

City of Ramsey
Agenda
Public Works Committee
Tuesday July 16, 2013
6:00 pm
Lake Itasca Room, 7550 Sunwood Drive NW

1. **Call to Order**
2. **Citizen Input**
3. **Approve Agenda**
4. **Approve Minutes**
 1. Approve June 18, 2013 meeting minutes.
5. **Committee Business**
 1. Consideration of Permitting Fence Encroachments across Private Property Lines
 2. Consider Partial Vacation of Drainage and Utility Easement at 15069 Helium Street NW
 3. Approve Plans and Specifications, and Joint Powers Agreement for the Mississippi River Trail
 4. Cost Estimate for Pedestrian Crosswalk at Alpine Dr and Zirconium St
 5. Recommend Shelter and Restroom for Riverdale Park – 2013 Capital Improvement
6. **Committee/Staff Input**
 1. Discuss Request to Mow Portions of an Undeveloped Park - Shawn Acres
7. **Adjournment**

Public Works Committee

4. 1.

Meeting Date: 07/16/2013

Submitted For: Grant Riemer

By: MaryJo Warner, Engineering/Public Works

Title:

Approve June 18, 2013 meeting minutes.

Background:

The meeting minutes are attached for Committee review and approval.

Notification:

Observations/Alternatives:

Funding Source:

n/a

Staff Recommendation:

Action:

Motion to approve Public Works Committee meeting minutes dated June 18, 2013.

Attachments

Minutes

Form Review

Inbox	Reviewed By	Date
Bruce Westby	MaryJo Warner	07/10/2013 02:18 PM
Mary Jo Warner (Originator)	MaryJo Warner	07/10/2013 02:22 PM
Bruce Westby	Bruce Westby	07/11/2013 01:13 PM
Grant Riemer	Grant Riemer	07/11/2013 01:54 PM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:42 PM
Form Started By: MaryJo Warner		Started On: 07/10/2013 08:37 AM
	Final Approval Date: 07/11/2013	

**PUBLIC WORKS COMMITTEE
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA**

The Public Works Committee conducted a regular meeting on Tuesday, June 18, 2013 at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Chairperson Randy Backous
 Councilmember Mark Kuzma
 Councilmember Chris Riley

Also Present: City Administrator Kurtis Ulrich
 Public Works Superintendent Grant Riemer
 City Engineer Bruce Westby

1. CALL TO ORDER

Chairperson Backous called the regular meeting of the Public Works Committee to order at 6:04 p.m.

2. CITIZEN INPUT

There was none.

3. APPROVE AGENDA

Motion by Councilmember Riley, seconded by Councilmember Kuzma, to approve the agenda, as presented.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Riley and Kuzma. Voting No: None.

4. APPROVE MINUTES

4.01: Approve May 21, 2013, Meeting Minutes

Motion by Councilmember Kuzma, seconded by Councilmember Riley, to approve the following minutes:

Regular Meeting Minutes dated May 21, 2013

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

5. COMMITTEE BUSINESS

5.01: Consider Stop Sign Request for 3-Way Stop at Tiger Street and 171st Avenue

Public Works Superintendent Riemer reviewed the staff report and resident petition requesting a three-way stop sign at Tiger Street and 171st Avenue. He reviewed the guidelines followed for stop sign installation and existing conditions, noting the speed limit had been reduced to 30 mph based on resident request. Public Works Superintendent Riemer stated the speed trailer was used at this location today and tracked 319 vehicles with an average speed of 29.35 mph, one minimum speed of 11 mph, and one maximum speed of 46 mph. He presented staff's recommendation to not install the requested three-way stop sign at Tiger Street and 171st Avenue due to low traffic volumes and above average sight distances at the intersection.

Chairperson Backous invited the public to make comment.

Jim Iler, 17110 Tiger Street, stated their main objective is to control the traffic and not necessarily a stop sign. He felt that traffic slowed when a speed trailer was in use so it was not a good indicator of typical traffic speed. In addition, it was used for only a short period of time today. Mr. Iler stated most traffic follows the rules but sometimes it is like a drag strip with speeding vehicles so he is concerned about the safety of his two children. He stated the neighborhood would like the 30 mph speed limit on Tiger Street enforced.

Public Works Superintendent Riemer explained that a stop sign is not used to control speed and studies have shown that if the stop sign is not warranted, drivers will ignore that traffic control so it adds more danger.

Larry Murney, 17211 Tiger Street, stated traffic does not obey the existing stop sign now. He felt the traffic report information was not complete as there had been a rollover with fatality a few years ago. At that time, the speed limit had been 50 mph and 55 mph and then the neighbors got it down to 30 mph. He stated it is a drag strip used by kids at 70 mph so something needs to be done.

Jessie Iler, 17110 Tiger Street, agreed that cars fly by and drivers use no common sense. She felt a stop sign or speed bump would require the drivers to slow down. She is also concerned with children having to cross to a school bus stop.

Mr. Murney stated in the past a Police Officer stopped speeding motorcycles and let the cars go by.

Chairperson Backous stated the Police Department enforces the speed limit and the City Council can ask the Police Chief how often they are in that area.

Mr. Iler stated he has not seen them ticketing traffic and since speeders are not there all the time, it may be difficult to catch them. He stated if they had lived next to a freeway they would acknowledge that but this is to be a 30 mph roadway.

Ms. Iler stated she does not want something to happen and noted this is no longer a County road.

Councilmember Riley stated there are rules in place that are not being enforced so instead of a stop sign that does not meet criteria, the City needs to address how to enforce the current speed limit through a combination of a speed sign and Police enforcement.

Mr. Iler asked about speed bumps.

Chairperson Backous stated they often cause drivers to speed up rather than slow down.

Public Works Superintendent Riemer agreed and stated the City has used them in the past and found they are not effective.

Councilmember Kuzma supported asking the Police Department to increase enforcement and to study the situation to determine if anything else can be done.

Mr. Iler stated it is used as a shortcut road by the neighborhood to the north.

Chairman Backous stated it may then be the same people causing the concern. He suggested determining the options that can be used, noting it would be prudent and cost effective to take the first step of enforcing the speed limit. Chairman Backous stated if the offenders are tagged, it may resolve the issue and then it can be followed up with monitoring. If the problem remains, other options should be considered.

Councilmember Riley agreed and stated he would like to hear back from the neighborhood whether it is effective.

Chairperson Backous stated it is his personal preference that residential neighborhoods have 15-20 mph roadways but that is not an option so he would support asking the Police Department to focus enforcement in this neighborhood.

City Administrator Ulrich stated he will inform the Police Chief of this request and, hopefully, the offenders can be ticketed and deterred.

Jeff Geldert, 14044 Dysprosium Street, stated from Thurston to Dysprosium it goes from 40 mph to 30 mph but when a Police car is parked in that area, traffic slows and then speeds again once the Police car is gone. He suggested using an unmarked Police vehicle.

City Administrator Ulrich stated if the goal is used to slow traffic, the City Engineer can address traffic calming options such as a curb bump out, colored concrete/asphalt, narrowing the roadway, or mid-block roundabout. He stated there are other solutions that could be vetted to determine if any are viable.

Chairperson Backous stated in Coon Rapids they addressed speeding traffic by installing two stop signs at "T" intersections and in that case, it worked. But, in this case, he supported taking a

first step of having Police Officers enforce the speed limit. He thanked the residents for bringing forward this concern to the Council so it can be rectified.

Motion by Councilmember Kuzma, seconded by Councilmember Riley, to recommend that the City Council not install the requested three-way stop sign at Tiger Street and 171st Avenue due to low traffic volumes and above average sight distances at the intersection and direct the Police Department to increase enforcement for three months followed by three months of monitoring, such as the speed trailer.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

5.02: Consider Improvements to Crosswalk at Armstrong Boulevard and 161st Avenue

Public Works Superintendent Riemer reviewed the staff report and recommendation to extend the crosswalk on the west side and connect it to 161st Avenue. He stated a resident in the area asked the City to install solar powered flashing lights to the crosswalk that could be activated by pedestrians to warn them that the crosswalk was being actively used. Public Works Superintendent Riemer stated these systems are effective but cost \$3,000 to \$5,000 per location. In addition, this is a County maintained crosswalk so it would be their decision whether or not to invest in the lighting system.

Councilmember Kuzma asked about the funding source.

Public Works Superintendent Riemer stated the funding for the additional paving and culvert extension would be from the General Fund Budget, Cost Center 0311, and possible signage improvements could be covered by Anoka County Highway or General Fund Budget, Cost Center 0260. It was noted that staff recommends working with Anoka County to extend the pavement and culvert on the west side of Armstrong Boulevard to provide a paved surface for pedestrians to use and to leave the current crosswalk signage in place based on the low volume usage of the crosswalk on an average day.

Councilmember Riley noted that again with this case, there are rules in place and the issue is one of enforcement. He suggested a *Ramsey Resident* article reminding drivers of the need to yield for pedestrians and to ask Anoka County if the trail can be extended into its right-of-way. Councilmember Riley noted a flashing light would draw the driver's attention.

Chairperson Backous stated a *Ramsey Resident* article will not educate drivers from outside Ramsey. He stated he visited the area and found traffic was driving very fast. He noted Alpine Park has the same situation of cutting off residents from access and residents on the west side of Armstrong Boulevard should also be concerned with crossing, especially with children. Chairperson Backous agreed that a flashing light will get driver's attention and asked about funding.

Public Works Superintendent Riemer stated the recommended fund is budgeted \$24,000 at the beginning of the year and used for all signage.

Chairperson Backous agreed the culvert needs to be extended because the crosswalk goes towards the ditch and pedestrians cannot get to the safety sign on the other side to access the light. He advocated for approaching Anoka County to fund the flashing lights.

Motion by Chairperson Backous, seconded by Councilmember Kuzma, to recommend that the City Council direct staff to work with Anoka County to extend the pavement and culvert on the west side of Armstrong Boulevard to provide a paved surface for pedestrians to use and pay for flashing lights, and to place an educational article in the *Ramsey Resident* reminding drivers of the need to yield for pedestrians.

Further discussion: Patrick Surma, 161st Avenue, thanked staff for placing additional pedestrian signs and Chairperson Backous for visiting the site to see the issue. He stated he thinks the traffic is traveling faster than 55 mph and that drivers have exhibited they do not care. Mr. Surma stated his fear that there will be a fatality if something is not done and described accidents that had already occurred. He presented pedestrian fatality statistics and stated he does not want to ever again see a child die.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

5.03: Consider Request to Construct Retaining Wall in Drainage & Utility Easement

City Engineer Westby reviewed the staff report and presented the request of property owners at 15069 Helium Street NW to construct a modular block retaining wall along their east side lot line within the public drainage and utility easement. The residents believe their side yard has settled over time, resulting in a steeper side slope that is more difficult to maintain and provides less support for their home's foundation walls. City Engineer Westby described the current conditions that have resulted in soil erosion and ordinance prohibitions against constructing permanent structures (i.e., retaining walls) within such easements. He stated staff recommends the property owner's request be denied and to establish new turf on the site that will take root to prevent erosion. It was noted similar requests in the past have always been denied.

Councilmember Riley asked if it is the case that the resident thinks the retaining wall is on their property line; however, it is actually in a City easement where building a retaining wall is prohibited.

City Engineer Westby stated staff offered another option to relocate the retaining wall closer to the home, within five feet, and at the property line so it does not infringe on the City's right-of-way. However, in that location the retaining wall would need to be taller. He stated there are currently no utilities in this easement but the property to the east includes a stormwater holding basin and it could develop. If that occurred, private utilities could be installed through this easement

Chairperson Backous asked about the option of selling a five-foot easement strip to the property owner so the retaining wall would not have to be so high.

City Engineer Westby stated the existing wall would then have to be moved about five feet towards the house and would not have to be as tall as if located at the property line.

Chairperson Backous stated selling five feet of the easement may not impact the City, especially if the abutting property has a large stormwater pond.

City Engineer Westby agreed it should not cause an issue.

Councilmember Riley asked if the intent is to build a better retaining wall.

City Engineer Westby stated staff did explain how to construct a structural retaining wall.

Chairperson Backous suggested staff determine the cost for selling a five-foot easement strip so the property owner can determine if it is economically feasible. He noted that is an option that has not yet been explored and offers an option other than denying the request.

Councilmember Riley asked if staff had explained the need to establish sod to eliminate erosion.

City Engineer Westby answered in the affirmative. He stated staff will determine a cost and schedule this case for consideration at a future Public Works Committee meeting.

5.04: Review Condition of Dysprosium Street Boulevard and Future Maintenance Requirements

Public Works Superintendent Riemer reviewed the staff report and described the turf restoration that took place following the Dysprosium Street reconstruction. It was noted that while the sod was healthy in the spring of 2012, it started to decline over the summer months due to lack of rain and hot weather. The current price is \$1.35 per square yard plus delivery costs (approximately \$4,000); however, staff recommends replacement of sod between the curb and sidewalk only if an agreement can be reached with residents that they will maintain the sod once it is established.

Jeff Geldert, 14044 Dysprosium Street, stated he was unemployed when the sod was installed and does not think they used quality topsoil. He stated he had to unroll the sod and lay down two inches of black dirt over the sand and glass along with grass seed because the sod strips were not tightly laid. Mr. Geldert felt the problem was that good black top soil was not used.

Chairperson Backous stated the City had another project with this same problem because the black dirt was of poor quality containing rocks and glass. Because of that, the City changed its policy to address the quality of black dirt that is used on projects.

Darin Rorman, 14020 Dysprosium Street, stated the contractor did no prep work and laid the sod down over the sand, his flowerbed, and existing grass. Because of this, the sod had to be watered constantly. In addition, snow and salt is pushed onto the boulevard, making the sidewalk unpassable.

Chairperson Backous asked whether some of the sod damage from the sidewalk to the curb has been caused by road salt.

Public Works Superintendent Riemer agreed it caused some of the sod damage.

Mr. Rorman stated the V-Plow comes through after a couple days but it is after salt has been applied.

Councilmember Riley asked who owns the section between the sidewalk and street.

Public Works Superintendent Riemer stated it is City easement but the City does not mow that grass. He explained boulevards are maintained and mowed by the abutting resident. In addition, 26 trees are being replaced as they are dying and under warranty.

Mr. Rorman stated two of his trees were removed and replaced but both are very sickly with dead branches and not marked for replacement.

Chairperson Backous stated if two trees were removed, then the replacement trees should be under warranty and replaced at the same time. He stated concern that some residents indicated they have contacted staff numerous times but received no response. Chairperson Backous asked if the new tracking system would show whether that had occurred.

Public Works Superintendent Riemer stated the new tracking system was installed after this project.

Chairperson Backous stated he wants the City to always be responsive to resident's calls, questions, and concerns.

Mr. Rorman asked who will pay for the replacement of sod.

Chairperson Backous stated it will be paid by the residents of Ramsey.

Councilmember Riley noted the trees are covered under warranty so the contractor would pay for those costs.

Chairperson Backous stated there are waist-high boulevard weeds in this area and residents need to understand that the boulevard between the sidewalk and curb is the responsibility of the abutting resident. He noted that some resident's yards in this project area have plush and green grass and the contractor had used the same type of poor quality black dirt on those lots.

Mr. Rorman agreed that some yards have green grass and described the work he has done on his yard to kill the weeds.

Chairperson Backous stated the resident with the plush green grass may have been constantly watering and he agreed there is a problem with sod on other properties. He stated the sod may

not have taken the way it should have but he would not categorize this as a failed project. Chairperson Backous stated if the City pays to replace this sod, there has to be an agreement with residents to mow, weed, and water the sod and trees all the way to the curb. If not, this same problem will occur.

Mr. Rorman stated Anoka County has indicated their policy is to not place sod unless a sprinkling system is in place. Instead, Anoka County uses seed.

Chairperson Backous noted it takes more attention and watering to establish grass seed.

Mr. Rorman stated Century Link dug up the back area and that also needs to be sodded.

Chairperson Backous asked staff to also include that area.

Councilmember Riley stated there is consensus to put down black dirt and resod and he agreed with the need for residents to be responsible for watering it.

Chairperson Backous agreed and asked how the City can ensure that occurs.

Councilmember Riley suggested sending out a flyer to encourage residents to maintain the sod.

Chairperson Backous asked if the sod froze after being installed and could be under warranty.

Public Works Superintendent Riemer assured the Committee that the warranty on this sod has expired.

Mr. Geldert stated another issue that made it difficult was the watering ban.

Chairperson Backous noted a timer can be used to water during times that are not banned and new sod is exempt from that restriction. He asked if a letter could be sent to residents indicating the sod needs to be maintained or will be at their expense going forward.

Public Works Superintendent Riemer stated the recommendation was to replace sod between the sidewalk and curb.

Chairperson Backous felt there was a larger problem than that area, noting many yards have poor turf ten feet into their yard. He suggested replacement from the project line to the curb.

Public Works Superintendent Riemer noted it takes about 30 days to establish sod and asked if the City's watering truck should be used during that time to assure the sod is established, estimating it would cost \$3,000 if it did not rain. He stated this is expensive for the City and the reason that residents need to take ownership to maintain their yards.

Motion by Councilmember Kuzma, seconded by Councilmember Riley, to recommend that the City Council approve replacement of sod between the original project line and curb, to have the City water the sod for the first 30 days, to send a letter to residents asking for their help to

maintain the sod and advising residents that new sod is exempt from the watering ban, and to use funding from the Street Maintenance Fund.

Further discussion: Public Works Superintendent Riemer reviewed the process for tree replacement. Chairperson Backous thanked residents for bringing this issue forward, participating in the discussion, and encouraged them to not hesitate to call City staff or Councilmembers if a problem occurs so it is properly addressed.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

In consideration of audience members, the Public Works Committee agreed to next consider Case 5.06.

5.06: Consider Request for Use of Veterans Drive Right-of-Way Adjacent to 7700 Sunwood Drive for Outdoor Dog Area: Case of Residence at The COR

Public Works Superintendent Riemer reviewed the staff report and request from Residence at The COR to use the right-of-way boulevard area on the south side of Veterans Drive as an outdoor dog area for tenant's pets. Pet owners would be required to immediately remove pet waste and Residence at The COR would be responsible for constructing and maintaining the area. He noted the applicant has submitted a sketch drawing of the proposed improvements to landscaping. Public Works Superintendent Riemer stated if approved, a maintenance agreement would be recorded on Residence at The COR parcel to document specific maintenance obligations and process for City removal as necessary for maintenance, repair, or other improvements in the event of non-maintenance on the part of Residence at The COR. He presented three alternatives: Alternate 1 – Recommend the City Council approve the request subject to a maintenance agreement; Alternate 2 – Recommend the City Council approve the request on the north side of Sunwood Drive (Municipal Plaza); or, Alternate 3 – Recommend the City Council deny the request. Public Works Superintendent Riemer stated staff does not recommend Alternate 2 as the design and future construction of this area is undetermined and would be impacted by future construction. It was noted if the request is denied, residents would need to utilize other public land pursuant to current law or the private areas on site such as the center courtyard.

Motion by Councilmember Kuzma, seconded by Councilmember Riley, to recommend that the City Council approve use of a pet area on the south side of Veterans Drive for Residence at The COR subject to the owner making improvements, executing a Use and Maintenance Agreement, and securing the necessary right-of-way permit.

Further discussion: Jessica Fimon, Residents of The COR Property Manager, provided a picture of the trashcan that has been purchased to be placed across the street. She stated it would be picked up every day and she would like this approved so utilities can be located and the trashcan installed.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

5.05: Review of Updated Costs for Reconstructing Andrie Street

City Engineer Westby reviewed the staff report, past consideration that resulted in not furthering the Andrie Street reconstruction, and renewed interest on the part of numerous area residents to reconstruct Andrie Street and 165th Lane but not to construct sidewalks. He explained that since plans and specifications were completed for this project in 2008, it could be moved forward quickly should the City Council so desire, unless assessments are to be used to fund part of the improvement. If that is the City Council's desire, the corresponding public process per State Statute 429 would need to be followed. It was noted that since 2008, a petition has not been received requesting improvements. City Engineer Westby presented three alternatives: Alternate 1 – Recommend the City Council direct staff to update the 2008 feasibility report based on the original 2008 street reconstruction design (excluding sidewalks); Alternate 2 – Recommend the City Council direct staff to revise the 2008 feasibility report to reflect the inclusion of on-road bicycle lanes, in place of sidewalks; or, Alternate 3 – Motion for other recommendation or to do nothing. He advised that the City's MSA account has been depleted and other funds are earmarked for the Riverdale project. City Engineer Westby stated if the City Council supports Alternatives 1 or 2, no funding would be committed at this time and the funding analysis can then be completed prior to finalizing the feasibility report updates.

Chairperson Backous asked if MSA could be used to fund part of Andrie Street.

City Engineer Westby explained the MSA formula used to determine funding, usually about 50%, not including things like utilities. He stated staff is asking whether it should update the feasibility report, which would be needed whether or not assessments are considered. City Engineer Westby noted by the time the feasibility report is completed, staff will have funding options ready to present to the Council for consideration.

Chairperson Backous stated he wants it clear that these residents would not be responsible for the full cost because MSA funds have been used for other projects.

City Administrator Ulrich stated properties can only be assessed up to the benefit to the property so the City will have to contribute something and in addition, it is an MSA street. He noted this project is over one mile, a big project, and the City needs to be consistent.

Chairperson Backous noted there is also a substantial cost for waiting three to four years to complete this project.

Councilmember Kuzma stated from his discussion with Andrie residents, he does not think they would support sidewalks but would support a bike path as a good alternative.

Chairperson Backous agreed there is need for a bike path.

City Engineer Westby stated with assessments, the Statute 429 process requires the City to assess a minimum of 20%. He noted if the Council wants to consider an on-road bicycle lane, it could be bid as an alternate so the cost is determined.

Councilmember Riley stated all agree that sidewalks should not be included so it no longer needs to be discussed. He felt a good alternative has been determined and supported bidding the bike lane as an alternate bid. Councilmember Riley asked when MSA funds will again be available.

City Engineer Westby stated MSA funds are several years out for accruing a positive balance.

City Administrator Ulrich stated the City had put MSA funds towards the Riverdale Extension and Dysprosium Street projects. He suggested staff determine when a positive MSA balance will be realized.

Councilmember Riley agreed this road needs to be reconstructed so it only makes sense to get a feasibility report.

Chairperson Backous asked about the road standard.

City Engineer Westby stated a 9-ton design is required for an MSA roadway.

Motion by Chairperson Backous, seconded by Councilmember Kuzma, to recommend that the City Council direct staff to update the 2008 feasibility report to reflect the inclusion of on-road bicycle lanes in place of sidewalks.

Motion carried. Voting Yes: Chairperson Backous, Councilmembers Kuzma and Riley. Voting No: None.

5.06: Consider Request for Use of Veterans Drive Right-of-Way Adjacent to 7700 Sunwood Drive for Outdoor Dog Area: Case of Residence at The COR

This case was considered prior to Case 5.05.

6. COMMITTEE / STAFF INPUT

Public Works Superintendent Riemer provided an update on several projects the Public Works Department has completed to clear views of a pond and address drainage of a Highway 47 culvert.

Councilmember Kuzma asked about the impact of garbage trucks from multiple companies on City streets.

Public Works Superintendent Riemer stated a legally loaded garbage truck equals 10,000 passenger vehicles as far as wear on the road. He stated garbage truck traffic is very hard on the City's streets and especially along the road's edge where the layer of bituminous may be thinner.

Chairperson Backous stated this has been discussed in the past and involves a discussion of free market.

Councilmember Kuzma asked about seeking bids to assure a competitive rate.

Chairperson Backous asked if it can be considered by Council Wards so more companies can be involved and the free market still exists. He noted, however, that it then dictates to residents that they must buy from that one company.

Councilmember Riley stated he would not support dictating to residents the company they must purchase trash service from.

Chairperson Backous stated another issue on Dysprosium Street is that residents place garbage carts right in the area of traffic.

Public Works Superintendent Riemer stated you see more of that on the south end by the fourplex units and staff has addressed it with Waste Management. He stated it is also causes an issue with snow removal.

Chairperson Backous stated residents may not know that the carts can be placed on the curb instead of into the street.

City Administrator Ulrich suggested that be mentioned in the letter that will be sent to residents about maintenance of sod.

With regard to future road reconstruction estimates, City Engineer Westby stated staff has prepared 13 different roadway scenarios, Citywide, and assigned each to different street segments to narrow down reconstruction costs over a 30 year period. That presentation will be made to the City Council and include discussion of available funding vehicles.

Chairperson Backous asked if the Interim Engineer had mentioned there was a change in bonding requirement and assessing at least 20%.

City Administrator Ulrich advised there is a provision for a five-year capital bond if it is within a Five Year CIP to not require assessments but it does require a unanimous vote of the City Council and would result in increased taxes. However, it would be outside the City's levy limits. He noted there is a need for sustainable funding for road reconstruction.

Chairperson Backous felt the assessment process wasted the City's money and that roadways were the responsibility of the entire City.

7. ADJOURNMENT

Motion by Councilmember Kuzma, seconded by Councilmember Riley, to adjourn the Public Works Committee meeting.

Motion carried.

The regular meeting of the Public Works Committee adjourned at 7:47 p.m.

Respectfully submitted,

Grant Riemer
Public Works Superintendent

Drafted by Carla Wirth
TimeSaver Off Site Secretarial, Inc.

Public Works Committee

5. 1.

Meeting Date: 07/16/2013

By: Bruce Westby, Engineering/Public Works

Title:

Consideration of Permitting Fence Encroachments across Private Property Lines

Background:

As discussed during the Public Works Committee meeting on May 21st, City policy currently requires landowner's to install fences a foot or more inside their property line in areas where a potential infrastructure conflict exists. An example of this situation exists within the Ramsey Town Center 10th Addition where fence lines are staggered along rear property lines to avoid damaging an existing underground storm sewer system. While this policy was developed to protect City infrastructure, it has had the unintended consequence of creating remnant strips of land two or more feet in width between rear fence lines in which property owners are not able to easily maintain their properties resulting in blight and nuisance issues. Attached are photos depicting this. In an effort to avoid this problem, some property owners have asked if they can extend their side lot line fencing across their rear property line to connect to their neighbor's fence, thereby allowing them to share a common rear fence line with their neighbor to eliminate the remnant strips of property between fences.

Notification:

No notifications are required for this case.

Observations/Alternatives:

Extending fences across private property lines for the purpose of connecting to a neighbor's fence is a civil matter and the city should neither deny nor promote such actions. Any property owner seeking to connect to a neighbor's fence should first request permission from their neighbor, but even if permission is obtained verbally City staff would recommend that a written agreement be executed between the neighbors. Upon direction by the Public Works Committee, staff could work with the City Attorney to draft an agreement template for use by the public for such purposes.

Regarding adverse possession concerns, City staff would recommend adding language to our (building) fence permit to notify the applicant of potential ramifications between private property owners as related to adverse possession law. Minnesota Statute 508.03 is attached for reference.

Funding Source:

The only city funds that will be expended as a result of this case will be for the City Attorney to review the draft permit language discussed below. Any language that is to be added to the (building) fence permit can easily be added by City staff.

Staff Recommendation:

Staff supports a policy change allowing neighbors to extend fences across private property lines to connect to neighbor's fences, contingent on language being added to the (building) fence permit to ensure that:

1. City infrastructure will be protected during fence construction activities;
2. Access to City infrastructure will be maintained on an on-going basis;
3. Property owners will not lose property rights as related to adverse possession laws; and,
4. Property owners are reminded to obtain permission from neighbors via a written agreement.

Below is the respective draft language that staff recommends adding to the (Building) fence permit for each of the four (4) contingencies outlined above.

1. "The property owner to whom this permit is issued must contact Gopher State One Call (on-line or by calling 811) at least two business days before constructing their fence. All fence posts and other below-ground hardware must be hand-dug when digging within 2-feet either side of a marked underground utility."
2. "Continual access must be provided to all utilities throughout existing public drainage and utility (D&U) easements. Property owners on whose land the D&U easement exists will be responsible for all costs required to remove and replace the fencing as needed to provide access."
3. "By law, adverse possession may be claimed by property owners that maintain another person's property for a specified number of years. The permitted property owner must disclose this fact to any other private property owner whose land the fence will be installed on as a result of this permit. Any disagreement relating to the construction of the permitted fence on other private property must be settled as a civil matter. The City shall not be held liable for any resulting costs or legal ramifications resulting from the installation of the permitted fence."
4. "The City recommends that the owners of all real property on which the permitted fence will be constructed should enter into a written agreement clearly defining the rights and responsibilities of all parties prior to constructing the fence."

Action:

Motion to recommend a change in City policy allowing fences to be extended across property lines, contingent on the draft (building) fence permit language above being reviewed and approved by the City attorney and subsequently added to all (building) fence permits issued in the future.

Attachments

RTC10th Fence Pic1

RTC10th Fence Pic2

MS 508.03

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	07/11/2013 09:29 AM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:29 PM
Form Started By: Bruce Westby		Started On: 07/03/2013 09:36 AM
Final Approval Date: 07/11/2013		



NORTHSTAR FENCE
INC.
763-421-6150

CAUTION
CALL
603-888-8888
FOR THE FENCE
DEPARTMENT

NO OPEN FLAMES
OR
SMOKING



508.03 APPLICATION.

An application for registration may be made by any of the following persons:

(1) the person or persons who singly or collectively own the land; tenants in common shall join in the application;

(2) the person or persons who singly or collectively have the power of disposing of the land;

(3) infants and other persons under disability, by their guardian duly appointed by the proper court in this state;

(4) a corporation, by its proper officer, or by an agent duly authorized by the board of directors;

(5) any executor, administrator or personal representative duly appointed by the proper court in this state;

(6) a municipal corporation, by its mayor and city clerk, in the case of a city, after a resolution passed by its city council so directing, and by the county auditor and chair of the county board, in the case of a county, after a resolution passed by its county board so directing;

(7) any person may make application when, for at least 15 years, the land has been in the adverse possession of the applicant or those through whom the applicant claims title;

(8) a partnership by one or more of its general partners;

(9) the state of Minnesota, by the county auditor and chair of the county board of the county in which the land is located, at the direction of the county board of such county, in the case of lands forfeited to the state for taxes, and held by it in trust for its taxing districts, or otherwise.

This provision is in addition to all other laws by which the state may register the title to land.

History: (8249) *RL s 3372; 1905 c 305 s 3; 1909 c 110 s 1; 1939 c 100 s 1; 1941 c 378 s 1; 1977 c 21 s 1; 1983 c 92 s 1; 1986 c 444*

Public Works Committee

5. 2.

Meeting Date: 07/16/2013

By: Bruce Westby, Engineering/Public Works

Title:

Consider Partial Vacation of Drainage and Utility Easement at 15069 Helium Street NW

Background:

As was discussed at the June 18th Public Works Committee, the property owners at 15069 Helium Street NW requested to be allowed to construct a modular block retaining wall along their south side lot line within the public drainage and utility (D&U) easement as they believe their side yard has been settling over time, resulting in a steep side slope that is difficult to maintain and reducing support for their home's foundation walls. The property owners therefore feel that the settling of the side yard is putting their home in danger and believe a retaining wall is necessary to protect their homes foundation.

As was also discussed with the Public Works Committee, City staff met with the property owners on their property to review and discuss the issue this spring. Upon visiting the property it was apparent, as can be seen in the attached pictures, that the property owners had already purchased and placed dozens of retaining wall blocks on the ground's surface along the bottom of the side slope along their south lot line. Staff also observed that their sod was in poor condition and had never fully taken root and was therefore allowing water to run into the seams and between the partially-dead sod mat and underlying soil. Therefore, whenever it rains the underlying soils become saturated and the dead and/or dying sod mats simply slide on top of the underlying soils. Staff therefore believes this issue could have simply been resolved by removing the dead and decaying sod and establishing new turf, either seed or sod, and watering it adequately until it becomes firmly rooted, which would be aided by the fact that the property owner plans to install an underground irrigation system this summer.

When visiting the site staff also informed the property owners that the city does not allow retaining walls to be constructed within D&U easements as the walls can limit a neighbor's use of their property due to altering drainage patterns, grades and elevations. D&U easements also allow private properties to be served by private and public utilities, but when a retaining wall is constructed over existing utilities it can impact the ability of the utilities to quickly and cost-effectively access and/or maintain their facilities. Plus, if a new utility needs to be installed where a retaining wall exists within the easement, installation costs are often higher and the increased costs are then passed on to all users of that utility.

Following discussion of this case on June 18th, the Public Works Committee directed staff to research costs related to vacating 5-feet of the existing 10-foot D&U easement, thereby still providing a standard 5-foot D&U easement along the property line. Staff was also directed to discuss with the property owner which course of action, i.e. constructing a wall outside the D&U easement versus constructing a wall 5-feet off the property line and paying a small fee for the vacated easement area, would be preferable to them. Staff was then to bring all relevant information back to a subsequent Public Works Committee meeting for further discussion.

Notification:

No notification is required as a result of this case.

Observations/Alternatives:

Though staff had informed the property owners that a case would be presented to the Public Works Committee on June 18th, the property owners did not attend. Staff therefore sent an email to the property owners summarizing the direction of the Public Works Committee but a response was never received. Staff therefore visited the property a couple of weeks later, only to find that a retaining wall had already been constructed roughly 5-feet off the property line. The exact distance between the wall and property line has not been confirmed, nor has the wall been inspected as to its adequacy of construction. The property owners therefore never received formal approval from the City to construct the retaining wall within the existing public D&U easement.

When staff first met with the property owners they were clearly notified that staff does not have the authority to relax or waive allowable uses within city easements so a case would need to be presented to the Public Works Committee on June 18th to seek their recommendation. Again, the property owners were invited to attend the meeting to present their concerns and request in person. Then, based on the recommendations of the Public Works Committee, the request could be forwarded to the City Council on June 25th, along with the recommendation of the Public Works Committee.

Staff has identified the following alternative actions as related to this item:

1. Direct staff to meet the property owners on site to review the wall as constructed to confirm that it was constructed adequately and is located at least 5-feet off the property line. If staff finds that the wall was constructed adequately and is located at least 5-feet off the property line, direct staff to take no further action, in which event the city will retain a 10-foot D&U easement along the south property line.
2. Direct staff to meet the property owners on site to review the wall as constructed to confirm that it was constructed adequately, to measure the area of encroachment within the drainage and utility easement, and to discuss payment for the associated D&U easement using a price per square foot as approved by the Public Works Committee. If the property owners accept the proposed cost for purchasing the associated easement area, direct staff to request that the City Council authorize vacating the associated easement area and to accept payment from the property owners for the vacated easement.
3. Direct staff to work with the property owner to remove the wall as constructed. Then, following removal of the wall, either restore the side slope and turf or install a retaining wall outside the 10-foot D&U easement and grade and restore turf in the D&U easement area per staff's direction.
4. Take no further action.

Funding Source:

No funds are anticipated to be expended in relation to this item. If alternative action 2 is approved, the associated funds will be collected.

Staff Recommendation:

Staff recommends that alternative action #1 be approved by the Public Works Committee since the wall has already been constructed. No matter which action is approved, staff intends to provide a letter to the property owner summarizing the chain of events and the responsibilities associated with the actions taken.

Action:

The Public Works Committee is asked to approve alternative action #1 for reasons stated herein.

Attachments

15069 Helium Ret Wall Pix

Form Review

Inbox
Grant Riemer
Kurt Ulrich

Reviewed By
Grant Riemer
Kurt Ulrich

Date
07/11/2013 01:55 PM
07/11/2013 03:33 PM

Form Started By: Bruce Westby

Started On: 07/03/2013 12:36 PM

Final Approval Date: 07/11/2013

15069 HELIUM ST. NW - PWC 6/18/13



Public Works Committee

5.3.

Meeting Date: 07/16/2013

By: Mark Riverblood, Engineering/Public Works

Title:

Approve Plans and Specifications, and Joint Powers Agreement for the Mississippi River Trail

Background:

For many years, the City of Ramsey has been working other units of government to promote and secure funding for regional trails including the Mississippi River Trail (MRT). This case represents the culmination of much of this effort, coordination, and collaboration.

The purpose of the case is to approve both the Joint Powers Agreement (JPA) and the Plans and Specifications for the construction of the MRT between Mississippi West Regional Park in Ramsey, and Mississippi Community Park in Anoka.

In terms of the process, following the anticipated recommendation from the Public Works Committee, both the JPA and the Plans and Specs would be placed on City Council's consent agenda for July 23rd, 2013, so as to authorize the formal bid letting process. Sealed bids would due on August 6th, 2013; with Ramsey City Council approving the bids by Resolution (for that trail work to occur within Ramsey's jurisdiction) on August 13th. A more detailed calender of key dates is contained within the attachment entitled 'MRT Schedule'.

Project costs are best explained within the attachment 'Financial Summary'. The details of jurisdictional responsibility as well as future reimbursement from Anoka County to the cities of Anoka and Ramsey are reviewed in the JPA attachment as well.

Notification:

Observations/Alternatives:

Funding Source:

Funding for this trail will be apportioned as indicated in the Financial Summary and Joint Powers Agreement. Ramsey's share will be funded by the Park Trust Fund which has a present balance in excess of \$4 million dollars.

Ramsey's total costs are anticipated to be less than or equal to \$620,000, (construction, plus administration and engineering as well as contingency). This total will be reduced following reimbursement by Anoka County of \$153,000 (to Ramsey), bringing an amended total project cost to an estimated \$467,000 for the Mississippi River Trail.

Staff Recommendation:

Staff recommends approval of the Plans and Specs, and the JPA.

Action:

Motion to recommend City Council approval of the Plans and Specifications, and the Joint Powers Agreement for the Mississippi River Trail.

Attachments

MRT Schedule

Financial Summary

MRT - middle section

MRT - west section

MRT - east section

Joint Powers Agreement

MRT Plans and Specs

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	07/11/2013 08:43 AM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:37 PM
Form Started By: Mark Riverblood		Started On: 07/09/2013 01:40 PM
	Final Approval Date: 07/11/2013	

MISSISSIPPI RIVER TRAIL PROJECT SCHEDULE

General Timeline

June 21, 2013	Draft JPA sent to City of Ramsey and Anoka County
July 1, 2013	City of Anoka Council – Approves Plans and Specs, Authorizes ad for bid, sets bids date, approves JPA
July 10, 2013	Ad to Anoka County Union
July 11, 2013	Ad to Finance & Commerce
July 12, 2013	Ad Appears in Anoka County Union and Finance & Commerce
July 15, 2013	City of Anoka Council – Approves JPA
July 18, 2013	Lower Rum River WMO Approval
July 19, 2013	2 nd Appearance in Finance & Commerce
July 23, 2013	Ramsey City Council - Approves Plans and Specs, approves JPA
July 30, 2013	Pre-Bid Meeting (Anoka City Hall)
July 2013	Anoka County Board - Approves JPA (determine date)
August 6, 2013	Bids Received (City of Anoka City Hall, City Council Chambers 10:00AM)
August 9, 2013	MnDOT Concurrence with Bids
August 13, 2013	Ramsey City Council - Approves Bids
August 19, 2013	City of Anoka Council – Awards Construction Contract
September 3, 2013	Construction Begins
October 18, 2013	Milestone Date for Completion of Westerly Segment
September 30, 2014	Substantial Completion
June 30, 2015	Acceptance and Final Payment

April 30, 2013

MISSISSIPPI RIVER TRAIL PROJECT FINANCIAL SUMMARY

Total Project	\$1,374,000	
Anoka	\$754,000	(55%)
Ramsey	\$620,000	(45%)

COSTS

	Total	Anoka	Ramsey
Construction	\$946,000	\$519,000	\$427,000
10% Contingency	<u>\$95,000</u>	<u>\$52,000</u>	<u>\$43,000</u>
Subtotal	\$1,041,000	\$571,000	\$470,000
32% Administration	<u>\$333,000</u>	<u>\$183,000</u>	<u>\$150,000</u>
TOTAL ESTIMATED COST	\$1,374,000	\$754,000	\$620,000

FUNDING

	Total	Anoka	Ramsey
Federal Grant	\$440,000	\$242,000	\$198,000
Anoka County	\$340,000	\$187,000	\$153,000
City Funds	<u>\$594,000</u>	<u>\$325,000</u>	<u>\$269,000</u>
TOTAL ESTIMATED FUNDS	\$1,374,000	\$754,000	\$620,000

- Engineering/ Administration cost to be split 55%/45%
- Federal Grant and Anoka County funds to be split 55%/45%
- Anoka County funds will not be available until the County receives funding from the Metropolitan Council's Regional Park and Trail Grant Program. This is estimated to occur in 2016 or 2017.
- Costs based on "Project Cost and Financing Summary" document created by Bolton Menk dated March 29, 2013



LEGEND

- PROPOSED TRAIL
- EXISTING TRAIL
- PROPOSED STRIPED SHOULDER
- FLOOD PLAIN LIMITS
- WETLAND LIMITS
- CONSTRUCTION LIMITS
- BLUFF AREA
- VEGETATIVE BUFFER
- WETLANDS



BOLTON & MENK, INC.
 Consulting Engineers & Surveyors
 MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
 WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
 BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

CITY OF ANOKA, MINNESOTA
 KINGS ISLAND TRAIL PROJECT
 CENTRAL SEGMENT
 FEBRUARY, 2011

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WESTERLY
PROJECT LIMITS

CONSTRUCTION
LIMITS

PROPOSED TRAIL
(10' BITUMINOUS)

CONNECT TO
EXISTING TRAIL
SYSTEM

MISSISSIPPI WEST
REGIONAL PARK MASTER
PLAN CONCEPT (9/20/2010)

U.S. HIGHWAY 10

LEGEND

-  PROPOSED TRAIL
-  EXISTING TRAIL
-  PROPOSED STRIPED SHOULDER
-  FLOOD PLAIN LIMITS
-  WETLAND LIMITS
-  CONSTRUCTION LIMITS
-  BLUFF AREA
-  VEGETATIVE BUFFER
-  WETLANDS



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 WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
 BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

CITY OF ANOKA, MINNESOTA
 KINGS ISLAND TRAIL PROJECT
 WEST SEGMENT

FEBRUARY, 2011

FIGURE NO. 1



LEGEND	
	PROPOSED TRAIL
	EXISTING TRAIL
	PROPOSED STRIPED SHOULDER
	FLOOD PLAIN LIMITS
	WETLAND LIMITS
	CONSTRUCTION LIMITS
	BLUFF AREA
	VEGETATIVE BUFFER
	WETLANDS



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 WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
 BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

CITY OF ANOKA, MINNESOTA
 KINGS ISLAND TRAIL PROJECT
 EAST SEGMENT
 FEBRUARY, 2011
 FIGURE NO. 3

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 H:\ANOKA\15104941\C3D\15104941FIG-02.dwg 2/19/13 9:51 am

JOINT POWERS AGREEMENT
FOR CONSTRUCTION OF THE NATIONAL AND REGIONAL MISSISSIPPI RIVER
TRAIL FROM THE MISSISSIPPI COMMUNITY PARK TO MISSISSIPPI WEST
REGIONAL PARK (KING'S ISLAND)

This Joint Powers Agreement (JPA) is made and entered into this ____ day of _____, 2013, by and between the County of Anoka, a political subdivision of the State of Minnesota, 2100 Third Avenue North, Anoka, Minnesota, 55303, hereinafter referred to as "County," and the cities of Anoka and Ramsey, municipal corporations under the laws of the State of Minnesota, 2015 First Avenue North, Anoka, Minnesota 55303, and 7550 Sunwood Drive Northwest, Ramsey, Minnesota 55303, hereinafter referred to as the "City" or "Cities."

WITNESSETH

WHEREAS, access to parks, trails, and recreation areas, are essential to the quality of life, health and welfare of the Cities, the County, the region and the state's residents; and

WHEREAS, the landscape, natural resources and waters centered upon the Mississippi River are beautiful and inspiring to residents and tourists alike; and

WHEREAS, the Mississippi River Trail (MRT) is an existing and planned bicycle route that offers an opportunity for extraordinary adventure along the entire river from the Headwaters in Lake Itasca State Park in Minnesota to the Gulf of Mexico in Louisiana; and

WHEREAS, the MRT will generate additional economic activity within the trail corridor area businesses; and

WHEREAS, the Cities of Anoka and Ramsey have constructed and continue to maintain portions of the Metropolitan Council designated regional trail facilities ; and

WHEREAS, it is in each jurisdictions' interest to collaborate on regional trail facilities and continue to seek funding for shared trails for the benefit of local, County and Metropolitan area residents, and to attract tourists; and

WHEREAS, the Cities have acquired a Federal Transportation Grant of \$380,204 for construction of a trail connecting Mississippi Community Park in Anoka to Mississippi West Regional Park in Ramsey; and

WHEREAS, Minnesota Statute § 471.59 authorizes political subdivisions of the State to enter into joint powers agreements for the joint exercise of powers common to each.

NOW, THEREFORE, IT IS MUTUALLY STIPULATED AND AGREED AS FOLLOWS:

I. PURPOSE

The parties have joined together for the purpose of constructing a segment of the Mississippi River Trail connecting the Mississippi Community Park and the existing regional trail at the east end of Mississippi West Regional Park. Further it is the intent of this JPA to provide for the planning, engineering, and capital costs, as a match to the Federal Transportation grant necessary to complete the project.

II. METHODS

A. Preliminary Planning/Approval

The Cities in consultation with Anoka County, have selected a consultant to provide for the planning, engineering, and construction administration for this project.

The Cities shall manage the grant process through the Metropolitan Council's Transportation Enhancement's program including, grant administration and project documentation for the purpose of seeking reimbursement for each respective City.

B. Design

The Cities shall be responsible for all engineering and design services and to prepare plans and specifications for the Project. Neither the City of Anoka or Ramsey shall go out for bids until such time as the County has approved, in writing, the plans and specifications for the Project.

C. Bidding/Construction

The City of Anoka and/or Ramsey shall do the calling for all bids and the acceptance of all bid proposals and shall cause the construction of the Project in conformance with the approved plans and specifications. After receipt of all necessary governmental approvals, the Cities of Anoka and Ramsey shall cause the commencement of the Project's construction.

III. COST ALLOCATION

A. The total costs of the work, including engineering and construction contracts, shall constitute the "Actual Project Costs" and shall be so referred to herein. Actual Project Costs shall not include City or County staff time, overhead, or any other costs that are not specifically part of a contract for services that is pre-approved in writing by the County. "Estimated Costs" are good faith projections of the costs which will be incurred for this Project.

The Estimated Cost of the Project is \$1,374,100.

- B. The Actual Project Costs for this project, above the Federal Funding and Anoka County Contribution, will be split between the City of Anoka and City of Ramsey using a percentage split with 55% of said costs being assigned to the City of Anoka and 45% being assigned to the City of Ramsey. This cost split is based on the "Project Cost and Financing Summary document created by Bolton Menk dated March 29, 2013 and is summarized as Exhibit A of this document. These percentages were determined by assigning the estimated project cost east of the center of the westerly bridge to the City of Anoka and the estimated project cost west of the center of the westerly bridge to the City of Ramsey.
- C. The City of Anoka has been named the project manager of this project. As such, the City of Anoka will apply for the available Metropolitan Council federal Transportation Enhancement Grant funds, estimated to be \$440,100 and allocate said funds to the overall total project cost. Funding obligations not covered by the federal funds will be paid for by the City of Anoka. The City of Anoka will then invoice the City of Ramsey their funding obligation based on the percentages described in paragraph III. B.
- D. The County shall not be required to pay for any of the Actual Project Costs until such time as the County receives funding from the Metropolitan Council's Regional Park and Trail grant program.
- E. At the time the County receives funding from the Metropolitan Council's Regional Park and Trail grant program, the County agrees to reimburse the Cities for part of the Actual Project Costs in an amount not to exceed \$340,000 if the Actual Project Costs equal or exceed \$1,026,070. If the Actual Project Cost is less than \$1,026,070, the County agrees to reimburse the difference between the Actual Project Costs less the amount of \$686,070. In no case shall the County's obligation to reimburse the Cities for the Actual Project Costs exceed \$340,000.
- F. Upon receipt of County reimbursement funds, the City of Anoka will receive 55% of said reimbursement funds and the City of Ramsey will receive 45%.

IV. TERM

This Agreement shall continue in force until such time as the Transportation Enhancement funding grant is 'open' and shall sunset upon the closure of this grant by the Metropolitan Council or closure of the reimbursement by Anoka County of the Anoka County procured grant, whichever is later, and concurrence by the parties named within this JPA.

V. DISBURSEMENT OF FUNDS

All funds disbursed by the City(ies) pursuant to this Agreement shall be disbursed by each entity pursuant to the method provided by law.

VI. CONTRACTS AND PURCHASES

All contracts let and purchases made pursuant to this Agreement shall be made by the two Cities in conformance to State laws.

VII. STRICT ACCOUNTABILITY

A strict accounting shall be made of all funds and report of all receipts and disbursements shall be made upon request by either party.

VIII. OWNERSHIP OF IMPROVEMENTS

All improvements constructed as a part of the Project shall be owned by the jurisdiction within which such infrastructure shall be positioned or affixed, subject to terms of the Federal funding.

IX. MAINTENANCE OF IMPROVEMENTS

Each City shall maintain that portion of the trail segment funded by the Transportation Enhancement grant for the MRT, and located within its jurisdiction, for 20 years or greater; provided, however, that the Cities shall share equally the maintenance responsibilities and costs associated with the westerly bridge located between the Cities.

X. COUNTY REIMBURSEMENT FOR COUNTY SHARE OF PROJECT

The County shall actively seek grant funds from the Metropolitan Council's Regional Park and Trail grant program to reimburse the City of Anoka for the County's portion of the cost to construct the Project; provided that reimbursement shall be made only at such time and to the extent that the County receives fully executed grant agreements from the Metropolitan Council and successfully submits documentation for, and receives reimbursement of, approved grant funds.

XI. NOTICE

For purposes of delivery of any notices hereunder, the notice shall be effective if delivered to the County Administrator of Anoka County, 2100 Third Avenue North, Anoka, Minnesota 55303, on behalf of the County, the City Administrator of Anoka, 2015 First Avenue North, Anoka, Minnesota, 55303, and the City Administrator of Ramsey, 7550 Sunwood Drive Northwest, Ramsey, Minnesota 55303, on behalf of each respective City.

XII. INDEMNIFICATION

The Cities and the County mutually agree to indemnify and hold harmless each other from any claims, losses, costs, expenses or damages resulting from the acts or omissions of the respective officers, agents, or employees relating to activities conducted by either party under this Agreement.

XIII. ENTIRE AGREEMENT REQUIREMENT OF WRITING

It is understood and agreed that the entire agreement of the parties is contained herein and that this Agreement supersedes all oral agreements and all negotiations between the parties relating to the subject matter thereof, as well as any previous agreement presently in effect between the parties to the subject matter thereof. Any alterations, variations, or modifications of the provisions of this Agreement shall be valid only when they have been reduced to writing and duly signed by the parties.

IN WITNESS WHEREOF, the parties of this Agreement have hereunto set their hands on the dates written below:

COUNTY OF ANOKA

By: _____

Rhonda Sivarajah
Chair; County Board of Commissioners

Dated: _____

ATTEST

By: _____

Jerry Soma
County Administrator

Dated: _____

CITY OF ANOKA

By: _____

Phil Rice
Mayor

Dated: _____

ATTEST

By: _____

Tim Cruikshank
City Manager

Dated: _____

CITY OF RAMSEY

By: _____

Sarah Strommen
Mayor

Dated: _____

By: _____

Kurt Ulrich
City Administrator

Dated: _____

APPROVED AS TO FORM

By: _____
Dan Klint
Assistant County Attorney

Dated: _____

By: _____
Scott Baumgartner
City Attorney

Dated: _____

By: _____

City Attorney

Dated: _____

Draft JPA

EXISTING TOPOGRAPHIC SYMBOLS

	STORM SEWER APRON		OUTLET CONTROL STRUCTURE
	BASKETBALL POST		PARKING METER
	BARRICADE PERMANENT		PEDESTRIAN PUSH BUTTON
	BENCH		PEDESTAL POWER
	BOOSTER STATION		PEDESTAL CATV
	BUILDING LOWEST OPENING		PEDESTAL COMMUNICATIONS
	BURIAL CONTROL MONUMENT		POST INDICATOR VALVE
	BUSH DECIDUOUS		POLE-COMMUNICATIONS
	CATCH BASIN BEEHIVE		POLE-GUY
	CURB BOX		POLE-LIGHT
	CATCH BASIN		POLE-POWER
	COLUMN		POLE-UTILITY
	CONTROL BOX SIGNAL		POLE-UTILITY SERVICE
	CLEAN OUT (SEWER)		POST
	CULVERT END		PROPANE TANK
	DRINKING FOUNTAIN		PICNIC TABLE
	ENERGY DISSIPATER		SAMPLING WELL
	FLAG POLE		ROCK
	FUEL PUMP		RR SIGNAL CONTROL BOX
	GUY WIRE		RR CROSSING GATE
	GRILL		RR SIGNAL
	HANDICAP SPACE		REGULATION STATION GAS
	HANDHOLE		SATELLITE DISH
	FIRE HYDRANT		SEPTIC TANK
	HYDRANT PVMNT MARKER (REFLECTOR)		SEPTIC VENT
	HYDRANT VALVE		SEPTIC DRAIN FIELD
	INLET (SMALL DIA.)		SIGN
	LIFT STATION CONTROL PANEL		SOIL BORING
	LIFT STATION DRY WELL		STAND PIPE GAS
	LIFT STATION WET WELL		SPIGOT WATER
	LIGHT YARD		SPRINKLER HEAD
	LOOP DETECTOR		SPRINKLER VALVE BOX
	MAIL BOX		STUMP
	MAIL RELAY BOX		SERVICE-GAS POINT ON LINE
	MANHOLE-AIR RELEASE		SERVICE-SANITARY SEWER POINT ON LINE
	MANHOLE-HEAT		SERVICE-STORM SEWER POINT ON LINE
	MANHOLE-GAS		SERVICE-WATER POINT ON LINE
	MANHOLE-POWER		TELEPHONE BOOTH
	MANHOLE-SANITARY SEWER		TRANSMISSION TOWER ELECTRIC
	MANHOLE-STORM SEWER		TEST PIT LOC
	MANHOLE-COMMUNICATIONS		TRANSFORMER POWER
	MANHOLE-UNKNOWN		TREE DEAD
	MANHOLE-WATER		TREE-CONIFEROUS
	METER POWER		TREE-DECIDUOUS
	METER GAS		TREE-FRUIT
	ORDINARY HIGH WATER MARK		TRASH CAN

SURVEY SYMBOLS

	AERIAL CONTROL POINT
	BACKSIGHT CONTROL POINT
	GPS CONTROL POINT
	JUDICIAL LAND MONUMENT
	MONUMENT COMPUTED
	MONUMENT IRON FOUND
	MONUMENT IRON SET
	RESECTED POINT
	ROW MONUMENT
	ROW MARKER POST
	SECTION CORNER
	TRAVERSE CONTROL POINT
	BENCH MARK LOCATION

EXISTING PRIVATE UTILITY LINES

	CABLE TV QUALITY LEVEL D
	CABLE TV QUALITY LEVEL C
	CABLE TV QUALITY LEVEL B
	CABLE TV QUALITY LEVEL A
	FIBER OPTIC QUALITY LEVEL D FIBER
	OPTIC QUALITY LEVEL C FIBER OPTIC
	QUALITY LEVEL B FIBER OPTIC
	QUALITY LEVEL A
	POWER QUALITY LEVEL D
	POWER QUALITY LEVEL C
	POWER QUALITY LEVEL B
	POWER QUALITY LEVEL A
	GAS QUALITY LEVEL D
	GAS QUALITY LEVEL C
	GAS QUALITY LEVEL B
	GAS QUALITY LEVEL A
	COMMUNICATION QUALITY LEVEL D
	COMMUNICATION QUALITY LEVEL C
	COMMUNICATION QUALITY LEVEL B
	COMMUNICATION QUALITY LEVEL A
	OVERHEAD POWER
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITIES

PROPOSED TOPOGRAPHIC SYMBOLS

	BOLLARD
	SANITARY CLEANOUT
	MANHOLE
	SANITARY OR STORM LIFT STATION
	STORM SEWER BEEHIVE CATCH BASIN
	STORM SEWER CATCH BASIN
	STORM SEWER FLARED END SECTION
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER REDUCER
	VALVE
	RIP RAP
	DRAINAGE FLOW
	PEDESTRIAN RAMP

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE - BARBED WIRE
	FENCE - CHAIN LINK
	FENCE - DECORATIVE
	FENCE - STOCKADE
	FENCE - WOOD
	GUARD RAIL
	TREE LINE
	WETLAND

SURVEY LINES

	BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	FLOOD PLAIN BOUNDARY
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER SECTION LINE
	SIXTEENTH SECTION LINE

EXISTING UTILITY LINES

	FORCE MAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	WATER MAIN
	WATER SERVICE

PROPOSED UTILITY LINES

	FORCE MAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER DRAINTILE
	STORM SEWER
	WATER MAIN
	WATER SERVICE
	PIPE CASING

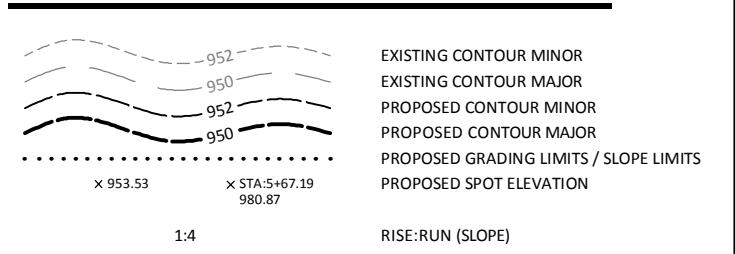
FUTURE UTILITY LINES

	FORCE MAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER DRAINTILE
	STORM SEWER
	WATER MAIN
	WATER SERVICE
	PIPE CASING

CONCRETE CURB AND GUTTER

	EXISTING
	PROPOSED
	FUTURE
	DEMOLITION

GRADING INFORMATION



ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE
BV	BUTTERFLY VALVE
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CL	CENTER LINE
CL	CLASS
CMP	CORRUGATED METAL PIPE
C.O.	CHANGE ORDER
DIP	DUCTILE IRON PIPE
EL/ELEV	ELEVATION
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EX	EXISTING
FES	FLARED END SECTION
F/F	FACE TO FACE
FM	FORCE MAIN
F.O.	FIELD ORDER
GV	GATE VALVE
HP	HIGH POINT
HWL	HIGH WATER LEVEL
INV	INVERT
K	CURVE COEFFICIENT
LP	LOW POINT
MH	MANHOLE (SANITARY)
NTS	NOT TO SCALE
NWL	NORMAL WATER LEVEL
PC	POINT OF CURVE
PCC	COMPOUND CURVE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PPVC	PERFORATED POLYVINYL CHLORIDE PIPE
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
SS	STORM SEWER STRUCTURE
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TNH	TOP NUT HYDRANT
TYP	TYPICAL
VC	VERTICAL CURVE
WM	WATER MAIN

HATCH PATTERNS

	HEAVY DUTY BITUMINOUS		SAND
	BITUMINOUS		BEDROCK
	CONCRETE		GROUND
	GRAVEL		

STATEMENT OF ESTIMATED QUANTITIES					
ITEM NO.	ID NO.	ITEM	UNIT	PARTICIPATING	TOTAL BID QUANTITY
1	2021.501	MOBILIZATION	LUMP SUM	1	1
2	2101.502	CLEARING	EACH	289	289
3	2101.507	GRUBBING	EACH	289	289
4	2101.610	TREE TRIMMING	HOURL	3	3
5	2102.501	PAVEMENT MARKING REMOVAL	LIN FT	7150	7150
6	2104.501	REMOVE CURB AND GUTTER	LIN FT	325	325
7	2104.501	REMOVE FENCE	LIN FT	120	120
8	2104.501	REMOVE PIPE SEWERS	LIN FT	31	31
9	2104.509	REMOVE PIPE APRON	EACH	2	2
10	2104.602	RELOCATE STREET LIGHT	EACH	1	1
11	2105.501	COMMON EXCAVATION (EV) (P)	CU YD	5160	5160
12	2105.521	GRANULAR BORROW (LV)	CU YD	3326	3326
13	2105.525	TOPSOIL BORROW (LV)	CU YD	2434	2434
14	2211.501	AGGREGATE BASE CLASS 5	TON	3230	3230
15	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B) [SPWEA240B]	TON	1430	1430
16	2360.505	TYPE SP 9.5 BITUMINOUS MIXTURE FOR PATCHING [SPWEA240B]	TON	16	16
17	2504.602	RELOCATE HYDRANT	EACH	1	1
18	2531.501	CONCRETE CURB & GUTTER	LIN FT	325	325
19	2531.618	PEDESTRAIN CURB RAMP	SQ FT	1300	1300
20	2531.618	TRUNCATED DOMES	SQ FT	260	260
21	2540.602	INTERPRETIVE SIGN	EACH	2	2
22	2557.602	FENCE POST	EACH	2	2
23	2563.601	TRAFFIC CONTROL	LUMP SUM	1	1
24	2564.531	SIGN PANELS TYPE C	SQ FT	191.5	191.5
25	2564.537	INSTALL SIGN TYPE C	EACH	59	59
26	2564.602	RELOCATE SIGN	EACH	5	5
27	2573.502	SILT FENCE, TYPE PREASSEMBLED	LIN FT	7150	7150
28	2573.530	STORM DRAIN INLET PROTECTION	EACH	12	12
29	2575.501	SEEDING	ACRE	3.2	3.2
30	2575.502	SEED MIXTURE 240	POUND	241	241
31	2575.505	SODDING TYPE LAWN	SQ YD	2850	2850
32	2575.523	EROSION CONTROL BLANKET CATEGORY 3	SQ YD	15250	15250
33	2575.531	FERTILIZER TYPE 3	TON	0.64	0.64
34	2582.501	PAVEMENT MESSAGE (BIKE SYMBOL) EPOXY	EACH	10	10
35	2582.501	PAVEMENT MESSAGE (BIKE LANE ARROW) EPOXY	EACH	10	10
36	2582.501	PAVEMENT MESSAGE (LANE) EPOXY	EACH	10	10
37	2582.502	4" SOLID LINE WHITE - EPOXY	LIN FT	9740	9740
38	2582.502	4" DOUBLE SOLID LINE YELLOW - EPOXY	LIN FT	3900	3900
39	2582.503	CROSSWALK MARKING - EPOXY	SQ FT	1010	1010

BASIS FOR QUANTITIES	
MATERIAL	CONVERSION FACTORS
BITUMINOUS MIXTURE	110 LBS/SY-IN
AGGREGATE BASE CLASS 5	1.8225 TONS/CY
SEED MIXTURE 240	75 LBS/ACRE
FERTILIZER TYPE 3	400 LBS/ACRE

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

Mn/DOT STANDARD PLATES	
PLATE NO.	DESCRIPTION
7038A	DETECTABLE WARNING SURFACE
8000I	STANDARD BARRICADES

SEE SHEETS 5-11 FOR ADDITIONAL STANDARD PLATES

CONCRETE REMOVALS			
ALIGNMENT	STATION	LOCATION	2104 REMOVE CURB & GUTTER (LIN FT)
WEST TRAIL (OFF-ROAD)	8+10		50
CENTRAL TRAIL (OFF-ROAD)	100+00	LT	25
CENTRAL TRAIL (OFF-ROAD)	100+00	RT	25
CENTRAL TRAIL (OFF-ROAD)	112+75	LT	25
CENTRAL TRAIL (OFF-ROAD)	112+75	RT	25
CENTRAL TRAIL (OFF-ROAD)	127+12	LT	50
CENTRAL TRAIL (OFF-ROAD)	131+05	LT	50
CENTRAL TRAIL (OFF-ROAD)	131+05	RT	25
CENTRAL TRAIL (OFF-ROAD)	133+90	LT	25
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38		25
EAST TRAIL (OFF-ROAD) - ANOKA			

AGGREGATE INSTALLATION			
ALIGNMENT	STATION - STATION	LOCATION	2211 AGGREGATE BASE CLASS 5 (TON)
WEST TRAIL (OFF-ROAD)	0+00 - 30+49		1030
CENTRAL TRAIL (OFF-ROAD)	112+74 - 133+81	LT	715
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38 - 209+44		200
EAST TRAIL (OFF-ROAD) - ANOKA	209+44 - 234+66		1285

BITUMINOUS INSTALLATION				
ALIGNMENT	STATION - STATION	LOCATION	2360 TYPE SP 9.5 WEARING COURSE MIXTURE [SPWEA240B] (TON)	2360 TYPE SP 9.5 BITUMINOUS MIXTURE FOR PATCHING [SPWEA240B] (TON)
WEST TRAIL (OFF-ROAD)	0+00 - 30+49		445	3
CENTRAL TRAIL (OFF-ROAD)	112+74 - 133+81	LT	320	11
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38 - 209+44		90	2
EAST TRAIL (OFF-ROAD) - ANOKA	209+44 - 234+66		575	

CLEARING AND GRUBBING					
ALIGNMENT	STATION - STATION	LOCATION	2101 CLEARING (EACH)	2101 GRUBBING (EACH)	2101 TREE TRIMMING (HOUR)
WEST TRAIL (OFF-ROAD)	0+00 - 30+49		4	4	
CENTRAL TRAIL (OFF-ROAD)	100+00 - 151+08		2	2	3
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38 - 209+44		20	20	
EAST TRAIL (OFF-ROAD) - ANOKA	209+44 - 234+66		185	185	

CONCRETE INSTALLATION					
ALIGNMENT	STATION	LOCATION	2531 CONCRETE CURB & GUTTER (LIN FT)	2521 PEDESTRIAN CURB RAMP (SQ FT)	2531 TRUNCATED DOMES (SQ FT)
WEST TRAIL (OFF-ROAD)	8+10		50	200	40
CENTRAL TRAIL (OFF-ROAD)	100+00	LT	25	100	20
CENTRAL TRAIL (OFF-ROAD)	100+00	RT	25	100	20
CENTRAL TRAIL (OFF-ROAD)	112+75	LT	25	100	20
CENTRAL TRAIL (OFF-ROAD)	112+75	RT	25	100	20
CENTRAL TRAIL (OFF-ROAD)	127+12	LT	50	200	40
CENTRAL TRAIL (OFF-ROAD)	131+05	LT	50	200	40
CENTRAL TRAIL (OFF-ROAD)	131+05	RT	25	100	20
CENTRAL TRAIL (OFF-ROAD)	133+90	LT	25	100	20
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38		25	100	20
EAST TRAIL (OFF-ROAD) - ANOKA					

CONSTRUCTION NOTES:

- TRAILS SHALL BE CONSTRUCTED SO NO WATER IS HELD EITHER ADJACENT TO OR ON THE TRAILS.
- CONTRACTOR TO REMOVE ALL MATERIALS OFF SITE AS EXCAVATED (TEMPORARY STOCKPILE OF MATERIALS ON SITE WILL NOT BE PERMITTED).
- CONTRACTOR TO LIMIT CONSTRUCTION ACTIVITIES TO AREAS OUTSIDE THE CONSTRUCTION ZONE.
- DAMAGE TO TURF OR PROPERTY NOT SLATED FOR REMOVAL IN OR ADJACENT TO THE CONSTRUCTION ZONE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE AND REPAIR.
- MATERIALS USED FOR FILL AREAS SHALL BE APPROVED PRIOR TO PLACEMENT (TOPSOIL MATERIALS WITH TURF OR SOD MIXED IN WILL NOT BE ACCEPTED).
- SEEDED AREAS SHALL BE FREE OF ALL ROCKS, DIRT CLUMPS, SOD OR OTHER DEBRIS.
- EXACT LIMITS AND LOCATION OF SAW CUTTING EXISTING BITUMINOUS OR CONCRETE EDGES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTRACTOR RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Kevin P. Kiel
 KEVIN P. KIEL, P.E.
 LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK
 DRAWN: AK
 CHECKED: KPK



BOLTON & MENK, INC.
 Consulting Engineers & Surveyors
 MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN
 CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA
 ROCHESTER, MN SPENCER, IA

REV.	BY	DATE

CITY OF ANOKA, MINNESOTA

MISSISSIPPI RIVER TRAIL

QUANTITY TABULATIONS

SP 103-090-003

EARTHWORK SUMMARY										
D	NOTES	ITEMS	UNIT	PROJECT TOTAL	WEST TRAIL (OFF-ROAD) STA 0+00 - STA 30+49	CENTRAL TRAIL (OFF-ROAD) STA 112+74 - STA 133+81	EAST TRAIL (OFF-ROAD) STA 205+38 - STA 208+75	BRIDGE R0654 STA 208+75 - STA 210+50	EAST TRAIL (OFF-ROAD) STA 210+50 - STA 233+25	BRIDGE R0655 STA 233+25 - STA 234+66
UNADJUSTED VOLUMES BASED ON CROSS SECTIONS										
EXCAVATION										
1		COMMON EXCAVATION (EV)	CY	5160	1150	660	290	1460	1080	520
EMBANKMENT										
2		TOPSOIL (CV)	CY	1690	490	190	60	290	420	240
3		GRANULAR EMBANKMENT (CV)	CY	2520	60	50	90	190	1680	450
4		COMMON EMBANKMENT MATERIAL REQUIRED (CV)	CY	630	0	0	0	0	630	0

NOTES:

- CUT VOLUME FROM CROSS SECTIONS. ALSO ASSUMES AN AVERAGE OF 4 INCHES OF STRIPPING ACROSS THE SITE FOR FUTURE EXCAVATION AND TOPSOIL PLACEMENT.
- 4 INCHES OF TOPSOIL PLACED IN ALL VEGETATED AREAS DISTURBED DURING CONSTRUCTION.
- FILL VOLUMES FROM CROSS SECTIONS (LESS TOPSOIL AND GRANULAR BORROW).
- GRANULAR BORROW FOR USE AT APPROACHES TO BRIDGES BEYOND LIMITS OF BRIDGE RELATED MATERIALS WITHIN CORE TRAIL EMBANKMENT.
- 4 INCHES OF TOPSOIL PLACED WITH SHRINKAGE FACTOR OF 1.2 APPLIED FROM (CV) TO (EV).
- ASSUMES NO TOPSOIL GENERATED DURING EXCAVATION.
- INCLUDES STRIPPING AND TRAIL EXCAVATION.
- APPLIES A SHRINKAGE FACTOR OF 1.2 FROM (CV) TO (EV). UTILIZE MATERIAL BELOW TOP 4 INCHES OF STRIPPING. EXCLUDES TOPSOIL AND GRANULAR BORROW.
- MATERIAL TO BE HAULED OFF-SITE BY CONTRACTOR.
- GRANULAR BORROW TO BE IMPORTED FOR BRIDGE APPROACH EMBANKMENT. 14 FEET WIDE AT TOP WITH 1:1.5 SLOPES TO GRADE.
- COMMON EXCAVATION.
- INCLUDES SHRINKAGE FACTOR OF 1.2 FROM (EV) TO (LV).
- INCLUDES SHRINKAGE FACTOR OF 1.1 FROM (EV) TO (LV).

EARTHWORK BALANCE										
TOPSOIL										
5		TOPSOIL REQUIRED (EV)	CY	2028	588	228	72	348	504	288
6		TOPSOIL BORROW REQUIRED (EV)	CY	2028	588	228	72	348	504	288
SUITABLE GRADING MATERIAL										
7		COMMON EXCAVATION (EV)	CY	5160	1150	660	290	1460	1080	520
8		EMBANKMENT MATERIAL (EV)	CY	756	0	0	0	0	756	0
9		EXCESS GRADING MATERIAL (EV)	CY	4404	1150	660	290	1460	324	520
10		GRANULAR MATERIAL REQUIRED (EV)	CY	3024	72	60	108	228	2016	540

EARTHWORK QUANTITIES TO SEQ										
11		COMMON EXCAVATION (EV)	CY	5160	1150	660	290	1460	1080	520
12		TOPSOIL BORROW (LV)	CY	2434	706	274	86	418	605	346
13		GRANULAR BORROW (LV)	CY	3326	79	66	119	251	2218	594

H								
TURF AND EROSION CONTROL INSTALLATION								
ALIGNMENT	STATION - STATION	2573 SILT FENCE (LIN FT)	2573 STORM DRAIN INLET PROTECTION (EACH)	2575 EROSION CONTROL BLANKET CATEGORY 3 (SQ YD)	2575 SEEDING (ACRE)	2575 SEED MIXTURE TYPE 240 (POUND)	2575 FERTILIZER TYPE 3 (TON)	2575 SODDING TYPE LAWN (SQ YD)
WEST TRAIL (OFF-ROAD)	0+00 - 30+49	3200	4	5800	1.2	90	0.24	850
CENTRAL TRAIL (OFF-ROAD)	112+74 - 133+81		8					2000
EAST TRAIL (OFF-ROAD) - RAMSEY	205+38 - 209+44	750		1300	0.3	23	0.06	
EAST TRAIL (OFF-ROAD) - ANOKA	209+44 - 234+66	3200		8150	1.7	128	0.34	

I								
TRAFFIC CONTROL INSTALLATION								
ALIGNMENT	2564 SIGN PANEL TYPE C (SQ FT)	2564 INSTALL SIGN TYPE C (EACH)	2582 PAVEMENT MESSAGE (BIKE SYMBOL) - EPOXY (EACH)	2582 PAVEMENT MESSAGE (BIKE LANE ARROW) - EPOXY (EACH)	2582 PAVEMENT MESSAGE (LANE) - EPOXY (EACH)	2582 4" SOLID LINE WHITE - EPOXY (LIN FT)	2582 4" DOUBLE SOLID LINE YELLOW - EPOXY (LIN FT)	2582 CROSSWALK MARKING - EPOXY (SQ FT)
WEST TRAIL (OFF-ROAD)								
CENTRAL TRAIL (OFF-ROAD)	191.5	59	10	10	10	9740	3900	1010
EAST TRAIL (OFF-ROAD) - RAMSEY								
EAST TRAIL (OFF-ROAD) - ANOKA								

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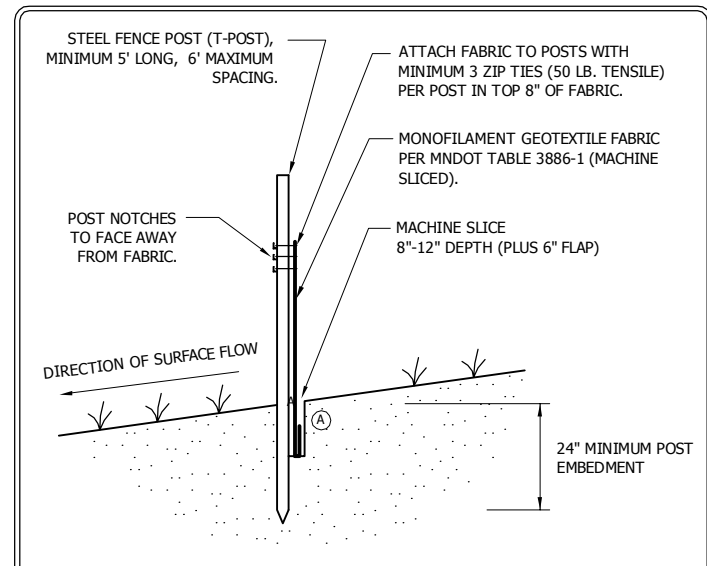
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 DRAWN: AK
 CHECKED: KPK



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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 QUANTITY TABULATIONS
 SP 103-090-003



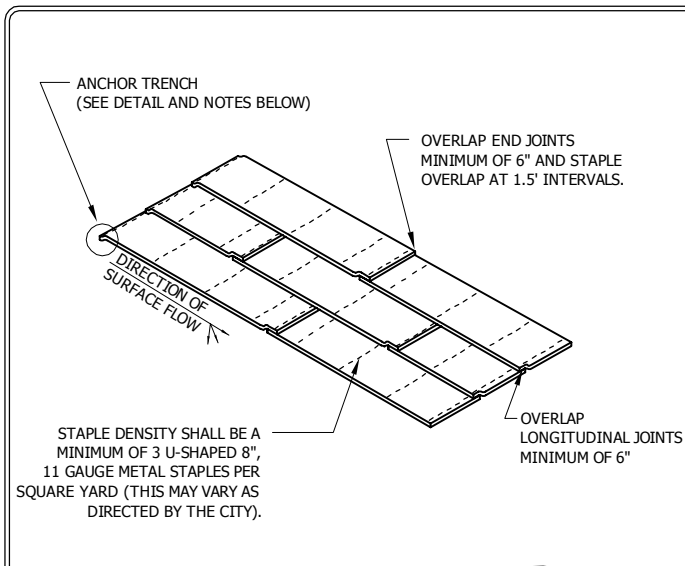
NOTE:
THE MACHINE SLICED METHOD (THIS DETAIL) IS THE STANDARD SILT FENCE INSTALLATION METHOD. HEAVY-DUTY (ERO-1B) OR STANDARD (ERO-1C) SILT FENCE INSTALLATION METHODS SHOULD ONLY BE USED WHEN APPROVED OR DIRECTED BY THE CITY.

(A) COMPACTION:
AFTER "SLICING" IN THE FABRIC AND BEFORE INSTALLATION OF STEEL POSTS, DRIVE INSTALLATION EQUIPMENT OVER THE "SLICE" WHILE FABRIC IS LAYING ON THE GROUND. THEN INSTALL STEEL POSTS AND PULL UP FABRIC TO ATTACH AT A UNIFORM HEIGHT.

SILT FENCE
MACHINE SLICED

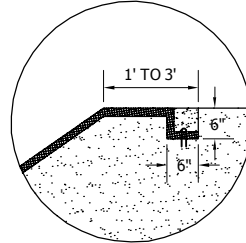
LAST REVISION:
Jan. 2005

PLATE NO.
ERO-1A



STAPLE DENSITY SHALL BE A MINIMUM OF 3 U-SHAPED 8", 11 GAUGE METAL STAPLES PER SQUARE YARD (THIS MAY VARY AS DIRECTED BY THE CITY).

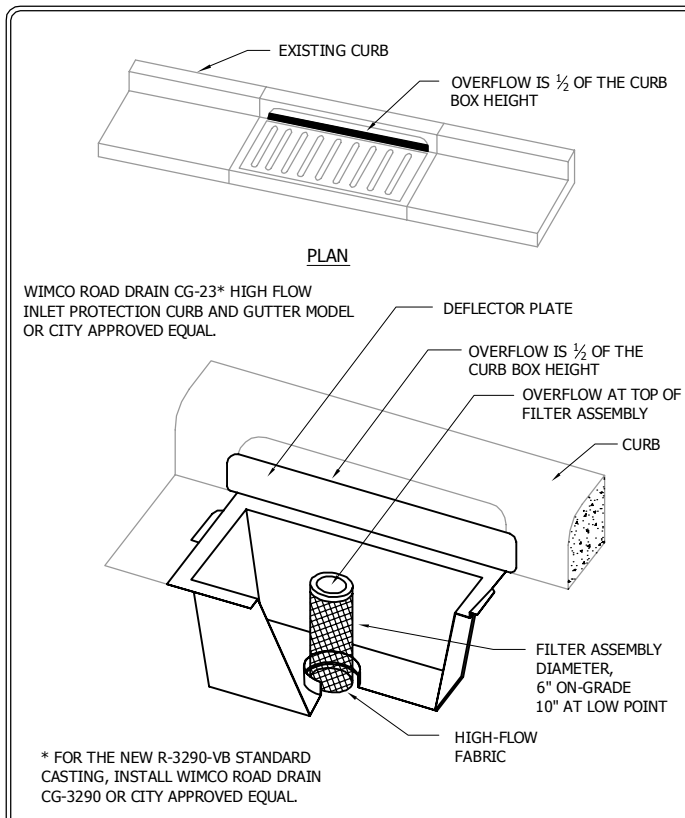
- ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
 2. LAY BLANKET IN TRENCH
 3. STAPLE AT 1.5' INTERVALS
 4. BACKFILL WITH NATURAL SOIL AND COMPACT
 5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



EROSION CONTROL BLANKET
INSTALLATION

LAST REVISION:
Mar. 2004

PLATE NO.
ERO-2



WIMCO ROAD DRAIN CG-23* HIGH FLOW INLET PROTECTION CURB AND GUTTER MODEL OR CITY APPROVED EQUAL.

* FOR THE NEW R-3290-VB STANDARD CASTING, INSTALL WIMCO ROAD DRAIN CG-3290 OR CITY APPROVED EQUAL.

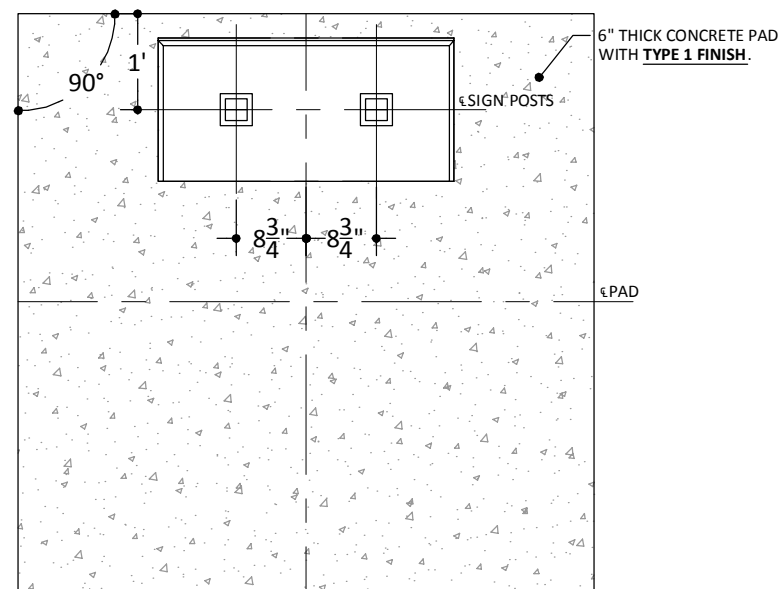
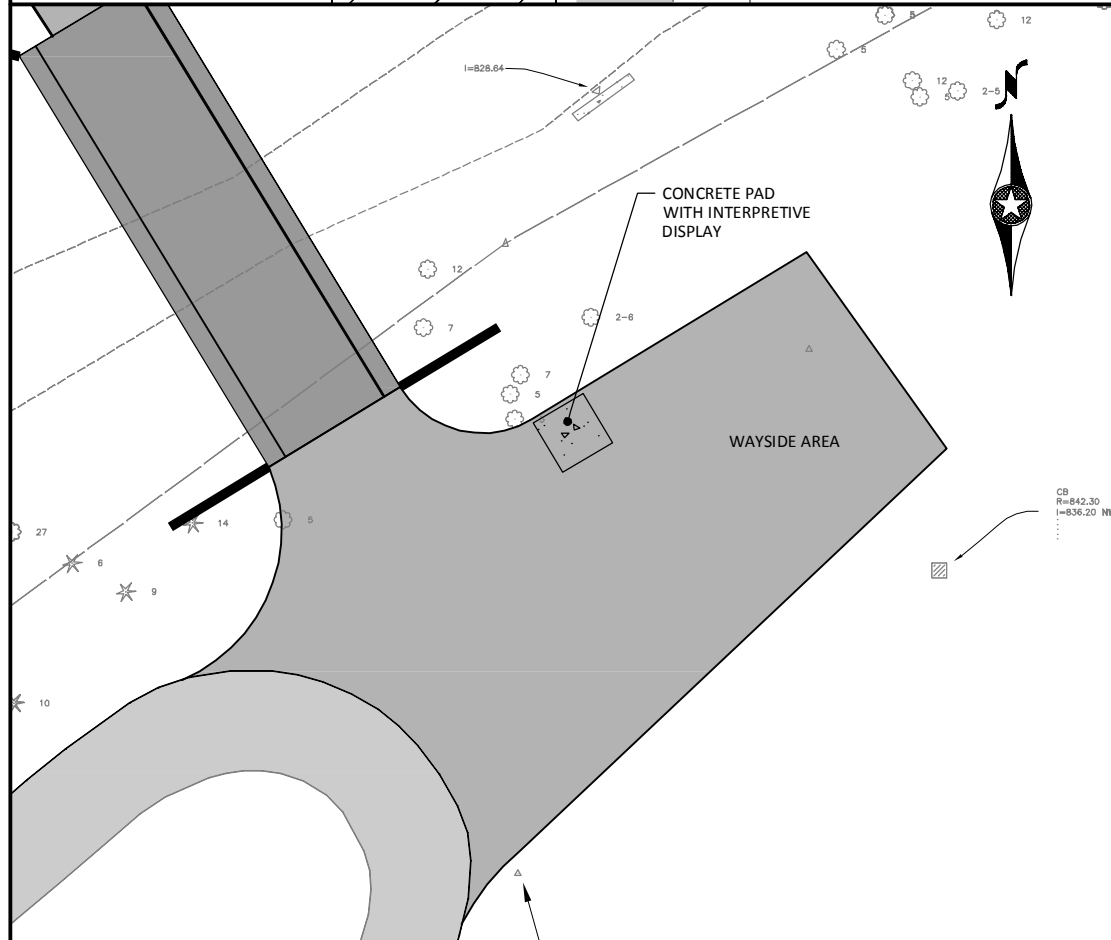
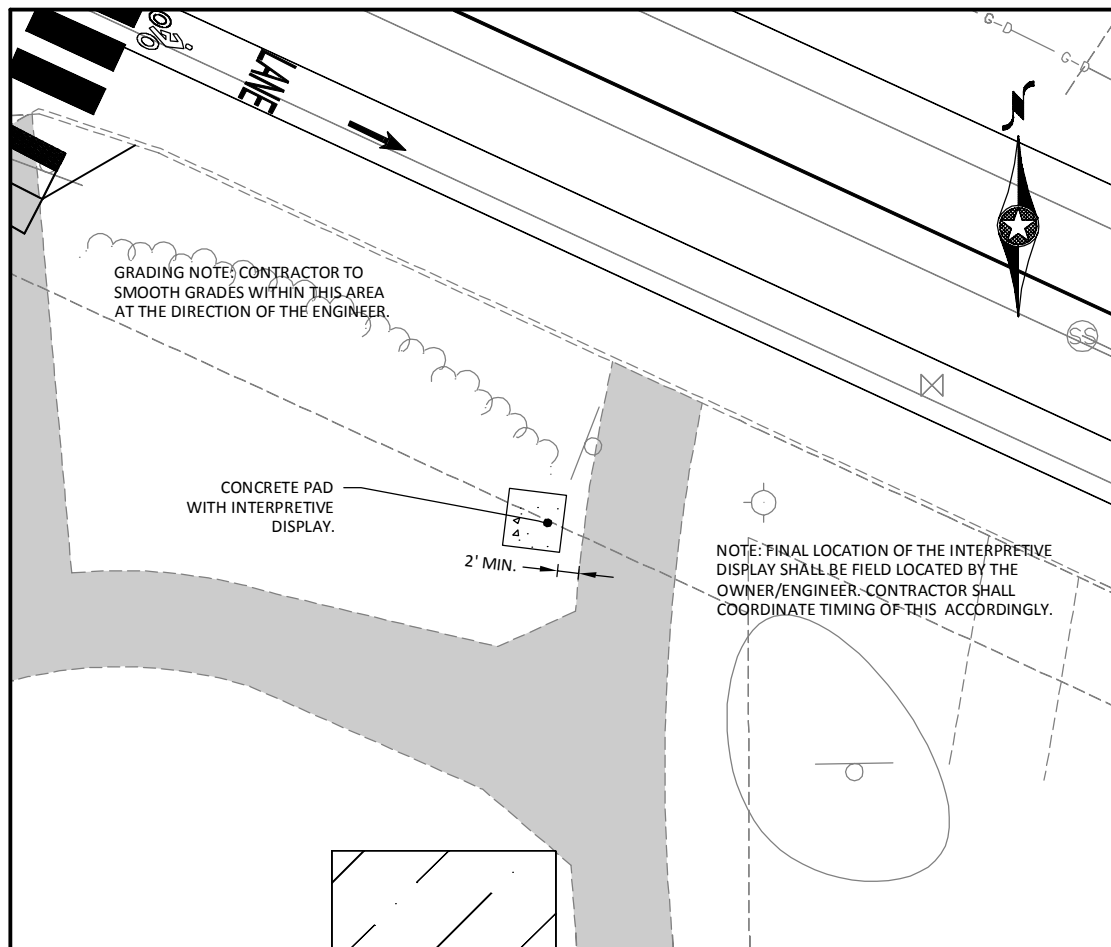
INLET PROTECTION
CATCH BASIN INSERT
AFTER PAVING

LAST REVISION:
Jan. 2005

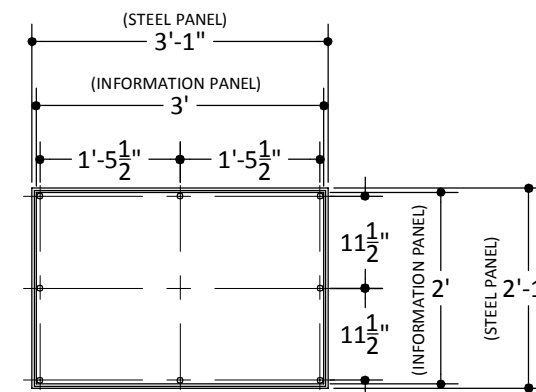
PLATE NO.
ERO-4C



REV.	BY	DATE



PLAN



3/8" DIA. HOLES - TYP.
HOLES THROUGH BOTH PANELS - FASTEN WITH TAMPER RESISTANT HARDWARE WITH SMOOTH ROUNDED FACE SIMILAR TO CARRIAGE BOLT ON DISPLAY SIDE OF PANEL.

STEEL PLATE PLAN

NOTES:

REFER TO SPECIFICATION SECTION 05510 FOR ADDITIONAL INFORMATION.

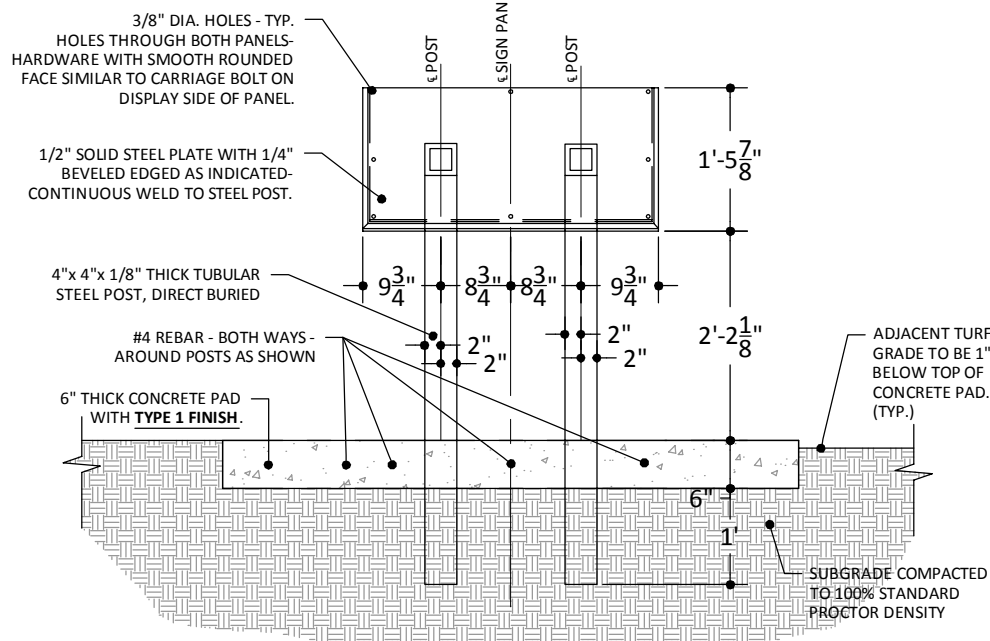
CONTINUOUS WELD ALL METAL CONNECTIONS AND CLOSED ENDS. GRIND EDGES SMOOTH.

ALL METAL SHALL BE GALVANIZED AFTER FABRICATION AND PRIOR TO PRIMING/PAINTING.

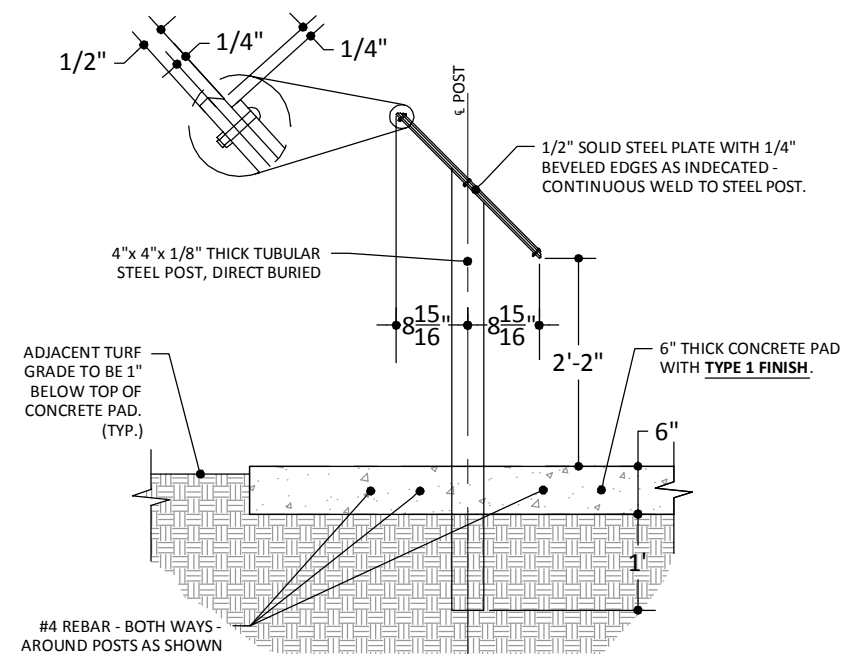
SHOP DRAWING NOTICE:

SHOP DRAWINGS MUST BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

* SIGN PANELS AND REQUIRED HARDWARE TO BE SUPPLIED AND INSTALLED BY THE OWNER.



FRONT ELEVATION



SIDE ELEVATION



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KEVIN P. KIEL, P.E.

LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK

DRAWN: AK

CHECKED: KPK



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Consulting Engineers & Surveyors
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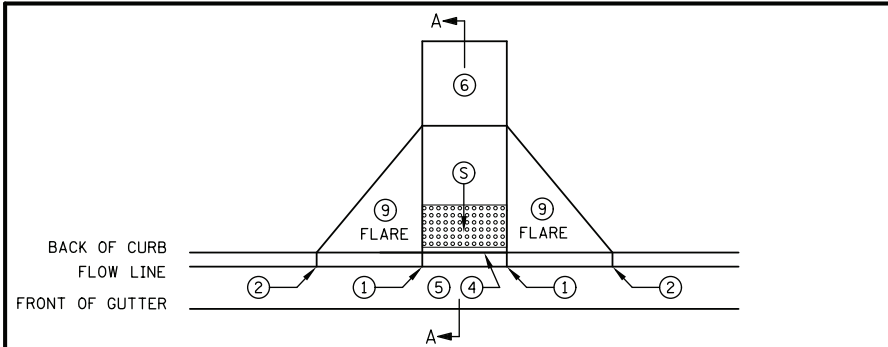
CITY OF ANOKA, MINNESOTA

MISSISSIPPI RIVER TRAIL

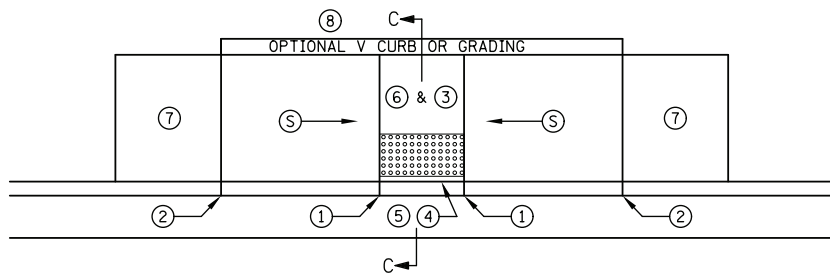
INTERPRETIVE SIGN DETAIL

SP 103-090-003

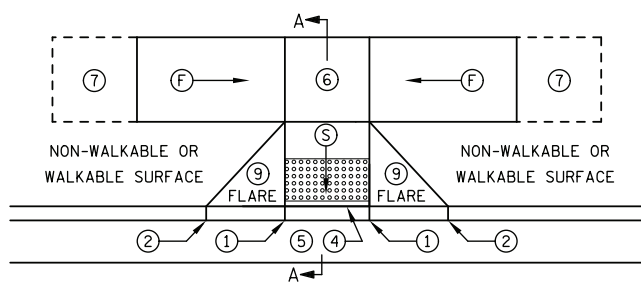
SHEET 6 OF 53



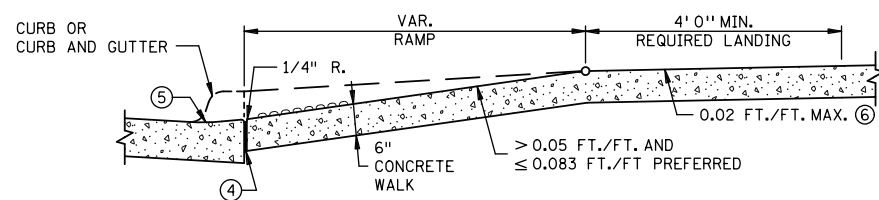
PERPENDICULAR



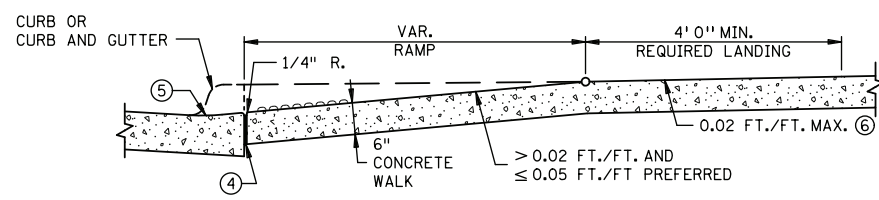
PARALLEL



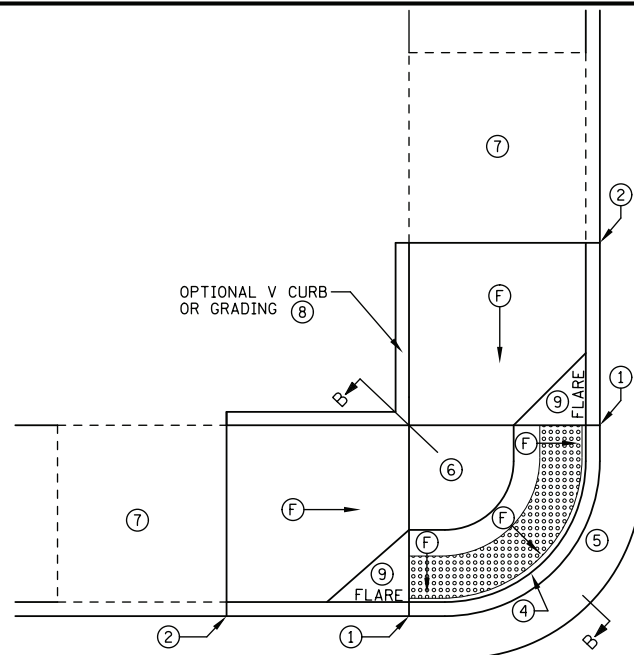
TIERED PERPENDICULAR



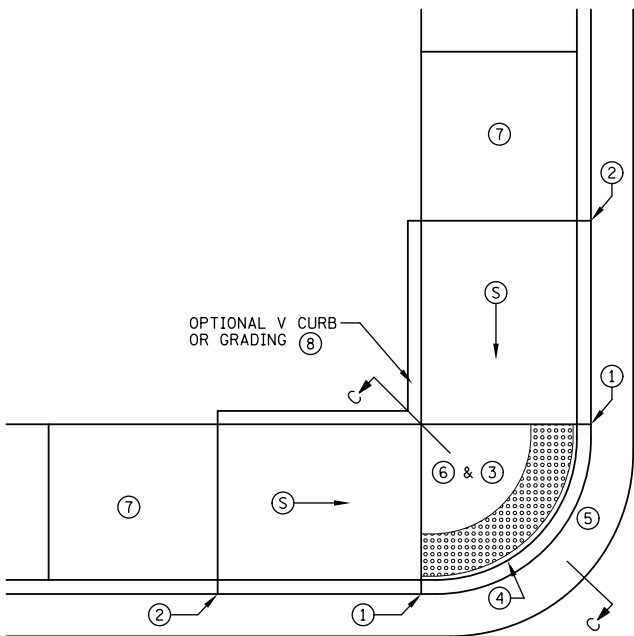
SECTION A-A
PERPENDICULAR/TIERED/DIAGONAL



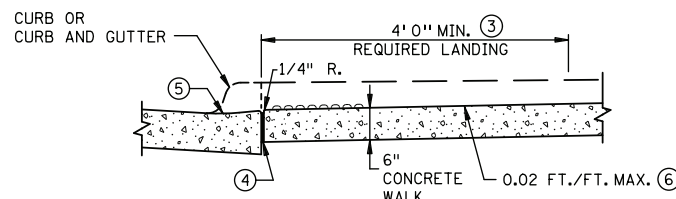
SECTION B-B
FAN



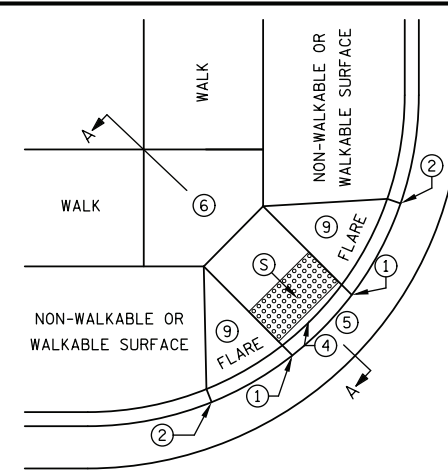
FAN



DEPRESSED CORNER



SECTION C-C
PARALLEL/DEPRESSED CORNER



DIAGONAL ⑩

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30' OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.

TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 5 WHEN LANDINGS ARE CAST SEPARATELY.

ALL SLOPES ARE ABSOLUTE, RATHER THAN RELATIVE TO SIDEWALK/ROADWAY GRADES. TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MINIMUM OF 24" IN THE PATH OF TRAVEL. SHARED USE PATHS SHALL HAVE DETECTABLE WARNING ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD.

SEE STANDARD PLATE 7038 AND SHEET 4 OF 5 FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

- ① 0" CURB HEIGHT.
- ② FULL CURB HEIGHT.
- ③ DETECTABLE WARNINGS MAY BE PART OF 4' X 4' LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
- ④ 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M 213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.
- ⑤ SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3 OF 5.
- ⑥ 4' BY 4' MIN. LANDING WITH MAX. 2.0% SLOPE IN ALL DIRECTIONS.
- ⑦ IF LONGITUDINAL SLOPE IS GREATER THAN 5.0%, 4' X 4' MIN. LANDING WITH MAX 2.0% SLOPE IN ALL DIRECTIONS REQUIRED.
- ⑧ V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. SEE SHEET 5 OF 5.
- ⑨ SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.
- ⑩ DIAGONAL RAMPS SHOULD ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- ⑤ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%
- ⑦ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%

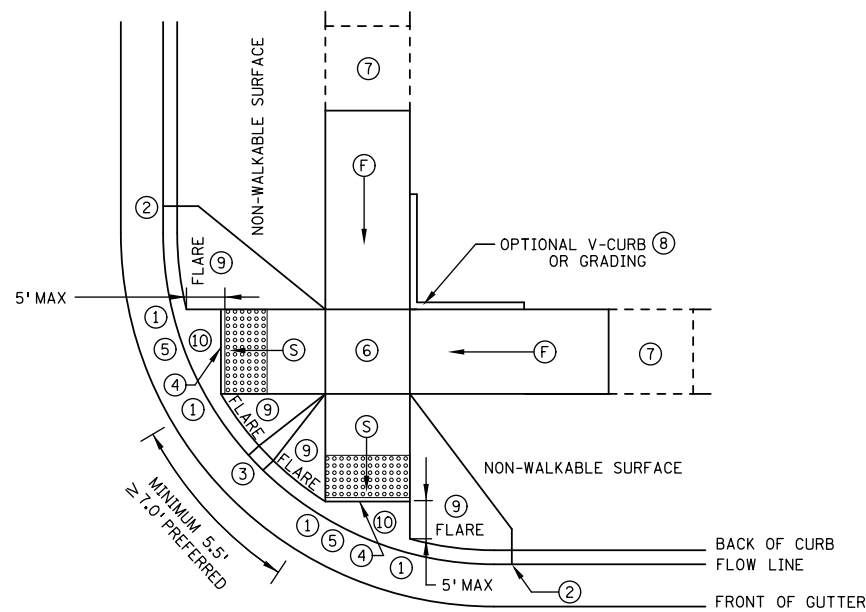
STANDARD PLAN SHEET NO.
5-297.250 (1 OF 5)

STANDARD APPROVED:
APRIL 10, 2013

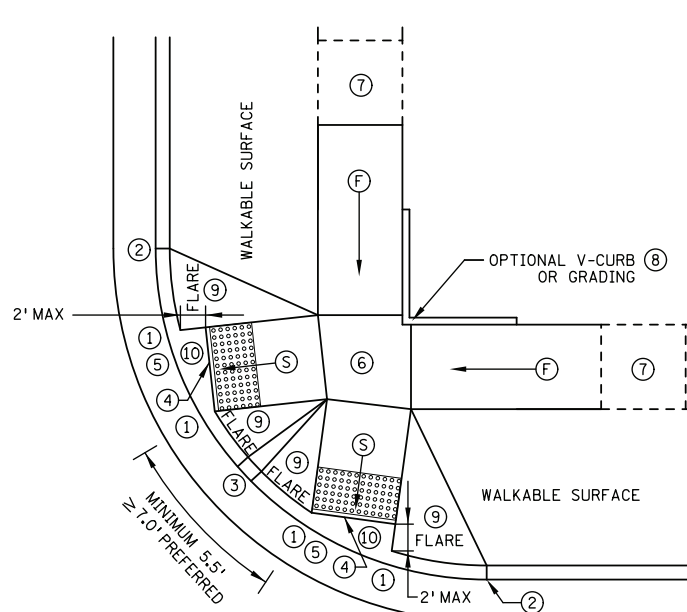
PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. 103-090-003

SHEET NO. 7 OF 53 SHEETS

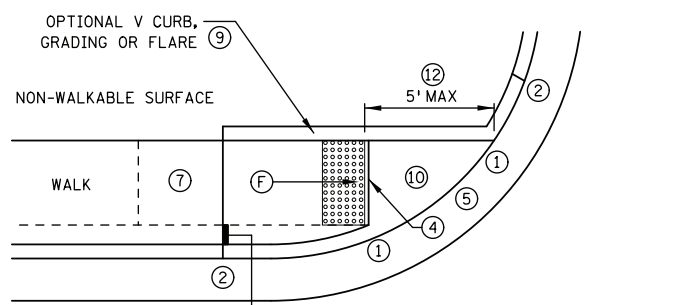


ADJACENT TO NON-WALKABLE SURFACE



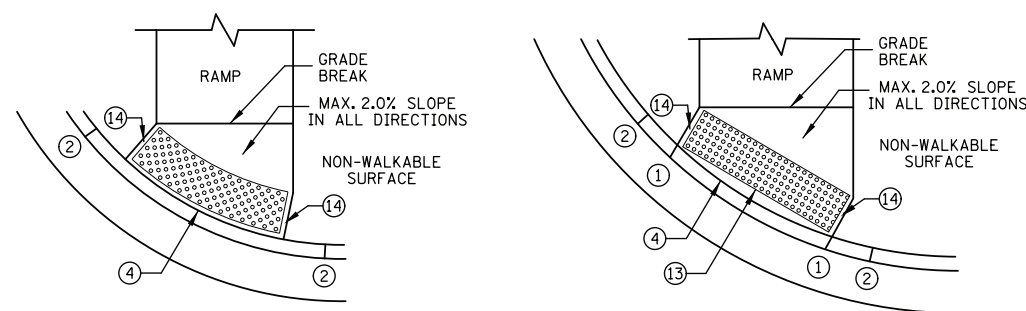
ADJACENT TO WALKABLE SURFACE

COMBINED DIRECTIONAL 15

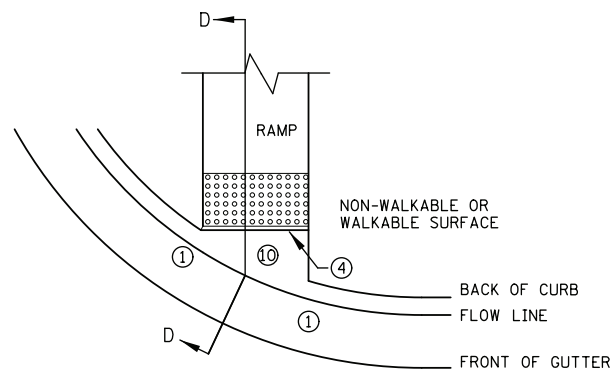


ONE-WAY DIRECTIONAL

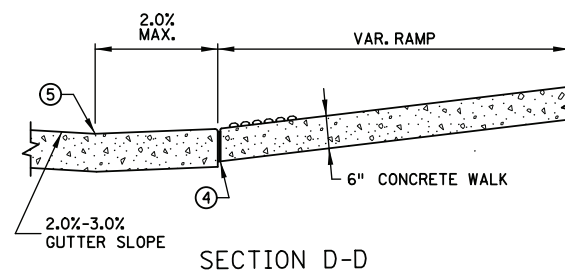
IF NON-CONCRETE BLVD. IS CONSTRUCTED AND IS LESS THAN 2' IN WIDTH AT TOP OF CURB TRANSITION, PAVE CONCRETE RAMP WIDTH TO ADJACENT BACK OF CURB.



DETECTABLE WARNING PLACEMENT WHEN SETBACK CRITERIA IS EXCEEDED



CURB FOR DIRECTIONAL RAMPS 11



NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30' OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL.

TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 5 WHEN LANDINGS ARE CAST SEPARATELY.

ALL SLOPES ARE ABSOLUTE, RATHER THAN RELATIVE TO SIDEWALK/ROADWAY GRADES.

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MINIMUM OF 24" IN THE PATH OF TRAVEL. SHARED USE PATHS SHALL HAVE DETECTABLE WARNING ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD.

SEE STANDARD PLATE 7038 AND SHEET 4 OF 5 FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

- 1 0" CURB HEIGHT.
- 2 FULL CURB HEIGHT.
- 3 3" MINIMUM CURB HEIGHT, 4" PREFERRED.
- 4 1/2" PREFORMED JOINT FILLER MATERIAL AASHTO M 213. JOINT FILLER SHALL BE PLACED FLUSH WITH THE BACK OF CURB AND ADJACENT SIDEWALK. JOINT SHALL BE FREE OF DEBRIS. RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MIN. TO 6" MAX. FROM THE BACK OF CURB.
- 5 SEE PEDESTRIAN ACCESS ROUTE CURB AND GUTTER DETAIL FOR INFORMATION ON CONSTRUCTING CURB AND GUTTER AT CURB OPENINGS. SEE SHEET NO. 3 OF 5.
- 6 4' BY 4' MIN. LANDING WITH MAX. 2.0% SLOPE IN ALL DIRECTIONS.
- 7 IF LONGITUDINAL SLOPE IS GREATER THAN 5.0%, 4' X 4' MIN. LANDING WITH MAX 2.0% SLOPE IN ALL DIRECTIONS REQUIRED.
- 8 V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.
- 9 SEE SHEET 4 OF 5, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.
- 10 MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.
- 11 TO BE USED FOR ALL DIRECTIONAL RAMPS.
- 12 PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.
- 13 RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.
- 14 WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
- 15 FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

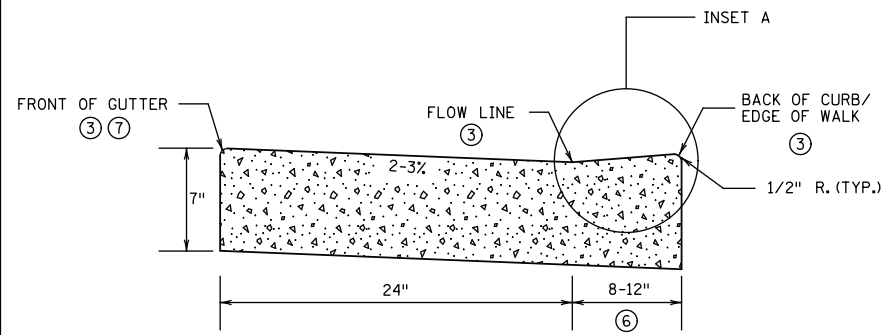
- S INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%
- F INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%

STANDARD PLAN SHEET NO.
5-297.250 (2 OF 5)
STANDARD APPROVED:
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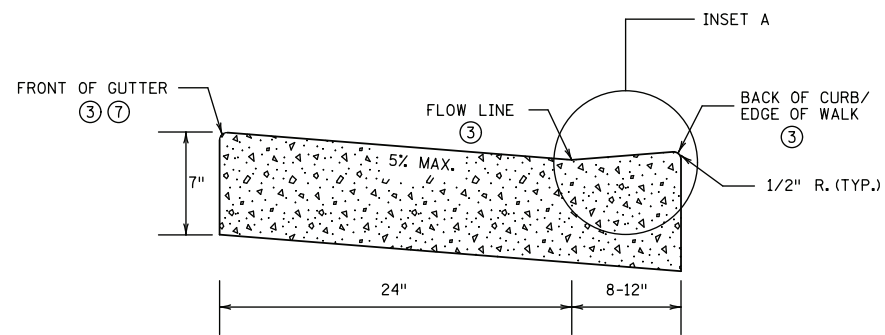
PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. 103-090-003

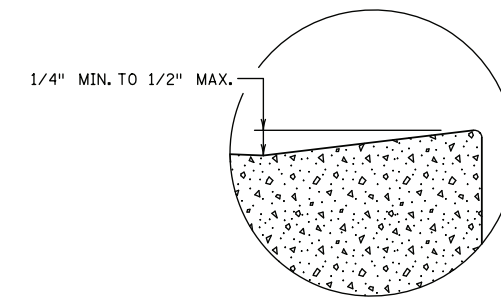
SHEET NO. 8 OF 53 SHEETS



NON PERPENDICULAR ①

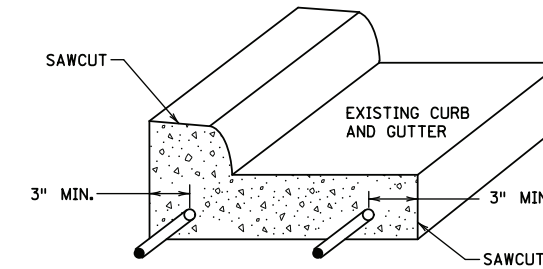
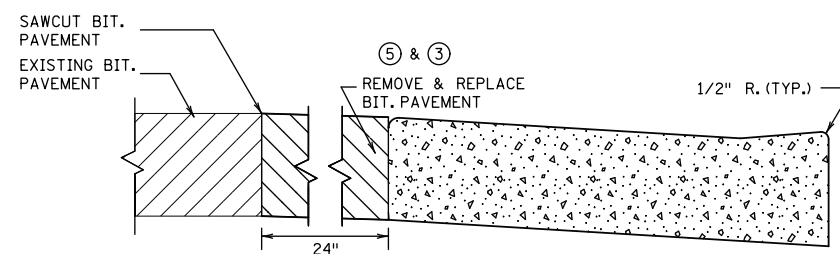
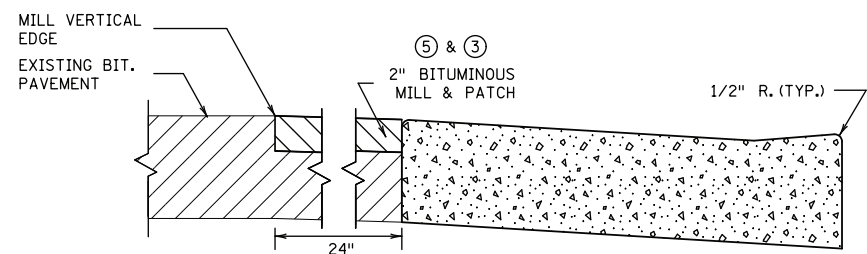


PERPENDICULAR ②

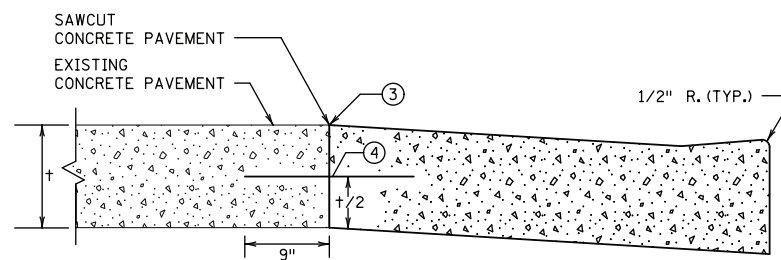
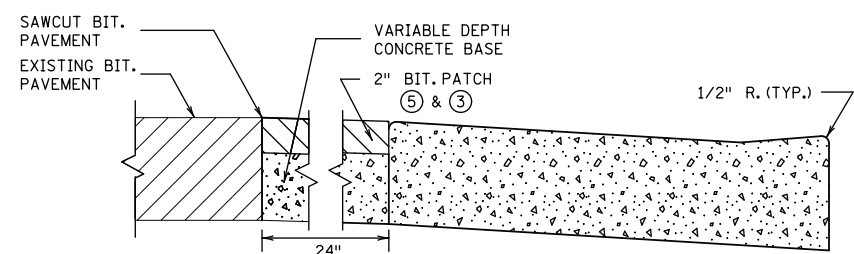


INSET A

PEDESTRIAN ACCESS ROUTE
CURB & GUTTER DETAIL



CURB AND GUTTER
REINFORCEMENT ⑧
FOR USE ON CURB RAMP RETROFITS



PAVEMENT TREATMENT OPTIONS
IN FRONT OF CURB & GUTTER
FOR USE ON CURB RAMP RETROFITS

NOTES:

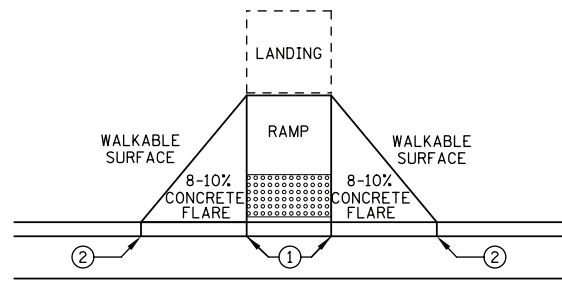
- POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.
- NO PONDING SHALL BE PRESENT IN THE PAR.
- ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.
- ① FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS, DEPRESSED CORNERS, & ONE WAY AND COMBINED DIRECTIONALS.
- ② FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.
- ③ THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".
- ④ DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT.
- ⑤ ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.
- ⑥ VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS.
- ⑦ TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. PAR GUTTER SHALL NOT BE OVERLAID.
- ⑧ WHERE PLAN SPECIFIES, DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED).

STANDARD PLAN SHEET NO.
5-297.250 (3 OF 5)
STANDARD APPROVED:
APRIL 10, 2013

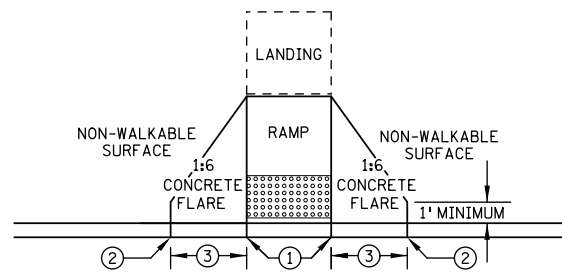
PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. 103-090-003

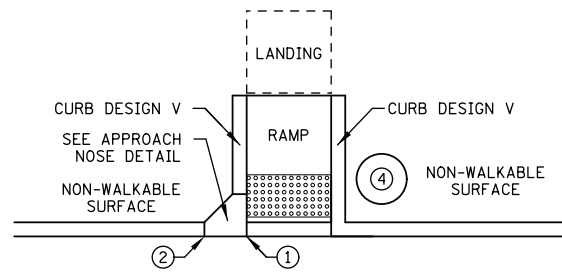
SHEET NO. 9 OF 53 SHEETS



PAVED FLARES
ADJACENT TO WALKABLE SURFACE

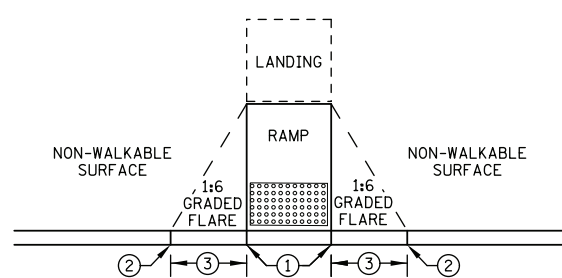


PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE



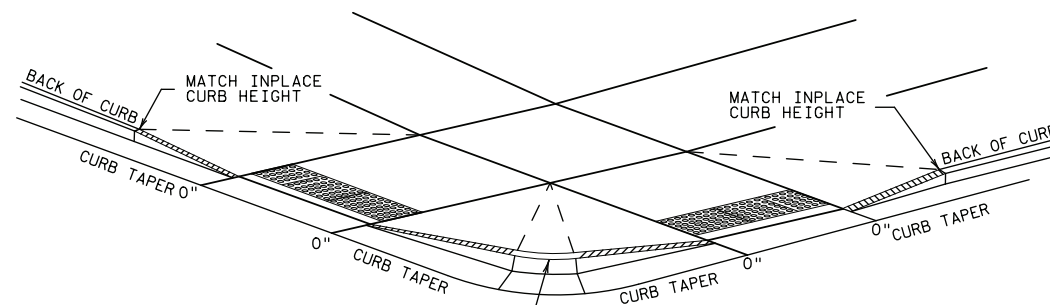
DIRECTION OF TRAFFIC

RETURNED CURB



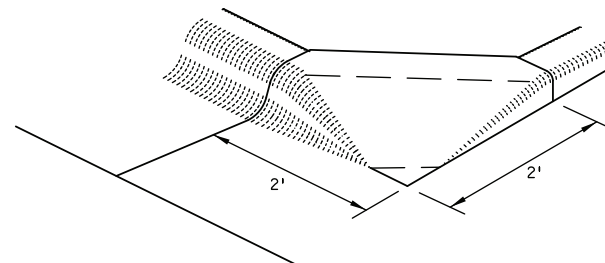
GRADED FLARES

TYPICAL SIDE TREATMENT OPTIONS ⑤



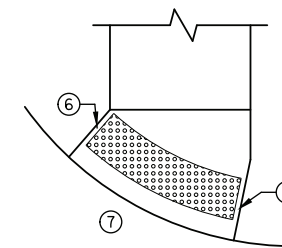
3" MINIMUM CURB HEIGHT, 4" PREFERRED
(MEASURED AT FRONT FACE OF CURB)
FOR A MIN. 6" LENGTH
(MEASURED ALONG FLOW LINE)

DETECTABLE EDGE WITH
CURB AND GUTTER ⑧

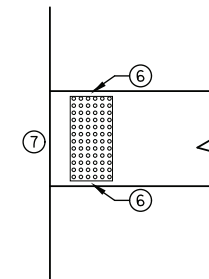


SECTION A-A

APPROACH NOSE DETAIL
FOR DOWNSTREAM SIDE OF TRAFFIC



RADIAL DETECTABLE WARNING



RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER

NOTES:

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING. WHETHER A SURFACE IS WALKABLE OR NOT SHALL BE DETERMINED BY THE ENGINEER. CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

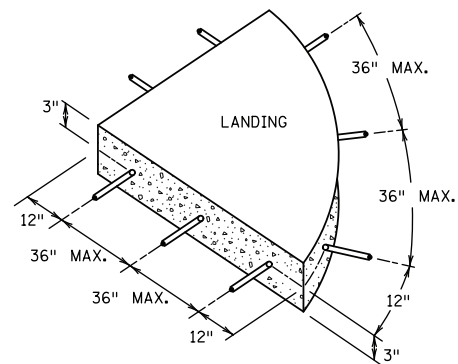
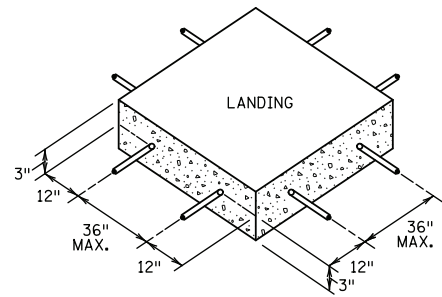
- ① 0" CURB HEIGHT.
- ② FULL CURB HEIGHT.
- ③ 2' - 3' FLARE.
- ④ IMMOVABLE OBJECT OR OBSTRUCTION.
- ⑤ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED ON ALL RAMPS AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.
- ⑥ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
- ⑦ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF ROADWAY TO PROVIDE VISUAL CONTRAST.
- ⑧ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

STANDARD PLAN SHEET NO.
5-297.250 (4 OF 5)
STANDARD APPROVED:
APRIL 10, 2013

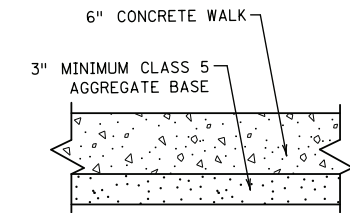
PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. 103-090-003

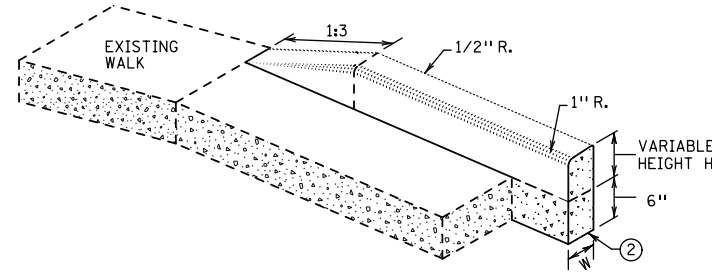
SHEET NO.10 OF 53 SHEETS



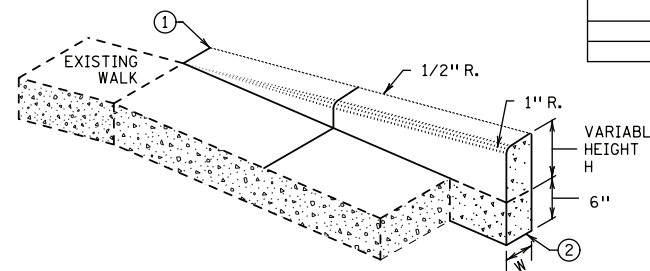
SIDEWALK REINFORCEMENT ⑤ ⑥



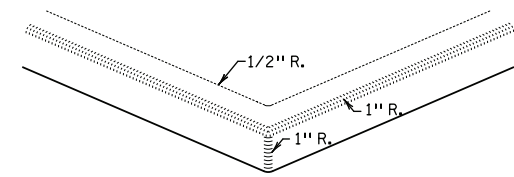
TYPICAL SIDEWALK SECTION WITHIN INTERSECTION CORNER



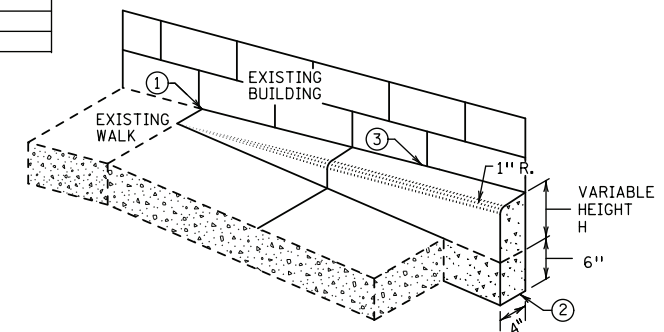
V CURB ADJACENT TO LANDSCAPE
CURB WITHIN SIDEWALK LIMITS



V CURB ADJACENT TO LANDSCAPE
CURB OUTSIDE SIDEWALK LIMITS

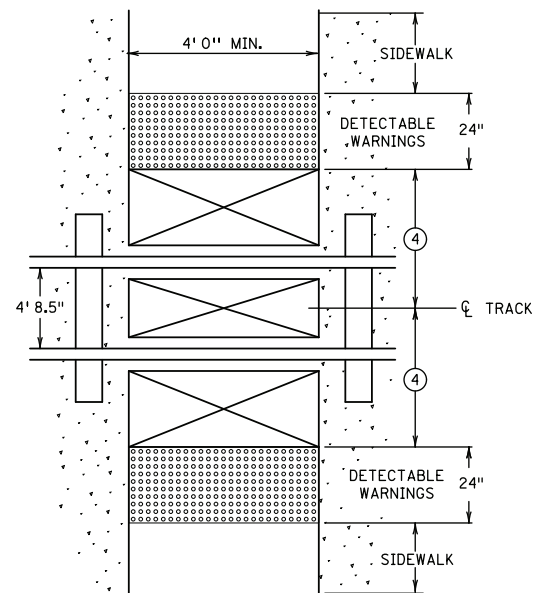


V CURB INTERSECTION

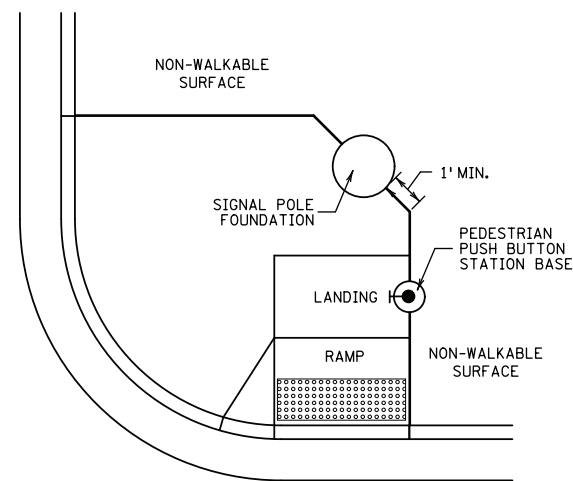


V CURB ADJACENT TO BUILDING
OR BARRIER

CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"



RAILROAD CROSSING
PLAN VIEW



CONCRETE WALK EDGES ADJACENT
TO CONCRETE STRUCTURES

NOTES:

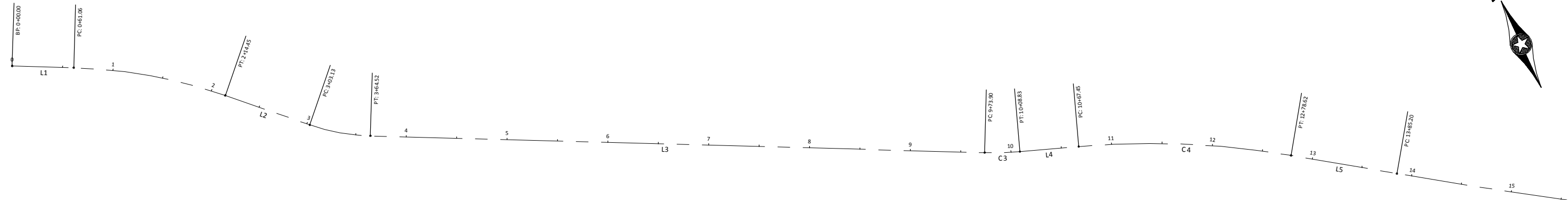
- ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.
- WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.
- V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.
- ① END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
- ② ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
- ③ EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
- ④ EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 15' MAXIMUM FROM THE CENTERLINE OF THE TRACK. WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL, 17" - 19" FROM THE APPROACHING SIDE OF THE GATE ARM.
- ⑤ WHEN PLAN SPECIFIES, DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAX. CENTER TO CENTER (EPOXY COATED).
- ⑥ TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS MAY BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET WHEN LANDINGS ARE CAST SEPARATELY.

STANDARD PLAN SHEET NO.
5-297.250 (5 OF 5)
STANDARD APPROVED:
APRIL 10, 2013

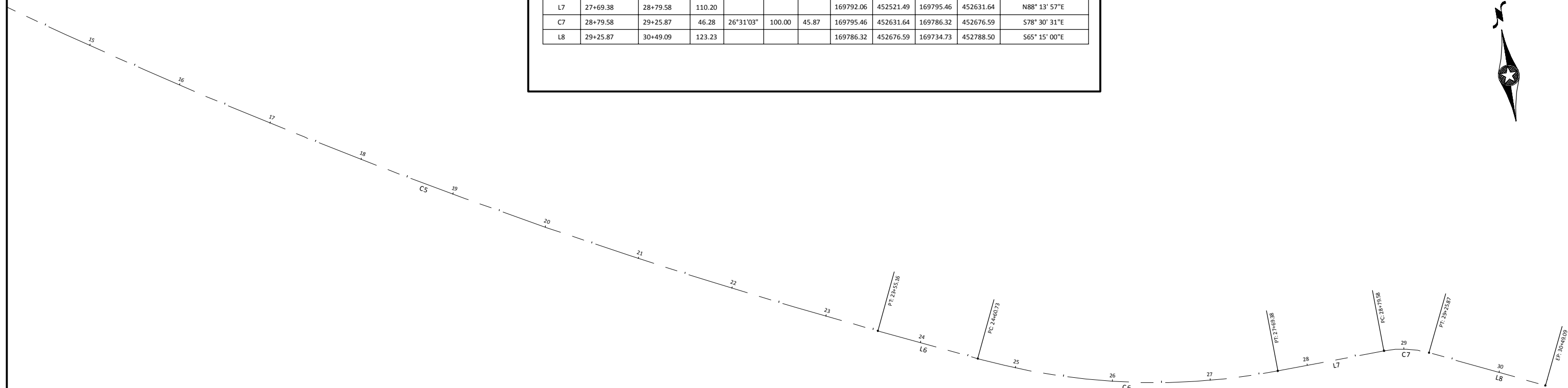
PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. 103-090-003

SHEET NO.11 OF 53 SHEETS



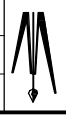
WEST TRAIL (OFF-ROAD)											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
L1	0+00	0+61.06	61.06				171046.00	450080.58	171018.89	450135.29	S63° 38' 38" E
L2	2+14.45	3+03.13	88.67				170930.94	450260.23	170869.42	450324.09	S46° 04' 01" E
L3	3+64.52	9+73.90	609.38				170834.22	450374.10	170563.79	450920.18	S63° 39' 17" E
C3	9+73.90	10+08.83	34.93	6° 32' 19"	306.08	34.91	170563.79	450920.18	170550.11	450952.30	S66° 55' 26" E
L4	10+08.83	10+67.45	58.62				170550.11	450952.30	170530.24	451007.45	S70° 11' 36" E
C4	10+67.45	12+78.62	211.17	14° 43' 57"	821.26	210.59	170530.24	451007.45	170434.07	451194.80	S62° 49' 37" E
L5	12+78.62	13+85.20	106.58				170434.07	451194.80	170373.64	451282.59	S55° 27' 39" E
C5	13+85.20	23+55.16	969.96	10° 01' 22"	5544.89	968.73	170373.64	451282.59	169896.21	452125.50	S60° 28' 20" E
L6	23+55.16	24+60.73	105.57				169896.21	452125.50	169852.40	452221.55	S65° 29' 01" E
C6	24+60.73	27+69.38	308.66	26° 17' 02"	672.83	305.96	169852.40	452221.55	169792.06	452521.49	S78° 37' 32" E
L7	27+69.38	28+79.58	110.20				169792.06	452521.49	169795.46	452631.64	N88° 13' 57" E
C7	28+79.58	29+25.87	46.28	26° 31' 03"	100.00	45.87	169795.46	452631.64	169786.32	452676.59	S78° 30' 31" E
L8	29+25.87	30+49.09	123.23				169786.32	452676.59	169734.73	452788.50	S65° 15' 00" E



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Kevin P. Kiel
 KEVIN P. KIEL, P.E.
 LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK
 DRAWN: AK
 CHECKED: KPK

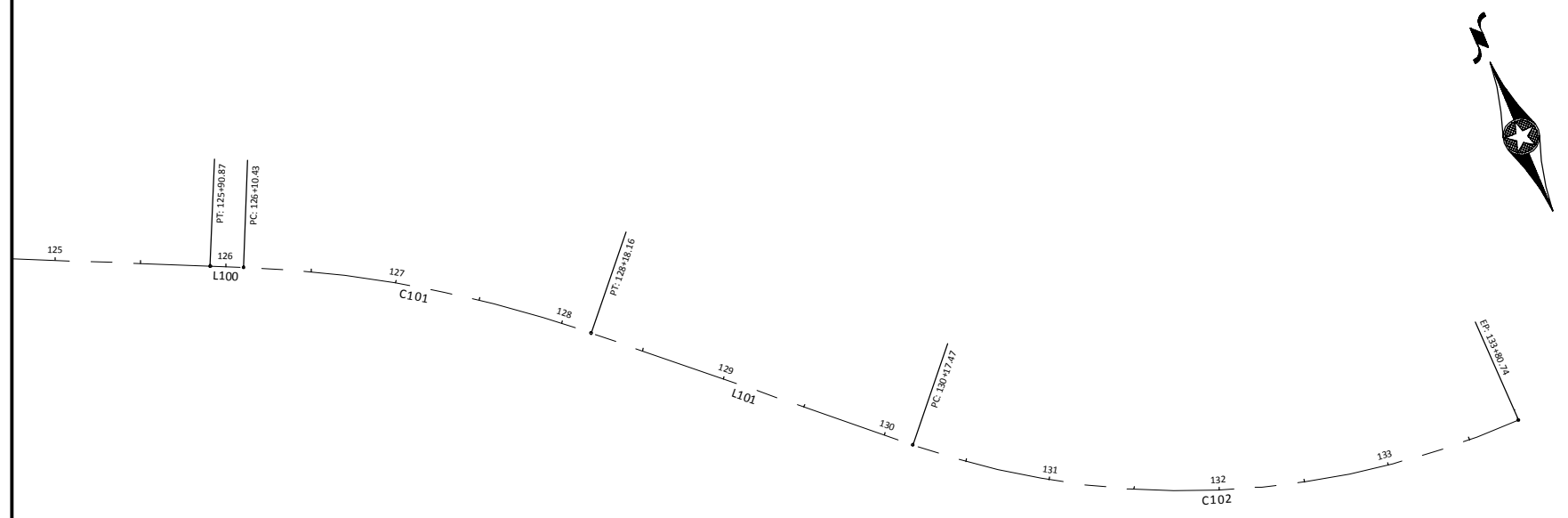
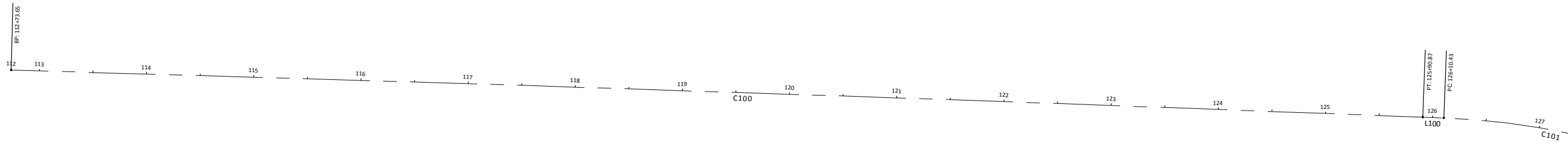


BOLTON & MENK, INC.
 Consulting Engineers & Surveyors
 MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN
 CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA
 ROCHESTER, MN SPENCER, IA

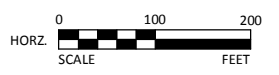
REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 WEST TRAIL (OFF-ROAD) ALIGNMENT TABULATION
 SP 103-090-003

SHEET
 12
 OF
 53



CENTRAL TRAIL (OFF-ROAD)											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
C100	112+73.65	125+90.87	1317.22	0°37'00"	122369.66	1317.22	167758.38	456435.63	167203.35	457630.20	S65° 04' 43"E
L100	125+90.87	126+10.43	19.56				167203.35	457630.20	167195.01	457647.89	S64° 46' 13"E
C101	126+10.43	128+18.16	207.73	16°57'08"	702.10	206.98	167195.01	457647.89	167080.15	457820.07	S56° 17' 39"E
L101	128+18.16	130+17.47	199.31				167080.15	457820.07	166946.32	457967.77	S47° 49' 05"E
C102	130+17.47	133+80.74	363.27	43°01'11"	483.82	354.80	166946.32	457967.77	166821.07	458299.72	S69° 19' 40"E



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Kevin P. Kielb
 KEVIN P. KIELB, P.E.
 LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK
 DRAWN: AK
 CHECKED: KPK

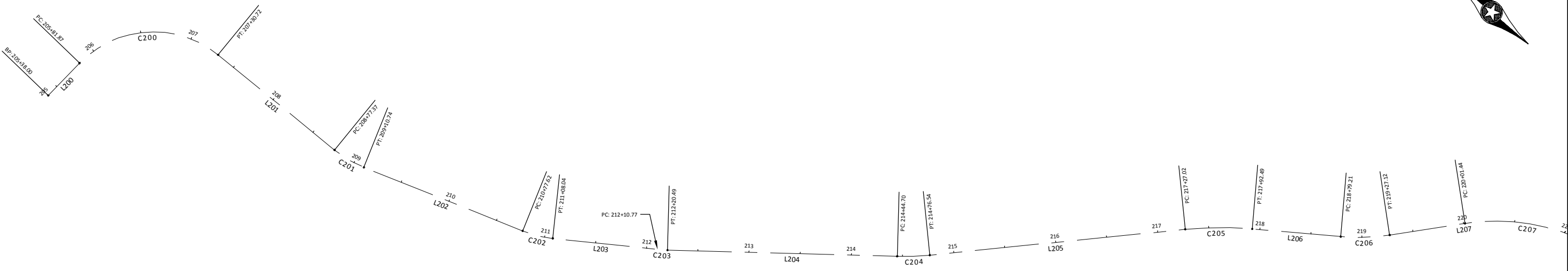


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 ROCHESTER, MN SPENCER, IA

REV.	BY	DATE

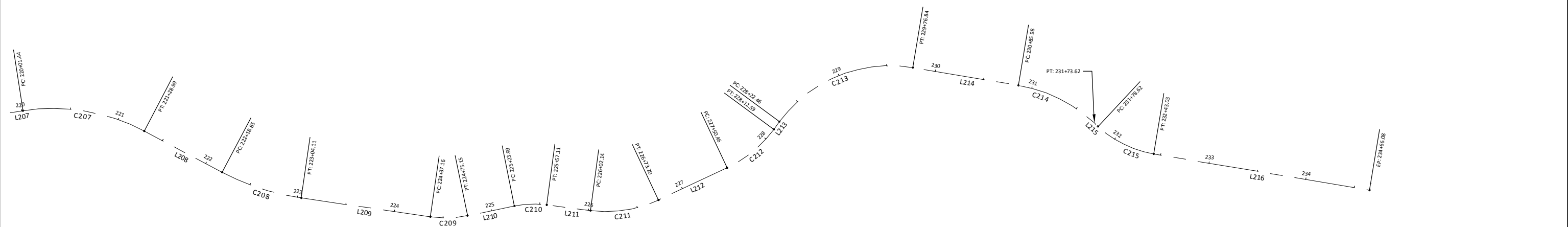
CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 CENTRAL TRAIL (OFF-ROAD) ALIGNMENT TABULATION
 SP 103-090-003

SHEET 13 OF 53



EAST TRAIL (OFF-ROAD)											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
L200	205+38	205+81.87	43.87				166131.28	459467.63	166128.87	459511.43	S86° 50' 48"E
C200	205+81.87	207+30.72	148.85	85°17'08"	100.00	135.49	166128.87	459511.43	166031.74	459605.89	S44° 12' 14"E
L201	207+30.72	208+77.37	146.65				166031.74	459605.89	165885.15	459609.89	S1° 33' 40"E
C201	208+77.37	209+10.74	33.37	17°22'55"	110.00	33.24	165885.15	459609.89	165852.44	459615.81	S10° 15' 07"E
L202	209+10.74	210+77.62	166.88				165852.44	459615.81	165694.60	459669.98	S18° 56' 35"E
C202	210+77.62	211+08.04	30.42	15°50'39"	110.00	30.32	165694.60	459669.98	165667.55	459683.68	S26° 51' 55"E
L203	211+08.04	212+10.77	102.74				165667.55	459683.68	165583.18	459742.30	S34° 47' 14"E
C203	212+10.77	212+20.49	9.71	4°27'08"	125.00	9.71	165583.18	459742.30	165575.42	459748.14	S37° 00' 48"E
L204	212+20.49	214+44.70	224.21				165575.42	459748.14	165401.77	459889.97	S39° 14' 22"E
C204	214+44.70	214+76.54	31.84	7°17'52"	250.00	31.82	165401.77	459889.97	165378.45	459911.63	S42° 53' 19"E
L205	214+76.54	217+27.02	250.48				165378.45	459911.63	165206.15	460093.43	S46° 32' 15"E
C205	217+27.02	217+92.49	65.47	10°43'02"	350.00	65.37	165206.15	460093.43	165156.95	460136.47	S41° 10' 44"E
L206	217+92.49	218+79.21	86.72				165156.95	460136.47	165086.63	460187.22	S35° 49' 12"E
C206	218+79.21	219+27.12	47.92	13°43'38"	200.00	47.80	165086.63	460187.22	165051.49	460219.63	S42° 41' 01"E
L207	219+27.12	220+01.44	74.32				165051.49	460219.63	165003.27	460276.18	S49° 32' 50"E
C207	220+01.44	221+28.99	127.55	36°32'22"	200.00	125.40	165003.27	460276.18	164896.10	460341.29	S31° 16' 39"E
L208	221+28.99	222+18.85	89.86				164896.10	460341.29	164808.54	460361.51	S13° 00' 27"E

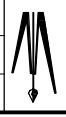
EAST TRAIL (OFF-ROAD)											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
C208	222+18.85	223+04.11	85.26	19°32'25"	250.00	84.85	164808.54	460361.51	164730.31	460394.36	S22° 46' 40"E
L209	223+04.11	224+37.16	133.05				164730.31	460394.36	164618.16	460465.94	S32° 32' 53"E
C209	224+37.16	224+75.15	37.99	19°47'11"	110.00	37.80	164618.16	460465.94	164590.27	460491.45	S42° 26' 28"E
L210	224+75.15	225+23.99	48.84				164590.27	460491.45	164560.43	460530.11	S52° 20' 04"E
C210	225+23.99	225+57.11	33.13	18°58'46"	100.00	32.97	164560.43	460530.11	164536.25	460552.54	S42° 50' 41"E
L211	225+57.11	226+02.14	45.02				164536.25	460552.54	164498.64	460577.29	S33° 21' 18"E
C211	226+02.14	226+73.20	71.06	32°34'15"	125.00	70.11	164498.64	460577.29	164453.24	460630.71	S49° 38' 25"E
L212	226+73.20	227+50.46	77.26				164453.24	460630.71	164421.72	460701.25	S65° 55' 32"E
C212	227+50.46	228+12.59	62.13	28°28'44"	125.00	61.49	164421.72	460701.25	164411.22	460761.84	S80° 09' 55"E
L213	228+12.59	228+22.46	9.87				164411.22	460761.84	164411.98	460771.69	N85° 35' 43"E
C213	228+22.46	229+76.84	154.38	63°10'55"	140.00	146.68	164411.98	460771.69	164344.96	460902.16	S62° 48' 49"E
L214	229+76.84	230+85.98	109.14				164344.96	460902.16	164251.63	460958.73	S31° 13' 22"E
C214	230+85.98	231+73.62	87.64	33°28'35"	150.00	86.40	164251.63	460958.73	164167.98	460980.34	S14° 29' 05"E
L215	231+73.62	231+78.62	5.00				164167.98	460980.34	164162.99	460980.15	S2° 15' 13"W
C215	231+78.62	232+43.03	64.41	33°32'51"	110.00	63.49	164162.99	460980.15	164101.52	460996.07	S14° 31' 13"E
L216	232+43.03	234+66.08	223.05				164101.52	460996.07	163910.92	461111.93	S31° 17' 38"E



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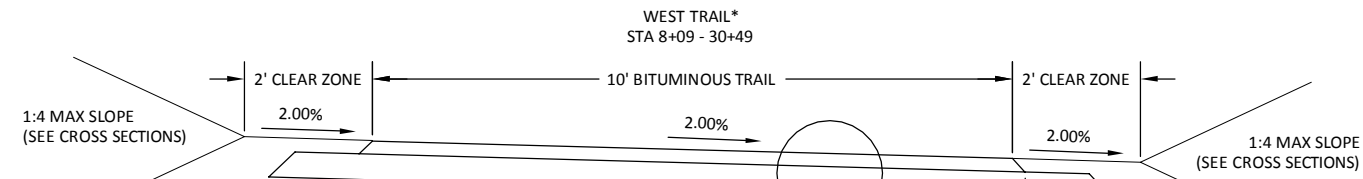
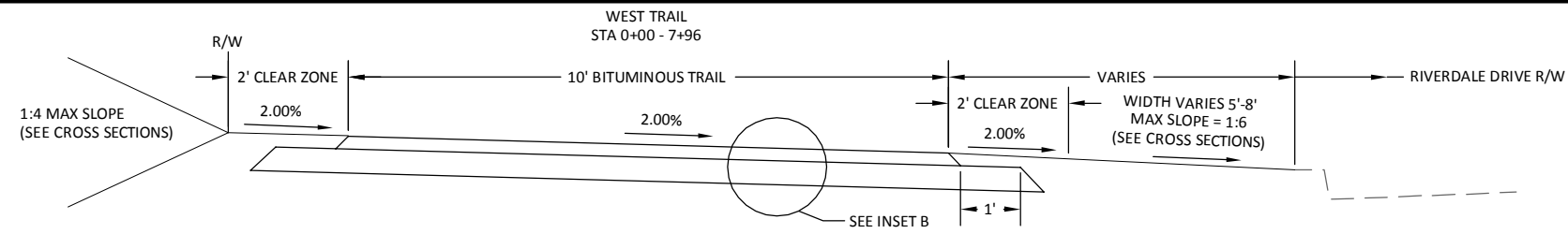
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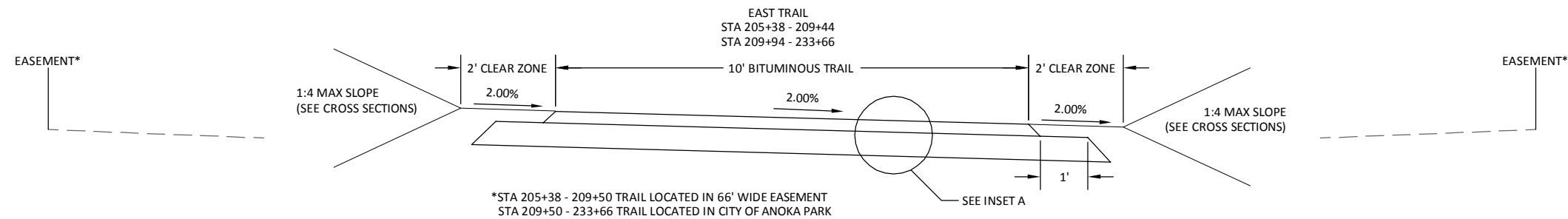
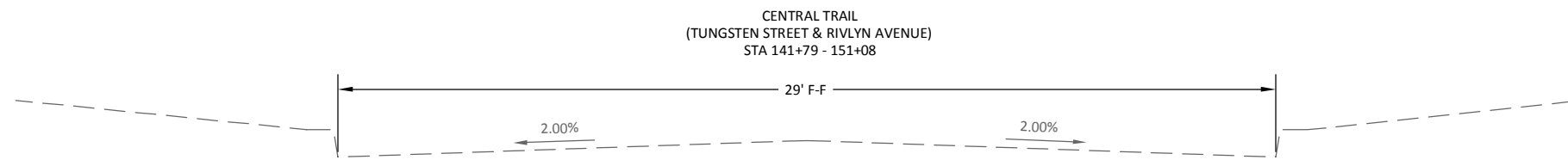
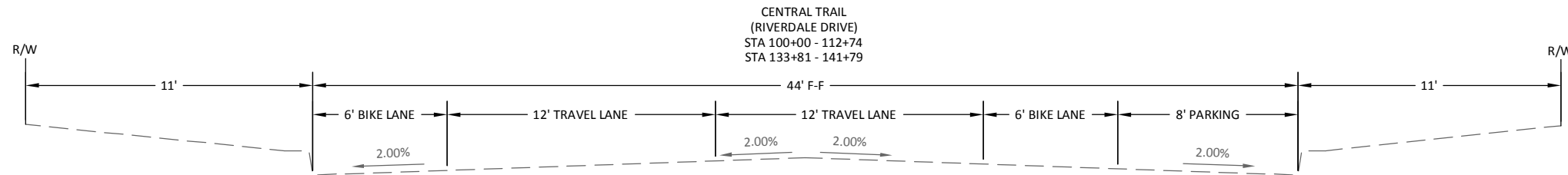
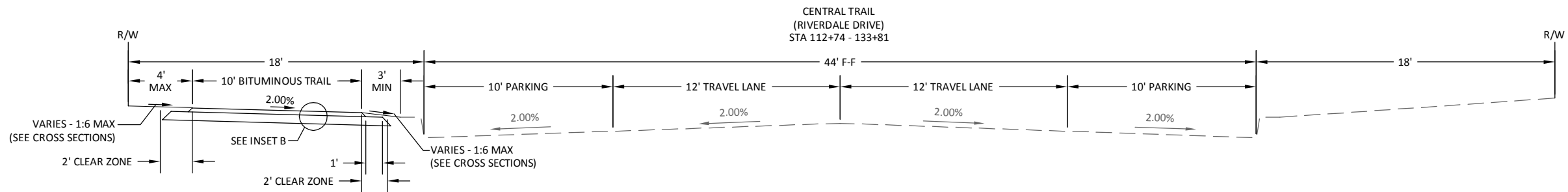
BOLTON & MENK, INC.
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REV.	BY	DATE

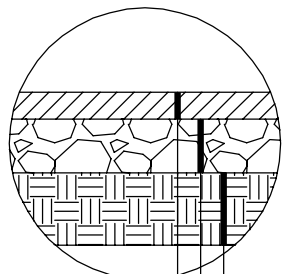
CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 EAST TRAIL (OFF-ROAD) ALIGNMENT TABULATION
 SP 103-090-003



*STA 8+26 - 28+72 TRAIL LOCATED IN ANOKA COUNTY PARK
 STA 28+72 - 30+22 TRAIL LOCATED IN Mn/DOT R/W

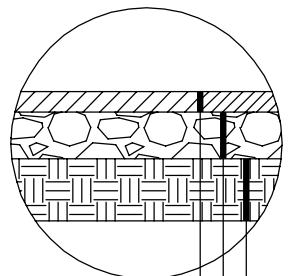


INSET A (BITUMINOUS TRAIL)



3" TYPE SP 9.5 WEARING COURSE MIXTURE (2,B) [SPWEA240B] (2360)
 6" AGGREGATE BASE CLASS 5 (2357)
 SUBGRADE PREPARATION - INCIDENTAL (2112)

INSET B (BITUMINOUS TRAIL)



2" TYPE SP 9.5 WEARING COURSE MIXTURE (2,B) [SPWEA240B] (2360)
 4" AGGREGATE BASE CLASS 5 (2357)
 SUBGRADE PREPARATION - INCIDENTAL (2112)

NOTE:

THE 2' TRAIL CLEAR ZONE ON EITHER SIDE OF THE TRAIL SHOULD BE AT THE SAME CROSS SLOPE AS THE TRAIL IN MOST CASES.



REV.	BY	DATE

GENERAL PROJECT INFORMATION:

RESPONSIBLE PARTIES:

The Contractor and Owner must apply for coverage under the MPCA's General Storm Water Permit for Construction Activity as required by the National Pollutant Discharge Elimination System (NPDES) Phase II program. Coverage under the permit will begin automatically 7 calendar days after the postmarked date on the permit application. [Longer time frames apply to sites that: (1) disturb areas greater than 50 acres AND discharge within 1 mile of a Special or Impaired Water; or (2) Use alternative storm water treatment techniques].

Owner:	CITY OF ANOKA	<NAME>	XXX.XXX.XXXX
		Contact Person	Phone
SWPPP Preparer:	BOLTON & MENK, INC.	KEVIN KIELB	651.704.9970
		Contact Person	Phone
Contractor:	(SUPPLIED BY CONTRACTOR)	<NAME>	XXX.XXX.XXXX
		Contact Person	Phone
Person Responsible For Inspections:	(SUPPLIED BY CONTRACTOR)	<NAME>	XXX.XXX.XXXX
		Contact Person	Phone
Party Responsible for Long Term O&M of Permanent Storm Water Management Facility:	CITY OF ANOKA	GREG LEE	763.576.2700
		Contact Person	Phone

PROJECT LOCATION:

County, State	Township	Range	Section(s)	Latitude	Longitude
Anoka, MN	31,32	25	2,33,34,35	45.21997	93.43295

PROJECT DESCRIPTION:

This project includes disturbance of approximately 5.5 acres. Construction activities include performing removals, aggregate base construction, and concrete and bituminous construction.

Soils on the site are primarily of Hydrologic Soil Group Type A, with high infiltration capacity.

Planned Construction Start Date:	8/1/2013
Estimated Construction Completion Date:	7/1/2014

PROJECT AREAS:

Total Project Size (disturbed area) =	5.5 AC
Existing area of impervious surface =	0 AC
Post construction area of impervious surface =	2.3 AC
Total new impervious surface area created =	2.3 AC

STORM WATER MANAGEMENT:

Type of storm water management used if more than 1 acre of new impervious surface is created:

Wet sedimentation basin Regional pond Alternative methods
 Infiltration Permanent storm water management not required
 Filtration

Required Water Quality Volume:	N/A
Design Water Quality Volume:	N/A
Elevation of Water Quality Volume Storage:	N/A
Surface Area at Water Quality Volume Storage:	N/A
Allowable Discharge of Water Quality Volume:	N/A
Designed Discharge for Water Quality Volume:	N/A
Required Infiltration Volume:	N/A
Designed Infiltration Volume:	N/A

The stormwater from the Mississippi West Regional Park and King's Island drains south to the Mississippi River. Stormwater from Riverdale Dr. is collected in catch basins and carried south. No change in the overall stormwater conveyance system is expected as a result of the project.

RECEIVING WATERS:

Surface waters which will receive storm water from the site within 1 mile of project boundary. Include waters shown on USGS 7.5 minute quad and all waters identified in Appendix A of the permit.

Name of Water Body	Type (ditch, pond, wetland, lake, etc.)	Appendix A Special Water?	Flows to Impaired Water within 1 mile?	USEPA Approved TMDL?
Mississippi River	River	YES	NO	NO

Impairment: _____

CONSTRUCTION ACTIVITY NOTES:

EROSION PREVENTION PRACTICES:

Phased construction will be used to extent practical or as indicated in the plans to minimize exposed soils.

Areas not to be disturbed shall be delineated with flags, stakes, signs, silt fence, etc. prior to work beginning. The normal wetted perimeter of all ditches or swales, including storm water management pond slopes, that drain waters from the site must be stabilized within 200' of any property edge or discharge point, including storm sewer inlets, within 24 hours of connection.

Energy dissipation or other outlet treatment must be installed within 24 hours of connection.

All exposed soils must be stabilized as soon as possible but in no case later than 14 days after the construction activity has temporarily or permanently ceased.

Seed and/or sod, fertilizer, and mulch shall be placed as indicated in the plans and project specifications.

Rapid stabilization shall be of type and quantity indicated in the project specifications. Additional rapid stabilization may be necessary to minimize erosion throughout the duration of the project. Type and quantity shall be determined by the engineer or inspector prior to installation.

If the Contractor stockpiles material on site, he shall install the appropriate erosion control devices around the stockpile and perform the best management practices possible to avoid erosion from the stockpile.

Temporary (or permanent) sedimentation ponds are required for areas > 10 acres of disturbed soils draining soils draining to one point.

SEDIMENT CONTROL PRACTICES:

Installation of silt fence and all other down gradient sediment protection measures shall be completed prior to commencement of upstream land disturbing activities.

Silt fence shall be installed along constant contours with continuous lengths not to exceed 600 feet. As indicated on plans, silt fence will be periodically broken and hooked upslope in "J-hook" or "smile" patterns to provide ponding and slow runoff.

No unbroken slope lengths greater than 75 feet are permitted when slope is 3:1 or greater. Slope shall be broken with silt fence or biorolls as indicated on plans.

Install ditch checks (Biorolls) as shown in plan. Ditch checks to be installed after street is removed and left in place until final restoration is established.

BMP	QUANTITY
SILT FENCE	7150 LIN FT
STORM DRAIN INLET PROTECTION	12 EACH
SODDING TYPE LAWN	2850 SY
EROSION CONTROL BLANKET	15250 SY

Vehicle tracking to be minimized to all practical extents. All eroded material that leaves the construction zone shall be collected by the contractor and returned to the site at the contractor's expense.

All stock piles shall be surrounded by silt fence and seeded with temporary seed and mulch. See erosion and sediment control plans.

All site storm sewer inlets, as well as off site downstream inlets with potential to receive sediment, shall be protected with approved inlet protection measures at all times. Inlets shall remain protected until site is 100% stabilized and vegetation is at least 70% established. Inlet protection may be removed in winter, if the project has an approval letter from jurisdictional authority or can produce it within 72 hours.

POLLUTION PREVENTION:

All solid waste collected from the construction site must be disposed of in accordance with MPCA disposal requirements.

Concrete washout must be contained in device such as provided by Neaton Brothers Concrete Washout LLC, or equivalent unit. Unit must be maintained to manufacturer recommendation.

All hazardous materials (e.g., oil, gasoline, fuel, antifreeze, paint, cleaning solvents, curing compounds, fertilizers, etc.) must be properly stored (including secondary containment when necessary) to prevent spills, leaks, or other discharge. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.

External washing areas must be limited to a defined area of the site. All runoff containing any hazardous material must be properly collected and disposed of. Defined area must be contained with heavy- or super-duty silt fence. NO ENGINE DEGREASING ALLOWED ON SITE.

The contractor is responsible for monitoring air pollution and ensuring it does not exceed levels set by local, state, or federal regulations. This includes dust created by work being performed on the site. Air pollution and dust control correction is considered incidental to the unit bid prices for which work is being performed. Additional dust control measures may be required by the Engineer.

INSPECTION & MAINTENANCE:

The permittees must routinely inspect the construction site once every seven (7) days during active construction and within 24 hours of a rainfall event greater than 0.5 inches in a 24 hour period.

All inspections performed during construction must be recorded and records retained on site with the SWPPP in accordance with the storm water permit. Records must include a site map showing areas of land disturbing activities and areas where activities have temporarily or permanently ceased.

Silt fence, biorolls and inlet protection devices must be maintained when non-functional or when accumulated sediment reaches 1/3 of device height.

Off site vehicle tracking to be removed within 24 hours of occurrence.

All non-functional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours of discovery, or as soon as field conditions allow access.

FINAL STABILIZATION:

The permittees must submit a Notice of Termination (N.O.T.) within 30 days of final stabilization or transferring permit responsibility to another owner or operator.

The Contractor must ensure final stabilization of the site. Final stabilization shall include a minimum of 70% vegetation establishment (100% stabilized) on all pervious areas.

All temporary erosion control measures and BMPs must be removed as part of the final site stabilization, unless directed otherwise by owner or engineer.

IMPLEMENTATION SCHEDULE & PHASING:

- 1) Install silt fence and inlet protection.
- 2) Clear, grub, and grade site.
- 3) Add additional temporary BMP's as necessary during construction based on inspection reports.
- 4) Ensure final stabilization measures are complete.
- 5) Submit Notice of Termination (NOT) to MPCA within 30 days of final stabilization.

RECORD RETENTION:

The SWPPP, all changes to it, and inspections and maintenance records must be kept at the site during construction. All owner(s) must retain the following for 3 years after submittal of NOT:

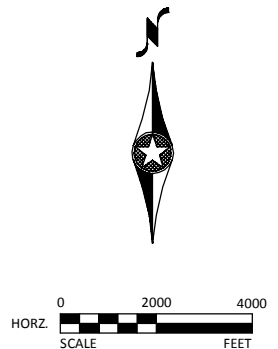
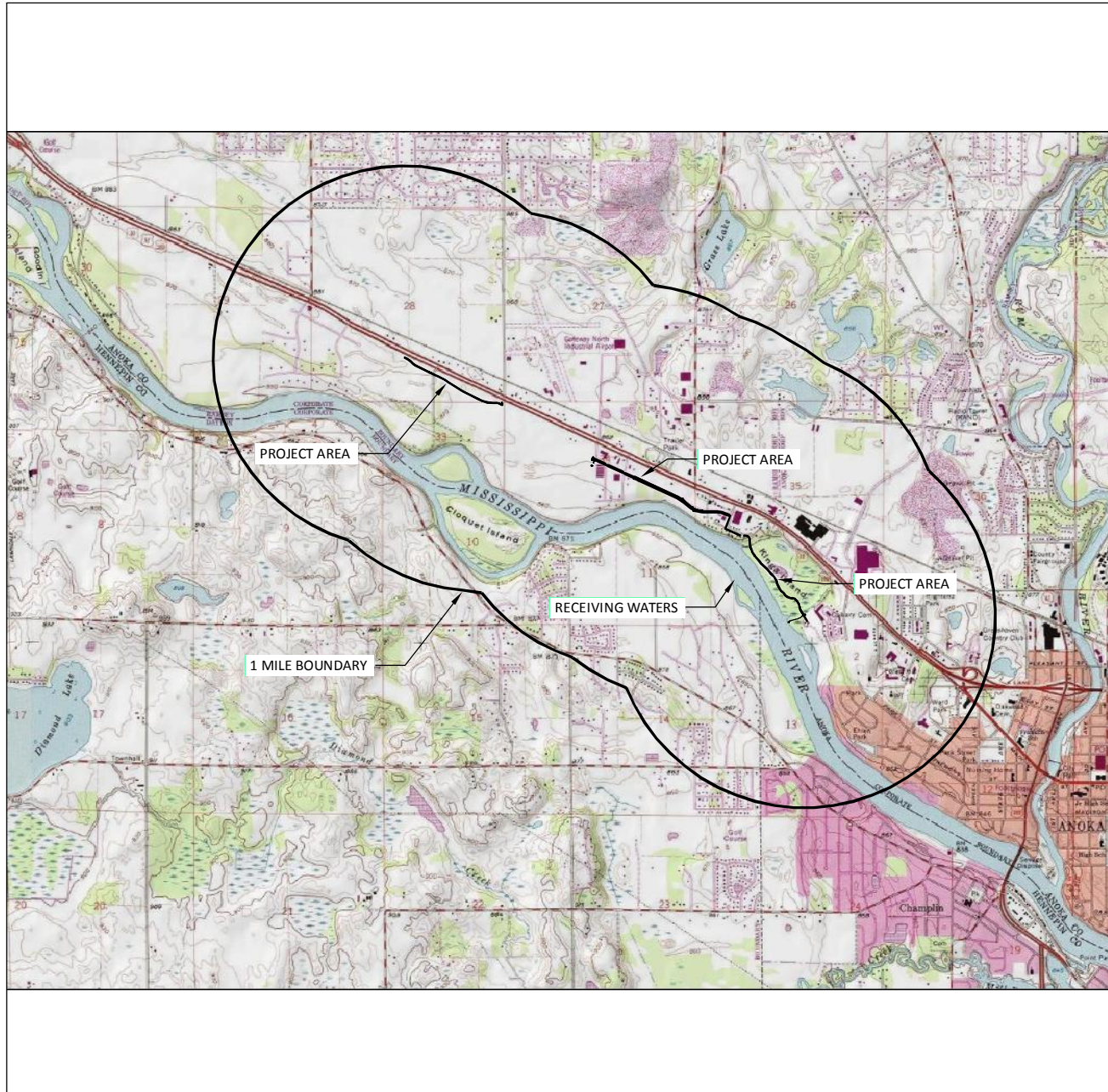
- 1) SWPPP;
- 2) Any other permits required for the project;
- 3) Inspection and maintenance logs;
- 4) All permanent operation and maintenance agreements for surface water facilities;
- 5) All design calculations for temporary and permanent storm water management.

PLAN SHEETS:

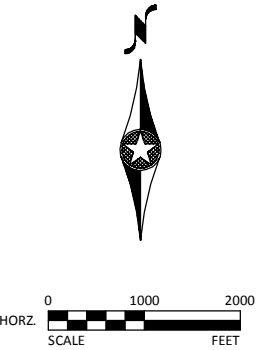
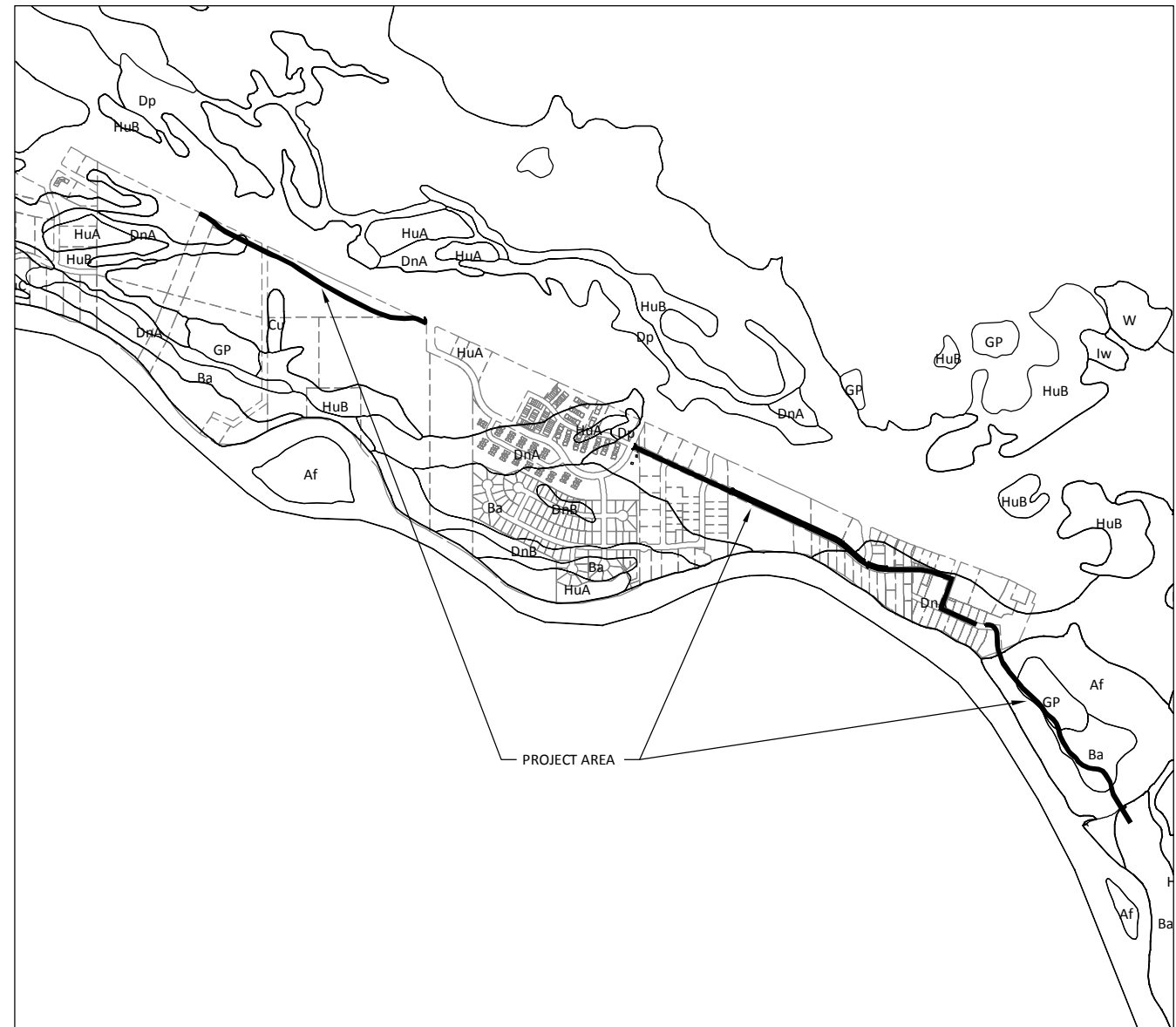
Sheet numbers 17-20 of this plan set are also considered a part of the SWPPP for this project.



USGS QUAD MAP



USDA SCS SOIL SURVEY MAP

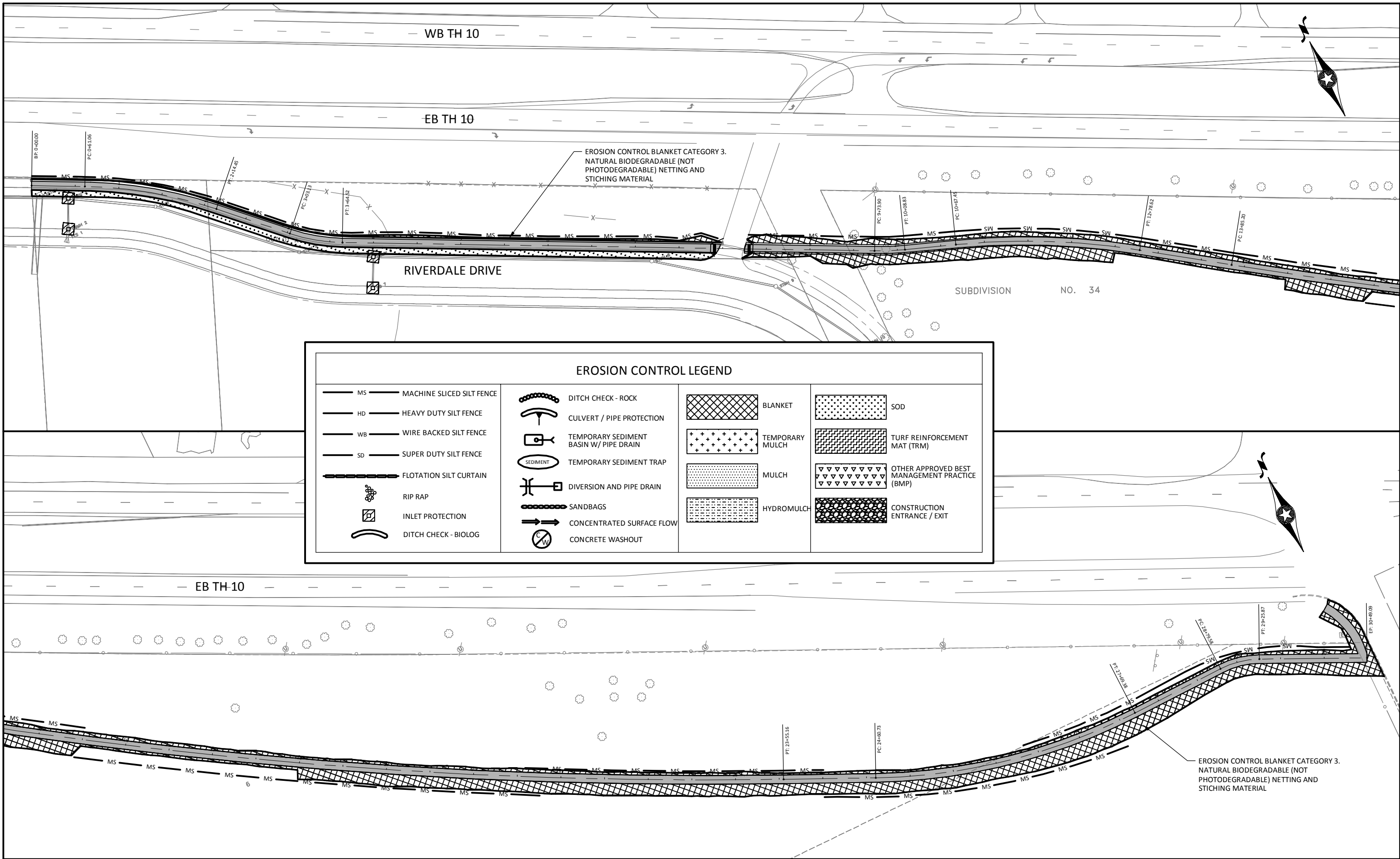


SOIL TYPES SUMMARY

- Af - Alluvial land, mixed, frequently flooded
- Ba - Becker very fine sandy loam
- Cu - Cut and fill land
- DnA - Dickman sandy loam, 0 to 2 percent slopes
- DnB - Dickman sandy loam, 2 to 6 percent slopes
- Dp - Duell loamy coarse sand
- GP - Pits, gravel-Udisamments complex
- HuA - Hubbard coarse sand, 0 to 2 percent slopes
- HuB - Hubbard coarse sand, 2 to 6 percent slopes
- Iw - Isanti fine sandy loam
- W - Water



REV.	BY	DATE



EROSION CONTROL LEGEND

MS	MACHINE SLICED SILT FENCE		DITCH CHECK - ROCK		BLANKET		SOD
HD	HEAVY DUTY SILT FENCE		CULVERT / PIPE PROTECTION		TEMPORARY MULCH		TURF REINFORCEMENT MAT (TRM)
WB	WIRE BACKED SILT FENCE		TEMPORARY SEDIMENT BASIN W/ PIPE DRAIN		MULCH		OTHER APPROVED BEST MANAGEMENT PRACTICE (BMP)
SD	SUPER DUTY SILT FENCE		TEMPORARY SEDIMENT TRAP		HYDROMULCH		CONSTRUCTION ENTRANCE / EXIT
	FLOTATION SILT CURTAIN		DIVERSION AND PIPE DRAIN				
	RIP RAP		SANDBAGS				
	INLET PROTECTION		CONCENTRATED SURFACE FLOW				
	DITCH CHECK - BIOLOG		CONCRETE WASHOUT				



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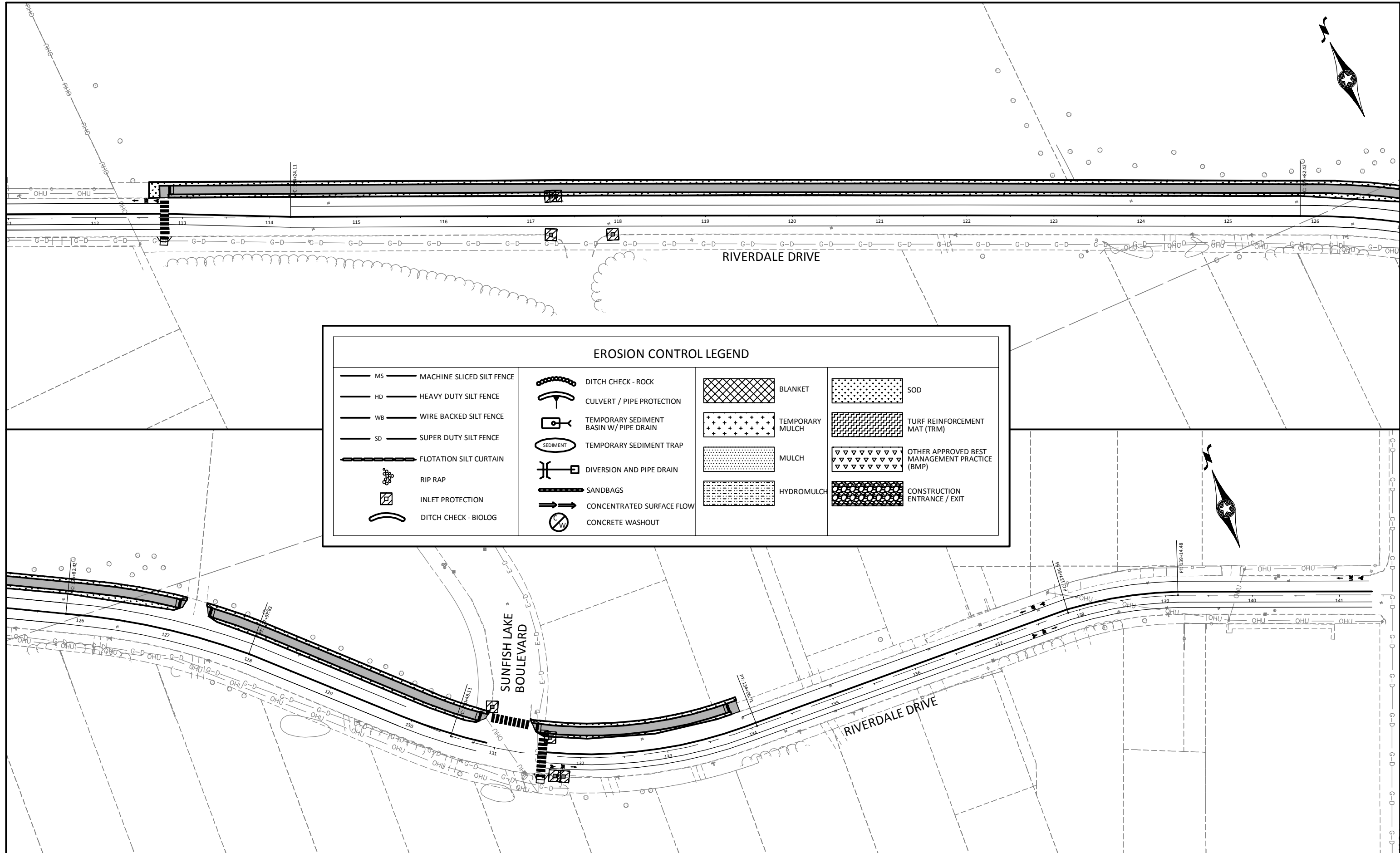
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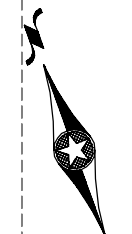
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 SP 103-090-003

SHEET 18 OF 53

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EROSION CONTROL LEGEND			
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HD	HEAVY DUTY SILT FENCE		CULVERT / PIPE PROTECTION
WB	WIRE BACKED SILT FENCE		TEMPORARY SEDIMENT BASIN W/ PIPE DRAIN
SD	SUPER DUTY SILT FENCE		TEMPORARY SEDIMENT TRAP
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	RIP RAP		SANDBAGS
	INLET PROTECTION		CONCENTRATED SURFACE FLOW
	DITCH CHECK - BIOLOG		CONCRETE WASHOUT
	BLANKET		SOD
	TEMPORARY MULCH		TURF REINFORCEMENT MAT (TRM)
	MULCH		OTHER APPROVED BEST MANAGEMENT PRACTICE (BMP)
	HYDROMULCH		CONSTRUCTION ENTRANCE / EXIT



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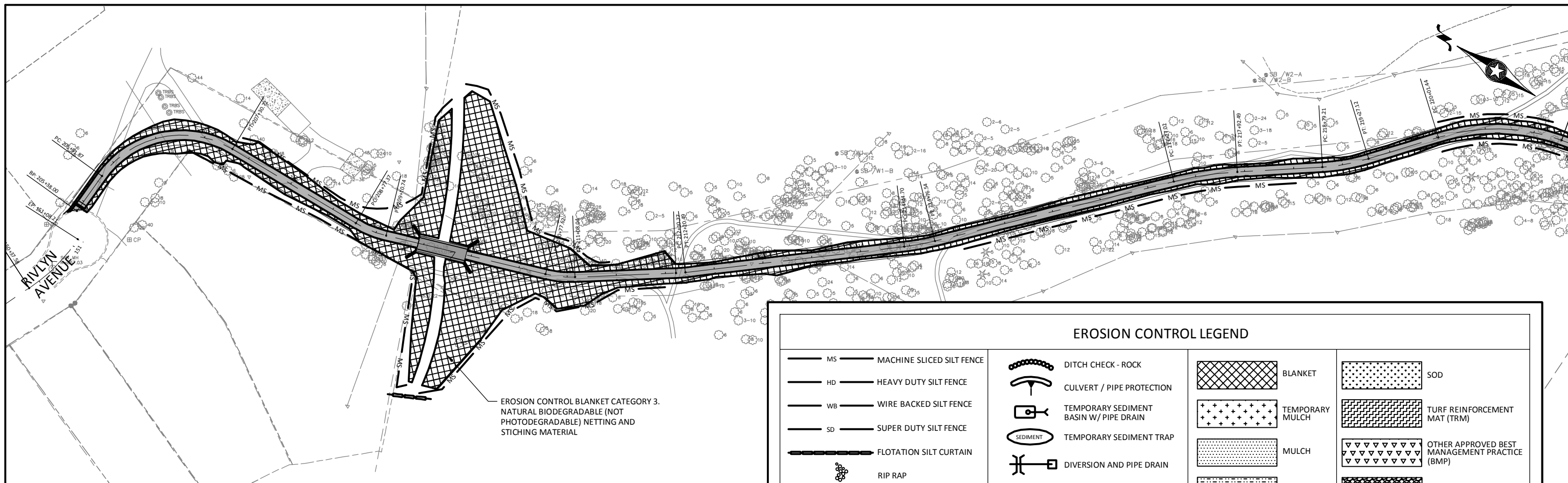
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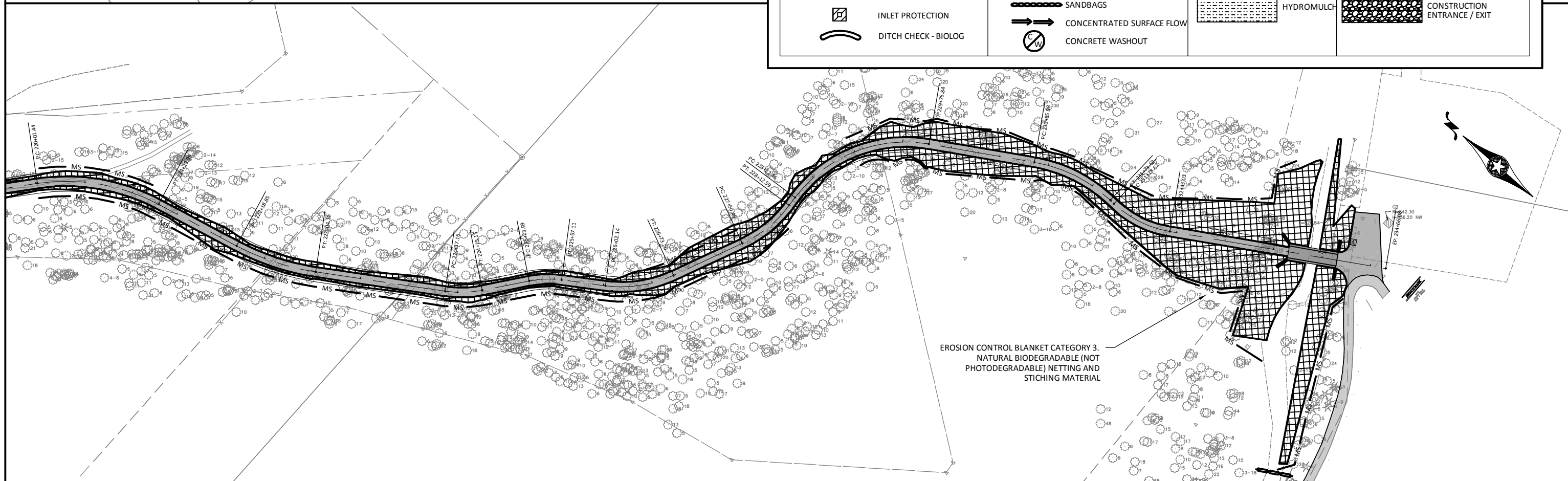
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EROSION CONTROL BLANKET CATEGORY 3. NATURAL BIODEGRADABLE (NOT PHOTODEGRADABLE) NETTING AND STITCHING MATERIAL

EROSION CONTROL LEGEND			
MS	MACHINE SLICED SILT FENCE		DITCH CHECK - ROCK
HD	HEAVY DUTY SILT FENCE		CULVERT / PIPE PROTECTION
WB	WIRE BACKED SILT FENCE		TEMPORARY SEDIMENT BASIN W/ PIPE DRAIN
SD	SUPER DUTY SILT FENCE		TEMPORARY SEDIMENT TRAP
	FLOTATION SILT CURTAIN		DIVERSION AND PIPE DRAIN
	RIP RAP		SANDBAGS
	INLET PROTECTION		CONCENTRATED SURFACE FLOW
	DITCH CHECK - BIOLOG		CONCRETE WASHOUT
	BLANKET		SOD
	TEMPORARY MULCH		TURF REINFORCEMENT MAT (TRM)
	MULCH		OTHER APPROVED BEST MANAGEMENT PRACTICE (BMP)
	HYDROMULCH		CONSTRUCTION ENTRANCE / EXIT



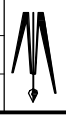
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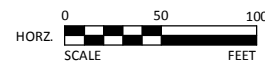
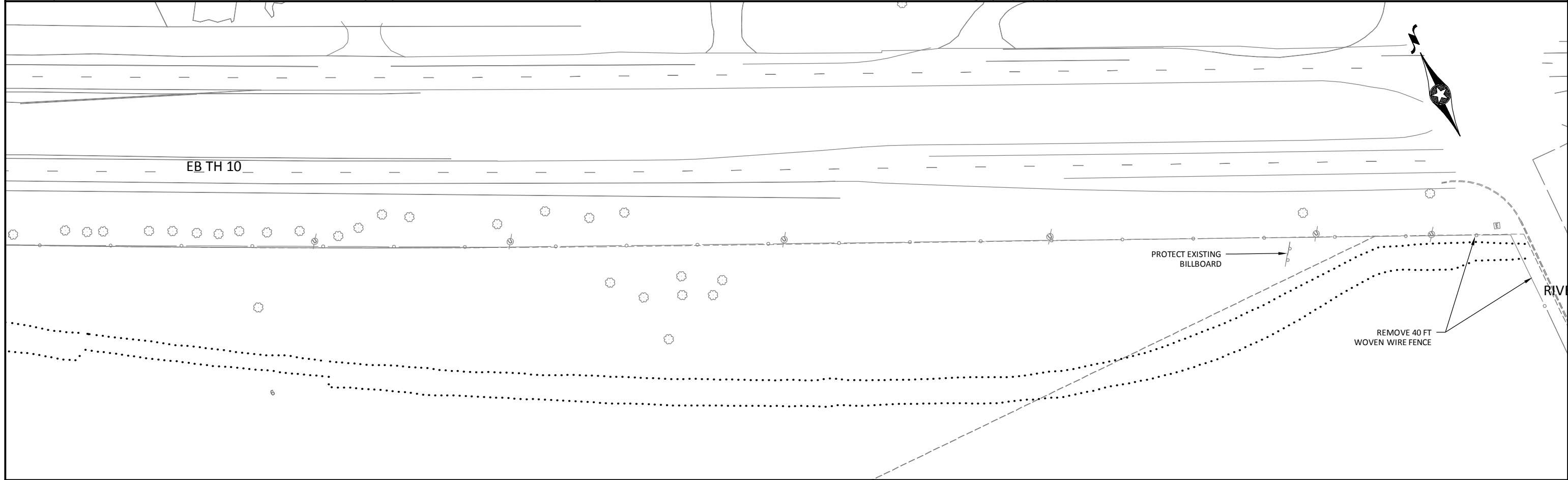
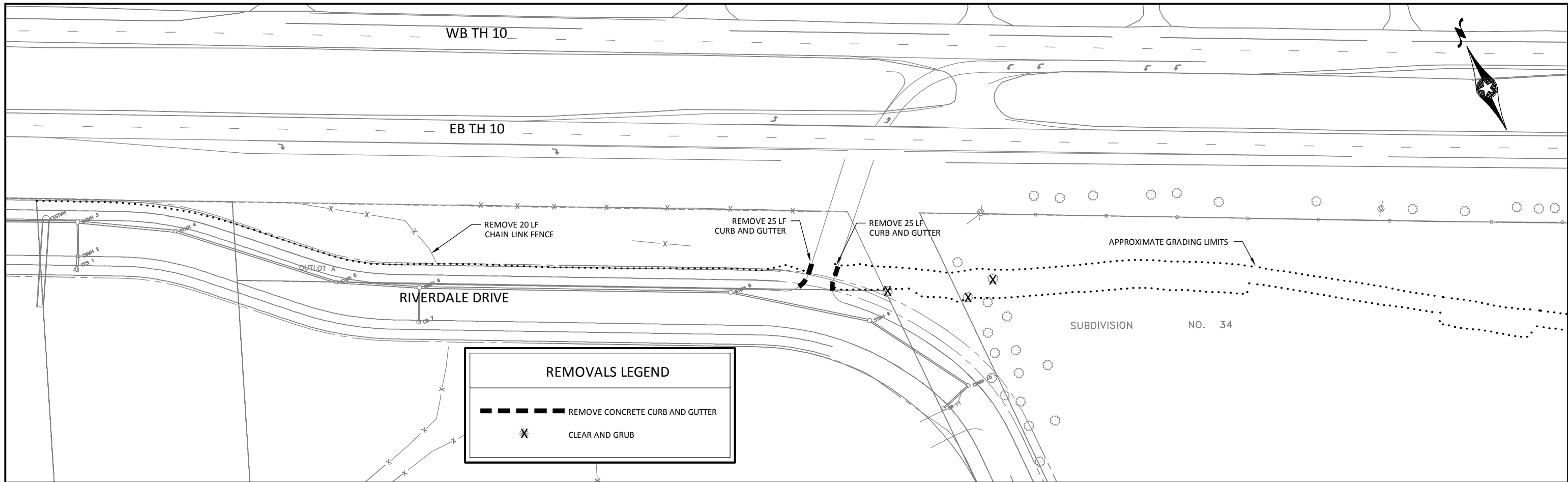


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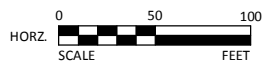
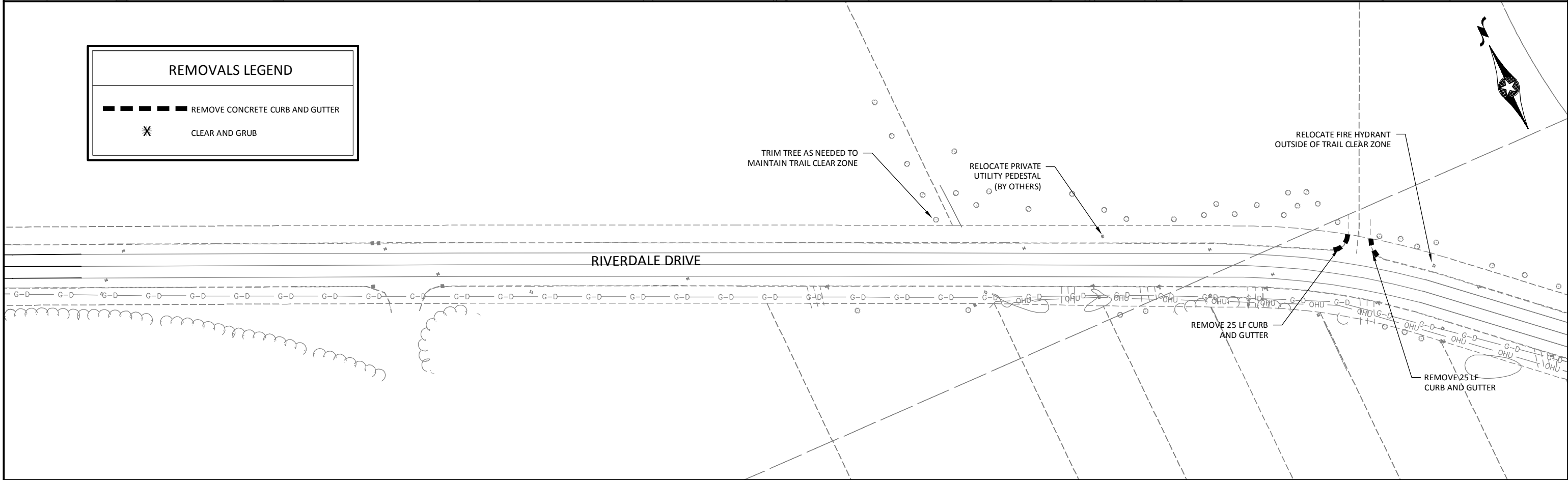
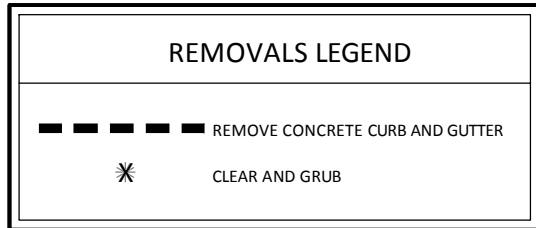
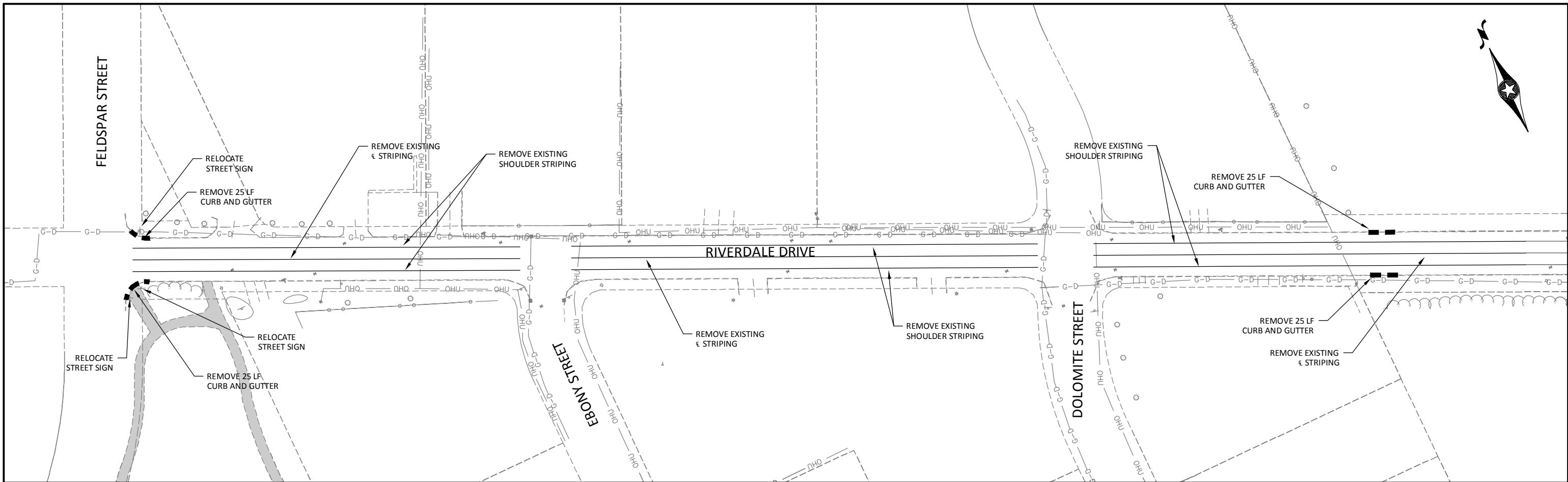


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 REMOVALS - WEST TRAIL
 SP 103-090-003

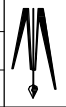
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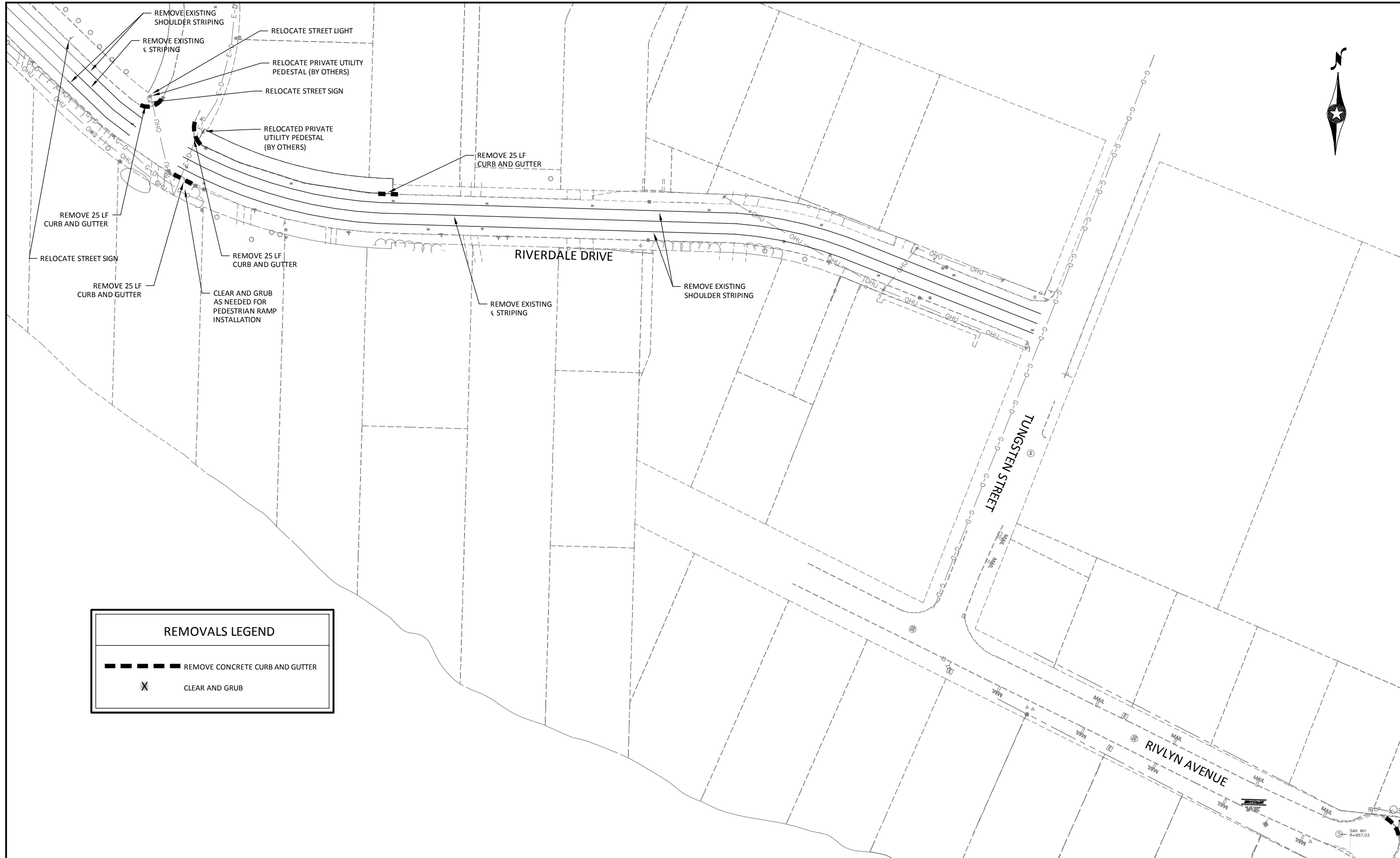


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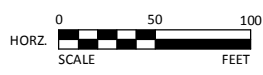
CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 REMOVALS - CENTRAL TRAIL
 SP 103-090-003

SHEET 22 OF 53



REMOVALS LEGEND

	REMOVE CONCRETE CURB AND GUTTER
	CLEAR AND GRUB



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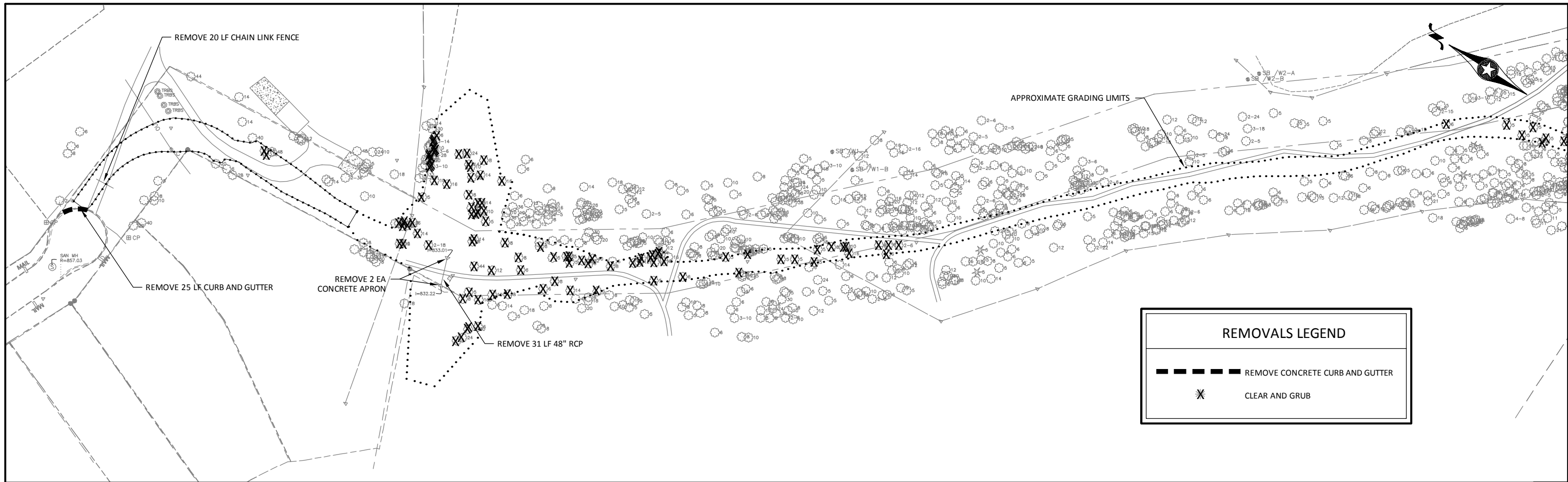


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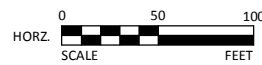
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 MISSISSIPPI RIVER TRAIL
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SHEET 23 OF 53



REMOVALS LEGEND

REMOVE CONCRETE CURB AND GUTTER
 CLEAR AND GRUB



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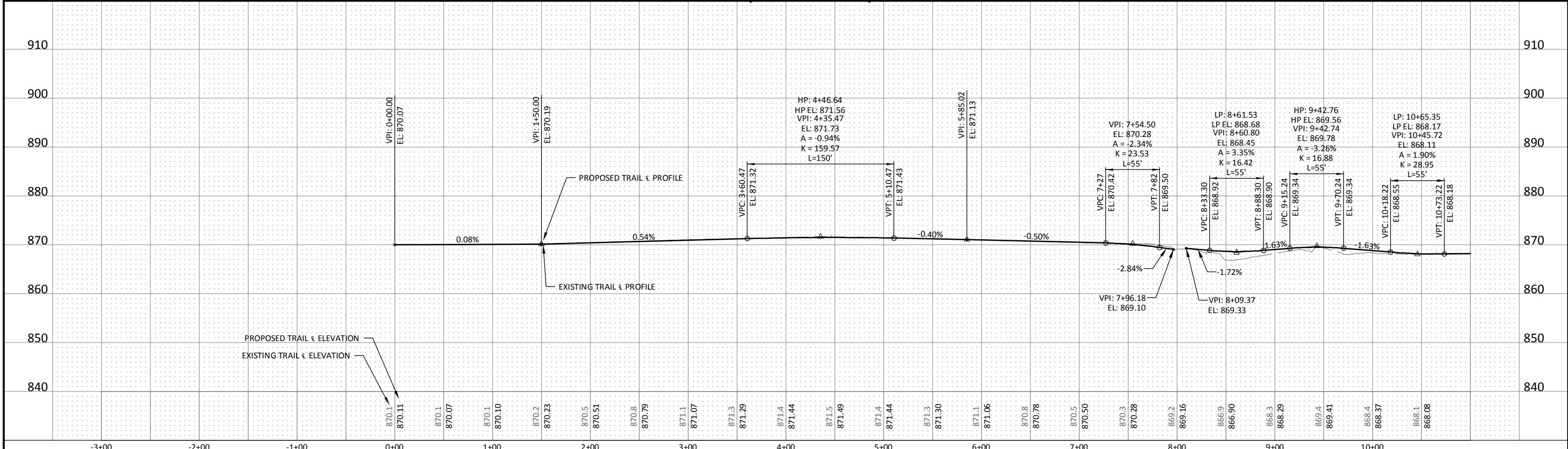
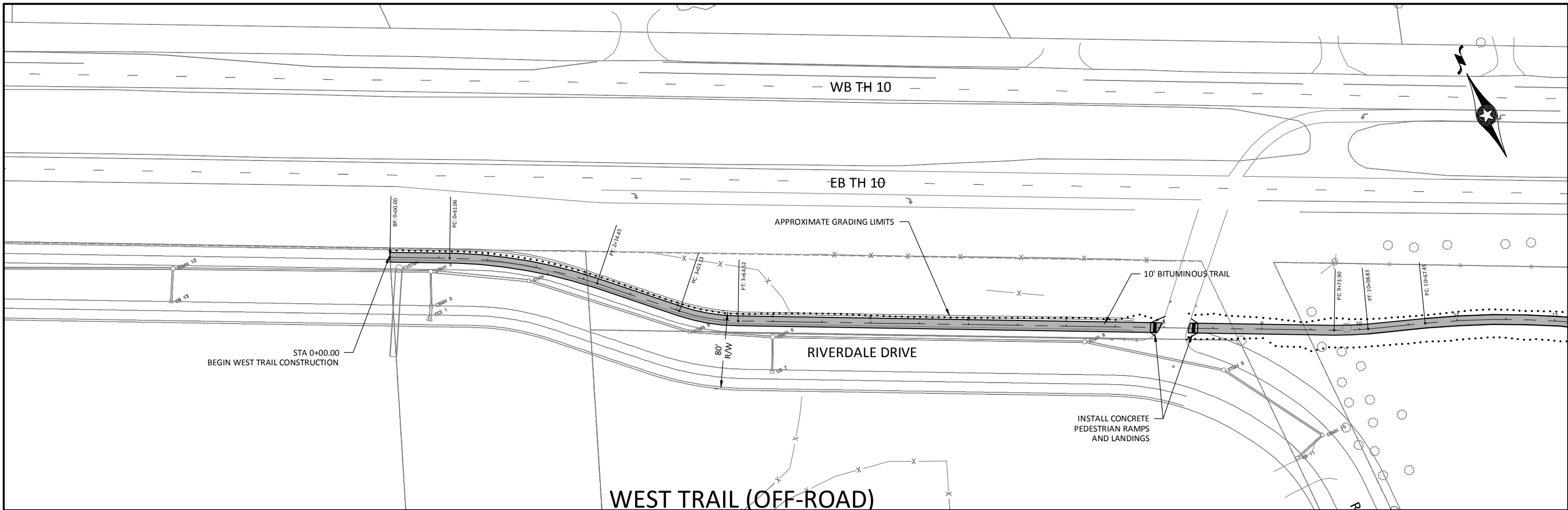


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CITY OF ANOKA, MINNESOTA
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 REMOVALS - EAST TRAIL
 SP 103-090-003

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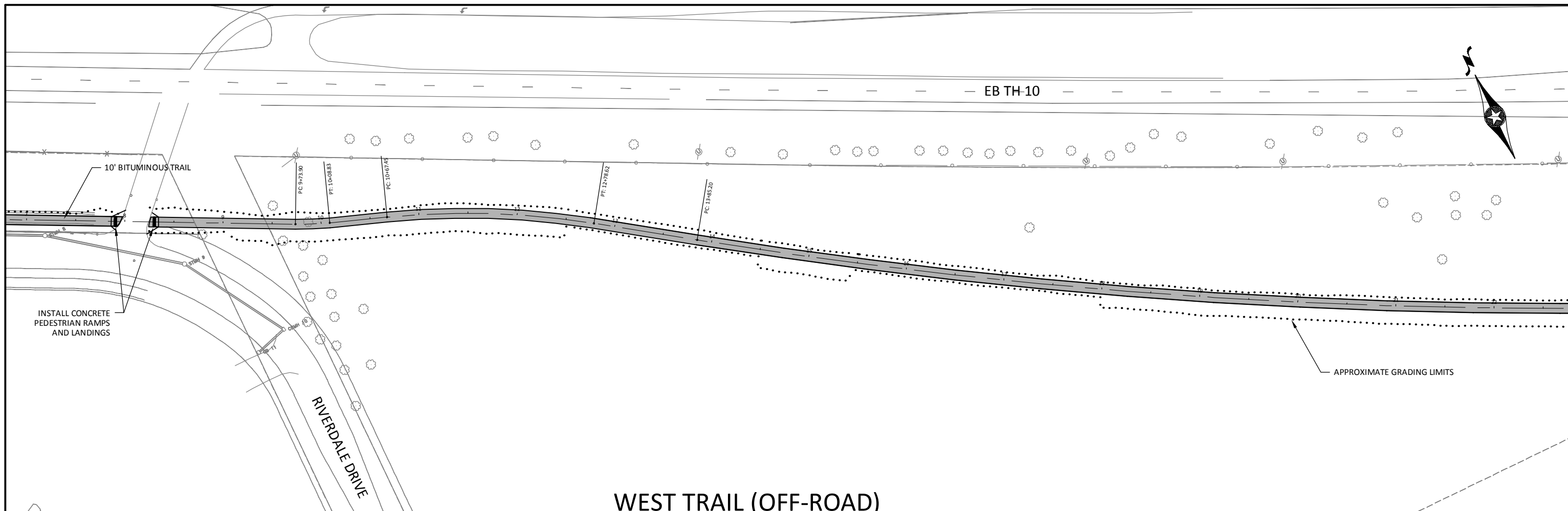


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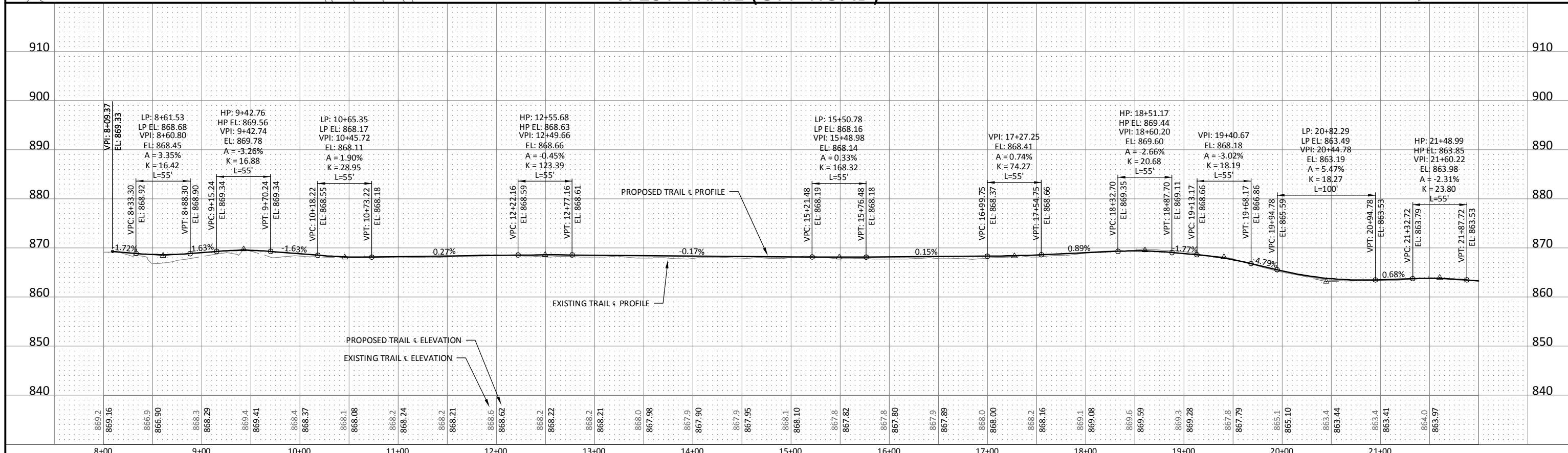
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WEST TRAIL (OFF-ROAD)



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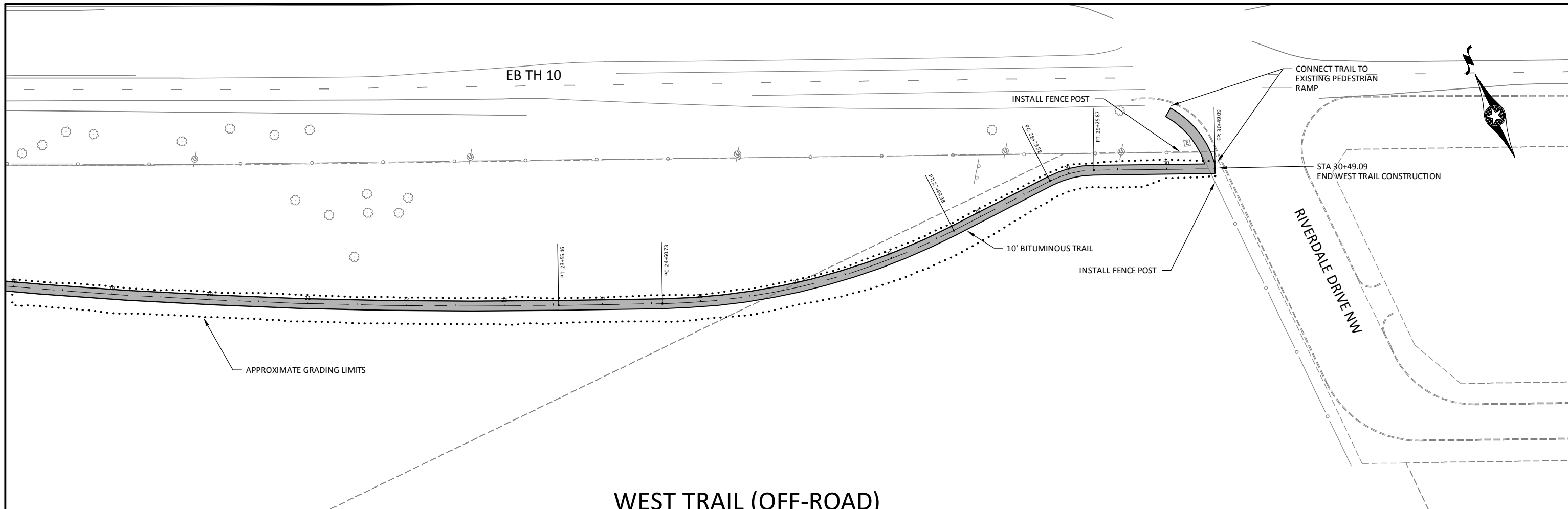
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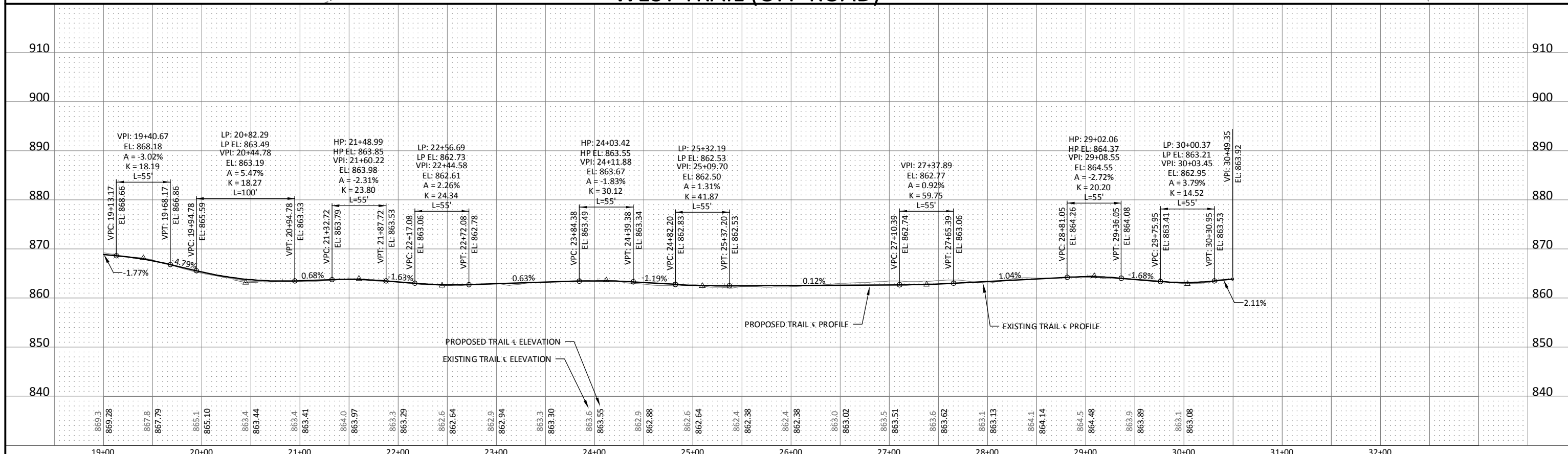
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 MISSISSIPPI RIVER TRAIL
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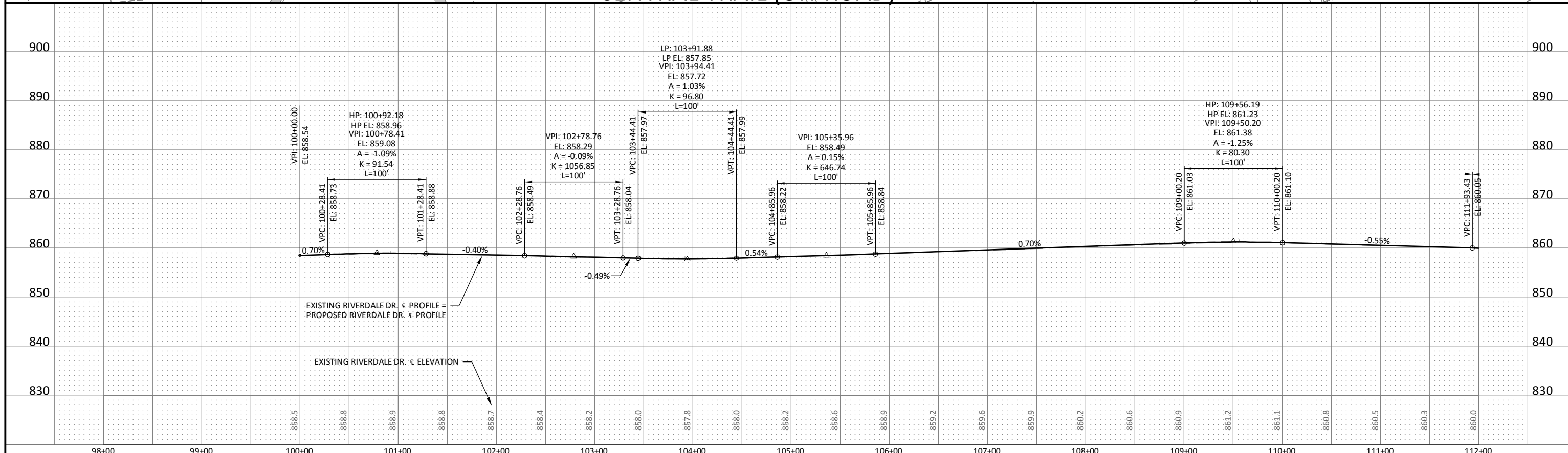
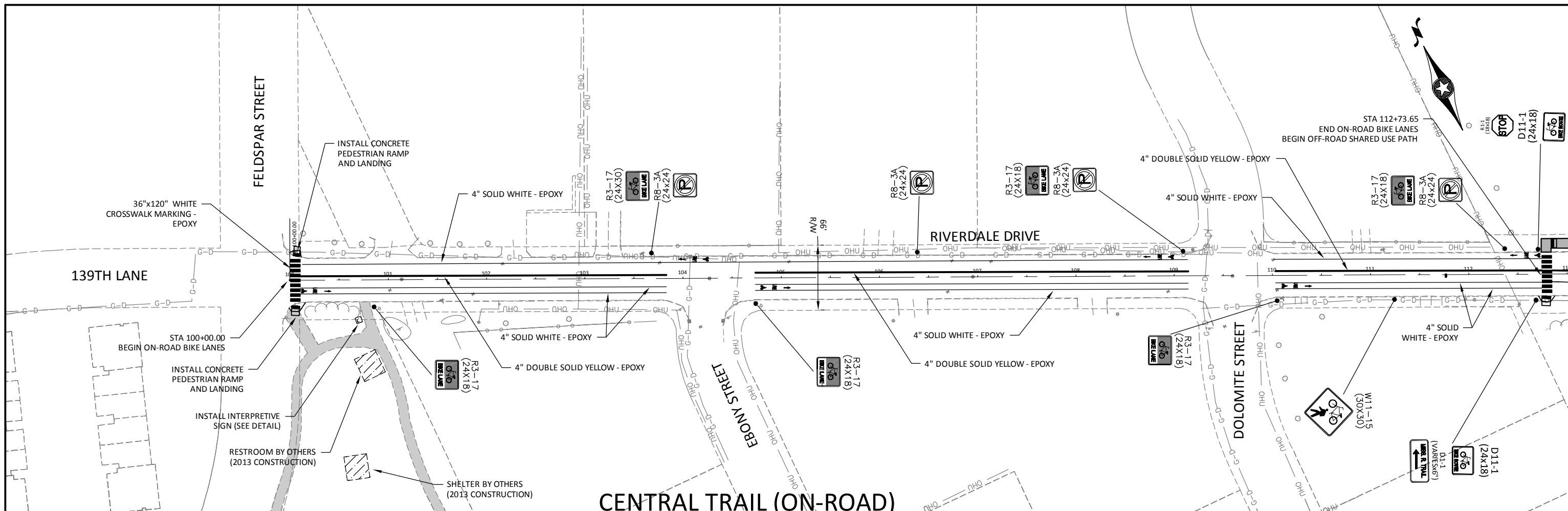


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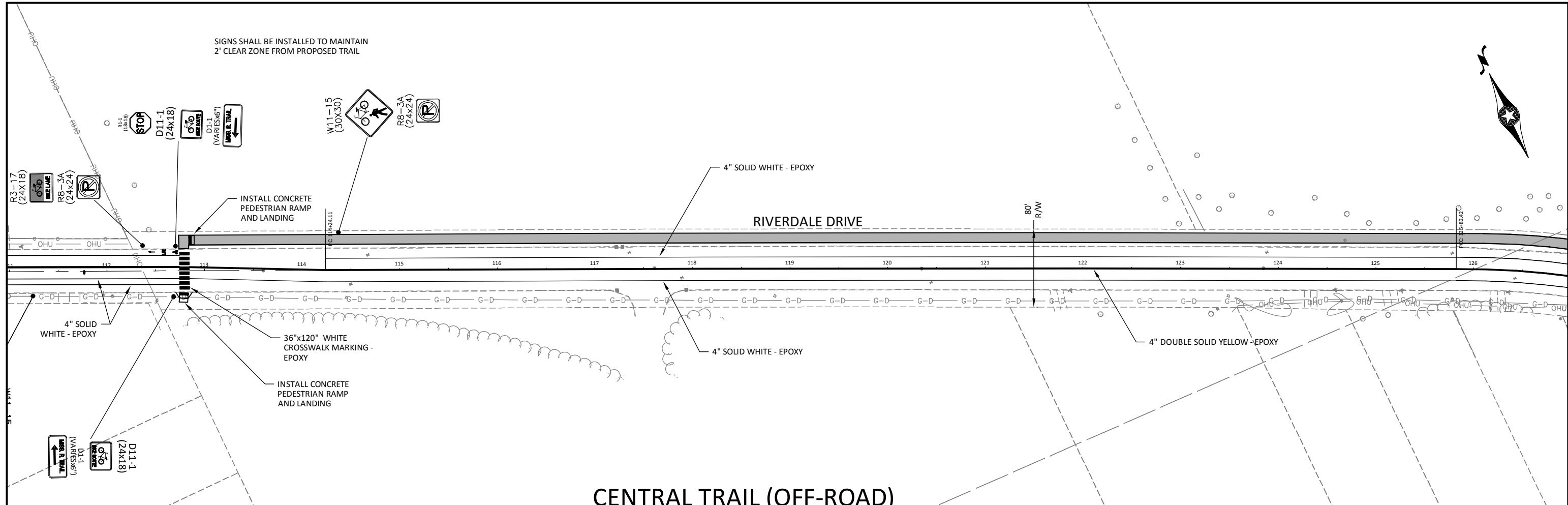


<p>0 50 100 SCALE FEET</p> <p>0 10 20 SCALE FEET</p>	<p>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p><i>Kevin P. Kielb</i> KEVIN P. KIELB, P.E. LIC. NO. 23211 DATE 3/25/2013</p>	<p>DESIGNED: KPK/AK DRAWN: AK CHECKED: KPK</p> <p>BOLTON & MENK, INC. Consulting Engineers & Surveyors MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA ROCHESTER, MN SPENCER, IA</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>REV.</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV.	BY	DATE										<p>CITY OF ANOKA, MINNESOTA MISSISSIPPI RIVER TRAIL WEST TRAIL (OFF-ROAD) PLAN & PROFILE SP 103-090-003</p>	<p>SHEET 27 OF 53</p>
REV.	BY	DATE															

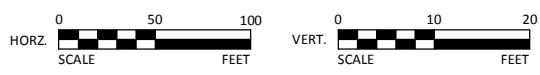
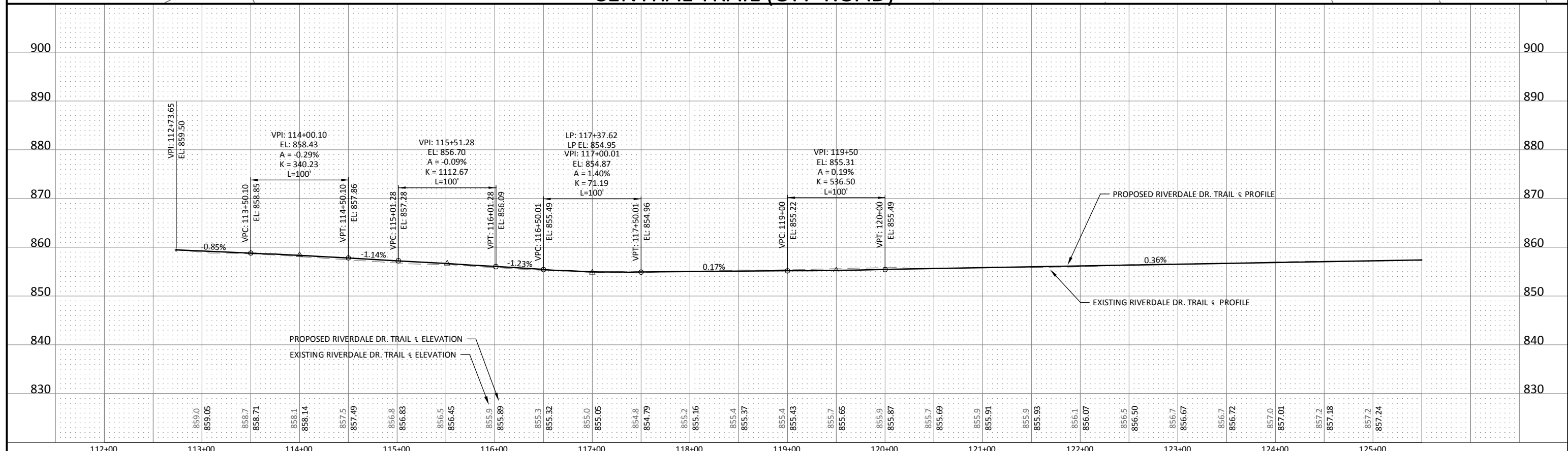
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SIGNS SHALL BE INSTALLED TO MAINTAIN
2' CLEAR ZONE FROM PROPOSED TRAIL



CENTRAL TRAIL (OFF-ROAD)



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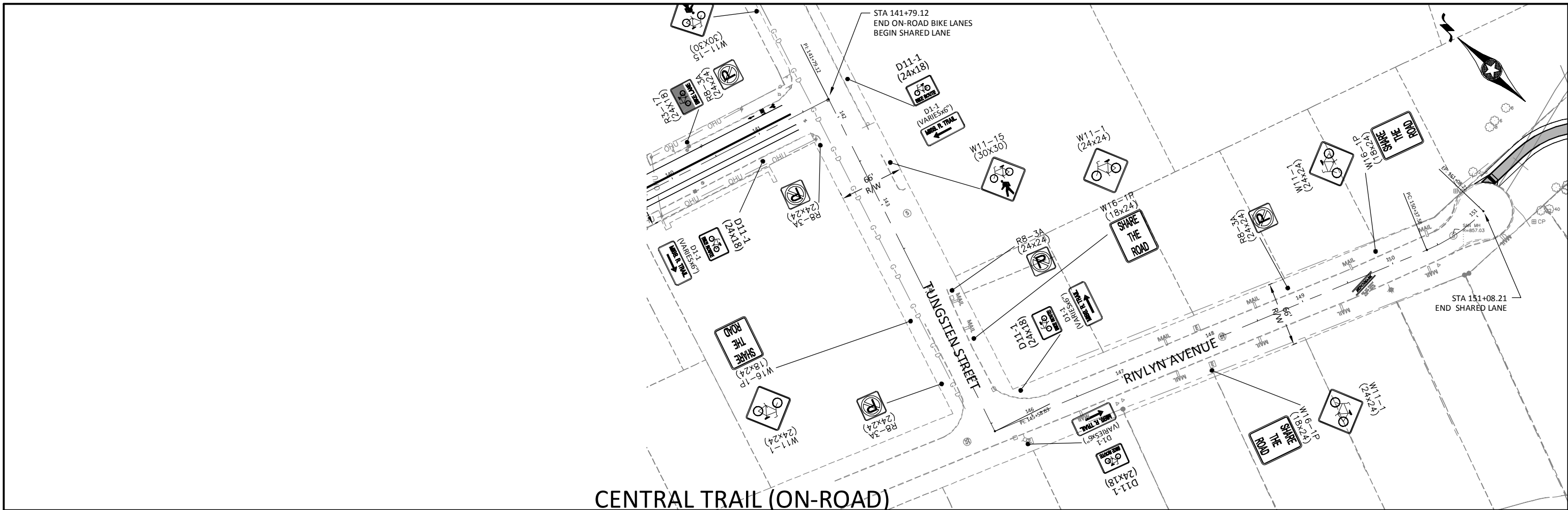
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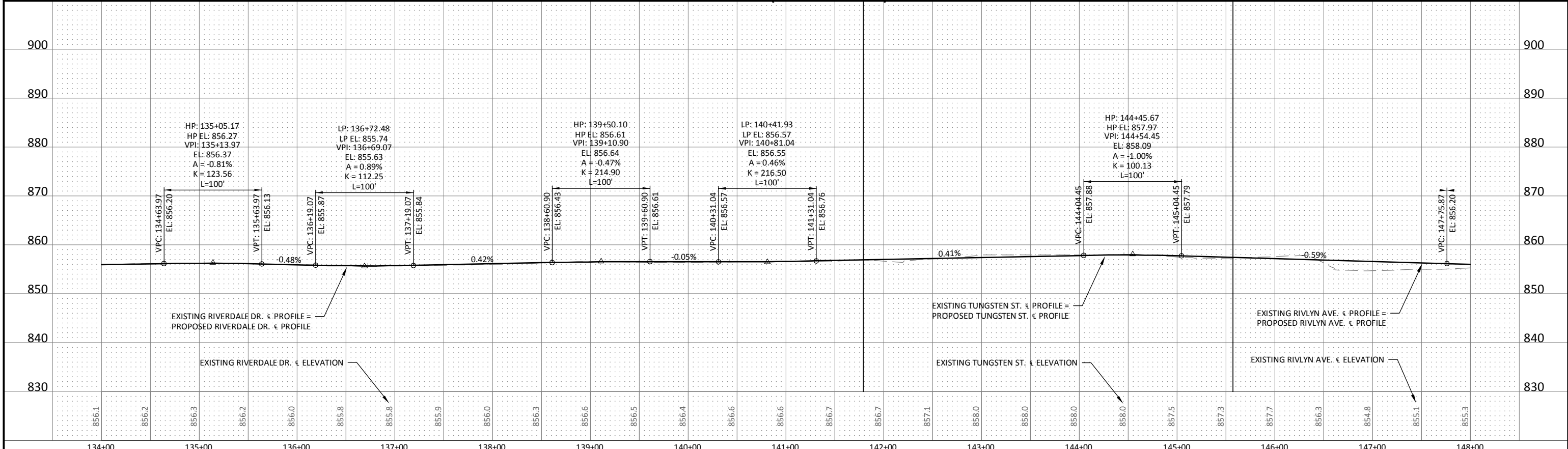
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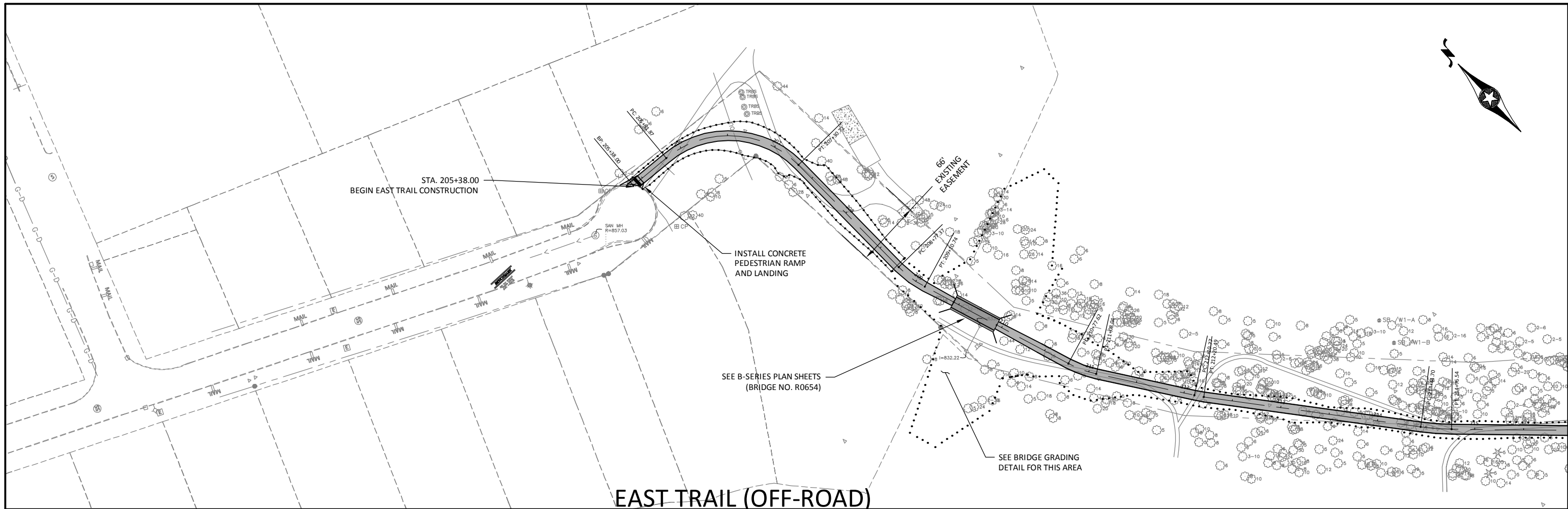
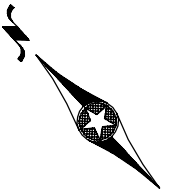
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 OF
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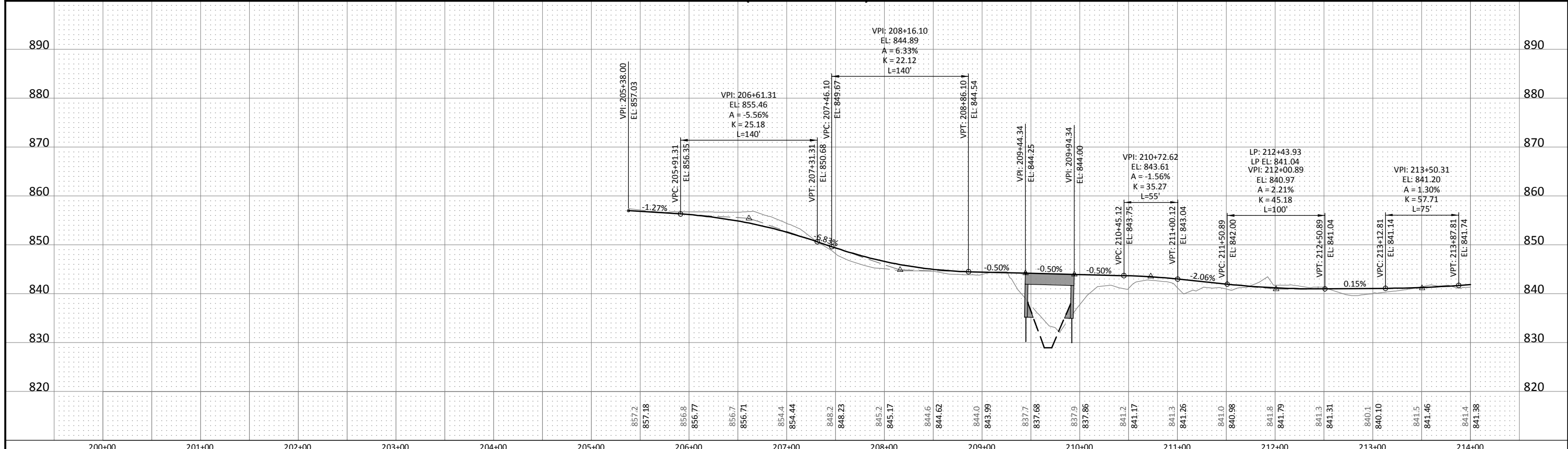
CENTRAL TRAIL (ON-ROAD)



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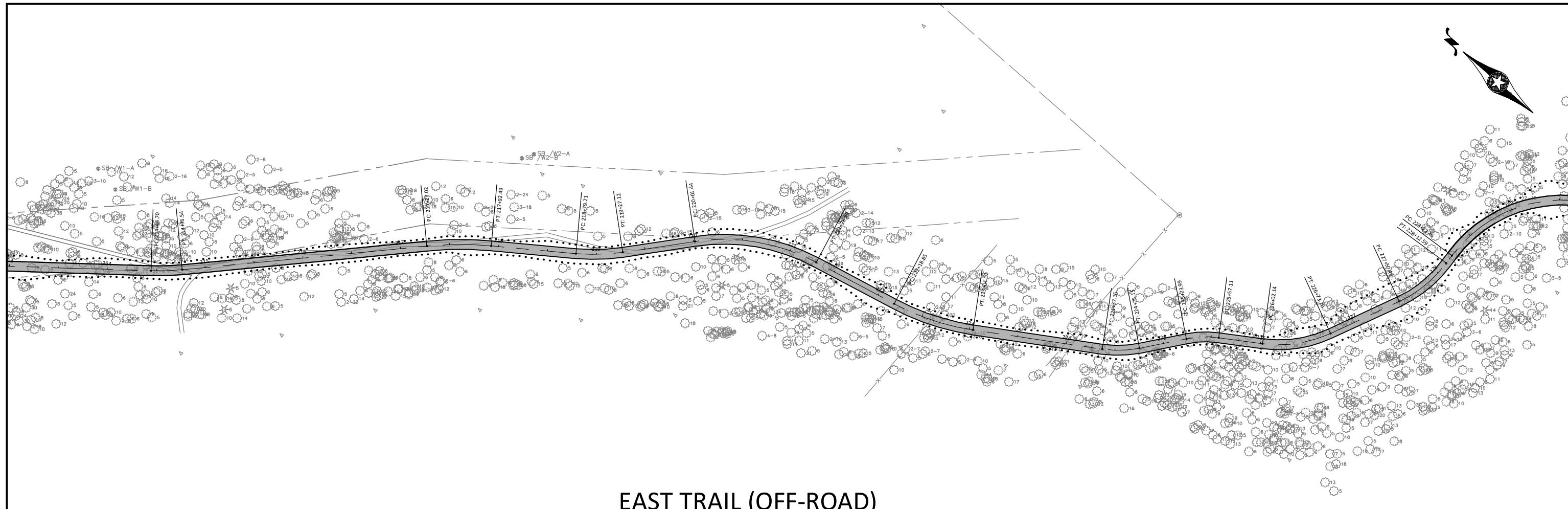


EAST TRAIL (OFF-ROAD)

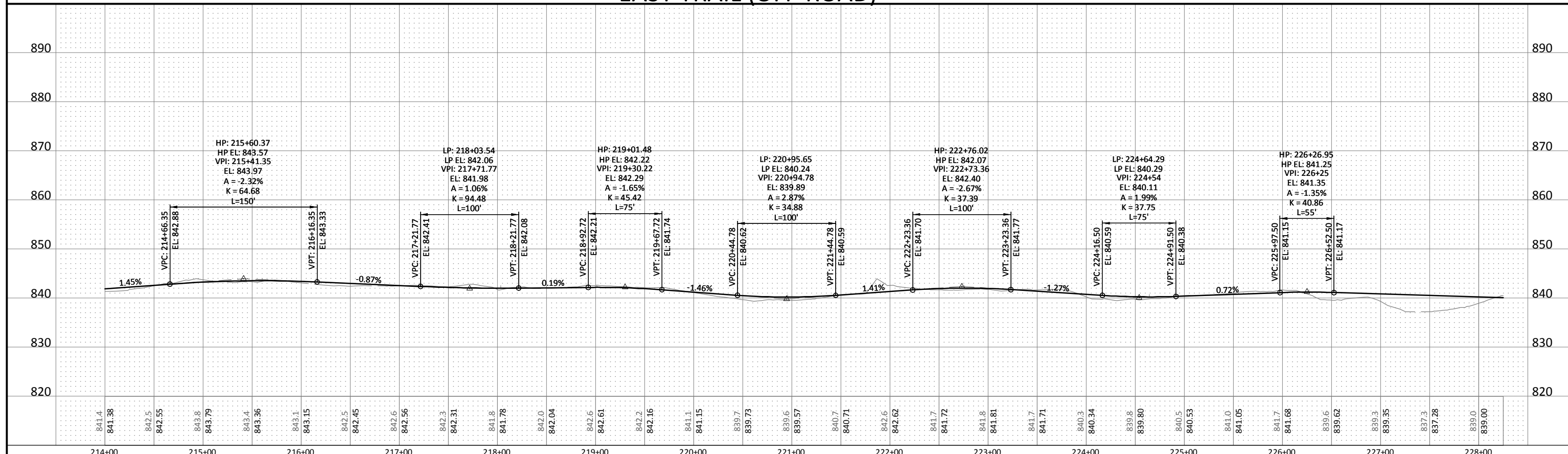


0 50 100 HORZ. SCALE FEET	0 10 20 VERT. SCALE FEET	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. KEVIN P. KIELB, P.E. LIC. NO. 23211 DATE 3/25/2013	DESIGNED: KPK/AK DRAWN: AK CHECKED: KPK	 BOLTON & MENK, INC. Consulting Engineers & Surveyors MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA ROCHESTER, MN SPENCER, IA	REV. BY DATE _____ _____ _____	CITY OF ANOKA, MINNESOTA MISSISSIPPI RIVER TRAIL EAST TRAIL (OFF-ROAD) PLAN & PROFILE SP 103-090-003	SHEET 32 OF 53
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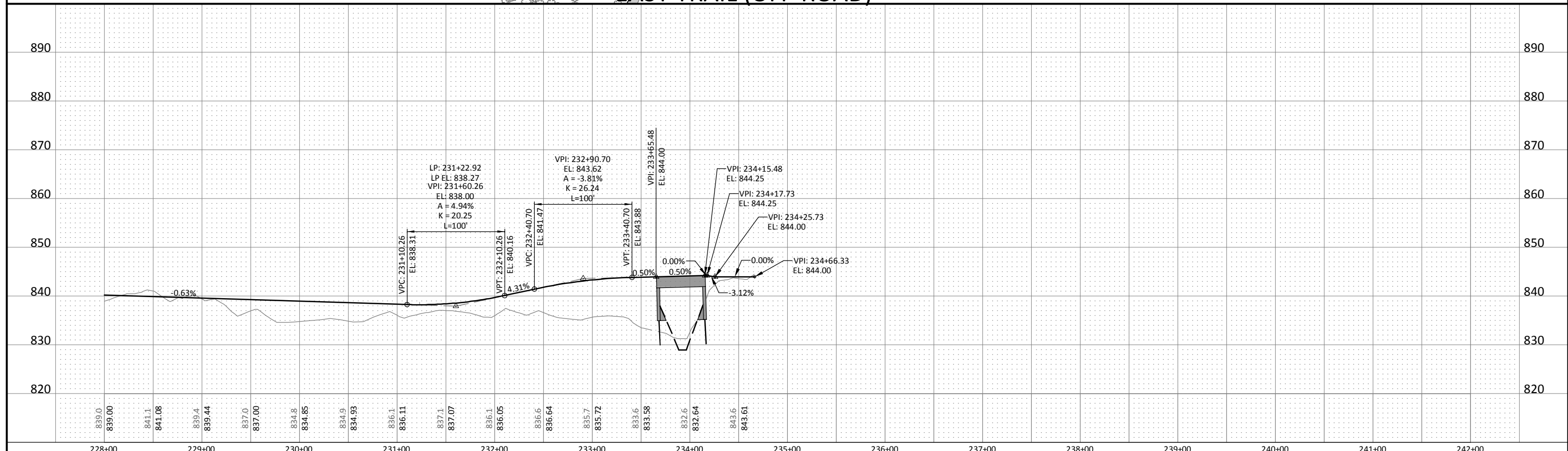
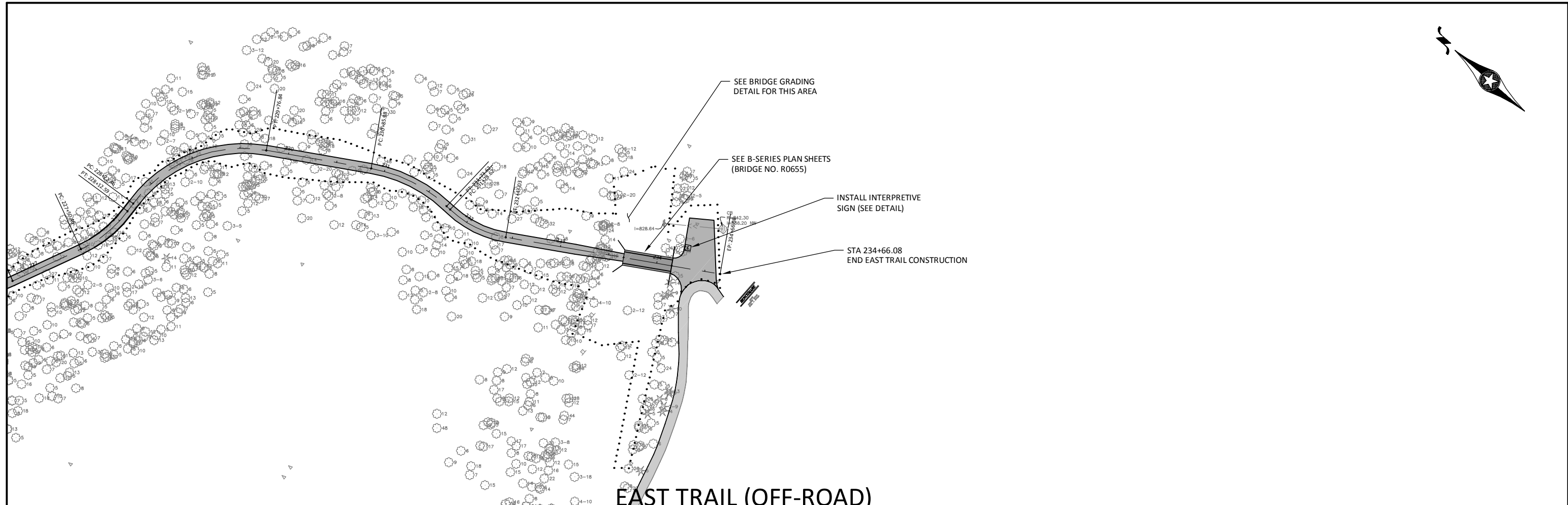
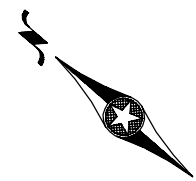
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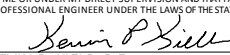


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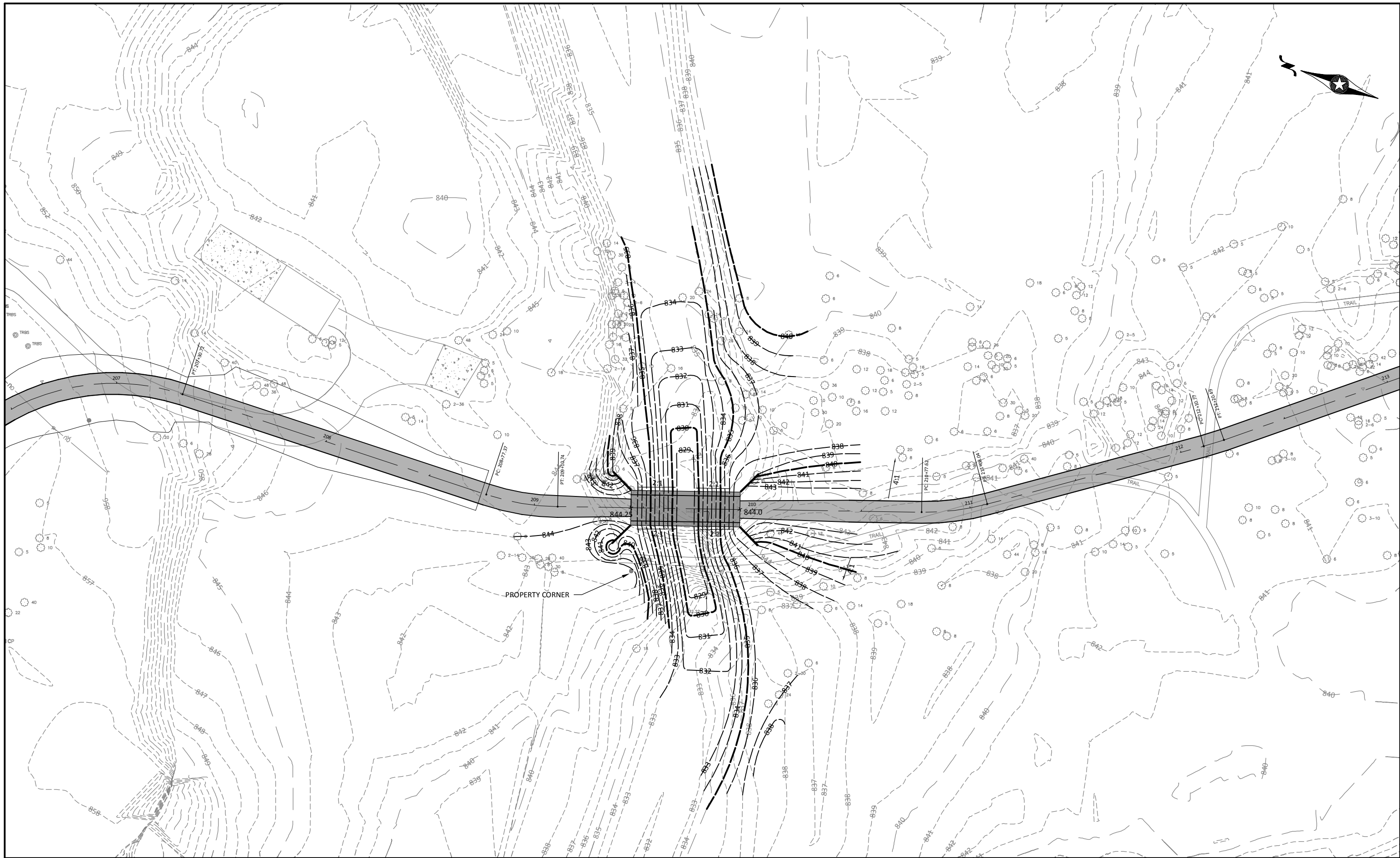


<p>© Bolton & Menk, Inc. 2013, All Rights Reserved W:\ANOK\W15104941\CD\104941PP-EAST.dwg 6/11/2013 2:06:21 PM</p>	<p>HORIZ. SCALE: 1" = 50 FEET VERT. SCALE: 1" = 10 FEET</p>	<p>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p><i>Kevin P. Kiel</i> KEVIN P. KIEL, P.E. LIC. NO. 23211 DATE 3/25/2013</p>	<p>DESIGNED: KPK/AK DRAWN: AK CHECKED: KPK</p>	<p>BOLTON & MENK, INC. Consulting Engineers & Surveyors MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA ROCHESTER, MN SPENCER, IA</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>REV.</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REV.	BY	DATE							<p>CITY OF ANOKA, MINNESOTA MISSISSIPPI RIVER TRAIL EAST TRAIL (OFF-ROAD) PLAN & PROFILE SP 103-090-003</p>	<p>SHEET 33 OF 53</p>
REV.	BY	DATE														



0 50 100 HORZ. SCALE FEET	0 10 20 VERT. SCALE FEET	I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  KEVIN P. KIELB, P.E. LIC. NO. 23211 DATE 3/25/2013	DESIGNED: KPK/AK DRAWN: AK CHECKED: KPK	BOLTON & MENK, INC. Consulting Engineers & Surveyors MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN BURNSVILLE, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN AMES, IA ROCHESTER, MN SPENCER, IA	REV. BY DATE _____ _____ _____	CITY OF ANOKA, MINNESOTA MISSISSIPPI RIVER TRAIL EAST TRAIL (OFF-ROAD) PLAN & PROFILE SP 103-090-003	SHEET 34 OF 53
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Kevin P. Kielb
 KEVIN P. KIELB, P.E.
 LIC. NO. 23211 DATE 3/25/2013

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 ROCHESTER, MN SPENCER, IA

REV.	BY	DATE

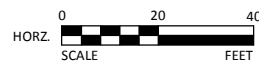
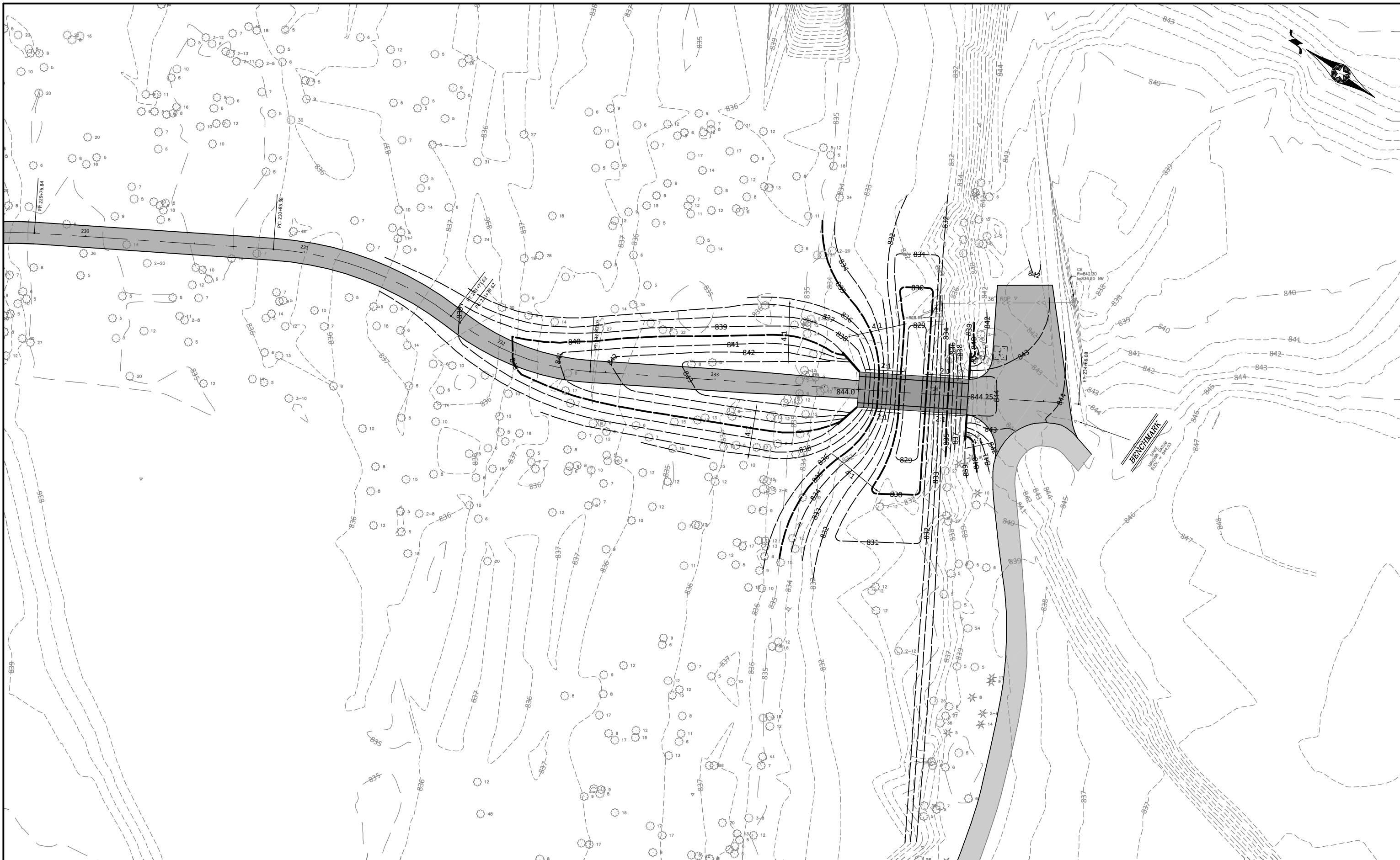
CITY OF ANOKA, MINNESOTA

MISSISSIPPI RIVER TRAIL

EAST TRAIL (OFF-ROAD) - WEST BRIDGE GRADING DETAIL

SP 103-090-003

SHEET 35 OF 53



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Kevin P. Kiel
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 DRAWN: AK
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 ROCHESTER, MN SPENCER, IA

REV.	BY	DATE

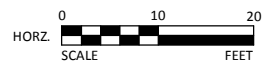
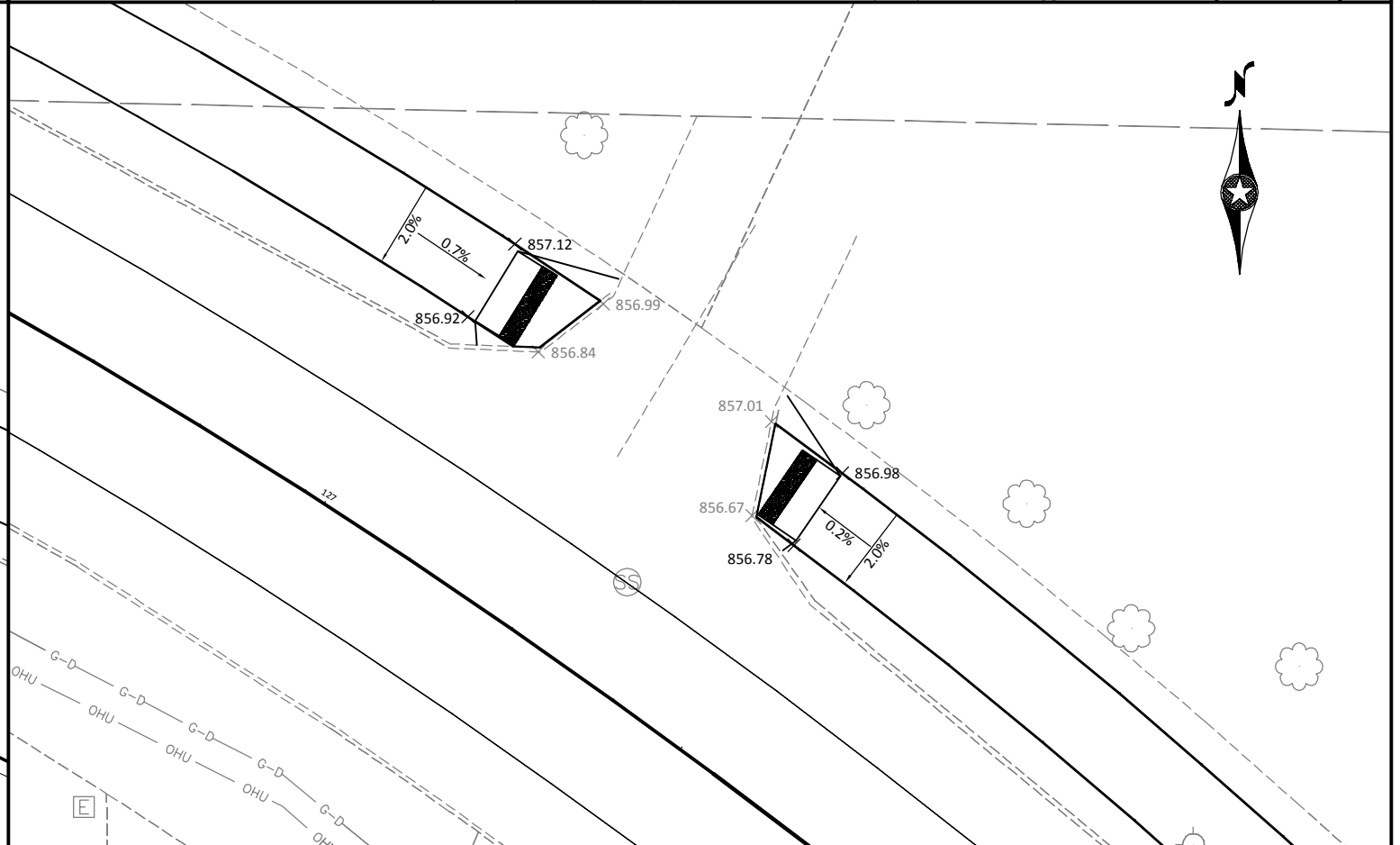
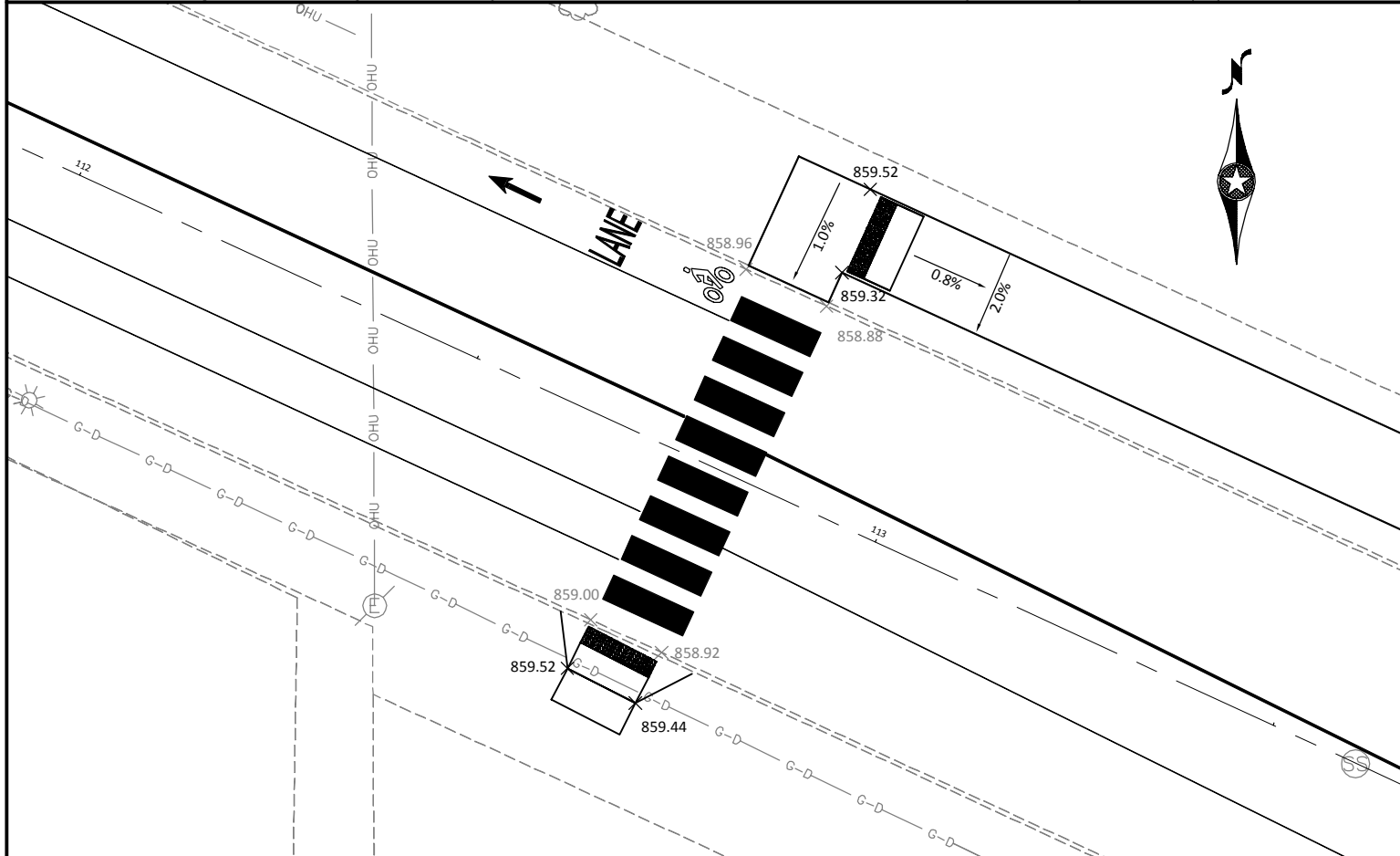
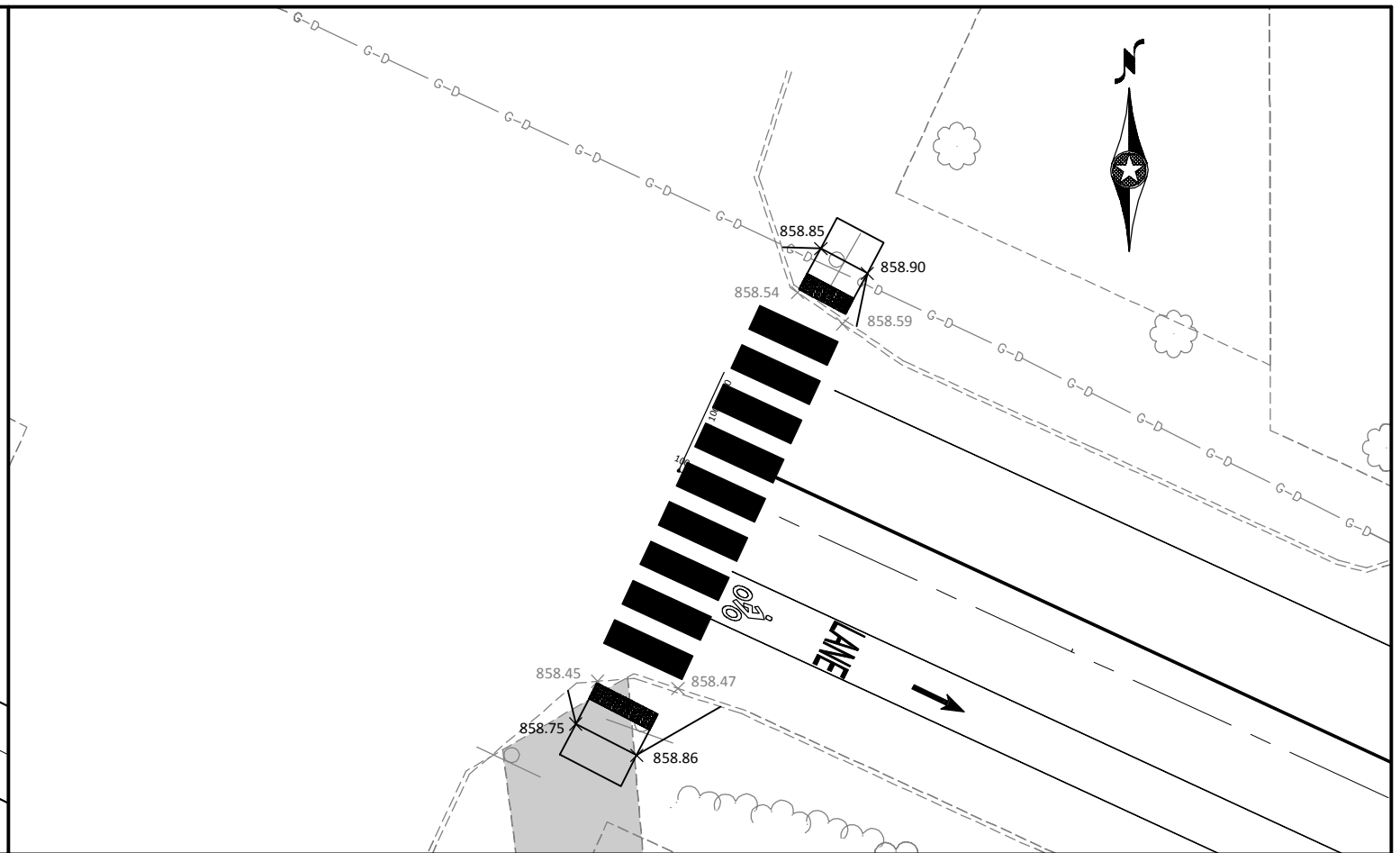
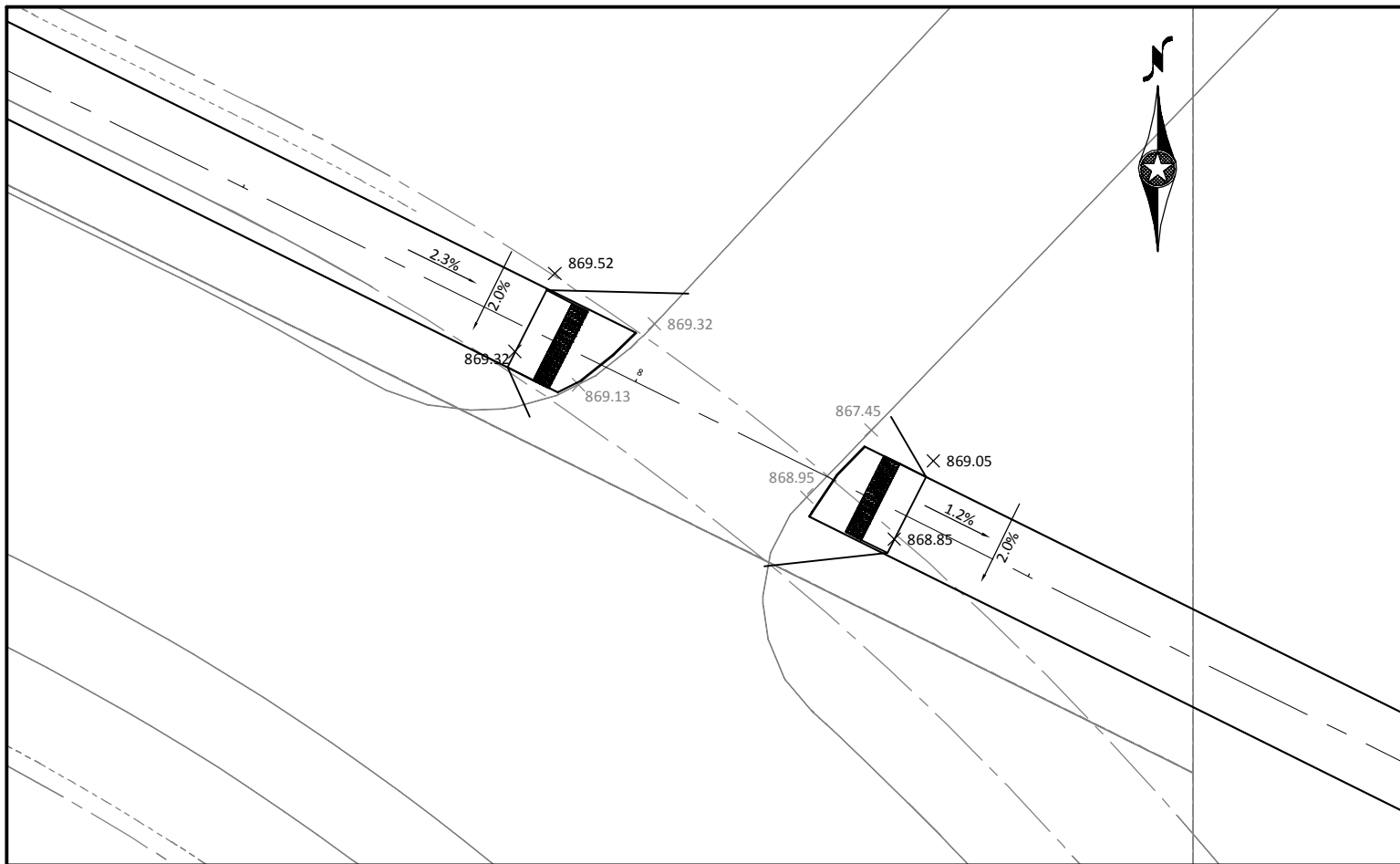
CITY OF ANOKA, MINNESOTA

MISSISSIPPI RIVER TRAIL

EAST TRAIL (OFF-ROAD) - EAST BRIDGE GRADING DETAIL

SP 103-090-003

SHEET
 36
 OF
 53



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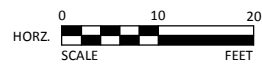
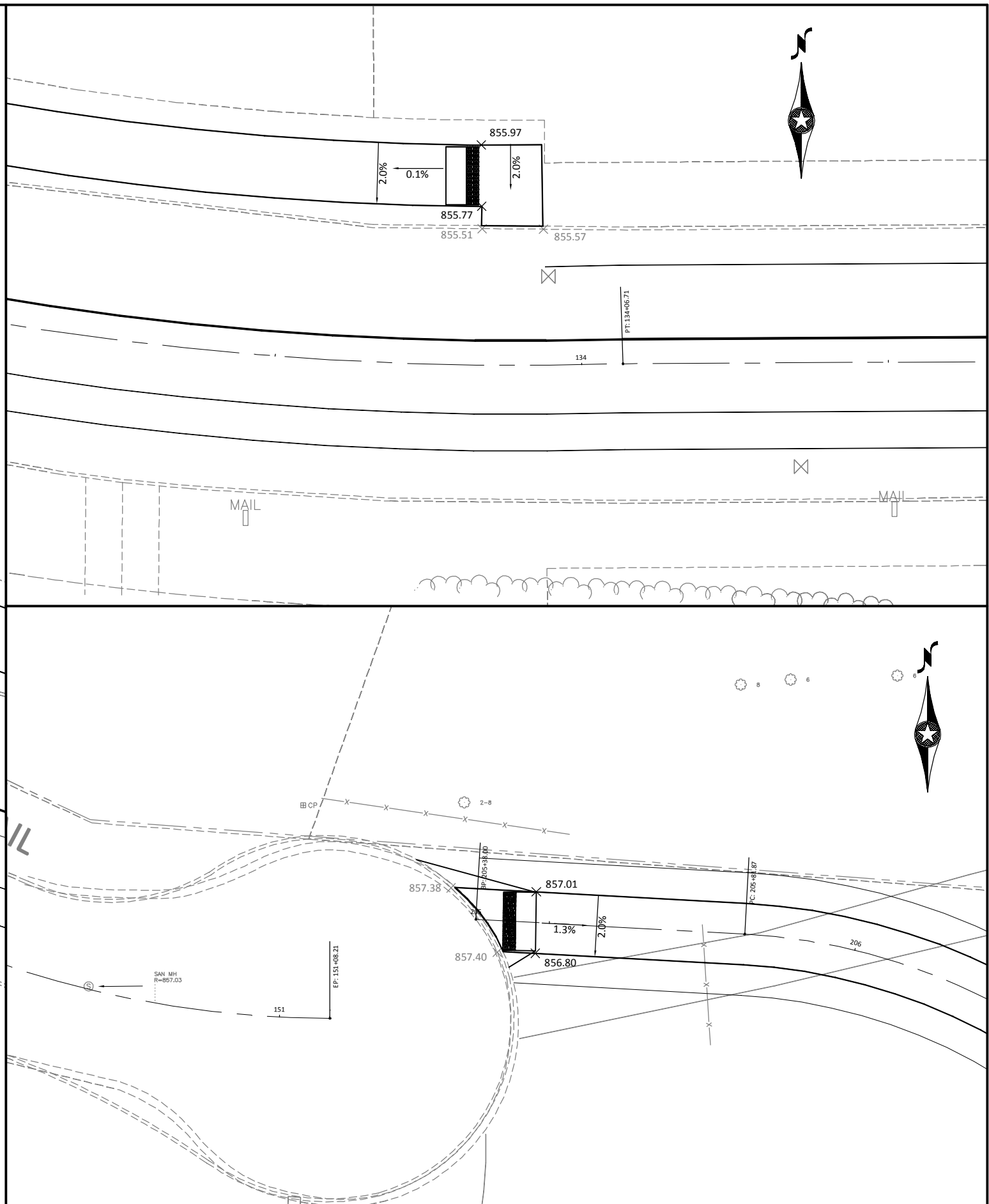
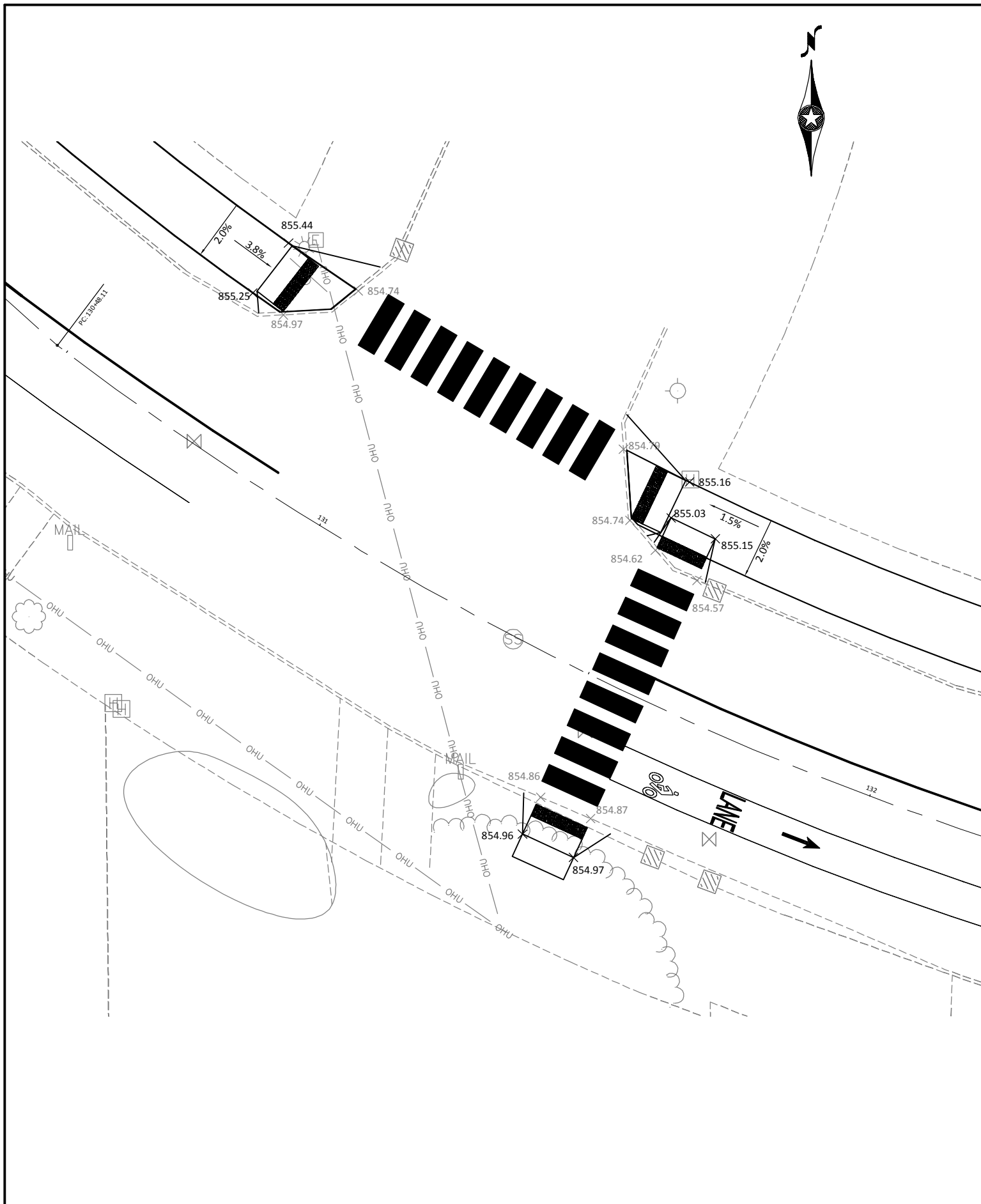


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 PEDESTRIAN RAMP DETAIL
 SP 103-090-003

SHEET 37 OF 53



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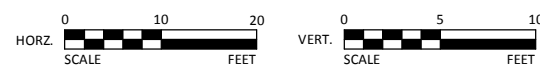
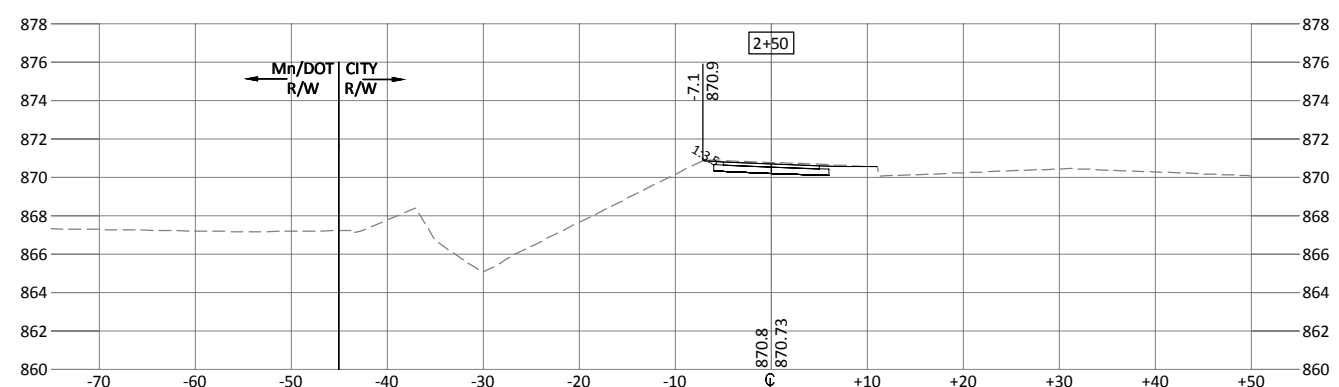
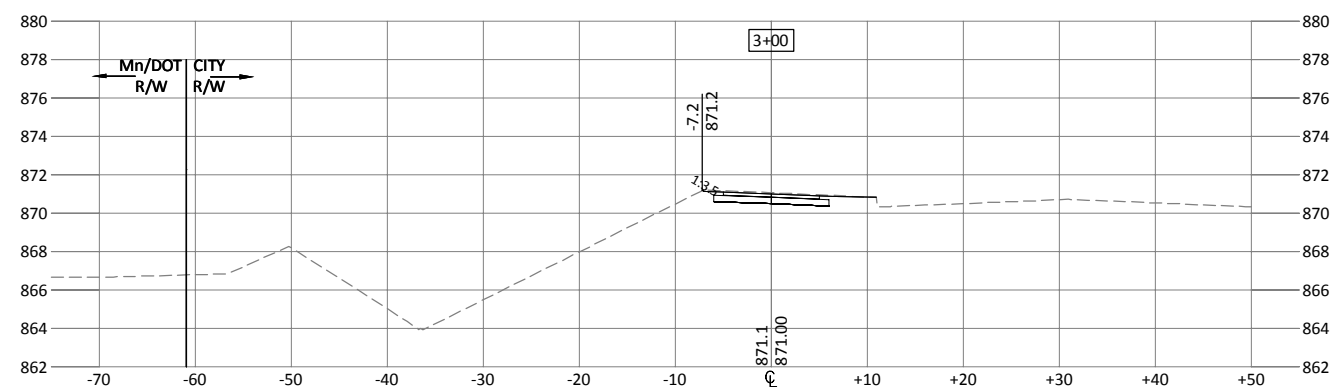
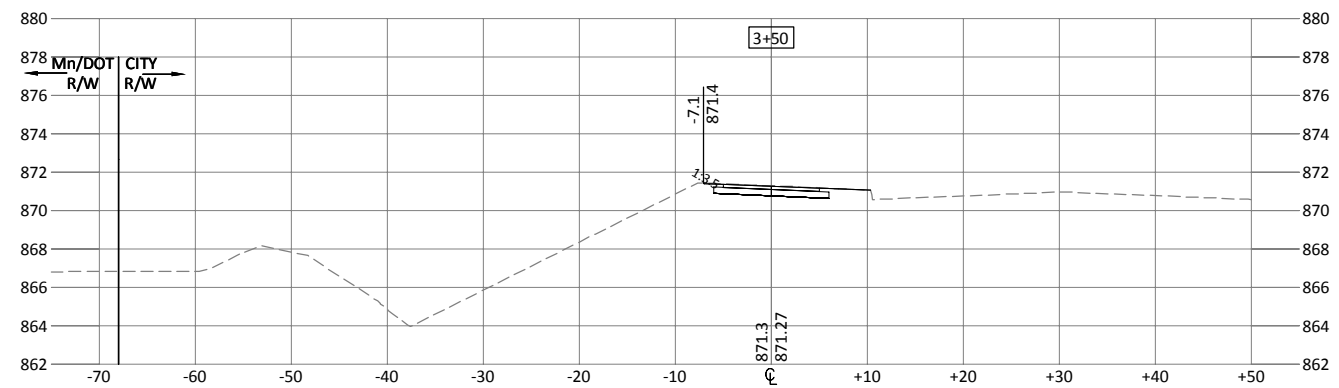
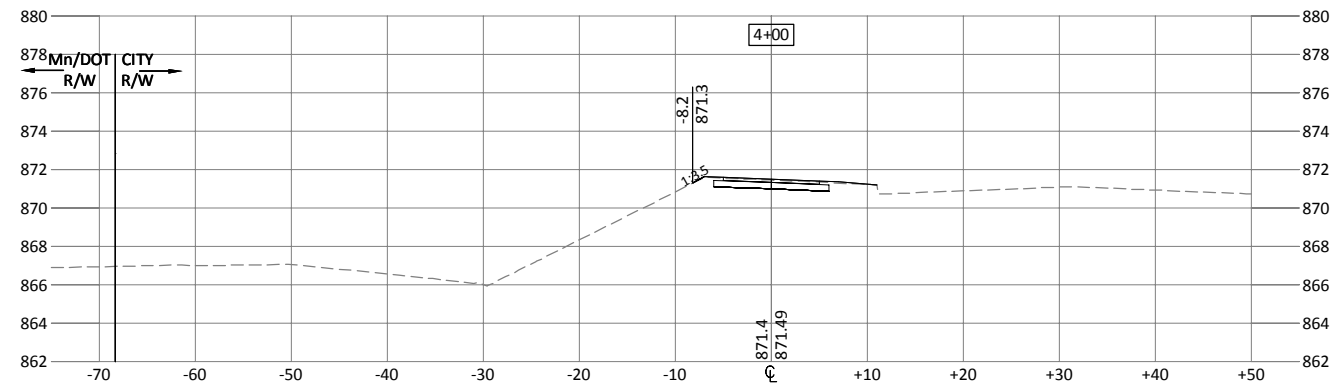
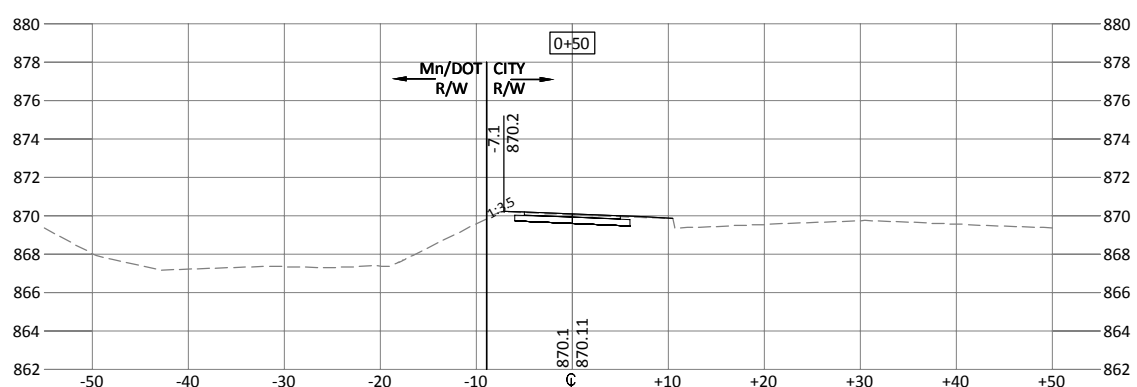
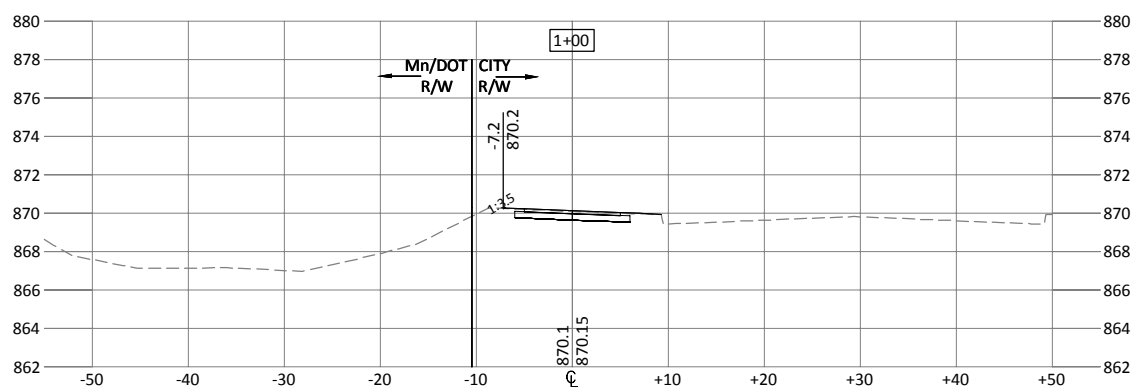
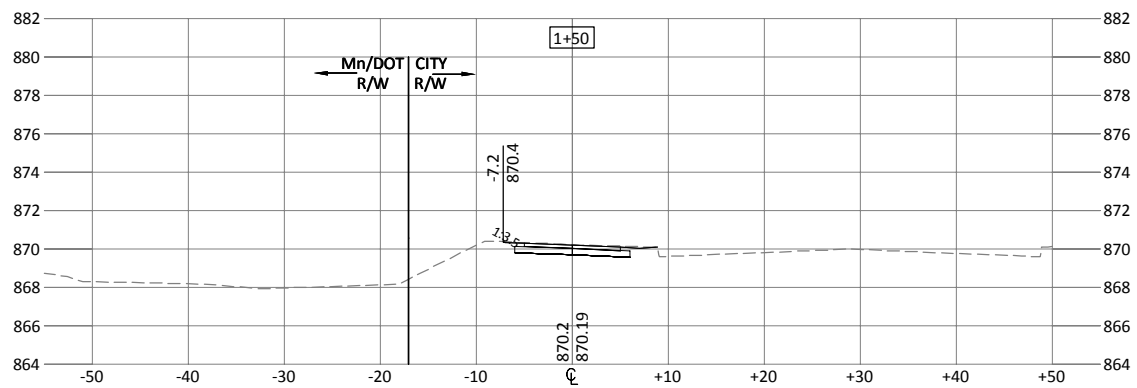
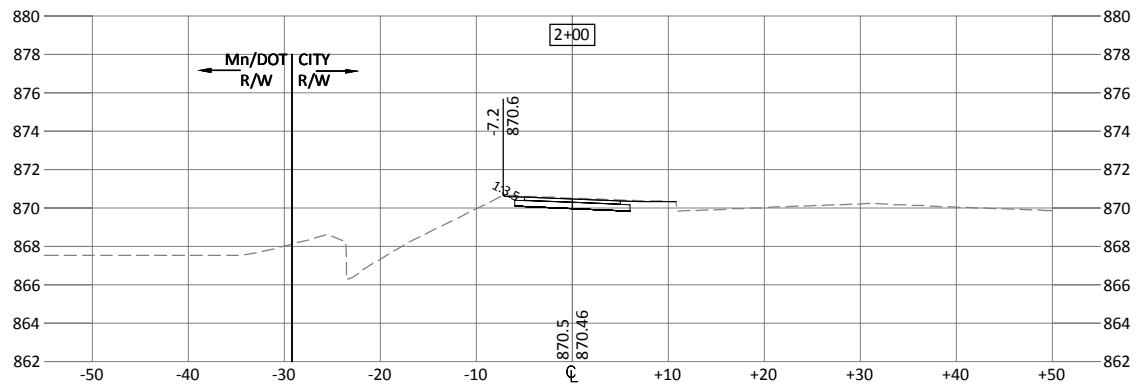


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 PEDESTRIAN RAMP DETAIL
 SP 103-090-003

SHEET
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 OF
 53



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KEVIN P. KIELB, P.E.
LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK
DRAWN: AK
CHECKED: KPK

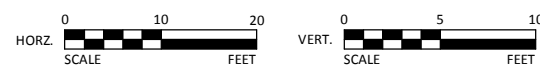
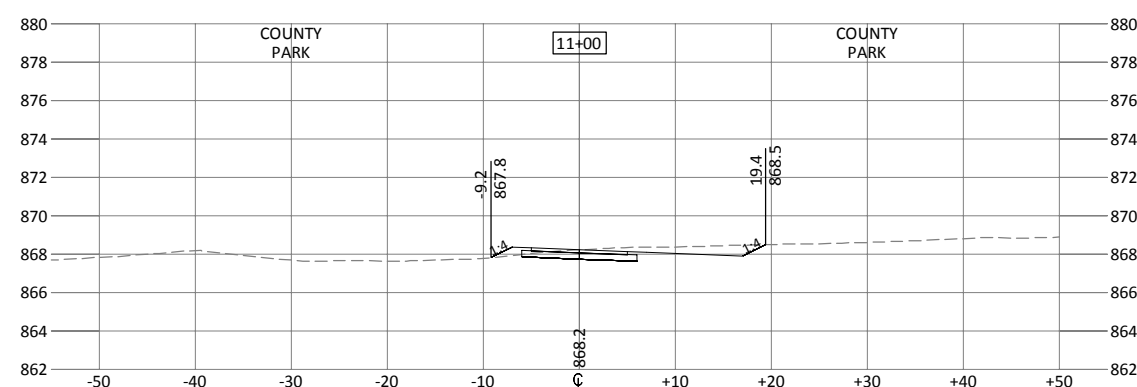
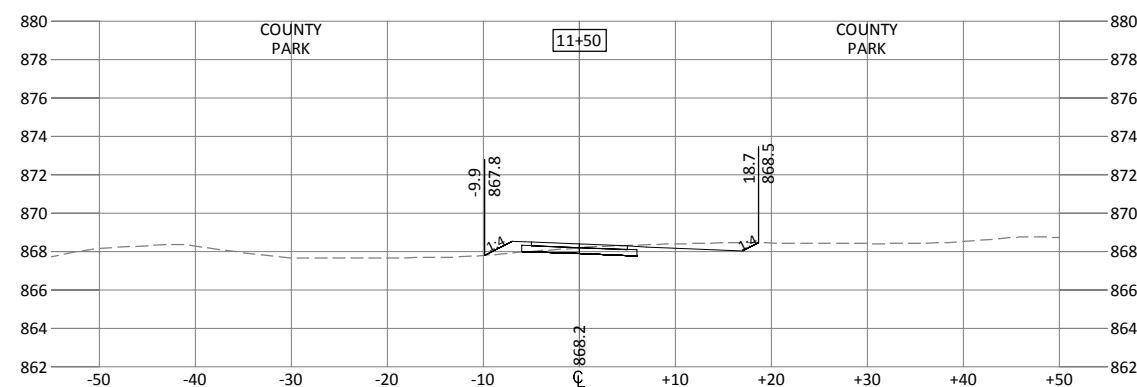
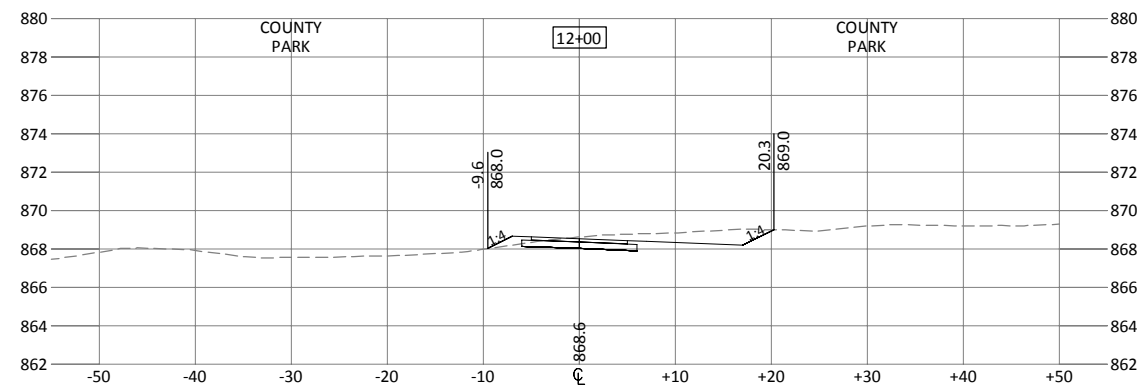
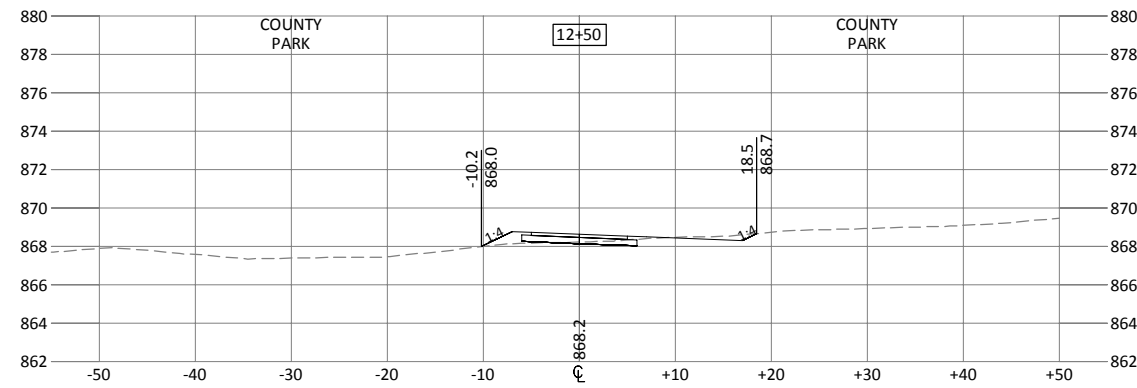
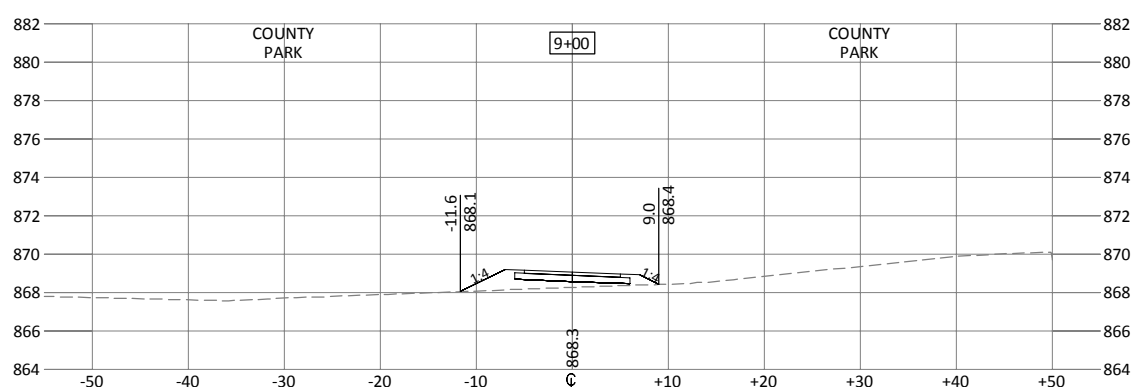
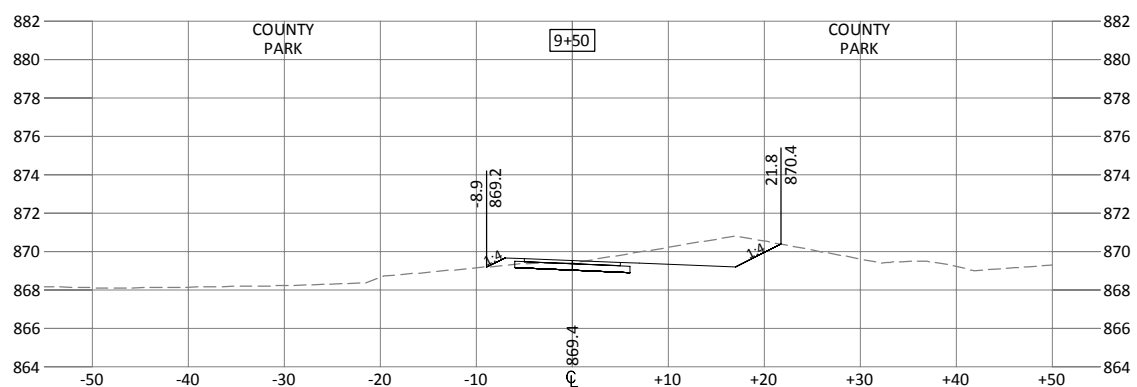
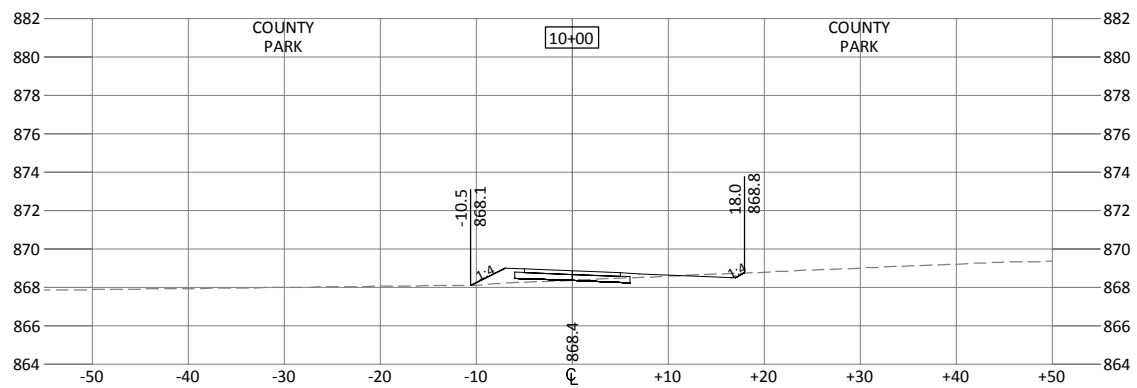
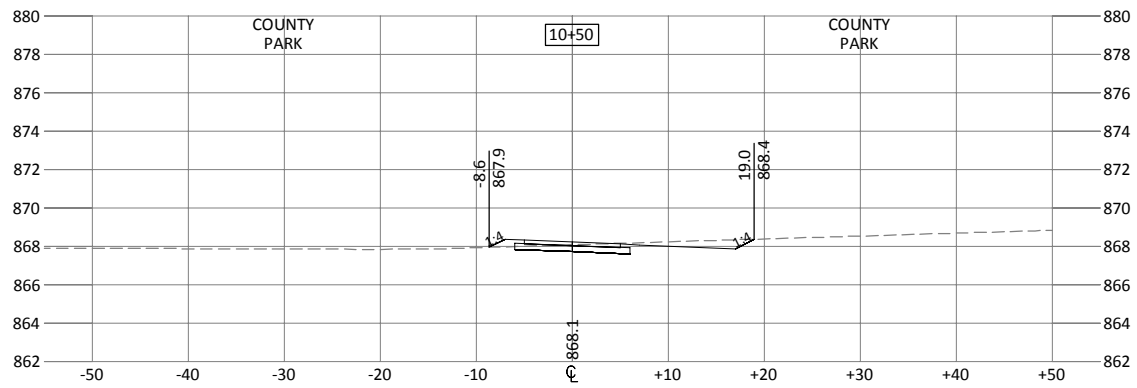


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
MISSISSIPPI RIVER TRAIL
WEST TRAIL (OFF-ROAD) CROSS SECTIONS
SP 103-090-003

SHEET
39
OF
53



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

KEVIN P. KIELB, P.E.
 LIC. NO. 23211 DATE 3/25/2013

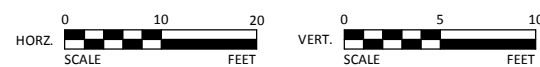
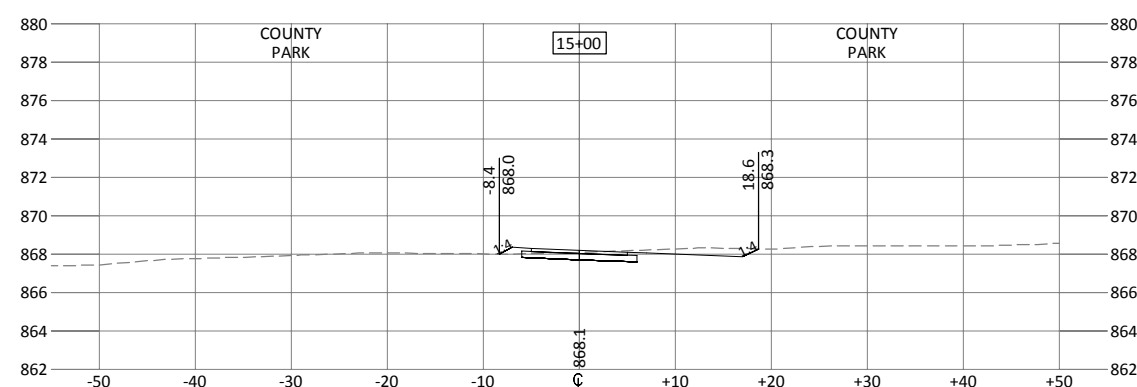
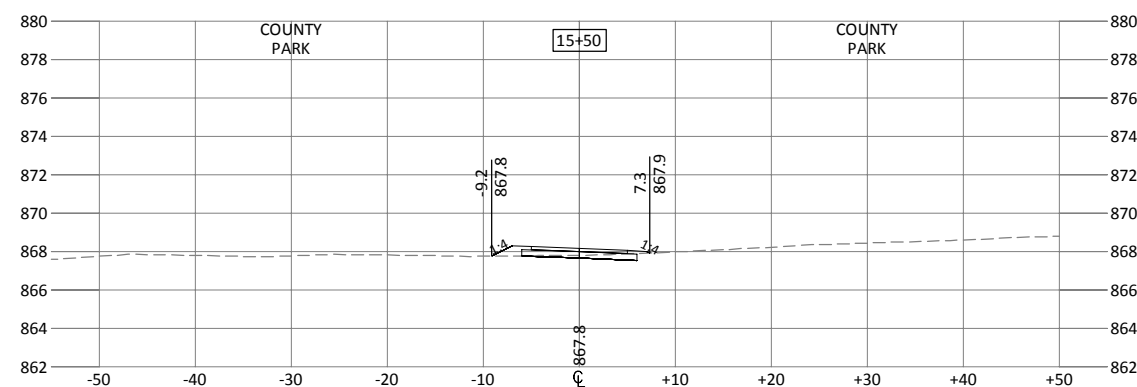
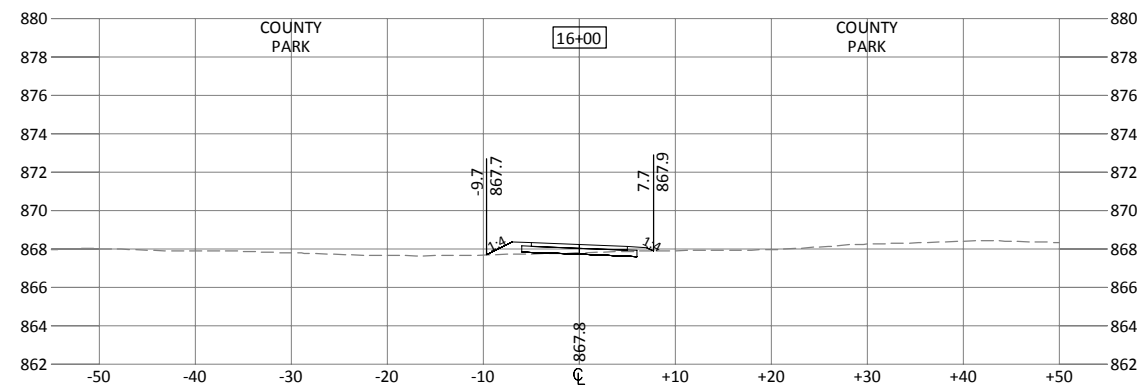
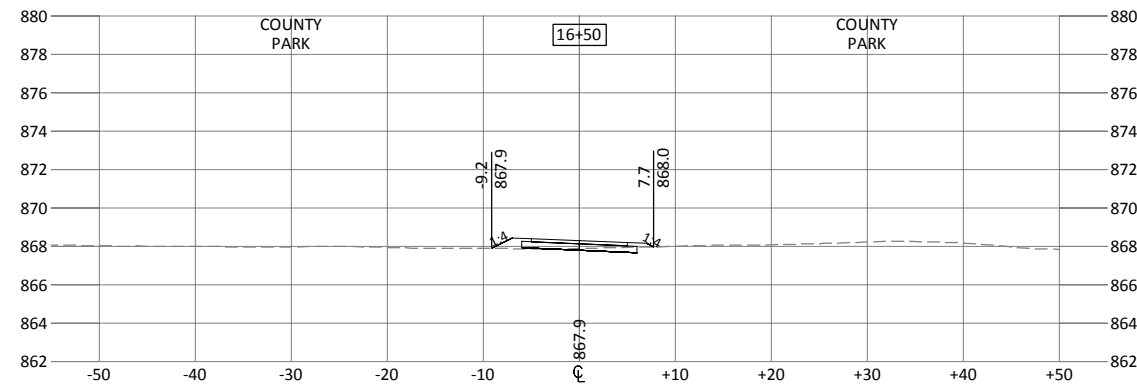
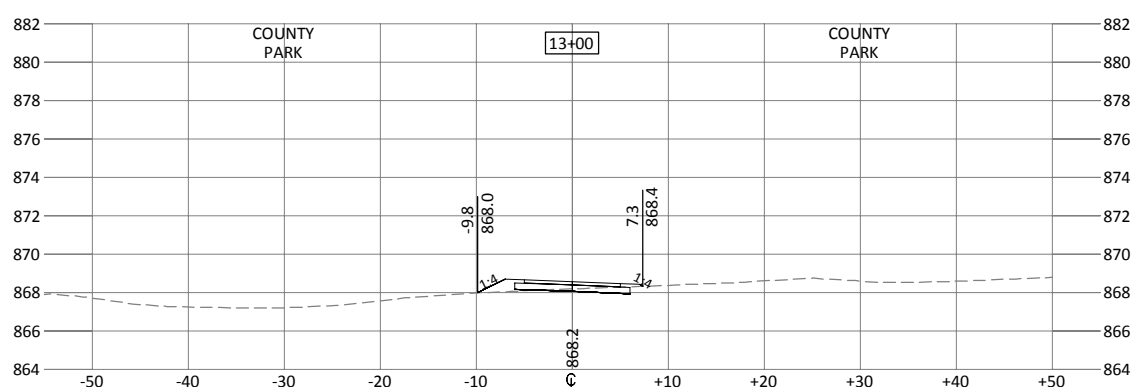
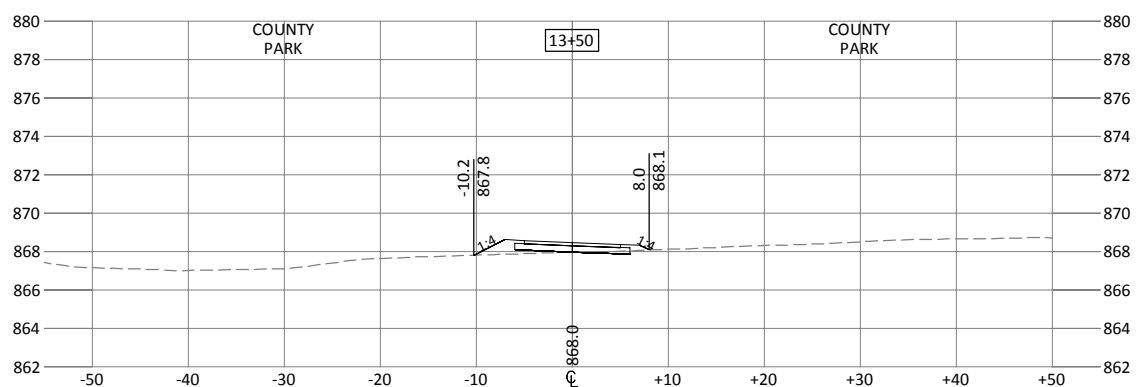
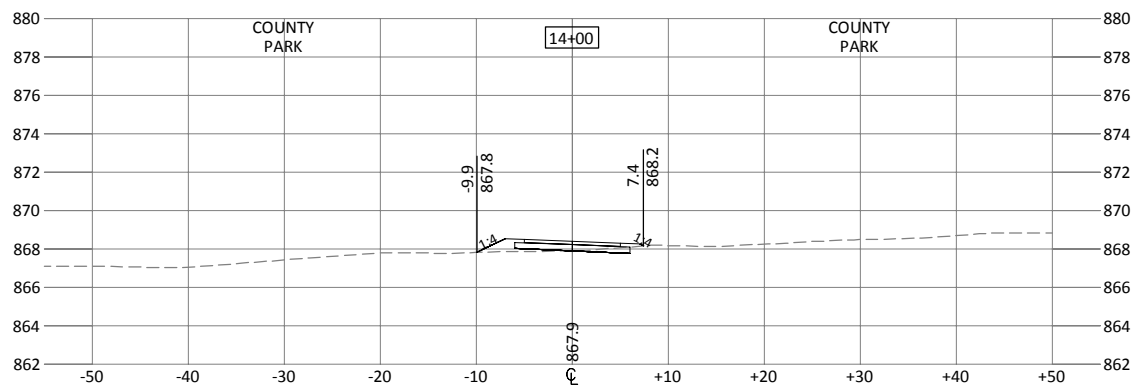
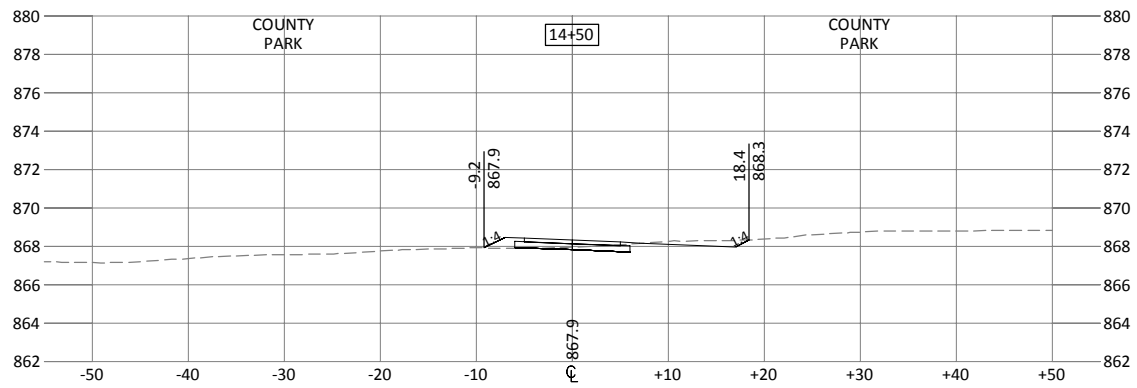
DESIGNED: KPK/AK
 DRAWN: AK
 CHECKED: KPK



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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 WEST TRAIL (OFF-ROAD) CROSS SECTIONS
 SP 103-090-003



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

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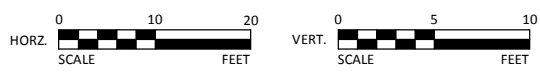
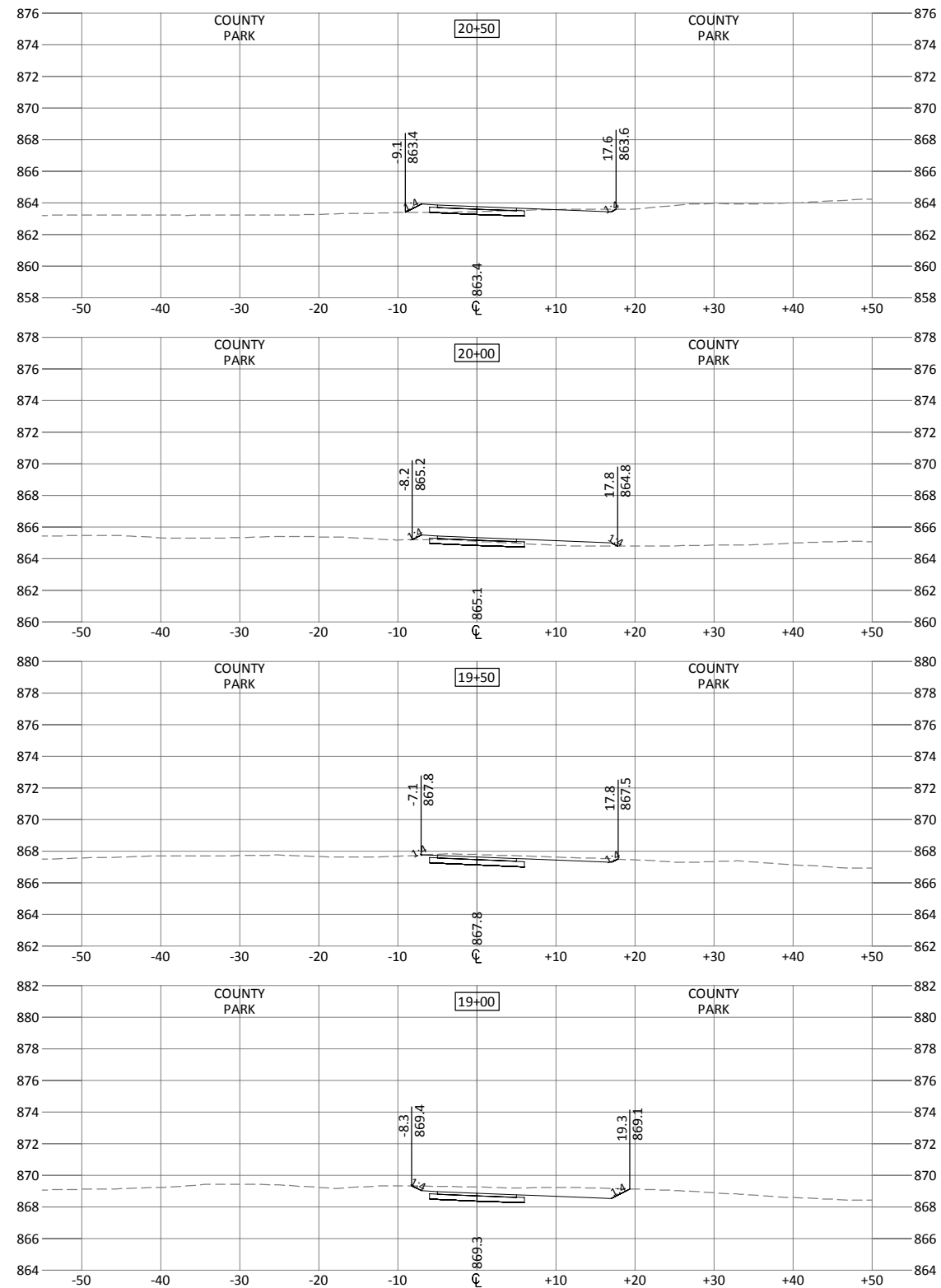
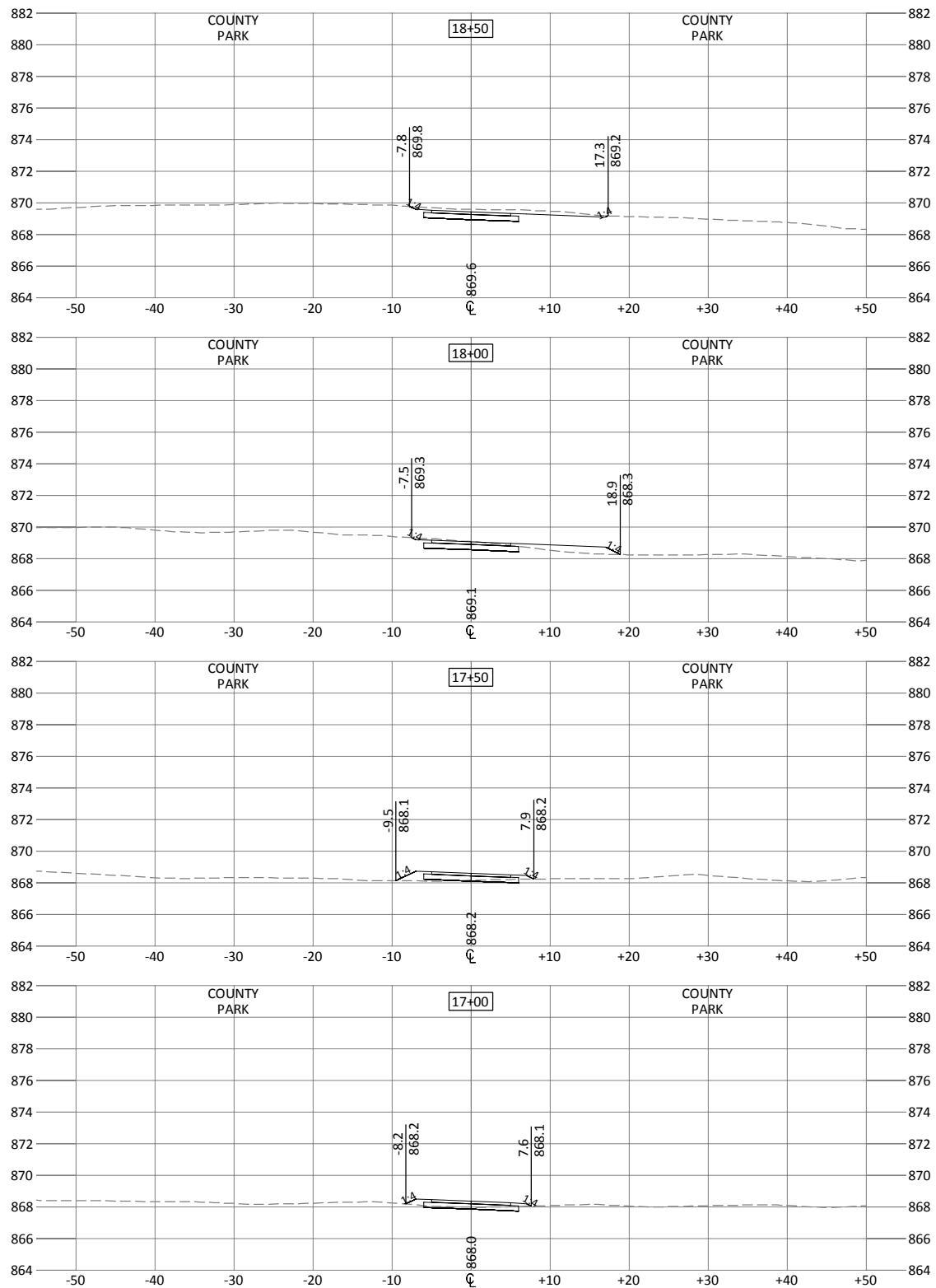


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 WEST TRAIL (OFF-ROAD) CROSS SECTIONS
 SP 103-090-003

SHEET
 42
 OF
 53



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

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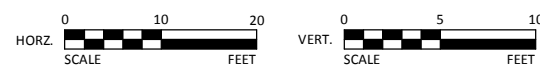
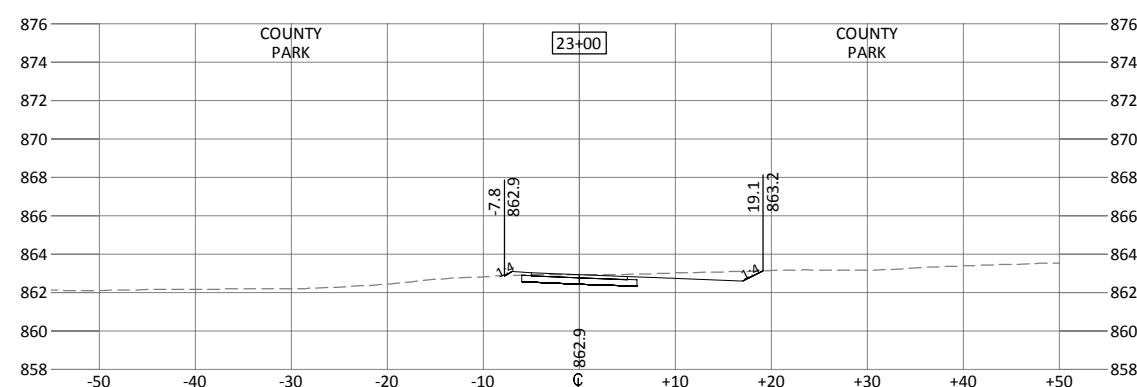
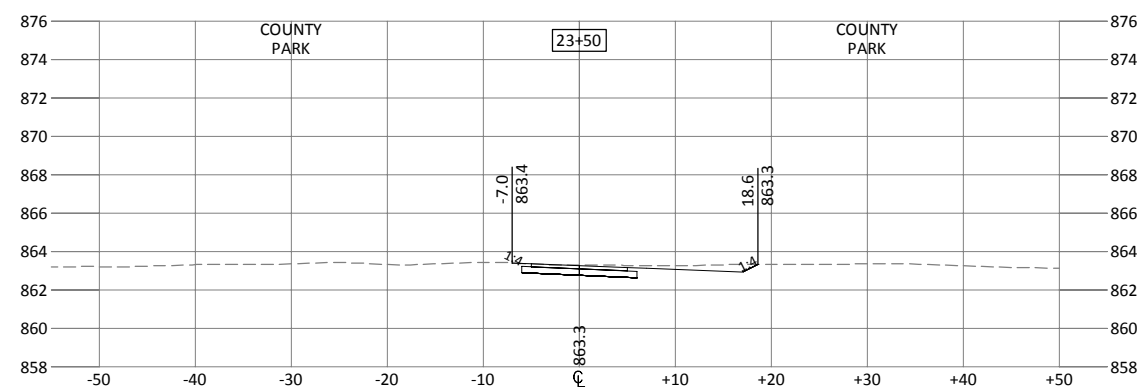
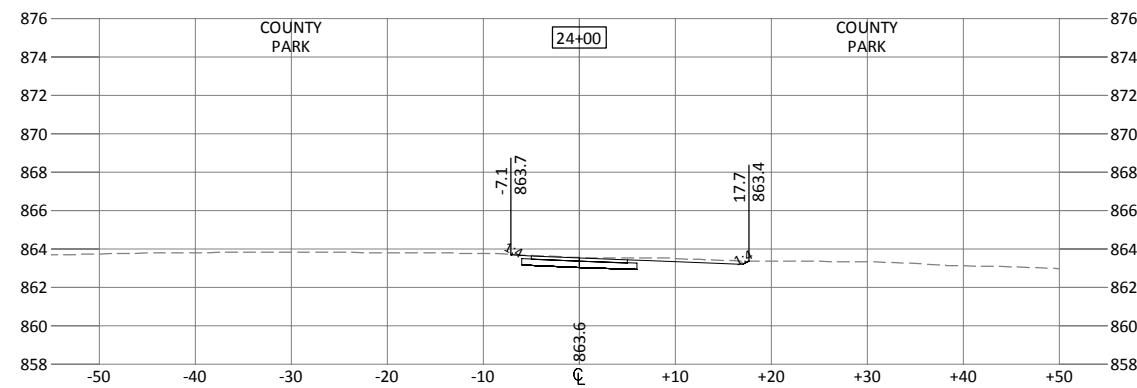
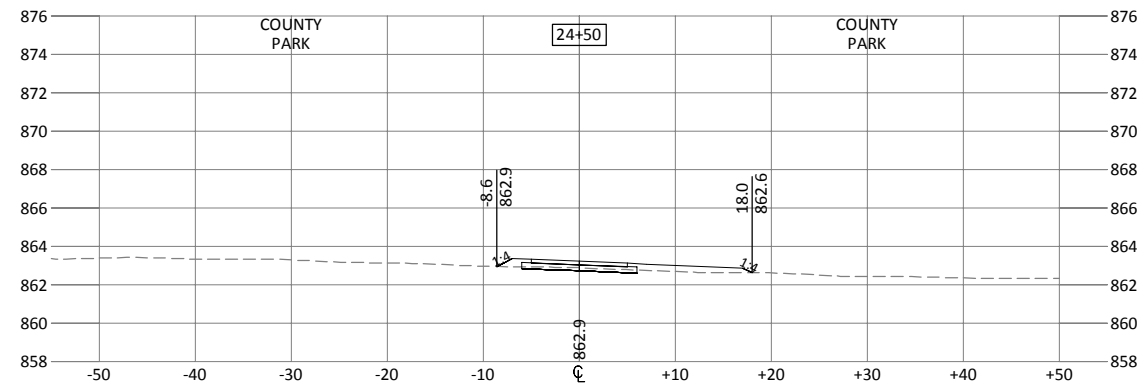
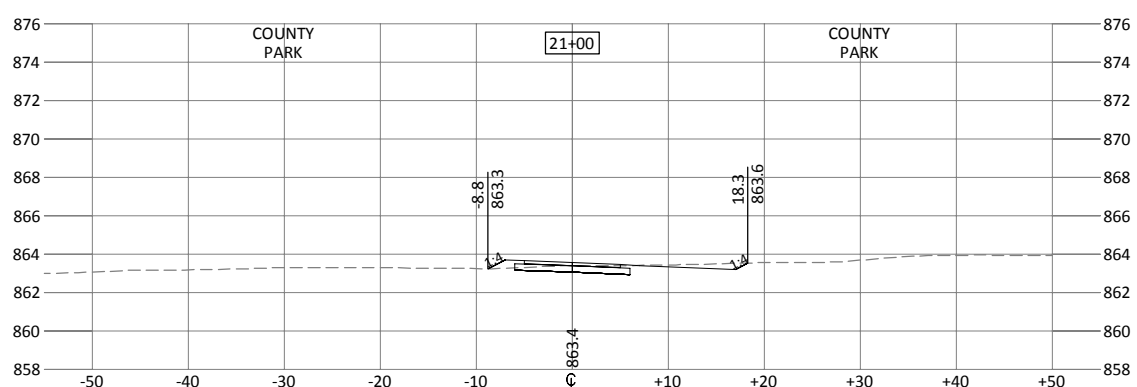
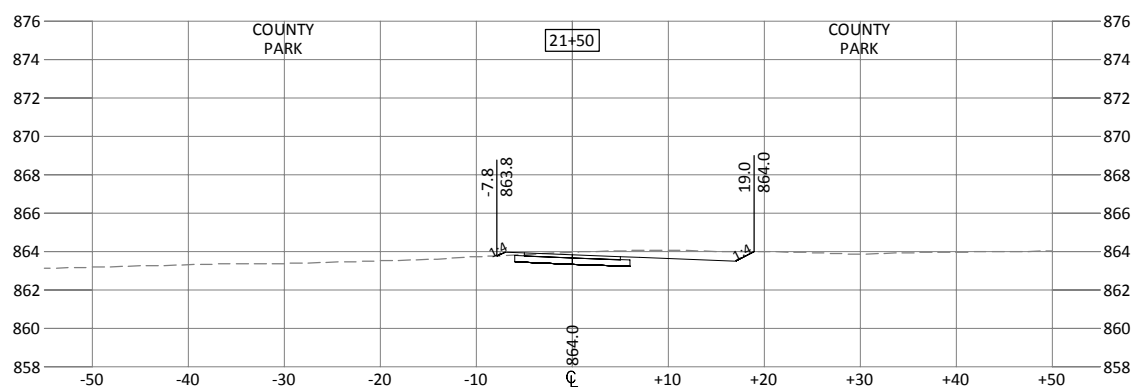
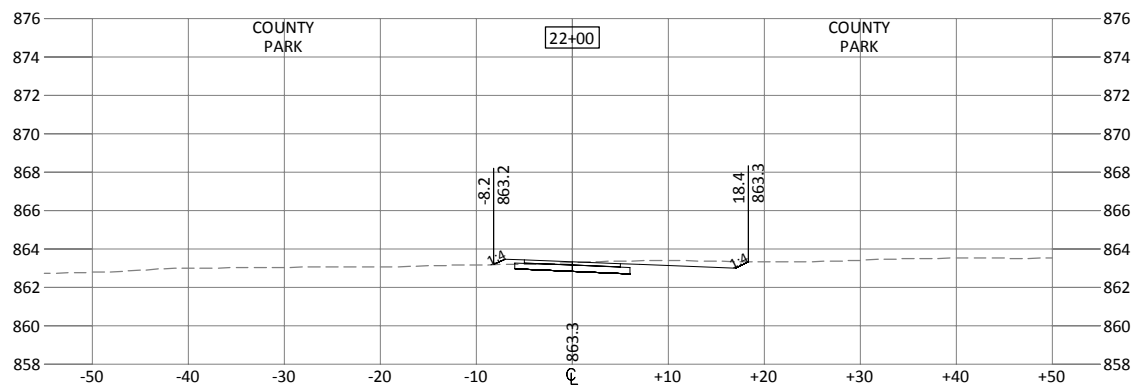
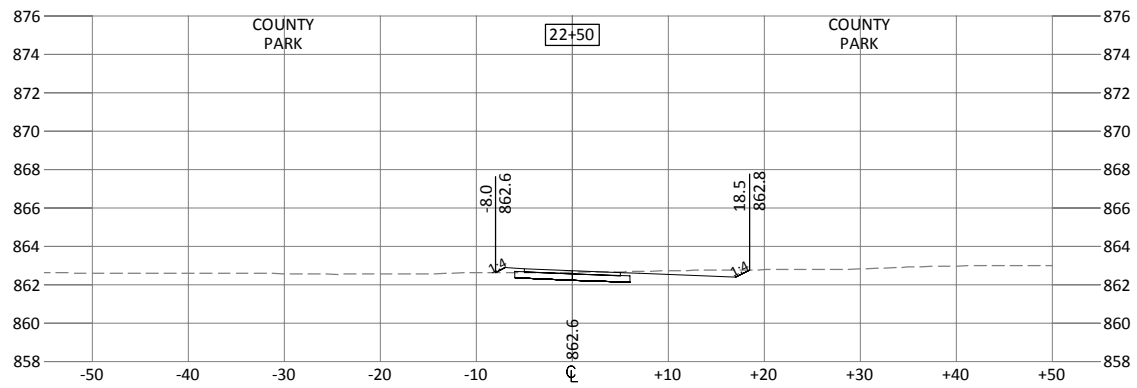


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
MISSISSIPPI RIVER TRAIL
WEST TRAIL (OFF-ROAD) CROSS SECTIONS
SP 103-090-003

SHEET 43 OF 53



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KEVIN P. KIELB, P.E.
 LIC. NO. 23211 DATE 3/25/2013

DESIGNED: KPK/AK
 DRAWN: AK
 CHECKED: KPK

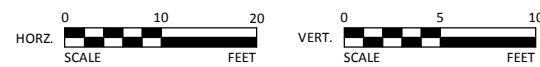
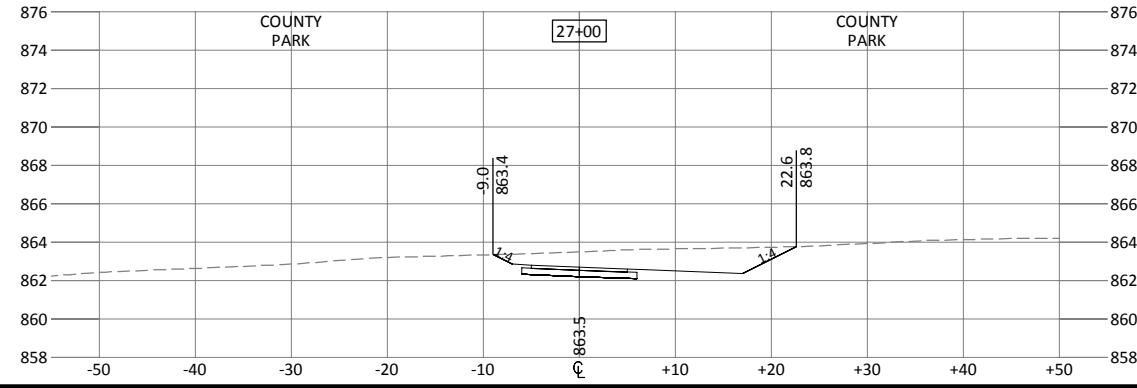
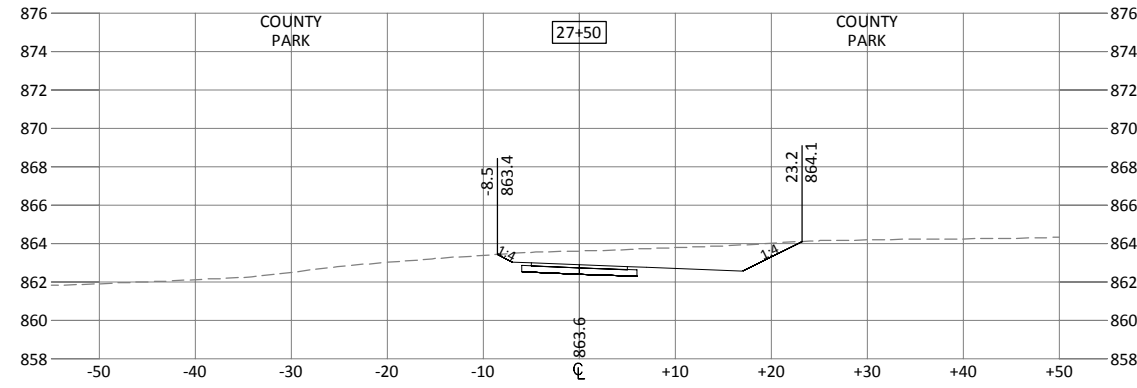
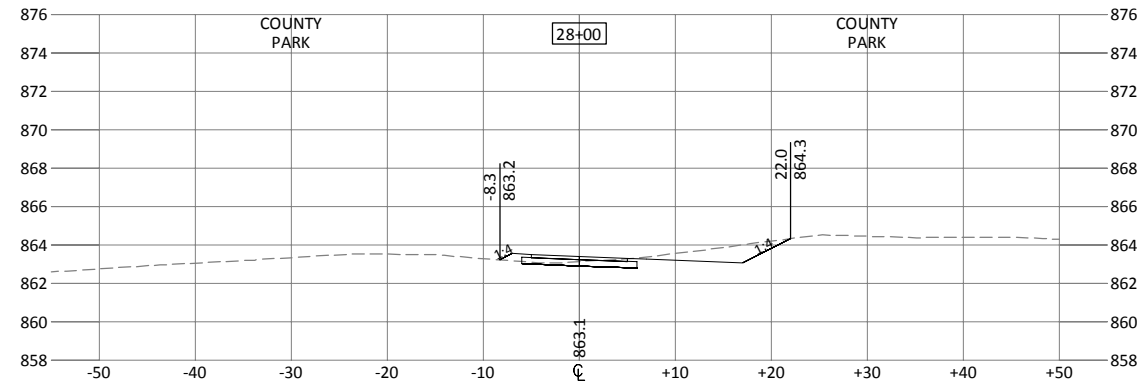
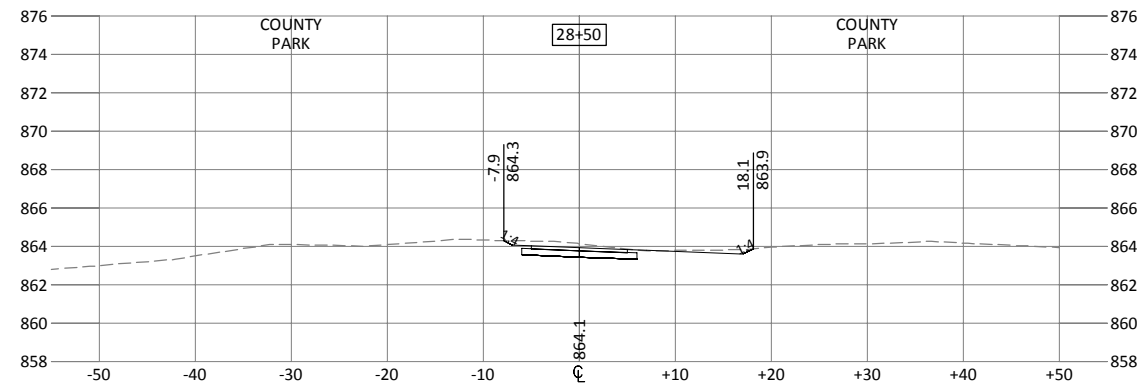
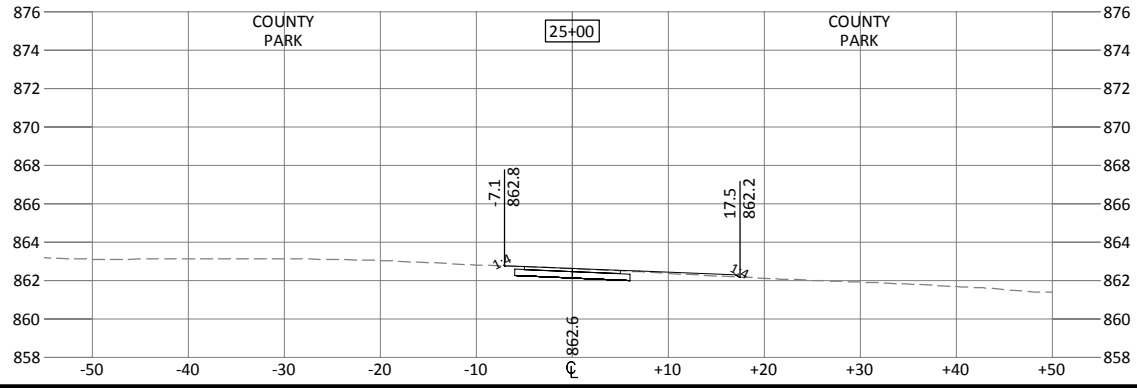
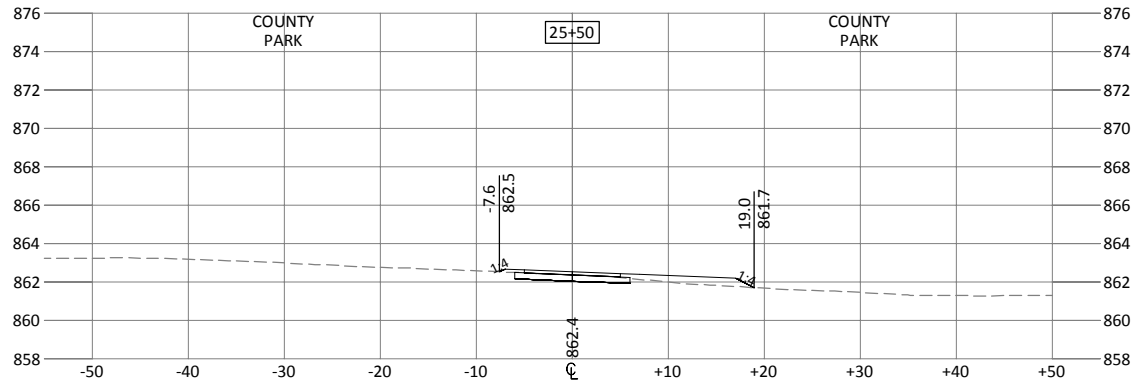
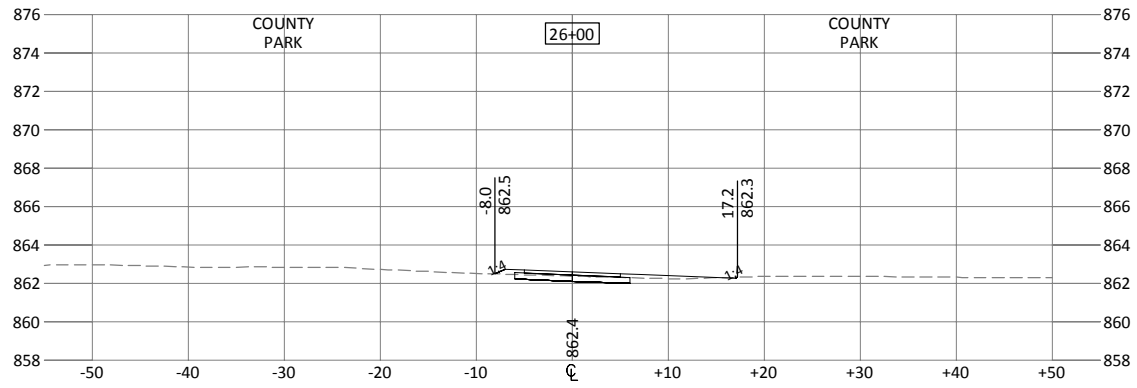
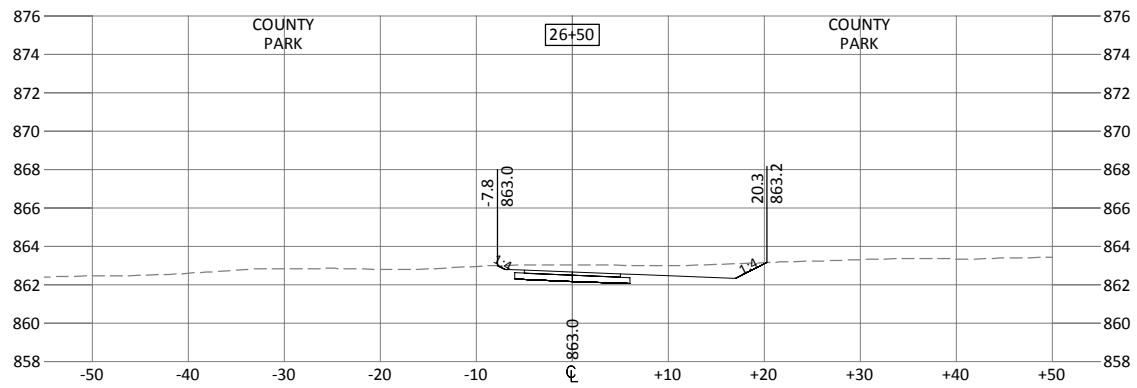


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REV.	BY	DATE

CITY OF ANOKA, MINNESOTA
 MISSISSIPPI RIVER TRAIL
 WEST TRAIL (OFF-ROAD) CROSS SECTIONS
 SP 103-090-003

SHEET
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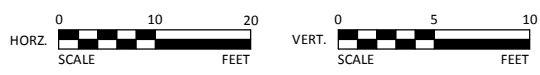
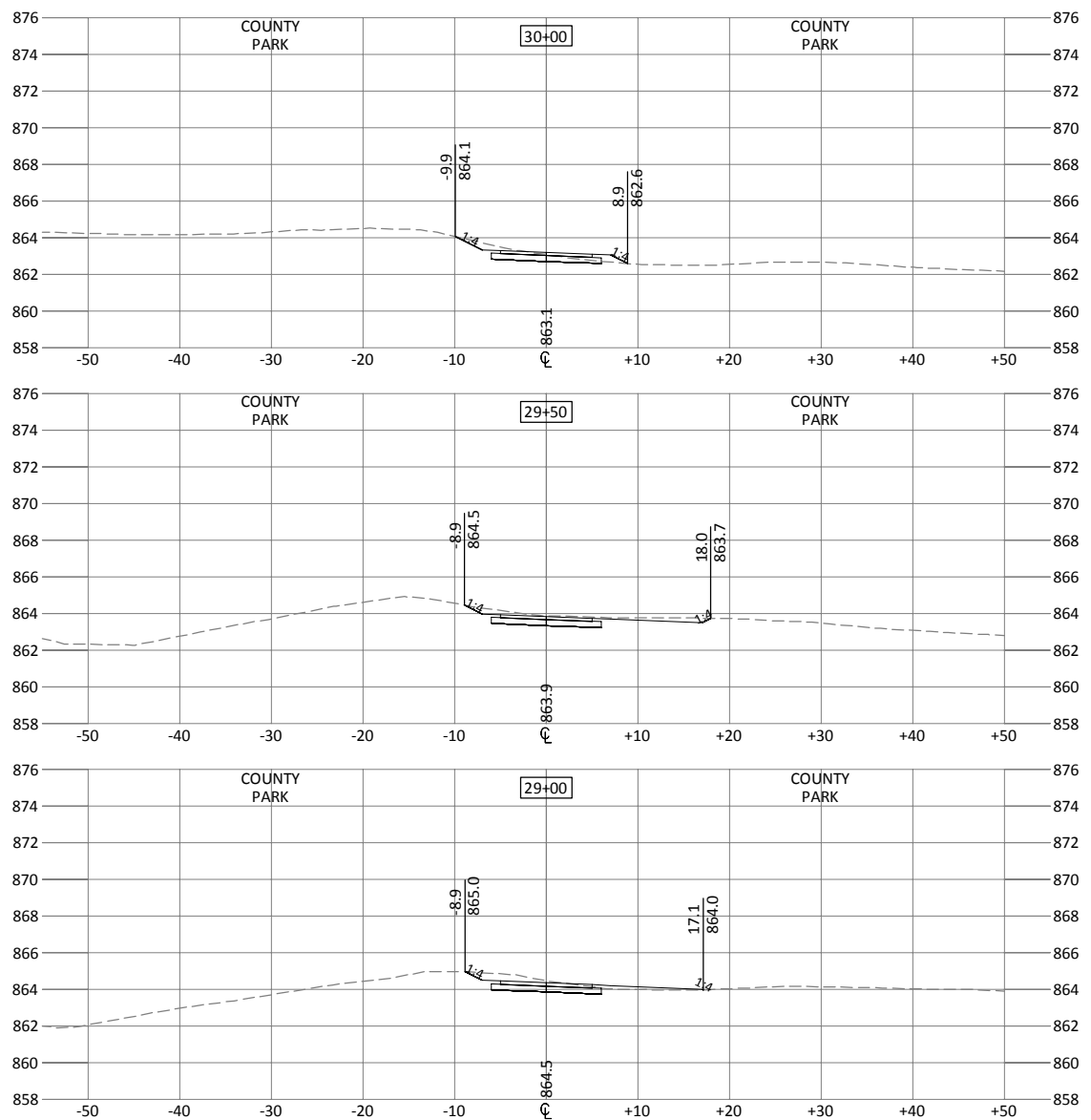
CITY OF ANOKA, MINNESOTA

MISSISSIPPI RIVER TRAIL

WEST TRAIL (OFF-ROAD) CROSS SECTIONS

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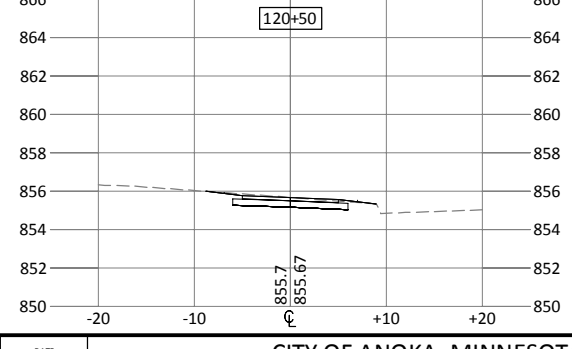
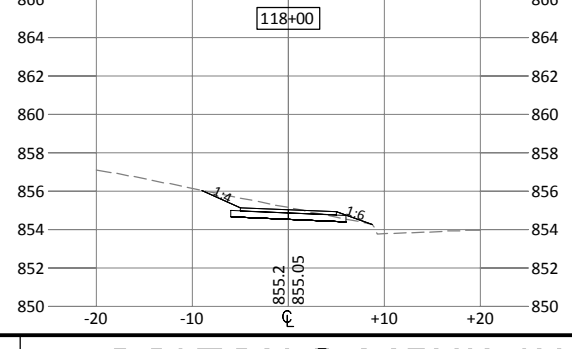
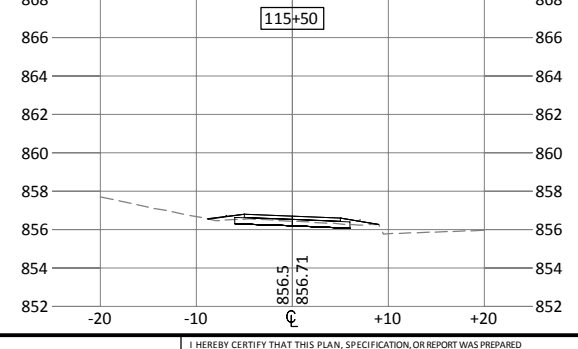
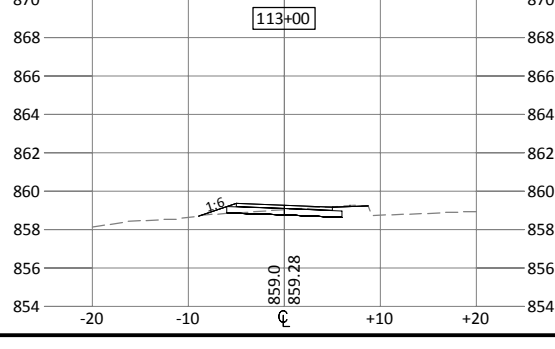
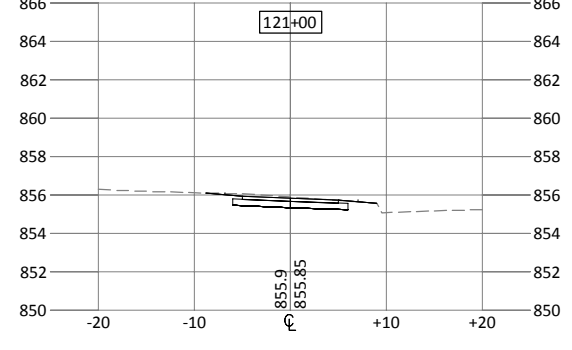
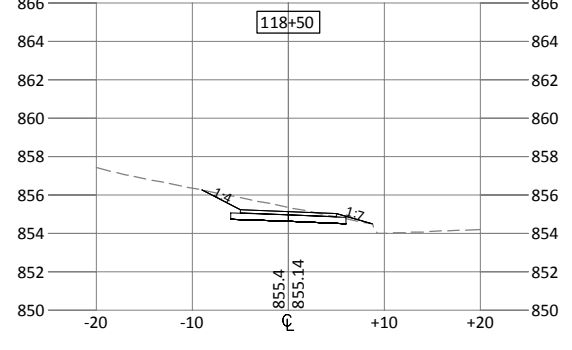
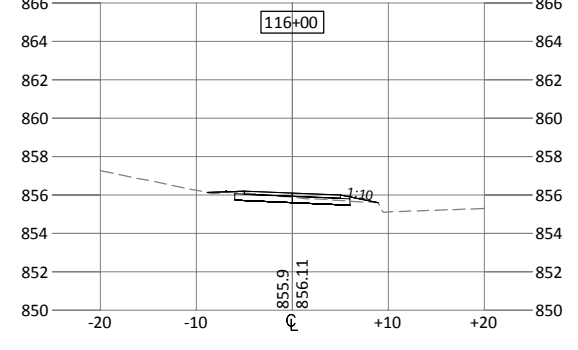
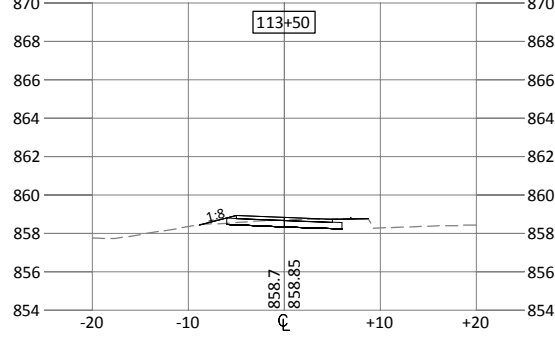
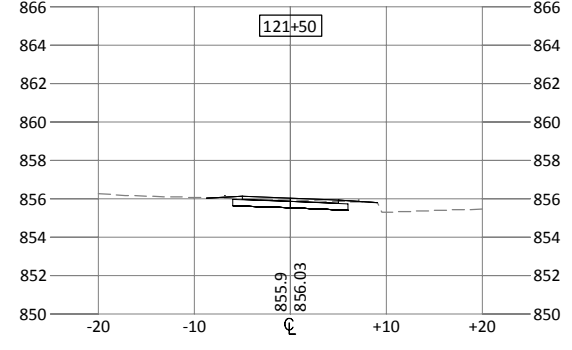
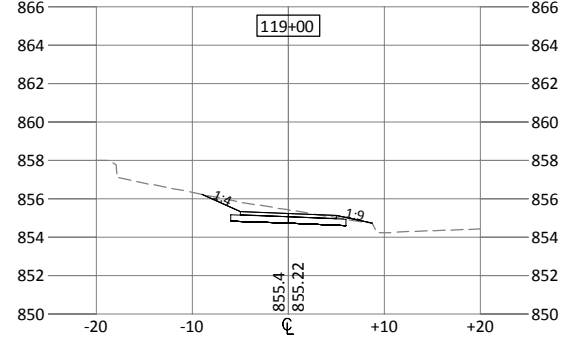
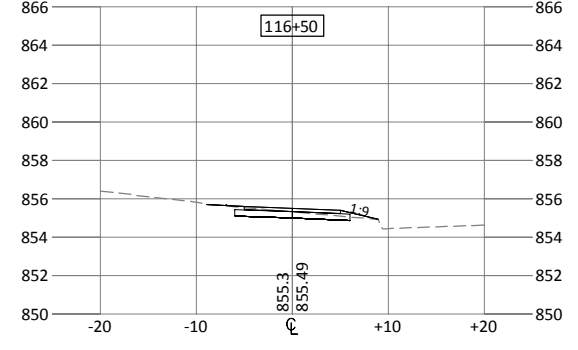
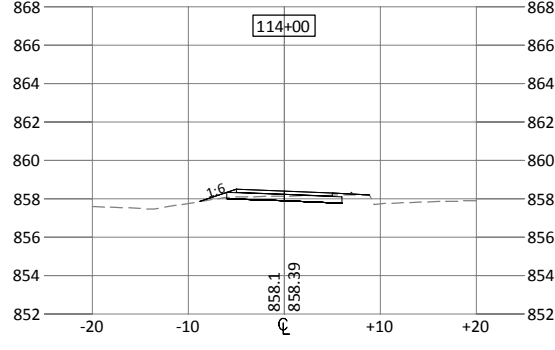
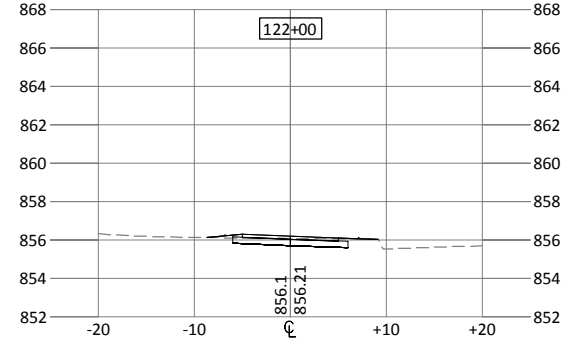
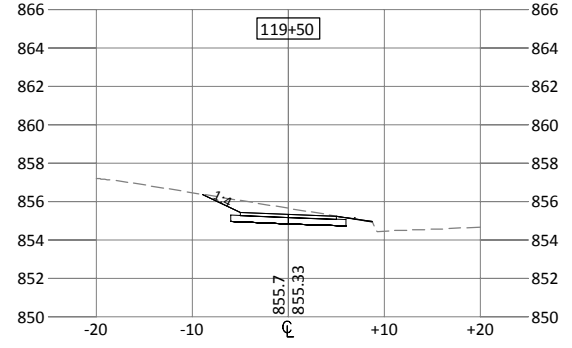
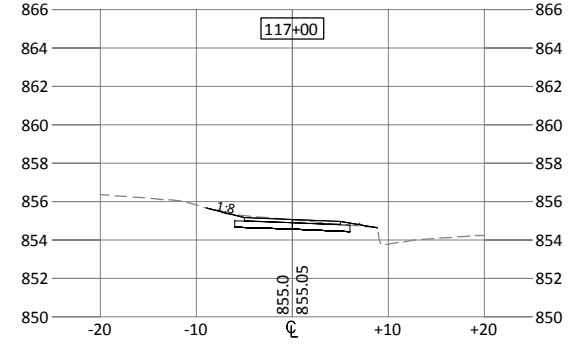
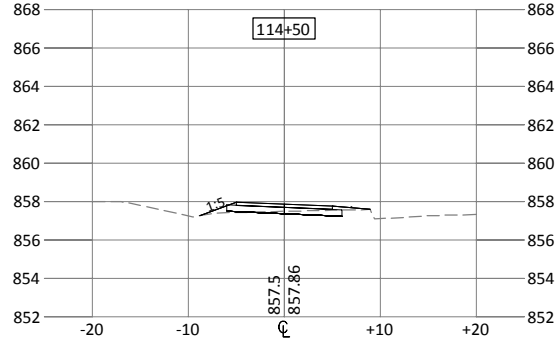
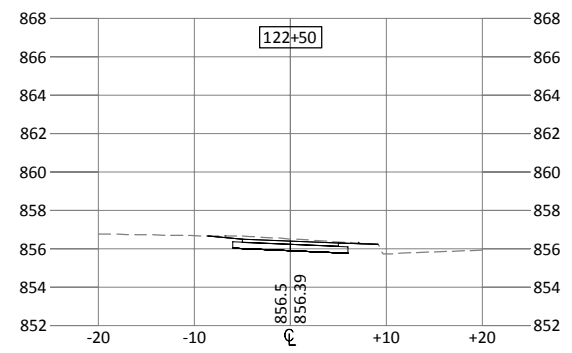
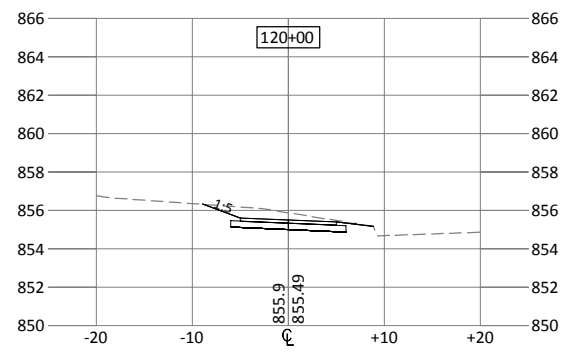
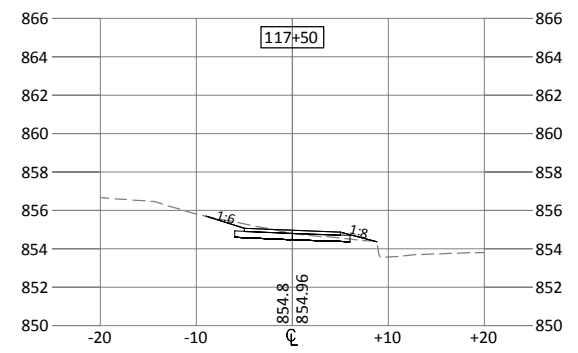
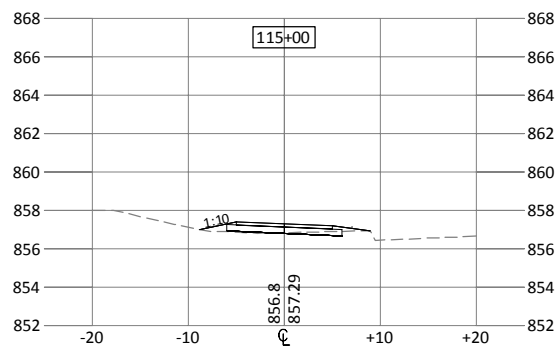


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CITY OF ANOKA, MINNESOTA
MISSISSIPPI RIVER TRAIL
WEST TRAIL (OFF-ROAD) CROSS SECTIONS
SP 103-090-003

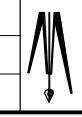
SHEET
46
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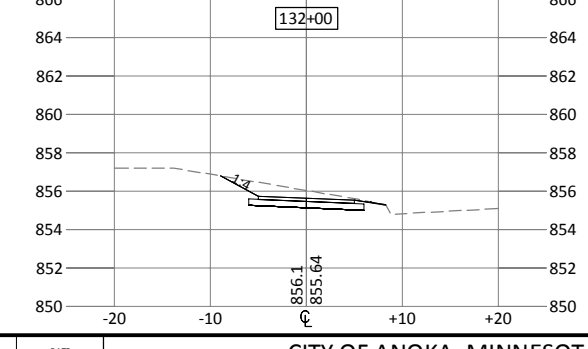
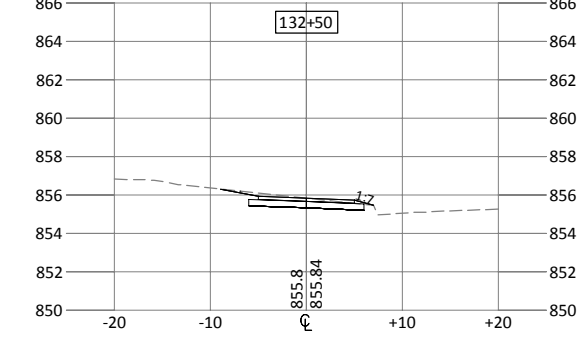
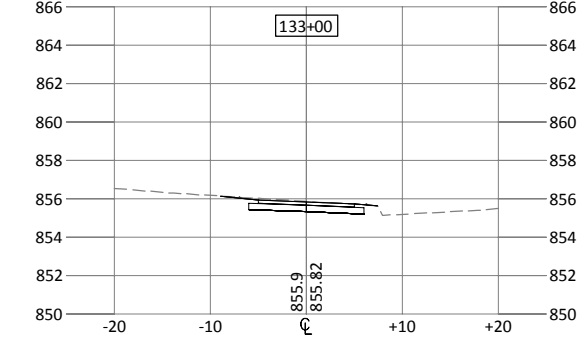
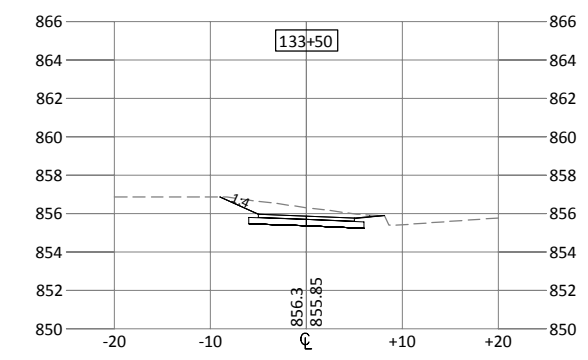
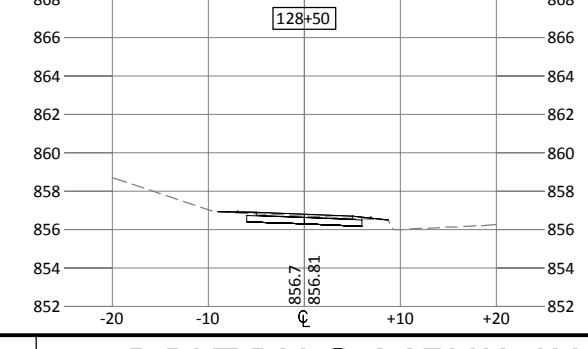
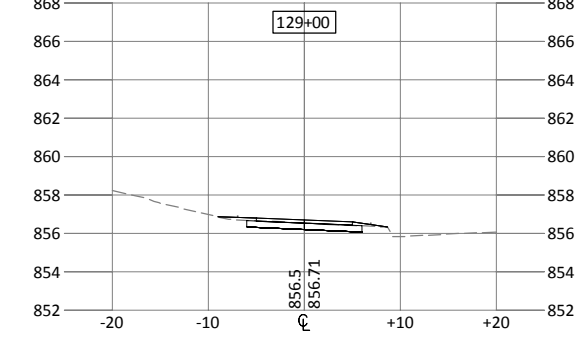
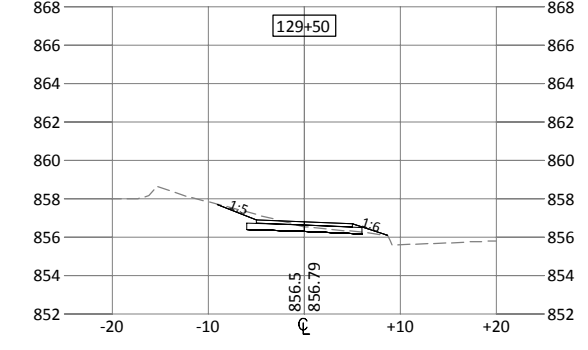
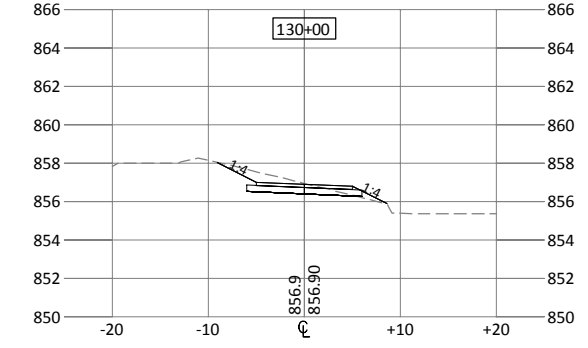
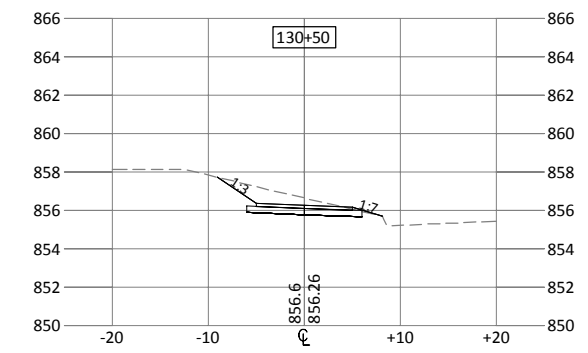
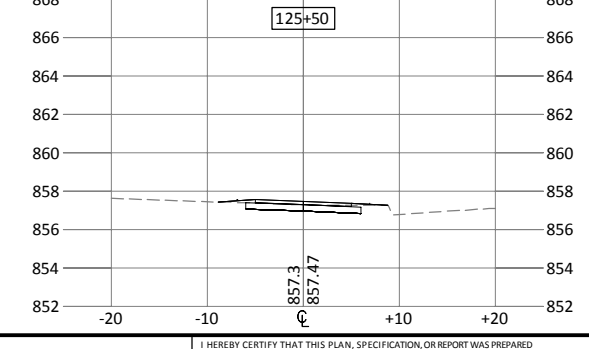
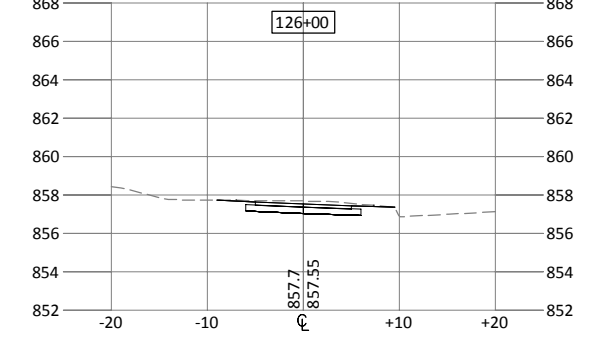
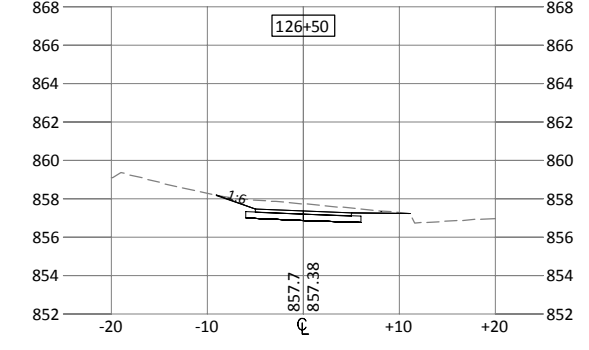
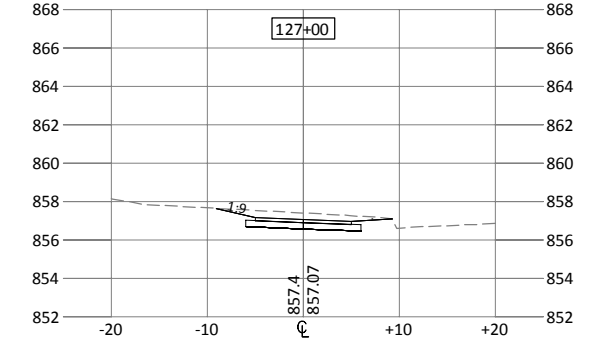
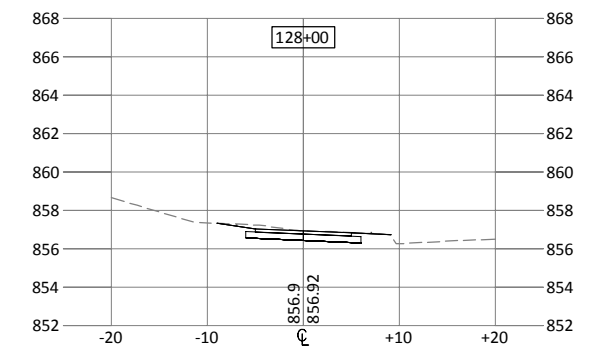
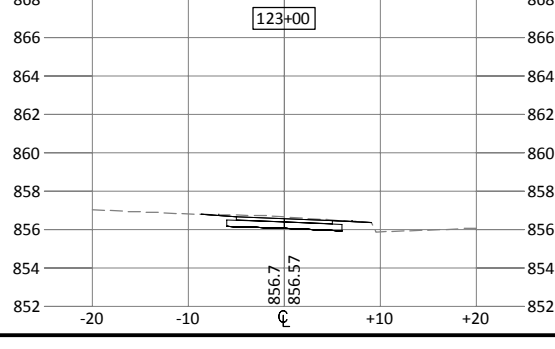
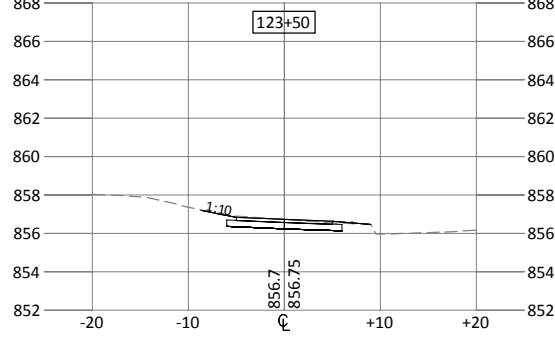
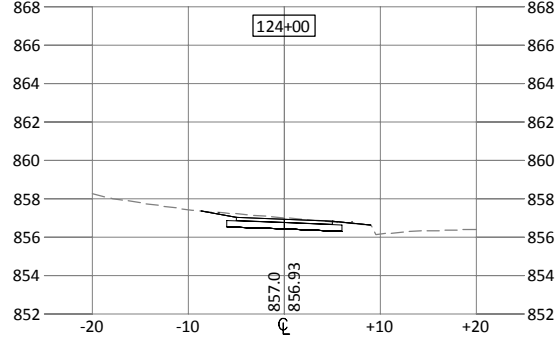
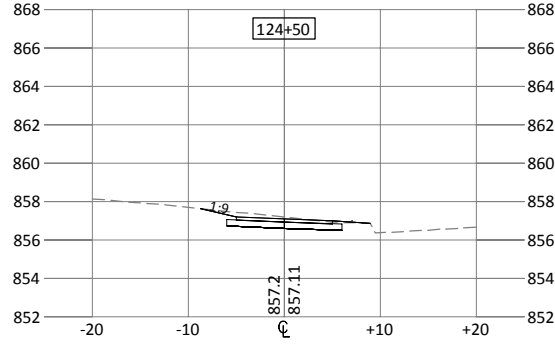
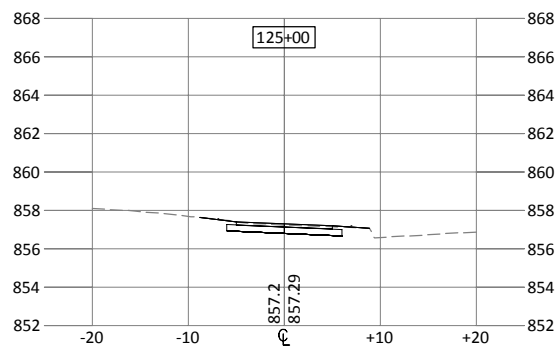
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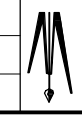
CITY OF ANOKA, MINNESOTA
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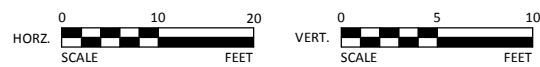
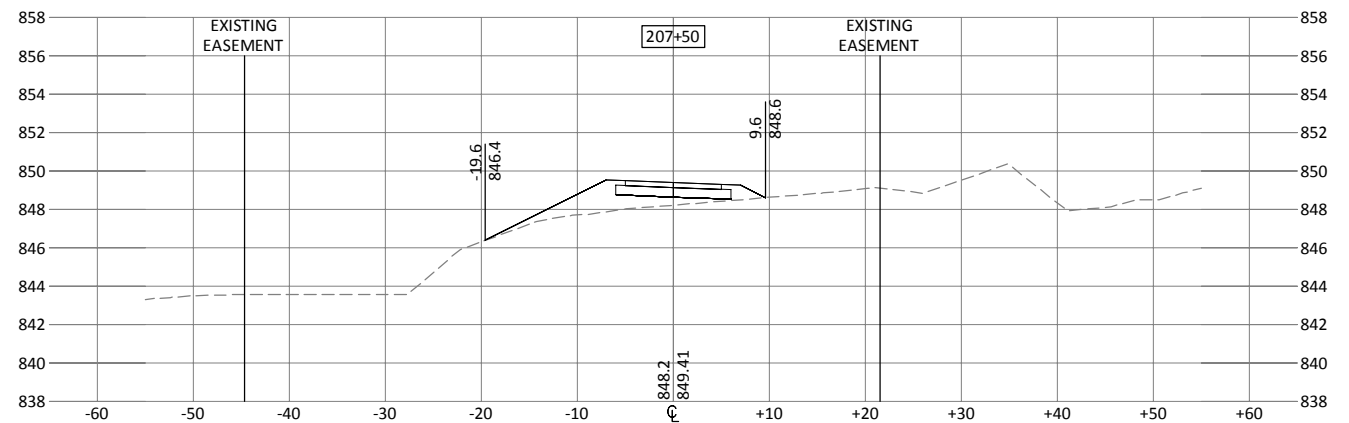
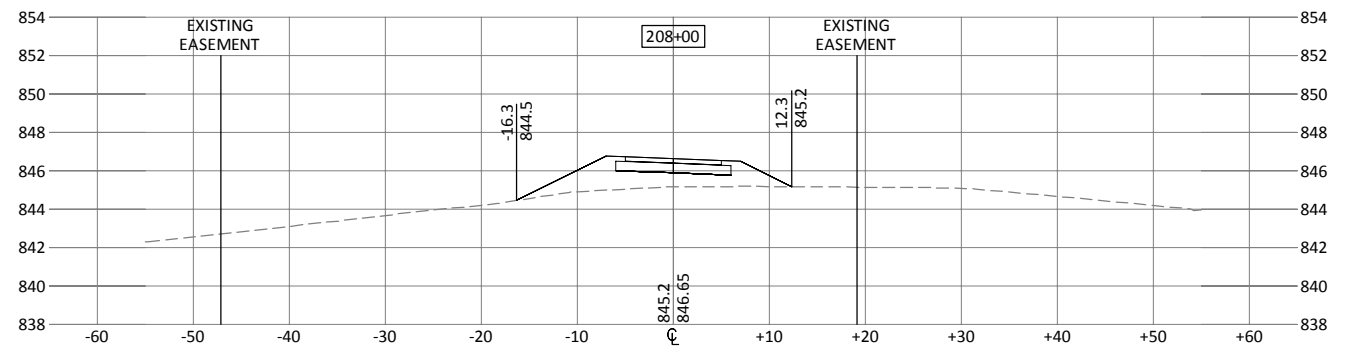
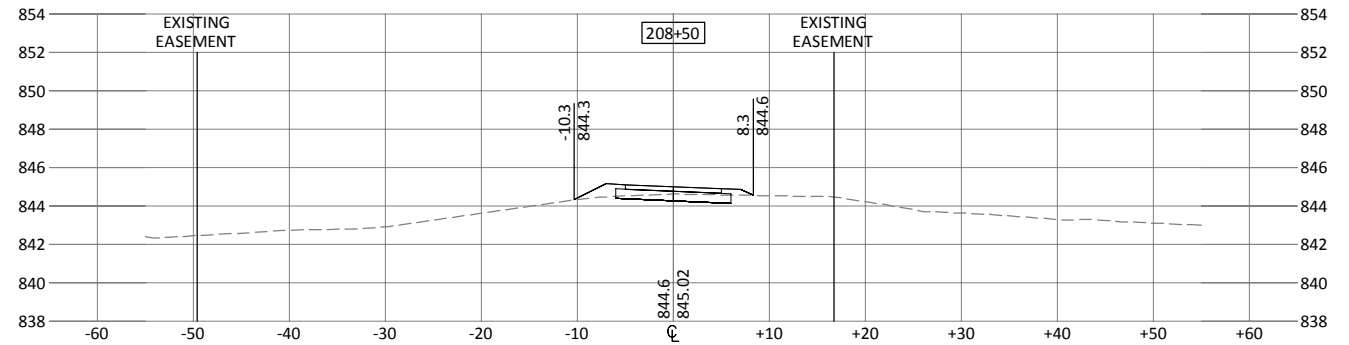
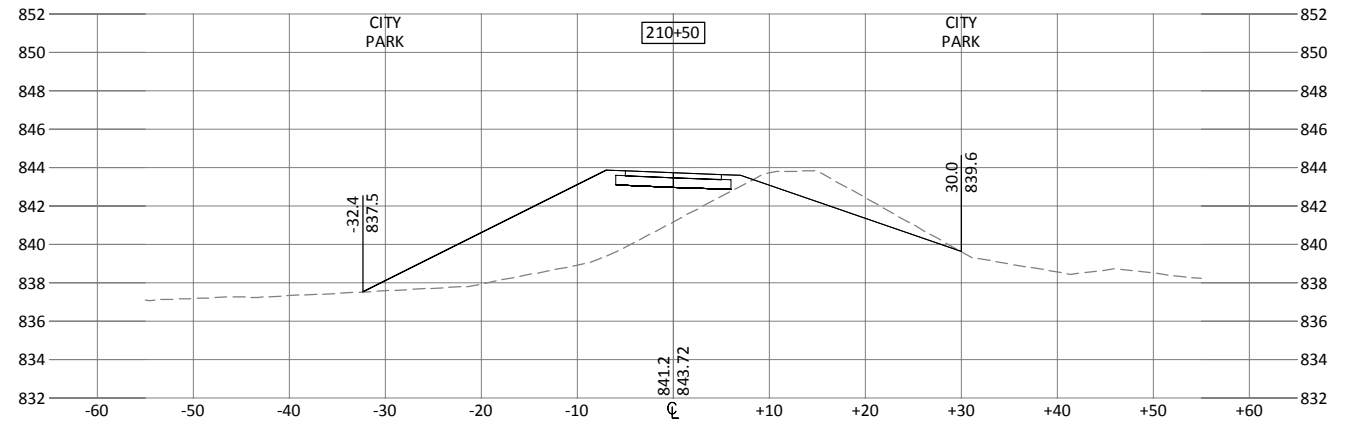
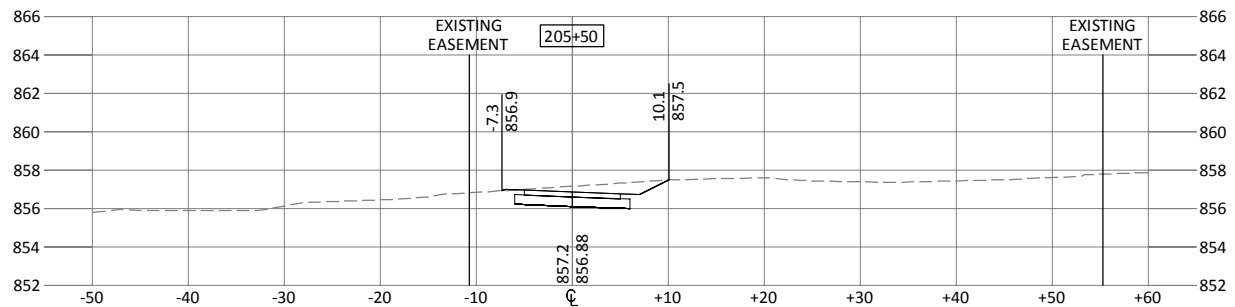
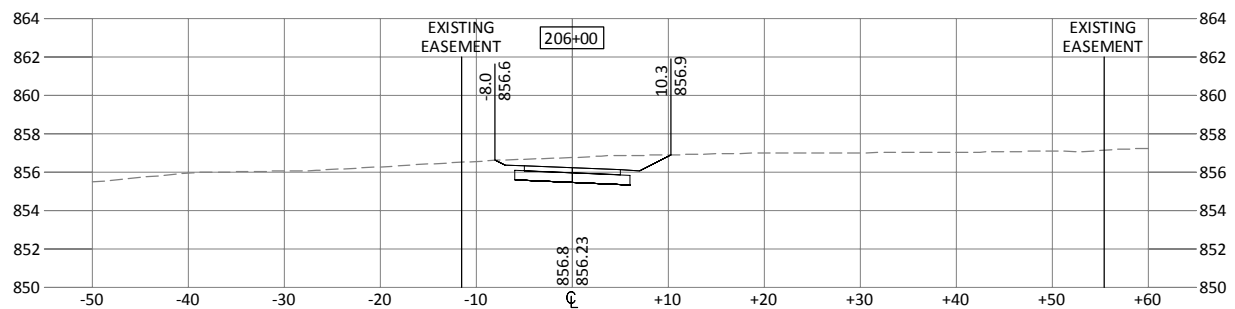
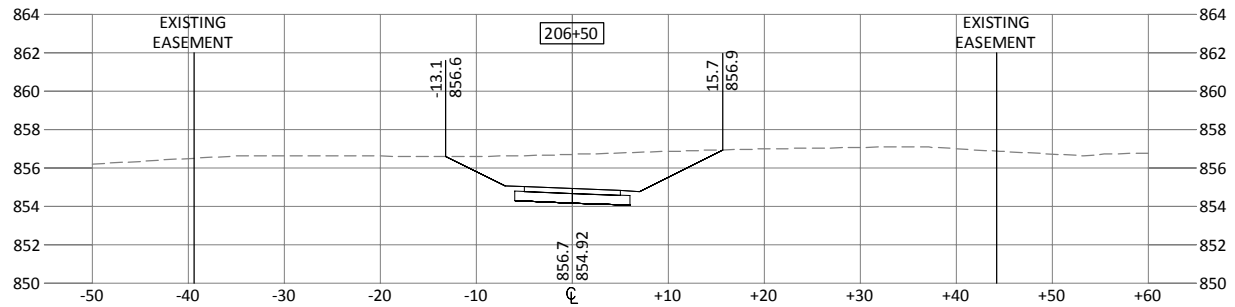
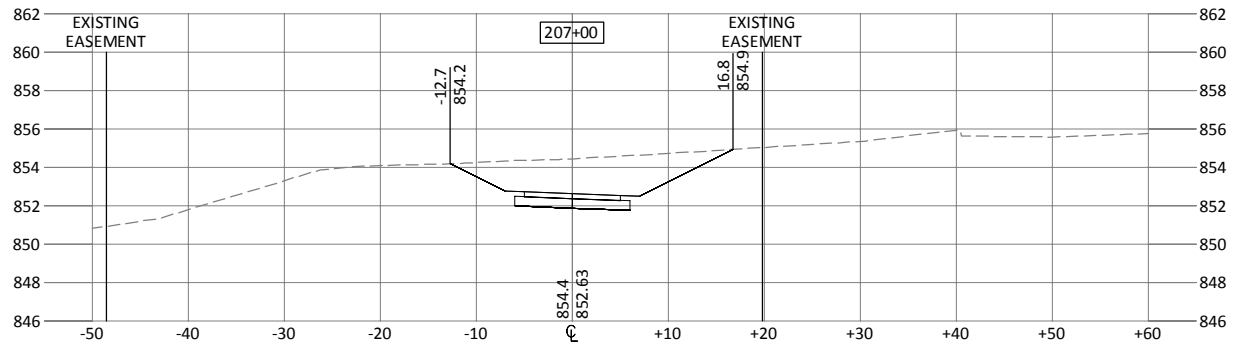
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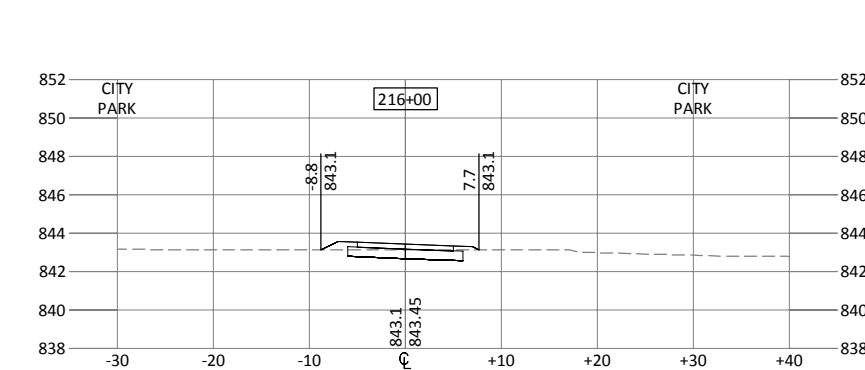
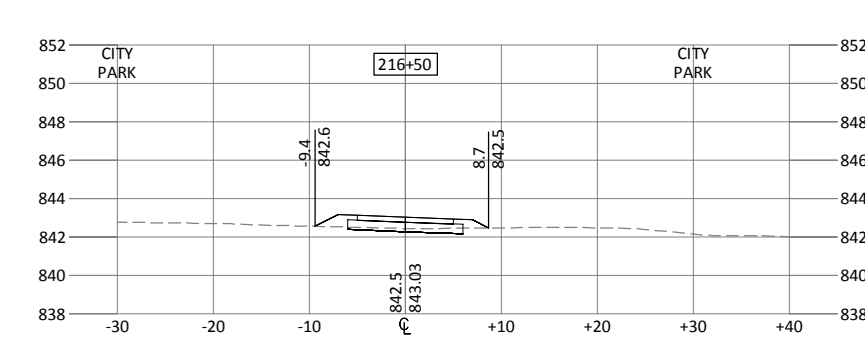
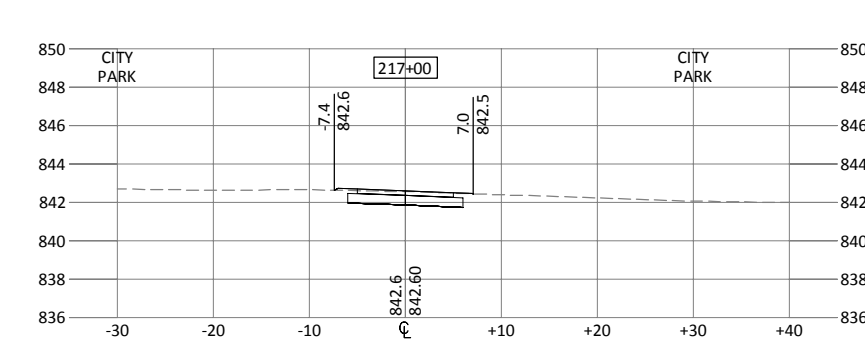
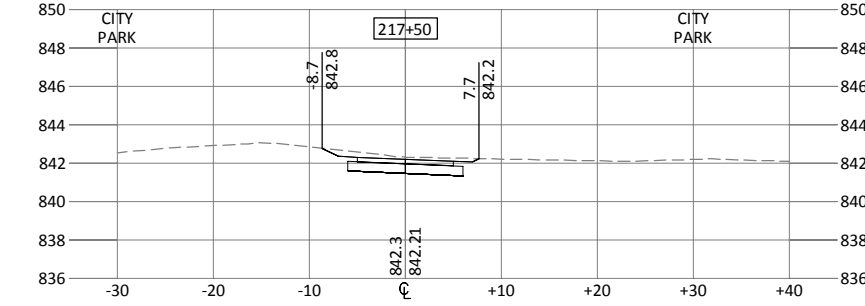
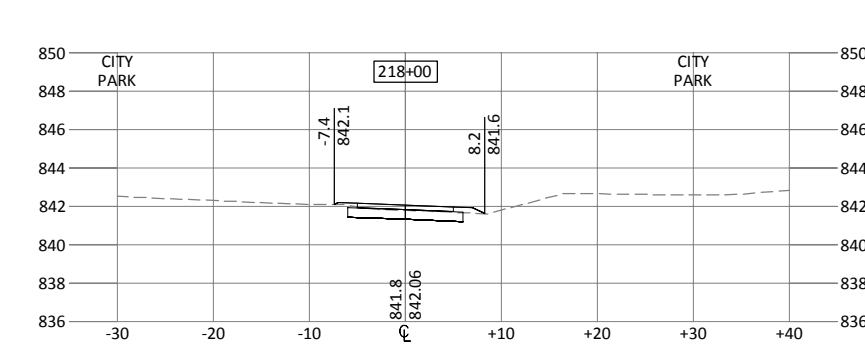
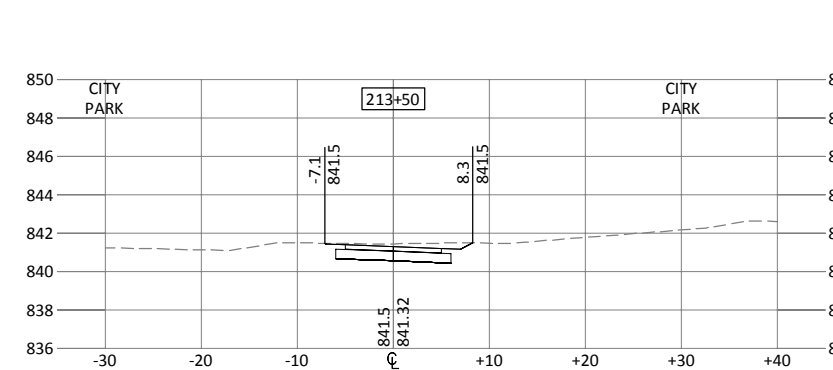
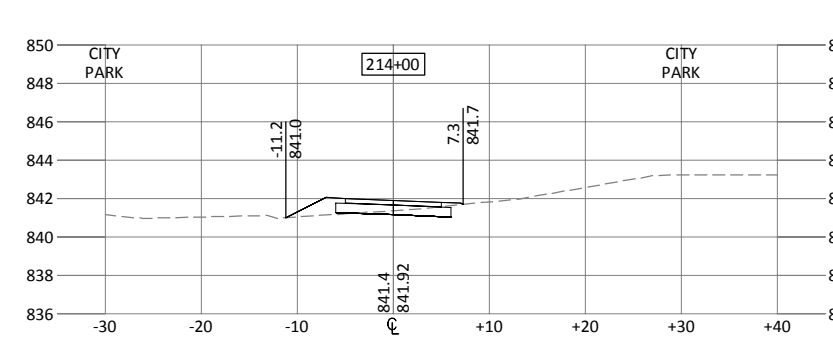
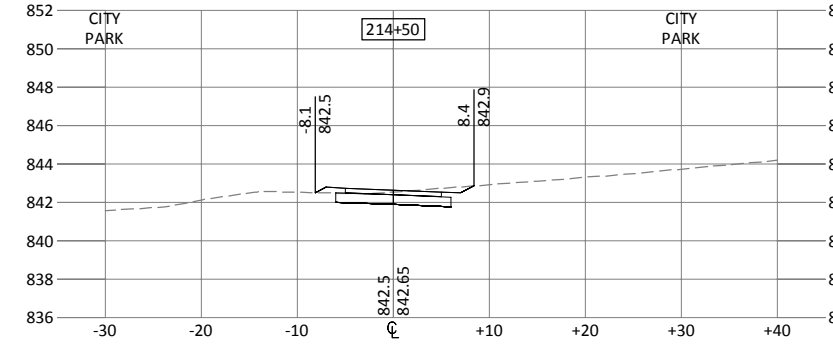
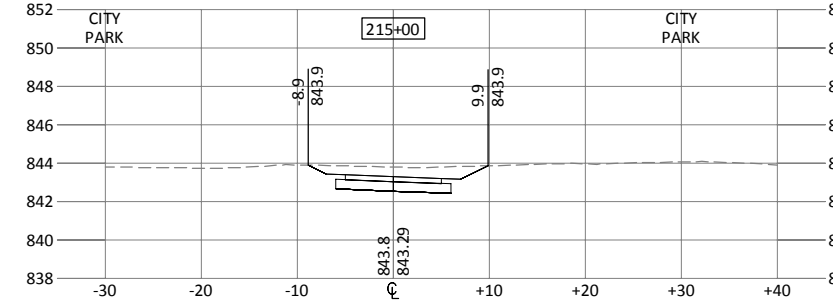
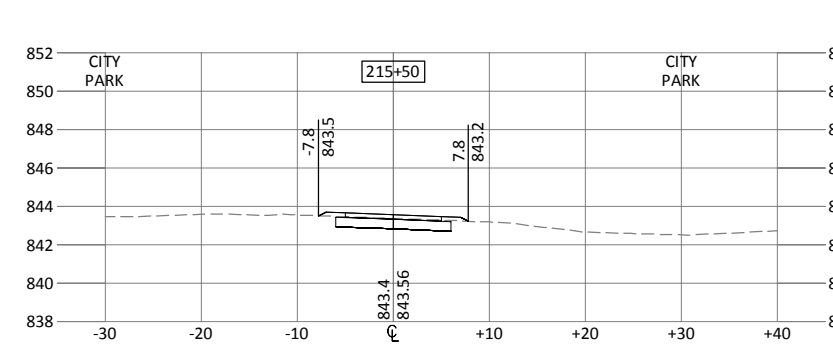
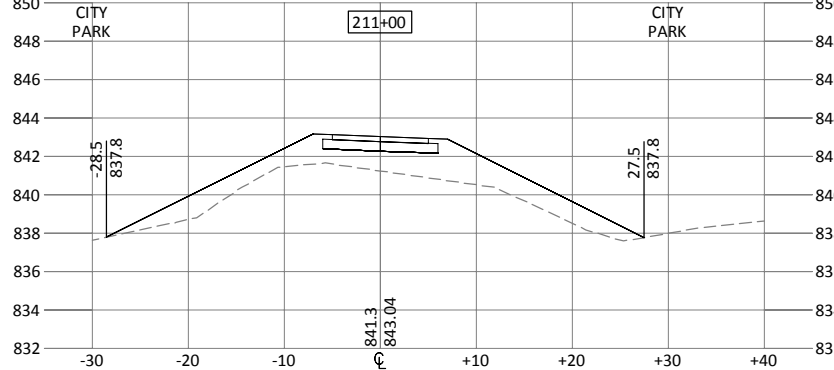
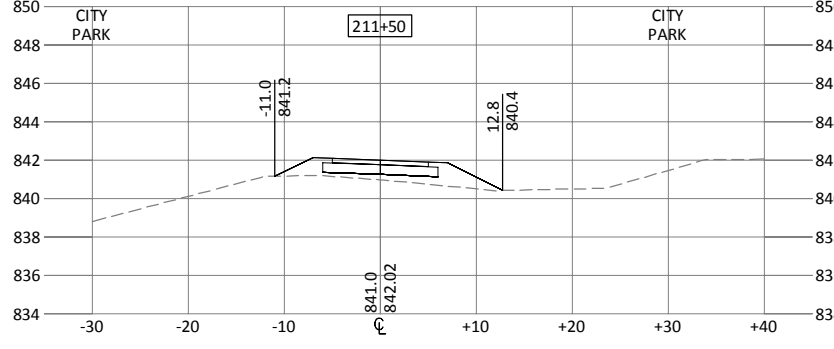
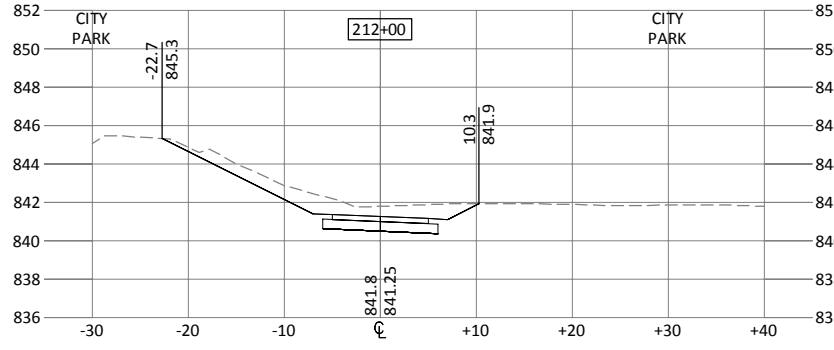
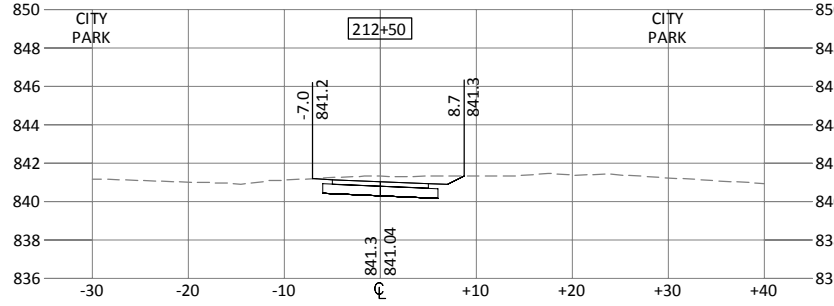
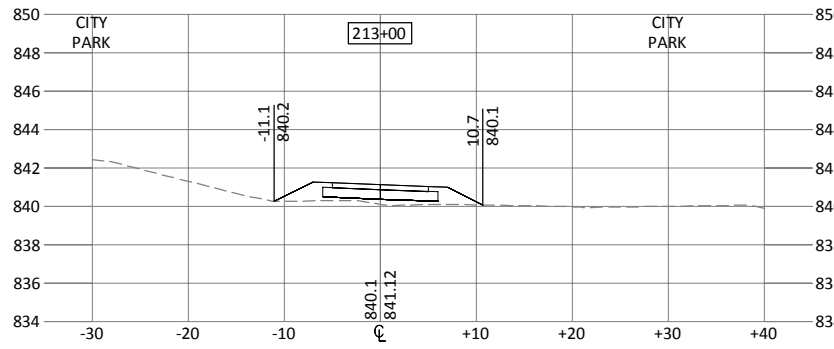
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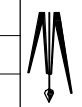
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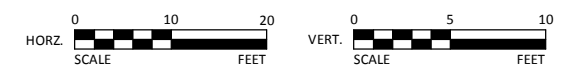
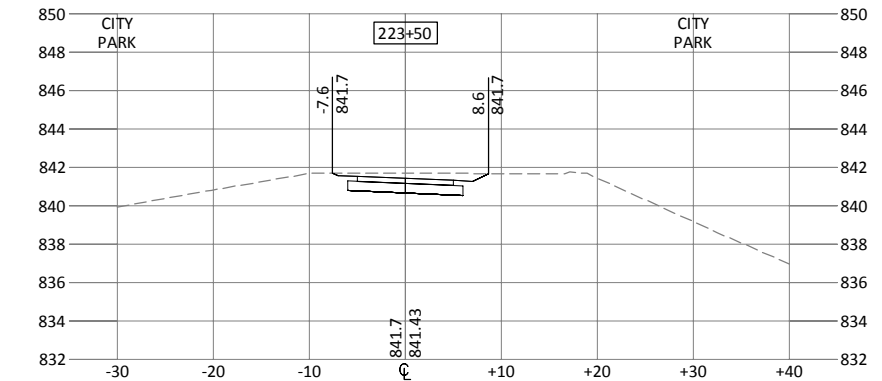
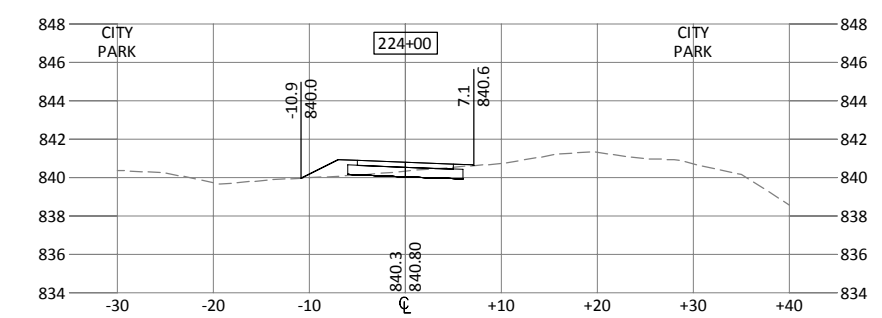
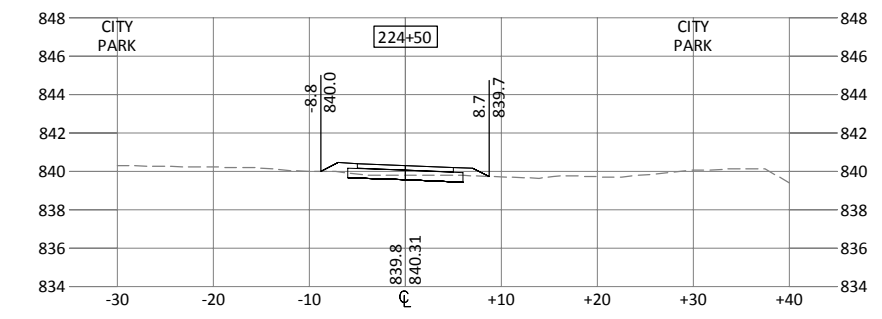
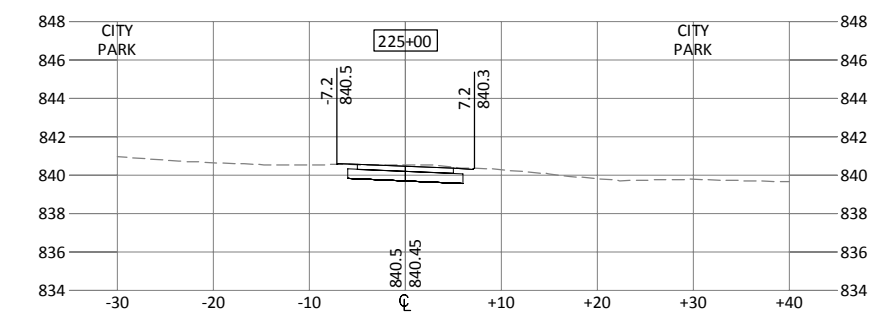
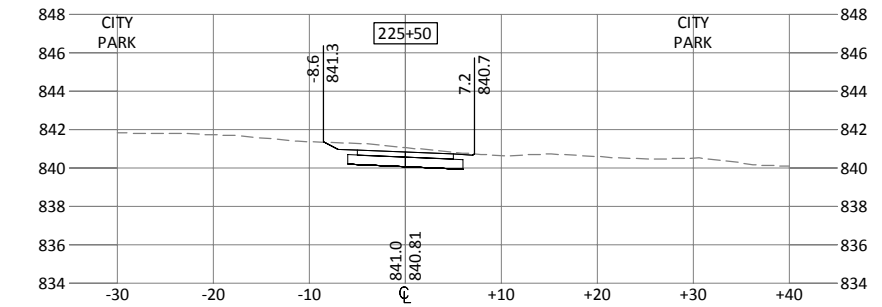
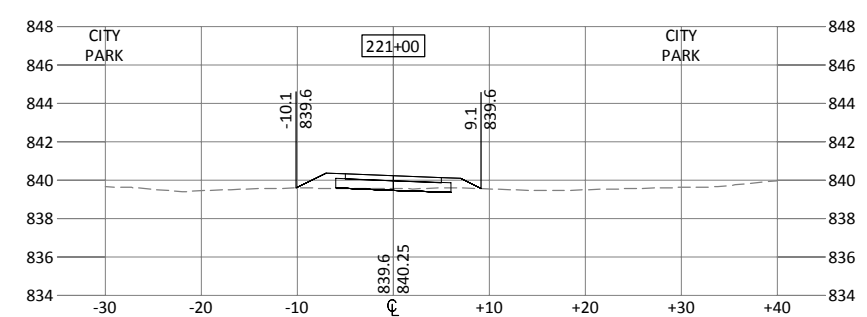
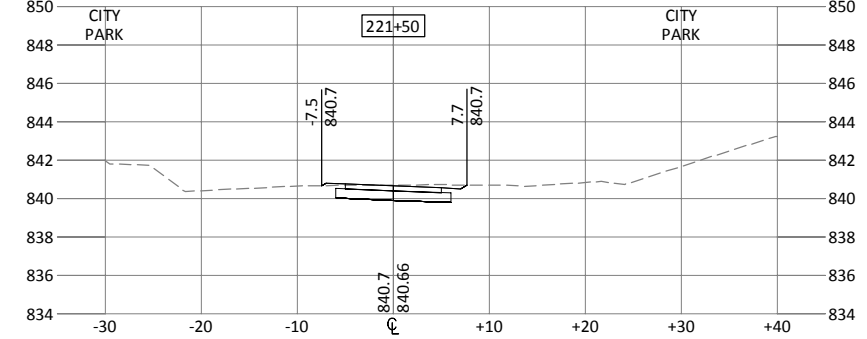
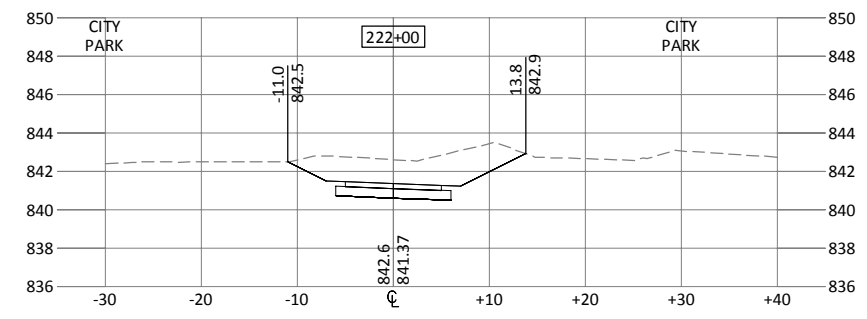
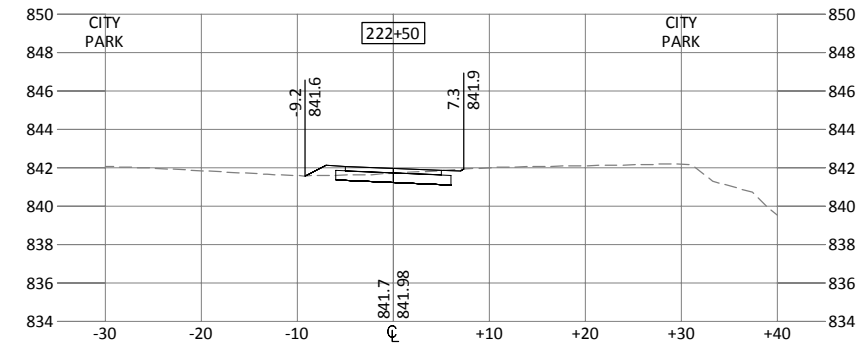
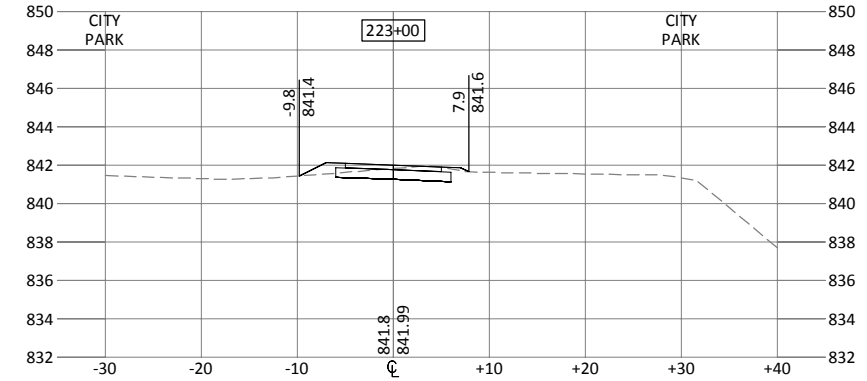
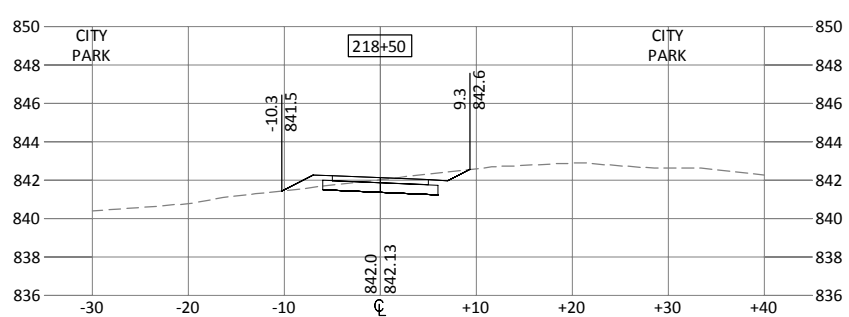
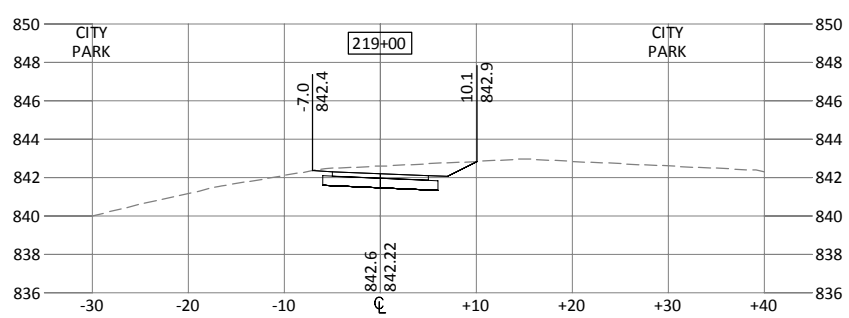
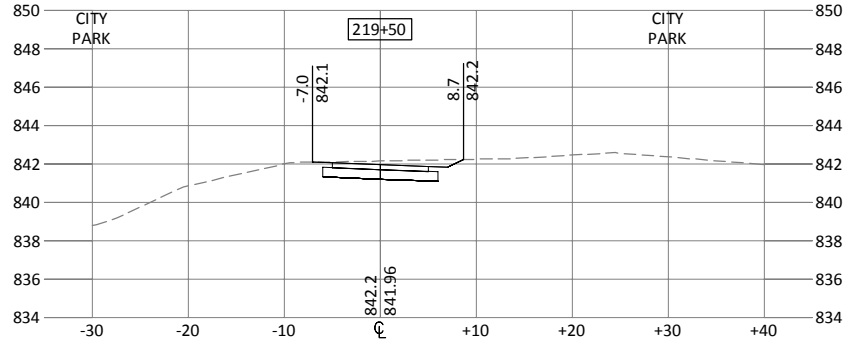
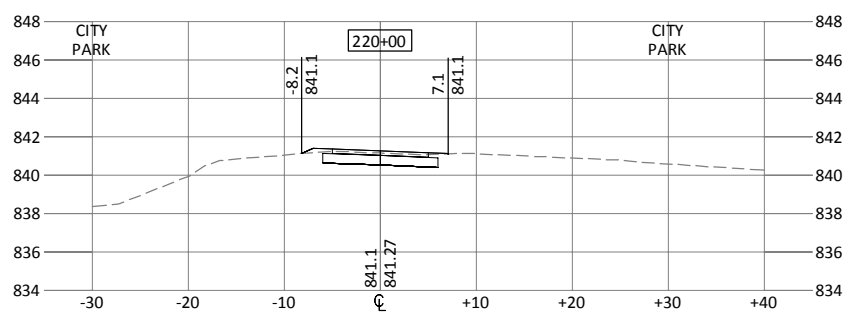
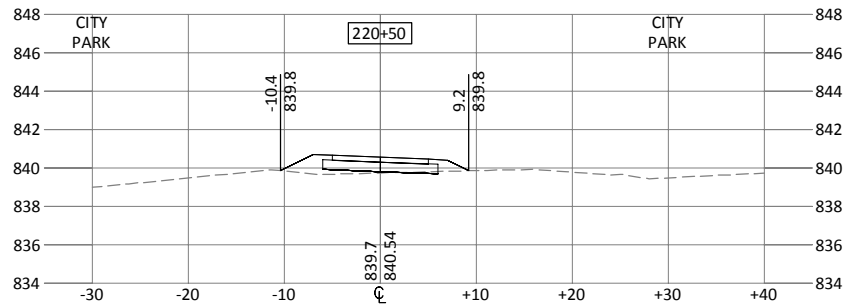
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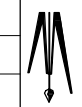
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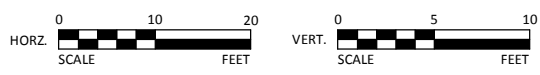
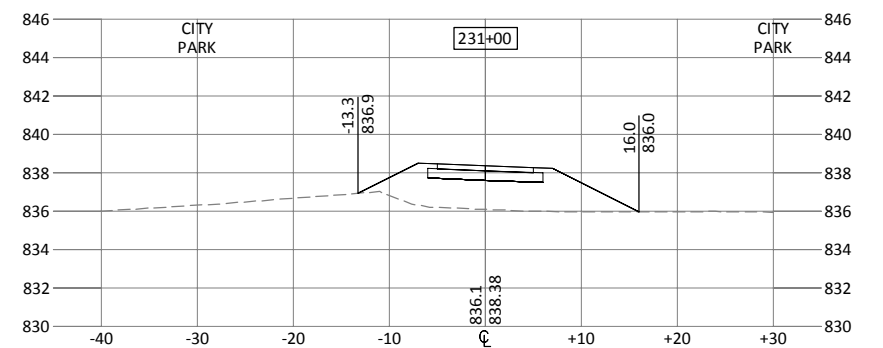
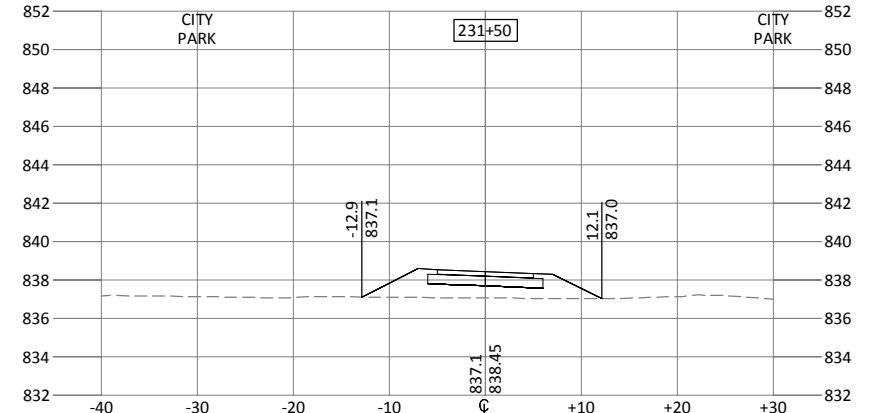
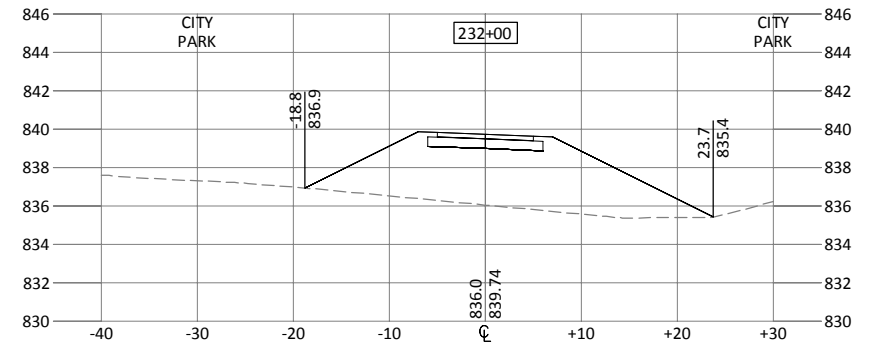
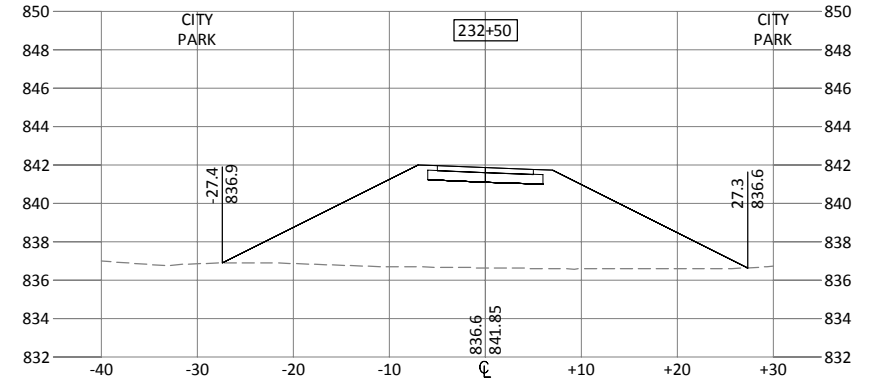
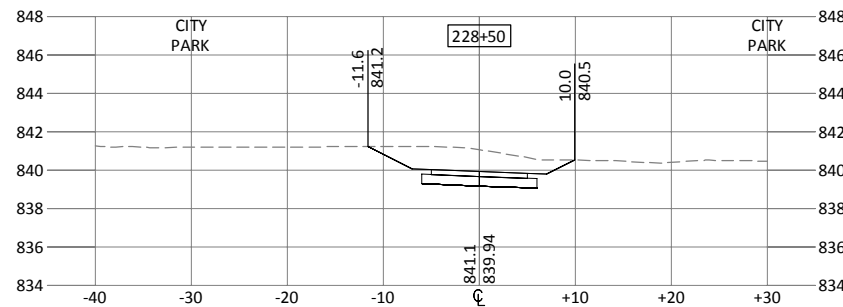
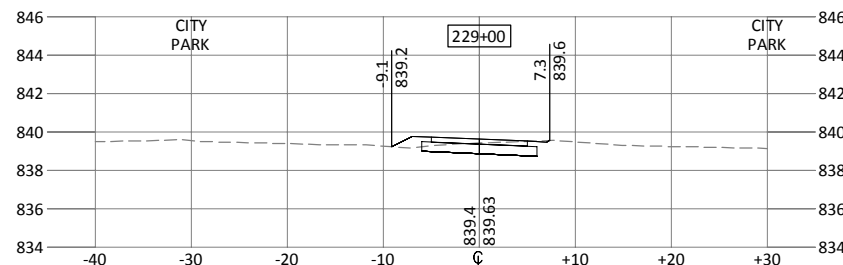
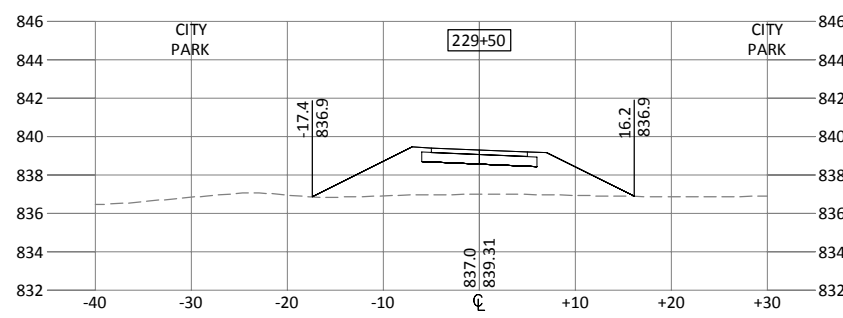
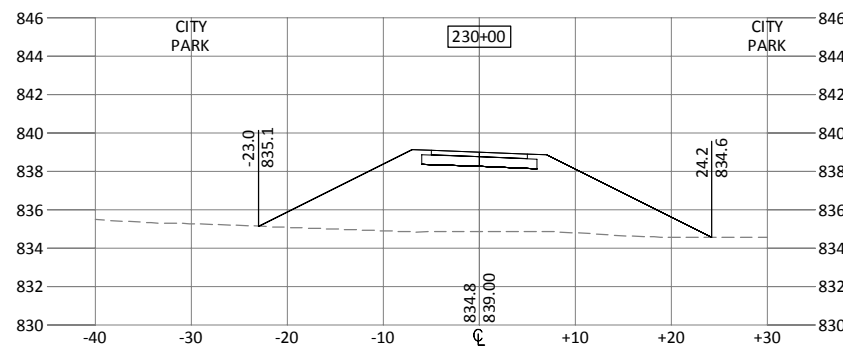
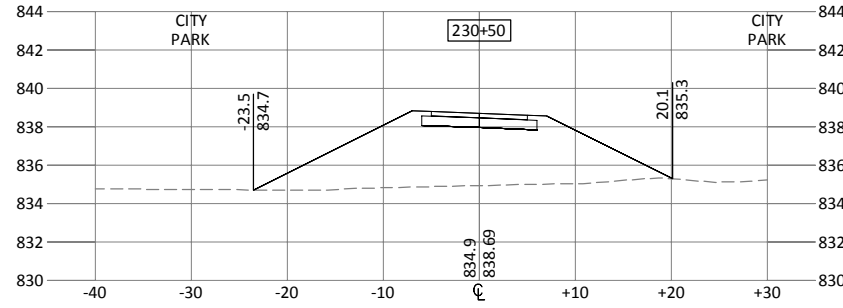
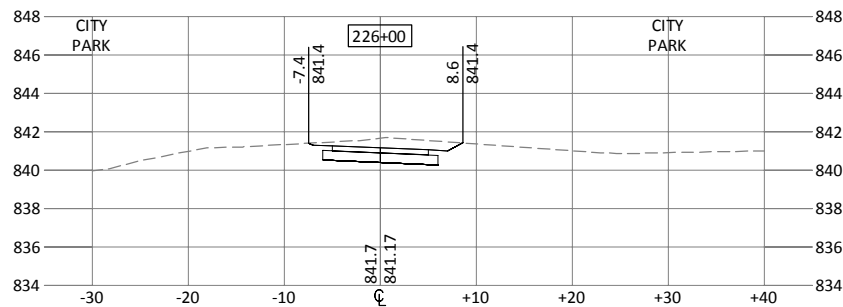
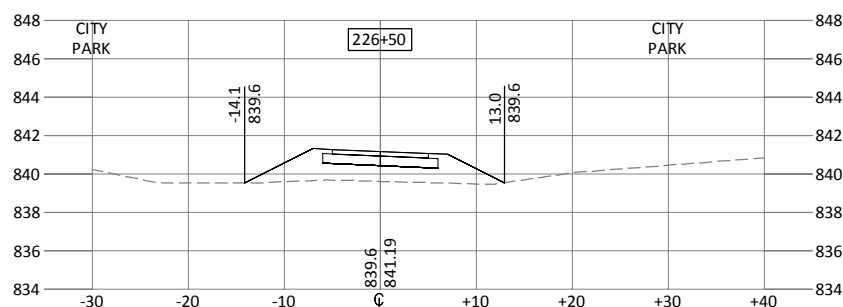
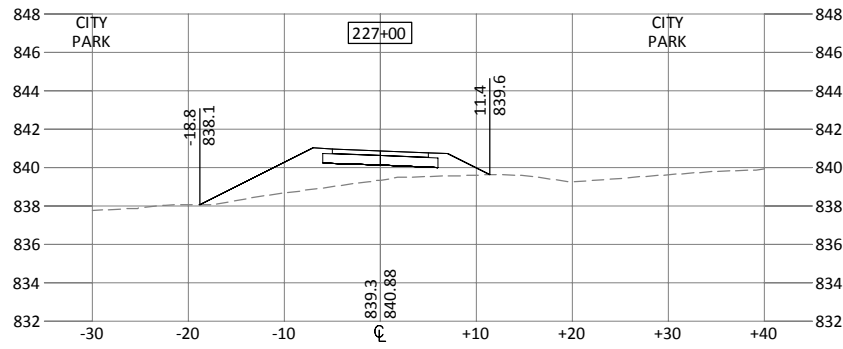
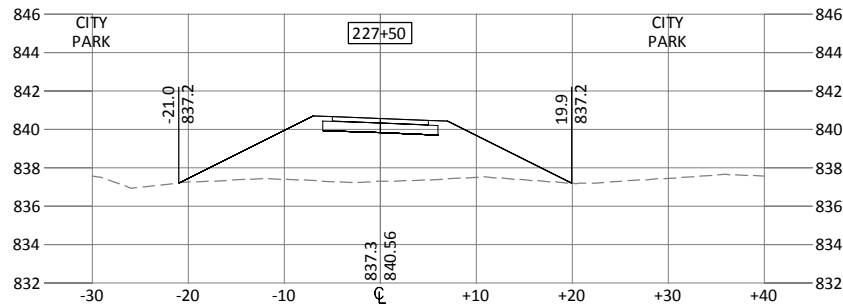
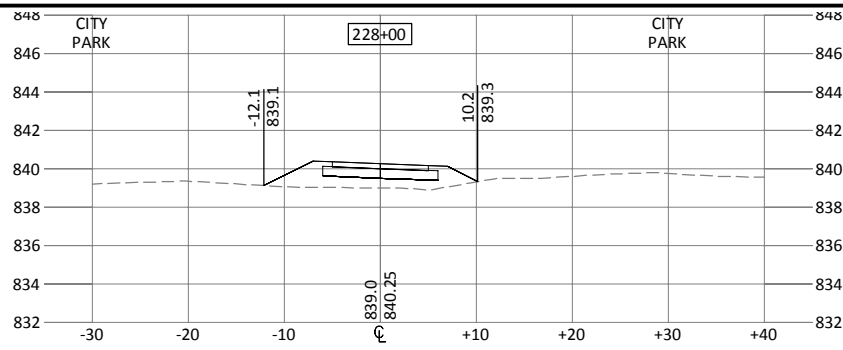
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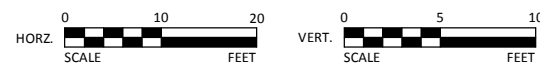
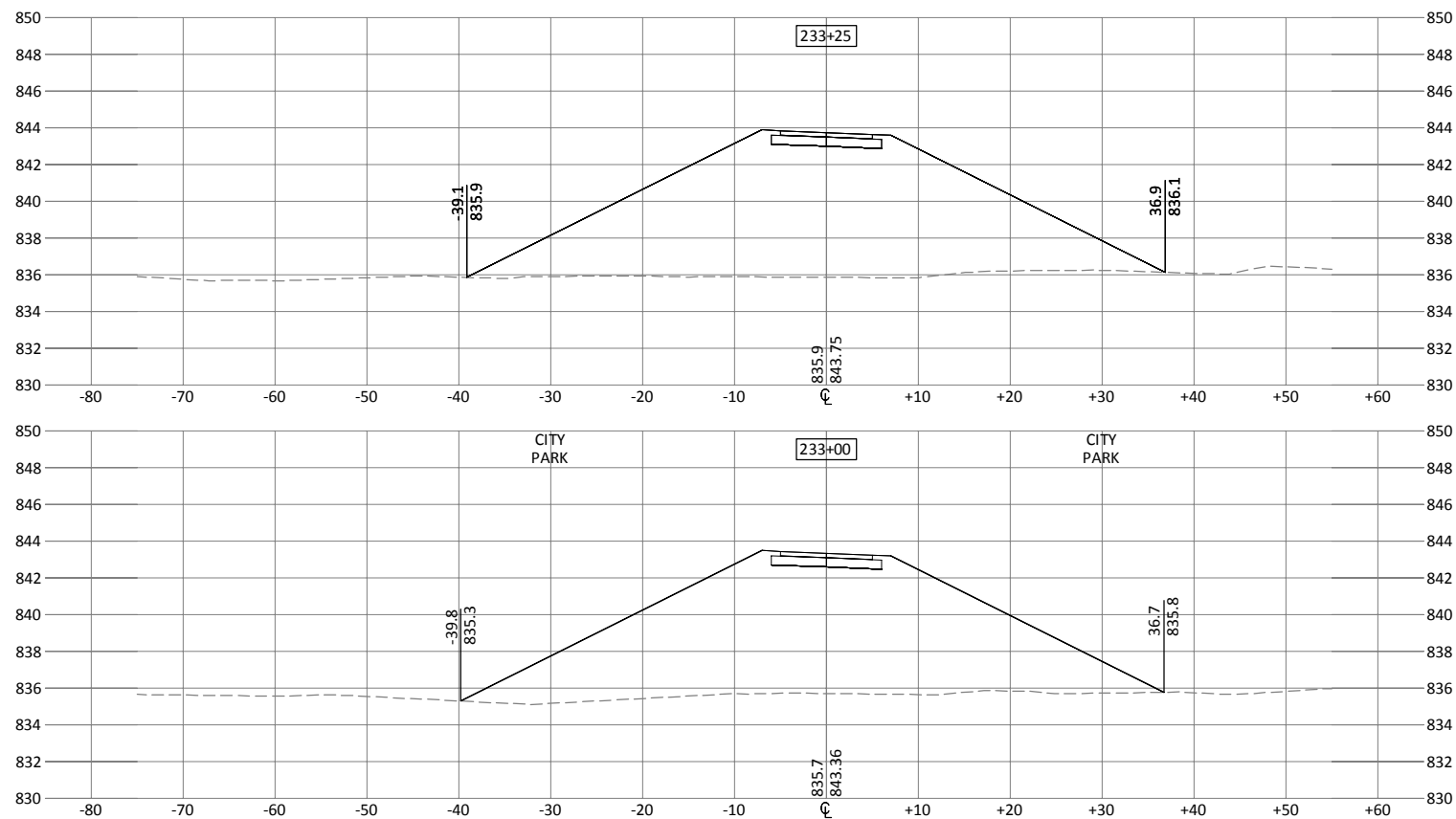
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SHEET
 53
 OF
 53

Public Works Committee

5. 4.

Meeting Date: 07/16/2013

Submitted For: Grant Riemer

By: Grant Riemer, Engineering/Public Works

Title:

Cost Estimate for Pedestrian Crosswalk at Alpine Dr and Zirconium St

Background:

At the July 21, 2009 Public Works Committee received a request for providing cross walks that would offer access to Alpine Park to the residential neighborhoods to the north. This proposal was revisited at the 9/18/2012 Public Works Committee and once more at the April 16,2013 Public works Committee meeting. The chief concern is the ability to access the park safely across Alpine Drive which has a 45 mile per hour speed limit and a daily traffic count of 2400 vehicles per day. The Alpine Acres subdivision neighborhood includes 22 single family units fronting on 153rd Way that accesses Alpine Drive via Zirconium Street, and 16 single family units fronting on 153rd Court which accesses the west end of the park.

A crosswalk providing access to the western portion of the neighborhood was installed at the intersection of Alpine Drive and 153 Court at a relatively modest cost of \$2,200. However, a crossing location for the eastern neighborhood was found to be more problematic and no action was taken by the Committee. A possible location having an adequate, but not ideal sight distance had been identified at a point approximately 200 feet west of the intersection with Zirconium Street. This location has the advantage of requiring a minimal distance of "extra travel" for pedestrians from the eastern neighborhood that wish to go to the playground area which is east of Zirconium Street. A crossing at this location would require; a) 200 feet of trail, b) cross walks with signage, c) concrete steps down the grade, and pedestrian ramps. The estimated cost for these improvements is \$38,000. There is also a question of compliance with the Americans with Disability Act (ADA) since steps would not make this access usable to wheelchair users. Staff contacted the Department of Justice, which administers the act, and was advised that a facility (the park) required only one accessible point. However, if an access were to be considered the main entrance, then a handicap access should be seriously considered. This would not be the case since there are two other access points on both the east and west sides of the park.

Notification:

Observations/Alternatives:

At The April 16, 2013 meeting the PW committee suggested staff look at constructing the trail to the west instead towards the main entrance to the east. Staff has staked a trail on the south side of Alpine leading into the park; terminating near the picnic pavilion and dog park. A crosswalk would still be installed at the point 200' west of Zirconium St and connected by a 10' crushed aggregate trail. Once pedestrians crossed the road to the south side of Alpine Dr they would take an 8' crushed aggregate trail south west down the slope into the park. The reasoning behind the crushed aggregate trail is twofold. First this will be a limited use trail, which in reality is only serving the one neighborhood to the north - Alpine Estates. Second is cost. Public works has a stock pile of reclaimed asphalt at the shop that would be suitable for this project, so there would be no additional cost for the material. The crosswalk proposed by staff would be a standard fluorescent yellow/ green design, with advance warning signs included. Cost for the basic crosswalk and trail are as follows:

- Standard crosswalk signage w/stripping- \$1,500.00
- 4 ADA approved pedestrian ramps /curb cuts at approximately \$1200.00 or \$4,800.00 total (estimated)
- 50 tons of recycled material (con-bit)–no cost
- Labor/equipment to install trail component-\$3,000.00
- Total estimated cost of project-\$9,300.00

Funding Source:

General fund - PW operating budgets cost centers 0311,0260,0452
Trail Fund

Staff Recommendation:

Staff recommends installing standard pedestrian crosswalk signage, 4 pedestrian crossings ramps, striping, and connecting trails to provide access to Alpine Park for residents of Alpine Estates.

Action:

Motion to accept staff recommendation to install standard crosswalk signage 200' west of Zirconium St to include 200' of aggregate trail on the north side of Alpine Dr and 225' of aggregate trail on south side of Alpine Dr.
Cost -\$9300.00

or

Motion to reject staff recommendation and choose an alternative based on committee discussion

Attachments

Cross walk location map

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Grant Riemer	07/10/2013 11:15 AM
Grant Riemer (Originator)	Grant Riemer	07/10/2013 12:02 PM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:44 PM
Form Started By: Grant Riemer		Started On: 07/10/2013

Final Approval Date: 07/11/2013



Alpine Park

- ★ Proposed Pedestrian Ramp
- - - Proposed Gravel Path
- - - Proposed Crosswalk with Signs

Public Works Committee

5. 5.

Meeting Date: 07/16/2013

By: Mark Riverblood, Engineering/Public Works

Title:

Recommend Shelter and Restroom for Riverdale Park – 2013 Capital Improvement

Background:

A restroom and also shelter had been discussed for many years for Riverdale Park as a stand-alone improvements as a annual Parks Capital Improvement. In 2009, the City of Ramsey applied for Federal funding for the Mississippi River Trail, with these two improvements as a part of the local match. The City of Ramsey (and Anoka) were awarded \$440,000 for this trail project which will be let for bid in August, with construction occurring thereafter.

In January of 2013 City Council adopted Resolution 13-01-007 warranting that the shelter and restroom would be built as part of the Federal trail project approvals.

To progress toward the project construction and completion, Staff has assembled the quotes and costs that make up the various components and tasks. The first was the selection of the hexagonal shelter identical to the one previously specified by the city at Sunfish Lake Park (with cladding for the support posts). This cost was obtained using the State Bid Contract.

The next major part of the project was to obtain quotes for the restroom. The style of construction and specifications were the same as the successful building installed at Emerald Pond Park in the spring of 2008. Parks' Lead-person Mike Berge organized the process and issued the summary in the text below. Staff is recommending CTX in the amount of \$35,320. Highlighted are areas two of the companies could not meet the City's specs - and to somehow add, or purchase the same product or services that CTX provides would result in a total cost higher than the one recommended.

"Company #1 - CXT Concrete Buildings is the same company we purchased the Emerald Pond Park restroom from. All of the inside fixtures have electronic flush with stainless steel plumbing. It will have a hot water heater, magnetic door locking system and more. In this quote CXT will make all final connections to utilities once the building is set in place. The final connections aspect is very beneficial since the city would have to hire licensed contractors for these connections. CXT has done this multiple times which will ensure us that it will get done correctly and safely.

Amount of quote - \$35,320.00

Company #2 – Huffcutt Concrete Inc is another company that provided a quote. This company's restroom is similar to CXT with all its options except a couple items. First one is they do not have the option of upgrading their plumbing fixtures from chrome plated to stainless steel. We prefer stainless steel due to the fact that it will hold up better and keep its appearance much longer than chrome plated. The other option that this company does't offer is the final connections of utilities to the building. The city would have to hire a licensed plumber and there will be additional cost to a contracted electrician to make these final connections. The cost for these contractors may be unknown until they complete the job.

Amount of quote - \$33,130.00

Company #3 – NCI (Norwalk Concrete Industries) is the third company that gave us a quote for this restroom. They had some of the options the other companies were offering but not all of them. NCI did not have an option for electronic flush on any of the fixtures. They also didn't have an option for a hot water heater or final connections to utilities

Amount of quote - \$34,025.00

Conclusion to these quotes – I recommend the city go with CXT. Their restroom meets specifications and has all the features that the city requires. We have used this company's product in the past and we are very satisfied with the ease of maintenance and durability of the building."

Notification:

Observations/Alternatives:

Below is the aggregate of the proposed 2013 project:

Riverdale Restroom and Shelter Budget Detail

Restroom

Restroom with tax, delivery, crane and hook up \$37,720
Electric service \$900
SAC charge \$2,435
Sewer and water service \$6,950
Restoration (sod) \$200
Contingency \$1,795
Subtotal \$50,000

Shelter

Hexagonal shelter with tax, delivery, and custom cladding \$12,713.51
Construction/labor for shelter and slab \$12,720
Drinking fountain with attachments \$6,594.19
Exposed aggregate slab for fountain \$1,200
Restoration (sod) \$200
Contingency \$572.30
Subtotal \$34,000

Riverdale Park restroom and shelter not-to-exceed total = \$84,000

Funding Source:

The shelter and restroom are listed within the 2013 CIP as funded by the Park Trust Fund in the amount of \$77,000. The present balance within the fund is approximately \$2.4 million dollars.

The drinking fountain and mister is also shown within the 2013 as funded from the Park Trust Fund at \$7,000.

Staff Recommendation:

Both Staff and the Park and Recreation Commission recommends approval of the 2013 Capital Improvement as presented within the budget detail; with the 'mister' purchased with the drinking fountain but to be located and installed at Central Park as part of Riverdale's project (as intended).

Action:

Motion to recommend to City Council a not-to-exceed amount of \$84,000 from the Park Trust Fund for Riverdale Park's shelter, restroom and drinking fountain as presented within the 2013 Capital Improvement Plan.

Attachments

Location map

Shelter and Restroom location exhibit

Shelter spec sans cladding

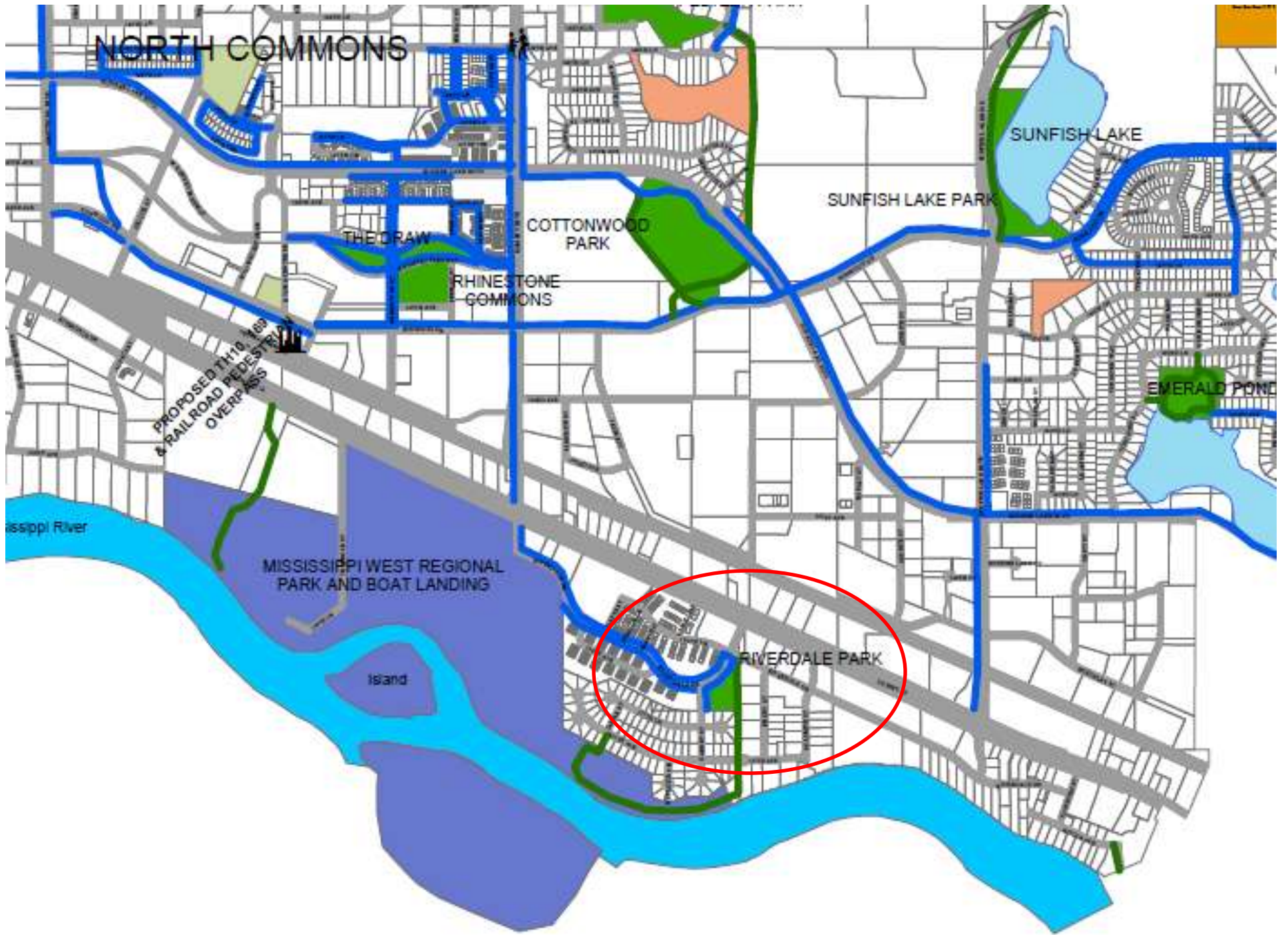
Recommended Restroom

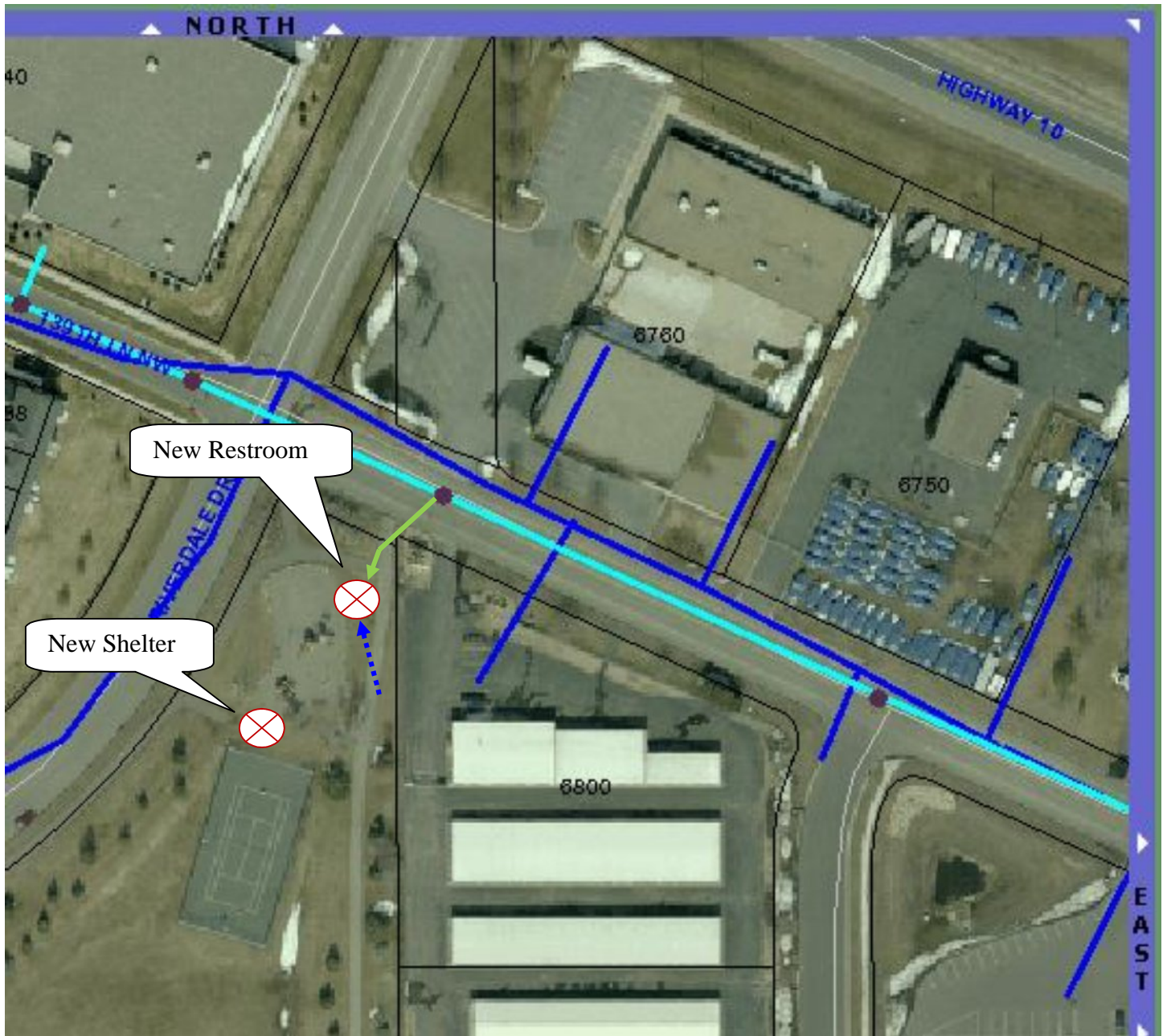
Resolution warranting construction of restroom and shelter

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	07/11/2013 09:22 AM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:49 PM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:56 PM

Form Started By: Mark Riverblood
Started On: 07/11/2013
Final Approval Date: 07/11/2013





Green line would be new PVC sanitary connection to manhole

Blue dashed line represents new 1 1/4 poly water line connection to potable water routed to irrigation supply

(Light blue existing sanitary sewer with manholes)

(Dark blue existing watermain)

Model: Steelworx Hexagonal Shelter w/ Vented Top, 20'
Model # HX-20-SW-VT-TG

Manufacturing Mission: To provide all prefabricated components and installation instructions for a 20' hexagonal (measured from eave to eave) free standing bolt together, tubular steel constructed shelter kit.

Design Criteria: Structure shall be designed for a 50 lb live load and a 90 mph wind load capacity, but can also be designed based on specific site requirements upon request. All structural members are ASTM A-500 U.S. grade B steel. Welded connection plates shall be ASTM A-36 hot rolled steel. All fabrication performed to latest AISC standards by AWS Certified welders. All framing connections are done using A325 grade bolts within concealed access openings from above and will later be concealed by the roofing. All roof framing shall be flush against the roof decking to eliminate the possibility of bird nesting.

Tubular Steel Columns and Beams: Standard column dimension shall be 5" x 5" x 3/16" tubular steel welded to 5/8" base plates for surface mounting. Main support beams are 7" x 5" x 3/16" and purlins are 5" x 3" x 1/8". Steel sizes are preliminary and may change due to ongoing review and final engineering.

Roof Deck: 2" x 6" (nominal) #1 Grade, end matched, single tongue and groove with V-joint bottom face, kiln-dried to an average of 15% moisture content, Southern Yellow Pine.

Roofing: 24 Ga. pre-cut steel Multi-Rib panels with Kynar 500 finish in a variety of colors with white underside. Standard roof slope is a 4/12 pitch with a eave height of 7'-6". Attached to decking with exposed screws painted to match roof color. Matching 24 Ga. trim included.

Frame Finish: All steel framework will receive a corrosion protective TGIC Polyester powder coat, electro-statically applied and cured at 400°F. A large selection of standard colors are available.

Foundation: All columns need to be anchored to concrete footings (footing design provided separately). Columns can be surface mounted to footings with anchor bolts at or below finish slab elevation or they can be embedded directly into the footing without base plates upon request. Anchor bolts and bracing templates are included. Optional base plate covers are available at an additional cost.

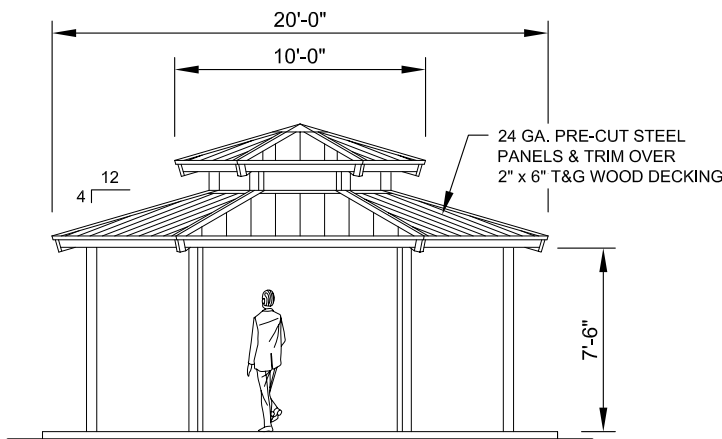
Hardware: All structural hardware and roofing fasteners shall be provided.

Warranty: 10 years against manufacturer defects.

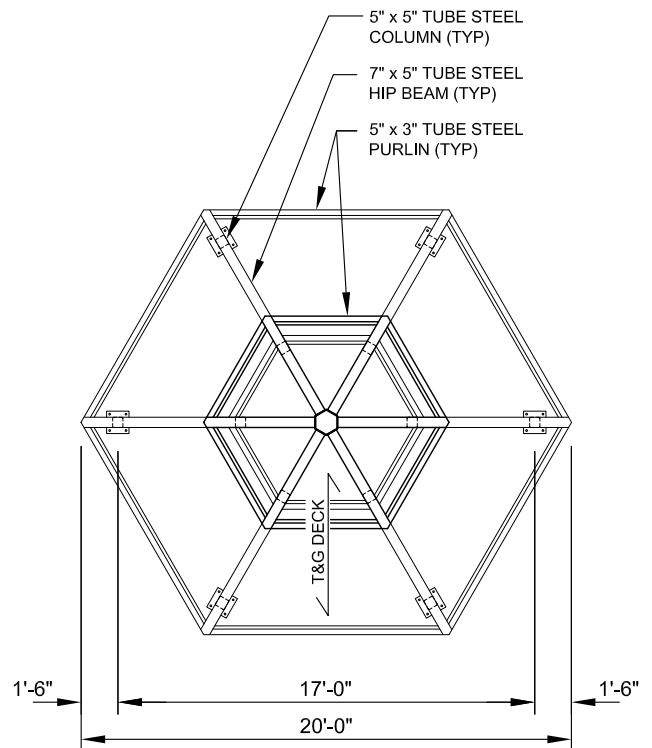
Not Included: Concrete work of any kind, unloading of product and installation.

Additional Options:

- Flexibility of Design
Such as: Height and Pitch
- Additional Engineering
- Variety of Colors
- Decorative Railings, Lattice, Braces, Trim, etc.
- Cupolas and Rooftop Accs.
- Column Style Variations
- Provisions for Electrical
- Lexan Wind Screens
- Tongue & Groove Roof Decking
- Asphalt Shingles, Standing Seam, Cedar Shake, or Clay Tile Roofing
- Composite Finished Ceiling
- Solar Panels & Solar Lighting
- Site Furnishings and Accs.



ELEVATION
SCALE: NTS



FRAMING PLAN
SCALE: NTS



11800 East 9 Mile Road
 Warren, MI 48089
 Office: (586) 759-5490
 Fax: (586) 754-9130
 Toll Free: (800) 657-6118
 Email: info@coverworx.net
 www.CoverWorx.net

Steelworx Hexagonal Shelter w/ Vented Top - 20'

Model: HX-20-SW-VT-TG

DESIGN SPECIFICATIONS



RESTROOM

RESTROOM

041022

NO-EXTEND

NO-EXTEND

Councilmember Elvig introduced the following resolution and moved for its adoption:

RESOLUTION #13-01-007

RESOLUTION WARRANTING 2013 RESTROOM AND SHELTER CONSTRUCTION FOR RIVERDALE PARK AS LOCAL MATCH FOR THE MISSISSIPPI RIVER TRAIL

WHEREAS, the City of Ramsey has passed a resolution supporting regional trail status for the planned for, and existing trails along the Mississippi River within Anoka and Ramsey; and

WHEREAS, the Metropolitan Council did grant the regional trail status for this trail in 2006; and

WHEREAS, the Mississippi River Trail will link together the cities of Anoka and Ramsey, Bunker Lake and Rum River Regional Trails, as well as being a key link in the National trail system and generate local and regional tourism revenue; and

WHEREAS, this trail may also be extended to connect the Historic Oliver Kelley Farm, Ramsey's COR, and the Ramsey Northstar Transit Station; and

WHEREAS, the Metropolitan Council did award Federal grant funds as part of Transportation Enhancements for funding year 2013 in the amount of \$387,808 for this regional trail; and

WHEREAS, the city of Anoka and Ramsey, as part of the Federal grant Project Memorandum submission, have requested that the local match of a shelter and restroom for Riverdale Park be constructed in 2013, but separated from the Federal processes associated with the trail grant as intended within the grant application and earlier 2009 City Council Resolution supporting Transportation Enhancement funding; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

The City of Ramsey hereby warrants that a restroom including sewer and water service and shelter will be constructed at Riverdale Park before the conclusion of the construction and Federal reporting for Transportation Enhancement funded Mississippi River Trail eligible for reimbursement.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember Tossey and upon vote being taken thereon, the following voted in favor thereof:

Mayor Strommen
Councilmember Elvig
Councilmember Tossey
Councilmember Backous

Councilmember Kuzma
Councilmember LeTourneau
Councilmember Riley

and the following voted against:

None

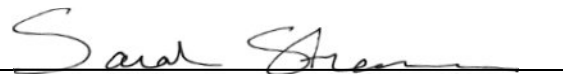
and the following abstained:

None

and the following were absent:

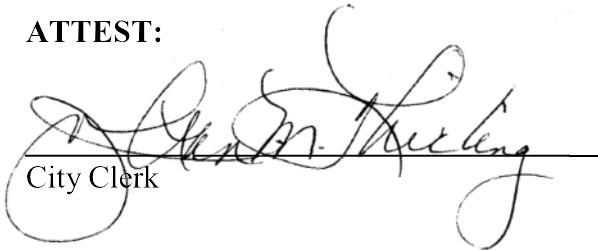
None

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council
this the 8th day of January 2013.



Mayor

ATTEST:



City Clerk

Public Works Committee

6. 1.

Meeting Date: 07/16/2013

By: Mark Riverblood, Engineering/Public Works

Title:

Discuss Request to Mow Portions of an Undeveloped Park - Shawn Acres

Background:

Between 2008 and 2010, various undeveloped and underdeveloped municipal lands were removed from mowing, or had reduced areas of mowing in other instances. This was approved by City Council and due to the reductions in General Fund Budgets, and also recognizing that two regular park maintenance staff resigned with the positions remaining unfilled.

There have been several instances of residents near Shawn Acres Park requesting that the park receive occasional mowing in the front portion (near the street). Staff would like Public Works Committee and Council concurrence that it is acceptable to resume limited mowing at the park.

Notification:

Observations/Alternatives:

Funding Source:

The funding source would be the parks' operating budget, a subset of the General Fund for labor, fuel, and ordinary expenses associated with mowing equipment.

Staff Recommendation:

Staff recommends resuming mowing on an as-needed basis.

Action:

Committee direction or consensus on whether or not to resume mowing Shawn Acres Park at the request of area residents.

Attachments

Location Map

Boulevard along Chameleon Street

Old play equipment

2009 Exhibit on mowing reductions

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	07/10/2013 11:02 AM
Kurt Ulrich	Kurt Ulrich	07/11/2013 03:39 PM
Grant Riemer	Mark Riverblood	07/11/2013 03:58 PM
Mark Riverblood (Originator)	Mark Riverblood	07/11/2013 04:19 PM
Grant Riemer	Grant Riemer	07/11/2013 04:26 PM
Kurt Ulrich	MaryJo Warner	07/11/2013 04:27 PM
Kurt Ulrich	MaryJo Warner	07/11/2013 04:27 PM

Form Started By: Mark Riverblood

Started On: 07/09/2013 03:37 PM

Final Approval Date: 07/11/2013



Shawn Acres Site Location Map





Estimated mowing reductions - in hours for 2009

(Time saved based on a 3 person mow crew)

- Alpine Park – 15 minutes saved reduce mowing parameters (22 weeks x 15 = 5.5 hrs)
 - Hunters Hill – 60 minutes saved by not mowing (11 weeks x 60 = 11 hrs)
 - Shawn Acres – 120 minutes saved (11 weeks x 120 = 22hrs)
 - Forest Hideaway – 30 minutes saved (11 weeks x 30 = 5.5hrs)
 - Riverwood Hills – 20 minutes saved (11 weeks x 20 = 3.7 hrs)
 - Fox – 10 minutes saved (20 weeks x 10 = 3.3 hrs)
 - Flintwood – 30 minutes saved (20 weeks x 30 = 10 hrs)
 - Autumn Heights – 10 minutes saved (11 weeks x 10 = 1.8 hr)
 - Tower #1 Community Garden reductions 30 minutes (11 weeks x 30 = 5.5 hrs)
 - Old City Hall 90 minutes (11 weeks x 90 = 16.5 hrs)
-
- All trails - 7 mowing intervals to twice per year [two person crew] = (240 hours)

Approximately 323 seasonal staff hours have been reduced by these mowing reductions.

Notes:

Outfield fences added to ball fields 2 and 3 at Alpine added 45 minutes to the mow crew per week, or 16.5 hrs annually.

Whispering Pines 1 and 2 have not been mowed since 2008 (60 minutes saved between the two, or 11 hrs annually).