

Introduction

This chapter of the FEIR for the Union City Intermodal Station Passenger Rail Project (Proposed Project) contains Master Responses intended to consolidate in one discussion the responses to key issues on a single subject raised in multiple comments. Responses to issues that fall outside of the Master Responses are addressed in the FEIR Chapters 3 and 4. Revisions made to the DEIR pursuant to Master Responses are included in the FEIR Chapter 4. Where an individual response to a comment is covered by a Master Response, this is also noted in the FEIR Chapters 3 and 4.

The Master Responses are listed below:

General Issues (GEN)

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- GEN - 2 – Segmentation

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- PD - 2 – Turnouts
- PD - 3 – Redesigned Shinn Connection
- PD - 4 – Freight Rail Traffic

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- AQ - 1 – Diesel Health Risk Assessment
- AQ - 2 – Construction Emissions

Alternatives (ALT)

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General Issues (GEN)

GEN-1: Project Background

Existing Rail Service:

There are four sets of rail lines that operate within the general project vicinity. These lines include BART and three separate alignments of UPRR tracks. These alignments include the Niles Subdivision, the Oakland Subdivision and the Centerville Line (see DEIR Figure 2-1). The Niles Subdivision and the Oakland Subdivision run generally parallel in a north-south direction within the Cities of Hayward and Union City, with the Niles Subdivision diverging slightly to the east through the City of Fremont. The Centerville Line runs in an east/west direction through Fremont. The Centerville Line is one of the main freight lines that provide freight rail connections from the Oakland Port through Niles Canyon to easterly destinations. All three of these lines are classified as main freight lines by the UPRR. UPRR operates trains as needed, which can result in increases or decreases in frequency of service depending on demand.

Historically, the railroad tracks were constructed through rural and open lands in the 1800's (see Page 3.4-9 of the DEIR). Over time, residential, commercial, and industrial land uses were established adjacent to the existing rail lines. Land subdivisions in the project area near the railroads began in the early 1900's as is noted by the development of the Decoto settlement (see DEIR Page 3.4-8). Residential development has continued near the railroad tracks with recent subdivisions in Hayward (Twin Bridges), Union City (Pacific Pointe) and Fremont (Riverwalk).

BART was constructed in the early 1970's. In the project vicinity, BART runs parallel to the Oakland Subdivision on a raised berm and at an elevation at or above the freight line. BART is a fully grade-separated rail system. BART runs approximately 250 arrivals and departures through the Union City BART station each weekday, with peak operation in the morning and evening commute hours.

Altamont Commuter Express (ACE) rail service became operational in October 1998. Service was initially two westbound morning trains and two eastbound evening trains. In 2001 a third roundtrip train was added to the service. The ACE operates on the Centerville Line through the project area. ACE plans to operate a fourth train when capacity becomes available.

Capitol Corridor is an intercity passenger rail train that operates between Sacramento and San Jose with four roundtrips per day. As identified in the DEIR,

Capitol Corridor plans to expand service to 16 round trips per day. Capitol Corridor operates trains on UPRR tracks.

Freight rail operates on the Centerville Line and Oakland and Niles subdivisions. The Centerville Line is a major intercontinental rail line that serves the Port of Oakland and points east in the southern U.S. There are approximately 30 to 40 freight trains a week operating on the Centerville Line. A similar number operate on the Niles subdivision heading south across Niles Junction to the yards in Fremont and Milpitas.

October 2000, Intermodal Station District and Transit Facility Plan

In October 2000, Union City brought together an Intermodal Action Team to oversee the development of the Intermodal Station District and Transit Facility Plan. The focus of the team was to create a vision of how to redevelop the lands around the Union City BART station. The team included representatives from several transit operators (both bus and rail), citizens, City officials, and City staff. Through the Action Team's intensive efforts, a preferred plan for the Station District and intermodal transit facility was developed. The plan called for high-density, mixed-use development that is pedestrian oriented and the creation of a world-class intermodal station. The Station District Plan was incorporated into the Union City General Plan (City of Union City 2002a) and the Amended Redevelopment Plan in 2002 (City of Union City 2002b).

In 2001, a draft EIR was prepared for the Redevelopment Plan that included an analysis of the Station District Plan at a project level, which considered a passenger rail station as part of this mixed-use, transit-oriented development (City of Union City 2001). The Redevelopment Plan EIR considered full build out of the Station District over a 20-year period. The Proposed Project EIR tiers off of the EIR prepared for the Station District Plan and incorporates by reference some of the elements of the Station District Plan EIR.

2002, Capitol Corridor Rail Station Study

As a result of the Station District Plan, Union City was encouraged by regional transportation agencies to continue planning efforts to create an intermodal station and passenger rail connection at the Union City BART station. The City embarked on the preparation of the Capitol Corridor Rail Station Study, Phase 1 Options Analysis in 2002 (Earth Tech Inc. 2002). The goal of the study was to identify a preferred location for the passenger rail station that provided efficient and convenient connections to other transit services. Planning of the station focused on Capitol Corridor, but considered possible future passenger rail operators, such as the Dumbarton Rail Corridor (DRC).

The City prepared the Rail Station Study with the assistance of a technical team, similar to the Intermodal Action Team, including transit providers (BART, rail and bus), citizens, staff, and officials. The City invited staff members from Fremont, Hayward, and Newark, and from regional funding and planning agencies, including the MTC, Alameda County Transportation Improvement

Agency (ACTIA), ACCMA, and Association of Bay Area Governments (ABAG).

The Rail Station Study concluded that the location adjacent to BART was a preferred location because it provided a direct link to BART and bus facilities, opened the east side of BART to new housing and office development, provided higher patronage because of the direct link among transit operators, had lower capital costs, interfered less with UPRR freight operations, reduced running time, and had fewer conflicts with at-grade crossings, resulting in improved safety and fewer train whistles.

The recommended alternative for the passenger rail station included related track improvements, including a track connection in Hayward known as the Industrial Connection, a track connection in Fremont known as the Shinn Connection and a passenger rail station and BART connection in Union City. The recommended alternative became the basis for the current CEQA review. At the conclusion of the environmental review process, the City plans to make an application to Capitol Corridor for a passenger rail stop in Union City.

2003 CEQA Review

In early 2003, Union City began to prepare an EIR to study the environmental impacts of creating a passenger rail station at Union City BART in the heart of the transit-oriented, mixed-use Station District. The Proposed Project extended from Industrial Parkway in Hayward to the Centerville Line in Fremont. Early in the process, the City approached the City of Fremont to join in the preparation of the EIR. Union City and the environmental consultants made a presentation regarding the Station District and the planned intermodal station with passenger rail access to the Fremont City Council on June 24, 2003 to ask for their staff's participation in the preparation of the EIR. The Fremont City Council approved their staff's support role in Union City's efforts to prepare the appropriate environmental document.

In August 2003, the City released a Notice of Preparation for the Union City Intermodal Station Passenger Rail Project and two scoping meetings were held on September 8 and 9 with one meeting in Fremont and the other in Union City.

2004 Dumbarton Rail Corridor

The long-range planning process for the DRC began in 1991, with a San Mateo County Transportation Authority (SMCTA)-sponsored study evaluating the feasibility of operating a commuter rail service in the corridor between the peninsula and the East Bay. The rail service option was recommended as a long-term strategy, which included future planned rail expansions. In 1994, SamTrans purchased the Dumbarton Rail Corridor right-of-way between Redwood Junction and Newark Junction as an investment for future freight and/or commuter rail service.

The DRC is located in the southern section of the Bay Area regional rail network. The corridor begins at the former Southern Pacific Centerville rail line in Redwood City, San Mateo County. It crosses the Bay over the Dumbarton and Newark Slough railroad bridges to Alameda County. In the City of Fremont, it continues north via the Shinn connection to the UPRR Oakland Subdivision rail corridor to the Union City intermodal station. This final segment of the DRC (Segment G) would overlap with the Proposed Project.

Improvements to the DRC were studied by MK Centennial, Inc., and documented in a report prepared for SMCTA entitled, *Dumbarton Rail Corridor Rehabilitation* (1996). In 1997, SMCTA sponsored the *Dumbarton Corridor Study* to identify short-and long-term transit opportunities in coordination with other regional rail links. Similar to the 1991 study's conclusions, this study concluded that rail service is a long-term solution and recommended that bus service be expanded as a short-term strategy. In 1998, SMCTA sponsored another study, the *Dumbarton Corridor Transit Concept Plan* that identified the need for rail service and formulated a plan.

In 1999, SMCTA sponsored the *Dumbarton Rail Corridor Study* that defined a logical Rail Service Plan for the Dumbarton Rail Corridor. This information allowed Dumbarton Rail Service to be included as a candidate project in the transportation component of the MTC Blueprint for the 21st Century (2000). The Blueprint lists the priorities for regional transportation projects with recommendations on funding for additional resources beyond those committed in the Regional Transportation Plan (RTP).

In 2003, MTC drafted the Regional Traffic Relief Plan to provide relief to congestion on Bay Area bridges. In March 2004, voters in seven Bay Area counties approved Regional Measure 2 (RM 2), which provides funding to implement the Regional Traffic Relief Plan. Dumbarton Rail Corridor is one of the projects identified in that plan.

HNTB Corporation prepared a Project Study Report (PSR) for the DRC in May 2004. The report was prepared with input from a Technical Advisory Committee (TAC), which included members from:

- ACCMA
- ACTIA
- BART
- Capitol Corridor
- City of Fremont
- City of Menlo Park
- City of Newark
- City of Union City
- Metropolitan Transportation Commission

- San Mateo County Transit District (representing Caltrain and SMCTA)
- Santa Clara Valley Transportation Authority
- Silicon Valley Manufacturing Group.

A Policy Advisory Committee (PAC) was formed in April 2004 to further project development (HNTB 2004).

2005, City Releases DEIR

Union City was about to release the DEIR in spring 2004, when the voters passed RM 2. The newly formed Dumbarton Rail Technical Team requested that Union City address DRC impacts within the overlapping portion of the rail corridor that was then being studied. The Proposed Project study area corresponds to Segment G of the DRC. While the focus of the City's DEIR was Capitol Corridor service, construction of the Proposed Project would also facilitate the use of Union City intermodal passenger rail station by the planned DRC service.

MTC provided Union City with additional funding to revise the DEIR to incorporate DRC impacts based upon known information. The DRC PAC and the MTC Board approved the funding to update the environmental analysis. Extensive revisions were made to the noise and air quality studies to account for the 12 additional trains as identified by the DRC PSR, and engineering and operational data about the possible layover yard locations were included in the DEIR. DRC will provide a detailed analysis of the layover yard options as part of their environmental review. Final decision on the layover yard will be made by the DRC.

In order to fully disclose the potential impacts of the Proposed Project, the planned DRC train traffic was included in the analysis of the Proposed Project based on preliminary information from DRC. Because the location of the DRC layover yard would affect the operational scenarios and related impacts for DRC, the City identified three potential layover yard locations in the initial analysis of the Proposed Project. Based on comments received on the DEIR and the layout of the redesigned Shinn connection, the City has determined that South Layover Option A is not a feasible option and need not be considered in the analysis of cumulative impacts. This change was reflected in the PRDEIR (October 2005). See Chapter 1 for more information on the current EIR processing.

GEN-2: Segmentation

Several comments expressed concern that the analysis in the DEIR segmented the analysis of the DRC's environmental impacts and suggested that the DEIR should evaluate both the Proposed Project and the DRC Project. It is the opinion of the Lead Agency that the Proposed Project has independent utility and is a standalone project; it need not be analyzed with the DRC project in a single EIR.

The Proposed Project is an independent project separate from the Dumbarton Rail Corridor project (DRC) and is a subset of the Intermodal Station District and

Transit Facility Plan that was studied in the Redevelopment Plan EIR certified in 2001. As stated on Page ES-2 of the DEIR, the goal of the Proposed Project is to increase public transit patronage by creating a facility that provides for the safe, convenient, and efficient transfer of transit patrons between various transportation modes. The Proposed Project would achieve this goal by creating a new rail station at the Union City BART station and rerouting Capitol Corridor passenger rail service from the Niles Subdivision of the UPRR between Hayward and Fremont to allow Capitol Corridor trains to access the new station.

Physical impacts of the City's Proposed Project are limited to the project corridor between the Industrial connection and the turnout connecting the Shinn connection to the Centerville Line. These physical impacts are related to construction of the project components and the effects of moving Capitol Corridor passenger trains from the Niles subdivision to the Oakland subdivision using the new Industrial and Shinn connections. Planned increases in Capitol Corridor service would occur independent of the Proposed Project and would result in impacts along the existing route through Union City and Fremont. Increasing passenger rail traffic through the City of Fremont on the Centerville Line would have effects outside of the project corridor; however, these effects would occur with or without the Proposed Project.

The Proposed Project has independent utility and would achieve the project objectives without implementation of DRC. When implemented, DRC would utilize the proposed Shinn connection and new track to access the Union City passenger rail station. Therefore, impacts associated with the additional train traffic have been analyzed as part of the cumulative scenario. Because the location of the proposed layover yard for the DRC has not yet been determined, the cumulative analysis of noise and air quality impacts considers operational scenarios for alternative locations south of Union City at the existing Shinn rail yard and north of the station near the BART maintenance facility. The intent of including the DRC layover yard options in the description of the Proposed Project in the DEIR was to simplify and clarify the discussion of the cumulative impacts of future rail operations along the Proposed Project corridor. Three potential layover yard locations were included in the impact analysis in the DEIR. As stated above, the City has determined that one of the potential layover options is no longer feasible.

The DRC is a reasonably foreseeable future project that would use the Shinn connection and Oakland subdivision to access the Union City passenger rail station and is therefore considered part of the cumulative scenario consistent with CEQA Guidelines Section 15130. As stated in Chapter 2, *Project Description* of the DEIR, the Proposed Project would not preclude any alternatives being considered for the DRC and would not restrict the operating scenarios for either the DRC or for freight movement through the region. Therefore, Chapter 2, *Project Description* is revised to delete the discussion of the layover yards and additional train traffic associated with the DRC. This discussion will instead be included in the discussion of the cumulative impacts in Chapter 4.4 *Cumulative Impacts* (see Chapter 5, *Revisions to the DEIR and PRDEIR*).

The project that would be approved by the City does not include the construction of a layover yard for the DRC. The agency responsible for approving the DRC project will make the decision as to the location, design, and operation of the layover yard.

Project Description

PD-1: Layover Yard

Construction of the Proposed Project would facilitate the use of the Union City intermodal passenger rail station by the planned DRC service. In order to fully disclose the potential impacts of the Proposed Project, the planned DRC train traffic was included in the analysis of the Proposed Project in the DEIR based on preliminary information from DRC. DRC service would begin in the morning at the Union City intermodal station and proceed west to Redwood City where the trains will continue either north to San Francisco or south to San Jose. In the afternoon/evening the trains will return along the same route, terminating at the Union City station. After completing the route, the trains would proceed to a layover yard to remain overnight. Minor maintenance and cleaning would be accomplished at the layover yard.

The DRC PSR identifies a potential layover yard location north of Whipple Road in the City of Hayward; however, a decision as to the location of the layover yard has not been finalized. Operational and environmental issues could result in the selection of a different location for the layover yard by DRC. Because there is a potential for DRC to select a layover yard location near the Shinn connection in the City of Fremont where there is already an existing rail yard, the City evaluated the potential impacts associated with such a location as part of the cumulative impact analysis in the DEIR.

The location of the DRC layover yard would affect the operational scenarios and related impacts for DRC. A north layover location would require DRC trains to travel through the Decoto neighborhood in Union City on the way to and from the yard and would involve five at-grade road crossings. The north layover yard would be located in an industrial area, so noise related to activities in the yard would not affect sensitive receptors. A south layover location would require DRC trains to travel past the part of the Niles neighborhood adjacent to the Oakland subdivision on their way to and from the Union City station. A south location would not require any at-grade crossings; however, there are residential areas located to the south of the Centerville Line and west of the BART berm that could potentially be affected by operations at the yard.

To fully consider the potential effects of the DRC layover yard in the cumulative scenario, three possible layover yard locations were included in the DEIR. These included two possible southern locations; South Layover Yard Option A and South Layover Yard Option B. South Layover Yard Option A was located east of the BART tracks north of and roughly perpendicular to the Centerville Line (see

Figure 2-4 in the DEIR). Based on comments received on the DEIR regarding air quality, noise, and land use impacts of Layover Yard Option A and the layout of the redesigned Shinn connection, the City has determined that South Layover Yard Option A is not a feasible option and should not be considered in the analysis of cumulative impacts. Therefore, only two locations, the North Layover Yard Option and South Layover Yard Option B, were considered in the analysis of cumulative noise impacts in the recirculated PRDEIR.

The designs for the layover yards analyzed in the DEIR and PRDEIR are based on the operational requirements of the DRC and are not intended to represent a decision by DRC as to the design or location of the layover yard. The decision as to the location, design, and operation of the layover yard will be made by the agency responsible for approving the DRC, which has yet to be determined. The project that would be approved by the City would not include the construction of a layover yard for the DRC.

The layover yard options associated with the DRC are not part of the Proposed Project and discussion of the layover yard options and the potential impacts associated with them relate only to cumulative impacts. Cumulative noise impacts associated with the DRC and layover yard options are analyzed in the PRDEIR. The analysis of air quality impacts in the DEIR is based on the cumulative scenario with a south layover yard since this is the worst-case scenario for air quality. Please see Master Response, AQ-1, Diesel Health Risk Assessment, for responses to comments regarding the air quality analysis in the DEIR.

Several comments were received regarding inconsistency of the layover yard with land use and housing plans in the City of Fremont. Because the layover yard is not a part of the Proposed Project, consistency of the layover yard with City of Fremont plans is not discussed in the DEIR. Impacts related to the layover yard will be analyzed in the DRC environmental document.

PD-2: Turnouts

A turnout is the location where two sets of railroad tracks join together. A “frog” is a device used where two sets of tracks intersect that provides a way for wheels and wheel flanges on either rail to cross the other. A “movable point frog” is a frog having a movable wing rail that closes the gap in the rail at the connecting point between the two rails.

Several comments expressed concern about the effectiveness of movable point or spring rail frogs in mitigating noise and vibration impacts associated with turnouts. Some comments also suggested that the turnout adjacent to the Riverwalk neighborhood be relocated farther to the west, as was suggested as possible mitigation in the DEIR. In response to those comments, the City has revised the project to relocate the turnout adjacent to the Riverwalk neighborhood to the west, past the western end of the neighborhood and to

incorporate movable point frog technology into the project design for all turnouts located near sensitive receptors. See Figure 2-1.

Noise and vibration associated with turnouts is caused by the wheels impacting the gap present in a standard turnout. By eliminating the gap and providing an unbroken running surface, a movable point frog eliminates the noise and vibration associated with turnouts since there is no longer a gap for the wheel to impact. Movable point frogs are a proven technology and are effective in eliminating the noise and vibration associated with turnouts.

Several comments inquired about the maintenance of the movable point frog. Capitol Corridor currently has a maintenance agreement with UPRR, the owner of the Oakland and Niles subdivisions. As described in Mitigation Measure NV-1, incorporation of movable point frogs into the project design will require a revision to the existing maintenance agreement between Capitol Corridor and the UPRR.

PD-3: Redesigned Shinn Connection

Several comments on the DEIR expressed concern about the effect of the Shinn connection on the Riverwalk neighborhood. Specifically, the comments addressed the need to acquire property, remove landscaping, and replace the fence at the end of Riverwalk Drive; the aesthetic impacts of the underpass of the BART tracks; air quality, noise, and vibration impacts, and construction noise and lighting. The City has developed a revised design for the Shinn connection that incorporates the recommendations made in comment by individuals and local agencies. The redesigned Shinn connection moves the new section of curved track slightly farther to the east and adds a second set of tracks to improve train movement (see Figures 2-1 through 2-7).

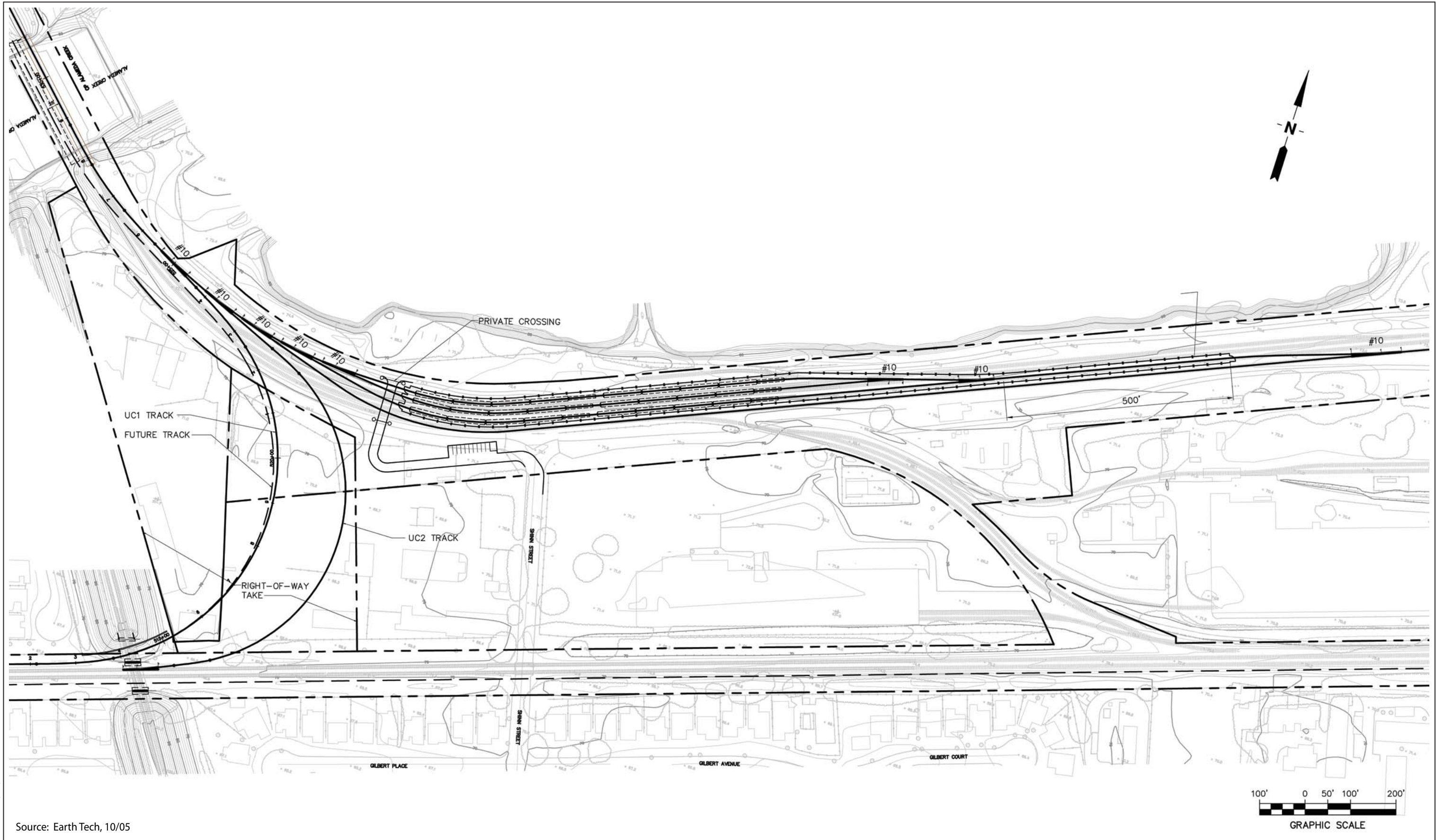
The revised design eliminates the need to acquire property from the Riverwalk neighborhood and moves the new tracks for the Shinn connection farther away from residences. The northern/western tracks join the Centerville Line west of the Riverwalk subdivision and incorporate moveable point frog technology into the design of the turnout where the tracks connect. The southern/eastern set of tracks would connect to the Centerville Line underneath the BART overpass (see Figure 2-5). The connection would incorporate moveable point frog technology for the turnout where the tracks connect. In the DEIR, the Shinn connection joined the Centerville Line adjacent to the Riverwalk subdivision and the moveable point frog was not part of the Proposed Project design, but was recommended as mitigation for noise and vibration impacts. The moveable point frog eliminates noise and vibration impacts associated with the turnout, therefore, DEIR Mitigation Measure NV-3, Relocate Turnouts or Install Spring Rail “Frogs,” is no longer necessary.

The northern tracks pass under the BART tracks farther to the east than the design in the DEIR and slightly farther from the home at the eastern terminus of Riverwalk Drive. This alignment would require considerably less modification of



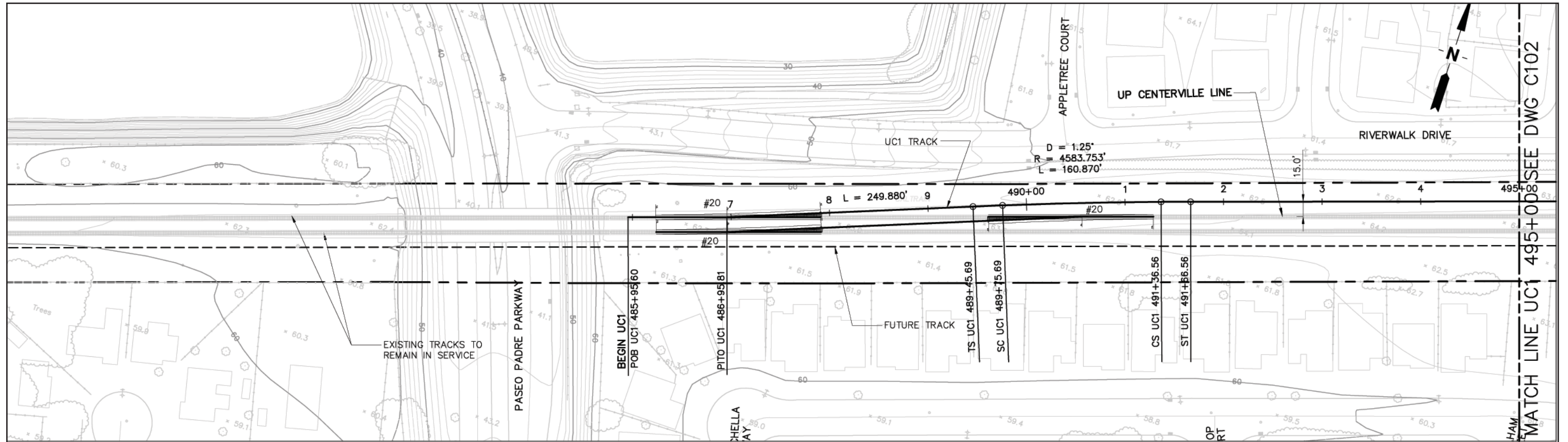
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Figure 2-1
Redesigned Shinn Connection

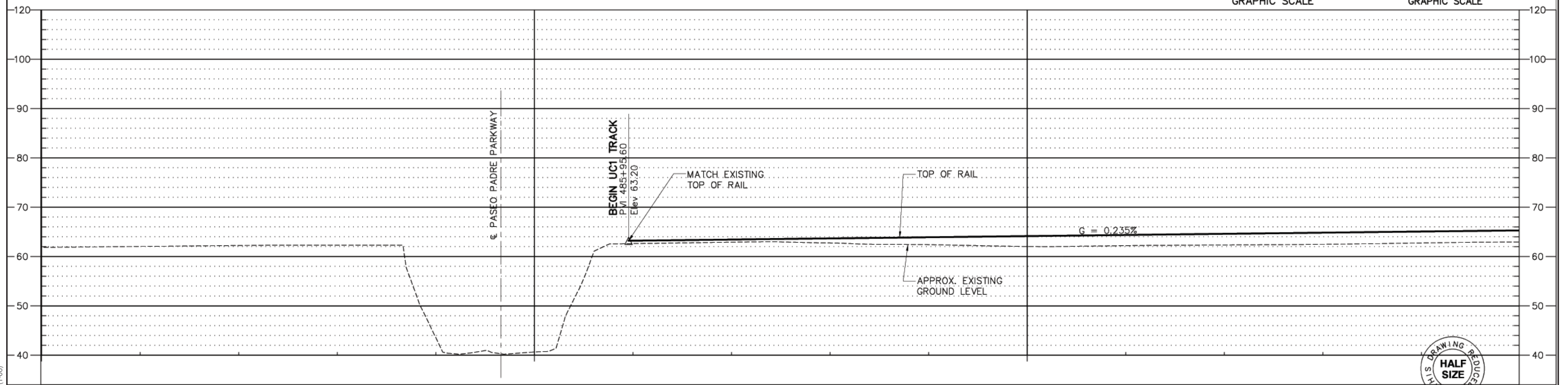
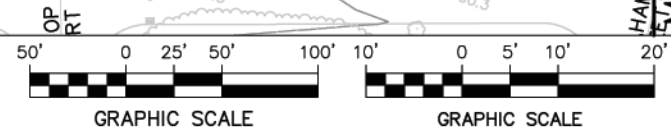


Source: Earth Tech, 10/05

02279.02 FEIR (1-06)



PLAN
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PROFILE
SCALE: 1"=50'H; 1"=10'V



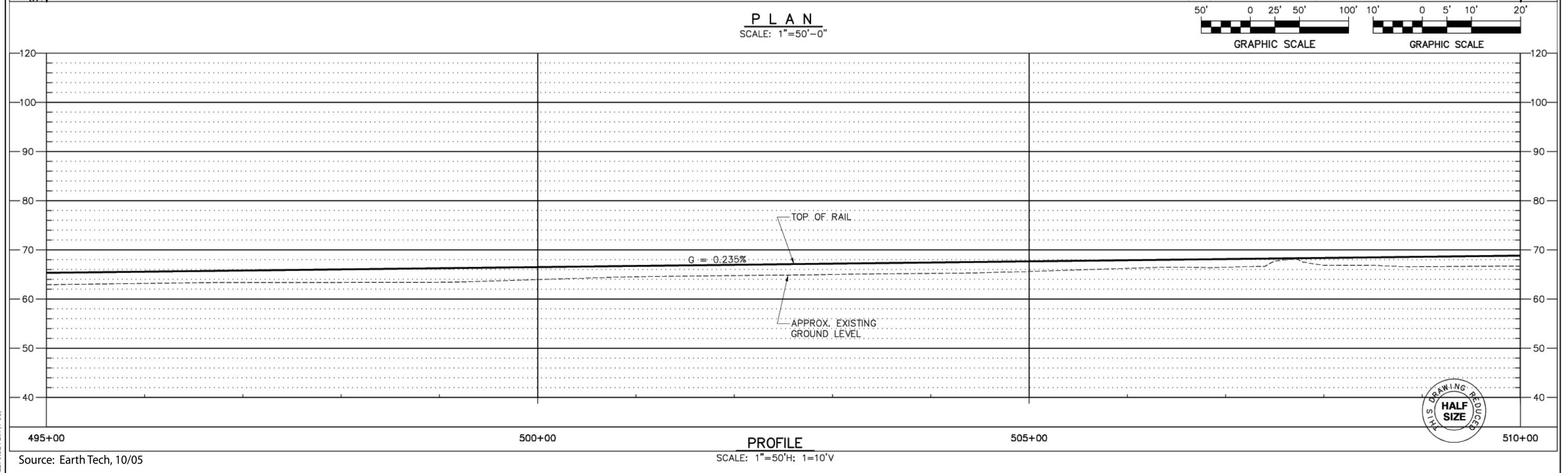
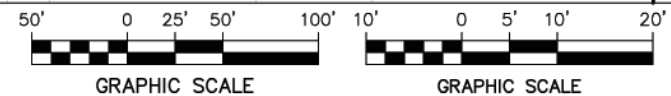
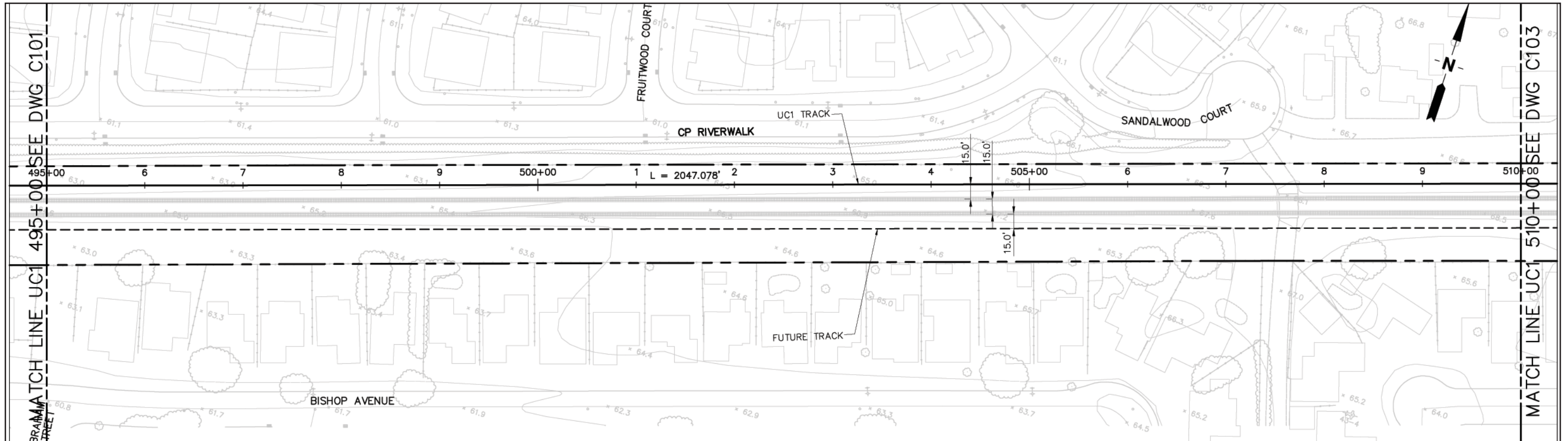
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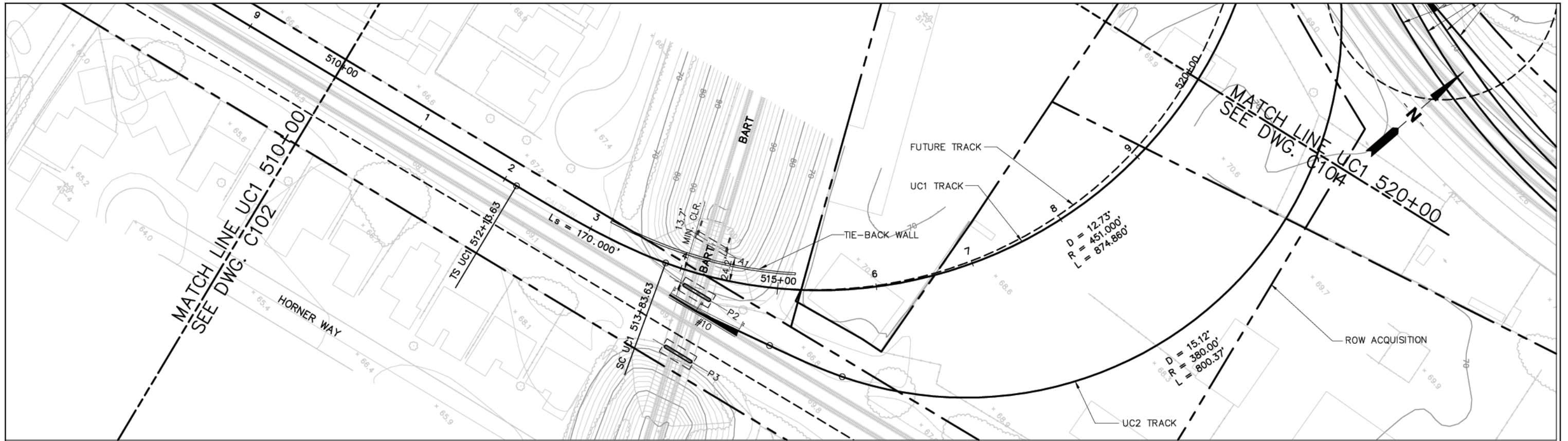
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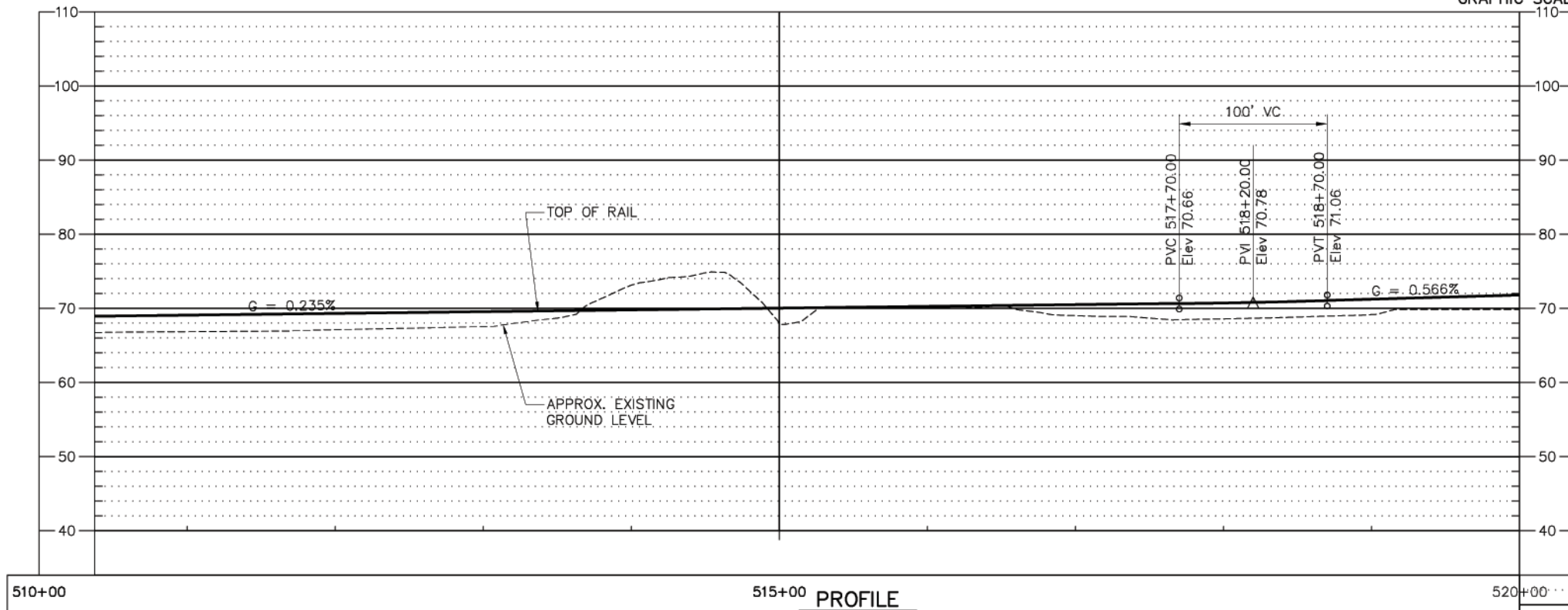
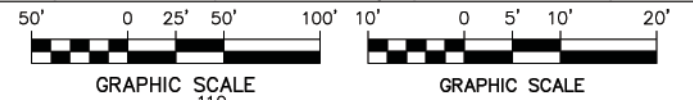


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Source: Earth Tech, 10/05



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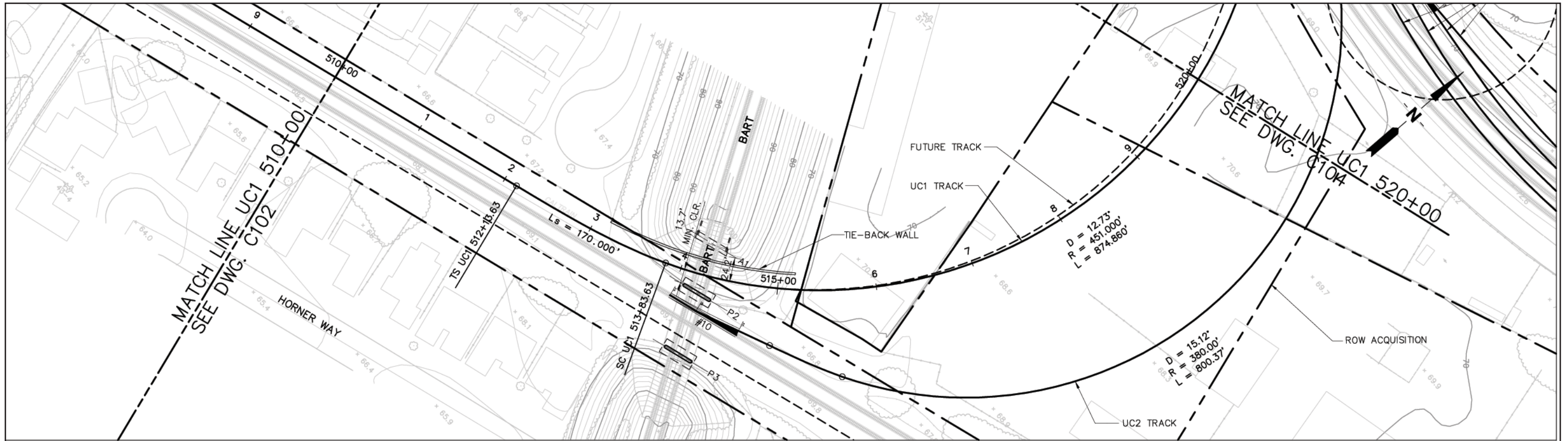


PROFILE
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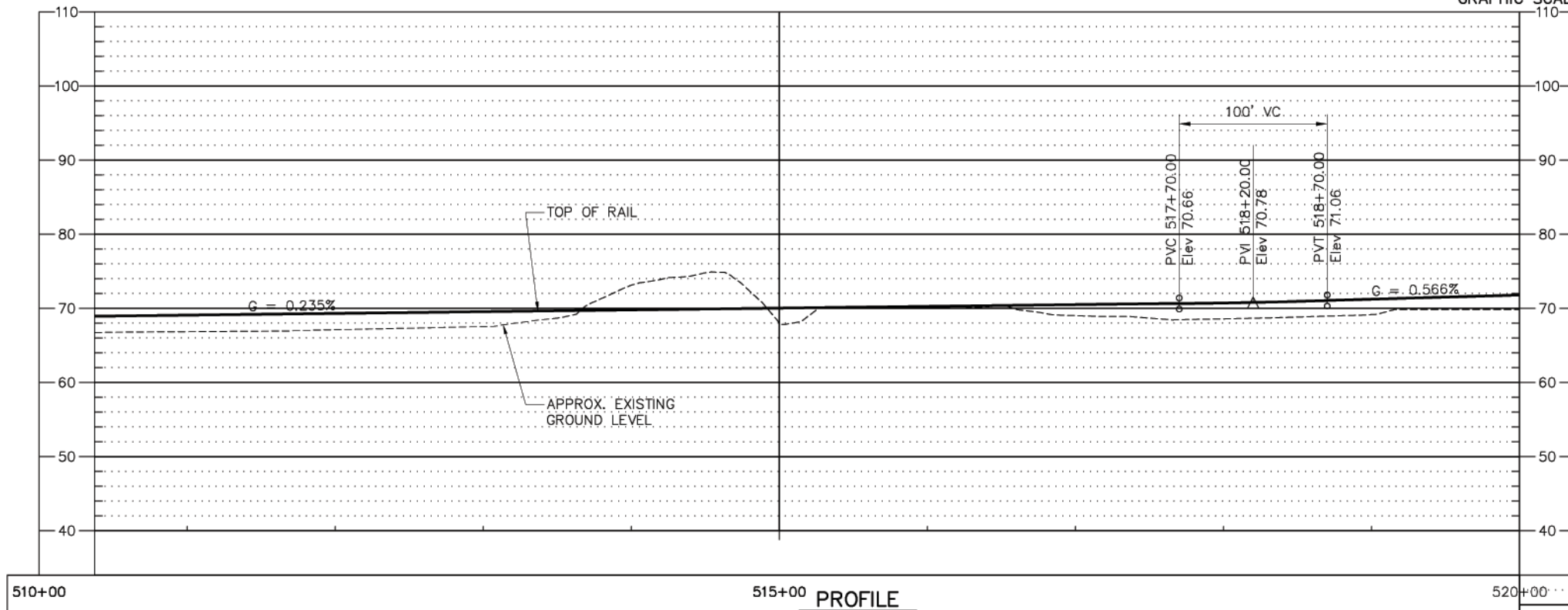
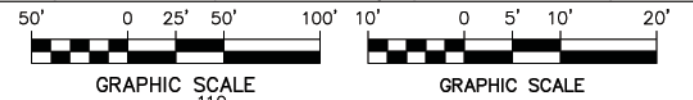


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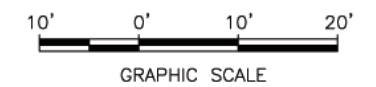
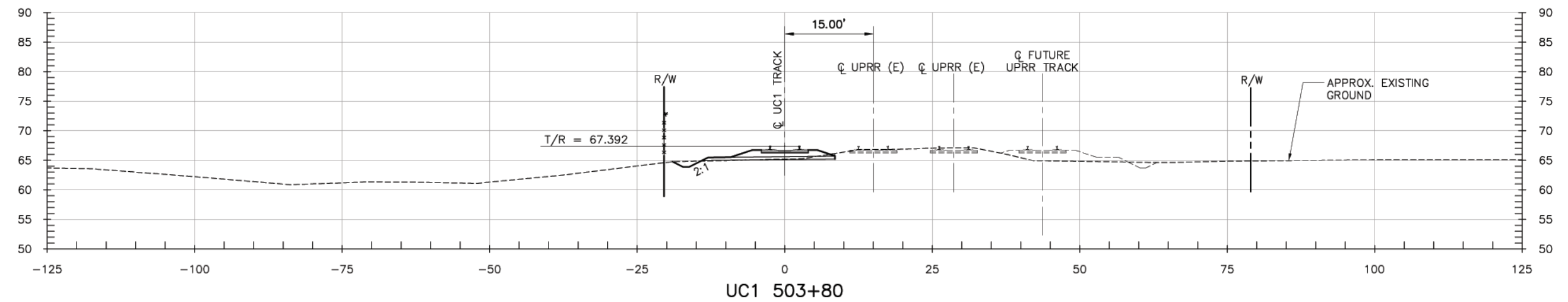
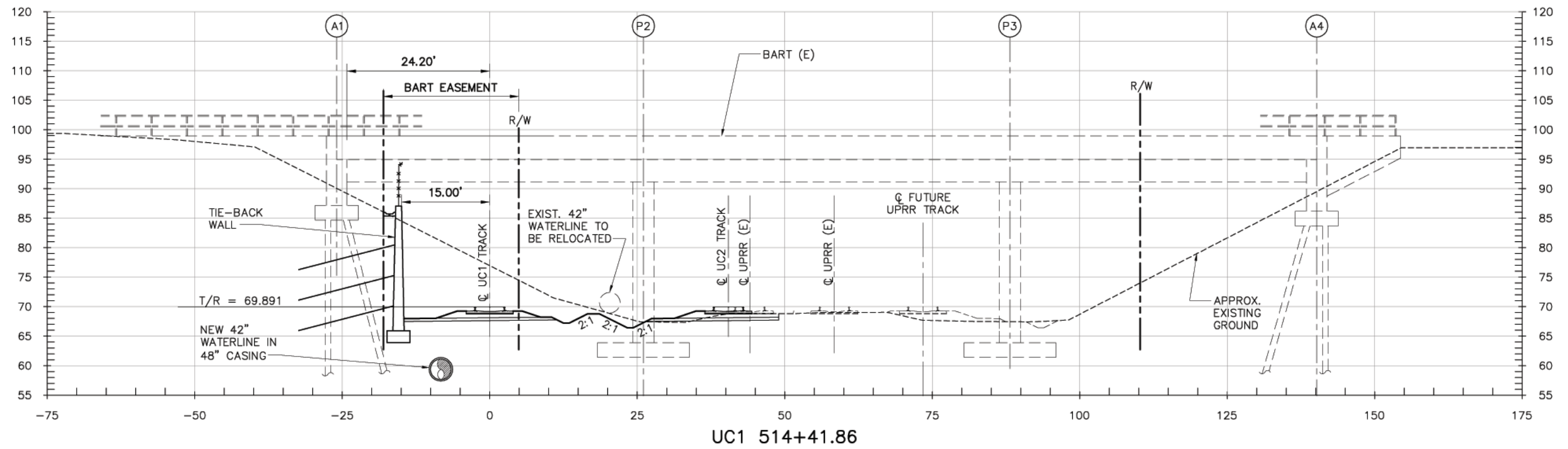


PROFILE
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02279.02 FEIR (1-06)

Source: Earth Tech, 10/05



02279.02 FER (1-06)

Source: Earth Tech, 10/05

the BART overpass of the Centerville Line than the design in the DEIR and would not require acquisition of any right of way from the Riverwalk Homeowners Association. Additionally, the existing sound wall and landscaping at the southeastern boundary of the Riverwalk subdivision would not be affected by the revised Shinn connection and would therefore not need to be replaced.

The redesigned Shinn connection would require acquisition of the Von Euw Trucking Company and a portion of the Alameda County Department of Public Works corporation yard and would also require relocating an ACWD water main in the vicinity of the BART overpass. The above ground portion of the water line under the BART structure needs to be placed underground with a proper depth of cover under the railroad tracks. The new track alignment will require a new soil tied back retaining wall and the removal of the existing BART embankment down to the existing UPRR track level subgrade. The new track will be at the same elevation as the existing UPRR track under the BART Bridge (see Figures 2-5 and 2-7) Construction of the new wall and track will not require dewatering. These activities would not have any new or more severe impacts than described in the DEIR and PRDEIR. The agency responsible for constructing the Shinn connection will coordinate construction timing so as to meet ACWD permitting requirements and minimize impacts of the Shinn connection on ACWD property and facilities.

The area between the Centerville Line and the Oakland subdivision east of the BART tracks is identified by the City of Fremont as a housing opportunity site. The area is currently in industrial use and contains active rail lines. Conversion to residential use would require changes to general plan land use and zoning designations. In comment on the EIR, the owner of the tracks, UPRR, objected to any potential partial acquisition of the Oakland subdivision. The proposed realignment of the Shinn connection would be consistent with current industrial and rail uses and was recommended by the City of Fremont as an alternative to the existing design as a way to reduce potential impacts on the Riverwalk neighborhood, the rail line is inconsistent with the designation of the area as a housing opportunity site.

Both sets of tracks in the redesigned Shinn connection would have a tighter curve than the design in the DEIR and would therefore have a higher likelihood of generating noise from wheel squeal. With the redesigned Shinn connection, the BART berm and the existing sound wall on the southeast boundary of the Riverwalk subdivision would shield the neighborhood from wheel squeal and, therefore, DEIR Mitigation Measure NV-1, Replace Existing Sound Wall in the Riverwalk Subdivision along the New Shinn Connection, is no longer required to mitigate noise from wheel squeal. Please see PRDEIR for a detailed discussion of noise impacts and mitigation measures related to the redesigned Shinn connection.

PD-4: Freight Rail Traffic

Several comments expressed concern that the Proposed Project would result in changes in freight rail traffic.

The Proposed Project would not affect freight rail traffic and would not directly or indirectly increase or decrease freight rail traffic on project area rail lines. Freight rail traffic is not regularly scheduled and is routed at the discretion of the freight rail companies, not by the Proposed Project. The Proposed Project would reduce passenger rail traffic on the Niles subdivision and Centerville Line between Industrial Parkway in Hayward and the proposed Shinn Connection in Fremont, however, due to capacity constraints elsewhere on the Niles subdivision, this would not increase capacity for freight rail traffic on that line. Another future rail project such as the DRC could include elements that would facilitate changes in freight rail, but at this time, those changes are speculative and are therefore not considered in the impact analysis in the DEIR.

Air Quality (AQ)

AQ-1: Diesel Health Risk Assessment

Several comments expressed concern about the potential health risks associated with diesel toxic air contaminants (TAC) that were identified in the DEIR. The health risk assessment in the DEIR was prepared using the best available knowledge of the project at the time it was prepared. In response to the concerns raised in comment on the DEIR, the health risk assessment was reaccomplished using more current information regarding potential rail operations for Capitol Corridor and DRC.

Based on input from Capitol Corridor and the DRC, the updated analysis included the following assumptions:

- 32 Capitol Corridor trains (16 roundtrips) operating daily
- 12 DRC train trips (6 roundtrips) daily. Due to limitations in the model used for the analysis, the model included DRC traffic on weekends; however, DRC is a commuter rail and would likely not operate on weekends.
- 12 trips to and from the layover yard daily for DRC, leaving between 5:30 and 9:00 a.m. and returning between 6:00 and 10:00 p.m.)
- Existing Capitol Corridor trains currently meet EPA Tier 2 standards for diesel locomotives and would meet EPA Tier 3 standards by 2010.
- All new locomotives for Capitol Corridor and DRC would meet EPA Tier 3 standards.

The health risk assessment was reaccomplished using the assumptions noted above and the methodology described on Page 3.2-13 of the DEIR. The proposed significance threshold of 10 in 1 million is based on the Bay Area Air Quality Management District's Risk Management Policy. A project is acceptable by the BAAQMD if the annual emissions associated with the project would result in an incremental cancer risk greater than one in a million and equal to or less than ten in a million, were the exposure to continue for 70 years. (http://www.baaqmd.gov/pmt/air_toxics/risk_procedures_policies/management_policy.htm)

The results of the recalculation show that the project would result in an increased health risk of 5 in one million, which is less than the BAAQMD's significance threshold of 10 in one million. The risk calculation is based on air quality modeling that includes five year's worth of hourly wind speed and direction data for the project area.

Some comments inquired about health risks from ingesting diesel TAC that has accumulated on garden produce. The methodology for calculating health risk is explained above and on Page 3.2-13 of the DEIR, which further explains that the greatest health risk from diesel TAC is from inhalation. If health risk from inhalation is found to be less than significant, risk from other pathways, such as ingestion, would also be less than significant. Impact AIR-4 on DEIR Page 3.2-15 identifies diesel exhaust impacts as less than significant because modeled concentrations were below the BAAQMD established threshold. The recalculated risk of 5 in 1 million was even lower than the risk described in the DEIR, thus, the inhalation risk remains less than significant.

One commenter opined that particulate matter monitoring stations be installed in residential neighborhoods of the Proposed Project. At this time, no such monitoring is proposed as part of this project. However, there is a monitoring station in Fremont that monitors for PM10. The Fremont PM10 monitor can be used to assess PM10 concentrations before and after the project. However, monitoring stations estimate concentrations in the ambient air and cannot be used to identify the sources of the air pollutants. Consequently, even if PM10 monitors were set up in the rail project neighborhoods, those monitors could not be used to evaluate how much of the monitored concentrations were from train emissions versus from other sources of air pollution.

One commenter requested that all trains use ultra low sulfur diesel fuel. The U.S. EPA has adopted a comprehensive national program to reduce emissions from future non-road diesel engines by integrating engine and fuel controls as a system to gain the greatest emission reductions (EPA Tier 3 standards). To meet these emission standards, engine manufacturers will produce new engines with advanced emission-control technologies similar to those already expected for highway trucks and buses. Exhaust emissions from these engines will decrease by more than 90 percent. Because the emission-control devices can be damaged by sulfur, EPA is also adopting a limit to decrease the allowable level of sulfur in non-road diesel fuel by more than 99 percent. These reductions in NOx and PM emissions from non-road diesel engines will provide enormous public health

benefits. Based on information provided by Capitol Corridor and DRC, all of their passenger trains will meet the EPA Tier 3 standard by 2010.

One commenter also suggested that diesel oxidation catalysts and diesel particulate filters be used for locomotives. The use of diesel particulate filters is being evaluated for use in California; however, it is still an experimental technology for locomotives.

One comment suggests rewording the discussion of diesel emissions to state that diesel emissions would increase in some areas and decrease in others relative to the no project scenario. The commenter is referred the discussion of impact AQ-4 on Page 3.2-15 of the DEIR where it states that the Proposed Project would move emissions closer to residential receptors along the Oakland Subdivision, increasing the cancer risk at those locations, while decreasing the cancer risk at locations near the Niles alignment. A greater number of homes are situated near the Niles alignment, so the project, while increasing the cancer risk at some homes, would decrease the cancer risk at a greater number of homes. As noted above, the impact is less than significant.

AQ-2: Construction Emissions

A few comments were received regarding the methodology used to evaluate the project's construction emission impacts. Impact Air-1 on DEIR Page 3.2-14 identifies potential construction impacts as significant and identifies Mitigation Measure Air-1 to reduce the impact to less than significant. The BAAQMD has developed a list of construction-related mitigation measures designed to minimize emissions from construction activities. Those measures are required in lieu of estimating emissions for construction projects. The BAAQMD's measures have been incorporated into the mitigation measures for this project. See Mitigation Measure Air-1 and Table 3.2-3 in the DEIR. That list of construction measures include basic, enhanced, and optional control measures to limit emissions. The project applicant will be required to use all of these construction measures – basic, enhanced, and optional – to mitigate the impacts of the project. Although construction emissions could be calculated for the project, it would be a fruitless exercise because the BAAQMD has not established any construction-related significance thresholds against which emissions can be compared.

The BAAQMD's construction mitigation measures are designed to limit the generation of dust. Emissions of other pollutants such as ozone precursors that are emitted from construction equipment are already accounted for by the BAAQMD in their emission inventories. The linear aspect of this project also will limit emissions because the location of construction and associated emissions will vary each day as construction progresses.

Alternatives

ALT-1: Niles Subdivision Passenger Rail Station Alternative

Several comments stated that the range of alternatives studied in the DEIR should have included an alternative location for the passenger rail station along the Niles Subdivision.

The process of reviewing alternative locations for the passenger rail station included participants from several regional transit agencies and neighboring jurisdictions. The possibility of locating the passenger rail station on the Niles Subdivision was analyzed in the *Union City Capitol Corridor Rail Station Study, Phase 1 Options Analysis* report prepared for the City of Union City by Earth Tech, Inc., in December 2002 (Earth Tech, Inc. 2002), which is available for review at the Union City Economic and Community Development Department, 34009 Alvarado-Niles Road, Union City.

The goal of the study was to determine the preferred passenger station location in Union City. Two options were reviewed for the station location. Option 1 was to locate the passenger rail station on the UPRR Niles Subdivision, the existing Capitol Corridor route that is located approximately 800–1000 feet east of the Union City BART station. Option 2 was to locate the passenger rail station directly adjacent to the BART station on the UPRR Oakland Subdivision, the former WPRR alignment. The passenger rail station would serve Capitol Corridor and could also accommodate other potential rail providers including, the Dumbarton Rail service and potentially the California High Speed Rail Service.

The report recommended selection of Option 2 as the preferred passenger rail station location option. This recommended option was the basis to proceed forward into preliminary engineering and for the future application to the CCJPA for a passenger rail station stop in the City of Union City.

The primary basis for the recommendation on Option 2 was as follows:

- Provides the greatest degree of passenger access to BART and the passenger rail station
- Higher patronage forecast
- Provides for an new east entrance to BART
- Allows a direct connection with a common concourse between BART and the passenger rail station
- Allows the pedestrian grade separation to function without stairs and minimal ramps, thereby creating a safer and more accessible connection between the BART property and the former PG&E property
- Direct connection to the bus transfer facility on the west side of BART

- Saves time for the Capitol Corridor operation even with the new stop in Union City
- Requires less additional ROW acquisition in the Station area, thereby increasing transit-oriented development opportunities
- Lower capital costs
- Less interference with UPRR freight operations.

Additionally, the City commissioned a screening-level analysis to determine the potential environmental impacts of the two options under consideration for the passenger rail station and corridors. This information was used to help determine which option should be selected. Primary environmental issues addressed in the analysis include the following.

- Noise and vibration
- Biological resources
- Visual resources
- Land use planning
- Water quality and flooding
- Cultural resources
- Hazardous materials

The full report is available as a separate document. It is entitled: *Environmental Constraints Analysis for Union City Capitol Corridor Rail Station Study for Phase 1 Options Analysis*, and was prepared by Jones & Stokes, dated July 25, 2002. The report is available for review at the Union City Economic and Community Development Department, 34009 Alvarado-Niles Road, Union City. The report found few differences in the environmental impacts of the two alignments except in the area of noise and vibration. The report stated that “Alignment Option 2 represents the best option in regards to minimizing impacts to sensitive land uses; sensitive land uses are located farther from the Option 2 alignment than from the Option 1 alignment, and fewer overall sensitive land uses are present in the vicinity of the Option 2 alignment, as compared with Option 1.”

Based on the findings in the Earth Tech report and the environmental constraints analysis, Option 1, the Niles subdivision location for the passenger rail station, was removed from further consideration.