seattle project team completing survey work. Starting the week of February 11, Waterfront Seattle surveyors will be out in force to complete both conventional and High Definition Scanning survey work. Expanding and confirming previous investigative survey work completed by other projects in the area will help the team create a comprehensive data set for this project, including cool, colorful and detailed 3D images!

This is an exciting time – the survey work is one of the first steps in realizing our future waterfront, which will include new parks and paths, access to the water, vibrant public and cultural spaces and more. You can see conceptual images and learn more about the projects at www.waterfrontseattle.org.

Okay, but how does this whole surveying thing work?
To establish an accurate set of survey data to support design development of the new waterfront, surveyors take the following steps:

1) First, crews install survey control points – small markers called “monuments” that establish the position and elevation of a network of points – at regular intervals along both Alaskan Way and 1st Avenue.

More than 30 of these Waterfront Seattle survey control monuments will be installed throughout the project area. You may notice these on your way to work or if you’re passing through the area – they’re even marked with the project name! Each monument is about two inches in diameter, a bit larger than a golf ball or the bottom of a coffee cup.

2) At the control points, crews conduct survey work using conventional tripod survey and digital survey. 3D scanners are used to shoot the control points. The data bounces off of the control points and back to create three dimensional images, like the one to the right.

3) Using the data gathered in the field, surveyors create an initial base map – which is the basis for completing detailed design of the Waterfront Seattle project. See “Base map area” on page 2.

4) Once the map is created, crews revisit the survey markers to confirm the complete data set. Once survey work is complete, crews will be back to complete other activities to advance design of the waterfront.

Surveyors will use equipment like the 3D scanner pictured at right. Do you recognize the location being surveyed in the picture at right? Hint: It’s in Pioneer Square.
Want more details? Read below:

- We will not close any streets or sidewalks
- Occasionally, you may see us set-up a couple of cones and step into the street to take a quick shot before going back to the sidewalk; the majority of the work can be done from the sidewalk
- We plan to place signs alerting vehicles and pedestrians that survey work is in progress
- Expect mostly weekday work and occasional work on the weekends
- Work will last for approximately two months, spending about 2-3 days in any given block
- Daytime work hours are from 7 a.m. to 6 p.m.
- Due to the sensitive digital equipment, work schedules are weather dependent
- No parking spots will be taken up during this activity

Survey work will take place throughout the project area, with the most detailed work in the primary survey area shown in orange above.

Questions? Get in touch:
For updates on survey progress or questions about the Waterfront Seattle project, please contact us:
Phone: 206.499.8040
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What is Waterfront Seattle?
Waterfront Seattle is an incredible opportunity to transform our central waterfront. With the removal of the failing Alaskan Way Viaduct and replacement of the deteriorating Elliott Bay Seawall, we have an unprecedented chance to create a new public space and reconnect our city to the waterfront. The project area extends 26 city blocks from Pioneer Square to the Olympic Sculpture Park and includes improved east-west connections. More information about this City of Seattle project is available at www.waterfrontseattle.org.