

## LIGHT RAIL PERMITTING ADVISORY COMMITTEE MEETING

**Date**: May 16, 2014

**To:** Light Rail Permitting Advisory Committee

From: Matthews Jackson (425-452-2729, mjackson@bellevuewa.gov)

Carol Helland (425-452-2724, chelland@bellevuewa.gov)

Liaisons to the Advisory Committee Development Services Department

Subject: May 21st, 2014 Advisory Committee Meeting

Enclosed you will find an agenda packet for your twelfth Advisory Committee meeting next Wednesday, May 21<sup>st</sup>. We will begin at 3:00 p.m. in Room 1E-113 at Bellevue City Hall. The meeting will be chaired by Doug Mathews and Marcelle Lynde.

#### This packet includes:

- 1. Agenda
- 2. May 7<sup>th</sup> Meeting Minutes
- 3. March 25th, 1014 Downtown Segment Open House Public Comment Summary
- 4. Draft East Main Segment Pre-Development Advisory Document
- 5. Elevated Guideway Drawings Requested At May 7th CAC Meeting

We will have hard copies of all electronic packet materials for you on May 21st. Materials will also be posted on the City's project web site at <a href="http://www.bellevuewa.gov/light-rail-permitting-cac.htm">http://www.bellevuewa.gov/light-rail-permitting-cac.htm</a>.

Please let us know if you have any questions prior to our meeting. We look forward to seeing you next week.



Wednesday, May 21, 2014 3:00 p.m. – 5:00 pm • Room 1E-108 Bellevue City Hall • 450 110th Ave NE

### AGENDA

3:00 p.m. 1. Call to Order, Approval of Agenda, Approval of May 7th Meeting Committee Co-Chairs Mathews and Lynde 2. Public Comment 3:10 p.m. Limit to 3 minutes per person 3. Arts Presentation 3:20 p.m. Mary Pat Byrne, City of Bellevue and Barbara Luecke, Sound Transit 4. CAC Presents Draft of the East Main Segment Pre-Development 3:50 p.m. **Advisory Document** Committee Co-Chairs Mathews and Lynde 5. CAC Review of the Bel Red Design and Mitigation Permit (Permit #13-4:20 p.m. 135564 LD) Matthews Jackson and Carol Helland 6. Public Comment 4:50 p.m. Limit to 3 minutes per person 7. Adjourn 5:00 p.m.

Project web site located at: <a href="http://www.bellevuewa.gov/light-rail-permitting-cac.htm">http://www.bellevuewa.gov/light-rail-permitting-cac.htm</a>. For additional information, please contact the Light Rail Permitting Liaisons: Matthews Jackson (425-452-2729, <a href="mailto:mjackson@bellevuewa.gov">mjackson@bellevuewa.gov</a>) or Carol Helland (425-452-2724, <a href="mailto:chelland@bellevuewa.gov">chelland@bellevuewa.gov</a>). Meeting room is wheelchair accessible. American Sign Language (ASL) interpretation available upon request. Please call at least 48 hours in advance. Assistance for the hearing impaired: dial 711 (TR).

#### CITY OF BELLEVUE LIGHT RAIL PERMITTING ADVISORY COMMITTEE MEETING MINUTES

May 7, 2014
3:00 p.m.

Bellevue City Hall
Room 1E-113

MEMBERS PRESENT: Marcelle Lynde, Doug Mathews, Susan Rakow

Anderson, Joel Glass, Wendy Jones, Don Miles

MEMBERS ABSENT: Ming-Fang Chang, Erin Derrington, Siona van Dijk

OTHERS PRESENT: Matthews Jackson, Carol Helland, Department of

Development Services; Mike Kattermann, Planning

and Community Development; Kate March,

Department of Transportation; Paul Cornish, John Walser, Deborah Ashland, Michael Miller, Sound

Transit

RECORDING SECRETARY: Gerry Lindsay

#### 1. CALL TO ORDER, APPROVAL OF AGENDA, APPROVAL OF MINUTES

Co-Chair Mathews called the meeting to order at 3:05 p.m.

The agenda was approved by consensus.

A motion to approve the minutes of the April 2, 2014, meeting was made by Co-Chair Lynde. The motion was seconded by Mr. Glass and it carried unanimously.

A motion to approve the minutes of the April 16, 2014, meeting was made by Ms. Jones. The motion was seconded by Mr. Glass and it carried without dissent; Co-Chair Mathews abstained from voting.

#### 2. PUBLIC COMMENT

Mr. Howard Katz spoke representing the Bellevue Network on Aging. He said Puget Sound Energy is looking to run high-voltage powerlines along the Burlington Northern/Sante Fe right-of-way. According to news sources, residents of Bellevue to the south of NE 8th Street along with residents of Renton have filed suit against Puget Sound Energy over the issue. He asked where Sound Transit stands and what would happen if an earthquake caused the powerlines to fall on the light rail track or on a station.

Paul Cornish with Sound Transit said Sound Transit staff has been meeting with Puget Sound Energy staff. Energize Eastside, which is the project name, includes some 19 alternatives. The talks with Sound Transit staff have centered on the compatibility of

high-voltage powerlines and light rail. Those conversations are continuing. In most instances, powerlines and light rail lines are compatible uses.

Mr. Katz pointed out that the City Council at its meeting on May 5 issued a better hearing proclamation. The proclamation recognizes that there is a hearing problem in Bellevue. The fact is 17 percent of the population is hard of hearing or deaf, as opposed to three/tenths of one percent of the population being blind. The second largest rail transit system in the country operating in Maryland, Virginia and Washington, D.C. recognizes that fact and includes platform warning lights. As has been pointed out, it is not only those with hearing issues who need to be concerned, the issue also impacts people wearing headphones and people distracted by small children. There should be platform lights at all Bellevue stations. As life expectancy continues to increase, the percentage of citizens living with hearing loss will only increase. Platform lights are a safety issue. Additionally, mixed-height seating needs to be provided at each station, particularly at the hospital station. As people age or become disabled, they have difficulty in rising from seats that are the standard height. The path from the station to the hospital needs to be made as safe as possible. Lights and cameras will not stop crime from occurring. The question of who will patrol the trail has not been addressed. There is a homeless population living along the tracks and the residents of Lake Bellevue know they also commit crimes, which is why a fence has been built to keep them out. He invited Sound Transit staff to attend the Network on Aging transportation committee meeting on May 19 at 9:00 a.m. at the North Bellevue Community Center.

Ms. Betsy Blackstock encouraged the Committee to carefully consider the time it will have to spend together. She said she has talked with a number of Committee members about how the Surrey Downs neighborhood can help and the answer most frequently given has been that the Committee does not have enough time together. The limit of three minutes for the public to provide comment should be strictly adhered to, and when presentations are made by Sound Transit they should be encouraged to get to the point quickly to give the Committee more time to deliberate and comment. The community will support the Committee in every way possible to make sure the Committee has enough time to talk about the issues. The Committee should never settle for hearing Sound Transit staff say they will take something under consideration.

#### 3. SOUND TRANSIT CITIZENS ACCESSIBILITY ADVISORY COMMITTEE

Mr. Cornish provided the Committee with copies of the finalized public involvement summary for the downtown station. He also noted that the TSA gave Sound Transit a gold standard rating for security.

Mr. Cornish introduced Michael Miller, a certified accessibility plan examiner and an inspector for the International Council Code who has been working in the Puget Sound region on disability issues for 30 years, the last 15 of which have been focused on transportation. Mr. Miller said he has multiple disabilities and has had them for 28 years. He said he a former member and chair of the King County Aging and Disability Advisory Committee.

Mr. Miller said Sound Transit prides itself on going above and beyond what is required by the ADA in order to meet the needs of the community. The Citizens Accessibility Advisory Committee was established in 2001 with 15 members, two from each of the county's subareas and five at-large members. Members have to be persons with disabilities, senior citizens, advocates, or people who work at agencies that serve the disabled and aging populations. One thing the committee has been charged with is helping Sound Transit develop internal accessibility design guidelines. The committee worked for nearly two years on that task and involved the public and individual work groups comprised of specific disabilities. The committee had a platform mockup built to allow the members to test different materials to determine what works best for persons with different disabilities. The committee does not, however, have the luxury of being able to focus on what will help one disability group over another; it is necessary to determine what will best serve the continuum of disabilities.

With regard to the use of uplights on platforms, Mr. Miller agreed that they are in use by the system highlighted by Mr. Katz. However, the lights were installed prior to passage of the ADA which focuses on the use of tactile pavers at the edge of platforms. There are several reasons not to use uplights. First, Sound Transit prefers to have the same accessibility features and standards in place for all of its stations to accommodate the disabled who have travel training; it is very important for people to know they can expect to encounter the same features everywhere they go. Second, uplights can cause problems for certain disabilities groups, including those who have seizure disorders, those with night blindness or light-sensitive blindness. Third, there are operational issues that argue against the use of uplights, including the fact that they would have to be connected to the extremely complex and overloaded train control system. Fourth, because for most stations the platform edge is open air, and because of the ambient lighting, in order to be seen any uplights would need to be so bright they could affect the vision of the train operators as they pull into the stations.

Mr. Glass ask if, technical aspects aside, there would be any benefit to deaf or the hard of hearing by having the lights. Mr. Miller said the lights would not benefit him personally; he suggested that he is one of those persons who would get used to them and stop paying attention to them. There are other means built into the stations to make it known a train is approaching, including variable message signs and PA systems.

Answering a question asked by Mr. Glass, Mr. Miller said early in the process there were a lot of issues raised and addressed by the Citizens Accessibility Advisory Committee. The issues were individually and thoughtfully reviewed, and field trips were taken to Vancouver and Portland to see how they had addressed the issues. The committee then made its recommendations to Sound Transit. In the 13 years since the founding of the committee, Sound Transit has chosen to incorporate all of the recommendations made by the committee.

Co-Chair Lynde commented that with the advance of technology it would seem installing lights and controlling them either as a part of or separate from the overloaded train

control system should be an easy task. Mr. Miller said the issue is that uplights are something that are not typically connected to the system.

Mr. Miles pointed out that lights being triggered by trains is something that has occurred since the 1800s without many problems. Mr. Miller said the system that controls the Sound Transit trains is a lot different and a lot more complex than the ones that operate the warning lights at intersections.

Co-Chair Lynde said she is not blind, deaf or hard of hearing but is familiar with what it is like to be listening to screaming children and being distracted for a number of reasons. She said she struggled with the fact that there are no visual warnings at the stations aside from the reader boards which many have trouble reading for various reasons. Platform or overhead lights that simply change color to herald an arriving train would add sufficient warning. Mr. Miller stressed that Sound Transit cannot do something for one group of people with a specific disability that might hinder a different disability group, especially if it involves something that is not required by ADA. There is also the issue of using one approach in one station but not in all the others. Co-Chair Lynde said people who travel a lot know that not everything is done in the same way everywhere they go; society is neither generic nor vanilla. One flashing or color-changing light, or any simple warning system, is going to cause mass confusion.

Ms. Jones asked if there are other groups, such as the Bellevue Network on Aging or the AARP, that might have a different point of view, particularly with regard to the aging population. Mr. Miller said some members of the Citizens Accessibility Advisory Committee are senior citizens. Public comment is taken at all meetings and any group wanting to testify is welcome to do so. Public comments are also welcomed during the design phase.

Deborah Ashland with Sound Transit said some specific groups have offered testimony, including Veterans of America, the deaf and blind community, and paralyzed veterans. She said she did not know if any of those groups have specific policies relative to transit systems.

Mr. Miller said the Beverly Foundation, a private organization based in California, has as a large part of its mission a focus on transportation for the aging population. They conduct a lot of research and publish works on accessibility relative to transit systems.

Ms. Anderson said it was her understanding that the Washington Metropolitan Area Transit Authority runs a state-of-the-art system. She asked how old that system is and if there are any newer systems that have not incorporated uplights. Mr. Miller said Sound Transit's executive director of operations, Bonny Todd, used to work for the Washington Metropolitan Area Transit Authority, as did the manager of the facilities maintenance section. That system began installing uplights in about 1975 and continued to do so through the early 1990s. Passage of the ADA in 1991 ushered in the use of tactile warning pavers at the edge of platforms. Most systems that pre-date the ADA do not utilize warning lights. He said he was not aware of any post-ADA system, including

those in San Diego, Salt Lake City, Dallas, Atlanta and Phoenix, that uses warning lights. There are systems in other countries that use them, but those countries do not have ADA regulations.

Ms. Jones said the suggestion made by Mr. Katz relative to the use of various seating heights made sense to her. Mr. Miller said the ADA specifies maximum and minimum seating heights for benches. Seating height must be close to the same height as the height of a wheel chair to facilitate transferring from a wheel chair to a bench. Sound Transit adheres to those guidelines but also includes leaning rails.

Co-Chair Lynde asked if Sound Transit ever goes above the minimums required by ADA. Mr. Miller said all Sound Transit bus facilities include tactile pavers at the edge of platforms even though they are not required. The bus bay markers in Braille and raised letter are not required. Wayfinding that accommodates blind or partially sighted persons who use a cane is incorporated as well.

Answering a question asked by Ms. Anderson, Mr. Miller said Sound Transit never had any specific issues raised by people who are not officially classified as hearing or sight impaired, those who simply are distracted or not paying attention. Sound Transit does publish pamphlets about accessibility features for all the facilities it operates, and also runs a very strong public safety education campaign run by the safety department. Training is provided in schools and community centers for youths as well as the disabled, seniors and low-income persons.

Ms. Ashland added that under the ADA rules at least one entrance to every station must be accessible, but Sound Transit goes beyond that and makes sure that all entrances are accessible.

Co-Chair Mathews said it was clear that a majority of the Committee held the view that a visual alert system of some type would be more advantageous than disadvantageous and would complement the reader board and audio announcements.

Mr. Glass indicated he had to leave the meeting. He provided Sound Transit staff with his comments regarding the South Bellevue station.

#### 3. FINALIZE SOUTH BELLEVUE ADVISORY DOCUMENT

Mr. Jackson reminded the Committee that Mr. Glass had asked at a previous meeting about the Winters House lid. He pointed out that the design feature was negotiated by the city and the Sound Transit board and it falls outside the purview of the Committee. He noted, however, that at the request of the Committee, Sound Transit was asked to provide additional information regarding the guideway design and the noise wall along 112th Avenue SE.

Ms. Ashland shared with the Committee images of elevated guideway sections constructed by Sound Transit. She noted that typically the guideways are concrete

structures that include a railing or acoustical panels on the sides and poles supporting the overhead electrical wires. In Bellevue there will be elevated guideways associated with the South Bellevue station, crossing I-405 near the hospital station, and crossing Kelsey Creek between 120th and the 130th station. The Committee was shown a cross-section drawing of the typical double box guideway that will be used in those locations, as well as cross-section drawings of the standard columns used to support the guideway. It was pointed out that the columns in Bellevue will be modified octagons with facets toward the crosshead at the top designed to break up the size of the columns and to provide some shadow lines.

Ms. Ashland said a deviation from the typical will occur along Kelsey Creek. The location will not allow the guideway to be easily seen from anywhere so to save some money Sound Transit is proposing the use of I-beams instead of the double box. The future NE 15th Street/NE 16th Street extensions will cross under the guideway so the elevated guideway height will be take that into account. In a couple of places elements called straddle bents will be used; they are needed when crossing a road precludes putting a column down in the center of the span.

The Committee was informed that the typical railing consists of steel verticals, stainless steel cables as the intermediates, and a top rail. Ms. Ashland stated that railings are primarily used to protect the workers performing maintenance functions. Acoustical panels are used in some areas in lieu of a railing. The metal panels sandwich acoustical material that absorbs sound.

Transition structures are needed to get the rail from at-grade to elevated. A transition structure will be needed to take the rail from at-grade on I-90 and elevate it high enough to clear the freeway ramps. Another transition structure will be needed to tie the elevated South Bellevue section to the elevation of the retained cut along Bellevue Way. The line will come out of the downtown station already elevated and will continue across I-405 to the hospital station, following which another transition structure will be needed to bring the line back to grade. Photos of transition structures were shared with the Committee along with photos of the standard concrete wall formliner.

Ms. Jones asked if a pattern other than the standard formliner could be used, especially in South Bellevue where the focus has been on natural elements. A formliner with a pattern depicting trees or something would be welcomed. Ms. Ashland said anything is possible in terms of formliners. The formliners used for the I-90 section will need to be approved by the Washington State Department of Transportation. The design team has recommended the standard concrete formliner pattern for the entire East Link segment I-90 to Redmond, but that does not preclude choosing different patterns for different segments.

Photos of longspan structures were shown to the Committee. Ms. Ashland noted that a single-box design will be used. The columns associated with longspan structures are necessarily different in order to support the structures. Longspan structures are expensive and are thus used sparingly. In Bellevue a longspan structure will be needed where East

Link exits I-90 and for the crossing of I-405. WSDOT has specific urban design criteria for I-405, including a color pallet and a specific design for the railing. Sound Transit has reached an agreement to paint the underside of the longspan and backspan elements over I-405 green in accord with the WSDOT design criteria for the freeway. Sound Transit is also working with the city on the design of the OCS poles for the crossing of I-405.

Ms. Anderson said she would like to see the underside of the guideway going up Bellevue Way painted green as well. John Walser with Sound Transit explained that the WSDOT design standards pertaining to I-90 will need to be followed to the limit of their right-of-way.

Ms. Jones asked about the material used in the sound panels and whether or not they could be painted. Ms. Ashland said they are made of aluminum and they are painted silvery gray to minimize the overall look. She said anything is possible when it comes to the use of color, it is just a matter of where the money should be spent.

Co-Chair Mathews pointed out that the Committee had been clear about wanting to see some color used on the guideway in the South Bellevue area to better fit with the Mercer Slough area.

Co-Chair Lynde noted that the advisory document talks about general design guidelines and indicates that the sound panels offer an opportunity for color if not art. She suggested the document should be amended to indicate the desire of the Committee to see opportunities explored to incorporate color on the guideway as well.

Mr. Walser said typically a pigmented sealer is used on the columns in part to make it easier to deal with graffiti. The thinking has been that the higher elements of the girders and the tubs are high enough that they will not attract the graffiti artists and thus do not need to be painted. Ms. Ashland pointed out that paint can add significantly to the life cycle costs of structures.

Co-Chair Lynde said before leaving Mr. Glass handed her two written comments regarding the South Bellevue segment. She noted that wanted to see natural materials incorporated into the design to the degree possible, and that landscaping should be added to shield the trackway. Mr. Walser said for safety and security purposes, shrubs and vegetation is kept below 36 inches in height, and the lower branches of trees are kept trimmed up to seven feet to preserve a visual zone.

Ms. Jones noted that two elements for the hospital station could be appropriate for the South Bellevue station: the cable wall screen and the mesh wall screen, both with vines and the like twining in and through them. She suggested they could represent a very good way to camouflage or district the eye from the columns. Mr. Walser said the elements are associated with the station rather than the guideway columns.

Ms. Jones asked where fencing will be used at the South Bellevue station. Mr. Walser said fencing is used as a safety element along the trackway segments that are at-grade or

in a retained cut. There will also be fencing erected around the perimeter of the parking lot and the South Bellevue station site, and there will be a security fence screen at the bottom level of the parking garage to control access to and from the garage. The detention pond will be fenced off as well.

Ms. Jones said she would like the advisory document to ask Sound Transit to plant mature landscaping at the end of the construction project, and to consider the use of earth tones and natural colors in the pallet.

Co-Chair Mathews commented that because the South Bellevue station will serve as a grand entry into the city, every opportunity should be taken to reflect Bellevue as a city in a park, including the use of natural colors.

Ms. Jones said she also would like the document to call for using a formliner that reflects the character of the area.

Co-Chair Lynde agreed and suggested that formliners with a more natural bent should be incorporated for the entire alignment through the city.

Mr. Jackson said there have been discussions about using a pattern in the Bel-Red area that would be unique to that corridor as a way of informing riders about where they are. Co-Chair Mathews said he could support having different formliner patterns used for each segment of the alignment.

There was consensus to include in the South Bellevue advisory document direction to: incorporate natural materials and earth tone colors that reflect the idea of Bellevue as a city in a park; incorporate additional appropriate landscaping to screen the guideway; plan ahead to have mature vegetation available when finishing the construction project; use a special formliner that reflects the special characteristics of the Slough; and painting the guideway similar to the graphic shown in the presentation for the elevated segment outside of the WSDOT right-of-way.

Answering a question asked by Ms. Anderson, Ms. Ashland said the typical height of a railing is 42 inches but there is no typical height for a sound wall. Ms. Anderson said she wanted specific information about what it would cost to paint the west-facing side of the guideway from the I-90 right-of-way border to Winters House. Ms. Ashland said she would provide that information.

Mr. Walser noted that a question had earlier been asked about the canopy coverage at the different platforms. He explained that Sound Transit calculates coverage at 15 square feet per person that the ridership projections indicate will be waiting on the platforms during the peak 15-minute period during the peak hour. Those calculations are put up against the Sound Transit-established minimum of 30 percent coverage, so where the projections indicate ridership at the East Main station calculates out to only 17 percent, the higher 30 percent coverage will be incorporated. The South Bellevue and hospital stations, because of their elevated platforms with escalators, stairs and elevators, require

weather projection, a factor that triggers a larger canopy coverage. Ironically, the hospital station, even though it is projected to have the lowest ridership, will have the most canopy coverage in terms of percentage.

#### 5. CONTINUED DISCUSSION OF DOWNTOWN SEGMENT

Ms. Jones asked what the typical dimensions are for a signal house. Mr. Walser said the signal houses contain the electronic switching equipment that controls the track switches. A typical signal house that involves a simple crossover would be around 10 feet by 12 feet. The signal house associated with the hospital station will need to include equipment to control the track that heads for the stub extension in the rail alignment as well as the tracks coming from the Spring District and turning up into the stub, as well as the through track. The three different facilities will require three different controls, thus the signal house will need to be roughly 12 feet by 20 feet. The buildings are typically 10 to 12 feet tall. The hospital station signal house will be located within the Sound Transit right-of-way, but an easement is needed from the Lake Bellevue community for access to it.

Co-Chair Lynde said she would like to see the advisory document to include using a formliner pattern unique to the area, along with provisions for safety and security. She added that while the pathway to the hospital should include weather protection, it should not be the job of Sound Transit to ferry people between the station and the hospital.

Mr. Miles asked how Sound Transit handles incidents such as assault and robbery occurring at a station. Ms. Ashland said the police are notified right away about any criminal activity. Accidents are investigated by the Sound Transit operations safety group to determine if something needs to be done.

Co-Chair Mathews asked what the distance is between the hospital station and the hospital itself for someone walking the path. Mr. Walser said he would have to go back and calculate that number.

Answering a question asked by Ms. Jones, Mr. Cornish said Sound Transit staff has met with the Lake Bellevue property owners to discuss their concerns. He said in another meeting is planned to share with them drawings and snapshots from the animation.

Ms. Jones noted that the Lake Bellevue property owners had also expressed concerns about spillover parking by people using the hospital station. Mr. Walser said a six-foot fence will separate their parking area from the station to discourage the impression that there is any relationship between their parking and the hospital station. There will also be signage, but some enforcement may be required as well.

Mr. Jackson said he would draft the advisory document based on the direction given by the Committee.

6. CAC REVIEW OF THE BEL-RED DESIGN AND MITIGATION PERMIT (Permit #13-135564 LD)

Mr. Jackson said a copy of the critical areas and mitigation report had been included in the packet. He said the Bel-Red segment, the shoreline substantial development, and the shoreline variance permit applications have all been submitted. Environmental impacts will occur throughout the East Link alignment and mitigation will be required to satisfy the impacts. Through the Memorandum of Understanding a site has been identified to take the bulk of the mitigation. The most challenging mitigation, aside from noise, is wetland creation. The focus is on having a single mitigation plan to cover the East Link project. As additional design and mitigation permits come in, they will rely on the prior decision and be augmented as necessary with any new information.

Mr. Jackson said the wetland impacts will be to Mercer Slough and the proposed mitigation site is in the Bel-Red area. There are, however, some challenges with the site being able to accommodate the amount of mitigation considered by the Memorandum of Understanding and the critical areas report. A technical team has been tasked with reaching a decision as to whether or not the site is a non-starter, a partial starter, or if it can accommodate the full mitigation with alternative recommendations. The site is on the south side of the East Link alignment near the Cadman operation.

Referring to the project wetland and wetland buffer impact summary, Co-Chair Mathews said he was surprised at how low the impact is on wetlands, particularly in Mercer Slough. Mr. Jackson said the fact that the alignment runs along the side of the Slough rather than through the middle of it is a major factor. There are other wetland impacts along the alignment, though most are of a rather small scale. He said in order to assist Sound Transit in getting its land use entitlements and first permits out, it will be necessary to nail down the required mitigation and update the critical areas report as necessary to reflect any new findings. Because the work is critical, it will be done on its own path and will be incorporated into the design and mitigation permit and the shoreline permitting as needed.

Mr. Jackson asked for comments from the Committee members on the best way for Sound Transit and the city to assist in reviewing the information. Co-Chair Lynde suggested it will be important to not waste time discussing issues that are outside the Committee's purview; to that end, it would be helpful to identify the elements about which input from the Committee will be wanted. Mr. Jackson noted that the Land Use Code decision criteria for the design and mitigation permits had been provided to the Committee members previously, and that is ultimately where the focus will be. The path to get there, however, is not fully fleshed out. He said as the process moves along he would highlight the items over which the Committee can have a say.

There was agreement to anticipate not meeting in August. Mr. Jackson said he would review the schedule with that in mind and review it with the Committee at the next meeting.

#### 7. PUBLIC COMMENT

Mr. Dick Lohman, 4-107 Lake Bellevue Drive, spoke representing the Lake Bellevue property owners that have been working with the city and with Sound Transit. He thanked Sound Transit for their timely response to the issues raised by the group at the last Committee meeting. He said the group will be meeting again soon to review their comments and to respond in writing. The signal station is a sticking point and the group has officially asked Sound Transit to move it. If things proceed as planned, the west property line will be visually challenging. The Lake Bellevue property owners have asked Sound Transit for mature landscaping. While Sound Transit has security concerns with doing that, the fact is there are special circumstances affecting that area, including the transition zone and the historic problem with homeless persons who choose to shelter there. The group would like to see a rendering of what Sound Transit has planned for the west property line.

Mr. Howard Katz with the Bellevue Network on Aging explained that the group was formed after seniors from Kirkland came to the city and highlighted the need for special representation of older adults on the Eastside. Eighty percent of the Network members are not older adults but rather are people who work in the older adult community. The group has been recognized as an outstanding organization representing older adults in the state of Washington. He noted that both Mr. Miller and Ms. Ashland talked about bursts of light impacting some who have vision impairments, but Lea Foss in her April 16 testimony noted that she herself suffers from photophobia, that she has worked in the Washington, D.C. area where they use warning lights on the train platforms, and that she was never bothered by the lights. Sound Transit says it cannot do something at one station it does not do at other stations in the system, yet the system in Washington, D.C. has continually made upgrades station by station and they are doing it because it works to improve safety; in addition to lights, they use vibrating tiles that let the blind know that a train is coming. He also said the issue of Sturtevant Creek needs to be addressed. The creek runs underground along 120th Avenue NE and eventually flows into Lake Washington.

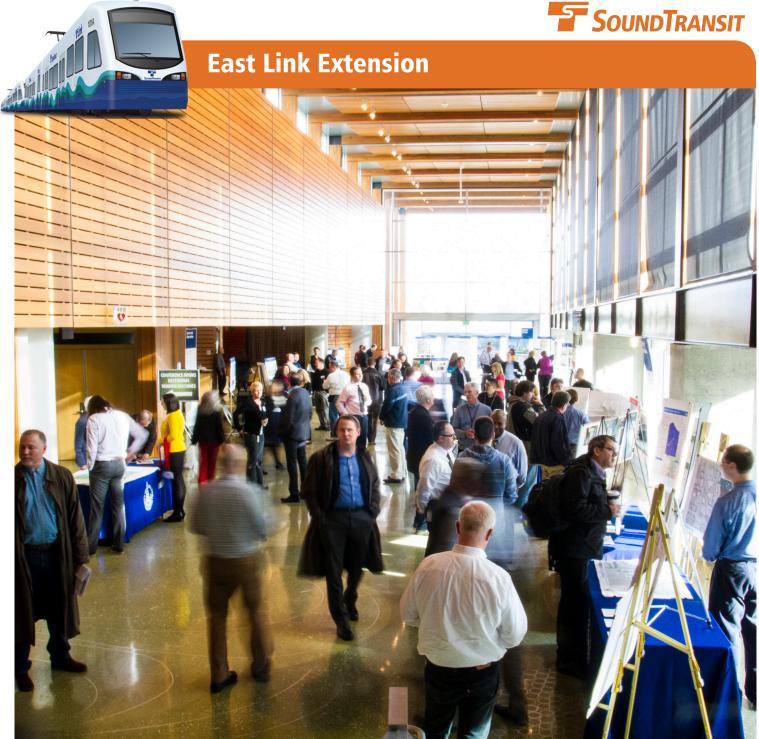
Mr. Cornish pointed out that Sound Transit will be relocating part of Sturtevant Creek to the west of the hospital station. He said he would add the section along 120th Avenue NE to his homework list

Mr. Katz commented that an elderly or disabled person taking the train to the airport will find no moving platform or other means of getting from the station to the terminal. Sound Transit needs to take those issues into account, especially with regard to the sidewalk connecting the hospital station to the hospital. He thanked the Committee members for their work on behalf of the city.

#### 8. ADJOURN

Co-Chair Mathews adjourned the meeting at 5:26 p.m.





March 25, 2014

**Downtown Bellevue Segment 60% Design Open House Public Involvement Summary** 

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## **Background**

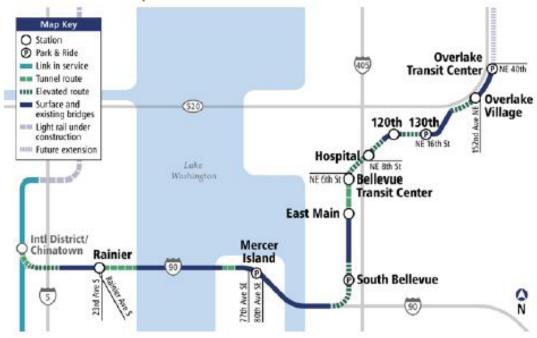
East Link Extension is a key element of the regional mass transit system approved by voters in 2008. This 14-mile light rail line will benefit local communities and support regional growth with fast, frequent and reliable light rail service, connecting Seattle to the Eastside's biggest population and employment centers.

The project builds on the Central Link light rail system running between Sea-Tac Airport and downtown Seattle and the University Link and S. 200th Link Extensions that are scheduled to open in 2016. East Link is part of the new light rail extensions being built north, south and east from Seattle. When East Link opens around 2023, 10 stations, serving Seattle, Mercer Island, Bellevue, South Bellevue and Overlake in Redmond will become a part of a regional light

rail system stretching more than 50 miles. By 2030, about 50,000 riders will use East Link every day.

East Link is advancing in final design. During this phase, project architects and engineers define the light rail system, determining the technical specifications for the stations, bridges, tracks and other elements as well as construction methods and sequencing. The Sound Transit art program, STart, also begins work to select station artists and artworks during final design. Sound Transit hosted a public meeting in June 2013 to share design plans in the Downtown Bellevue area, and we have since advanced design to approximately 60 percent completion. There are multiple opportunities for the community to help influence design elements and stay informed as East Link moves forward.

#### **East Link route map**



#### **Timeline**



#### **Overview**

On March 25, 2014, Sound Transit and the City of Bellevue's Light Rail Permitting Citizen Advisory Committee (CAC) hosted an open house to inform the public of design progress on the Downtown Bellevue Segment of East Link Extension, from Main Street to 120th Ave NE, including the Bellevue Transit Center and Hospital stations. The meeting served to educate the community on design details, provide an overview of the project schedule, benefits, and final design elements; and present and gather comments on 60 percent design plans for the Downtown Bellevue Segment. The open house was held at Bellevue City Hall from 5 to 7 p.m.

Light rail travels in a tunnel under 110th Avenue NE, turning east at NE 6th St. to Bellevue Transit Center Station. The route transitions to an elevated profile south of NE 6th St. to cross I-405 and 116th Ave. NE. It turns north along the former BNSF Railway corridor to cross NE 8th Street and reaches the elevated Hospital Station with entrances on the north side of NE 8th St., transitioning to an at-grade alignment before turning east to cross under 120th Ave NE.

#### City of Bellevue Light Rail Permitting Citizen Advisory Committee

Appointed by the Bellevue City Council, the CAC is comprised of 9 Bellevue residents charged with representing community perspective on the design and mitigation process for East Link. All comments submitted to Sound Transit at the open house will be shared with the CAC. The CAC meets regularly and all meetings are open to the public. Visit www.bellevuewa.gov/light-rail-permitting-cac-meetings for more information.

### **Notification**

The open house was widely publicized through the following channels:

- Display advertisements in the Bellevue Reporter, Seattle Chinese News, Korea Daily, Russian World, La Raza, and Phuong Dong Times.
- Postcards mailed to over 13,500 residents and businesses
- A press release to local papers and blogs
- Email notification to approximately 5,800 subscribers of the East Link Extension listserv, 850 subscribers of the Bellevue Gov Alert, neighborhood newsletter, and other agency or community group listservs
- Announcements on the Sound Transit and City of Bellevue project web pages
- Announcement on the Sound Transit Facebook page
- Announcement to City of Bellevue CAC distribution list



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## **Open house overview**

Approximately 120 people attended the open house to learn about updated design plans for the Downtown Bellevue Segment and provide comments. Attendees were greeted by project staff, asked to sign-in and provided with a Community Guide to Final Design, segment fact sheet, and comment forms. Display boards and roll plots featured information about East Link, the final design process and updated design plans for the Downtown Bellevue Segment, from Main Street to 120th Ave NE, including the Bellevue Transit Center and Hospital stations.

An overview presentation was held at 5:30 p.m. Project staff were available throughout the meeting to answer questions and explain design details to the public. Attendees were encouraged to share their thoughts on the design plans. All meeting materials and electronic versions of the comment forms were made available on the East Link project website following the open house.





## **Comment summary**

Sound Transit accepted public comments in person at the open house, and by mail, email and electronically on the East Link website. The Light Rail Permitting Citizen Advisory Committee provided a stenographer at the open house to take public comment. All comments submitted were shared with Sound Transit and the CAC. The following section is a summary of verbal feedback collected at the open house as well as 25 comments received between March 25 and April 8, 2014. Transcribed comments are italicized below to highlight the tone of public feedback.

#### General comments on the Downtown Bellevue Segment:

- Design and location looks good. Would prefer a Park and Ride near either station.
- Looks great.
- Security and access for hearing impaired and visually impaired.
- There is no need for the Hospital Station and the 130th Street Station. These stations should be eliminated to reduce costs.
- ST needs to work more closely with Bellevue on station access, particularly bicycle access. This cannot be an afterthought after stations are 90% design complete.
- You will want amenities with restrooms. Pocket shops are even fine. Look at Tom Douglas' Tanakasan, Flower shop, bike shop, Assembly Hall, Melrose Market near Denny Triangle.
- Open LR services between Seattle and South Bellevue Park and Ride early — by 2021!
- Planning with county and BNSF Trail connecting to Kirkland.
- Please rezone to increase density around the stations.
   I hope this will lead to more apartments, condos, pedestrian traffic, etc.
- While the designs include bicycle facilities at the stations, there does not appear to be any planning focused on getting riders to and from the stations.

■ A couple items I hope are being considered by the city as the new stations are planned include: (1) High-capacity transit works best with transit-oriented development and I hope that appropriate, high densities are being planned around the future stations (except where single family neighborhoods would be harmed by a nearby station; (2) High levels of feeder transit service by King County Metro will be needed to carry those of us who live in East Bellevue to the Hospital and BTC stations.

## Bellevue Transit Center Station design

## General comments on station design, features and amenities:

- A center loaded platform would be much more sleek and unimposing. That would reflect Bellevue character.
- Just use the space to its fullest use. They do this well in Europe.
- In looking at the station, I'm struck with how un-pretty it is. While not ugly, it certainly is not attractive. It looks like a lego machine that might be used for mining moon rocks. Why not a center-loaded platform so inglorious structures on the outside of the alignment do not have to be created.

- Instead of glass causeway, could place a building on top with amenities like a coffee shop or bike repair.
   They could have bathrooms.
- Need a 24/7 restroom available out downtown transit center.
- Electronic information at transit center.

#### **Comments on pedestrian access to the station:**

- Get the underground tunnel to the BTC platform.
- At the Bellevue downtown station, or any other station, which at any point crosses the grade of a sidewalk, should allow for at least emergency exits for wheelchairs and such people, allowing them to go directly from the platform out onto existing city sidewalks, or in the case of the downtown station a possible new sidewalk on the south side.
- At the 30 percent open house there were comments made about a possible underpass under 110th Avenue NE to access the downtown Bellevue station.

#### Comments on bicycle access to the station:

- Runnels on the sidewalks.
- Bellevue needs a bold plan for AAA bicycle access to stations.

- Need to show that one can get there from all directions.
- Looks really hard, unsafe.
- Bike routes downtown is hard to bike.
- Need all ages and abilities bicycle access to downtown stations from South Kirkland P&R, 520 Trail, I-90 Trail, East Bellevue.
- Severe lack of bicycling improvements, the boards show next to nothing — especially Bellevue's.
- Need to get City of Bellevue to actually provide real bike routes that are reviewed by a committee, such as Cascade Bike Club.
- \$ budget for art vs. \$ spent on how to safely get there via bike?

#### Comments on vehicle drop-off and parking:

- Would like to see more public parking near Downtown Station. Perhaps "new building" can provide that and have a circulator for all of Downtown Bellevue.
- Provide drop-off at Bellevue Transit Center.
- Off-street pick-up and drop-off locations integrated with a downtown building.



### Hospital Station design

#### Station design and amenities:

- Looks great.
- Thanks for maximizing design of the creek into a presence for the station.
- Plans we have should improve the flow and vitality.
   Your landscaping will be important too. This is a great view point so this station should have lots of glass.
- Protect and enhance the water. We are already underway with Lake Bellevue drainage basin enhancements and you can help with that. Signage for wayfinding is important and I like the bright red ticketing areas.
- Nice, clean and contemporary design. When will the tree and planting plans be available?
- Are the elevators enclosed, or do they have windows?
- Station looks very exposed, why no windscreens at edges of platform structure?
- I really hope that there will be an intentional integration with the trail that will continue onto the current Burlington Northern/Santa Fe right-of-way because Kirkland is going to be spending a lot of money improving it for regular use. There will end up being a lot of people who use it, particularly because it intersects directly with the hospital station. It should be recognized that lot of people could be taking their bikes from Kirkland to get onto Sound Transit. The hospital station is the least dense stop in Bellevue.

#### Interest in the City's station area planning efforts:

- It may take a serious increase in density in the area in order to make the station work. There will need to be riders, people either going to work or coming from home on their way to work. Some people will use the station to get to and from the hospital, but that will not be a large number.
- Increase zoning density around the Hospital Station to support ridership.

#### **Comments on pedestrian access:**

- An overpass over 8th seems most practical and tie into future trail that would use same path.
- Crosswalk under the station to reach SB bike path or EB bus stop.
- Overpass over NE 8th at Hospital Station for pedestrians and bikes.
- Review ped crossing at 8th close to station.
- Is the pedestrian path ADA accessible?
- Dangerous access from south of 8th.
- Consider pedestrian/bike overpass over NE 8th at the Hospital Station.
- I would like to see an at grade ped/bike crossing across 8th at the south of the Hospital Station. This would link the trail north/south at this point and would provide a convenient crossing for eastbound B Link buses and the south side of 8th.

Sound Transit East Link Extension

#### **Comments on bicycle access:**

- City of Bellevue bike plans are inadequate.
- Crosswalk under the station to reach SB bike path or EB bus stop.
- Not much history of bikes in this area. Too dangerous, probably bikes should be directed to the trail.
- Play up bike access to this site. Include bike lanes in the regional trail and a large bike parking area at the station (you may already be doing this). Make sure that the bike lanes are well connected to other bike routes. Bikers would appreciate not having to go into downtown to catch the train.
- Want to see a site plan with focus on bikes, not pedestrians.
- What is the status and timeline for the rail to trail project in relation to East Link?

#### **Comments on vehicle drop-off and parking:**

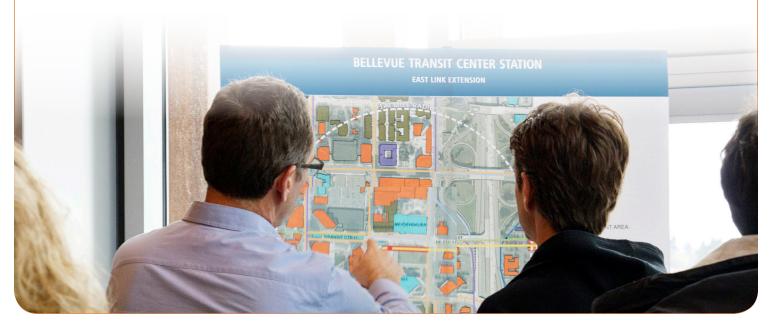
- If you have drop off, add another lane or large turnaround area or traffic will be a mess. How about a golf-cart-like shuttle between the station and hospitals, especially for older people. It is a long walk.
- More parking at Hospital and Downtown stations.
- Park and Ride near either station

- Vehicle access to this site is limited. It is difficult to drive to (right in/right out on NE 8th only), so it currently serves only residences and businesses in walking distance. As a result, to recoup the community's investment in the station, the immediate area should be zoned for a very high density.
- Create a viable Kiss & Ride access, which means mostly creating a second street connection so people can go back east easily. I know the Lake Bellevue-ites are adamantly against this idea, but when the density in the area is increased (as it must be), the new street will be essential and it could be designed to provide a buffer for the Lake Bellevue residences and offices

### **Construction Impacts**

#### **General comments:**

- When will ST share more about construction?
- What are construction impacts during construction?
- Vibration from construction on peat-I have already noted that initial work and tests around the area are transmitting vibration into our buildings, which means actual construction could be a problem.



## How do you plan to use East Link?

#### Do you live or work near a station?



#### How often do you anticipate using the station?



## Do you intend to use light rail for daily commuting, special events, or both?



#### How do you plan on accessing the station?



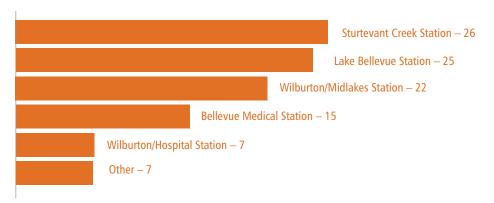
## Permanent station naming comment summary

A separate comment form was provided to gather input on permanent station names for the Downtown Bellevue segment. Sound Transit Board policy states that permanent station names should reflect the neighborhood environment, avoid commercial references and comply with ADA guidelines. Following the meeting, an online survey was posted to the project website. A total of 98 responses were received. The following is a summary of public feedback on permanent station names. The Sound Transit Board is anticipated to select station names in late 2014.

#### What is your preference for the Bellevue Transit Center Station name?



#### What is your preference for the Hospital Station name?



## Please indicate any comments or questions you have about the Bellevue Transit Center permanent station names:

- Whatever people think of Bellevue now (i.e. Bellevue Square); this is eventually going to be the center of Downtown Bellevue.
- I strongly support keeping the "downtown" in the station name. Bellevue Downtown Station is easily understood, puts the city's name first and relates well to the neighborhood/geography it serves
- Bellevue transit center is already a known destination; shouldn't we make things easy?

## Please indicate any comments or questions you have about the Hospital Station permanent station names:

 Something like "Medical Station" would be better than proposed "Lake Station" which is misleading. Most people will be looking for the hospital, not a lake.

- "Hospital Station" is not an appropriate name.
- I do not like "Hospital Station". It is not indicative to the area.
- It should reflect the neighborhood and this neighborhood is Lake Bellevue
- It would be nice to avoid stations with multiple names (i.e., "Wilberton/X")
- With support from the local businesses and owners, we are forming the Lake Bellevue neighborhood. It is the most prominent geographic feature in this micro neighborhood and best matches your guidelines Wilburton/Midlakes is a good option.
- While this is a hospital area now, who knows how long it will just be hospitals, thus please name it more generically.
- I do not like the name "Hospital Station" at all. Please do not consider this as a station name.

## **Next steps**

Sound Transit is working to advance design of the Downtown Bellevue Segment to 90 percent completion. The next opportunity to provide formal public comment will occur at the 90 percent design milestone. Please continue to visit the project website for the latest news: www. soundtransit.org/eastlink. For more information or to request a briefing for your organization, please contact Sound Transit Community Outreach staff at eastlink@soundtransit.org or 206-398-LINK.





# ADVISORY DOCUMENT EAST MAIN SEGMENT PRE-DEVELOPMENT REVIEW MAY 16, 2014

#### <u>Introduction</u>

The Light Rail Permitting Citizen Advisory Committee (CAC) was appointed by the Bellevue City Council consistent with the terms of the Light Rail Overlay regulations contained in the city's Land Use Code (LUC). Land Use Code section 20.25M.035.A describes the CAC purpose to:

- 1. Dedicate the time necessary to represent community, neighborhood and citywide interests in the permit review process; and
- 2. Ensure that issues of importance are surfaced early in the permit review process while there is still time to address design issues while minimizing cost implications\*; and
- 3. Consider the communities and land uses through which the RLRT System or Facility passes, and set "the context" for the regional transit authority to respond to as facility design progresses; and
- 4. Help guide RLRT System and Facility design to ensure that neighborhood objectives are considered and design is context sensitive by engaging in on-going dialogue with the regional transit authority and the City, and by monitoring follow-through\*; and
- 5. Provide a venue for receipt of public comment on the proposed RLRT Facilities and their consistency with the policy and regulatory guidance of paragraph 20.25M.035.E below and Sections 20.25M.040 and 20.25M.050 of this Part; and
- 6. Build the public's sense of ownership in the project\*; and
- 7. Ensure CAC participation is streamlined and effectively integrated into the permit review process to avoid delays in project delivery.
  - \* Identifies the focus of this Advisory Document

#### Pre-Development Review

This phase of review is intended to provide feedback regarding effectiveness at incorporating contextual direction into the early phases of design. The CAC is expected to provide advice regarding complementary building materials, integration of public art, preferred station furnishings from available options, universal design measures to enhance usability by all people, quality design, materials, landscape development, and tree retention. The CAC is to provide

further input and guidance, based on the input and guidance provided in the context setting phase, on compliance (or lack of compliance) with the policy and regulations and whether information is sufficient to evaluate such compliance.

#### **CAC Work Product**

The work of the CAC at each review stage will culminate in a CAC Advisory Document that describes the phase of review and CAC feedback. The work product required following the Pre-Development Phase of CAC review is intended to provide Sound Transit with early guidance and advice that is integrated into future Design and Mitigation Permit submittals.

At the February 19<sup>th</sup>, 2014 CAC meeting Sound Transit presented its pre-development review stage package for the East Main Segment. The CAC continued to discuss the East Main Segment at the March 5<sup>th</sup>, 2014 and March 19<sup>th</sup>, 2014 meetings.

The following represents the CAC advisory comments regarding LUC 20.25M.040, 20.25M.050, and context setting sensitivity.

#### 20.25M.040 RLRT system and facilities development standards

- 1. Building Height No concerns expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 2. Setbacks No concerns expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 3. Landscape Development
  - The CAC would like Sound Transit to explore the use of grasscrete for the turnaround area for emergency vehicles.
- 4. Fencing No concerns were expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 5. Light and Glare The No concerns expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 6. Mechanical Equipment No concerns were expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 7. Recycling and Solid Waste No concerns were expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.
- 8. Critical Areas No concerns expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.

9. Use of City Right of Way - No concerns expressed by the CAC. More project specific information will be included during the Design and Mitigation Permit review stage.

#### 20.25M.050 Design guidelines

- 1. Design Intent In addition to complying with all applicable provisions of the Southwest Bellevue Subarea Plan, the design intent for the Regional Light Rail Train system and facility segment that passes through this subarea is to contribute to the major City gateway feature that already helps define Bellevue Way and the 112th Corridor. The Regional Light Rail Train system or facility design should reflect the tree-lined boulevard that is envisioned for the subarea, and where there are space constraints within the transportation cross-section, design features such as living walls and concrete surface treatments should be employed to achieve corridor continuity. The presence of the South Bellevue park and ride and station when viewed from the neighborhood above and Bellevue Way to the west, as well as from park trails to the east, should be softened through tree retention where possible and enhanced landscaping and "greening features" such as living walls and trellises.
- 2. Context and Design Considerations The CAC was tasked with evaluating the existing context setting characteristics included in the Land Use Code in order to verify that the design of the station and alignment is consistent with the vision for the Southwest Bellevue. The Land Use Code states that the character of this area is defined by:
  - The expansive Mercer Slough Nature Park;
  - Historic references to truck farming of strawberries and blueberries;
  - Retained and enhanced tree and landscaped areas that complement and screen transportation uses from residential and commercial development; and
  - Unique, low density residential character that conveys the feeling of a small town within a larger City.

The CAC advised that the following additional context and design considerations should be considered when evaluating the East Link project in the Southwest Bellevue Subarea for context sensitivity during future CAC and permit review phases. The following items pertain to the East Main Segment:

- Along 112<sup>th</sup> SE design treatments and mitigation should be complementary to differing levels of development intensity that exist on the east (commercially developed) and the west (residentially developed) sides of the road.
- The portal and tunnel between the East Main and Downtown Stations present an opportunity to "Visually Transport" transit riders from the historic mid-century modern, stable neighborhoods of Southwest Bellevue to the bustling urban context

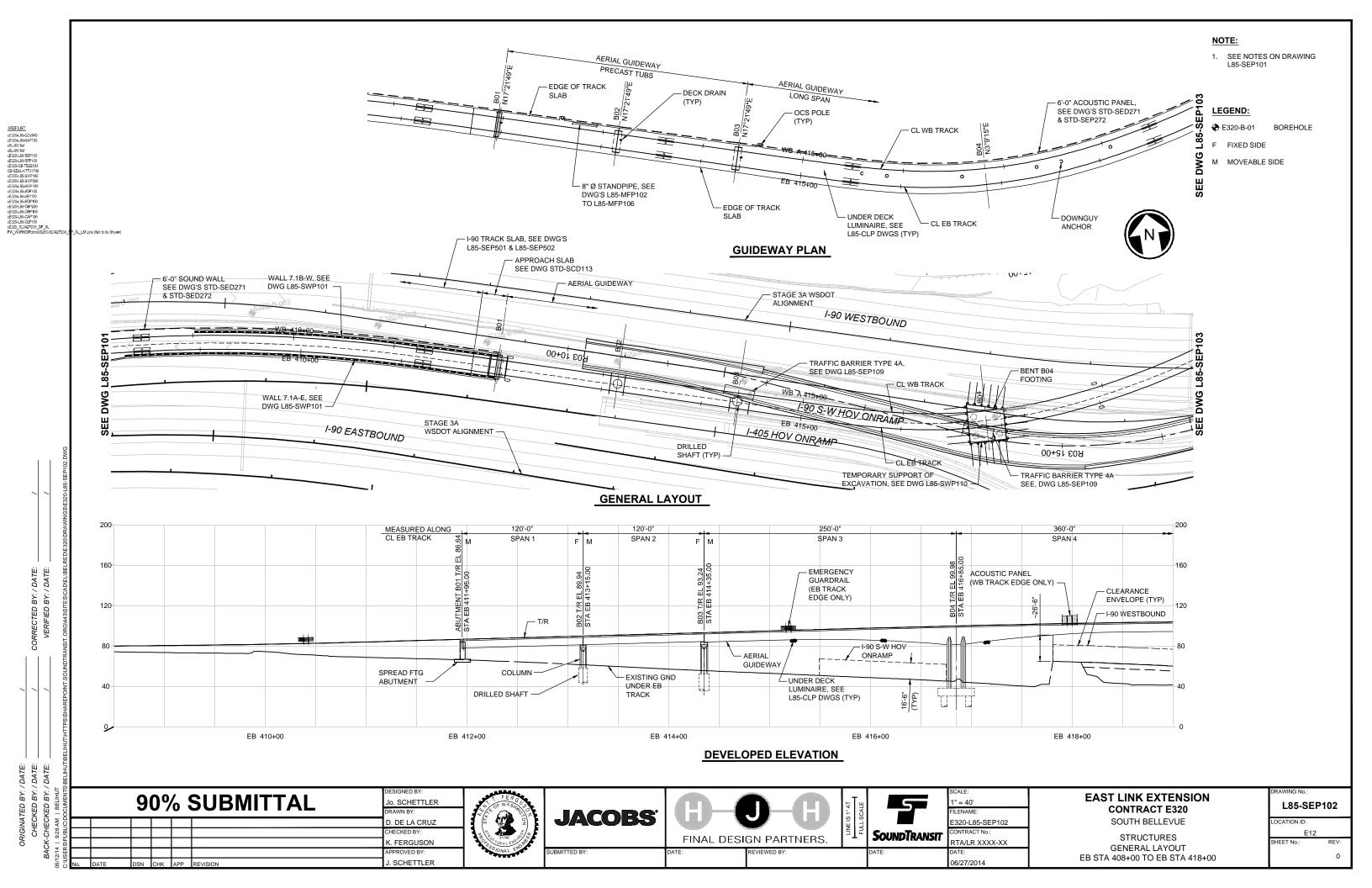
- of the Downtown. Art on the portal and in the tunnel could help depict the transition from the suburban context to the urban context.
- Landscaping should be employed to soften the impact of the portal structure adjacent to the East Main Station. If art opportunities are employed, additional emphasis on the concrete mass of the East Main portal structure should be avoided.

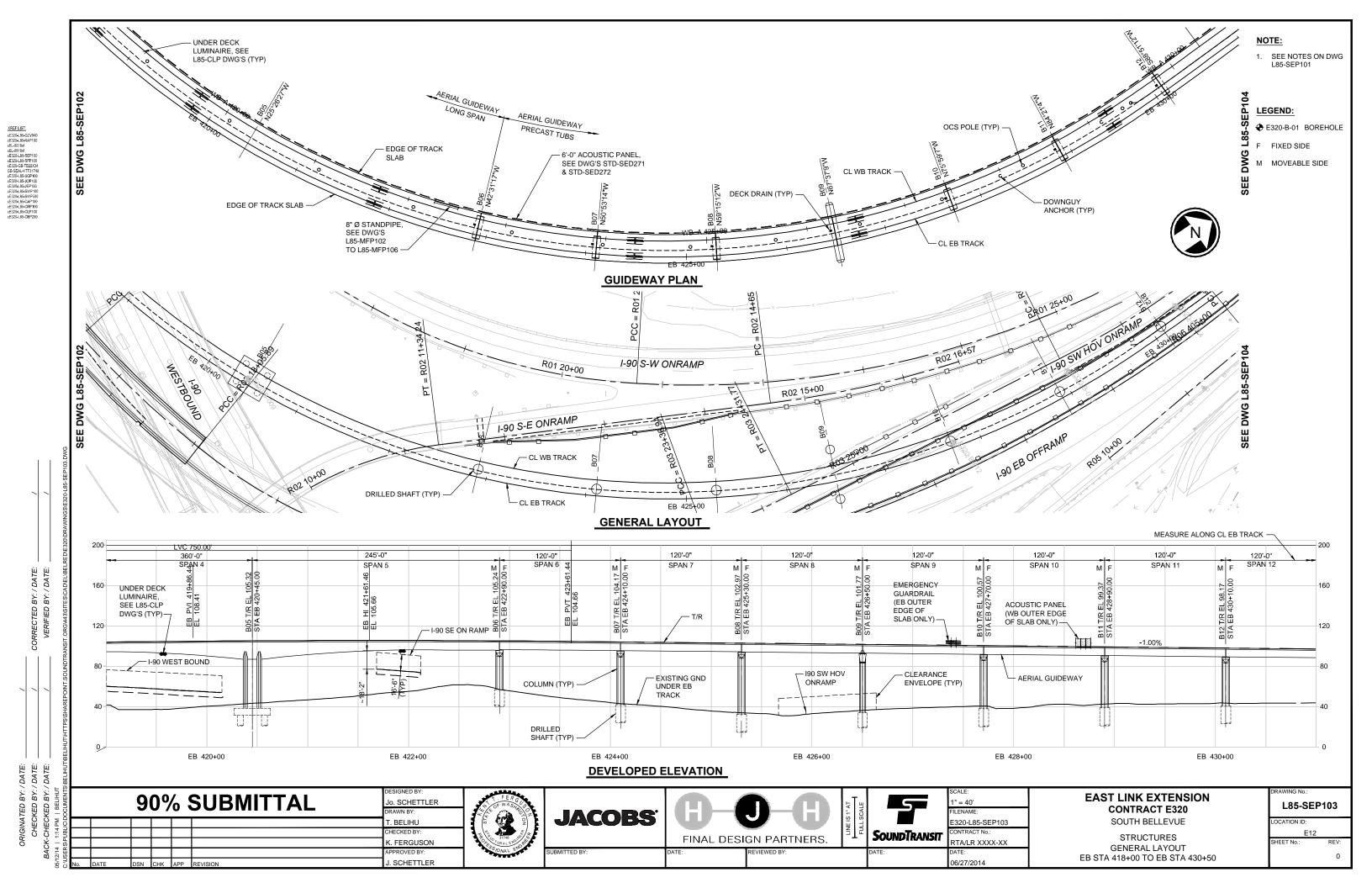
#### 3. Additional General Design Guidelines

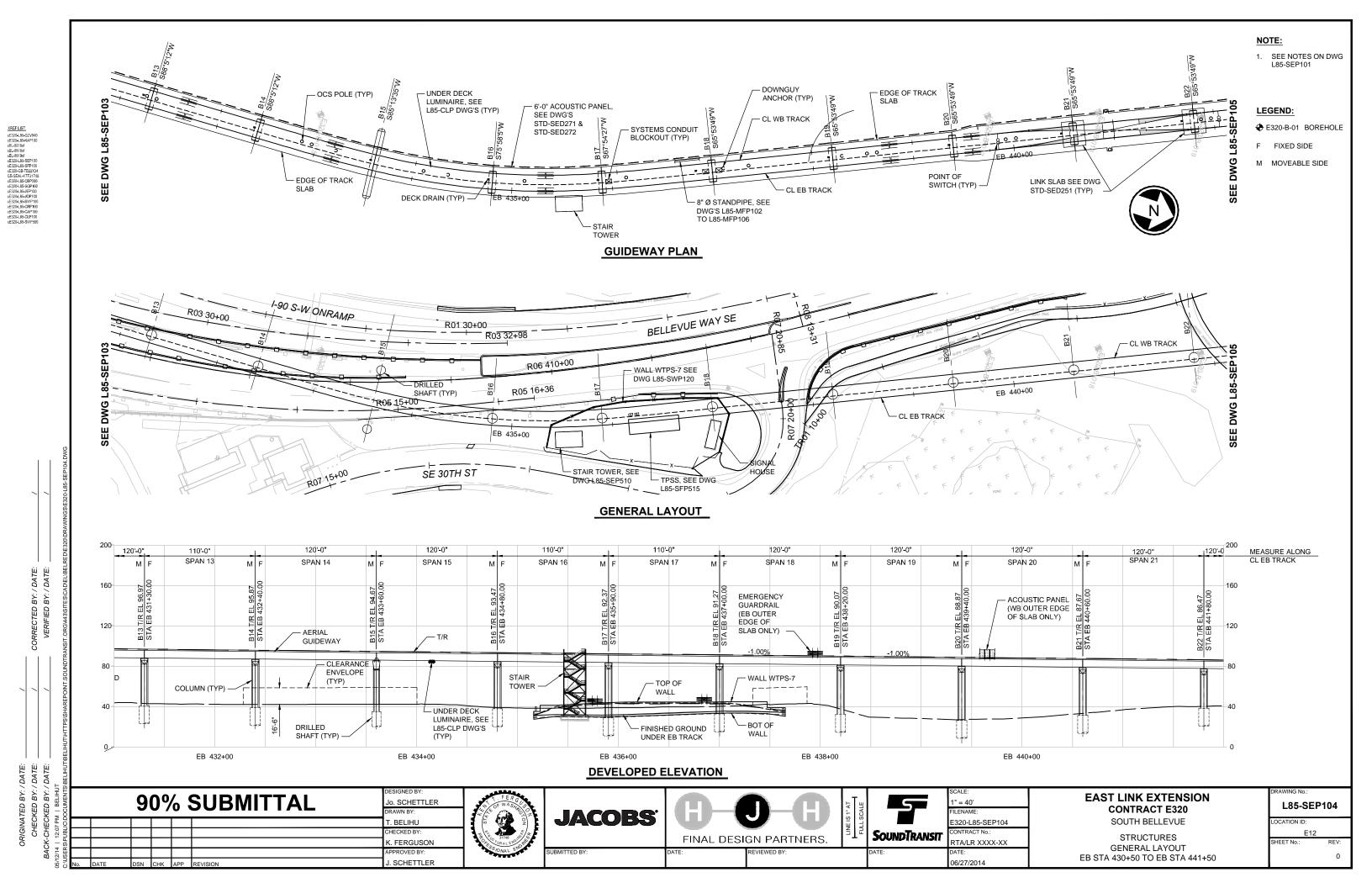
- The CAC would like to see both visual and audio signals installed at the stations provided they are not too obtrusive.
- The CAC would like to see stone or brick for the wall along 112<sup>th</sup> so that it reflects the tree lined boulevard envisioned in the context characteristics. This could be achieved with a more natural formliner pattern rather than a smooth surface.
- The CAC would like to see Sound Transit evaluate opportunities to use the tunnel portal as an opportunity for an artistic or whimsical expression.
- The CAC would like to see Sound Transit evaluate addition opportunities for pedestrian access to the East Main Station from the Surrey Downs neighborhood.
- The CAC wants to see detailed technical analysis of anticipated noise impacts from train construction and operations along the alignment.

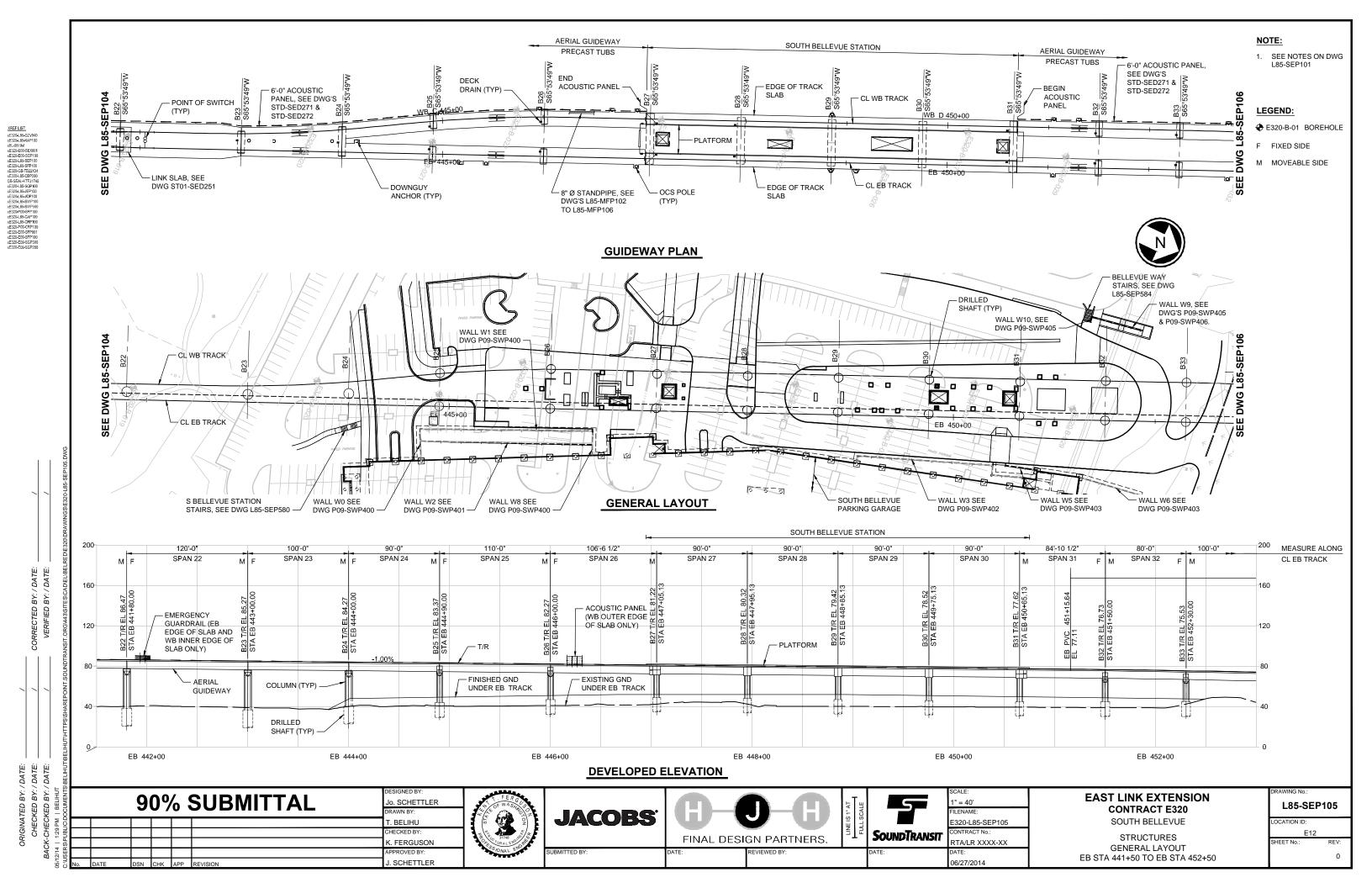
#### **Next Steps**

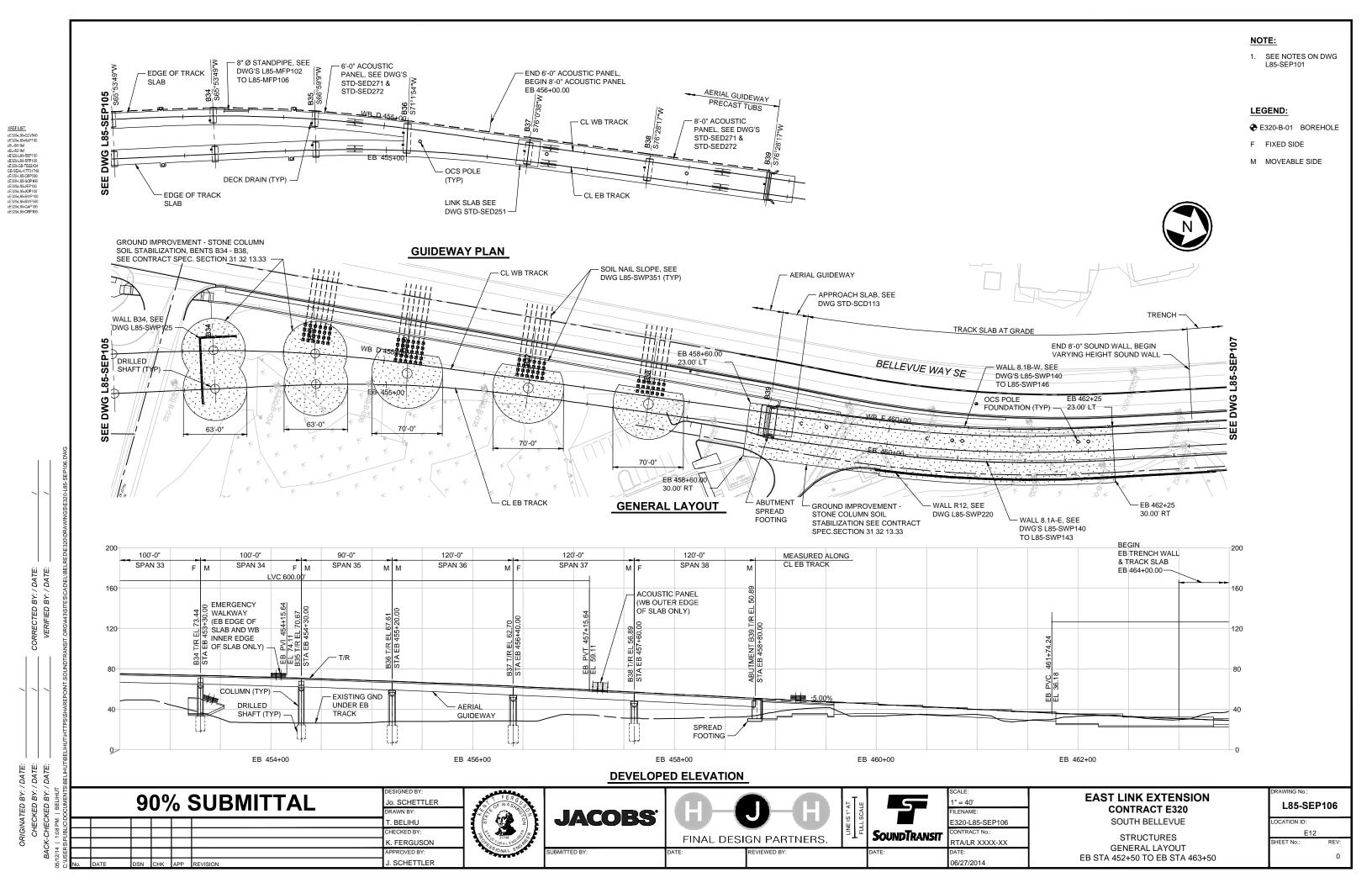
The advice contained in this Advisory Document should be forwarded to Sound Transit for use in refining its design of elements and features of the East Link light rail system features in support of its Design and Mitigation Permit submittal.

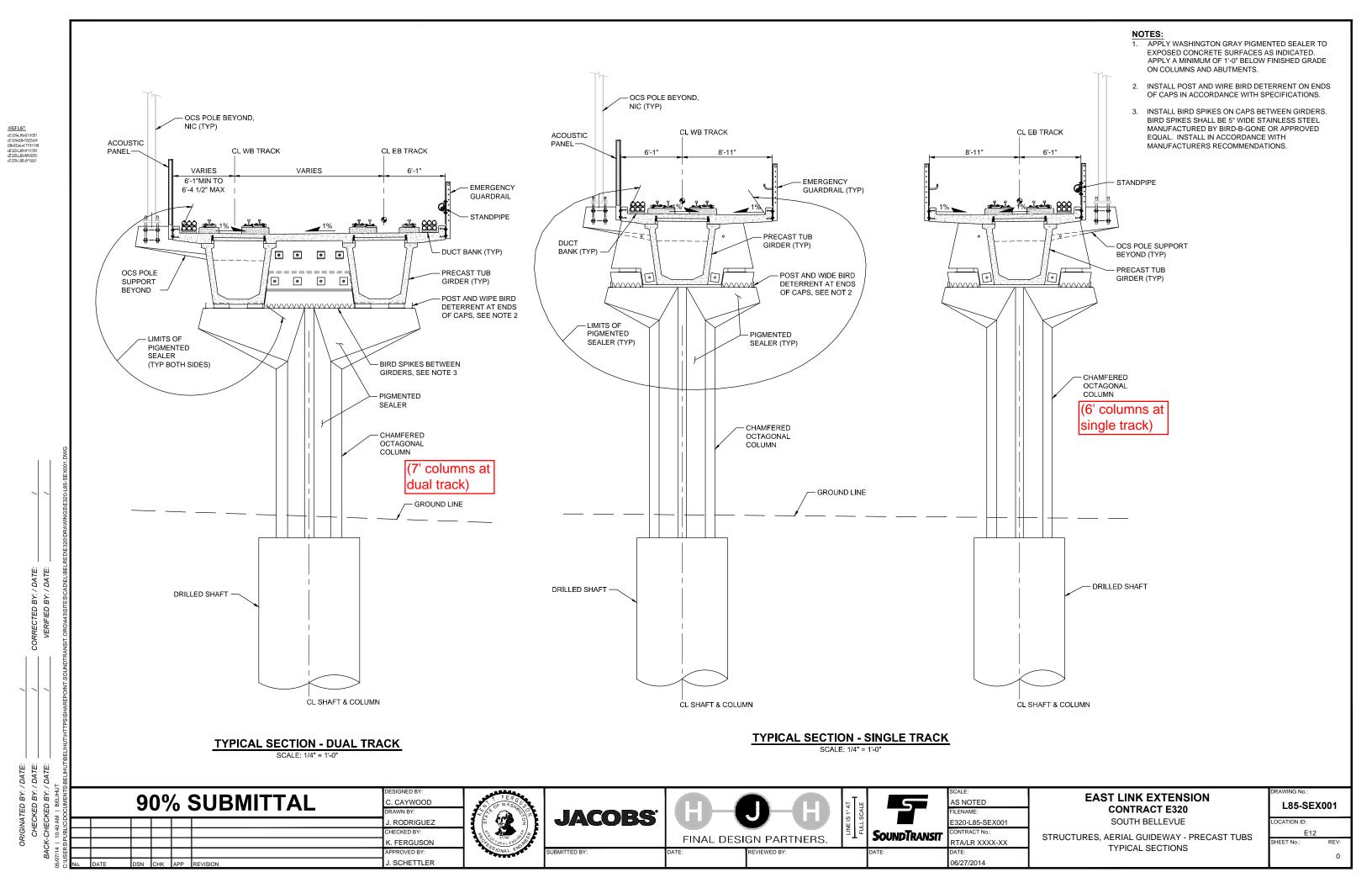


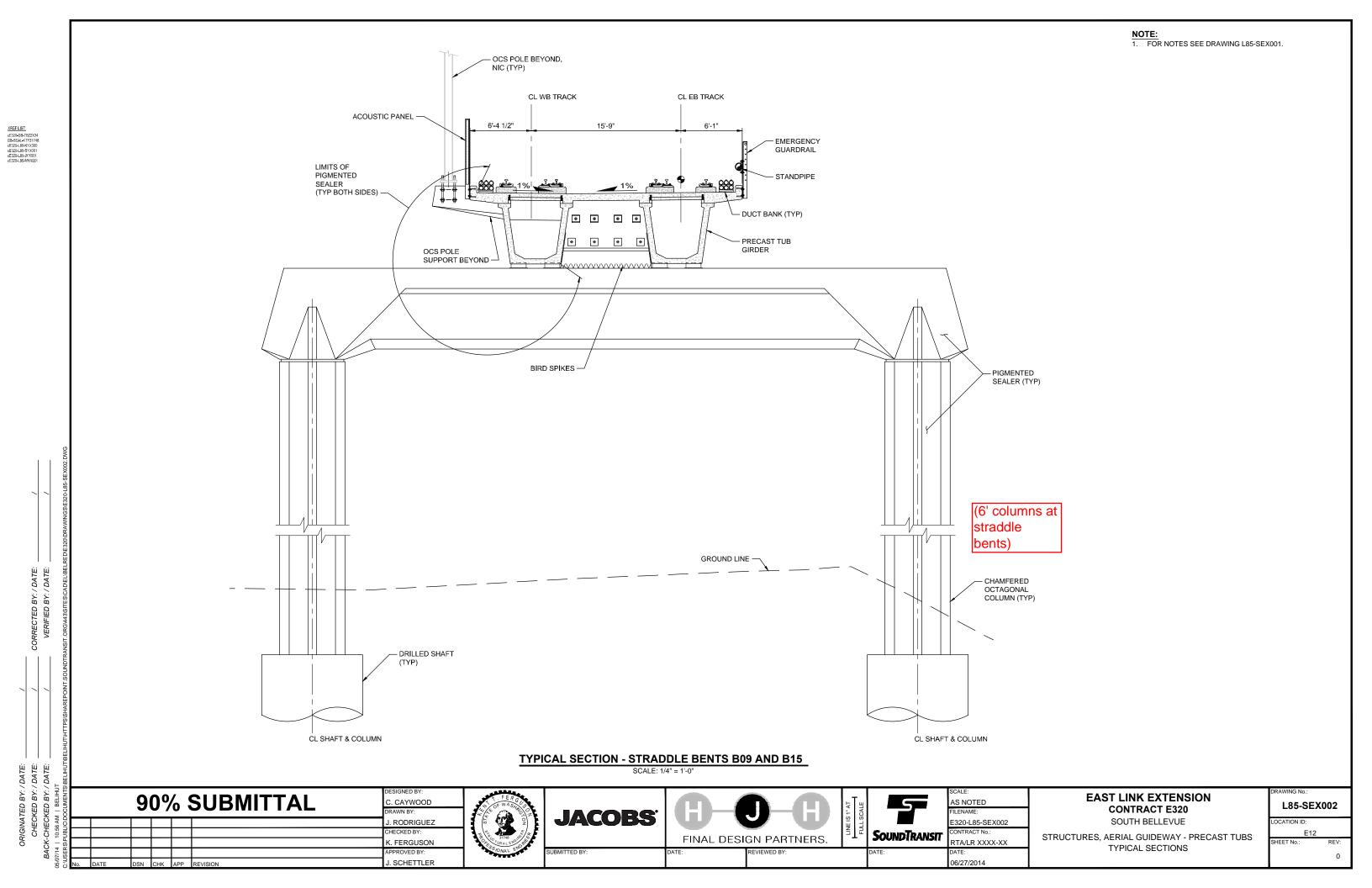


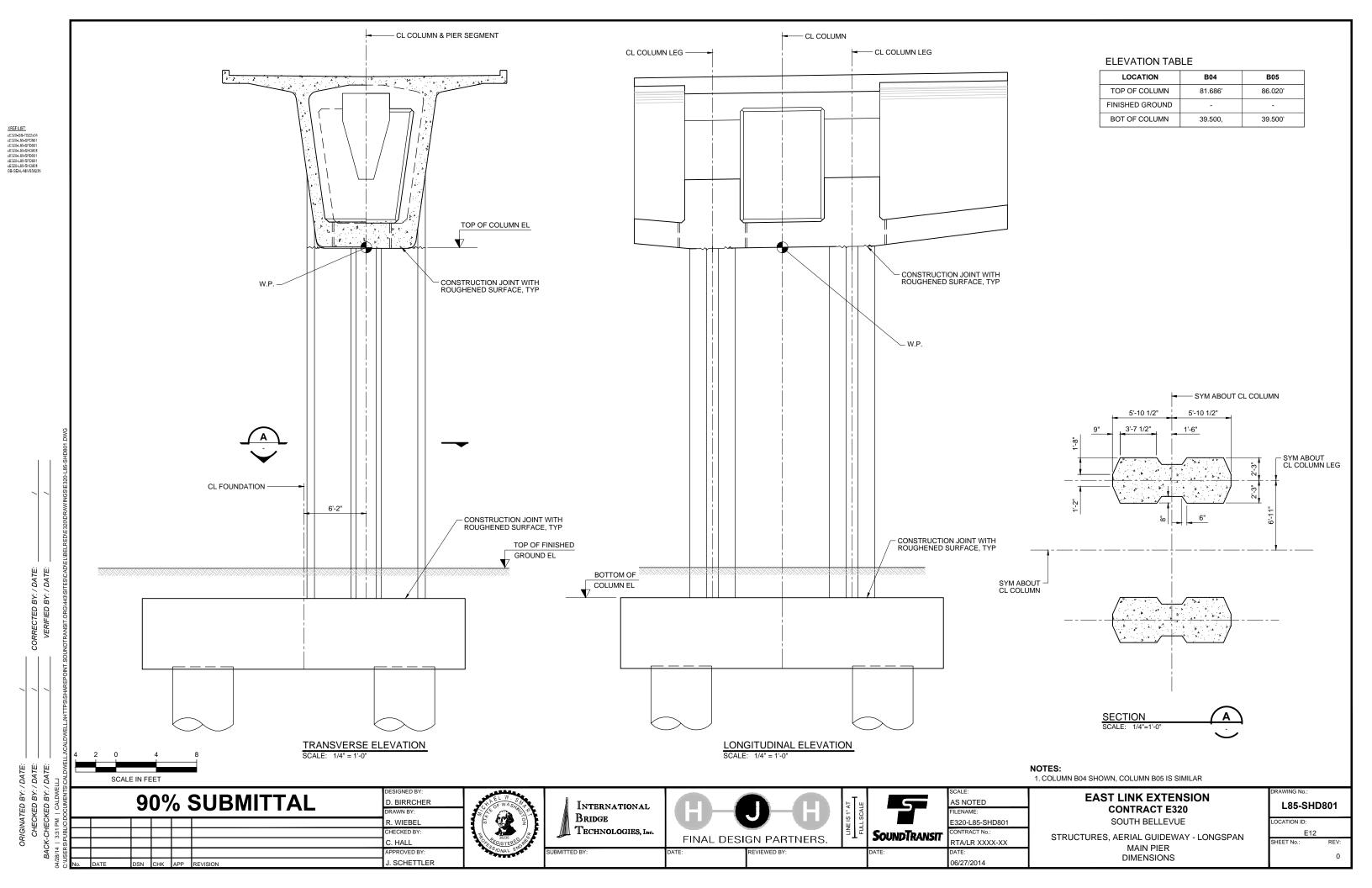












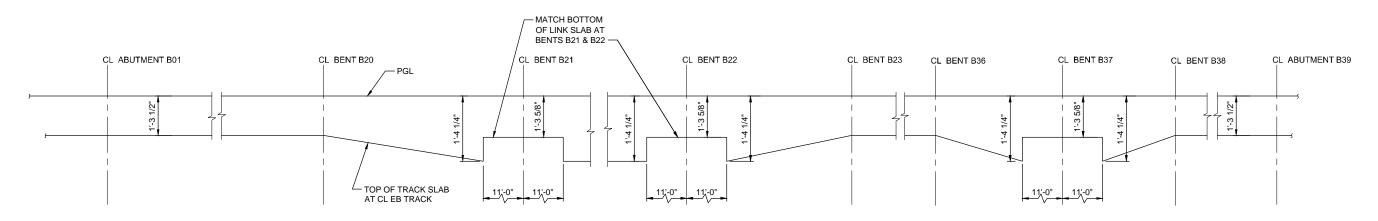
OCS POLE (NIC) 27'-11" FOR TANGENT SECTIONS (EDGE OF CURB TO EDGE OF CURB)
28'-2 1/2" FOR CURVED SECTIONS (SEE NOTE 4) CL WB TRACK CL EB TRACK 15'-9" TYPICAL VARIES AT SPANS 1-2 (SEE NOTE 4) 6'-1" FOR TANGENT SECTIONS 6' 4 1/2" FOR CURVED SECTIONS (SEE NOTE 4) VARIES, ACOUSTIC PANEL, NOTE 3 - EMERGENCY 1'-3 1/2" TO 1'-4 1/4" GUARDRAIL, (TYP) 5'-9" FOR TANGENT SECTIONS SEE DIAGRAM 2'-6" NOTE 1 & 2 BELOW - PLINTH, (TYP) EMERGENCY 6'-2" FOR CURVED SECTIONS - DUCTBANK WALKWAY (SEE NOTE 4) SEE SYSTEMS GUARD RAIL (TYP) DRAWINGS (TYP) LOW POINT STAND PIPE SEE MECH **DRAWINGS** 3/4" CHAMFER OR 1/2" HALF ROUND DRIP GROOVE (TYP) — INCREASED THICKNESS AT OCS POLE LOCATION - 3 1/2" STAY IN PLACE PANEL, (TYP) - VARIES PRECAST PRESTRESSED CONC GIRDER (TYP) 7'-0" NOMINAL 14'-0" NOMINAL CL GIRDER CL GIRDER

NOTES:

- INSTALL EMERGENGY GUARDRAIL ON EB SIDE FOR FULL LENGTH OF AERIAL GUIDEWAY. FOR EMERGENCY GUARDRAIL DETAILS, SEE DWGS STD-SED261 THROUGH STD-SED265.
- 2. INSTALL ADDITIONAL ANCHORAGES IN CURB AND TRACK ON EB SIDE TO ALLOW FOR FUTURE ACOUSTIC PANEL INSTALLATION. SEE DWG STD-SED-272 FOR ACOUSTIC PANEL
- INSTALL ACCOUSTIC PANELS ON WB SIDE FULL LENGTH OF AERIAL GUIDEWAY. SEE DWGS L85-SEP102 TO L85-SEP106 FOR HEIGHTS. SEE DWGS STD-SED262 THROUGH STD-SED265 FOR ACOUSTIC PANEL DETAILS.
- 4. SEE DRAWINGS L85-SEP200 THROUGH L85-SEP211 FOR TRACK SLAB GEOMETRY.
- 5. FOR PLINTH DETAILS, SEE DRAWING STD-KDD106 THROUGH STD-KDD113.
- STORM DRAIN AND SUPPORTS NOT SHOWN. FOR LOCATIONS WHERE STORM DRAINS ARE SUPPORTED FROM AERIAL GUIDEWAY SUPERSTRUCTURE, SEE DWGS L85-SGP200 THROUGH L85-SGP209. FOR STORM DRAIN SUPPORT DETAILS, SEE DRAWINGS STD-SED120 THROUGH STD-SED122.
- 7. DISTANCE FROM PGL TO TOP OF TRACK SLAB VARIES AT LOCATIONS NEAR LINK SLABS TO FIT 7" LINK SLABS. TOP OF TRACK SLAB MATCHES BOTTOM OF LINK SLAB WITHIN LIMITS OF LINK SLAB. STEP IN TOP OF TRACK SLAB AT EDGES OF LINK SLAB VARIES IN DEPTH TRANSVERSELY AND IS REQUIRED TO ACCOUNT FOR 1% CROSS SLOPE OF TRACK SLAB VERSUS NO CROSS SLOPE IN LINK SLAB, SEE DWG L85-SRD271 AND L85-SRD222 FOR ADDITIONAL DETAILS AT LINK SLABS.

### TYPICAL SUPERSTRUCTURE SECTION - TYPICAL DUAL TRACK

SCALE: 1/2" = 1'-0"



# TOP OF TRACK SLAB DIAGRAM

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						T. ZONG	3
						APPROVED BY:	
No.	DATE	DSN	СНК	APP	REVISION	J. SCHETTLER	

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	RTA/LR XXXX-XX
	DATE

06/27/2014

# EAST LINK EXTENSION CONTRACT E320

SOUTH BELLEVUE

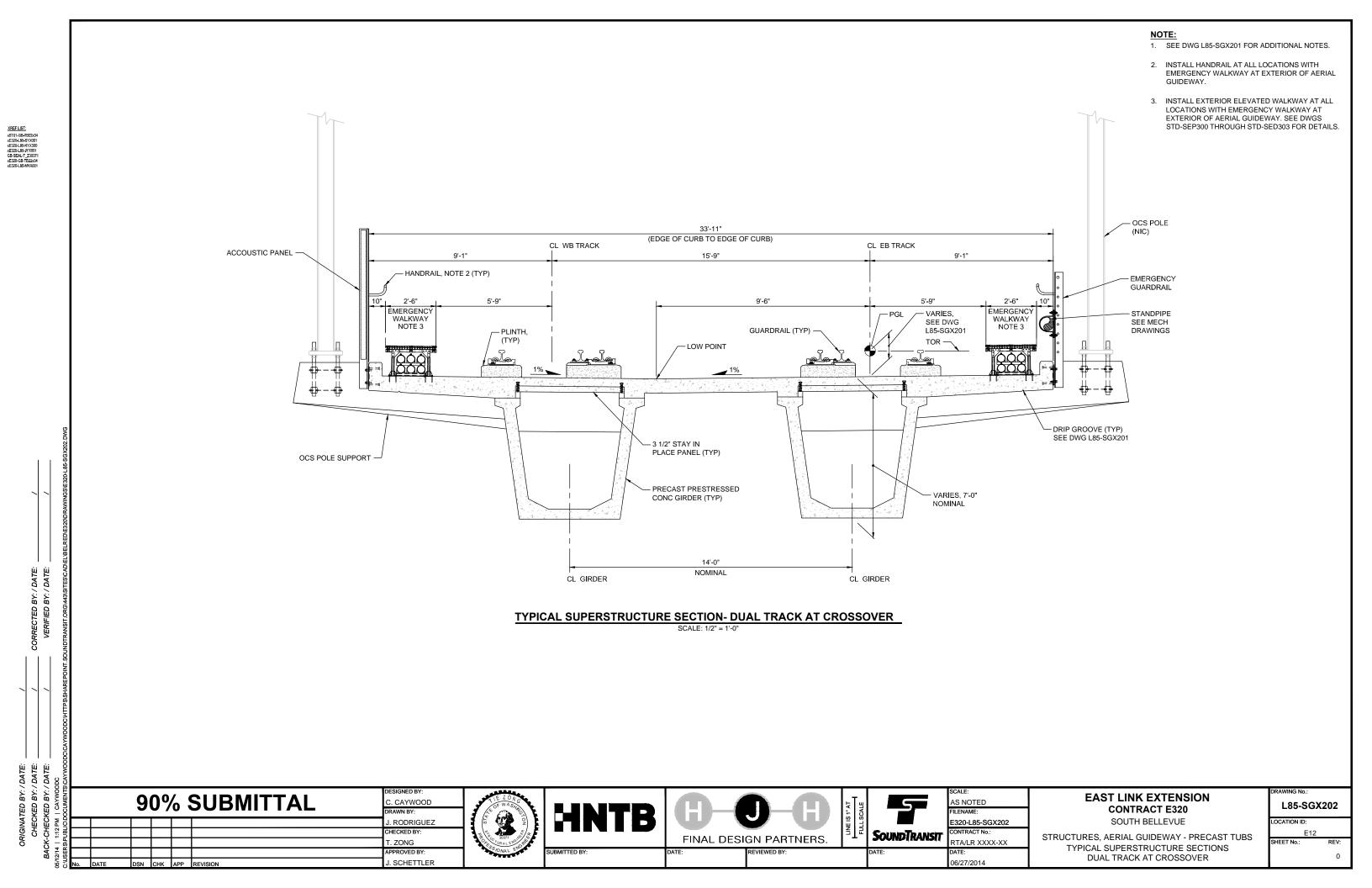
STRUCTURES, AERIAL GUIDEWAY - PRECAST TUBS
TYPICAL SUPERSTRUCTURE SECTIONS
TYPICAL DUAL TRACK

L85-SGX201

E12

SHEET No.:

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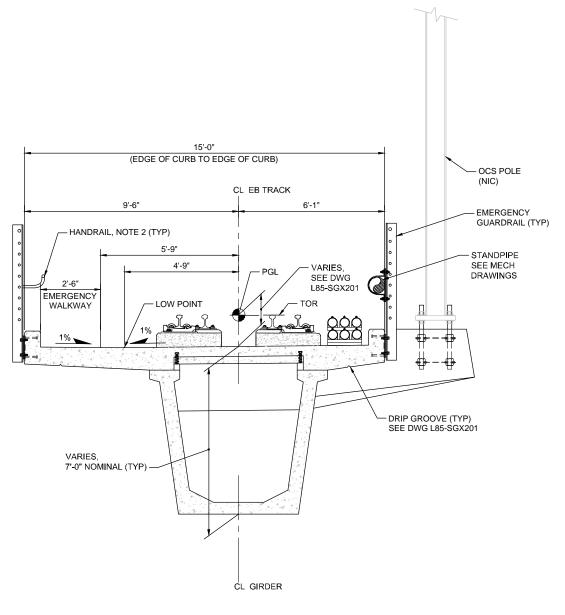
#### NOTES:

- 1. SEE DWG L85-SGX201 FOR ADDITIONAL NOTES.
- INSTALL HANDRAIL AT ALL LOCATIONS WITH EMERGENCY WALKWAY AT EXTERIOR OF AERIAL GUIDEWAY.

15'-0" (EDGE OF CURB TO EDGE OF CURB) ÇL WB TRACK 6'-1" ACCOUSTIC PANEL 5'-9" LOW POINT EMERGENCY WALKWAY PLINTH, (TYP) OCS POLE - 3 1/2" STAY IN PLACE PANEL (TYP) SUPPORT (TYP) -PRECAST PRESTRESSED

XREF LIST: xST01-GB-TB22x34 xE320-L85-SYX001 xE320-L85-KYX300 xE320-L85-JYX001 GB-SEA-T-Z30371 xE320-GB-TB22x34 xE320-L85-MYX001

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#### TYPICAL SUPERSTRUCTURE SECTION- SINGLE TRACK SCALE: 1/2" = 1'-0"

90% SUBMITTAL J. RODRIGUEZ T. ZONG J. SCHETTLER



CONC GIRDER (TYP)

CL GIRDER



FULL SCALE	SoundTransi

	SCALE:
	AS NOTED
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	CONTRACT No.:
	RTA/LR XXXX-XX
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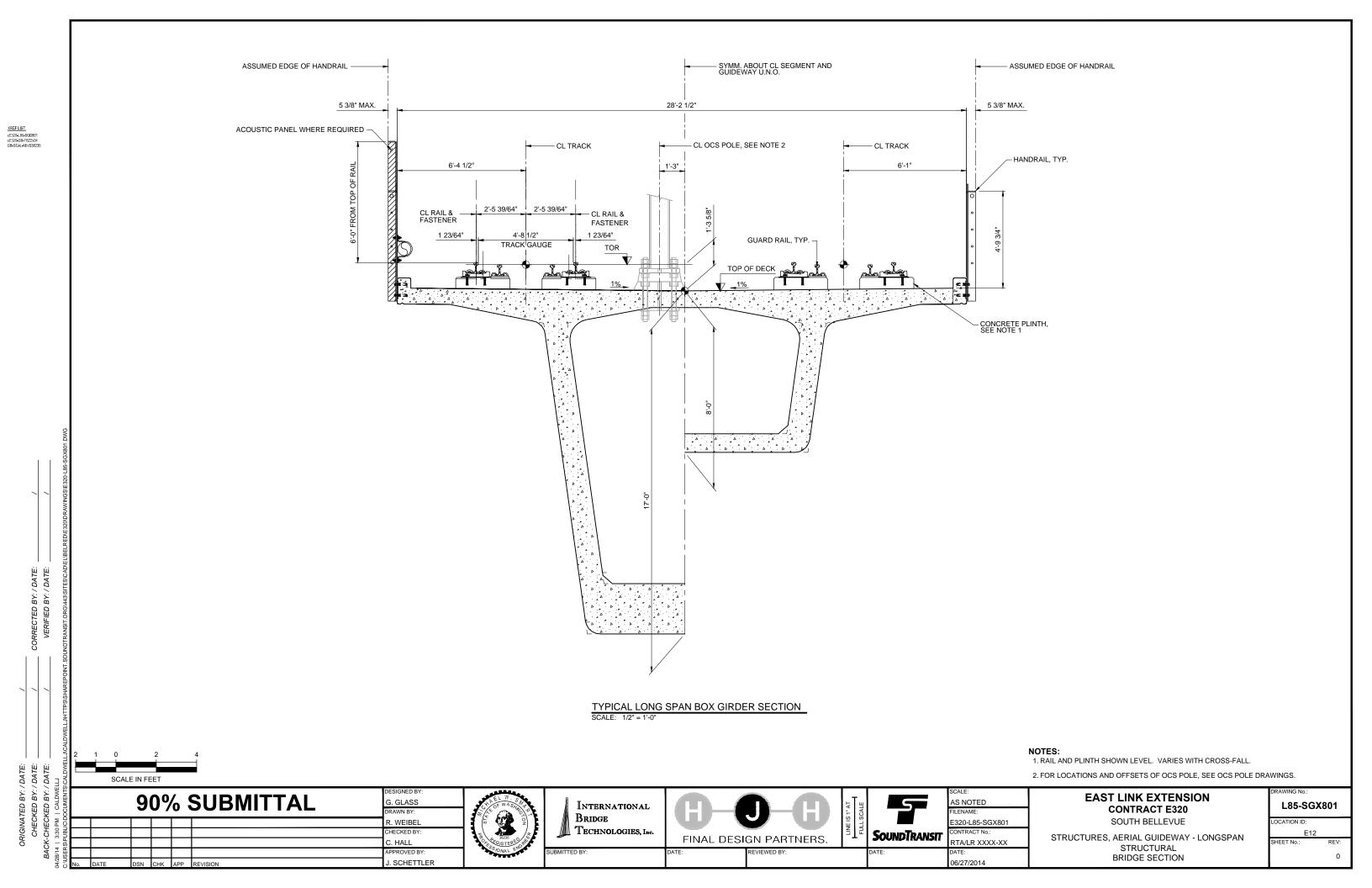
# **EAST LINK EXTENSION CONTRACT E320**

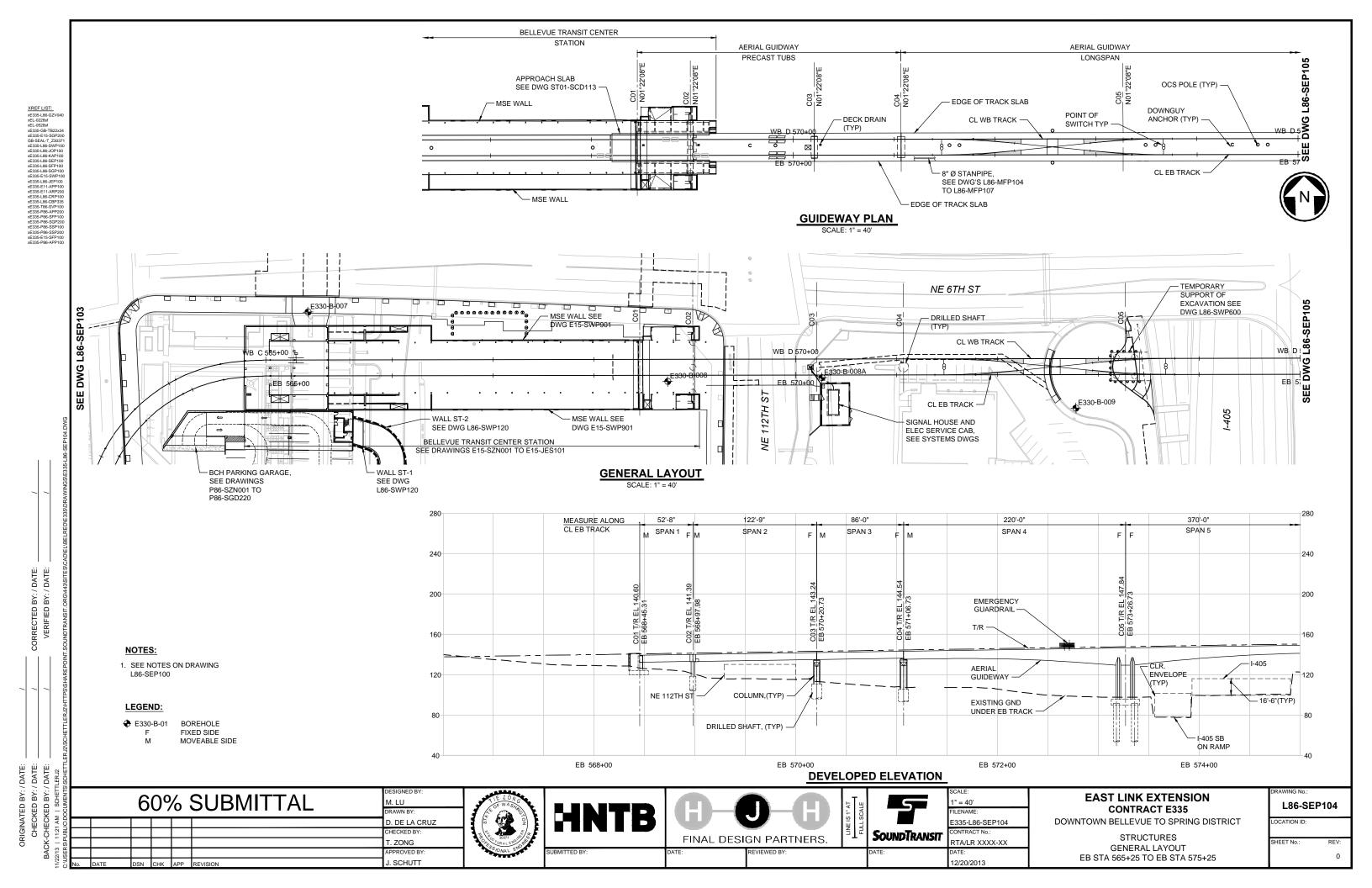
SOUTH BELLEVUE

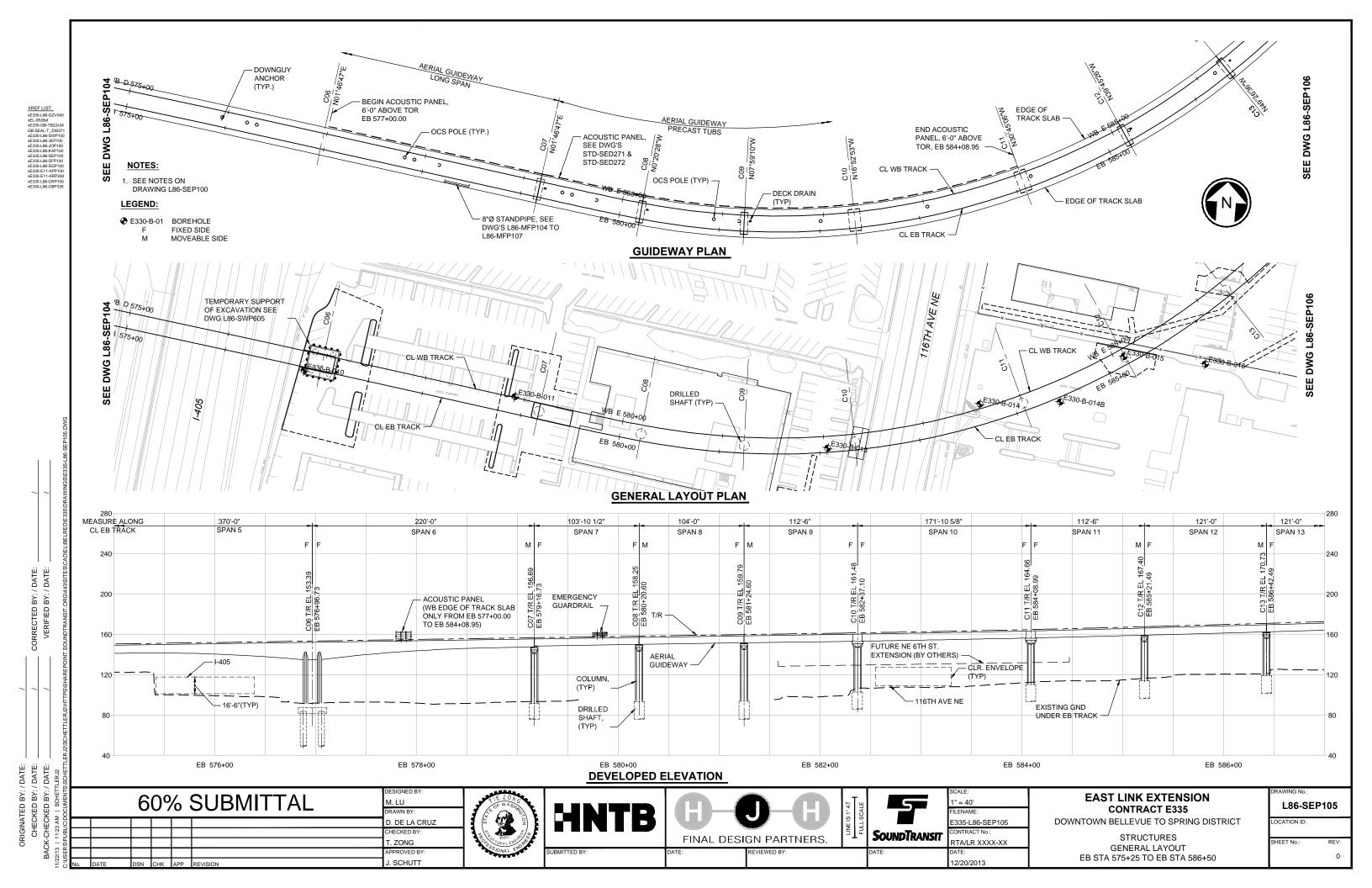
STRUCTURES, AERIAL GUIDEWAY - PRECAST TUBS TYPICAL SUPERSTRUCTURE SECTIONS SINGLE TRACK

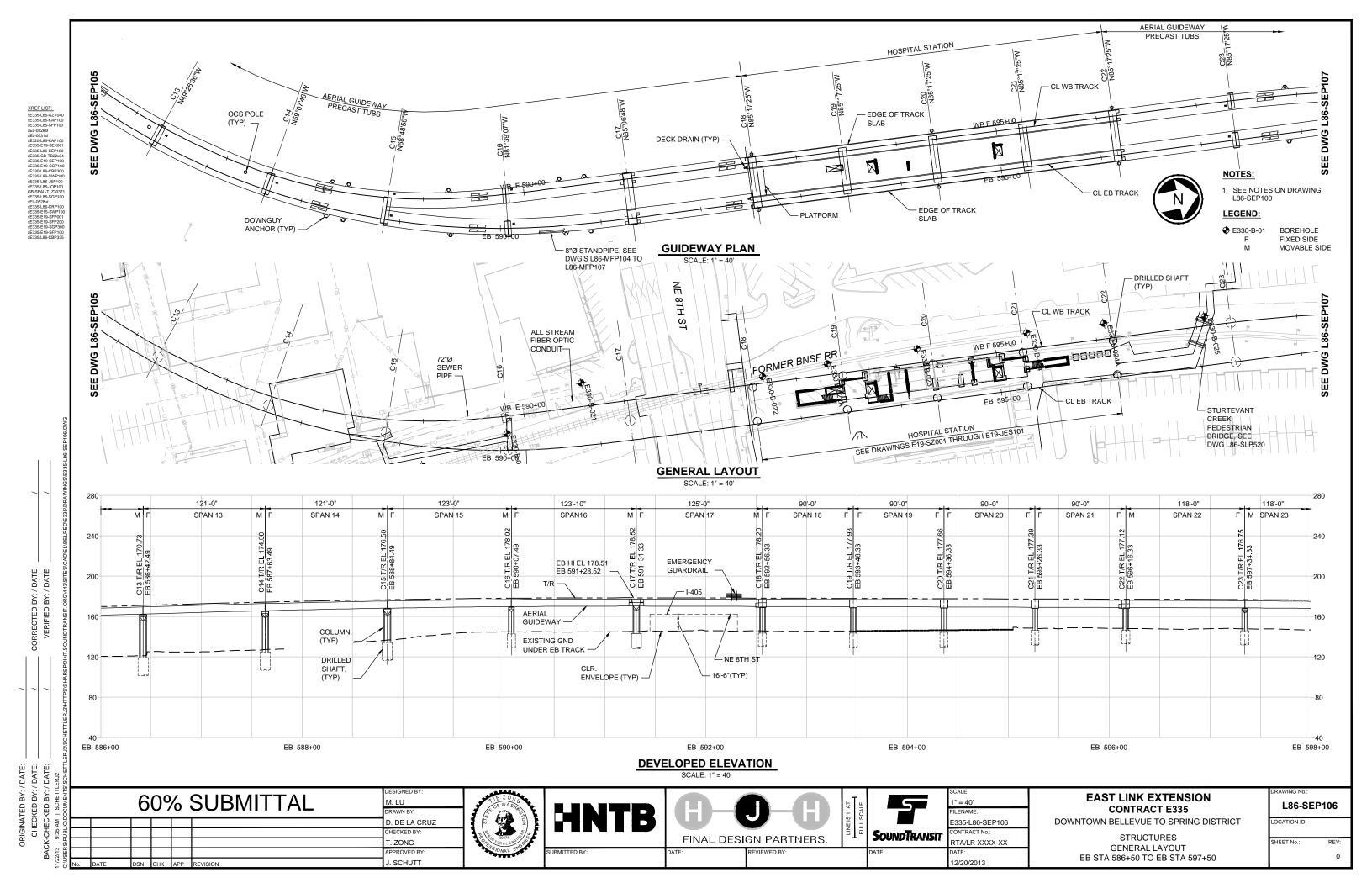
DRAWING No.:
L85-SGX203
LOCATION ID:
E40

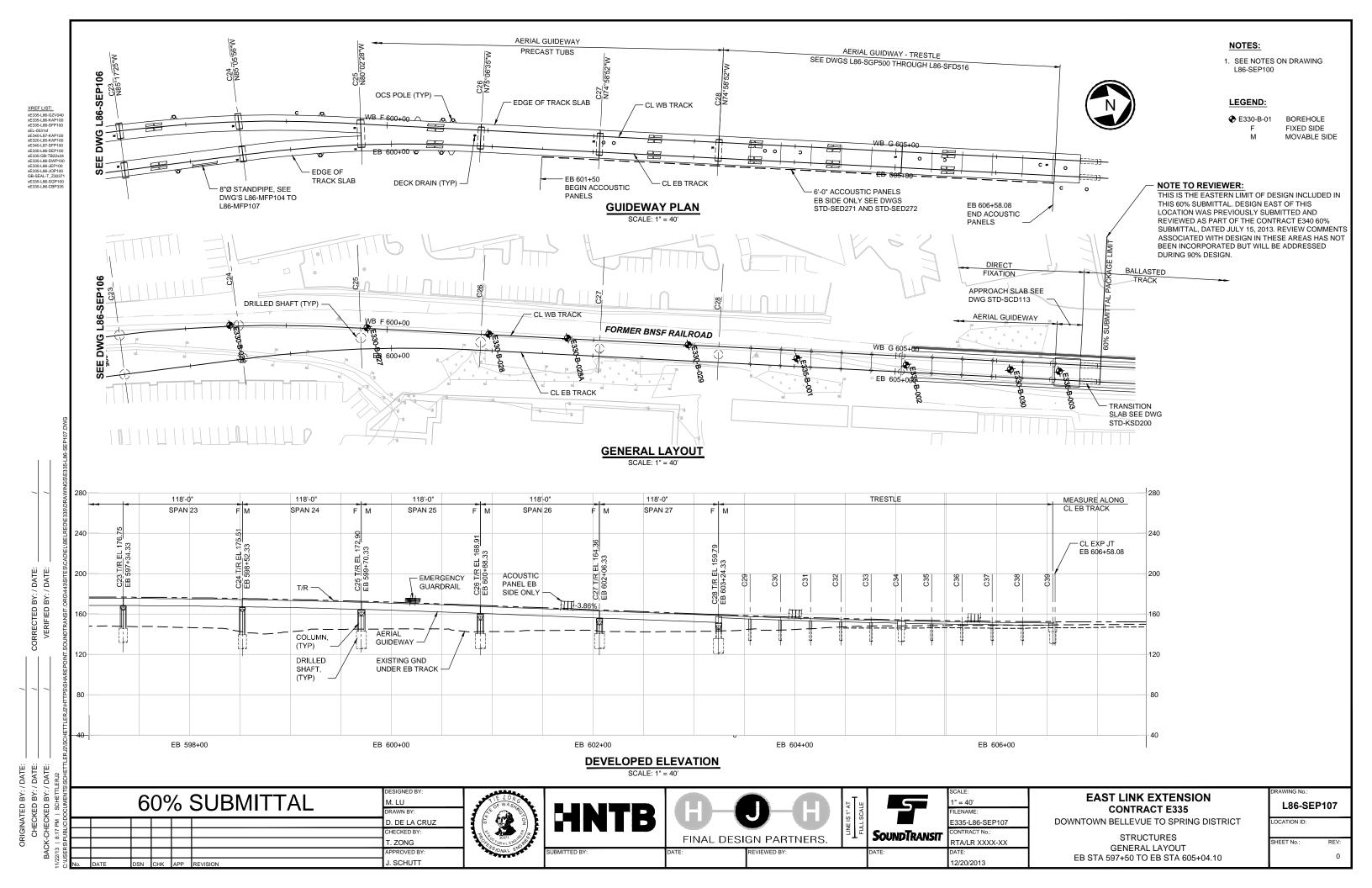
SHEET No.:

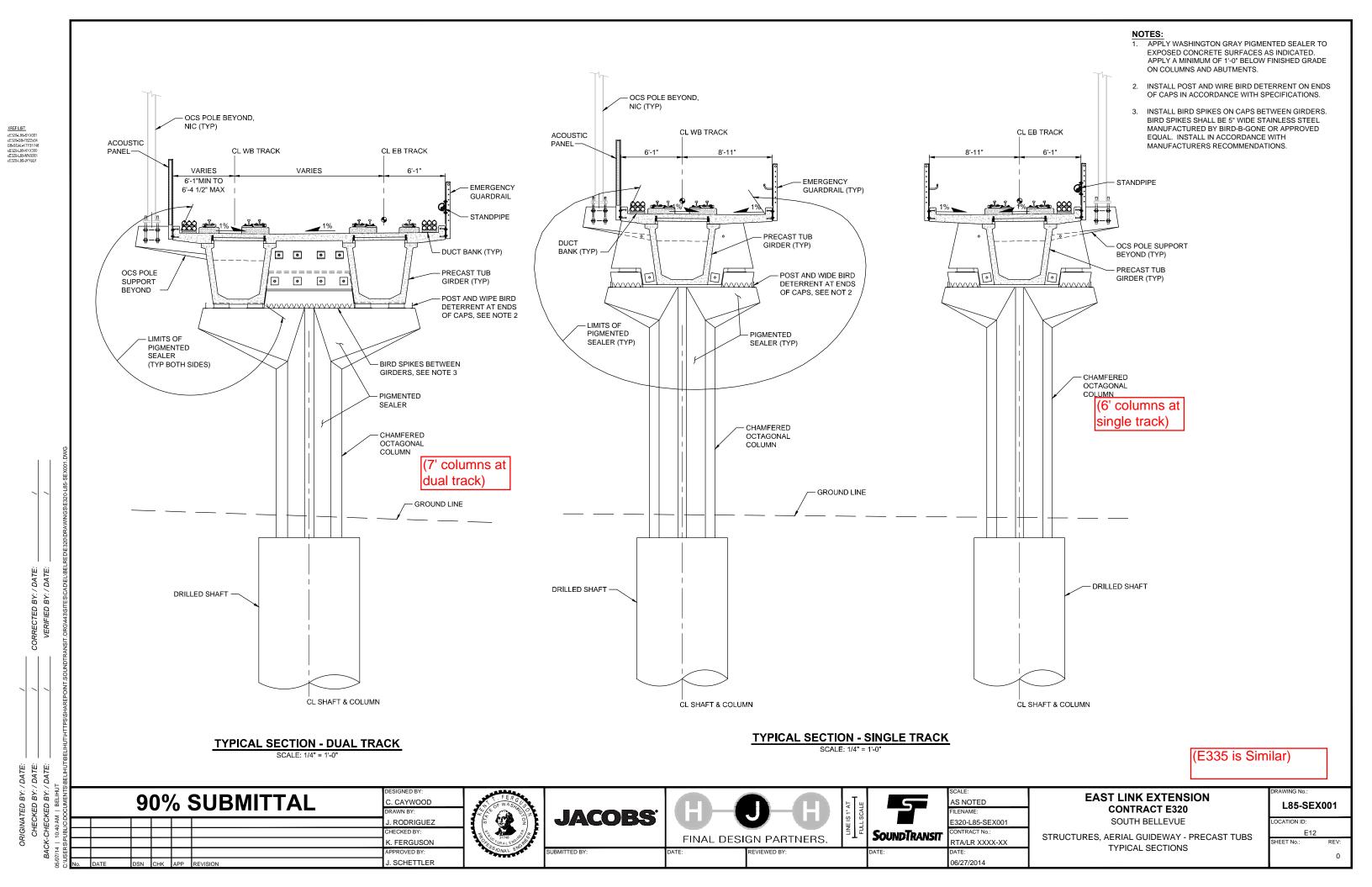


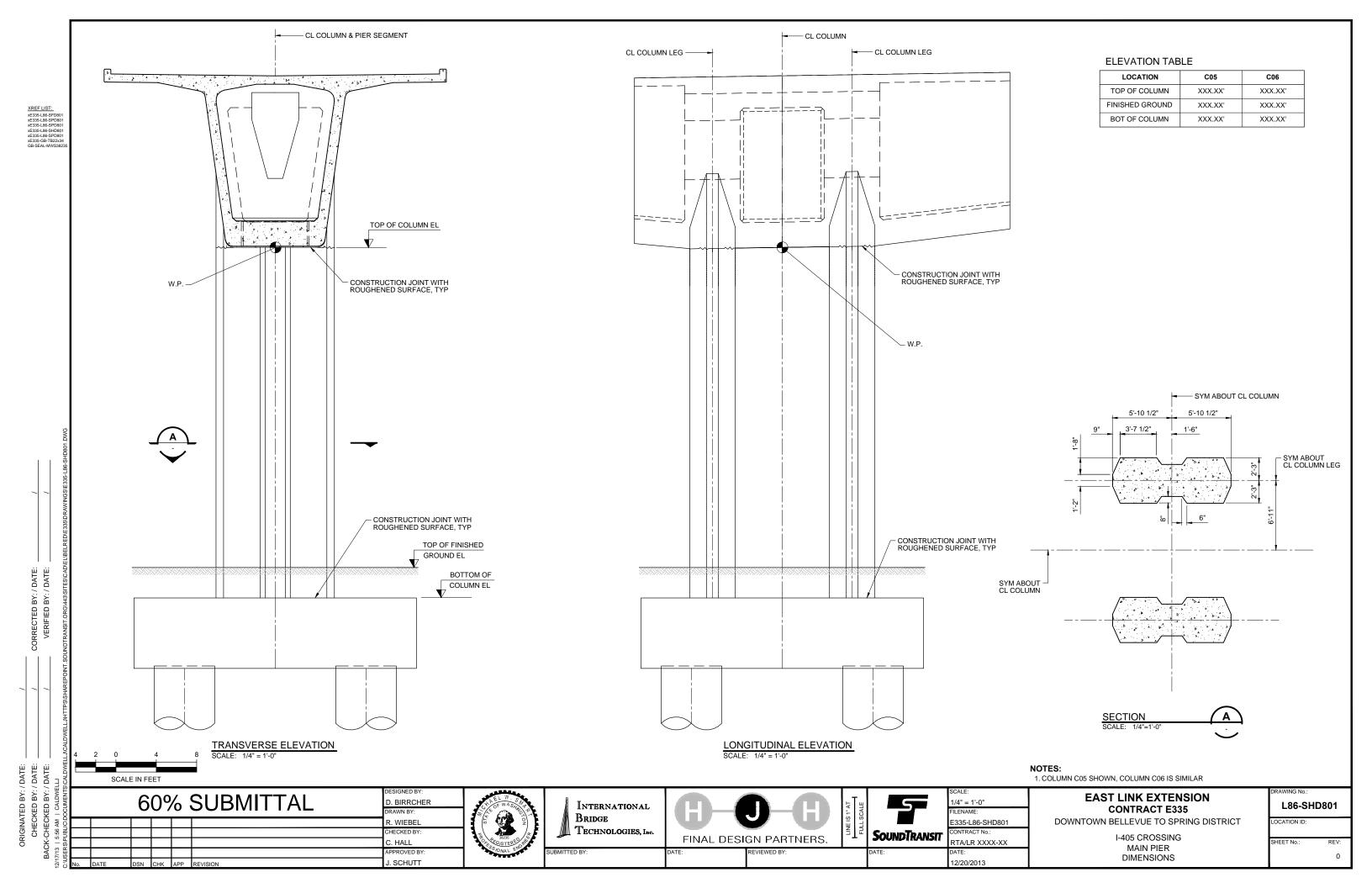












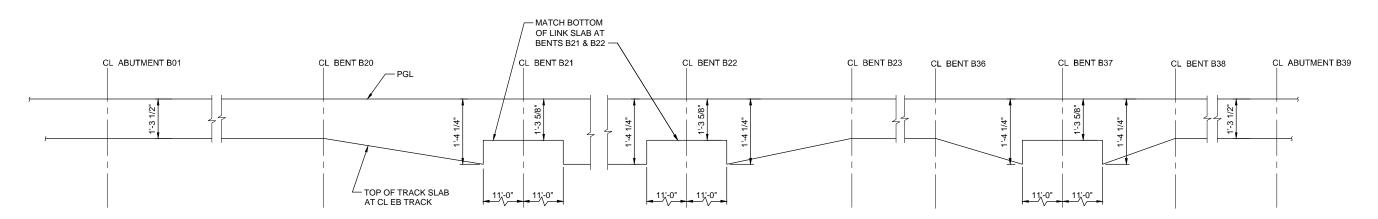
- OCS POLE (NIC) 27'-11" FOR TANGENT SECTIONS (EDGE OF CURB TO EDGE OF CURB)
28'-2 1/2" FOR CURVED SECTIONS (SEE NOTE 4) CL WB TRACK CL EB TRACK 15'-9" TYPICAL VARIES AT SPANS 1-2 (SEE NOTE 4) 6'-1" FOR TANGENT SECTIONS 6' 4 1/2" FOR CURVED SECTIONS (SEE NOTE 4) VARIES, ACOUSTIC PANEL, NOTE 3 - EMERGENCY 1'-3 1/2" TO 1'-4 1/4" GUARDRAIL, (TYP) 5'-9" FOR TANGENT SECTIONS SEE DIAGRAM 2'-6" NOTE 1 & 2 BELOW - PLINTH, (TYP) EMERGENCY 6'-2" FOR CURVED SECTIONS DUCTBANK WALKWAY (SEE NOTE 4) SEE SYSTEMS GUARD RAIL (TYP) DRAWINGS (TYP) LOW POINT STAND PIPE SEE MECH **DRAWINGS** 3/4" CHAMFER OR 1/2" HALF ROUND DRIP GROOVE (TYP) — INCREASED THICKNESS AT OCS POLE LOCATION - 3 1/2" STAY IN PLACE PANEL, (TYP) - VARIES PRECAST PRESTRESSED CONC GIRDER (TYP) 7'-0" NOMINAL 14'-0" NOMINAL CL GIRDER CL GIRDER

#### NOTES:

- INSTALL EMERGENGY GUARDRAIL ON EB SIDE FOR FULL LENGTH OF AERIAL GUIDEWAY. FOR EMERGENCY GUARDRAIL DETAILS, SEE DWGS STD-SED261 THROUGH STD-SED265.
- INSTALL ADDITIONAL ANCHORAGES IN CURB AND TRACK ON EB SIDE TO ALLOW FOR FUTURE ACOUSTIC PANEL INSTALLATION. SEE DWG STD-SED-272 FOR ACOUSTIC PANEL ANGUSPACE DETAILS.
- INSTALL ACCOUSTIC PANELS ON WB SIDE FULL LENGTH OF AERIAL GUIDEWAY. SEE DWGS L85-SEP102 TO L85-SEP106 FOR HEIGHTS. SEE DWGS STD-SED262 THROUGH STD-SED265 FOR ACOUSTIC PANEL DETAILS.
- 4. SEE DRAWINGS L85-SEP200 THROUGH L85-SEP211 FOR TRACK SLAB GEOMETRY.
- 5. FOR PLINTH DETAILS, SEE DRAWING STD-KDD106 THROUGH STD-KDD113.
- STORM DRAIN AND SUPPORTS NOT SHOWN. FOR LOCATIONS WHERE STORM DRAINS ARE SUPPORTED FROM AERIAL GUIDEWAY SUPERSTRUCTURE, SEE DWGS L85-SGP200 THROUGH L85-SGP209. FOR STORM DRAIN SUPPORT DETAILS, SEE DRAWINGS STD-SED120 THROUGH STD-SED122.
- 7. DISTANCE FROM PGL TO TOP OF TRACK SLAB VARIES AT LOCATIONS NEAR LINK SLABS TO FIT 7" LINK SLABS. TOP OF TRACK SLAB MATCHES BOTTOM OF LINK SLAB WITHIN LIMITS OF LINK SLAB. STEP IN TOP OF TRACK SLAB AT EDGES OF LINK SLAB VARIES IN DEPTH TRANSVERSELY AND IS REQUIRED TO ACCOUNT FOR 1% CROSS SLOPE OF TRACK SLAB VERSUS NO CROSS SLOPE IN LINK SLAB, SEE DWG L85-SRD271 AND L85-SRD222 FOR ADDITIONAL DETAILS AT LINK SLABS.

### TYPICAL SUPERSTRUCTURE SECTION - TYPICAL DUAL TRACK

SCALE: 1/2" = 1'-0"



# TOP OF TRACK SLAB DIAGRAM

(E335 is Similar)

90% SUBMITTAL

DESIGNED BY:
C. CAYWOOD
DRAWN BY:
J. RODRIGUEZ
CHECKED BY:
T. ZONG
APPROVED BY:
J. SCHETTLER

xE320-L85-SYX001 xE320-L85-KYX300 xE320-L85-JYX001 GB-SEAL-T\_Z30371 xE320-GB-TB22x34 xE320-L85-MYX001

> /DATE: /DATE: /DATE:



H—U—H
FINAL DESIGN PARTNERS.

SoundTransit

ANSIT

SCALE:

AS NOTED

FILENAME:

E320-L85-SGX201

CONTRACT No.:

RTA/LR XXXX-XX

# EAST LINK EXTENSION CONTRACT E320

SOUTH BELLEVUE

STRUCTURES, AERIAL GUIDEWAY - PRECAST TUBS
TYPICAL SUPERSTRUCTURE SECTIONS
TYPICAL DUAL TRACK

L85-SGX201

E12 SHEET No.:

(

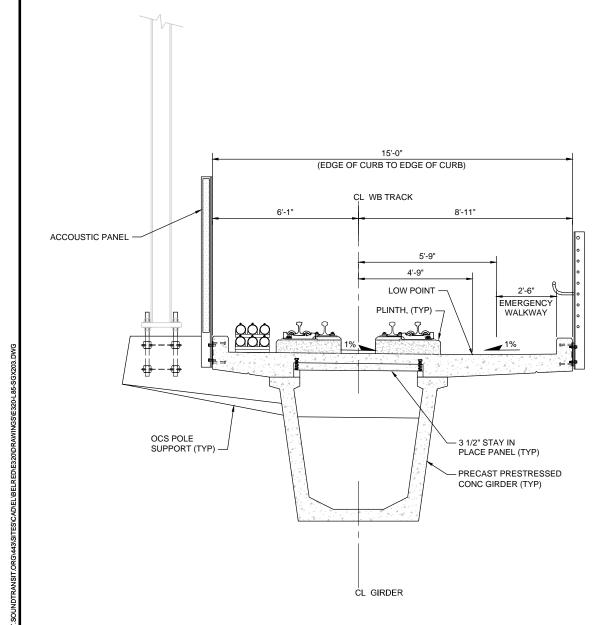
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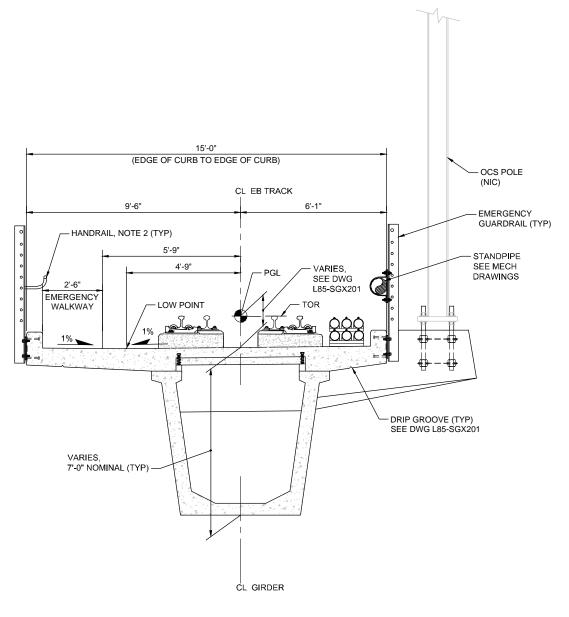
- 1. SEE DWG L85-SGX201 FOR ADDITIONAL NOTES.
- INSTALL HANDRAIL AT ALL LOCATIONS WITH EMERGENCY WALKWAY AT EXTERIOR OF AERIAL GUIDEWAY.

XREF LIST: xST01-98-1922:34 x£320L85-5YX001 x5320L88-4YX300 x£320L88-4YX300 x£320L88-1XX001 x£320-98-17222:24 x£320-98-17222:24

> CORRECTED BY: / DATE: VERIFIED BY: / DATE:

ORIGINATED BY: / DATE: \_
CHECKED BY: / DATE: \_
ICK-CHECKED BY: / DATE: \_
4 | 127PM | CAYWOODC





# TYPICAL SUPERSTRUCTURE SECTION- SINGLE TRACK SCALE: 1/2" = 1'-0"

(E335 is Similar)

		C. CAYWOOD DRAWN BY:					
						J. RODRIGUEZ	1
						CHECKED BY:	13
						T. ZONG	ı
						APPROVED BY:	ı
No.	DATE	DSN	СНК	APP	REVISION	J. SCHETTLER	



HNTB

H — G — H FINAL DESIGN PARTNERS.

SoundTransit

AS NOTED
FILENAME:
E320-L85-SGX203
CONTRACT NO:
CONTRACT NO:
DATE:

#### EAST LINK EXTENSION CONTRACT E320 SOLITH BELLEVILLE

SOUTH BELLEVUE

STRUCTURES, AERIAL GUIDEWAY - PRECAST TUBS TYPICAL SUPERSTRUCTURE SECTIONS SINGLE TRACK

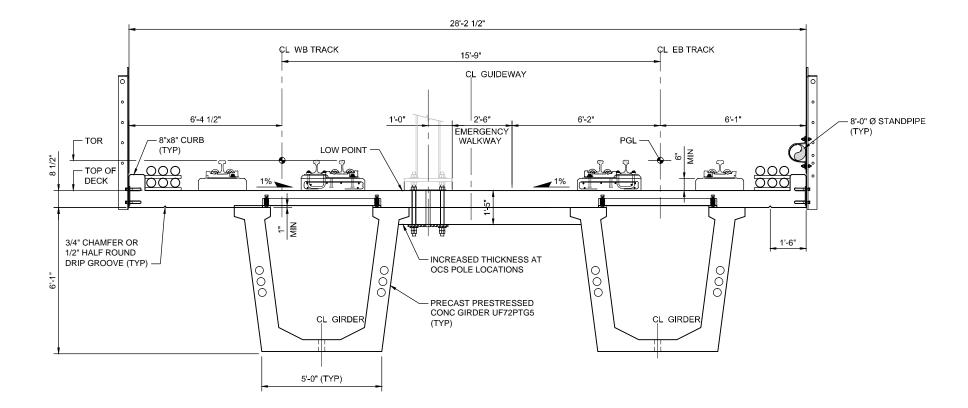
L85-SGX203

LOCATION ID:

E12

SHEET No.: REV:

XREF LIST: xE335-GB-TB22x34 GB-SEAL-T\_Z30371



### SPLICED TUB-TYPICAL SECTION

SCALE: 1/2" = 1'-0"

		_		,		DESIGNED BY:	Γ
		6	Uo		SUBMITTAL	M. LU	ı
			<u> </u>	0	CODIVILLIA	DRAWN BY:	ĺ
						J. RODRIGUEZ	l
						CHECKED BY:	ı
						T. ZONG	ı
						APPROVED BY:	ĺ
No.	DATE	DSN	СНК	APP	REVISION	J. SCHUTT	



HNTB	G
	FI
SUBMITTED BY:	DATE:



FULL SCALE	SoundTransn
	DATE:

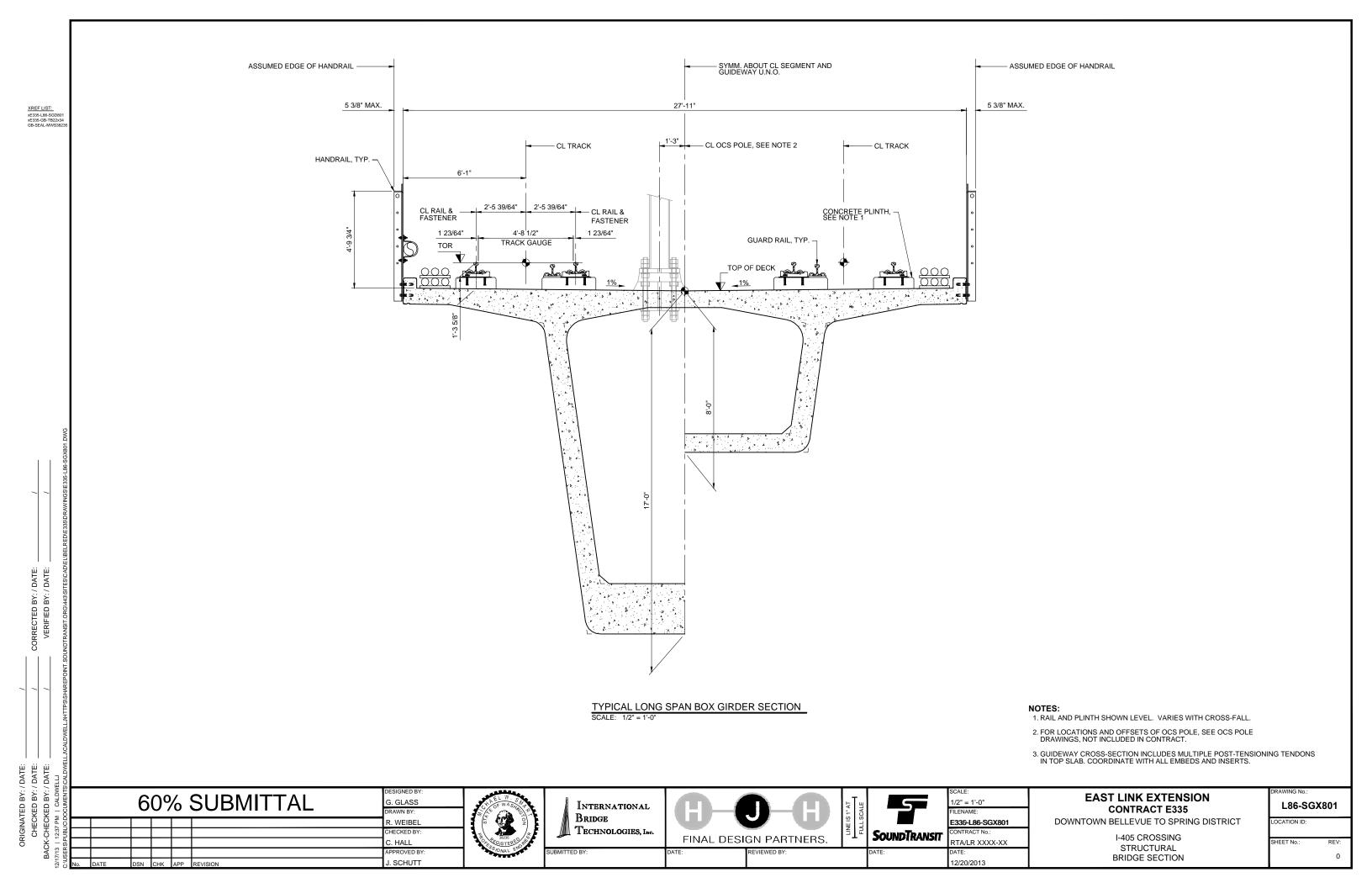
	SCALE:
	AS NOTED
	FILENAME:
	E335-L86-SEX201
-	CONTRACT No.:
	RTA/LR XXXX-XX

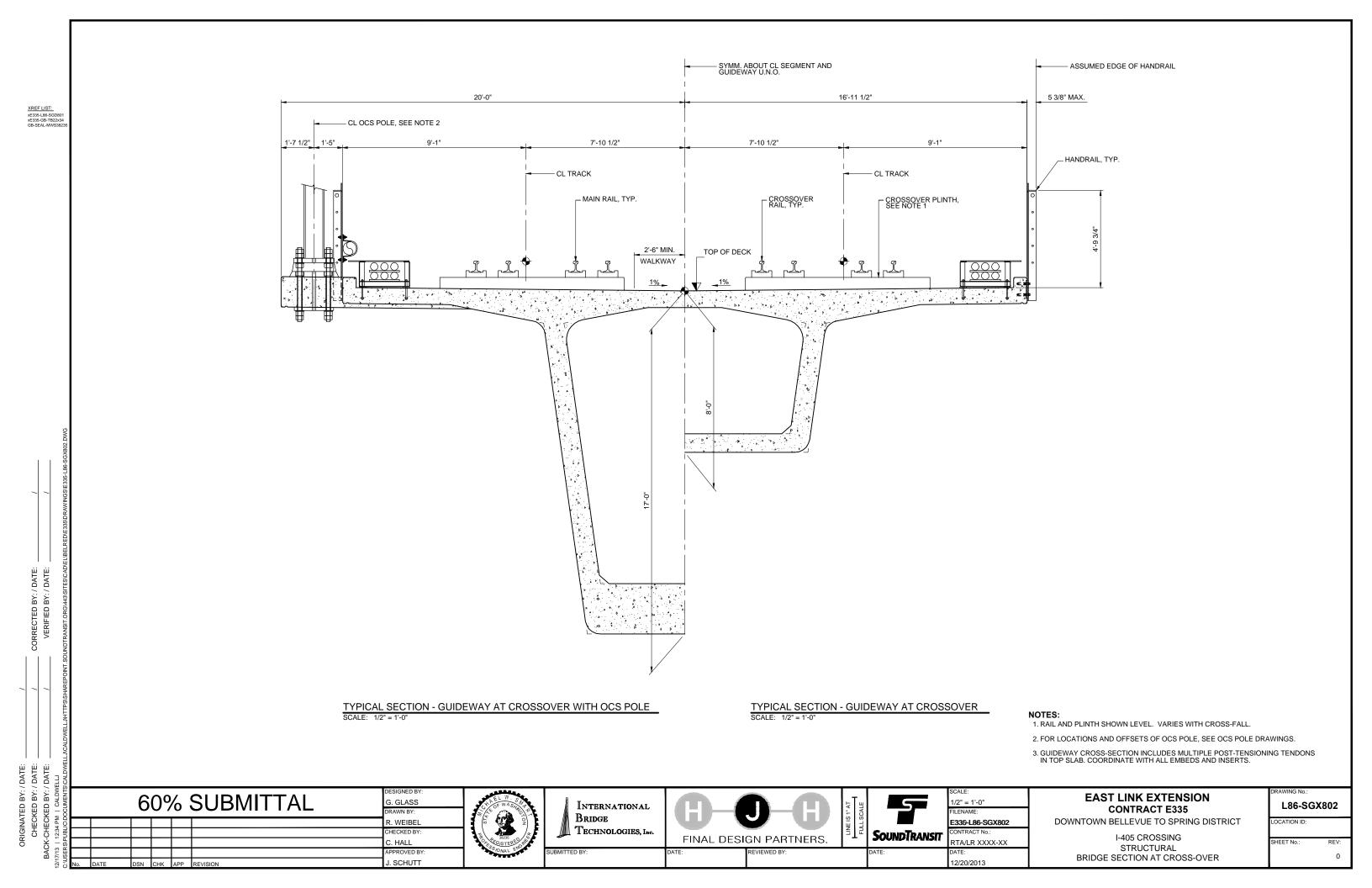
# EAST LINK EXTENSION CONTRACT E335 WNTOWN BELLEVUE TO SPRING DIS

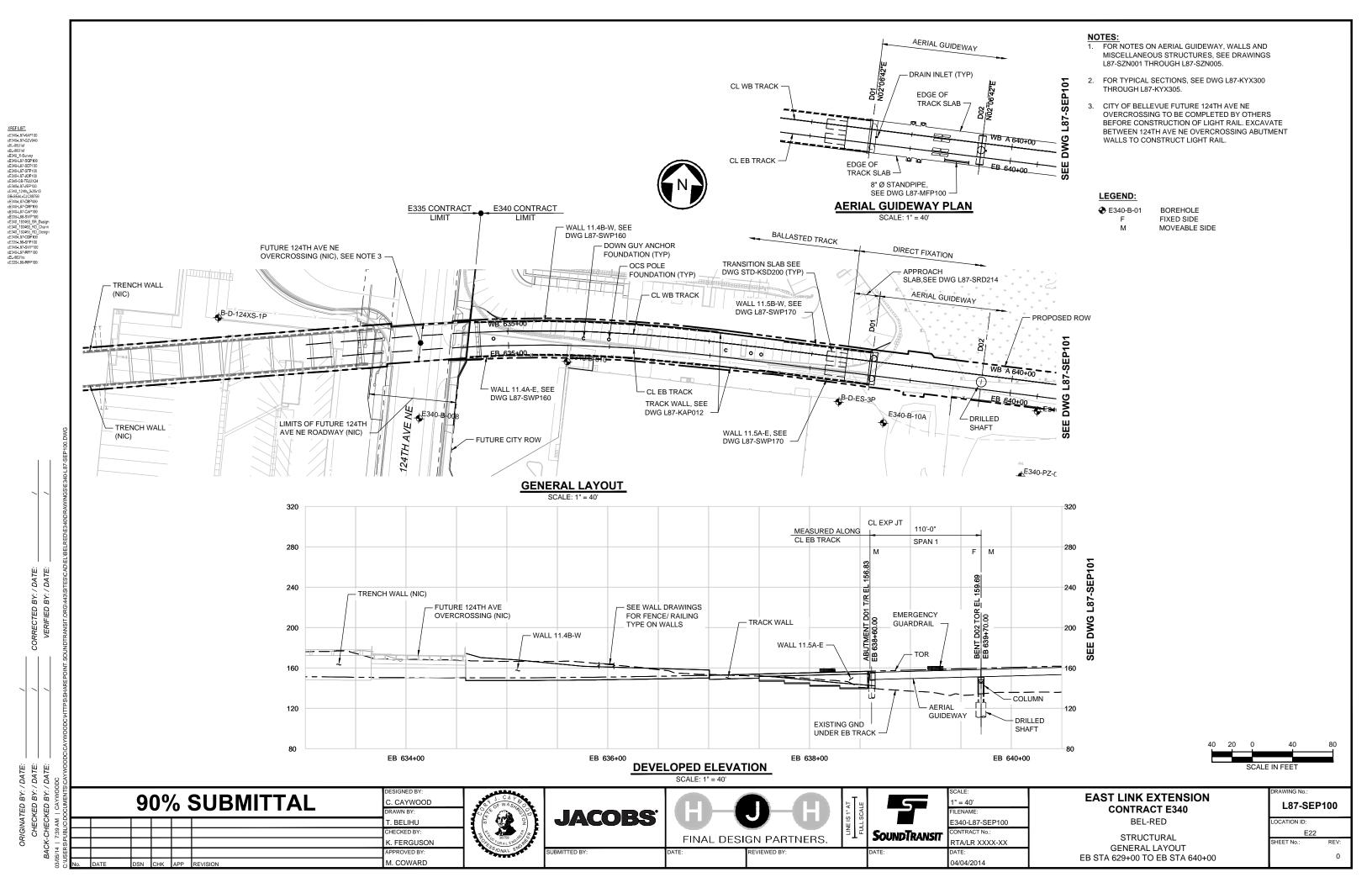
DOWNTOWN BELLEVUE TO SPRING DISTRICT
STRUCTURES, AERIAL GUIDEWAY - PRECAST TUBS
SPLICED TUB
TYPICAL SECTION

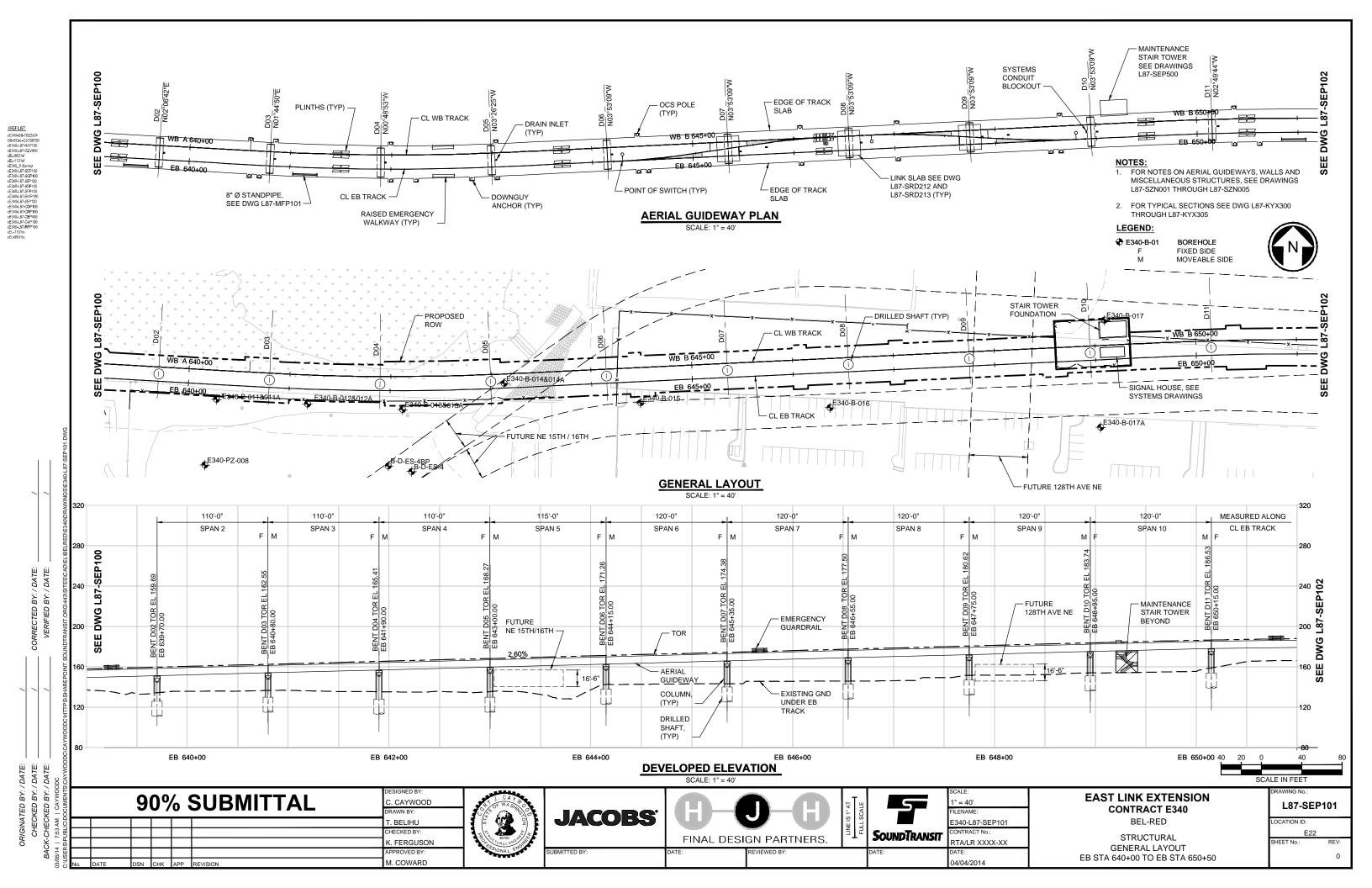
DIXAWING No
L86-SEX201
LOCATION ID:

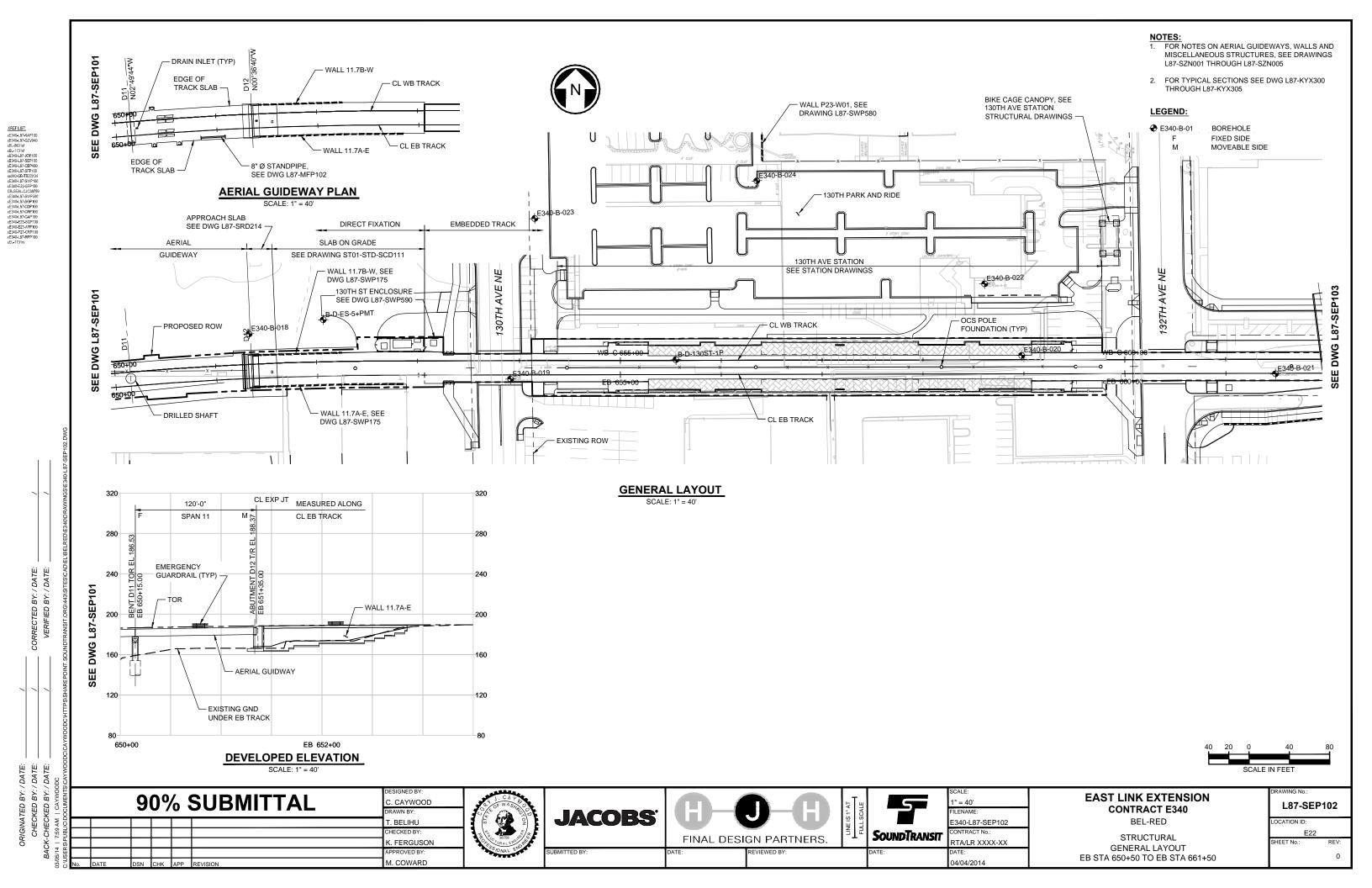
SHEET No.: REV:





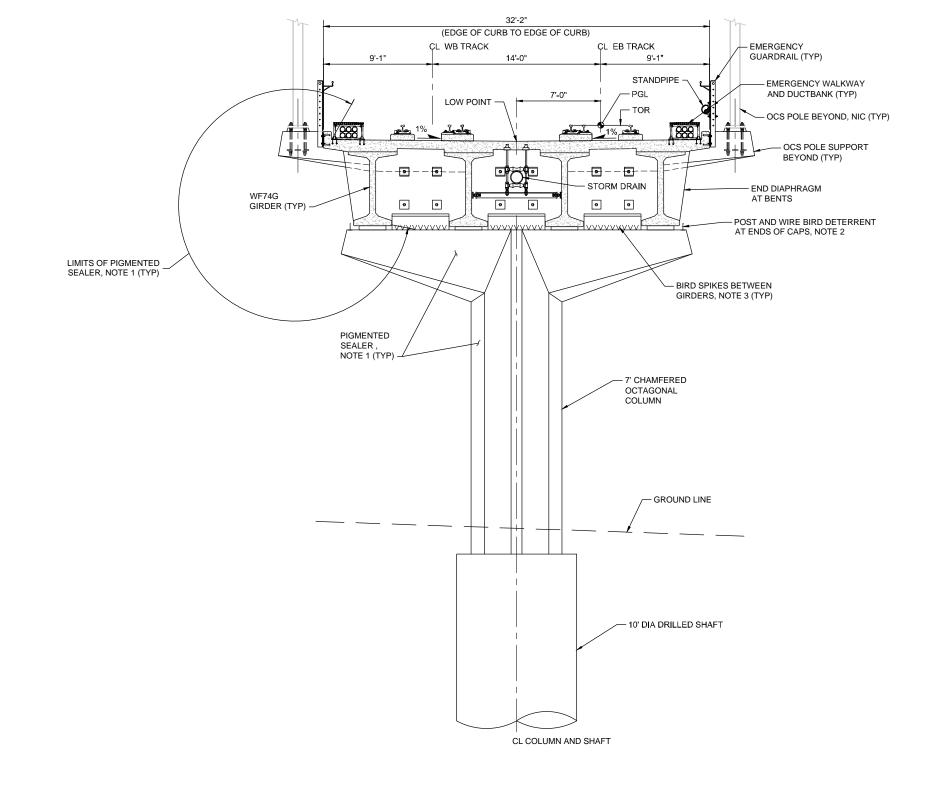






XREF LIST: xE340-GB-TB22x34 xE340-L87-SYX001 xE340-L87-KYX300 xE340-L87-JYX300 GB-SEAL-CJC38759 xE340-L87-MYX001

ORIGINATED BY: / DATE: \_
CHECKED BY: / DATE: \_
ACK-CHECKED BY: / DATE: \_
14 | 9:38 AM | CAYWOODC



#### NOTES:

- 1. APPLY WASHINGTON GRAY PIGMENTED SEALER TO EXPOSED CONCRETE SURFACES AS INDICATED.
  APPLY A MINIMUM OF 1'-0" BELOW FINISHED GRADE ON COLUMNS AND ABUTMENTS.
- 2. INSTALL POST AND WIRE BIRD DETERRENT ON ENDS OF CAPS IN ACCORDANCE WITH SPECIFICATIONS.
- 3. INSTALL BIRD SPIKES ON CAPS BETWEEN GIRDERS. BIRD SPIKES SHALL BE 5" WIDE STAINLESS STEEL MANUFACTURED BY BIRD-B-GONE OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

# **AERIAL GUIDEWAY TYPICAL SECTION**

SCALE: 1/4" = 1'-0"

90% SUBMITTAL				DESIGNED BY:  C. CAYWOOD  DRAWN BY:		
						J. RODRIGUEZ
						CHECKED BY:
						K. FERGUSON
						APPROVED BY:
No.	DATE	DSN	CHK	APP	REVISION	M. COWARD



JACOBS.
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-	-	
3 1" AT	SCALE	
LINE IS 1" AT	FULL SCALE	SOUND
_	- 1	JOURD

<b>T</b>	AS NOTED
-	FILENAME:
	E340-L87-SEX00
TRANSIT	CONTRACT No.:
	RTA/LR XXXX-X
	DATE

04/04/2014

# **EAST LINK EXTENSION CONTRACT E340**

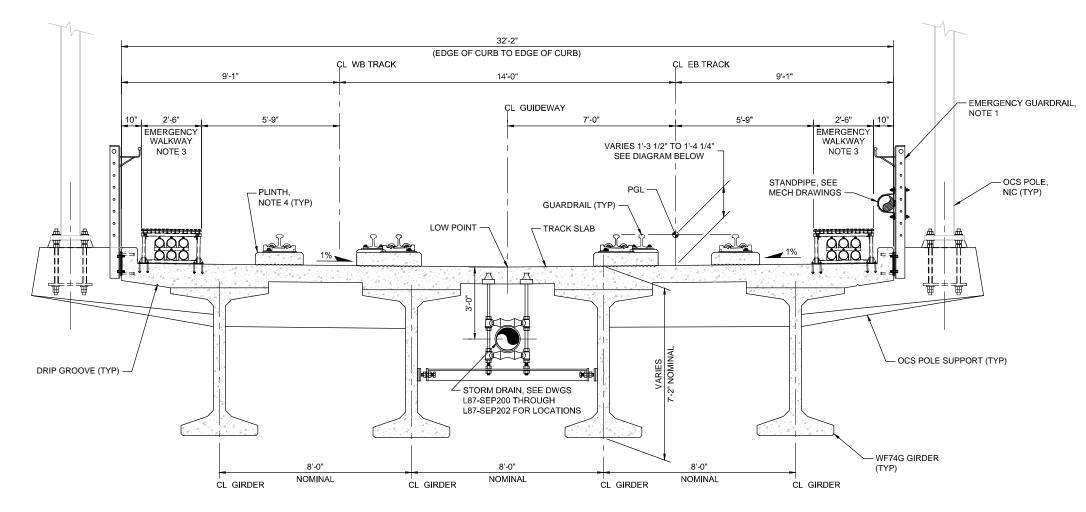
BEL-RED

STRUCTURAL, AERIAL GUIDEWAY TYPICAL SECTION

DRAWING No.:	
L87-SE	X001
LOCATION ID:	
E22	2
SHEET No :	REV:

XREF LIST: xE340\_GB-TB22x34 xE340\_L87.SYX001 xE340\_L87.4YX300 xE340\_L87.JYX300 gB-SEAL-CJC38759 xE340\_L87.MYX001

> CORRECTED BY: / VERIFIED BY: /



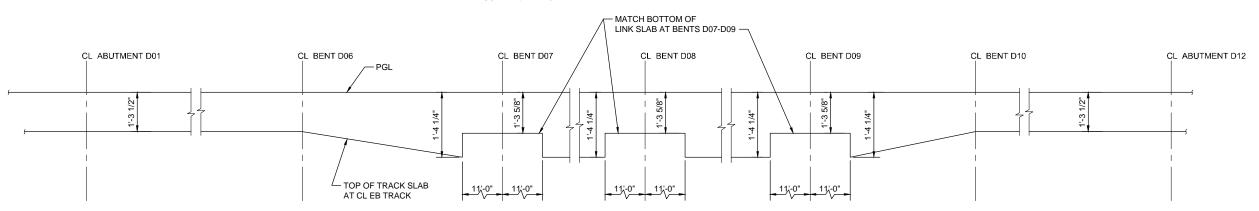
#### NOTE

- INSTALL EMERGENGY GUARDRAIL AND HANDRAIL ON BOTH SIDES FOR FULL LENGTH
  OF AERIAL GUIDEWAY. FOR EMERGENCY GUARDRAIL DETAILS, SEE DWGS STD-SED261
  THROUGH STD-SED263.
- INSTALL ADDITIONAL ANCHORAGES IN CURB AND TRACK SLAB TO ALLOW FOR FUTURE ACOUSTIC PANEL INSTALLATION. SEE DWG STD-SED-272 FOR ACOUSTIC PANEL ANCHORAGE DETAILS.
  - FOR EMERGENCY WALKWAY DETAILS, SEE DRAWING STD-SED301 THROUGH STD-SED303.
  - 4. FOR PLINTH DETAILS, SEE DRAWING STD-KDD106 THROUGH STD-KDD113.
  - FOR STORM DRAIN SUPPORT DETAILS, SEE DRAWINGS STD-SED120 THROUGH STD-SED122.
  - 6. FOR SUPERSTRUCTURE CONSTRUCTION SEQUENCE, SEE DWG STD-SED221.
- 7. DISTANCE FROM PGL TO TOP OF TRACK SLAB VARIES BETWEEN BENTS D06 TO D10 TO FIT 7" LINK SLAB AT BENTS D07 THROUGH D09. TOP OF TRACK SLAB MATCHES BOTTOM OF LINK SLAB WITHIN LIMITS OF LINK SLAB. STEP IN TOP OF TRACK SLAB AT EDGES OF LINK SLAB VARIES IN DEPTH TRANSVERSELY AND IS REQUIRED TO ACCOUNT FOR 1% CROSS SLOPE OF TRACK SLAB VERSUS NO CROSS SLOPE IN LINK SLAB, SEE DWG L87-SRD212 FOR ADDITIONAL DETAILS AT LINK SLABS.

SECTION THROUGH STANDARD TRACKWORK SHOWN

## TYPICAL SUPERSTRUCTURE SECTION

SCALE: 1/2" = 1'-0"



SEE NOTE 7

# **TOP OF TRACK SLAB DIAGRAM**

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		9	<b>0</b> %	6	SUBMITTAL	DESIGNED BY:  Jo. SCHETTLER  DRAWN BY:
						J. RODRIGUEZ
						CHECKED BY:
						C. CAYWOOD
						APPROVED BY:
No.	DATE	DSN	СНК	APP	REVISION	M. COWARD



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FULL SCALE	SoundTran
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SCALE:
AS NOTED
FILENAME:
E340-L87-SEX101
CONTRACT No.:
RTA/LR XXXX-XX

# EAST LINK EXTENSION CONTRACT E340

BEL-RED

STRUCTURAL, AERIAL GUIDEWAY TYPICAL SUPERSTRUCTURE SECTION

L87-SEX101

E22 SHEET No.: REV:

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