



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY PERDUE
GOVERNOR


EUGENE CONTI
SECRETARY

September 16, 2010

MEMORANDUM TO: Mr. J. Wally Bowman , PE
Division Five Engineer

FROM: Philip S. Harris, III, P.E., Unit Head
Natural Environment Unit
Project Development and Environmental Analysis Branch

SUBJECT: Wake County, Edwards Mill Road (SR 3009) Greenway from Reedy Creek Road
(SR 1775) to Trinity Road (SR 1656); T.I.P. Number EB-4978; Federal Aid
Project No. STP-0520(31); WBS Element 39981



Attached is the Riparian Buffer Authorization for the above referenced project. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:
<http://www.ncdot.gov/doh/preconstruct/pe/neu/permit.html>

PSH/gyb

Attachment

Cc: W/attachment
Mr. Randy Garris, P.E. State Contract Officer
Mr. Chris Murray, Division Environmental Officer

Cc: W/o attachment (see website for attachments)
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design
Dr. David Chang, P.E., Hydraulics
Mr. Art McMillan, P.E., Highway Design
Mr. Tom Koch, P.E., Structure Design
Mr. Dewayne Sykes, P.E., Utilities Unit
Mr. Mark Staley, Roadside Environmental
Mr. John F. Sullivan, FHWA
Mr. Ron Hancock, P.E., State Roadway Construction Engineer
Mr. Mike Robinson, P.E., State Bridge Construction Engineer
Ms. Beth Harmon, EEP
Mr. Eric Midkiff, P.E., PDEA Central Region Unit Head

PROJECT COMMITMENTS

Edwards Mill Road (SR 3009) Greenway
From Reedy Creek Road (SR 1775) to Trinity Road (SR 1656)
Raleigh
Wake County
WBS Element 39981
Federal Project Number STP-0520(31)
TIP Project Number EB-4978

Commitments Developed through Project Development and Design

There were no special commitments developed during project development or design.

Commitments Developed Through the Permitting Process

There were no special commitments developed during the permitting process.

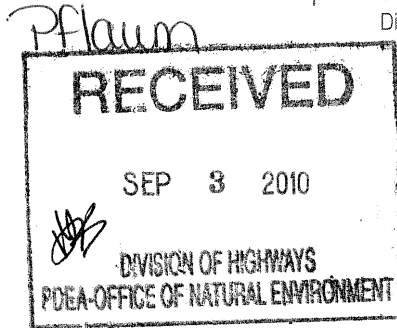


North Carolina Department of Environment and Natural Resources

Division of Water Quality
Coleen H. Sullins
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary



September 2, 2010
Wake County
NCDWQ Project No. 20100716
Edwards Mill Road multi-use path
TIP No. EB-4978

APPROVAL of NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS

Dr. Gregory J. Thorpe, Environmental Management Director
NCDOT PDEA
1598 Mail Service Center
Raleigh, NC 27699-1598

Dear Dr. Thorpe:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of constructing a multi-use path along Edwards Mill Road in Wake County:

Neuse Riparian Buffer Impacts

Site	Zone 1 Impact (sq ft)	minus Wetlands in Zone 1 (sq ft)	= Zone 1 Buffers (not wetlands) (sq ft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sq ft)	minus Wetlands in Zone 2 (sq ft)	= Zone 2 Buffers (not wetlands) (sq ft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	215	0	215	N/A	705	0	705	N/A
2	1055	0	1055	N/A	730	0	730	N/A
3	2010	0	2010	N/A	895	0	895	N/A
Totals	3280	0	3280	0	2330	0	2330	0

* n/a = Allowable activity; no mitigation required.

Total Buffer Impact for Project: 5,610 square feet.

The project shall be constructed in accordance with your application dated received August 31, 2010. This approval is valid for the Neuse Riparian Buffer Rules (15A NCAC 2B.0233). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the NCDWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC.0242(9). For this approval to remain valid, you must adhere to the conditions listed below.

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 2321 Crabtree Blvd. Suite 250, Raleigh, North Carolina 27604
Phone: 919-733-1786 \ FAX: 919-733-6893
Internet: <http://h2o.enr.state.nc.us/ncwetlands/>



Conditions of Certification:

1. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction.
2. Pursuant to 15A NCAC 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by NCDWQ. At this time, NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
3. All stormwater runoff shall be directed as sheetflow through stream buffers at nonerosive velocities, unless otherwise approved by this certification.
4. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
5. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
6. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
7. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.
8. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
9. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
10. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
11. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
12. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
13. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
14. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If NCDWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, NCDWQ may reevaluate and modify this certification.
15. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

16. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.

17. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.

18. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.

19. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify NCDWQ when all work included in the Certification has been completed.

20. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction.

21. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.

22. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:

- a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
- b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
- c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
- d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

23. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.

The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-733-2698, Facsimile: (919)-733-3478

A copy of the petition must also be served on DENR as follows:

Ms. Mary Penny Thompson, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please contact Rob Ridings at 919-733-9817.

Sincerely,



Coleen H. Sullins
Director

Cc: Chris Murray, Division 5 Environmental Officer
Eric Alsmeyer, US Army Corps of Engineers, Raleigh Field Office
James Pflaum, NCDOT NEU
File Copy

NCDWQ Project No.: _____

County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to NCDWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules; the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____

STATE OF NORTH CAROLINA
 DIVISION OF BICYCLE AND
 PEDESTRIAN TRANSPORTATION

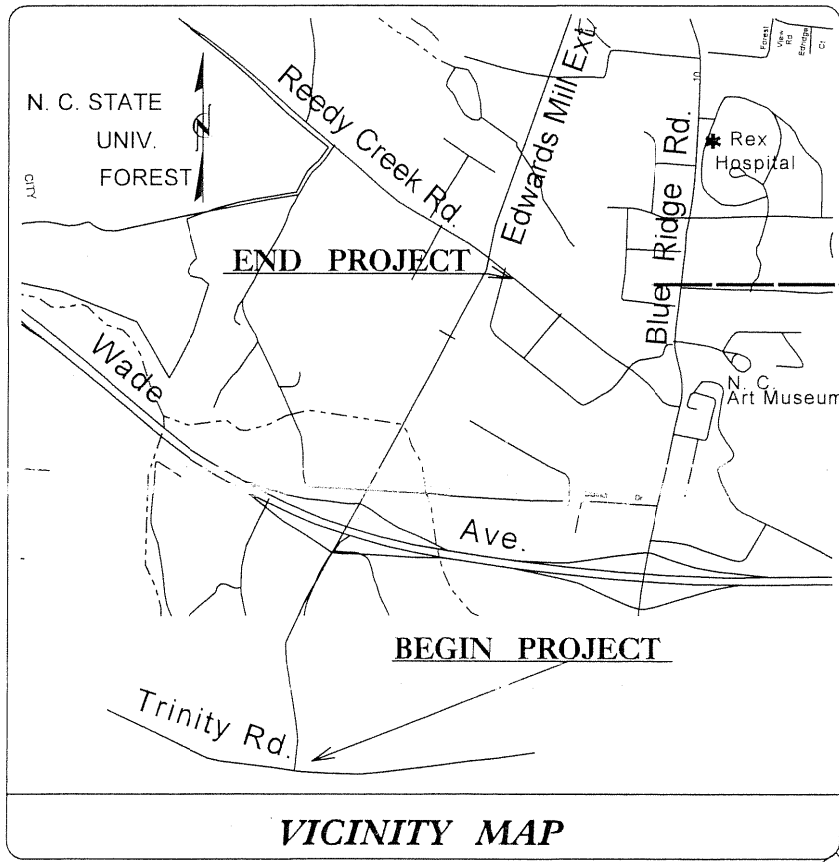
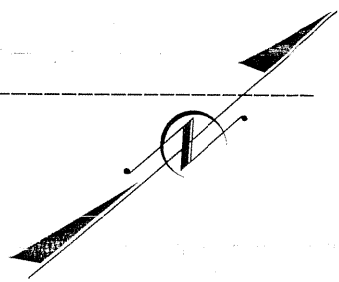
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N.C.	E-4978	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	

Wake County

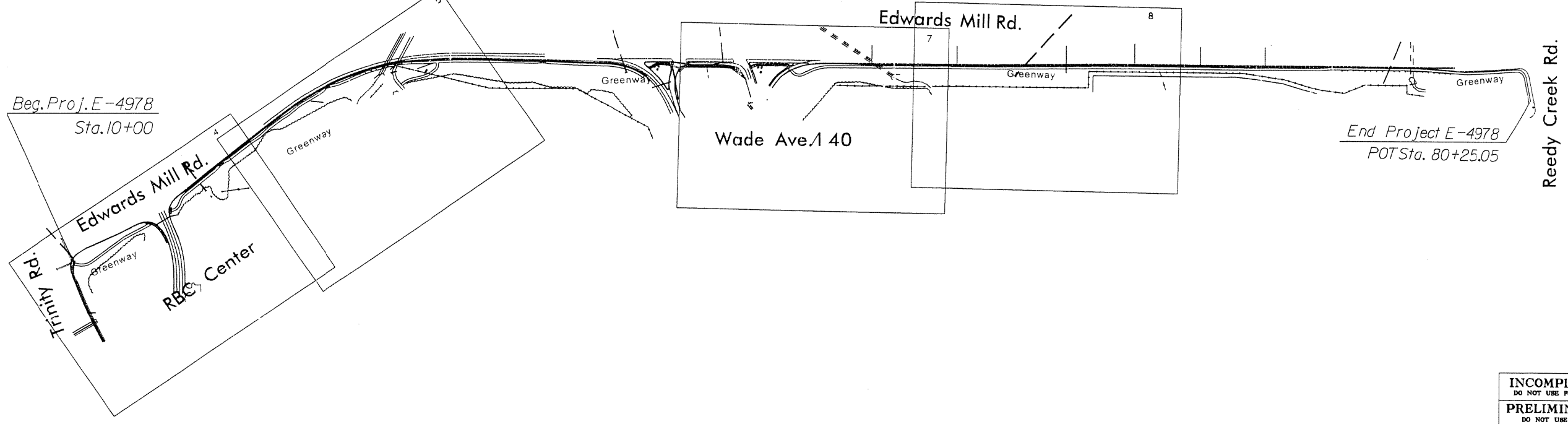
LOCATION: Along Edwards Mill Rd. From Trinity Rd.
To Reedy Creek Rd. Pedestrian Culvert

TYPE OF WORK: Grading, Paving, Drainage, and Structure

Buffer Drawing
 Sheet 1 of 1



BUFFER PERMIT



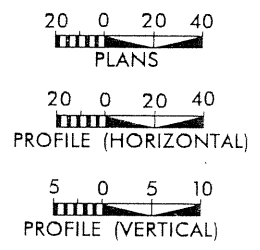
INCOMPLETE PLANS
 DO NOT USE FOR R/W ACQUISITION
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

PROJECT: E-4978

INDEX OF SHEETS

SHEET 1	TITLE SHEET	SHEETS 4 THRU	PLAN SHEETS
SHEET 1-A	SYMBOL SHEET	SHEETS ___ THRU	PROFILE SHEETS
SHEET 2	PAVEMENT SCHEDULE	SHEETS TCP-1 THRU TCP-___	PAVEMENT MARKING PLANS
	TYPICAL SECTION		SIGNING PLANS
SHEET 2-A	BOLLARD DETAILS	SHEETS EC-1 THRU EC-___	EROSION CONTROL PLANS
	TRAIL CONNECTION DETAIL	SHEETS X-1 THRU X-___	CROSS-SECTIONS
	SIGN PLACEMENT DETAIL		
SHEET 3	PIPE SUMMARY		
	EARTHWORK SUMMARY		
	GENERAL NOTES		
	LIST OF STANDARDS		

GRAPHIC SCALES



HYDRAULICS ENGINEER
 _____ P.E.
 SIGNATURE:
 BICYCLE FACILITY
 DESIGN ENGINEER
 _____ P.E.
 SIGNATURE:

PROJECT LENGTH
 TRAIL: 7025 / 1.33 FEET / MILES
DESIGN DATA
 V = 20 MPH
2006 SPECIFICATIONS

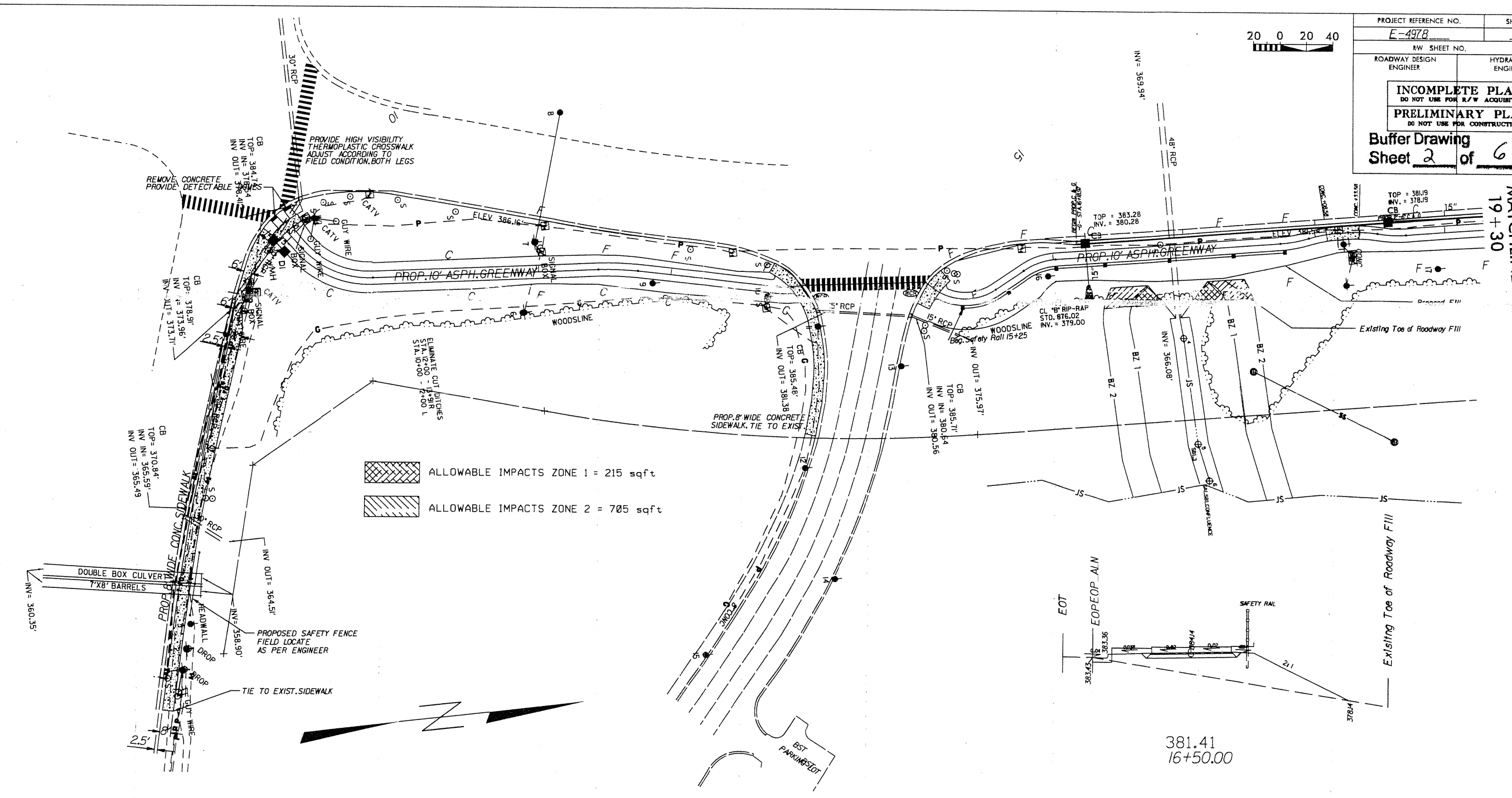
**Division of
 Bicycle &
 Pedestrian
 Transportation**

THOMAS P. NORMAN
 DIRECTOR

8/17/99

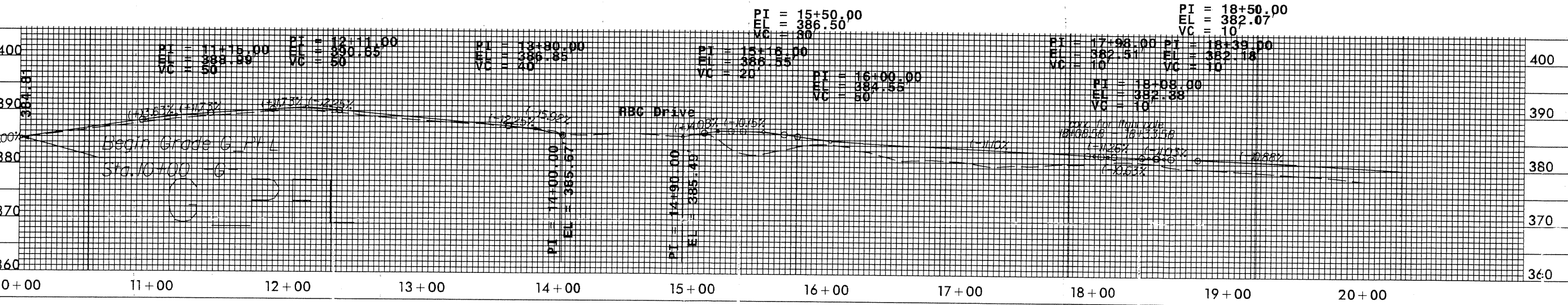
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PROJECT REFERENCE NO. E-4978	SHEET NO. 4
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INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
Buffer Drawing Sheet <u>2</u> of <u>6</u>	



- ALLOWABLE IMPACTS ZONE 1 = 215 sqft
- ALLOWABLE IMPACTS ZONE 2 = 705 sqft

MATCHLINE SHT. 5
19 + 30

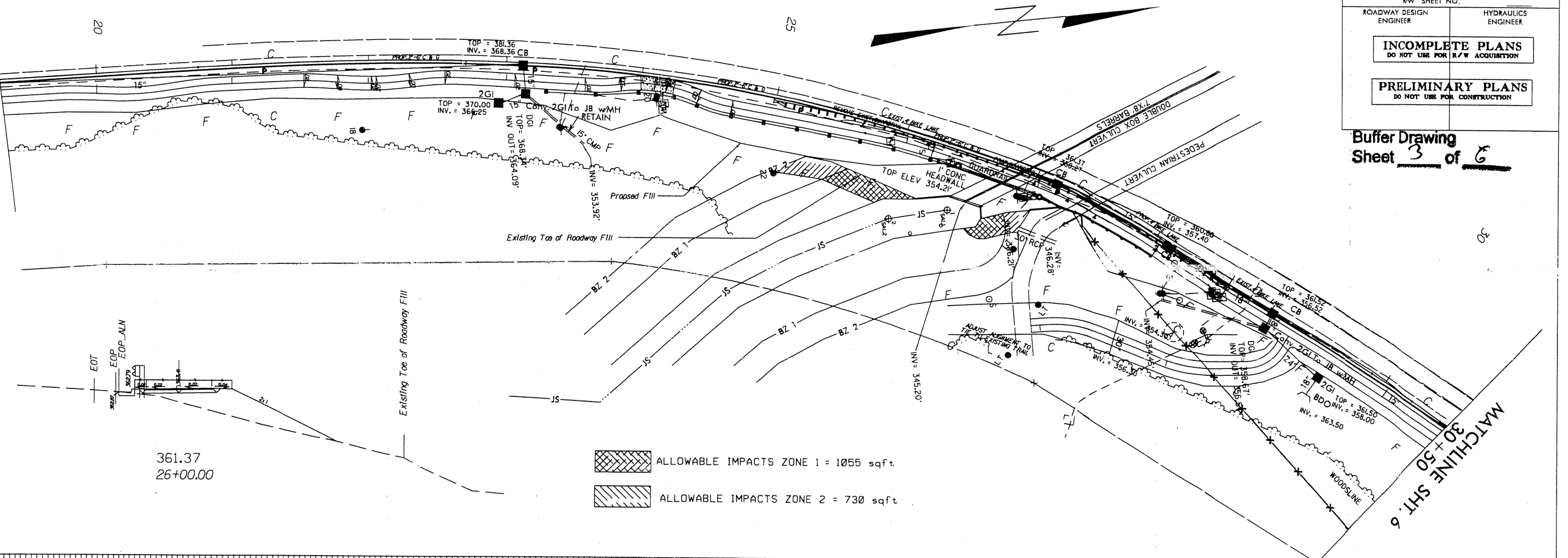


8/17/99

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E-497B		5	
RW SHEET NO.			
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PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

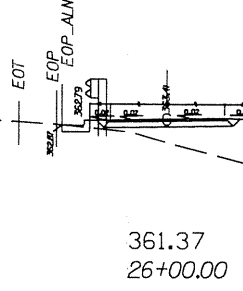
Buffer Drawing
Sheet 3 of 6

MATCHLINE SHT. 4
19+30



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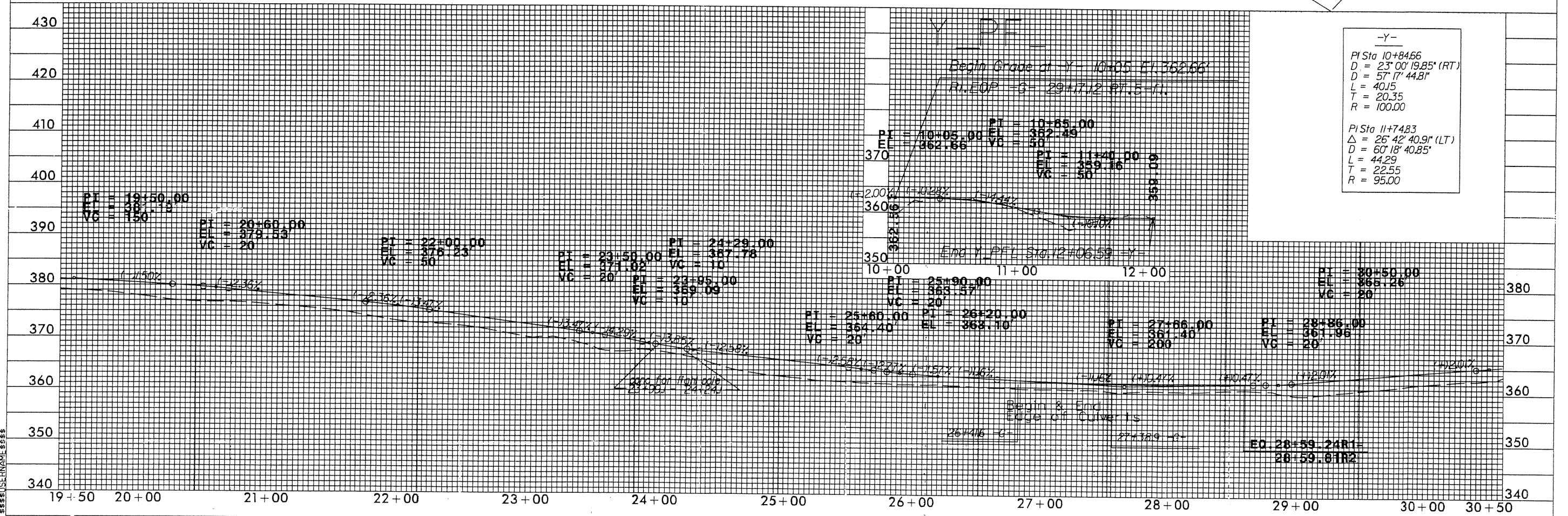
ALLOWABLE IMPACTS ZONE 2 = 730 sqft.



-Y-

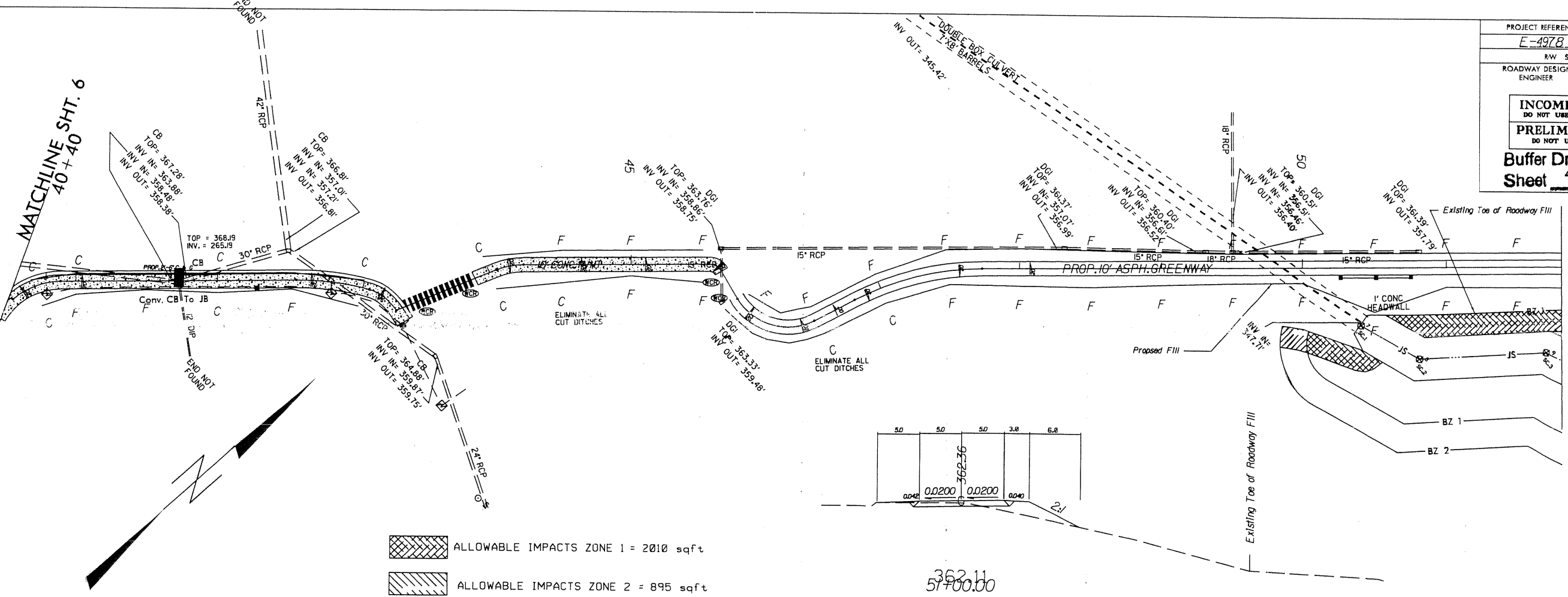
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D = 57' 17" 44.81"
L = 40.15
T = 20.35
R = 100.00

PI Sta 11+74.83
Δ = 26° 42' 40.9" (LT)
D = 60' 18" 40.85"
L = 44.29
T = 22.55
R = 95.00

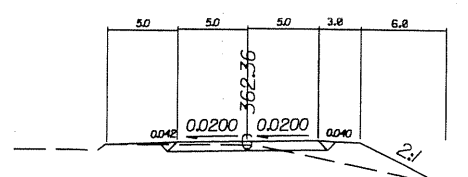


B/17/99

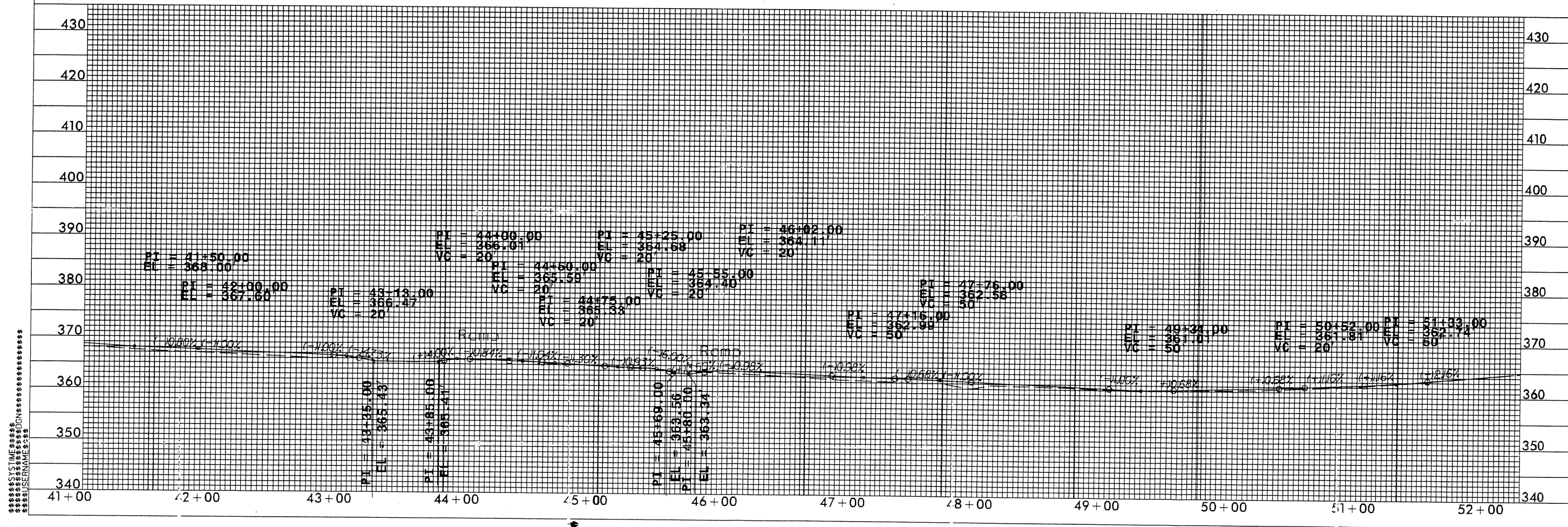
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
Buffer Drawing Sheet 4 of 6	



- ALLOWABLE IMPACTS ZONE 1 = 2010 sqft
- ALLOWABLE IMPACTS ZONE 2 = 895 sqft



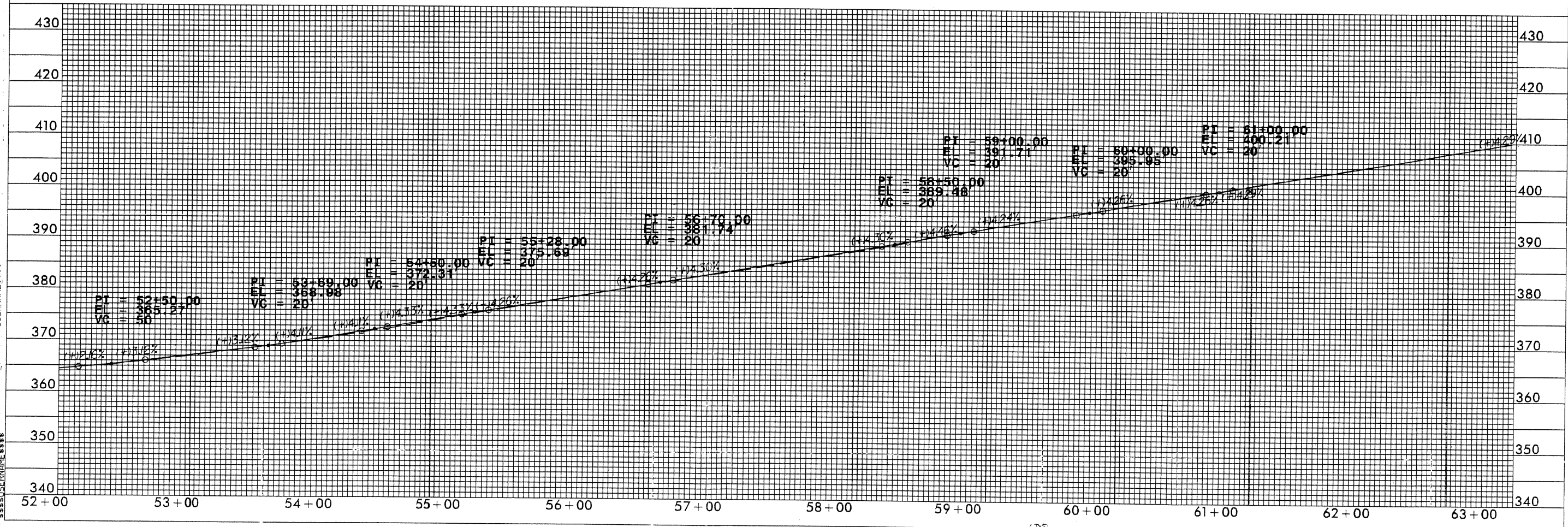
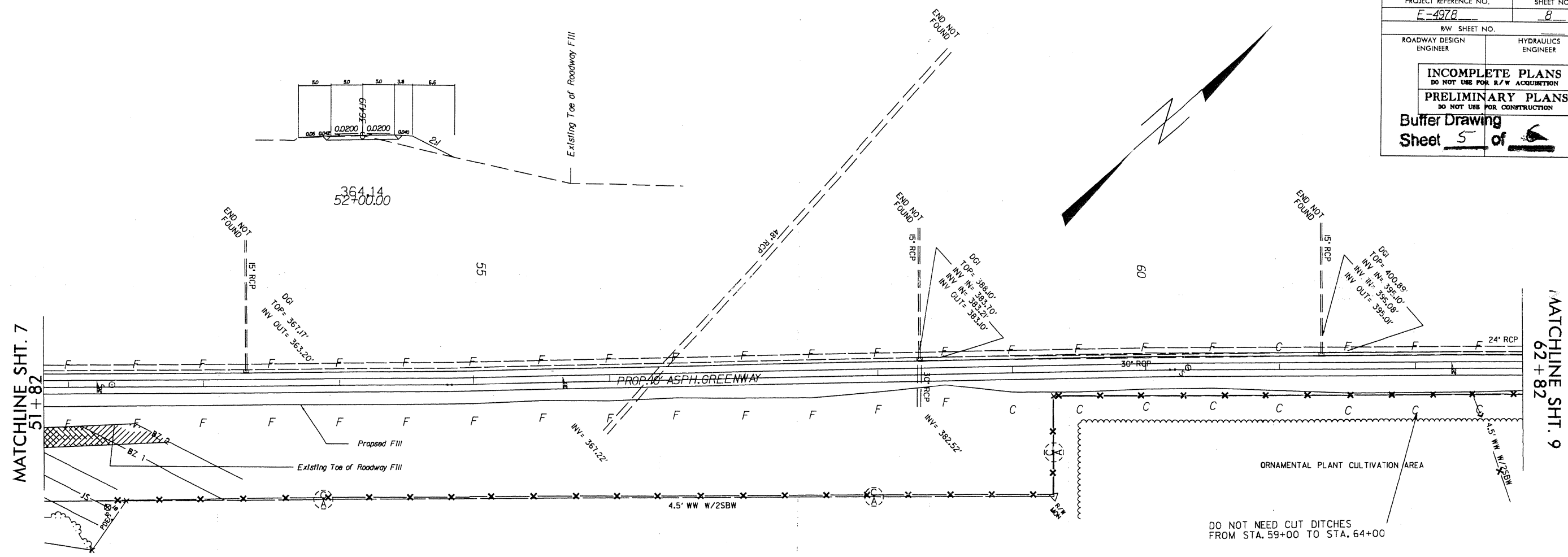
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8/17/99

PROJECT REFERENCE NO. E-497B	SHEET NO. B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
Buffer Drawing Sheet <u>5</u> of <u>5</u>	



SYSTEM TIME DESIGNER USERNAME

