



Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Meeting Agenda Board of Aldermen



Tuesday, September 19, 2017

7:30 PM

Board Chambers - Room 110

7:30-7:35

**A. POETRY READING, RESOLUTIONS, PROCLAMATIONS, AND
ACKNOWLEDGEMENTS**

1. [17-268](#) Proclamation: Designating October 2017 as Carrboro Walk/Bike to School Month and October 4th, 2017, as Carrboro Walk/Bike to School Day

7:40-7:45

B. ANNOUNCEMENT OF UPCOMING MEETINGS

7:45-7:50

C. REQUESTS FROM VISITORS AND SPEAKERS FROM THE FLOOR

D. CONSENT AGENDA

1. [17-264](#) Approval of Previous Meeting Minutes of September 5, 2017 and September 12, 2017
2. [17-274](#) A Resolution in Support of a NCDOT Bicycle Planning Grant Application
PURPOSE: The purpose of this item is to seek Board of Aldermen authorization to submit an application for NCDOT's upcoming bicycle and pedestrian planning grants initiative.

Attachments: [Attachment A - Resolution](#)
[Attachment B - Bike Ped Planning Grant Overview 2017--with label](#)

3. [17-276](#) Update on the Status of Transportation Projects - Estes Drive and North Greensboro Street (TIP #U-5846)
- PURPOSE:** The purpose of this item is to provide the Board of Aldermen with an update on the status of the intersection improvement project at Estes Drive and North Greensboro Street.
- Attachments:** [Attachment A - Resolution](#)
[Attachment B - U-5846_ROW](#)

E. PUBLIC HEARING

7:50-8:30

1. **17-278** Receipt of Public Comments on Concept Plan Options for Possible Design Options for Development of the 203 South Greensboro Street Property Including Contemplated Orange County Southern Branch Library
- PURPOSE:** The purpose of this item is to provide the Board of Aldermen with an opportunity to receive public comment on additional concept plan options for the Town's 203 S. Greensboro Street property in follow-up to the June 27th public hearing on this topic.

F. OTHER MATTERS

8:30-9:00

1. [17-275](#) Presentation on the 2045 Metropolitan Transportation Plan Alternative Analysis
- PURPOSE:** The purpose of this agenda item is to provide the Board of Aldermen with an update on the development of the 2045 Metropolitan Transportation Plan, with a focus on the Alternative Analysis. Andy Henry with the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) will make the presentation.
- Attachments:** [Attachment A - Resolution](#)
[Attachment B - DCHC MPO - 2045 Metropolitan Transportation Plan Overview](#)
[Attachment - C 2045AltAn-ScenariosTable](#)

9:00-9:30

2. [17-277](#) Update on the Status of Transportation Projects - Merritt Mill/Franklin/East Main/Brewer (TIP #U-5847)
- PURPOSE:** The purpose of this agenda item is to provide the Board with an update on the status of the intersection improvement project with a focus on possible designs and anticipated timelines for moving forward.
- Attachments:** [Attachment A - Resolution](#)

G. MATTERS BY BOARD MEMBERS

H. MATTERS BY TOWN MANAGER

I. MATTERS BY TOWN ATTORNEY

J. CLOSED SESSION PURSUANT TO NCGS 143-318.11 (A)(3) (5)



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Agenda Item Abstract

File Number:17-268

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

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TITLE:

A Resolution in Support of a NCDOT Bicycle Planning Grant Application

PURPOSE: The purpose of this item is to seek Board of Aldermen authorization to submit an application for NCDOT's upcoming bicycle and pedestrian planning grants initiative.

DEPARTMENT: Planning

CONTACT INFORMATION: Christina Moon - 919-918-7325, Patricia McGuire - 919-918-7327

INFORMATION: The NCDOT Division of Bicycle and Pedestrian and the Transportation Planning Branch is accepting applications for bicycle planning grants for the 2018 cycle. An overview of the NCDOT bicycle planning grant program is provided (Attachment B). The annual matching (70-30) grant program was initiated in 2004 and, to date, 183 planning grants have been awarded. The Town of Carrboro received a grant in 2007 and applied the funding (approximately \$45,000) toward the development of the Comprehensive Bicycle Transportation Plan, which was subsequently adopted in March 2009.

An update of the bike plan aligns well with the Town's interest in seeking gold status in the League of American Bicyclists, Bicycle Friendly Communities Program during the upcoming round of consideration.

A resolution in support of a planning grant has been prepared for the Board's consideration (Attachment A). Staff is working with Durham-Chapel Hill-Carrboro-Metropolitan Planning Organization staff to prepare a resolution for the DCHC-MPO Board's endorsement at its October or November meeting.

FISCAL & STAFF IMPACT: NCDOT estimates that the cost for a bicycle plan for a municipality the size of Carrboro is between \$45,000 to \$75,000. The grant program requires a 30-percent local match which would be \$13,500 to \$22,500. Should the Town's request for this grant be successful, funds for the local match will be identified within the general fund operating budget.

RECOMMENDATION: Staff recommends that the Board of Aldermen approve the attached resolution authorizing staff to submit a grant application.

A RESOLUTION IN SUPPORT OF AN NCDOT BICYCLE PLANNING GRANT
APPLICATION

WHEREAS, the North Carolina Department of Transportation has issued a call for projects for the 2018 Bicycle and Pedestrian Planning Grant Initiative; and

WHEREAS, the Town has a long history of developing bicycle facilities and includes in its policy document, *Carrboro Vision 2020*, goals relating to the implementation of the Town's bicycle plan, such as completing missing links in the bicycle network; and

WHEREAS, the Town of Carrboro is recognized by the League of American Bicyclists as a silver level Bicycle Friendly Community, and desires to achieve gold status; and

WHEREAS, the Board of Aldermen recognizes that an update of the 2009 bike plan will help the Town in achieving this goal and qualifies as a project under the NCDOT grant initiative.

NOW, THEREFORE, BE IT RESOLVED by the Carrboro Board of Aldermen that the Board endorses the Town's 2018 North Carolina Department of Transportation Bicycle and Pedestrian Grant Application to update the Town of Carrboro Comprehensive Transportation Bicycle Plan.

This the 19th day of September 2017.



Bicycle and Pedestrian Planning Grant Initiative Program Overview

The Bicycle and Pedestrian Planning Grant Initiative is a matching grant program that encourages municipalities to develop comprehensive bicycle plans and pedestrian plans. The Division of Bicycle and Pedestrian Transportation (DBPT) and the Transportation Planning Branch (TPB) sponsor this grant. All North Carolina municipalities are eligible and are encouraged to apply. Counties with populations of less than 50,000 may apply on behalf of incorporated or unincorporated communities within their jurisdiction. Calls for proposals open annually.

Program Background

Communities throughout North Carolina have begun to place more emphasis on providing facilities for biking and walking. A desire for better modal choices, the demand for more walkable and bikeable communities and a focus on smart growth initiatives have combined to highlight the need for better, more complete bicycle and pedestrian transportation systems. Comprehensive planning documents are an integral part of developing these systems, and can guide both local and state efforts to improve conditions for bicycling and walking.

To encourage the development of comprehensive local bicycle plans and pedestrian plans, the NCDOT Division of Bicycle and Pedestrian Transportation (DBPT) and the Transportation Planning Branch (TPB) have created a matching grant program to fund plan development. This program was initiated through a special allocation of funding approved by the North Carolina General Assembly in 2003 along with federal funds earmarked specifically for bicycle and pedestrian planning by the TPB. The planning grant program was launched in January 2004, and it is currently administered through NCDOT-DBPT. Over the past fourteen grant cycles, 183 municipal plans have been selected and funded from 429 applicants. A total of approximately \$5 million has been allocated. Funding for 2018 is around \$400,000. Additional annual allocations will be sought for subsequent years.

Who Can Apply

All North Carolina municipalities are eligible and are encouraged to apply for a planning grant. **Counties with populations of less than 50,000** may also apply on behalf of incorporated or unincorporated communities within their jurisdiction. Due to the limited amount of funding, counties with populations greater than 50,000 are not eligible to apply, nor are colleges/universities or other non-municipal entities. Applications submitted and received for previous grant cycles do not carry over — municipalities/counties must re-apply each year to be considered within the current process. Please note that all applications and relevant documents will be accepted via email only (see Application Instructions for more information).

Municipalities/counties who currently have bicycle plans and/or pedestrian plans, either through this grant program or otherwise, may also apply to update their plan provided it is at least five years old.

Smaller municipalities (below 5,000 population) are eligible to apply for a **joint bicycle and pedestrian plan**, but still have the option of applying for a stand-alone pedestrian or a standalone bicycle plan. Municipalities/counties with populations of 5,000 and over may choose to apply for funding to undertake either a bicycle plan or a pedestrian plan in any given fiscal year. Municipalities/counties may apply for funding for the other type of plan in subsequent years. Funding is intended to support the development of a comprehensive bicycle or pedestrian transportation plan. If neighboring municipalities wish to file a



joint application, please contact DBPT for instructions and guidance.

Submitting an application for planning funds is a competitive process. However, an effort will be made to award grants based not only on the merit of the proposal but to achieve statewide geographic distribution as well. Consideration will be given to funding a cross-section of municipality types.

In addition to the traditional bike and pedestrian planning grants, DBPT recently opened up the application process for **corridor plans**. Any municipality eligible for a planning grant has the option to apply for a more targeted planning grant in a specific location within their municipality. Examples include downtown business districts, targeted higher education corridors, potential shared use path connections, etc. Like the planning grants mentioned above, selection of these projects will be based on a competitive review process.

The Role of MPO's and RPO's

The relevant approval processes and procedures of MPO and RPO organizations should be followed by any municipality applying for funding. **A resolution by the local MPO and or RPO is required.** It is strongly encouraged that the appropriate resolution be sent in with the grant application (via email), which is due by 5:00 pm on Thursday, November 9, 2017. Staff from the MPO or RPO may assist with preparation of the application and should also be part of the steering committee guiding development of the plan.

Important Dates

Key dates for the 2018 NCDOT Bicycle and Pedestrian Planning Grant Initiative are shown below. (Subject to change.)

Activity	Date
Issue Call for Proposals	August 7, 2017
Application submission deadline - 5:00 pm (Thursday)	November 9, 2017
Awards Committee makes recommendations to NCDOT	January, 2018
Board of Transportation gives approval	March, 2018
Municipalities notified of award	March, 2018
Municipal Reimbursement Agreement executed and Notice to Proceed issued	Within 6 months from award notification
Plan completion deadline	Within 12 to 18 months from Notice to Proceed

Plan Development

Plans shall be developed by consultants that are prequalified by NCDOT. Also, a full-time permanent employee of the municipality must be assigned as project manager to oversee/coordinate the plan development. A task force/steering committee must also be formed to oversee development of the plan.



This group should include relevant local staff, regional planning staff, advocates and representatives of stakeholder groups as well as a DBPT staff member. The level of funding provided to a municipality for plan development will be determined by estimated cost and a matching grant formula.

Any plan developed with these funds must be comprehensive in nature and be a stand-alone plan. While NCDOT encourages the inclusion of bicycle and pedestrian elements in local comprehensive plans, transportation plans, land use plans, recreation plans, greenway and open space plans, etc., applications for funding to develop such elements is not within the scope of this grant.

An outline of required content standards has been developed to assure that plans are comprehensive in nature and to help the municipality/county identify all bicycle or pedestrian needs, priorities and opportunities for improvements. (See documents under Content Standards for NCDOT Bicycle and Pedestrian Plans, (<https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Planning-Grant-Initiative.aspx>). This tool will assist communities to address not only the infrastructure needs of users but also to develop construction project priorities; review local policies and guidelines and recommend favorable changes; identify opportunities for the implementation of education, enforcement and safety programs; and to develop encouragement and awareness initiatives. In addition, the plan will identify projects that can be integrated into the local and county Comprehensive Transportation Plans and project prioritization.

Other resources for plan development may be found at the bottom of the Planning Grant Initiative page. Links to planning and design guidelines, safety and education programs and initiatives and current research and development for bicycle and pedestrian planning can be found in this section. <https://www.ncdot.gov/bikeped/>

Completed plans can be found in this section. <https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/default.aspx>.

Matching Grant Formula

NCDOT planning grant funds will be provided on a sliding scale, based on municipal/county population, as shown in the table below. Neither in-kind services nor other state or federal funds from NCDOT can be used for local participation.

Municipal Population	DOT Participation	Local Participation
Less than 5,000	90%	10%
5,000 to 10,000	80%	20%
10,000 to 50,000	70%	30%
50,000 to 100,000	60%	40%
Over 100,000	50%	50%

Estimated Costs

Average costs associated with the development of comprehensive bicycle and pedestrian plans vary greatly depending upon the size of the municipality/county and the complexity of issues to be addressed. A range of estimated costs for plans developed by consultants is shown below. The cost of all plans funded through this initiative shall be within these established ranges. After awardee



notification, the specific cost of the plan will be determined through discussions between NCDOT and the municipality/county and through contract negotiations between NCDOT/municipality/county and the selected consultant.

Population	Estimated Consultant Costs		
	<i>Bicycle Plan</i>	<i>Pedestrian Plan</i>	<i>Corridor Plan</i>
Less than 5,000	Combined - \$35,000 to \$40,000		\$30,000-\$60,000
5,000 to 10,000	\$40,000-\$50,000	\$35,000-\$40,000	
10,000 to 50,000	\$45,000-\$70,000	\$40,000-\$60,000	
50,000 to 100,000	\$65,000-\$100,000	\$55,000-\$75,000	
Over 100,000	\$95,000-\$190,000	\$70,000-\$110,000	

Smaller municipalities (below 5,000 population) are eligible to apply for a joint bicycle and pedestrian plan, but still have the option of applying for a stand-alone pedestrian or a standalone bicycle plan. Smaller municipalities (<5,000 population) applying for a stand-alone plan should use the estimated costs for the 5,000 to 10,000 population.

Staff costs and in-house services are not eligible for reimbursement with these grant funds. Allowable expenses include consultant costs associated with plan development and delivery; GIS/mapping services, as appropriate; preparation of technical illustrations and graphic design/layout of plan undertaken by consultant; non-staff costs associated with data collection and public involvement activities; and, printing/copying of plan and maps.

All electronic files, maps, technical illustrations, etc. produced with these funds will become the property of the NCDOT Division of Bicycle and Pedestrian Transportation and the funded municipality/county.

Selection Process

DBPT and key planning professionals will conduct a preliminary review of all applications for completeness and general appropriateness. Applications that pass the initial screening will then be reviewed by the Planning Grant Initiative Awards Committee. This group will include DBPT and individuals with professional experience in developing, administering, and/or implementing bicycle plans and pedestrian plans. These individuals will represent municipalities of varying sizes, MPO's and RPO's, COG's and other appropriate agencies and organizations. The Awards Committee will review each proposal and evaluate it based on the stated vision, goals and needs of the municipality; comprehensiveness of scope; understanding of issues and opportunities; level of local commitment; and, feasibility of successful plan completion. The Awards Committee will forward their recommendations to the NCDOT for final approval.

Selection Criteria

The Awards Committee will consider the following elements in evaluating applications for bicycle and pedestrian planning grant funds. Successful proposals will address the following:



- Identify critical local needs for planning and/or implementation of infrastructure improvements
- Identify targeted roadway, adjacent land and existing conditions for corridor plan that are most realistic for maximizing existing infrastructure and improving conditions
- Demonstrate an understanding of needs of the particular modal user (bicyclist, pedestrian)
- Recognize the need to serve diverse populations
- Focus on the development of a comprehensive bicycle or pedestrian transportation system
- Identify how having a bicycle or pedestrian plan would help improve the health of a community
- Assure assignment of appropriate level of staff to oversee / undertake plan development
- Consider policy issues and describe how multi-modal transportation needs will be incorporated into municipal processes
- Recognize the value of developing education, enforcement and awareness initiatives
- Demonstrate widespread local support:
 - Include a strong local endorsement to undertake plan
 - Demonstrate commitment of elected officials and senior staff to carry out recommendations of plan
- Demonstrate an understanding of interrelationships with other plans:
 - Recognize opportunities to integrate with Comprehensive Transportation Plan
 - Identify potential projects for state funding
 - Identify opportunities to coordinate with other municipal, county, regional and state plans
- Demonstrate involvement of local, regional and state organizations:
 - Involve appropriate local and regional agencies and organizations in plan development
 - Appoint or utilize a local steering committee / task force
 - Identify valid partnerships for various plan development and implementation elements.
 - Include letters / endorsements that reflect type, variety and strength of support from partnering agencies, organizations and individuals
- Promote current transportation plans and initiatives:
 - Build on existing municipal or regional initiatives; coordinates with regional or neighboring community plans
 - Communicate potential for implementing existing goals and policies
- Develop realistic aspirations:
 - Show an awareness of / describe a realistic plan implementation strategy
 - Identify tasks and include a realistic time line for plan development
- Address development of modal interconnectivity (where applicable)

Conditions of Project Award

NCDOT offers the option to the local government to either handle the grant administrative responsibilities (RFP, consultant selection, project invoicing, etc.) themselves or delegate this to NCDOT-DBPT. Described below are the overall process and primary responsibilities. Dates are estimates.

NCDOT Administration of Grant Process

- In March 2018, DBPT will send the local government a municipal reimbursement agreement.



- NCDOT/DBPT maintains a short on-call list of experienced, pre-qualified consultants to prepare bicycle and pedestrian plans funded through the Planning Grant Initiative Program. DBPT staff will select a firm to prepare a community's plan whose skills match the needs of the local jurisdiction (with input from the local government when necessary). Consultant assignment will also be influenced by current workload/available staff. Final plan development cost will be negotiated between DBPT and the selected cost with final cost falling within the plan cost range noted earlier in this document.
- Agreements between the locality and NCDOT will be signed in April – July 2018. The locality will be responsible for the local match at this time.
- Plan start date is anticipated in July/August 2018.
- The consultant will be responsible for submitting quarterly progress reports to NCDOT.
- NCDOT-DBPT will handle all consultant invoicing and all other related documentation.
- The local government will establish the project steering committee consisting of local citizenry. A primary local contact will serve as the liaison between the locality, consultant and NCDOT.

Local Government Administration of Grant Process

- In March 2018, DBPT will send the local government various documentation including a municipal reimbursement agreement and grant recipient administrative procedures spelling out local responsibilities.
- The local government will draft a request for proposal and post the request for proposal and solicit firms. (DBPT will review and approve.)
- The local government will develop and document an equitable consultant selection process.
- Once the firm is chosen by the local government, the locality and selected consultant will develop a contract and scope. (DBPT and NCDOT External Audit will review and approve.)
- Agreements between the locality and NCDOT will be signed in April – July 2018.
- Plan start date varies, but based on prior experience, will likely occur 6 or more months after award notification, so September/October 2018 or later.
- The local government will establish the project steering committee consisting of local citizenry. A primary local contact will serve as the liaison between the locality, consultant and NCDOT.
- The local government will submit to NCDOT quarterly progress reports.
- The consultant will bill the local government directly throughout the plan development process. After payment, the local government can request reimbursement monthly to quarterly from NCDOT based on local match percentage. Supporting documentation is required.
- Unspent funds may be withdrawn from municipalities that fail to meet timely benchmarks in the plan development process.
- After project completion, the locality will need to maintain all documentation, accounting records, project records, etc. to substantiate costs incurred for 5 years from the date of final payment.



- Since this program is partially funded with federal dollars, the local government will be subject to certain federal audit requirements. Expectations will be spelled out in the agreement.

As outlined above, whichever grant administration process pursued, the funded municipality/county must be willing to execute a legal agreement with the NCDOT prior to receiving funding. This agreement will outline the responsibilities of each party, the terms of reimbursement and the deliverables. This agreement must be executed within six months of being awarded the grant.

The municipality/county must be willing to submit the final plan to the Town/City/County Council or other approving authority for adoption.

Costs incurred before receipt of a Notice to Proceed are not a reimbursable expense.

For grant processes administered locally, it is expected that awarded municipalities/counties will have twenty-four months from the date of receipt of an NCDOT written Notice to Proceed to complete the plan. For plans administered by NCDOT, it is anticipated that selected consultants will have twelve months from the date of receipt of an NCDOT written Notice to Proceed to complete the plan. Final timeframes will be determined during creation of agreements and finalization of consultant contracts.

Municipalities/counties must credit the North Carolina Department of Transportation for project participation in the plan document, in all press releases and other announcements and promotional materials related to the project.

All electronic files, maps, technical illustrations, etc. produced with these funds will become the property of the NCDOT Division of Bicycle and Pedestrian Transportation and the funded municipality/county. GIS files created for plan development must adhere to NCDOT's PBIN geodatabase standards (for more information see: <https://connect.ncdot.gov/projects/BikePed/Pages/PBIN.aspx>).

Additional Conditions of Project Award

According to General Statute legislation, NCDOT's Division of Bicycle and Pedestrian Transportation is required to produce an annual report on the implementation of projects identified in funded plans. Therefore, local governments receiving funds for the development of bike and/or pedestrians will be required to annually respond to a project implementation survey mechanism.

As stated in the legislation (§ 136-41.5): "The Division of Bicycle and Pedestrian Transportation of the Department of Transportation shall submit an annual report by May 15 on the progress of projects identified in plans (i) submitted to the Division over the 10-year period prior to the report and (ii) funded from Bicycle and Pedestrian Planning Grant funds. The Division shall submit the report required by this section to the chairs of the House of Representatives Appropriations Committee on Transportation, the chairs of the Senate Appropriations Committee on the Department of Transportation, and the Fiscal Research Division of the General Assembly."



Administration / Technical Assistance

Staff from the NCDOT Division of Bicycle and Pedestrian Transportation (DBPT) will be available to either (a) directly administer the grant process as described above or (b) to assist the municipality/county with administering the grant process by answering questions and providing guidance in developing an RFP to solicit consultants, as well as, final consultant selection and approval. DBPT staff will also provide various forms of technical assistance, attend steering committee meetings and review/approve plan drafts throughout the plan development process.

How to Apply

The application deadline is 5:00 pm Thursday, November 09, 2017

1. The application form is available as a fillable PDF document. The application is designed so that applicants can download the application form and complete the form electronically for submittal. Application form and relevant documents will be accepted in digital format only and should be emailed to Nick Scheuer at nrscheuer@ncdot.gov, with subject title, 2018 Planning Grant Initiative Application – Your Municipality (or County) Name. Every effort should be made to convert any additional files to PDF format. (There is a maximum 25 megabyte application packet size for emailing per municipality).
2. Please use only the space provided to answer the questions. The 2018 *Planning Grant Application* and *Application Instructions* can be found in the right-hand column of the following page: (<https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Planning-Grant-Initiative.aspx>).
3. The signature of an authorized City/Town/County staff member is required in the space provided on the first page of the application for the proposal to be eligible for consideration (e.g. City/Town/County Manager, Administrator, Mayor, etc.). Please also print the name and title of this signatory in the space provided. The first page should then be scanned and either added to the application or included as a separate document.
4. A resolution from the municipality is required. A resolution from an MPO or RPO, as appropriate, is also required. Arrangements should be made far enough in advance to allow time to acquire the appropriate resolution so that it may be sent in with the application.
5. Other specific information on how each application packet should be formatted may be found under “Submission Instructions” section of the *Application Instructions* document (<https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Planning-Grant-Initiative.aspx>)
6. Applications will be accepted via e-mail only.
 - Maximum application packet size per municipality must be no larger than 25 megabytes.
 - Completed application form and relevant scanned documents should be converted to PDF format.
 - Online/links references to large files like maps is preferred.



BICYCLE AND PEDESTRIAN PLANNING GRANT INITIATIVE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF BICYCLE AND PEDESTRIAN TRANSPORTATION
AND TRANSPORTATION PLANNING BRANCH

Email to:

Nick Scheuer at nrscheuer@ncdot.gov

Subject: 2018 Planning Grant Initiative Application – Your Municipality Name

For questions:

Nick Scheuer, 919.707.2608



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Agenda Item Abstract

File Number:17-276

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Update on the Status of Transportation Projects - Estes Drive and North Greensboro Street (TIP #U-5846)

PURPOSE: The purpose of this item is to provide the Board of Aldermen with an update on the status of the intersection improvement project at Estes Drive and North Greensboro Street.

DEPARTMENT: Planning

CONTACT INFORMATION: Christina Moon - 919-918-7325, Patricia McGuire - 919-918-7327

INFORMATION: Since the release of the draft 2016-2025 State Transportation Improvement Program (STIP) in December 2014, staff has provided reports to the Board on the status of an intersection improvement project at Estes Drive and North Greensboro Street (U-5846), on May 20, 2016, October 18, 2016 and December 6, 2016. The project, funded and managed by NCDOT, has been scheduled for design work in FY2017 and construction in FY2018. A public input session was held in Town Hall on November 14, 2016, and staff subsequently participated in a field inspection meeting at NCDOT's district office in Graham on April 25, 2017. Surrounding residents and property owners received mailed notice of project in early November 2016, as part of the outreach for the public input meeting, and again in mid-July 2017, as part of the right-of-way acquisition process.

Right-of-way drawings showing the configuration of the proposed roundabout are provided (Attachment B). Staff has received a handful of inquiries from residents who have received mailed notice from NCDOT, with questions about the project and/or the schedule moving forward. Some correspondence has included suggestions for refining the design, and such information has been forwarded to NCDOT. While design work is typically finished by the time a project has reached the right-of-way acquisition phase, staff have been in contact with NCDOT to discuss opportunities to further enhance the project, particularly as it relates to the facilities for cyclists and pedestrians. It is worth noting that it can be difficult to discern an accurate sense of scale from online research. The Estes Drive/North Greensboro Street intersection is constricted by its location, existing infrastructure in the form of buildings and stormwater pipes, as well as the heavily used Frances Shetley bikeway. Staff has encouraged NCDOT to keep the roundabout as small as possible in the interest of bike-ped users of all ages, while maintaining dimensional standards necessary for all vehicles. Staff and NCDOT are also taking into consideration the need for a seamless connection to future bike-ped improvements along Estes Drive.

Agenda Date: 9/19/2017

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FISCAL & STAFF IMPACT: No fiscal impacts are associated with receiving the project update.

RECOMMENDATION: Staff recommends that the Board receive the update.

A RESOLUTION TO RECEIVE A STATUS REPORT ON THE ESTES DRIVE AND
N. GREENSBORO ST. INTERSECTION IMPROVEMENTS PROJECT (TIP #U-5846)

WHEREAS, the intersection of Estes Drive and N. Greensboro Streets was submitted for improvements to SPOT 3.0 in 2013; and

WHEREAS, the project is programmed in the 2016-2025 State Transportation Improvement Program (STIP) for design in FY17 and construction in FY18; and

WHEREAS, NCDOT and their consultant, SEPI Engineering, held a public meeting at Town Hall on November 14, 2016; and

WHEREAS, NCDOT extended the public comment period to accommodate the Board of Aldermen discussion and resulting comments on the intersection improvements; and

WHEREAS, the Board received an update on the project at its December 6, 2016 meeting, prepared comments and endorsed the Transportation Advisory Board's comments on the project.

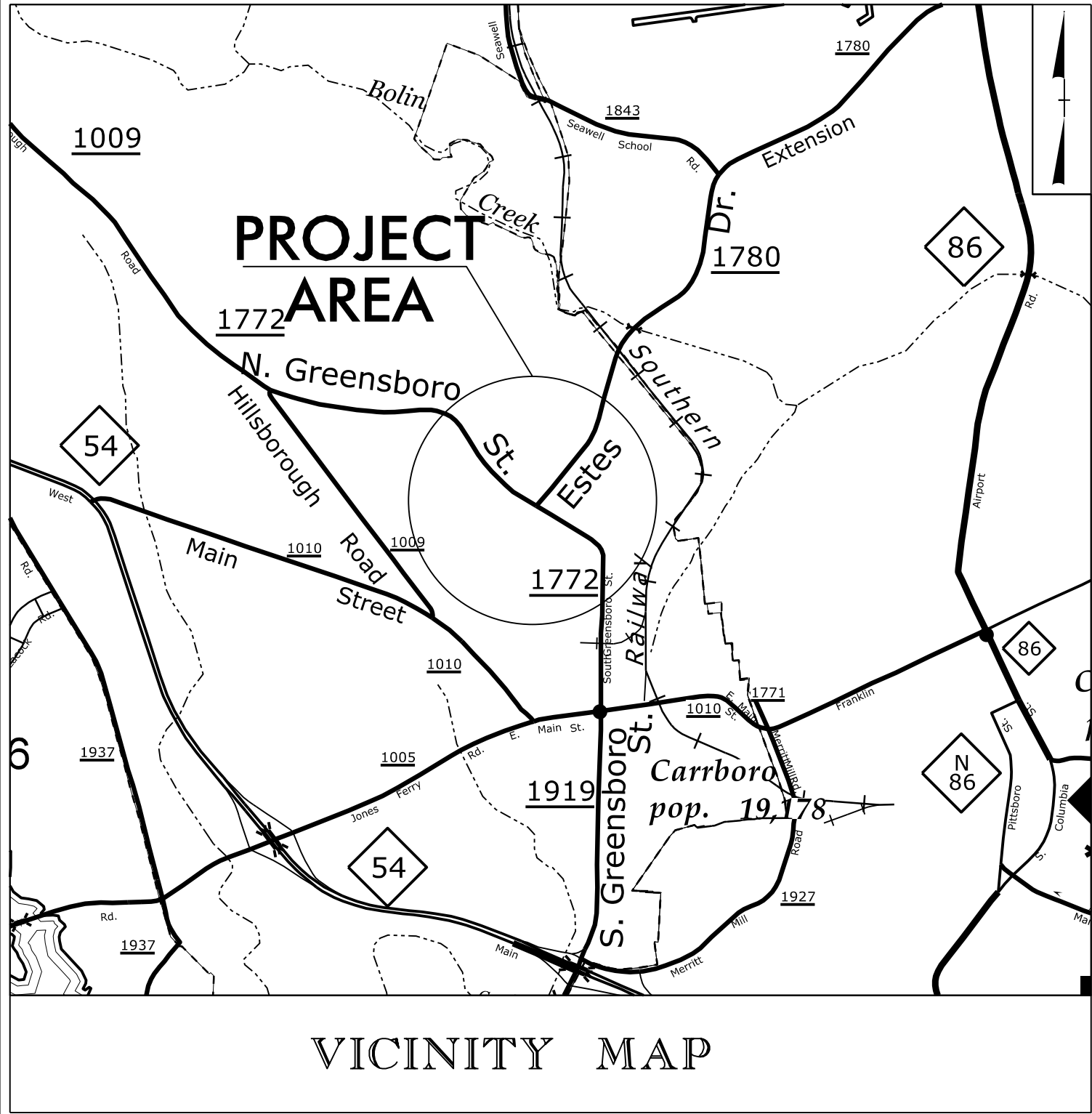
NOW, THEREFORE, BE IT RESOLVED by the Carrboro Board of Aldermen receives the update.

This the 19th day of September in 2017.

TIP PROJECT: U-5846

CONTRACT:

See Sheet 1-A For Index of Sheets
See Sheet 1B For Conventional symbols
See Sheet 1C For Survey Control Sheet



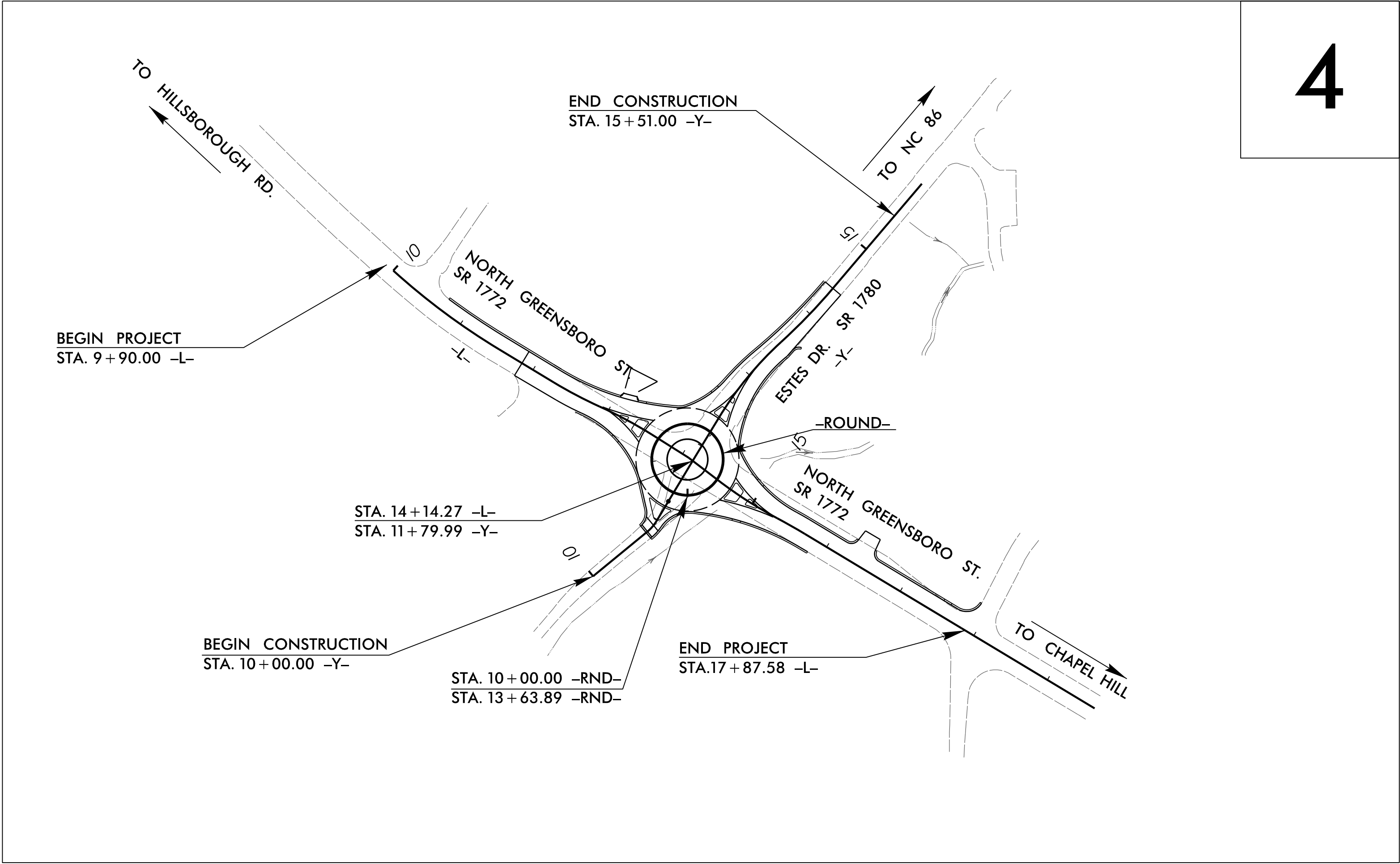
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ORANGE COUNTY

LOCATION: INTERSECTION IMPROVEMENT AT SR 1772 (NORTH GREENSBORO STREET) AND SR 1780 (ESTES DRIVE)

TYPE OF WORK: GRADING, DRAINAGE, AND PAVING

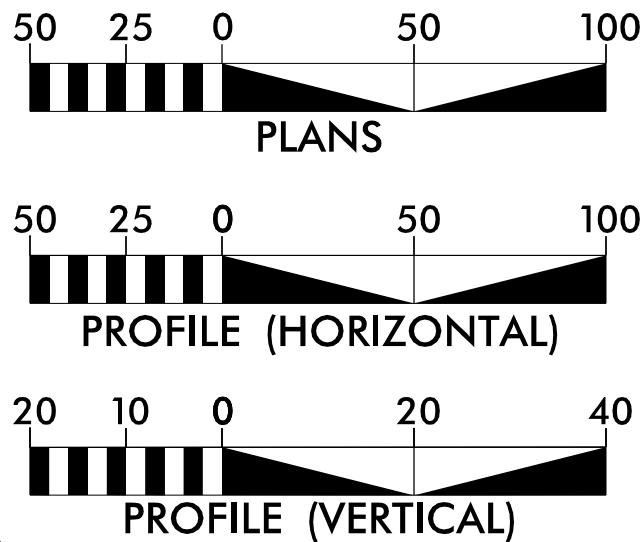
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5846	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50236.1.1		PE	
50236.2.1		R/W	
50236.3.1		CONST.	



THIS PROJECT IS WITHIN CARBORO MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2015 = 11,700
ADT 2040 = 15,300
K = 60 %
D = 10 %
T = 5 % *
V = 40 MPH
* TTST = 1 DUAL 4
FUNC CLASS =
MINOR ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-5846 = 0.151 Miles
TOTAL LENGTH TIP PROJECT U-5846 = 0.151 Miles

Prepared in the Office of:

SEPI
ENGINEERING &
CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JUNE 30, 2017

LETTING DATE:
JANUARY 16, 2018

BEN CRAWFORD, PE
PROJECT ENGINEER

MATTHEW COPPLE, PE
PROJECT DESIGN ENGINEER

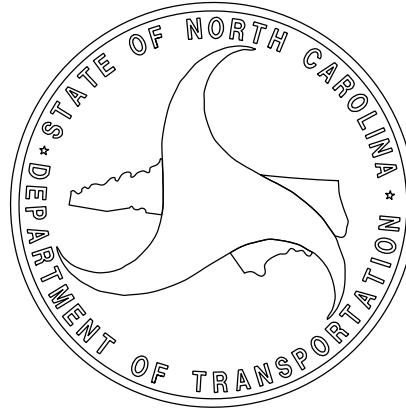
CHRIS SMITHERMAN, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

**ROADWAY DESIGN
ENGINEER**

SIGNATURE: _____ P.E.











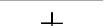


STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS
CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	
County Line	
Township Line	
City Line	
Reservation Line	
Property Line	
Existing Iron Pin	
Computed Property Corner	
Property Monument	
Parcel/Sequence Number	
Existing Fence Line	
Proposed Woven Wire Fence	
Proposed Chain Link Fence	
Proposed Barbed Wire Fence	
Existing Wetland Boundary	
Proposed Wetland Boundary	
Existing Endangered Animal Boundary	
Existing Endangered Plant Boundary	
Existing Historic Property Boundary	
Known Contamination Area: Soil	
Potential Contamination Area: Soil	
Known Contamination Area: Water	
Potential Contamination Area: Water	
Contaminated Site: Known or Potential	

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	
Sign	
Well	
Small Mine	
Foundation	
Area Outline	
Cemetery	
Building	
School	
Church	
Dam	

HYDROLOGY:

Stream or Body of Water	
Hydro, Pool or Reservoir	
Jurisdictional Stream	
Buffer Zone 1	
Buffer Zone 2	
Flow Arrow	
Disappearing Stream	
Spring	
Wetland	
Proposed Lateral, Tail, Head Ditch	
False Sump	

RAILROADS:

Standard Gauge	
RR Signal Milepost	
Switch	
RR Abandoned	
RR Dismantled	

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	
Primary Horiz Control Point	
Primary Horiz and Vert Control Point	
Exist Permanent Easment Pin and Cap	
New Permanent Easement Pin and Cap	
Vertical Benchmark	
Existing Right of Way Marker	
Existing Right of Way Line	
New Right of Way Line	
New Right of Way Line with Pin and Cap	
New Right of Way Line with Concrete or Granite R/W Marker	
New Control of Access Line with Concrete C/A Marker	
Existing Control of Access	
New Control of Access	
Existing Easement Line	
New Temporary Construction Easement	
New Temporary Drainage Easement	
New Permanent Drainage Easement	
New Permanent Drainage /Utility Easement	
New Permanent Utility Easement	
New Temporary Utility Easement	
New Aerial Utility Easement	

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	
Existing Curb	
Proposed Slope Stakes Cut	
Proposed Slope Stakes Fill	
Proposed Curb Ramp	
Existing Metal Guardrail	
Proposed Guardrail	
Existing Cable Guiderail	
Proposed Cable Guiderail	
Equality Symbol	
Pavement Removal	

VEGETATION:

Single Tree	
Single Shrub	

*S.U.E. = Subsurface Utility Engineering

Hedge	
Woods Line	
Orchard	
Vineyard	

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	
Bridge Wing Wall, Head Wall and End Wall	
MINOR:	
Head and End Wall	
Pipe Culvert	
Footbridge	
Drainage Box: Catch Basin, DI or JB	
Paved Ditch Gutter	
Storm Sewer Manhole	
Storm Sewer	

UTILITIES:

POWER:	
Existing Power Pole	
Proposed Power Pole	
Existing Joint Use Pole	
Proposed Joint Use Pole	
Power Manhole	
Power Line Tower	
Power Transformer	
U/G Power Cable Hand Hole	
H-Frame Pole	
U/G Power Line LOS B (S.U.E.*)	
U/G Power Line LOS C (S.U.E.*)	
U/G Power Line LOS D (S.U.E.*)	

TELEPHONE:

Existing Telephone Pole	
Proposed Telephone Pole	
Telephone Manhole	
Telephone Pedestal	
Telephone Cell Tower	
U/G Telephone Cable Hand Hole	
U/G Telephone Cable LOS B (S.U.E.*)	
U/G Telephone Cable LOS C (S.U.E.*)	
U/G Telephone Cable LOS D (S.U.E.*)	
U/G Telephone Conduit LOS B (S.U.E.*)	
U/G Telephone Conduit LOS C (S.U.E.*)	
U/G Telephone Conduit LOS D (S.U.E.*)	
U/G Fiber Optics Cable LOS B (S.U.E.*)	
U/G Fiber Optics Cable LOS C (S.U.E.*)	
U/G Fiber Optics Cable LOS D (S.U.E.*)	

WATER:

Water Manhole	
Water Meter	
Water Valve	
Water Hydrant	
U/G Water Line LOS B (S.U.E.*)	
U/G Water Line LOS C (S.U.E.*)	
U/G Water Line LOS D (S.U.E.*)	
Above Ground Water Line	

TV:

TV Pedestal	
TV Tower	
U/G TV Cable Hand Hole	
U/G TV Cable LOS B (S.U.E.*)	
U/G TV Cable LOS C (S.U.E.*)	
U/G TV Cable LOS D (S.U.E.*)	
U/G Fiber Optic Cable LOS B (S.U.E.*)	
U/G Fiber Optic Cable LOS C (S.U.E.*)	
U/G Fiber Optic Cable LOS D (S.U.E.*)	

GAS:

Gas Valve	
Gas Meter	
U/G Gas Line LOS B (S.U.E.*)	
U/G Gas Line LOS C (S.U.E.*)	
U/G Gas Line LOS D (S.U.E.*)	
Above Ground Gas Line	

SANITARY SEWER:

Sanitary Sewer Manhole	
Sanitary Sewer Cleanout	
U/G Sanitary Sewer Line	
Above Ground Sanitary Sewer	
SS Forced Main Line LOS B (S.U.E.*)	
SS Forced Main Line LOS C (S.U.E.*)	
SS Forced Main Line LOS D (S.U.E.*)	

MISCELLANEOUS:

Utility Pole	
Utility Pole with Base	
Utility Located Object	
Utility Traffic Signal Box	
Utility Unknown U/G Line LOS B (S.U.E.*)	
U/G Tank; Water, Gas, Oil	
Underground Storage Tank, Approx. Loc.	
A/G Tank; Water, Gas, Oil	
Geoenvironmental Boring	
U/G Test Hole LOS A (S.U.E.*)	
Abandoned According to Utility Records	
End of Information	

PROJECT REFERENCE NO.
U-5846

SHEET NO.
2A-1

RW SHEET NO.

ROADWAY DESIGN ENGINEER

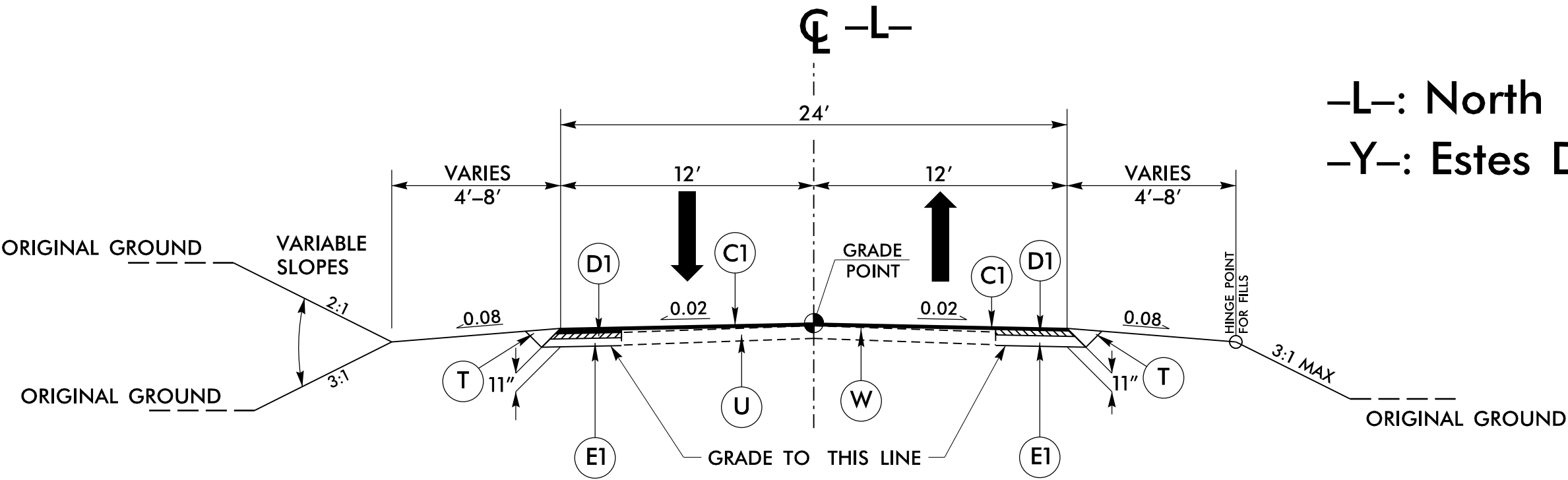
PAVEMENT DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SEPI

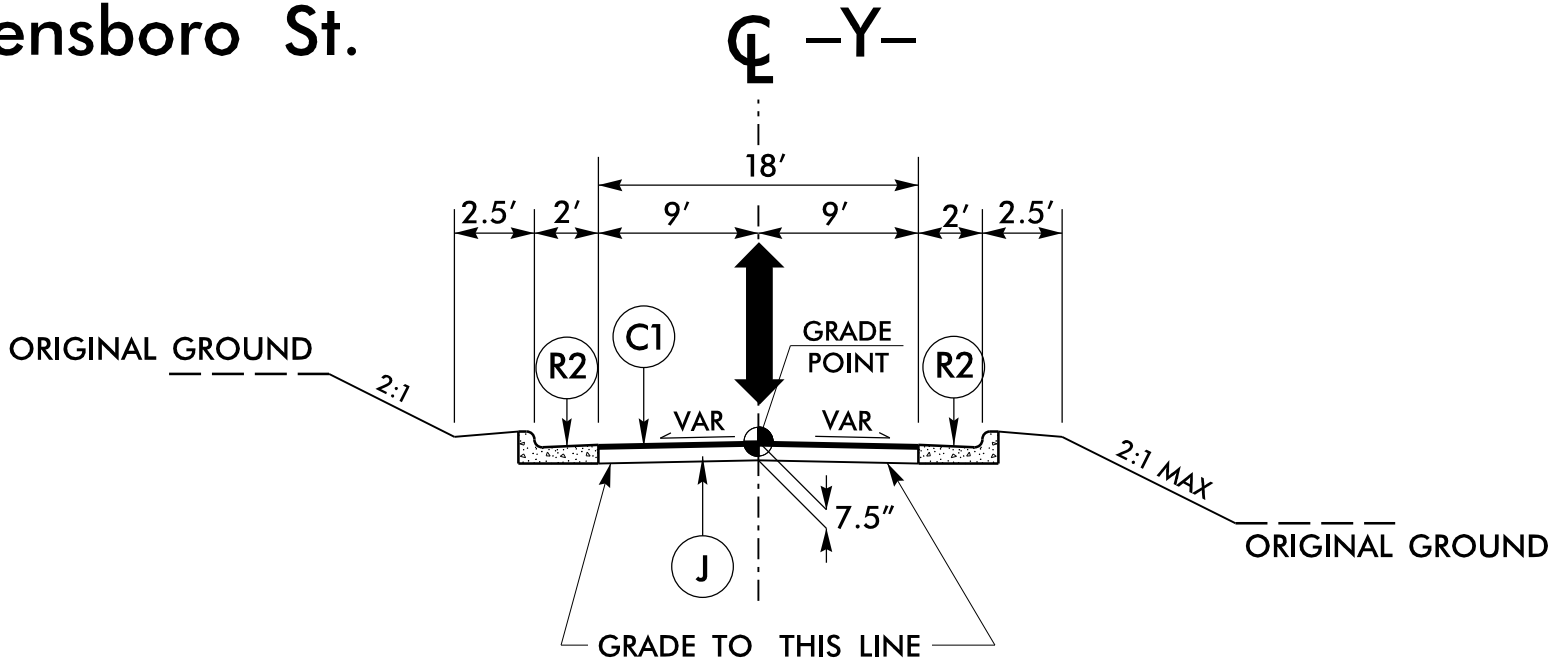
ENGINEERING & CONSTRUCTION

1025 Wade Avenue
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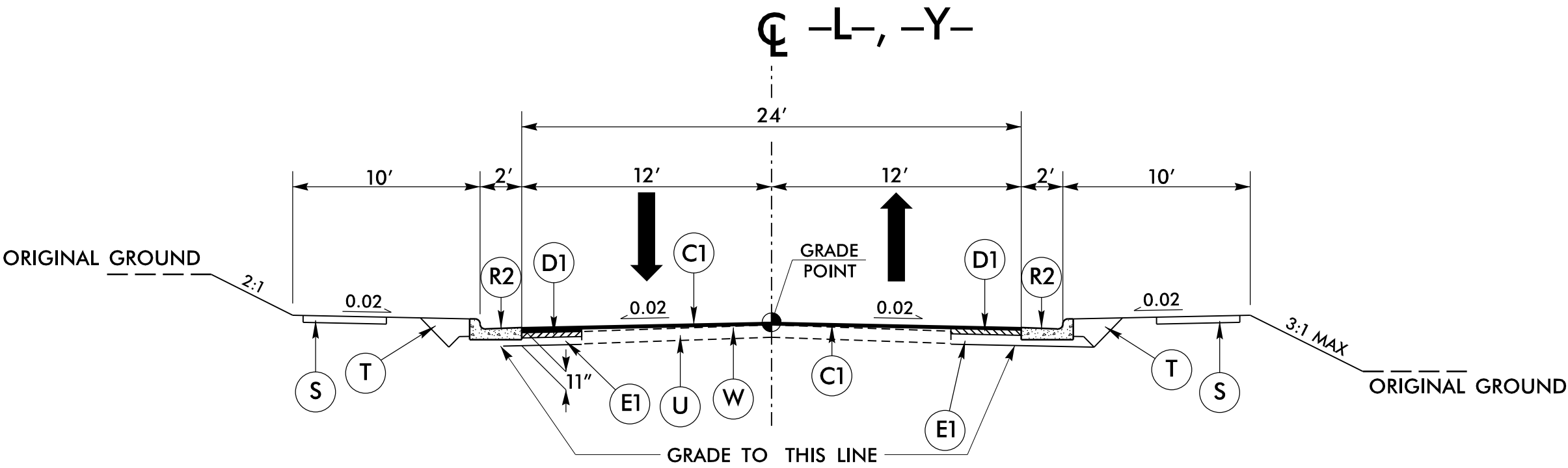
ROADWAY TYPICAL SECTION NO. 1

-L- STA. 11+85.00 TO 12+65.80



ROADWAY TYPICAL SECTION NO. 2

-Y- STA. 10+80.00 TO 11+18.00

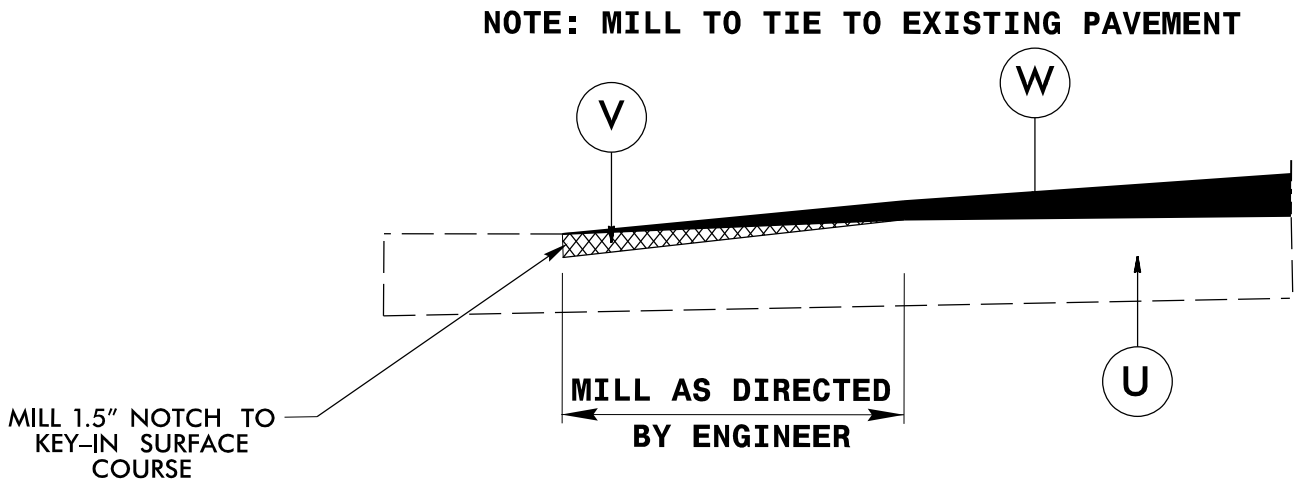


ROADWAY TYPICAL SECTION NO. 3

-L- STA. 12+65.80 TO 13+48.28
-L- STA. 14+68.40 TO 17+87.58
-Y- STA. 12+37.85 TO 14+40.10

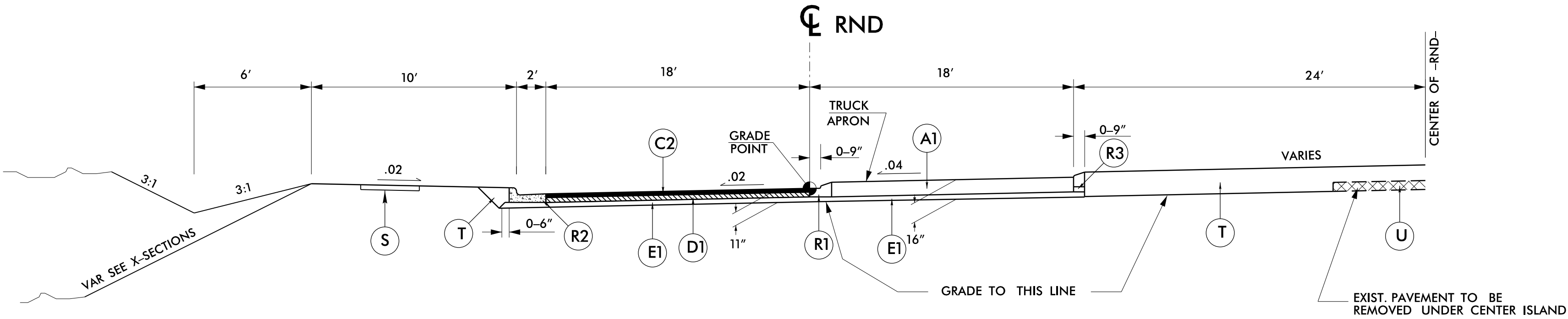
CURB EXISTS IN THESE RANGES:

-L- STA. 12+65.80 TO 15+83.68 RT
-L- STA. 12+17.68 TO 17+88.27 LT
-Y- STA. 12+37.85 TO 13+65.96 RT
-Y- STA. 12+37.85 TO 14+40.10 LT



INCIDENTAL MILLING DETAIL

-L- STA. 11+85.00
-L- STA. 17+88.27
-Y- STA. 14+40.10

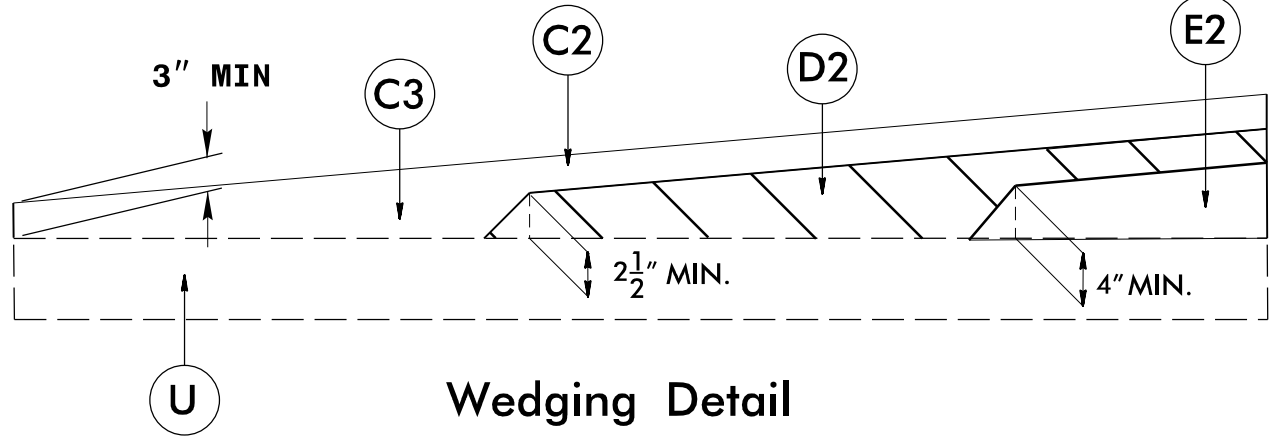


Roundabout
TYPICAL SECTION 4

-RND- STA. 10+00.00 TO 12+63.89

PAVEMENT SCHEDULE (PROPOSED PAVEMENT DESIGN)	
A1	12" PORTLAND CEMENT CONCRETE TRUCK APRON.
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
J	PROP 6" AGGREGATE BASE COURSE
R1	1'-6" CONCRETE CURB AND GUTTER.
R2	2'-6" CONCRETE CURB AND GUTTER.
R3	9"x18" CONCRETE CURB.
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	VARIABLE MILLING.
W	WEDGING (SEE STANDARD WEDGING DETAIL)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



Wedging Detail

PROJECT REFERENCE NO.
U-5846

SHEET NO.
2D-1

RW SHEET NO.

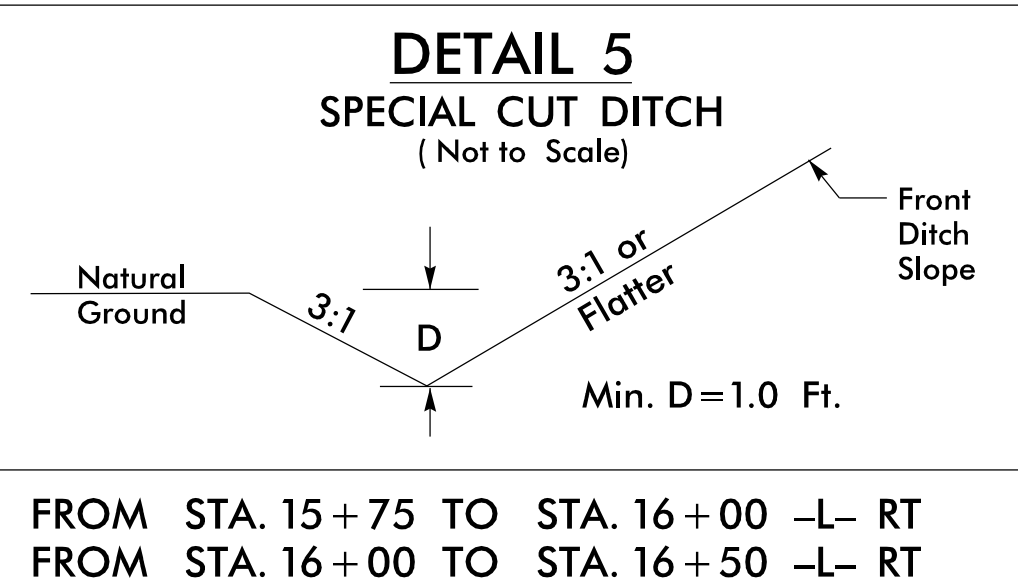
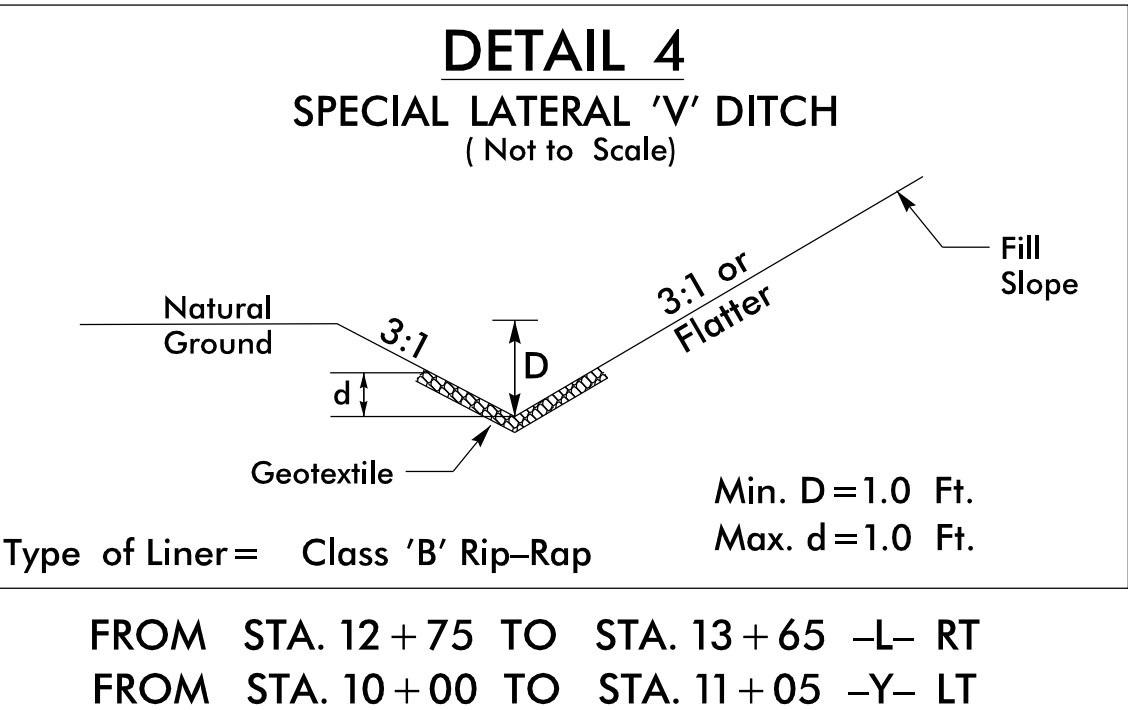
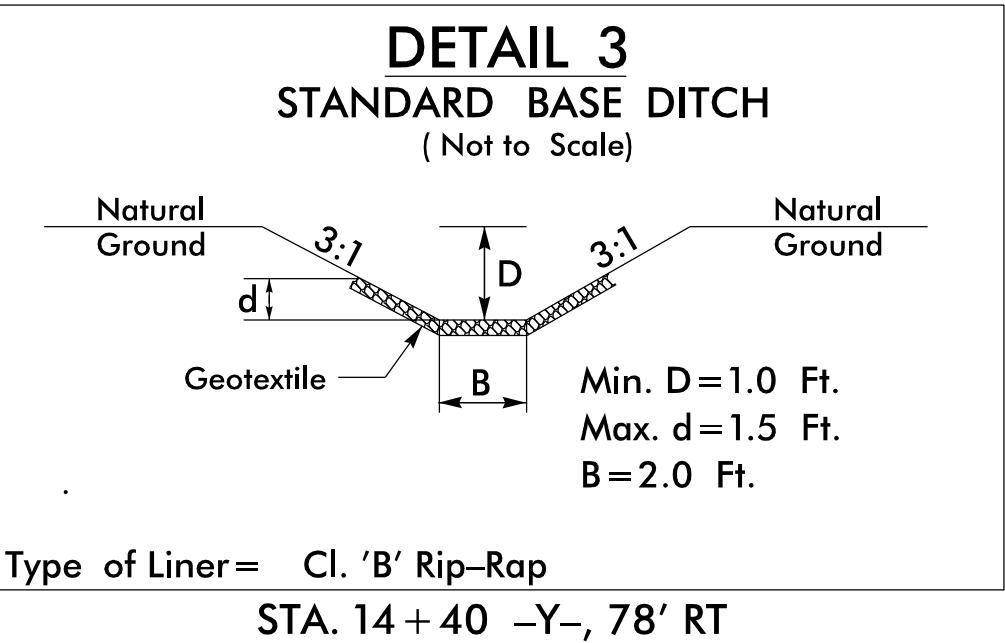
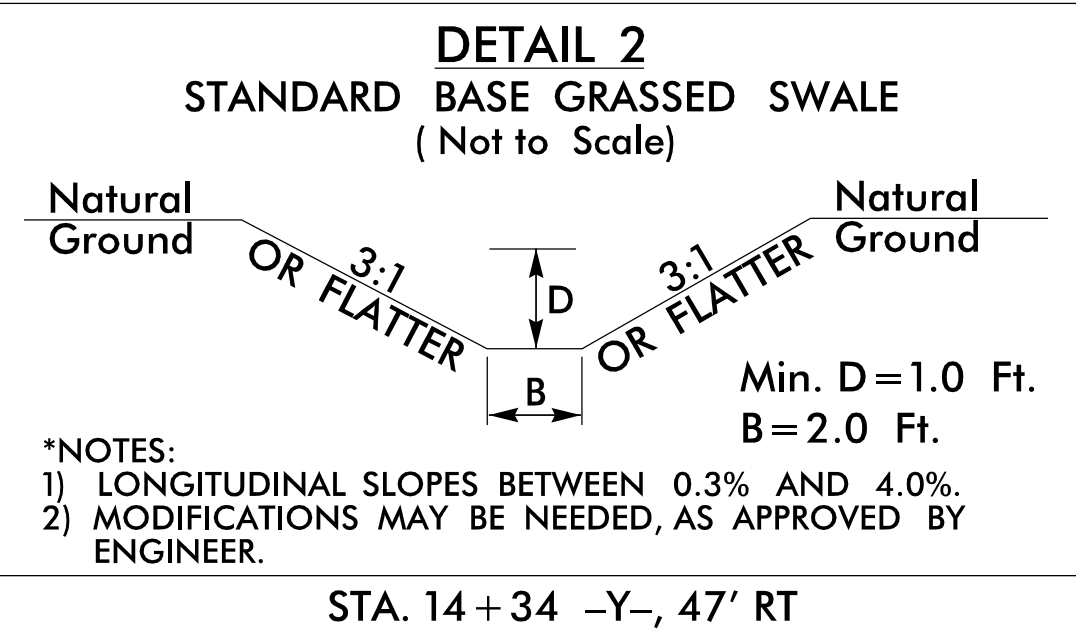
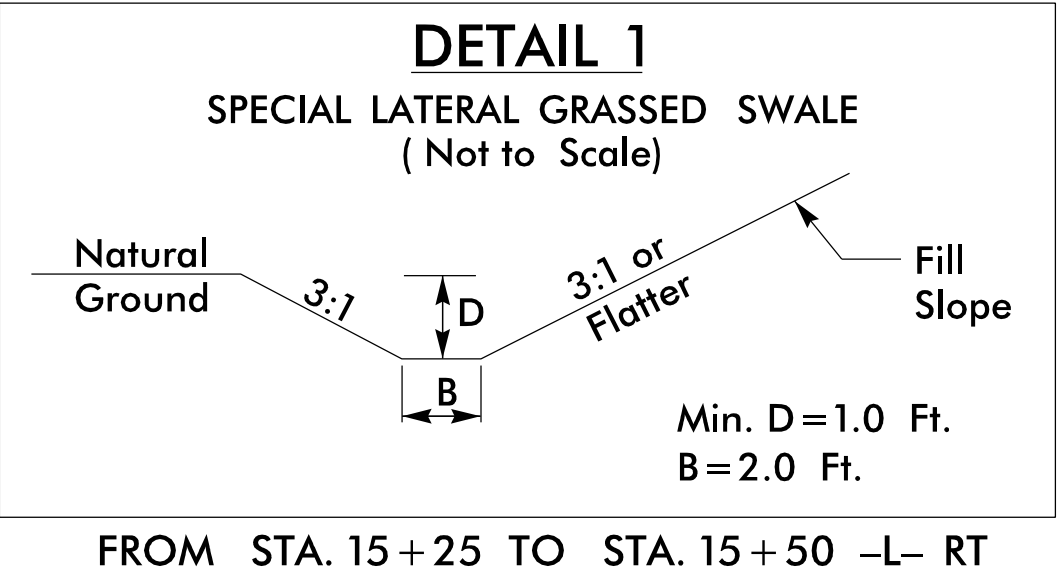
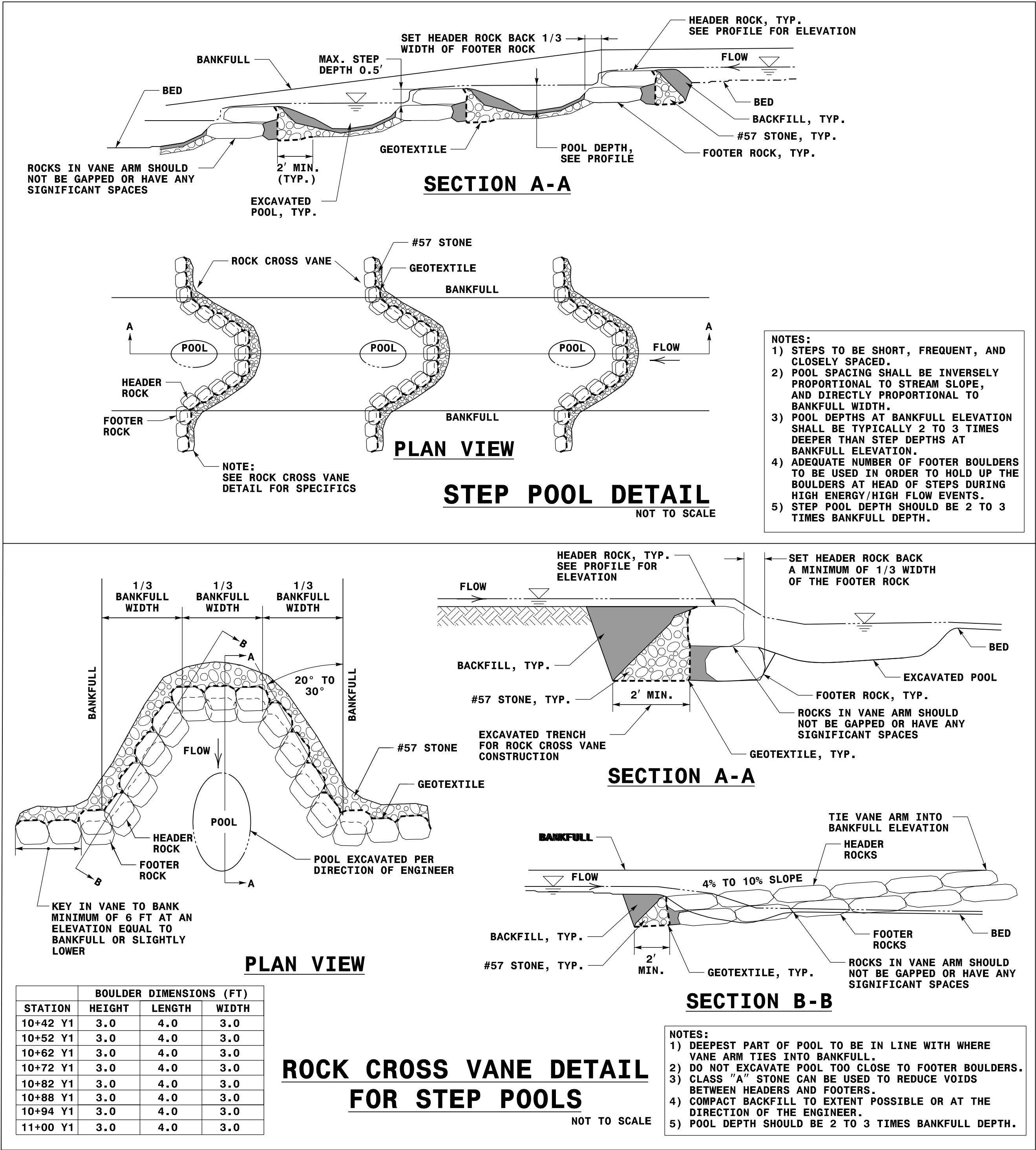
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
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SEPI
ENGINEERING & CONSTRUCTION

1025 Wade Avenue
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License: C-2197



8/17/99

COMPUTED BY: MBCDATE: 5/23/17

CHECKED BY: _____DATE: _____

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK
IN CUBIC YARDS

SEPI

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
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License: C-2197

ENGINEERING &
CONSTRUCTION

PROJECT REFERENCE NO. SHEET NO.

U-5846 3B-1

STATION	STATION	UNCL. EXCAV.	EMBANK. + %	BORROW	WASTE
SUMMARY NO. 1					
-L- STA. 11 + 85.00	-L- STA. 13 + 25.00	389	20		369
-L- STA. 14 + 75.00	-L- STA. 16 + 50.00	482	156		326
TOTAL SUMMARY NO. 1		871	176		695
SUMMARY NO. 2					
-Y- STA. 10 + 00.00	-L- STA. 14 + 40.10	348	113		235
TOTAL SUMMARY NO. 2		348	113		235
SUMMARY NO. 3					
-RND- STA. 10 + 00.00	-RND- STA. 12 + 50.00	129	1067	938	
TOTAL SUMMARY NO. 3		129	1067	938	
SUMMARY TOTALS		1348	1356	938	930
SUMMARY TOTALS		1348	1356	938	930
WASTE IN LIEU OF BORROW				-930	
PROJECT TOTALS		1348	1356	8	
EST. 5% TO REPLACE BORROW PIT				0	
GRAND TOTALS		1348	1,334	8	
SAY		1400		20	

Note: Approximate quantities only. Unclassified Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	SQUARE YARDS
-L-	14 + 84.00	16 + 28.00	LT	137.93
-L-	16 + 50.00	17 + 47.00	LT	60.14
-L-	12 + 68.00	13 + 16.00	RT	13.20
-Y-	12 + 70.00	14 + 26.00	RT	27.22
-Y-	14 + 26.00	14 + 40.00	RT	0.43
			TOTALS	238.92
			SAY	260

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SUB-REGIONAL & REGIONAL

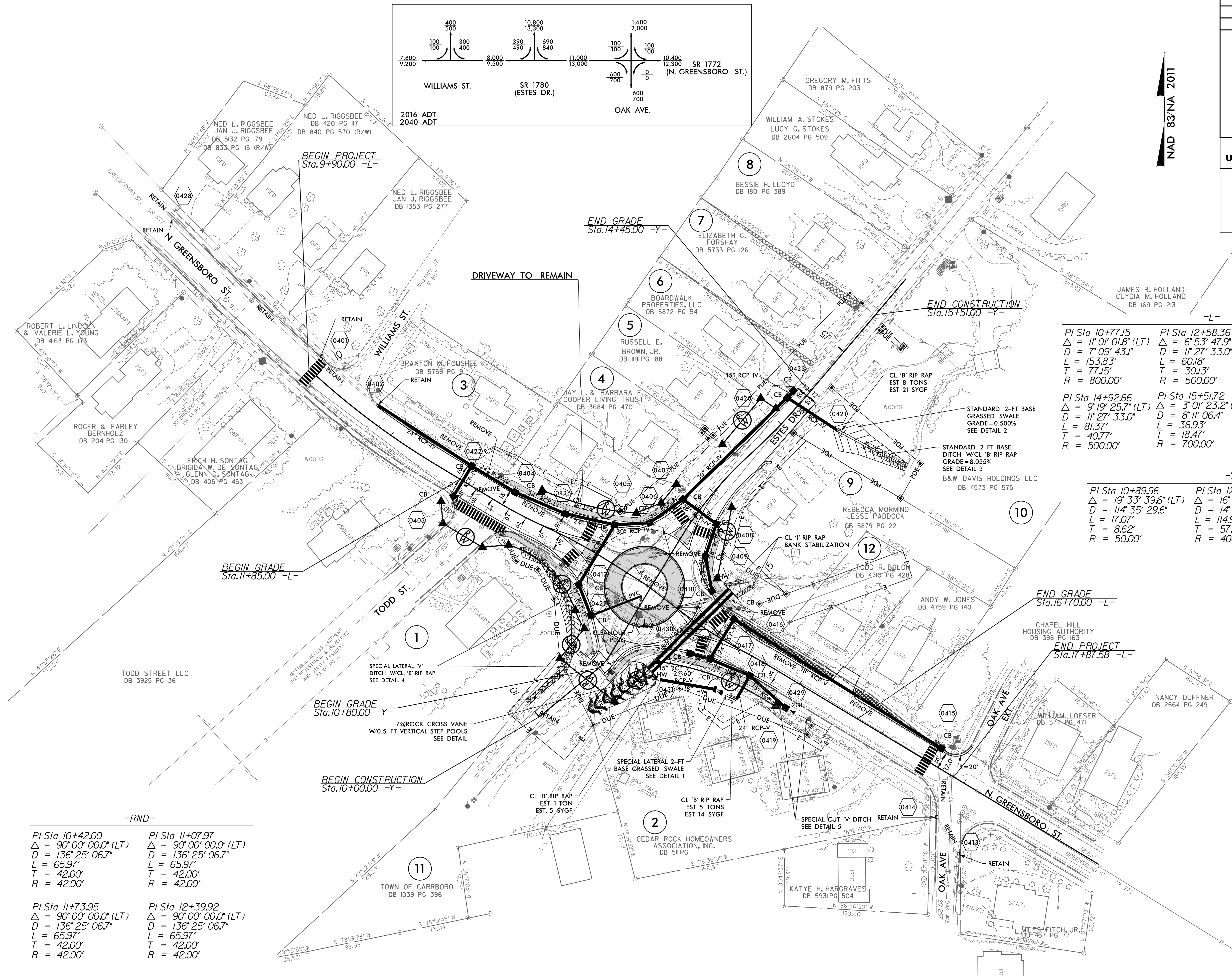
LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

[illegible]

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 54" & OVER)

[illegible]



FOR PROFILES, SEE SHEET NO. 5

ALIGNMENT AND RIGHT OF WAY DETAIL

PROJECT REFERENCE NO.
U-5846

SHEET NO.
4A

RW SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

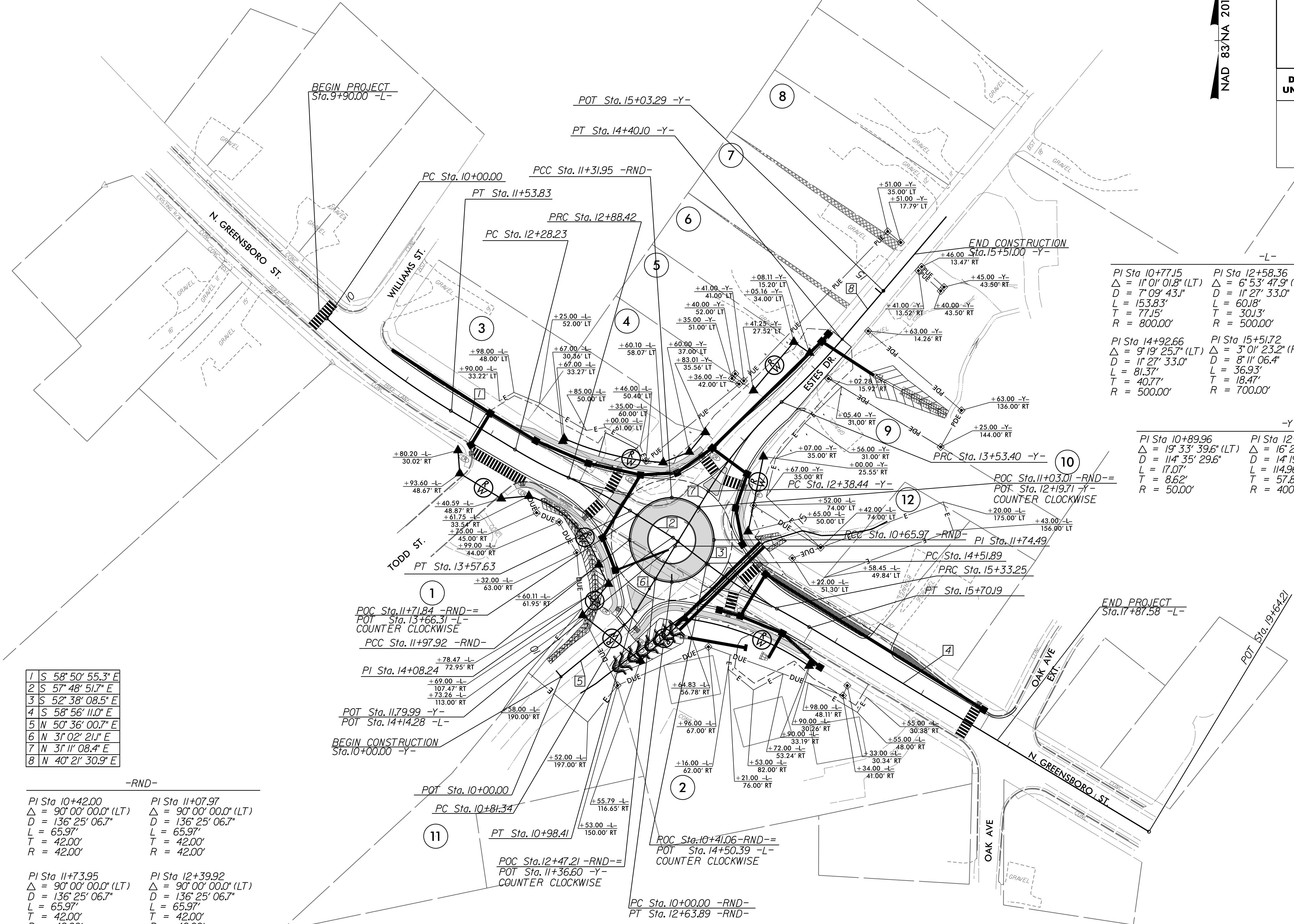
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NAD 83/NA 2011



PI Sta 10+77.15 Δ = 11° 01' 01.8" (LT) D = 7° 09' 43.1" L = 153.83' T = 77.15' R = 800.00'	PI Sta 12+58.36 Δ = 6° 53' 47.9" (LT) D = 11° 27' 33.0" L = 60.18' T = 30.13' R = 500.00'	PI Sta 13+23.08 Δ = 7° 55' 51.4" (RT) D = 11° 27' 33.0" L = 69.21' T = 34.66' R = 500.00'
PI Sta 14+92.66 Δ = 9° 19' 25.7" (LT) D = 11° 27' 33.0" L = 81.37' T = 40.77' R = 500.00'	PI Sta 15+51.72 Δ = 3° 01' 23.2" (RT) D = 8° 11' 06.4" L = 36.93' T = 18.47' R = 700.00'	
PI Sta 10+89.96 Δ = 19° 33' 39.6" (LT) D = 114° 35' 29.6" L = 17.07' T = 8.62' R = 50.00'	PI Sta 12+96.32 Δ = 16° 28' 02.6" (RT) D = 14° 19' 26.2" L = 114.96' T = 57.88' R = 400.00'	PI Sta 13+96.81 Δ = 7° 17' 40.1" (LT) D = 8° 24' 48.5" L = 86.70' T = 43.41' R = 681.00'

1 S 58° 50' 55.3" E
2 S 57° 48' 51.7" E
3 S 52° 38' 08.5" E
4 S 58° 56' 11.0" E
5 N 50° 36' 00.7" E
6 N 31° 02' 21.1" E
7 N 31° 11' 08.4" E
8 N 40° 21' 30.9" E

PI Sta 10+42.00 Δ = 90° 00' 00.0" (LT) D = 136° 25' 06.7" L = 65.97' T = 42.00' R = 42.00'	PI Sta 11+07.97 Δ = 90° 00' 00.0" (LT) D = 136° 25' 06.7" L = 65.97' T = 42.00' R = 42.00'
PI Sta 11+73.95 Δ = 90° 00' 00.0" (LT) D = 136° 25' 06.7" L = 65.97' T = 42.00' R = 42.00'	PI Sta 12+39.92 Δ = 90° 00' 00.0" (LT) D = 136° 25' 06.7" L = 65.97' T = 42.00' R = 42.00'

FOR PROFILES, SEE SHEET NO. 5

REVISIONS

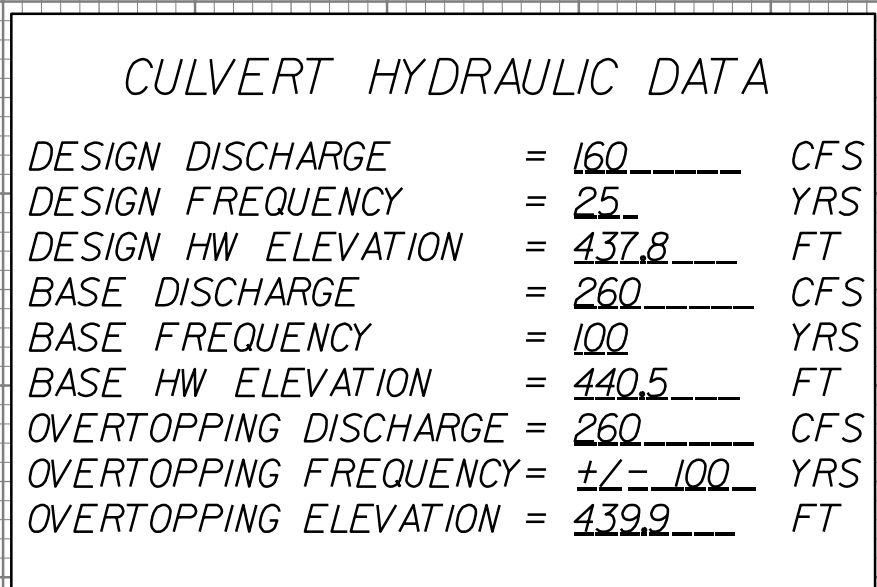
R/W REVISION 8/8/17 - ADDED PARCEL 12 (TODD R. BOLON)

8/17/99

8/7/2017
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SEPI
ENGINEERING &
CONSTRUCTION

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License: C-2197



CROSS SECTION INDEX

X-1 CROSS SECTION INDEX

X-2 THRU X-5 -L-

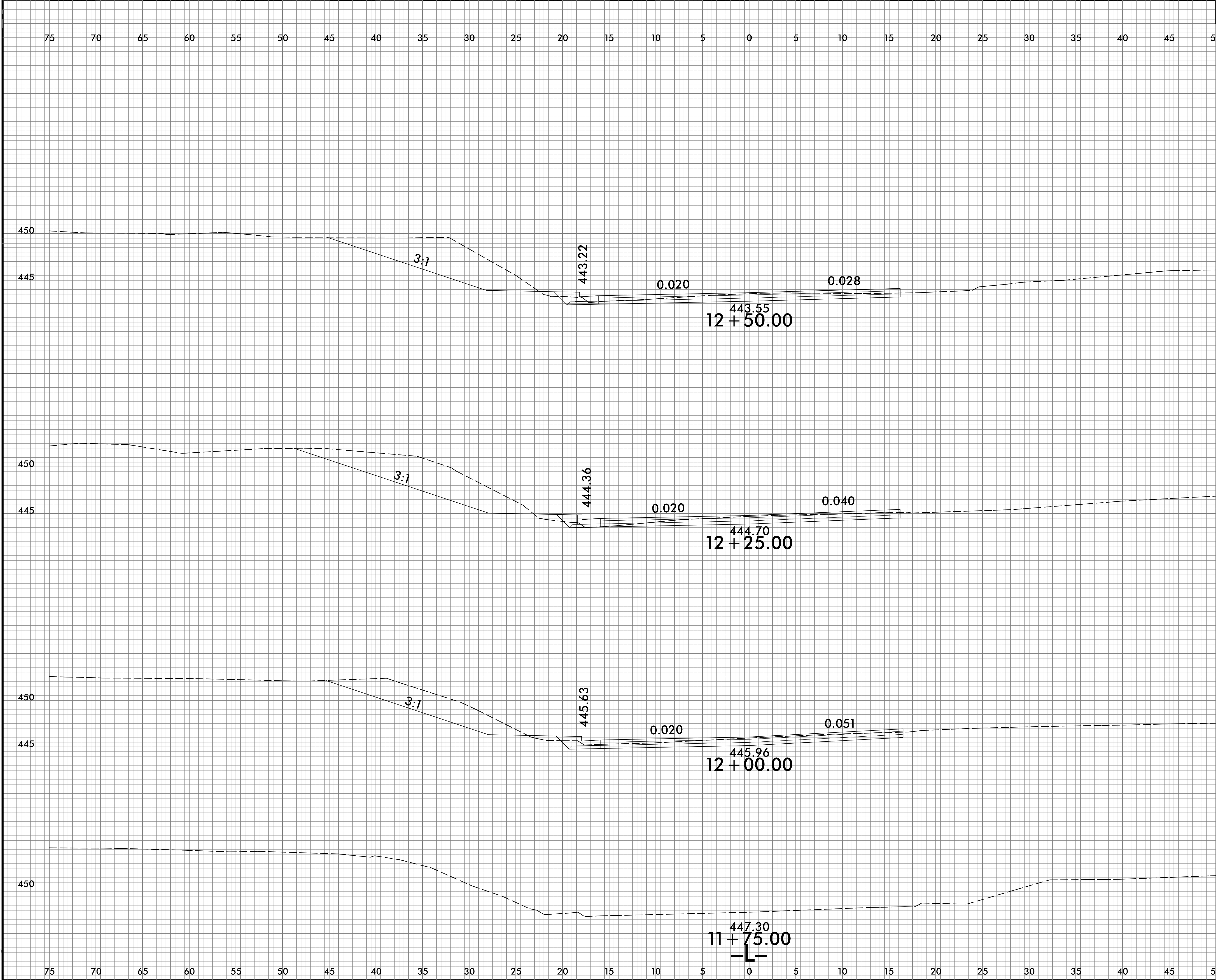
X-6 THRU X-8 -Y-

X-9 THRU X-11 -RND-

6/23/16

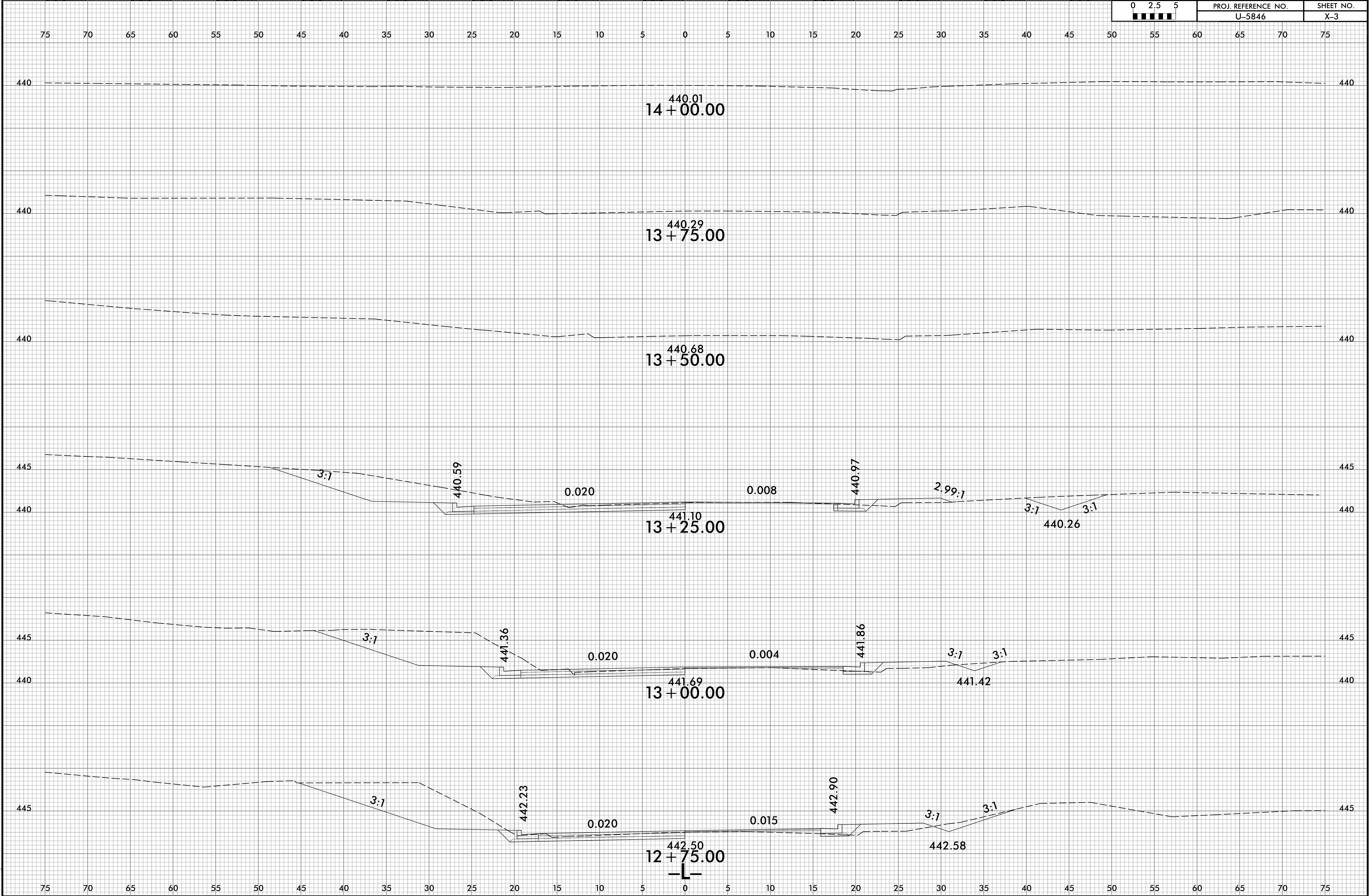
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	U-5846	X-2



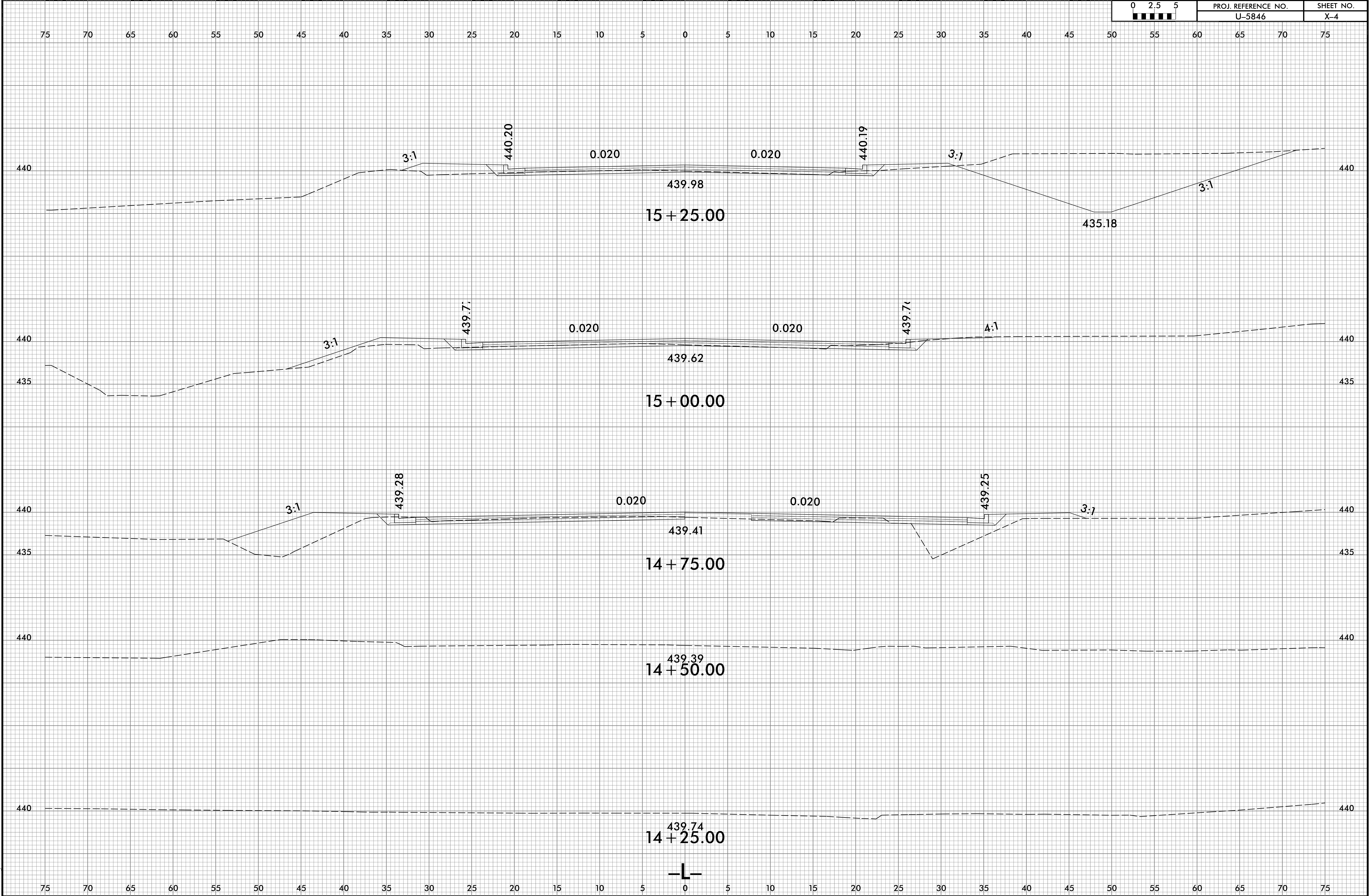
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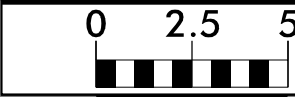


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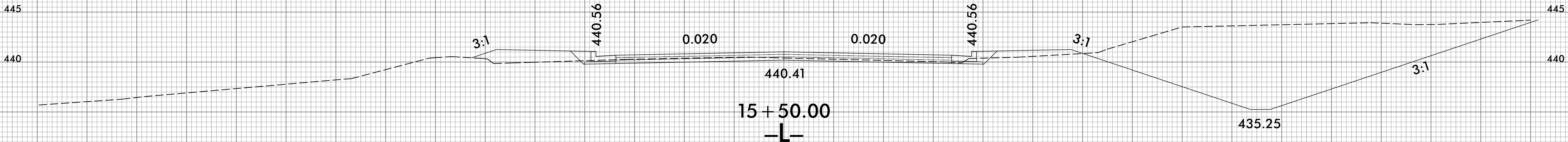
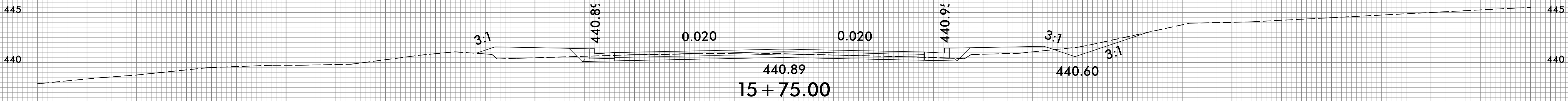
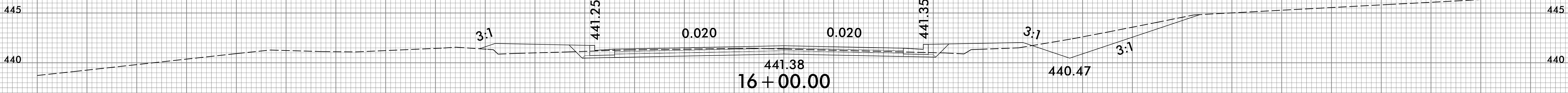


6/23/16



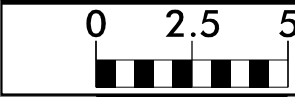
PROJ. REFERENCE NO.	SHEET NO.
U-5846	X-5

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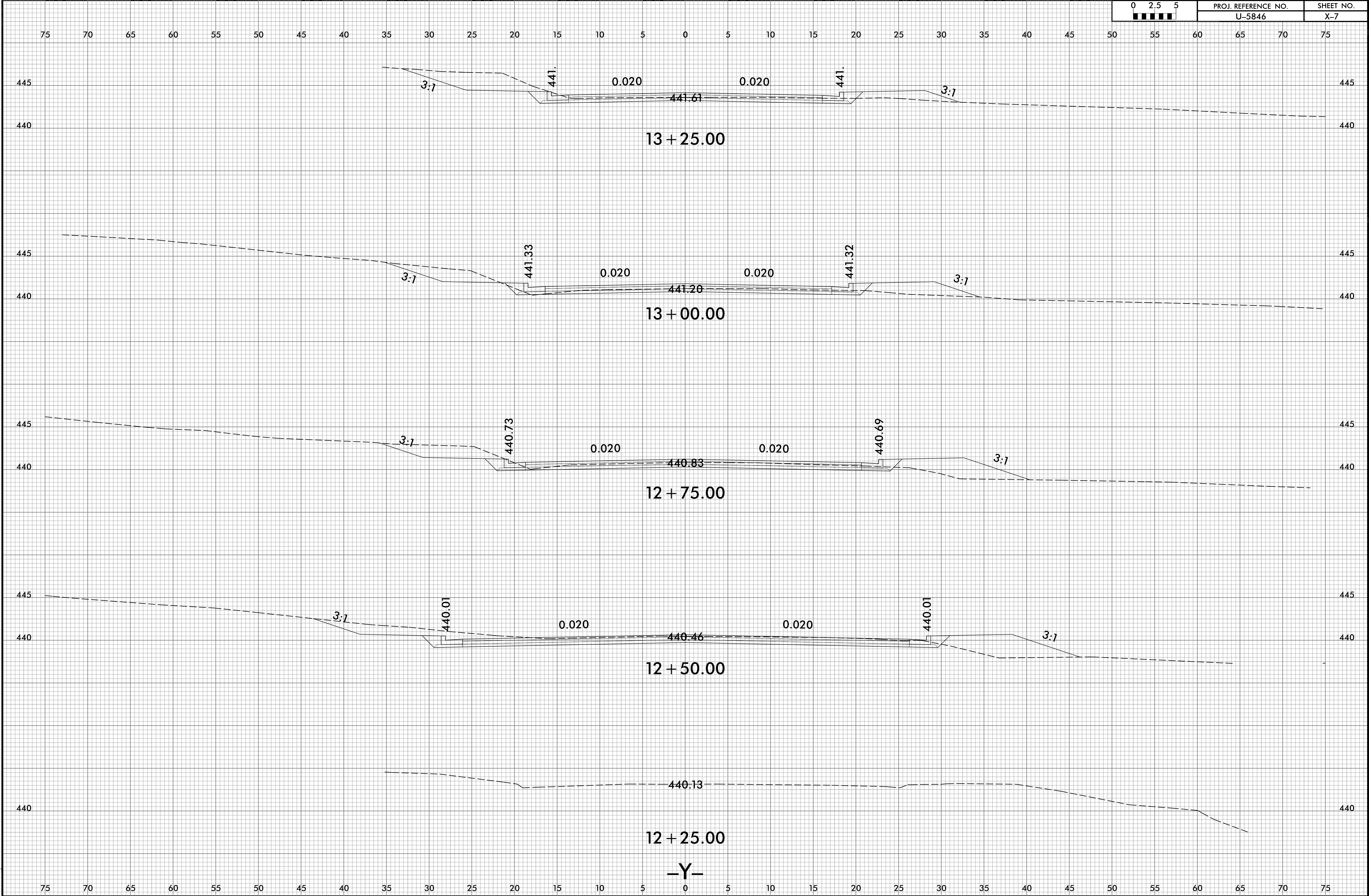
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6/23/16



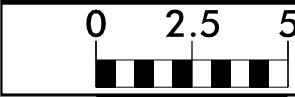
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U-5846

SHEET NO.
X-7



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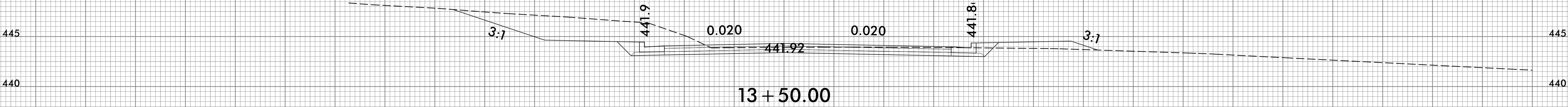
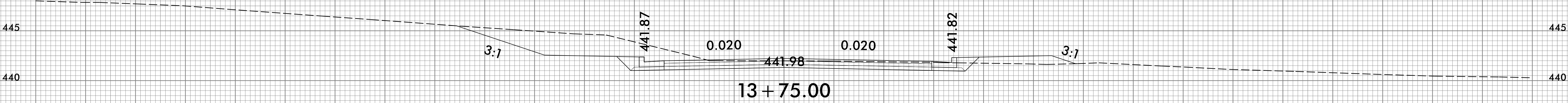
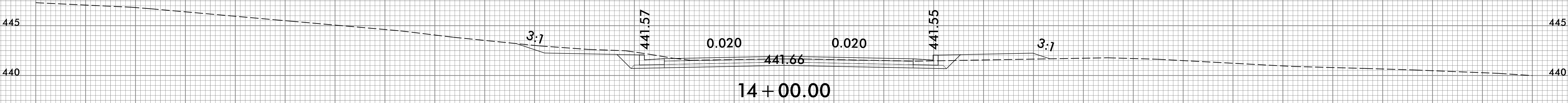
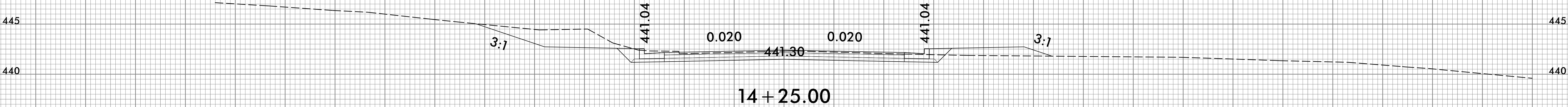
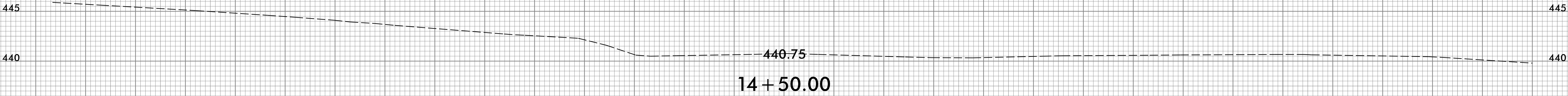
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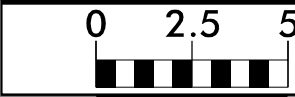
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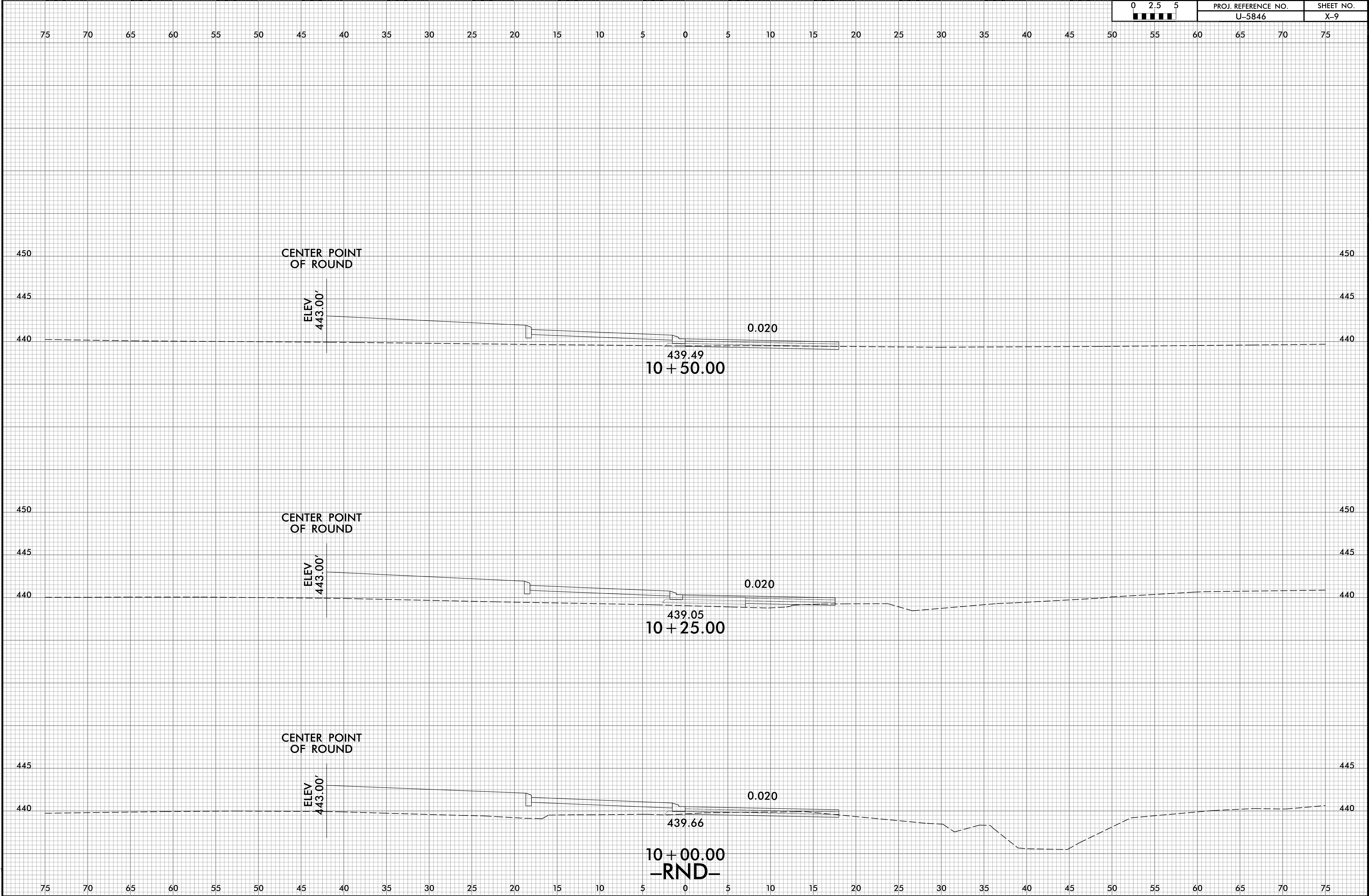
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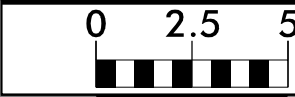


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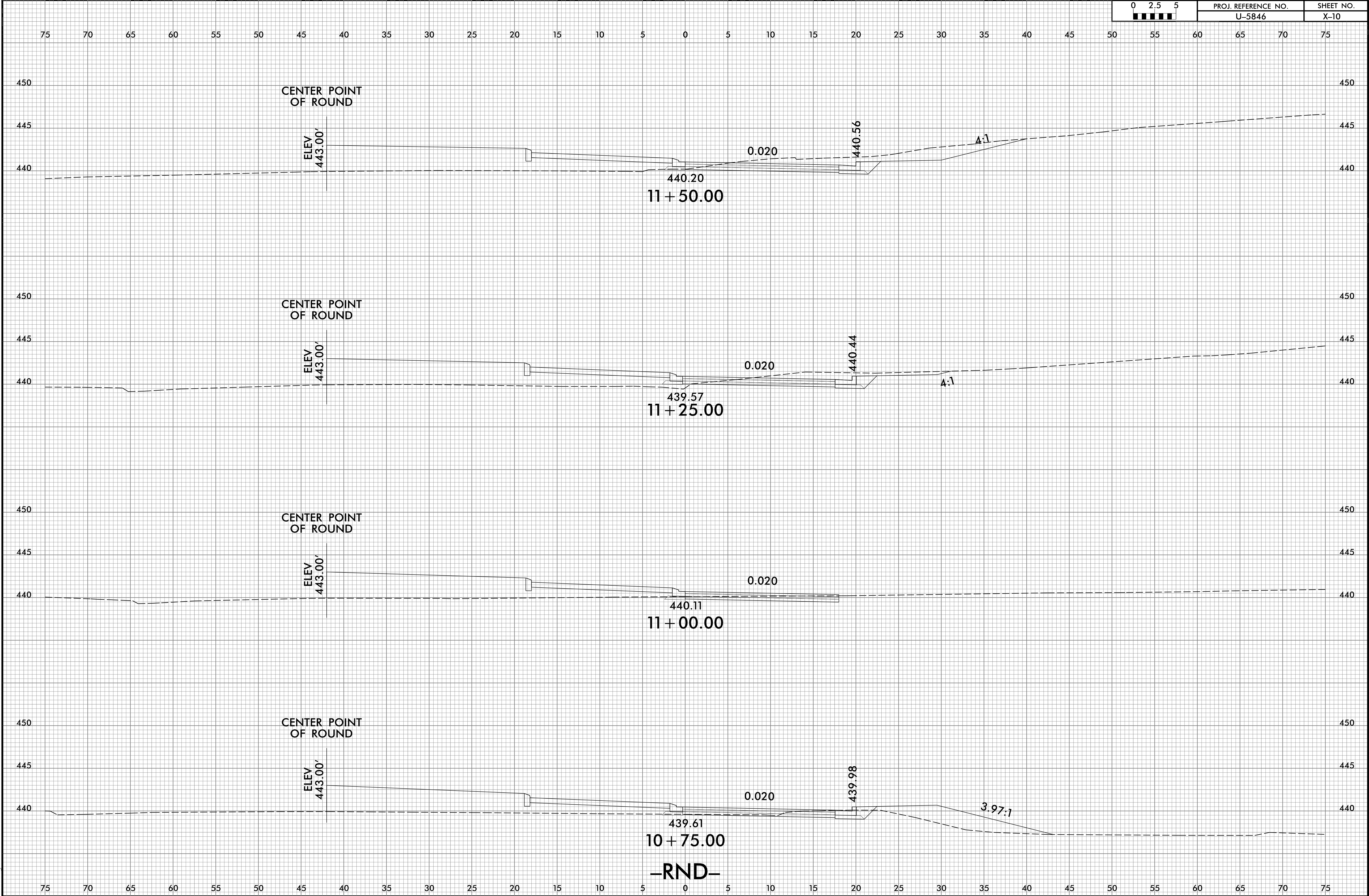


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Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:17-278

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Receipt of Public Comments on Concept Plan Options for Possible Design Options for Development of the 203 South Greensboro Street Property Including Contemplated Orange County Southern Branch Library

PURPOSE: The purpose of this item is to provide the Board of Aldermen with an opportunity to receive public comment on additional concept plan options for the Town's 203 S. Greensboro Street property in follow-up to the June 27th public hearing on this topic.

DEPARTMENT: Planning and Manager's Office

CONTACT INFORMATION: Trish McGuire, pmcguire@townofcarrboro.org

<mailto:pmcguire@townofcarrboro.org>, 919-918-7327; David Andrews, dandrews@townofcarrboro.org, 919-918-7308

INFORMATION: On June 20th, the Board of Aldermen received a presentation on the concept plan for the 203 S. Greensboro Street property. Agenda materials are available at this [link](https://carrboro.legistar.com/LegislationDetail.aspx?ID=3084136&GUID=676CEE1B-088E-457F-93FB-6CD4076789EC&Options=&Search=>) [<https://carrboro.legistar.com/LegislationDetail.aspx?ID=3084136&GUID=676CEE1B-088E-457F-93FB-6CD4076789EC&Options=&Search=>](https://carrboro.legistar.com/LegislationDetail.aspx?ID=3084136&GUID=676CEE1B-088E-457F-93FB-6CD4076789EC&Options=&Search=>). On June 27th, the Board of Aldermen received public comments on the concept plan. Agenda materials and minutes are available at [<https://carrboro.legistar.com/DepartmentDetail.aspx?ID=20277&GUID=2CC72A69-CFDE-4143-92E2-BC02C8A0FC9A&Mode=MainBody>](https://carrboro.legistar.com/DepartmentDetail.aspx?ID=20277&GUID=2CC72A69-CFDE-4143-92E2-BC02C8A0FC9A&Mode=MainBody>).

Eleven citizens provided comments to the Board of Aldermen on the concept, which provided for possible co-location of several principle uses including Town offices (specifically those needed for the Recreation and Parks Department), The ArtsCenter, and contemplated Orange County Southern Branch Library. Additional supplemental and related potential uses include a Virtual Justice Center, an initiative of North Carolina Central University School of Law (<http://law.nccu.edu/technology/virtual-justice-project-2/virtual-justice-project/>>), a seed library (<http://seedlibrarian.com/>>), WCOM radio (<http://wcomfm.org/>>), and a teen center. A parking deck containing between 280 and 300 spaces was included in the concept plan to provide for the parking generated by the new uses on the property, and to replace and augment the existing surface spaces provided on this property.

Board members provided comments as well, touching on several topics, including:

- Project schedule - groundbreaking in the fall of 2018;
- Parking - cost, possible partnerships with other property owners, and temporary parking during construction, safety improvements, magnitude of parking as percentage of whole project cost estimate,

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

climate change crisis and consideration in design;

- Support for project elements and appreciation for work on this effort, suggestion for other users and partnership/entrepreneurship models (e.g. American Underground), support for woonerf, mention of building appearance matches Carrboro's look;
- Roberson Street - possible one-way, possible construction footprint in Maple Avenue Extension, possible other tenants, bike sharing for employees

Updated conceptual design options have been developed in response to the June 27th input and will be presented by Jim Spencer, architect with Jim Spencer Architects, PA.

Town staff have been exploring temporary (i.e. during construction) parking areas and possible alternative locations for permanent parking demand generated by the 203 S. Greensboro project and will update the Town as information is available.

Staff has utilized a number of different media approaches to provide outreach for this **hearing**.

FISCAL & STAFF IMPACT: Fiscal and staff impacts associated with considering this information are minimal.

RECOMMENDATION: It is recommended that the Board of Aldermen receive public comments on the concept plan options.



Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:17-275

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Presentation on the 2045 Metropolitan Transportation Plan Alternative Analysis

PURPOSE: The purpose of this agenda item is to provide the Board of Aldermen with an update on the development of the 2045 Metropolitan Transportation Plan, with a focus on the Alternative Analysis. Andy Henry with the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) will make the presentation.

DEPARTMENT: Planning

CONTACT INFORMATION: Christina Moon - 919-918-7325, Patricia McGuire - 919-918-7327, Andy Henry, DCHC-MPO - 919-560-4366, extension 36419.

INFORMATION: The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) is in the process of developing the 2045 Metropolitan Transportation Plan (MTP) to guide transportation investment in the western half of the Triangle region during the next thirty years. The DCHC-MPO area includes all of Durham County, a portion of Orange County including the towns of Chapel Hill, Carrboro and Hillsborough, and northeast Chatham County.

The MTP lists highway, transit and bike-ped transportation projects to address future transportation infrastructure needs (Attachment B). Unlike the Comprehensive Transportation Plan (CTP), the MTP is fiscally constrained and a federal requirement for MPOs. Projects must be included in the MTP for consideration in the prioritization process for the State Transportation Improvement Program (STIP).

The development of the MTP involves a series of detailed steps, each one building on the information generated from the previous one, to determine transportation needs based on future land uses, population and employment. An overview of the process with updates on the steps that have already been completed may be found on the DCHC-MPO website at the following link:

<http://www.dchcmpo.org/programs/transport/2045mtp.asp>. In summary, after defining transportation goals, objectives, and targets for the region, socioeconomic data is reviewed to understand future population and employment changes. A deficiency analysis and needs assessment is completed to determine where investment is needed based on different scenarios: potential needs based on the anticipated growth using existing transportation networks, and potential needs based on the anticipated growth using existing networks and transportation projects that are committed but are not yet completed (referred to Existing plus Committed or E + C). During the alternative analysis step, four future scenario are considered taking into account a combination of infrastructure investment and potential land use development-such as “moderate development”

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

or “aspirational with enhanced transit.” Potential alternatives are analyzed and a preferred option selected (Attachment C). The preferred option is then used to develop the list of transportation improvement projects. While the modeling aspects of the MTP analysis helps inform where infrastructure improvements may be warranted, the selection of projects is guided by local policy.

The alternative analysis phase of the MTP is currently underway, and the DCHC-MPO is receiving public comment until September 20th, 2017. An informal informational drop-in session on the MTP process with a focus on the alternative analysis will be held prior to the Board of Aldermen meeting, in the Board Room from 4:00 pm to 6:30 pm. Members of the public are encouraged to attend, ask questions and offer comments. The next step in the process is to identify a preferred option which will likely be a combination of the various alternatives.

FISCAL & STAFF IMPACT: No fiscal impacts are associated with receiving the presentation.

RECOMMENDATION: Staff recommends that the Board receive the presentation.

A RESOLUTION RECEIVING A PRESENTATION ON THE DCHC-MPO
METROPOLITAN TRANSPORTATION PLAN

WHEREAS, all MPOs are federally mandated to prepare Metropolitan Transportation Plans (MTP) every five years to address future transportation infrastructure needs; and

WHEREAS, transportation projects must be included in the MTP to be eligible for submission to the SPOT process; and

WHEREAS, the draft DCHC-MPO MTP includes highway, bicycle, and pedestrian recommendations for the Town of Carrboro; and

WHEREAS, the public comment period for the Alternative Analysis phase of the 2045 MTP was opened on August 9, 2017 and will extend through September 20, 2017.

NOW, THEREFORE, BE IT RESOLVED by the Carrboro Board of Aldermen that the Board receives the presentation on the draft MTP.

BE IT FURTHER RESOLVED, that the Carrboro Board of Aldermen offers the following comments:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

This the 19th day of September in 2017.



Metropolitan Planning Organization
Planning Tomorrow's Transportation

(<http://www.dchcmpo.org/default.asp>)

2045 Metropolitan Transportation Plan

[2045 MTP](#) [Goals](#) [Land Use](#) [Deficiencies](#) [Alternatives](#) [Preferred](#) [Adopted](#)

2045 MTP

The 2045 Metropolitan Transportation Plan (MTP) will list the highway, transit, passenger rail, bicycle and pedestrian projects to be implemented in the region over the next 30 years. The development and review schedule is shown below. Please see the Alternatives Web page to participate.

- Deficiency Analysis; Board released in June
- Alternative Analysis; Board released in August
- Preferred Option; Board to release on October 11, 2017
- Adopted 2045 MTP; Board to adopt on December 13, 2017

Request for Public Comment

2045 MTP Goals and Objectives

The first step in planning for the 2045 Metropolitan Transportation Plan is to create a set of Goals and Objectives. It is important to understand that this document will drive the MPO's policies and project decision-making process in the future. In addition, the MPO attaches performance measures to the Goals and Objectives that will help the MPO Board and the public assess the extent to which the region's transportation system is meeting the Goals and Objectives.

This Webpage presents the process for developing the Goals, Objectives and Performance Measures. At this point, the public input process has ended but the MPO has not yet adopted the final document because development of the Performance Measures continues.

The MPO requested that the public review the draft Goals, Objectives and Performance Measures and provide feedback to the MPO. This public comment period was from Friday, February 12, 2016 through Friday, April 1, 2016. There are several options for participating, including:

www.surveymonkey.com/r/DCHCMPO-Goals (<http://www.surveymonkey.com/r/DCHCMPO-Goals>)

You can communicate your transportation values to the MPO by completing a short survey at the preceding link.

[Draft Goals, Objectives and Performance Measures](#)

- Review a [copy of the draft Goals, Objectives and Performance Measures here \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29572\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29572)
- Send your comments to [andrew.henry@durhamnc.gov \(mailto:andrew.henry@durhamnc.gov?subject=2045%20MTP%20Draft%20Goals,%20Objectives%20and%20Performance%20Measures\)](mailto:andrew.henry@durhamnc.gov?subject=2045%20MTP%20Draft%20Goals,%20Objectives%20and%20Performance%20Measures)

Public Workshop

Stop in anytime between 4 and 7 pm at the Durham Station Transportation Center (corner of W. Pettigrew St. and W. Chapel Hill St.) on Thursday, March 17 to learn more about your future transportation system and provide your comments on the Goals, Objectives and Performance Measures.

Public Hearing

You can provide feedback on the Goals, Objectives and Performance Measures to local elected officials (DCHC MPO Board) on Wednesday, March 9, 2016 at 9:00 AM in the Committee Room (2nd Floor of Durham City Hall, 101 City Hall Plaza). Persons with disabilities will be accommodated -- provisions must be requested at least 48 hours in advance of the meeting.

Contact

Comments and questions should be directed to:

Andy Henry, City of Durham, Transportation Department
101 City Hall Plaza
Durham, NC 27701

E-mail: [andrew.henry@durhamnc.gov \(mailto:andrew.henry@durhamnc.gov?subject=2045%20MTP%20Draft%20Goals,%20Objectives%20and%20Performance%20Measures\)](mailto:andrew.henry@durhamnc.gov?subject=2045%20MTP%20Draft%20Goals,%20Objectives%20and%20Performance%20Measures) Phone:(919) 560-4366, ext. 36419

Background

The MPO forecasts socioeconomic data (SE Data), such as dwelling units, population and employment, to the year 2045 and uses that data as a key input into the travel demand model (called the Triangle Regional Model, or TRM). The process starts with the 2045 guide totals, which are county- level population and employment projections for the year 2045, and proceeds to the Community Visualization model that distributes the dwelling units and employment to particular parcels based on land availability and suitability. The following document will provide details of this process and the output:

[2045 MTP Guide Totals \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29951\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29951)

[Community Visualization \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29952\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29952)

Connect 2045 -- Scenarios

Different scenarios, or different ways that the region might develop, are created under the name Connect 2045. More information on how and why these scenarios are created can be found [here \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29956\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29956). This section presents the outputs of the various scenarios as they become available.

Community Plans

This scenario is based on the adopted local land use plans and can be considered the "most likely" scenario.

- [New household distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29988\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29988)
- [New employment distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29987\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29987)

- [Distribution tables by jurisdiction \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29961\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29961)

Attachment B

AIM High

This scenario pushes the limits but is still market possible. It is based on draft data from a regional study on rail station development potential. It has a higher density and mixed use around future rail stations than the Community Plan scenario.

- [New household distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29992\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29992)
- [New employment distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29991\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29991)
- [Distribution tables by jurisdiction \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29990\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29990)



<http://arcg.is/qfzGH>

<http://arcg.is/2r6NQuu>

The icon above provides an interactive daily congestion map for the year 2045. See the information below under Congestion Maps for more information.

Background

What is a Deficiency Analysis?

The concept is fairly simple. The analysis compares today's travel conditions with that of a future year. Thus, the Deficiency Analysis shows staff, the MPO and the public where transportation investments in highways, transit and other modes are needed to address the future travel demands. It will guide the development and evaluation of the various transportation alternatives that will be considered in a subsequent step of the 2045 MTP development.

What Future Year is Used?

The measures and maps are based on a travel demand model that estimates conditions in two different years:

2013- This is 2013 population and employment using the existing transportation system of streets, transit, etc., and reflects the current travel conditions.

2045 E+C- This is the estimated 2045 population and employment using the existing transportation system plus any projects that are committed to construction or implementation. "E+C" means "Existing plus Committed." This "no build" scenario allows us to see where future deficiencies are to be expected.

What is the Next Step?

With the MPO's Goals and Objectives in mind, staff will use the deficiency data to create several alternatives to meet the future travel demand. This Alternatives Analysis will be released to the public and will include public meetings and a hearing to help gather people's comments.

2045 MTP Deficiency Analysis

The following link is a presentation on the Deficiency Analysis. This Web page provides the detailed tables and maps that comprise the Deficiency Analysis and presents the Socioeconomic Data (SE Data) used to generate the analysis.

- [Presentation of Deficiency Analysis \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29975\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29975)

Congestion Maps

The congestion maps estimate the level of congestion in the year 2045 if no additional transportation projects are implemented. This is often called the No Build Scenario. In this case, the travel demand model puts the trip demand for the 2045 population and 2045 employment on to the current transportation network that might also have a few additional approved projects (e.g., East End Connector and Alston Ave widening) that are close to beginning construction. The maps depict the level of congestion by dividing the traffic volume by the road capacity. So, if the road has 8,000 vehicle trips per hour and the road capacity is 10,000 vehicles; the V/C (volume to capacity value) will be 0.80. Note that the MPO's travel demand model uses a Level of Service (LOS) of "E," or the V/C = 1.0. Most motorists would experience LOS E as highly congested and the overall travel delay would be great especially in urban areas and those areas with intersections and driveways. Thus, most motorists would experience a V/C higher than 1 as highly congested (orange lines on the map), and a V/C higher than 1.2 as long delays (red lines on the map).

The thumbnail map at the top of this page provides an interactive daily congestion map.

Afternoon Peak

The congestion maps below show the average V/C for both roadway directions for the afternoon peak hour (i.e., 5:30pm to 6:30pm. Roadways in which the V/C exceeds 1 are labeled with the actual V/C value.

- [DCHC MPO Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29981\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29981)
- [Chatham County Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29977\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29977)
- [Durham County Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29979\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29979)
- [Orange County Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29983\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29983)
- [Close up of Central Durham Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29976\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29976)
- [Southwest Durham Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29985\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29985)
- [Southeast Durham Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29984\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29984)
- [Northern Durham Peak Hour Congestion Map \(http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29982\)](http://www.dchcmo.org/civicax/filebank/blobdload.aspx?BlobID=29982)

- [Close up of Chapel Hill and Carrboro Peak Hour Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29978)
(<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29978>)

- [Hillsborough Peak Hour Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29980) (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29980>)

Daily

The congestion maps below show the daily V/C for each roadway. Roadways in which the V/C exceeds 1 are labeled with the actual V/C value."

- [DCHC MPO Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29969) (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29969>)
- [Chatham County Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29965) (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29965>)
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- (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29965>)[Durham County Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29967)
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- (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29967>)[Orange County Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29971)
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- (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29971>)[Close up of Central Durham Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29964)
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- (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29972>)[Northern Durham Daily Congestion Map](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29970)
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Travel Time

The table and maps below show the travel time between key destinations in the Triangle region in 2013 and 2045, and calculates the change in that travel time. These travel times are for the afternoon peak hour. The map shows the average travel time for the afternoon peak hour, the connector lines becoming a "hotter" color as the percentage increase in travel time from 2013 to 2045

<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29968>)

- <http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29968>)Travel Time table
<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29962>)
- [Map showing travel times \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29963\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29963)

Isochrone Maps

An isochrone map shows lines that connect the points that have the same travel time from a specified point. The isochrone maps below show the travel time to key destinations in the Triangle region in fifteen minute increments. The destinations are the downtowns or center of Durham, Chapel Hill, Raleigh and the Research Triangle Park.

- [Isochrone Maps \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29974\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29974)

Performance Measures

The Performance Measures are a broad set of calculations that provide an indicator of the mobility, trip volume, mode choice and congestion in the overall transportation system. The measures are not specific to a travel corridor or transportation project but are useful for broad comparisons of different transportation system alternatives. The first table below compares the 2013 and the 2045 Existing plus Committed (E+C, also known as the No Build) models for the DCHC MPO. The remaining tables provide the same data at the county level.

- [DCHC MPO Performance Measures \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29957\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29957)
- [Performance Measures by County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29986\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29986)

SE Data

The Triangle J Council of Governments (TJCOG), in partnership with the MPO, forecasts Socioeconomic Data (SE Data; such as dwelling units, population and employment) to the year 2045. This forecast is used as key input into the Triangle Regional Model (TRM -- the regional travel demand model). The TRM is a principal tool for identifying the future transportation deficiencies in our area and helping to propose transportation improvements to address those deficiencies. This model is used for long range plans, major transit and transportation studies and transportation project environmental analyses.

The guide totals document below shows the expected population and employment growth from 2013 through 2045 for Triangle counties. These guide totals are input to a land use model called Community Visualization that uses a set of rules and database of available land to geographically distribute the population and employment. The two set of maps show the forecasted distribution for households and employment by MPO and county. Finally, the distribution tables show the detailed household and employment growth capacity in each county and how the guide totals were distributed.

- [Guide Totals by County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29958\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29958)
- [New Household Distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29988\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29988)
- [New Employment Distribution by MPO and County \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29987\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29987)
- [Distribution Tables \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29961\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29961)



(<http://arcg.is/0mme84>)



(<http://arcg.is/X0rbS>)



(<http://arcg.is/mabqz>)



(<http://arcg.is/H19yK>)

Presentation on Alternatives Analysis

(<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30017>)

Background

This Web page presents background and public involvement information, and then the analysis metrics and maps for the Alternatives Analysis.

Alternatives Analysis -- Overview

An Alternative is a combination of a transportation network, which includes a set of highway, transit and other transportation improvements, and a land use scenario that depicts the distribution of population and employment for the year 2045. These Alternatives are run in the Triangle Regional Model (TRM) to produce a set of transportation metrics that describe how well the Alternative meets future travel demand.

It should be noted that it is very unlikely that one of the Alternatives in its entirety would be advanced as the Preferred Option. The final 2045 CTP will be a combination of projects and policies from the various Alternatives.

Citizen Participation

(<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30024>)

(<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30024>)

The following information and links provide opportunities for the public to provide input on the long-range plan:

(<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30024>)

- **Workshops** (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30024>)
- **Public Hearing:** The MPO Board will conduct a public hearing on September 13, 2017, 9AM, in the Committee Room on the 2nd Floor of Durham City Hall. The public can sign up to speak directly to the TAC on the Alternatives.
- **Local Elected Officials and Boards** (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30024>)
- Comments can be sent to:

Andy Henry
City of Durham/Transportation Dept.
101 City Hall Plaza
Durham, NC 27701
(919)560-4366, extension 36419
andrew.henry@durhamnc.gov (<mailto:andrew.henry@durhamnc.gov>)

- **Comment Period:** The public comment period for the Alternatives will run from August 9, 2017 through September 20, 2017.

For more information, citizens can contact:

Andy Henry
(919)560-4366, extension 36419
andrew.henry@durhamnc.gov (<mailto:andrew.henry@durhamnc.gov>)

Alternatives Analysis Background

Scenarios

The MPO developed four future scenarios. Each scenario is based on a combination of a mobility investment (or assumption of improved highway, transit and other transportation facilities) and a development foundation (or, land use assumptions). The following documents provide more information on these scenarios.

- [Summary of Scenarios \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30003\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30003)
- [Details on Scenario Development \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30004\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30004)

Development Foundation

For information on the two different land use assumptions used in the four scenarios, see the 2045 MTP's land use Web page: <http://bit.ly/DCHC-MTP-LandUse> (<http://bit.ly/DCHC-MTP-LandUse>)

Mobility Investment

The link below is an interactive map that shows highway network improvements in Mod-MTP, Asp-MTP and Asp-Transit Alternatives (which is the 2040 MTP network), and those for the Mod-Hwy Alternative (with is the 2040 MTP & Highway Plus network). The user can click on the highway and interchanges to get a pop-up that has additional information on the project.

[Map: Highways and Interchanges in the Alternatives \(http://arcg.is/DOWvK\)](http://arcg.is/DOWvK)

Alternatives Analysis Data and Maps

Congestion Maps

The poster-sized maps at the links below and interactive maps at the top of this Web page provide the daily congestion values for the principal roadway segments in the MPO.

- [Understanding Congestion Maps \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29998\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29998)
- [Moderate VC Map \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29999\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29999)
- [Moderate \(highway enhanced\) VC Map \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30000\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30000)
- [Aspirational \(transit enhanced\) VC Map \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30001\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30001)
- [Aspirational VC Map \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30002\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30002)

Travel Choice Neighborhoods (TCN)

Travel Choice Neighborhoods focus on the mode choice change in areas that are expected to experience significant transit investment.

- [Background, tables and graphs \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30010\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30010)
- [Details on TNC method \(http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30011\)](http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30011)

This measure provides the time, speed and cost of travel in the most important travel corridors of the MPO for each Alternative. The two tables show indicators of congestion. The Travel Time Index indicates the level of congestion by dividing the peak period travel time by the free-flow travel time. For example, a TTI of 1.2 means that a 10-minute free-flow trip will take 12 minutes in the afternoon peak. The Hourly Cost of Congestion shows the value of the additional time it takes for all the motorists, both car and truck, while traveling in that corridor under congested conditions. All of the values in the tables are colored – the higher, or more congested values, are a hotter color, i.e. red.

- Travel Time Index by Corridor (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30012>)
- Hourly Cost of Congestion (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30013>)
- Travel Time (in minutes) (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30014>)
- Peak Speed (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30015>)

Travel Time -- Key Destinations

The tables and maps below compare the travel time between key destinations in the Triangle for the 2013 Base Year and each of the four Alternatives. The Alternatives consistently increase the travel time between these destinations because the MPO's counties will experience population and employment increases of approximately 300,000 and 200,000, respectively, by the year 2045.

- Travel Time Tables (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30007>)
- Travel Time Maps (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30009>)

Isochrone Maps

Isochrone travel maps connect the points that have the same travel time from a specified center. They resemble contour maps. They are useful for illustrating the labor, retail, residential and other markets in terms of travel time. The tables and maps below depict the afternoon peak hour and compare the four different alternatives for each center.

- Tables: population, employment and area in terms of travel market (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30016>)
- Downtown Durham (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29994>)
- Carrboro/Chapel Hill (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29993>)
- Research Triangle Park (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29995>), and
- Downtown Raleigh (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=29997>)

Performance Measures

These measures are not specific to a particular roadway or travel corridor but instead cover the entire transportation system, and therefore are useful for comparing the overall efficiency and effectiveness of the different transportation Alternatives. Most of the data used for calculating the Performance Measures comes from the Triangle Regional Model (TRM), which is the travel demand model for the entire region.

- Performance Measure Table - MPO (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30005>)
- Performance Measure Table - By Country (<http://www.dchcmpo.org/civicax/filebank/blobdload.aspx?BlobID=30028>)

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2045 MTP – Alternatives Analysis – Scenarios

The table below provides the combination of mobility investment (Highway Network and Transit Network) and development foundation (socioeconomic data for the land use) for each of the four scenarios.

The Alternatives Analysis scenarios are often compared to the base year (2015) and the no-build scenario (Existing plus Committed, or E+C), and thus these comparison scenarios are shown at the bottom of the table. The metrics and maps for these comparison scenarios can be found at the 2045 MTP Deficiency Analysis Web page:

<http://www.dchcmpo.org/programs/transport/2045mtp.asp#tabs6>

Scenario	Highway Network	Transit Network	SE Data
Alternatives			
Moderate1- 2040 MTP	2040 MTP	2040 MTP (LRT, CRT, BRT)	Community Plan
Moderate3- Highway Enhanced/No Fixed Guideway	2040 MTP+	No Fixed Guideway (no LRT, CRT, BRT)	Community Plan
Aspirational1- Transit Enhanced	2040 MTP	Fixed Guideway+ <ul style="list-style-type: none"> • LRT to Carrboro • 15min peak bus headway • 30min off-peak bus headway 	AIM High
Aspirational2- 2040 MTP	2040 MTP	2040 MTP (LRT, CRT, BRT)	AIM High
Baseline and E+C			
2013 – Baseline	2013	2013	2013
2015 -- Baseline	2015	2015	2015 – interpolate SE Data
2045 E+C	E+C	E+C	Community Plan



Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:17-277

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Update on the Status of Transportation Projects - Merritt Mill/Franklin/East Main/Brewer (TIP #U-5847)

PURPOSE: The purpose of this agenda item is to provide the Board with an update on the status of the intersection improvement project with a focus on possible designs and anticipated timelines for moving forward.

DEPARTMENT: Planning

CONTACT INFORMATION: Christina Moon - 919-918-7325, Patricia McGuire - 919-918-7327

INFORMATION: Conceptual intersection improvements for the five-way intersection at Merritt Mill Road, Franklin Street, East Main Street and Brewer Lane, recommended as part of the 2005 Downtown Circulation Study, were programmed for funding in the 2016-2025 STIP with an anticipated timeline of construction occurring in FY2019. The project which crosses the jurisdictional line between Carrboro and Chapel Hill has proven challenging, due in part to the skewed alignment of the existing road network and in part due to its categorization as a highway project with an intended focus on improving vehicular level of service (LOS).

The Board of Aldermen has received updates on the project on May 10, 2016 and June 6, 2017. On August 29th, elected officials and staff from Carrboro and Chapel Hill met with NCDOT to review the status of the project, to discuss aspects of the different design scenarios that seemed problematic and to convey a shared interest in improving facilities for bike-ped as well as for cars and transit. The proposal for a five-way roundabout (or "beanabout") was noted as one of the designs that seemed to achieve some vehicular LOS improvement, but the need for right-of-way acquisition was not insignificant and enhancements for bike-ped users were minimal. Potential costs for bike-ped improvements for this project have yet to be determined but, for highway projects in general, such costs are typically assigned to the local jurisdiction as a cost share or match.

At the close of the August meeting, a representative from the NCDOT Board noted a possibility of another federal funding source that might be available for use toward the bike-ped improvements in the project. Town staff also shared a "back of an envelope" sketch of potential bike-ped facilities--extending curbs to reduce crossing distances and adding pavement markings to better define crosswalks--that would improve the bike-ped experience, and clarify the appropriate path for all users traveling through the intersection. NCDOT staff is researching the federal funding option as well as the development of schematic designs showing the suggested bike-ped improvements.

Agenda Date: 9/19/2017

File Type:Agendas

In Control: Board of Aldermen

Version: 1

Subsequently, at the September 13th DCHC-MPO Board meeting, NCDOT staff recommended submitting the same intersection improvement location as a bike-ped project for scoring in the P5.0 process. If the bike-ped version scored well, it would provide the towns with an opportunity to compare project scopes and determine the most appropriate improvement for the location, while keeping a version of the original highway project on track. In response to this suggestion, a bike-ped version of intersection improvements at the Merritt Mill/Franklin/East Main/Brewer Lane project was included in the approved list of P5.0 projects to be submitted to NCDOT for formal scoring in the prioritization process for the FY2020-2029 STIP.

FISCAL & STAFF IMPACT: No fiscal impacts are associated with receiving the project update.

RECOMMENDATION: Staff recommends that the Board consider the resolution provided (Attachment A) receiving the update and offering any additional input for staff to convey to NCDOT regarding this project.

**A RESOLUTION RECEIVING AN UPDATE ON INTERSECTION IMPROVEMENTS
AT MERRITT MILL-FRANKLIN –MAIN-BREWER (TIP #U-5847)**

WHEREAS, a highway project to improve the intersection of Brewer Lane-West Franklin Street-East Main Street-Merritt Mill Road Lane received State funding and is programmed to be constructed in FY2019; and

WHEREAS, conceptual design has been underway with an alternatives analysis yielding descriptions of benefits associated with the different types of improvements; and

WHEREAS, the Town of Carrboro and the Town of Chapel Hill have reviewed the alternatives and requested clarifying information from the project designers; and

WHEREAS, on the recommendation of NCDOT, an intersection improvement project at the same location was submitted for scoring as a bike-ped project in SPOT Prioritization 5.0 for consideration in the FY2020-2029 State Transportation Improvement Program (STIP), as an alternative to the highway project.

NOW, THEREFORE BE IT RESOLVED that the Carrboro Board of Aldermen requests that the North Carolina Department of Transportation (NCDOT) continue its work to evaluate improvements for all modes at the Merritt Mill-Franklin-Main-Brewer intersection,

BE IT FURTHER RESOLVED that the Carrboro Board of Aldermen provides the following additional comments on the project:

This the 19th day of September in the year 2017.