

Taxiway Location

**NOTE:**  
Streams and wetlands depicted on property not owned by PTAA have not been delineated or verified by USACE or NCDENR.

LEGEND	
	Existing Right-Of-Way / Property Line
	Future Roadway Construction
	Proposed NCDOT Right-Of-Way
	Proposed Taxiway Grading Limits
	Southwest Alt. Grading Limits
	Northeast Alt. Grading Limits
	Wetlands
	Conservation Easement
	Perennial Stream
	Intermittent Stream
	50' Jordan Buffer (Zone 1 - 30')
	50' Jordan Buffer (Zone 2 - 20')

Highway 68 Interchange

Pleasant Ridge Rd

Centerline - Southwest Alt.

**NORTHEAST ALT.**  
 Size: 32 ac  
 Streams (Perennial): 170 Lf.  
 Streams (Intermittent): 164 Lf.  
 Zone 1 Jordan Buffer (30'): 15,651 s.f.  
 Zone 2 Jordan Buffer (20'): 11,140 s.f.  
 Wetlands: 0.00 ac  
 Preliminary Earthwork  
 Cut: 287,143 cu yd  
 Fill: 331,551 cu yd  
 Borrow: 74,408 cu yd

**SOUTHWEST ALT.**  
 Size: 34 ac  
 Streams (Perennial): 400 Lf.  
 Streams (Intermittent): 0.00 Lf.  
 Zone 1 Jordan Buffer (30'): 37,275 s.f.  
 Zone 2 Jordan Buffer (20'): 30,894 s.f.  
 Wetlands: 0.03 ac  
 Preliminary Earthwork  
 Cut: 214,161 cu yd  
 Fill: 408,002 cu yd  
 Borrow: 193,841 cu yd

**PROPOSED TAXIWAY**  
 Size: 33 ac  
 Streams (Perennial): 222 Lf.  
 Streams (Intermittent): 115 Lf.  
 Zone 1 Jordan Buffer (30'): 20,853 s.f.  
 Zone 2 Jordan Buffer (20'): 11,273 s.f.  
 Wetlands: 0.00 ac  
 Preliminary Earthwork  
 Cut: 234,250 cu yd  
 Fill: 342,876 cu yd  
 Borrow: 88,828 cu yd

Airport Interchange

ASR Area Not To Be Disturbed

30' Shift For Northeast Alt.  
 Centerline Northeast Alt.

Centerline - Southwest Alt.

Centerline Proposed TWW  
 245'

FUTURE TAXIWAY 'C'

Runway 5L-23R

CROSS-FIELD TAXIWAY ALTERNATIVES AT FUTURE I-73

**NOT FOR CONSTRUCTION**

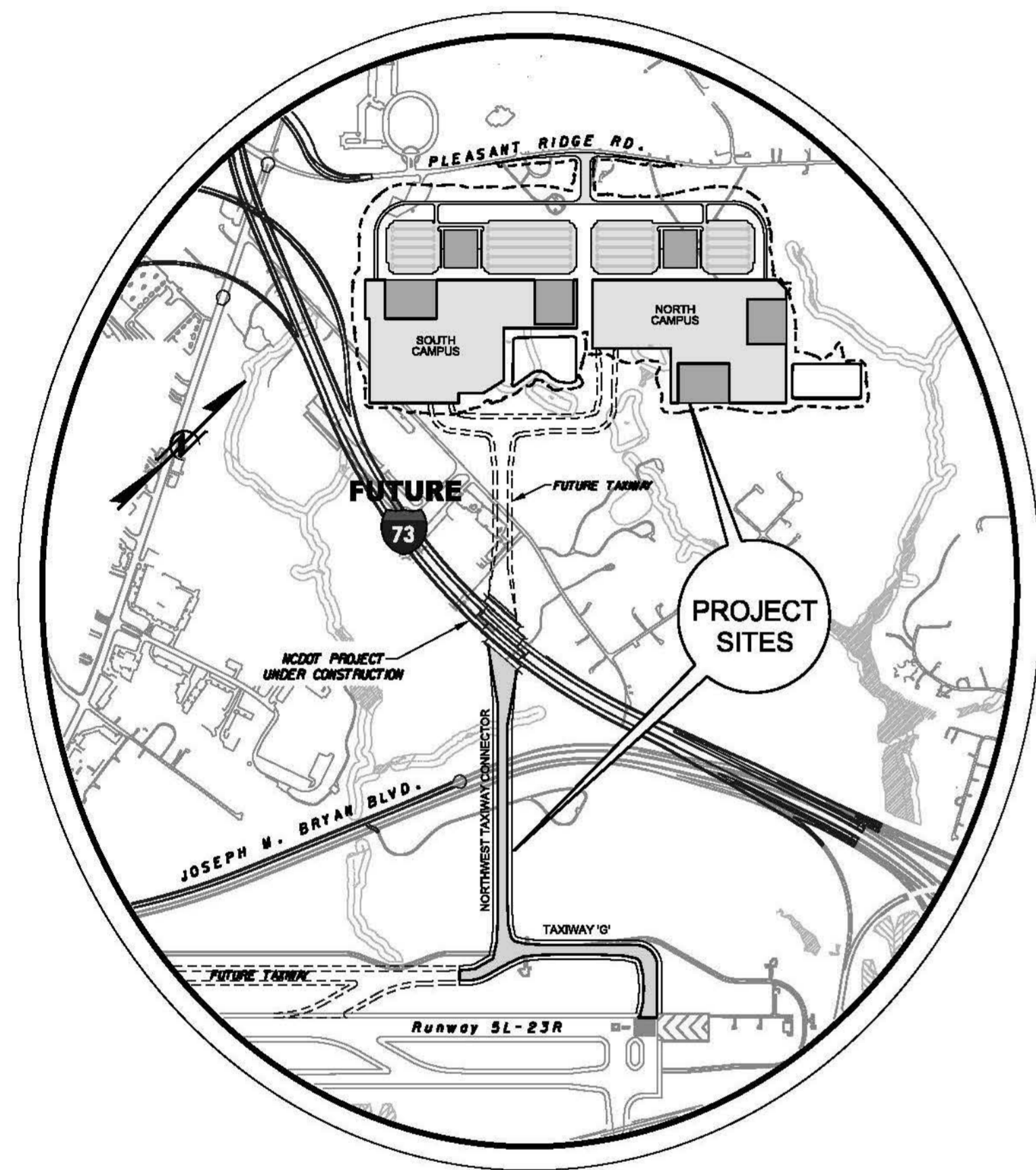
Exhibit 1

**PTI**  
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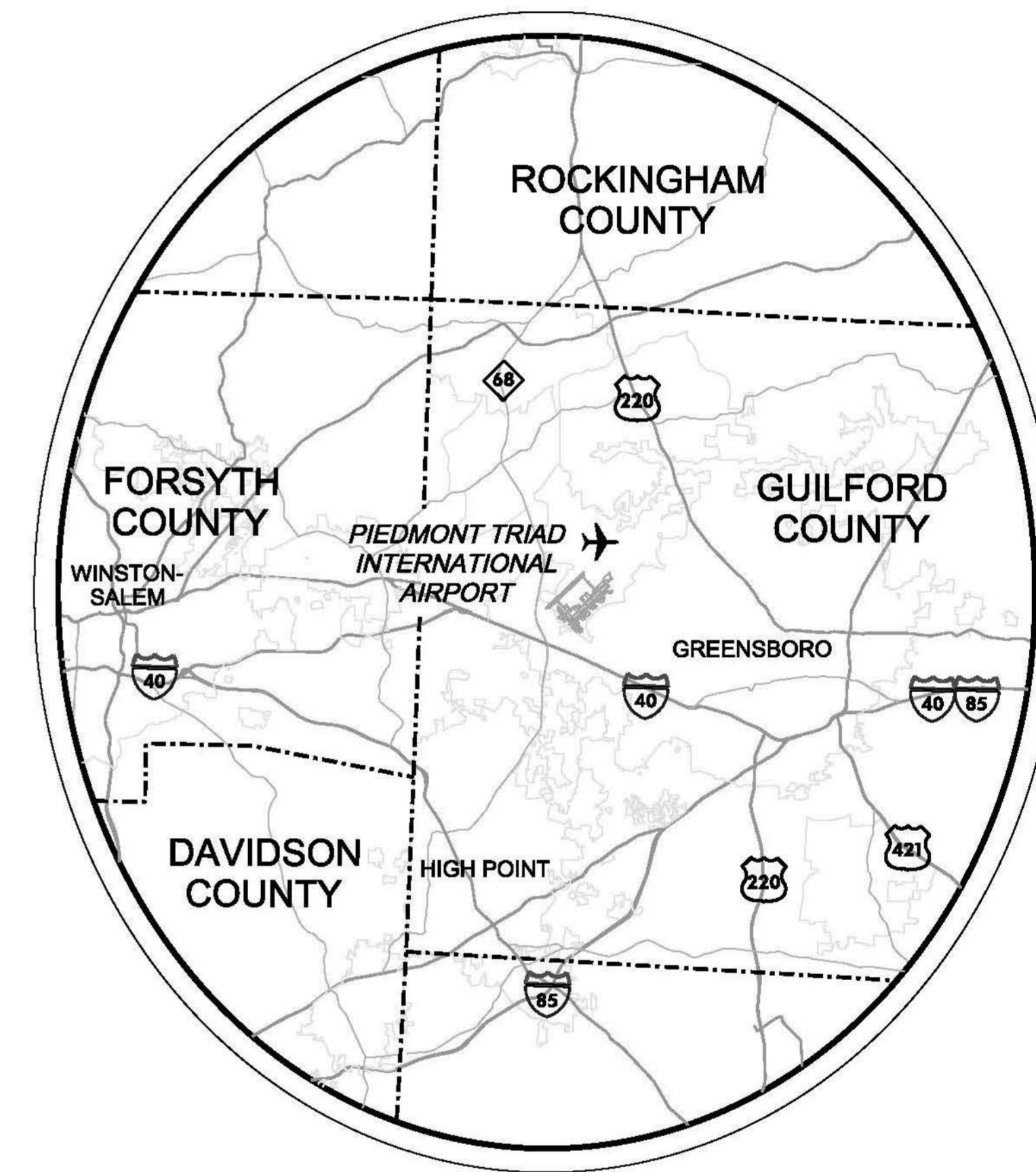
# PIEDMONT TRIAD INTERNATIONAL AIRPORT

## NORTHWEST TAXIWAY CONNECTOR AND PRELIMINARY NORTHWEST SITE DEVELOPMENT

### PLEASANT RIDGE SITE GRADING, DRAINAGE AND EROSION CONTROL



PROJECT LOCATION MAP



VICINITY MAP

#### INDEX OF DRAWINGS

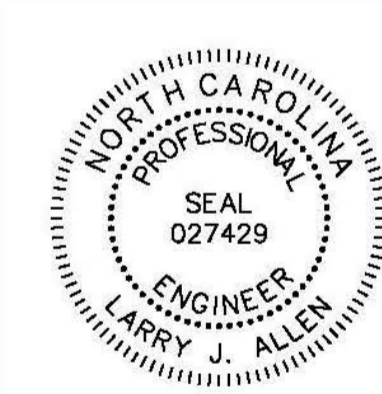
DESCRIPTION	DRAWING NO.
TITLE SHEET	G-1
PROPOSED DEVELOPMENT IMPACTS PLAN	PD-1 - PD-3
GRADING, DRAINAGE AND EROSION CONTROL PLANS	GD-1 & GD-2
DRAINAGE STRUCTURE TABLES	DS-1 & DS-2
EROSION CONTROL DETAILS	EC1 - EC4

#### JURISDICTIONAL WATERS IMPACTS

DESCRIPTION		PONDS		STREAMS		JORDAN BUFFER		REMARKS	
		Impacted Area (Ac.)	Fill Above Pond (Cubic Yards)	Intermittent (Liner Feet)	Perennial (Liner Feet)	Zone 1 (Square Feet)	Zone 2 (Square Feet)		
Sheet PD-1	Pond E-1 (3.43 Acres)	Permanent	3.43	174,250	--	--	50,354	36,792	Total Removal
		Temporary	0	--	--	--	0	0	
Sheet PD-1	Pond E-2 (0.54 Acres)	Permanent	0.54	19,300	--	--	25,307	20,085	Total Removal
		Temporary	0	--	--	--	0	0	
Sheet PD-1	Pond E-3 (0.91 Acres)	Permanent	0.91	68,300	--	--	30,492	23,654	Total Removal
		Temporary	0	--	--	--	0	0	
Sheet PD-1	Pond E-4 (1.08 acres)	Permanent	1.08	53,700	--	--	33,016	25,143	Total Removal
		Temporary	0	--	--	--	0	0	
Sheet PD-1	Pond E-5 (0.62 Acres)	Permanent	0	0	--	--	0	0	Not Disturbed
		Temporary	0	0	--	--	0	0	
Sheet PD-3	*Stream SAC	Permanent	--	--	136	255	19,930	11,324	--
		Temporary	--	--	0	0	1,540	2,950	
Total		Permanent	5.96	315,550	136	255	159,099	116,998	
		Temporary	0	--	0	0	1,540	2,950	

\*As designated in "Stream Quality Assessment Worksheet" dated October 10, 2012  
 ◇ Measured to the outer limits of associated Jordan Buffer - Zone 2

PIEDMONT TRIAD INTERNATIONAL AIRPORT  
 NORTHWEST SITE DEVELOPMENT  
 TITLE SHEET



DCT DESIGNED  
 DCT DRAWN  
 LJA CHECKED  
 S.O. S.O.

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DATE: OCTOBER 2015

SCALE: AS SHOWN

SHEET  
**G-1**  
 OF G-1

NO.	DATE	BY	DESCRIPTION



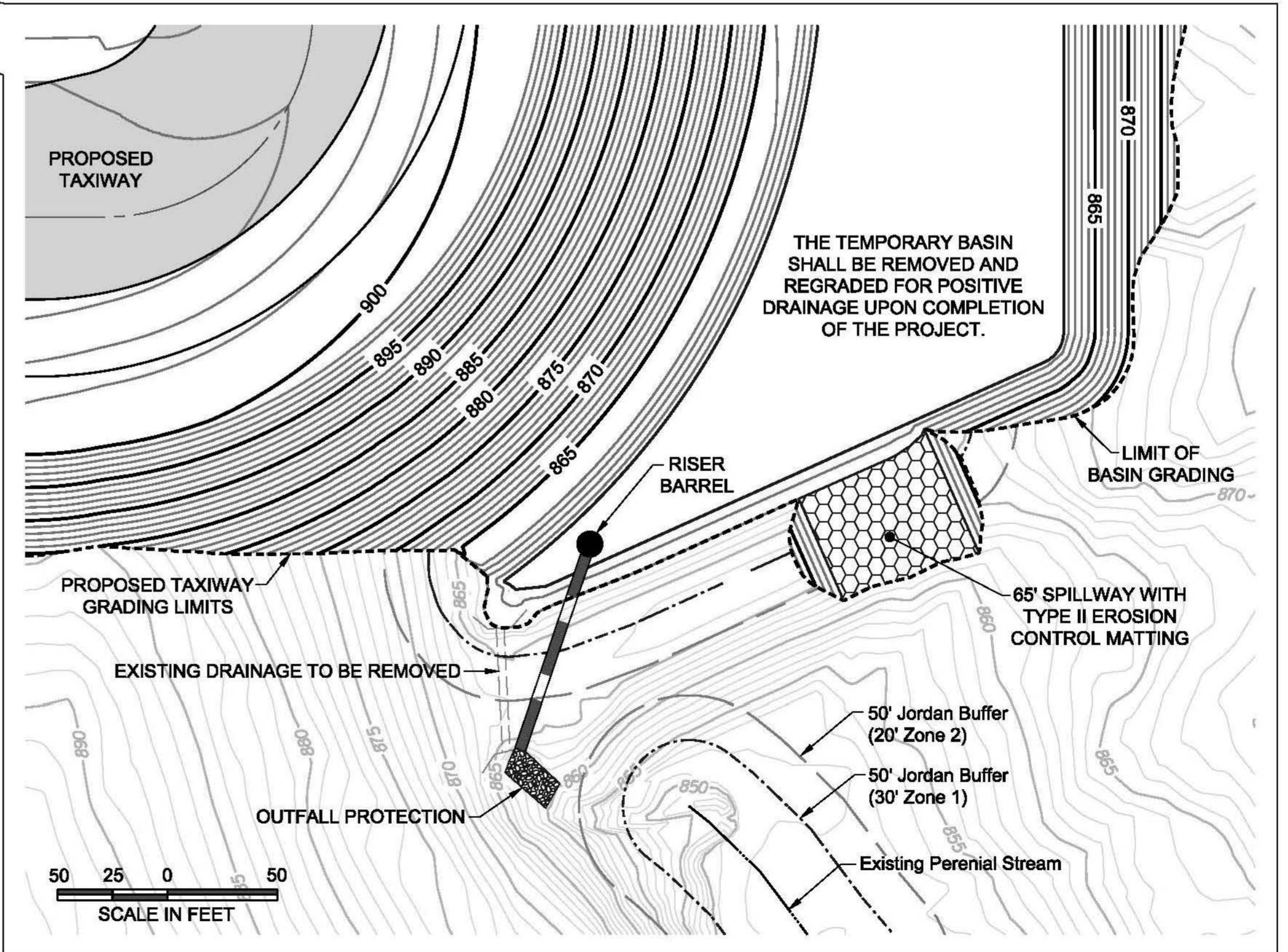
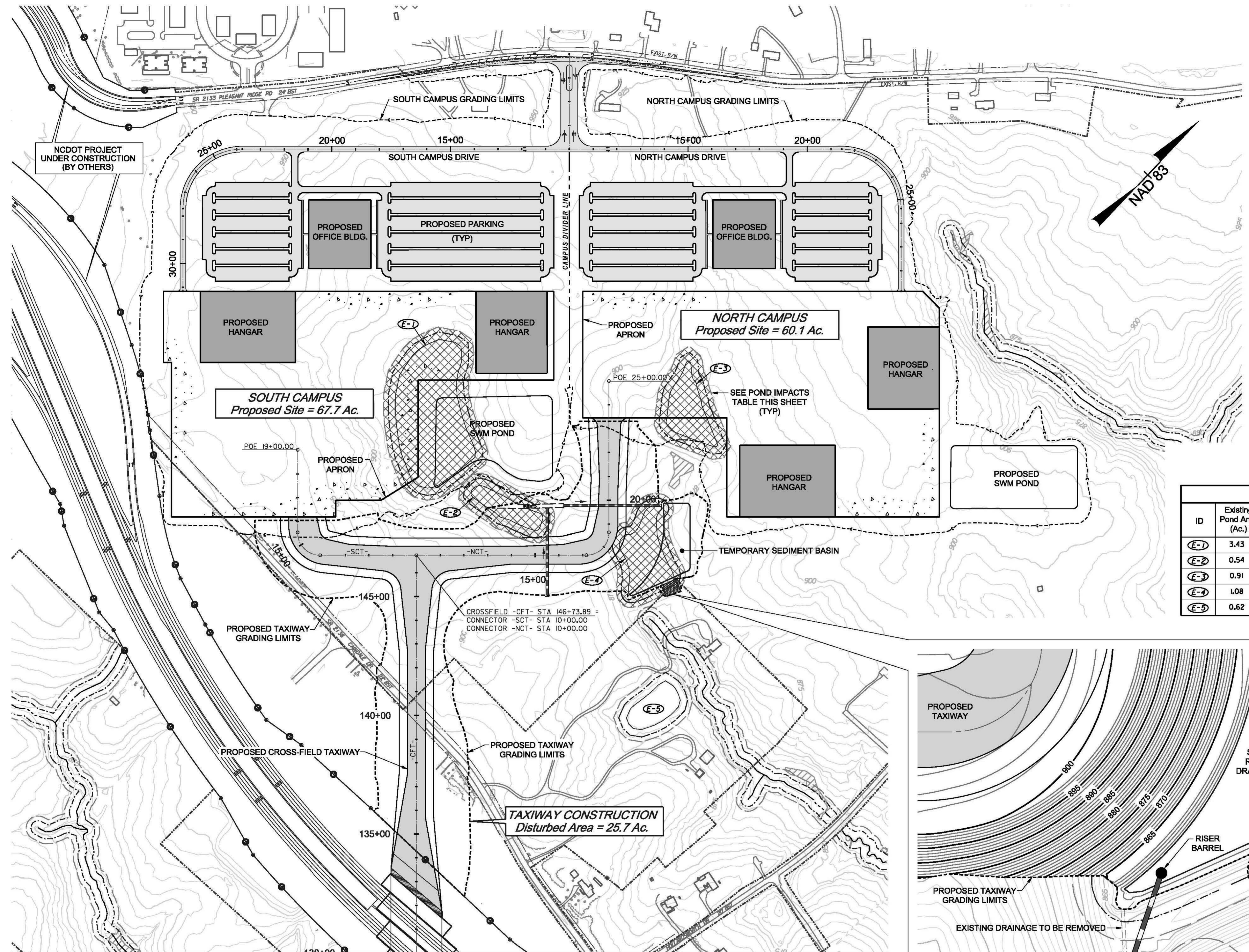
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**PIEDMONT TRIAD INTERNATIONAL AIRPORT  
 NORTHWEST SITE DEVELOPMENT  
 PROPOSED DEVELOPMENT IMPACTS PLAN**

**LEGEND**


- EXISTING PTIA PROPERTY LINE
- NCDOT RIGHT-OF-WAY LINE
- NCDOT CONTROLLED ACCESS ROW
- - - PROPOSED SITE GRADING LIMITS
- [Hatched Box] EXISTING WETLANDS
- PERENNIAL STREAM
- INTERMITTENT STREAM
- 50FT JORDAN BUFFER (30' ZONE 1)
- 50FT JORDAN BUFFER (20' ZONE 2)
- 835 EXISTING CONTOUR
- 835 PROPOSED CONTOUR
- [Grey Box] PROPOSED ASPHALT PAVEMENT
- [Dotted Box] PROPOSED CONCRETE PAVEMENT
- [Dark Grey Box] PROPOSED BUILDING LOCATION
- [Cross-hatched Box] PROPOSED POND REMOVAL
- PROPOSED DRAINAGE

ID	Existing Pond Area (Ac.)	Jordan Buffer 30' Zone 1 (s.f.)	Jordan Buffer 20' Zone 2 (s.f.)	Remarks
E-1	3.43	50,354	36,792	TOTAL REMOVAL
E-2	0.54	25,307	20,085	.
E-3	0.91	30,492	23,654	.
E-4	1.08	33,016	25,143	.
E-5	0.62	22,206	18,070	NOT DISTURBED



NO. DATE BY DESCRIPTION

NO.	DATE	BY	DESCRIPTION

LARRY J. ALLEN  
 ENGINEER  
 SEAL 027429

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 LJA CHECKED S.O.

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DATE: OCTOBER 2015  
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 SHEET  
**PD-1**  
 OF PD-3

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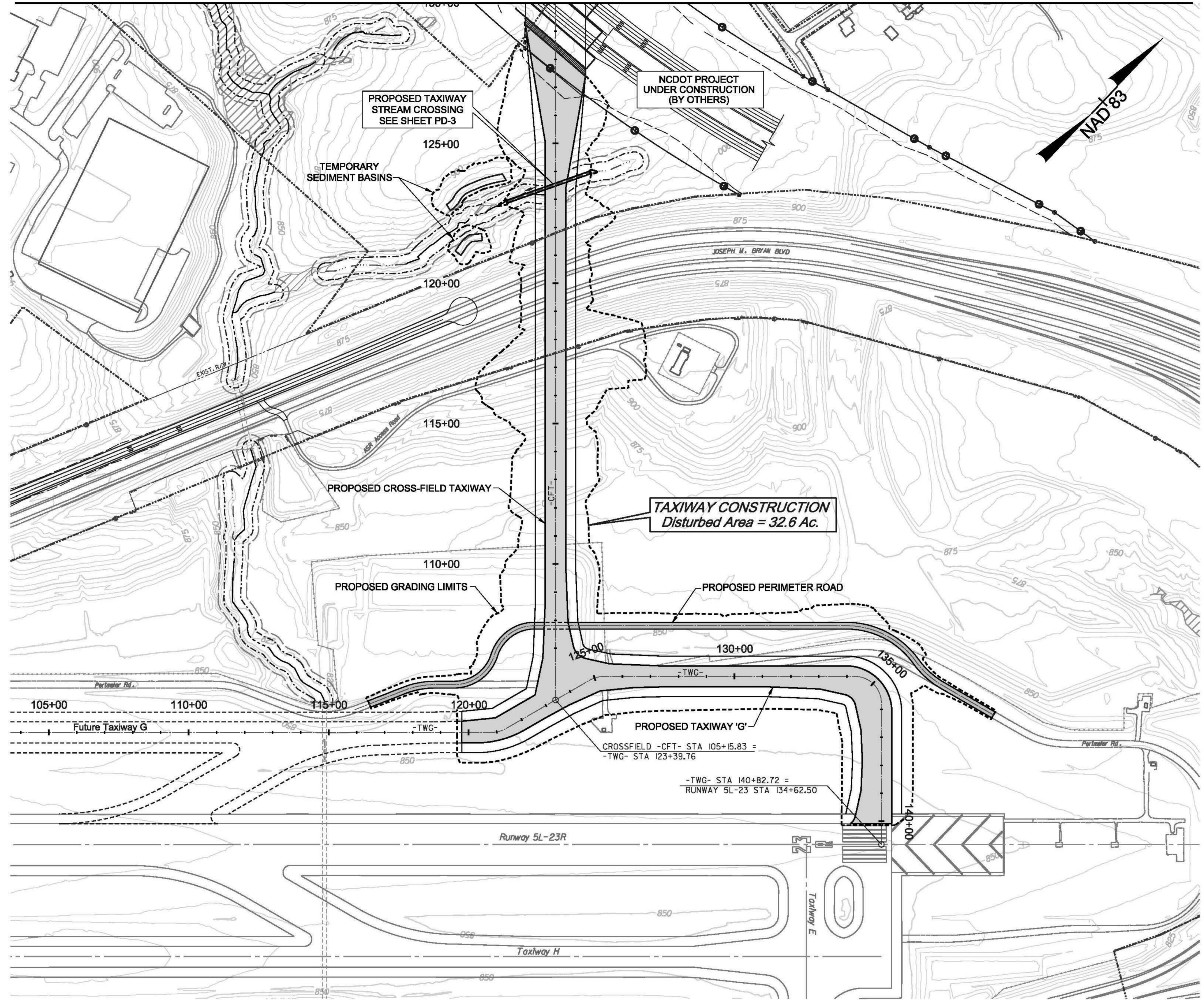
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SHEET  
**PD-2**  
 OF PD-3

MATCH LINE T/W STA 130+00 - SEE SHEET PD-1



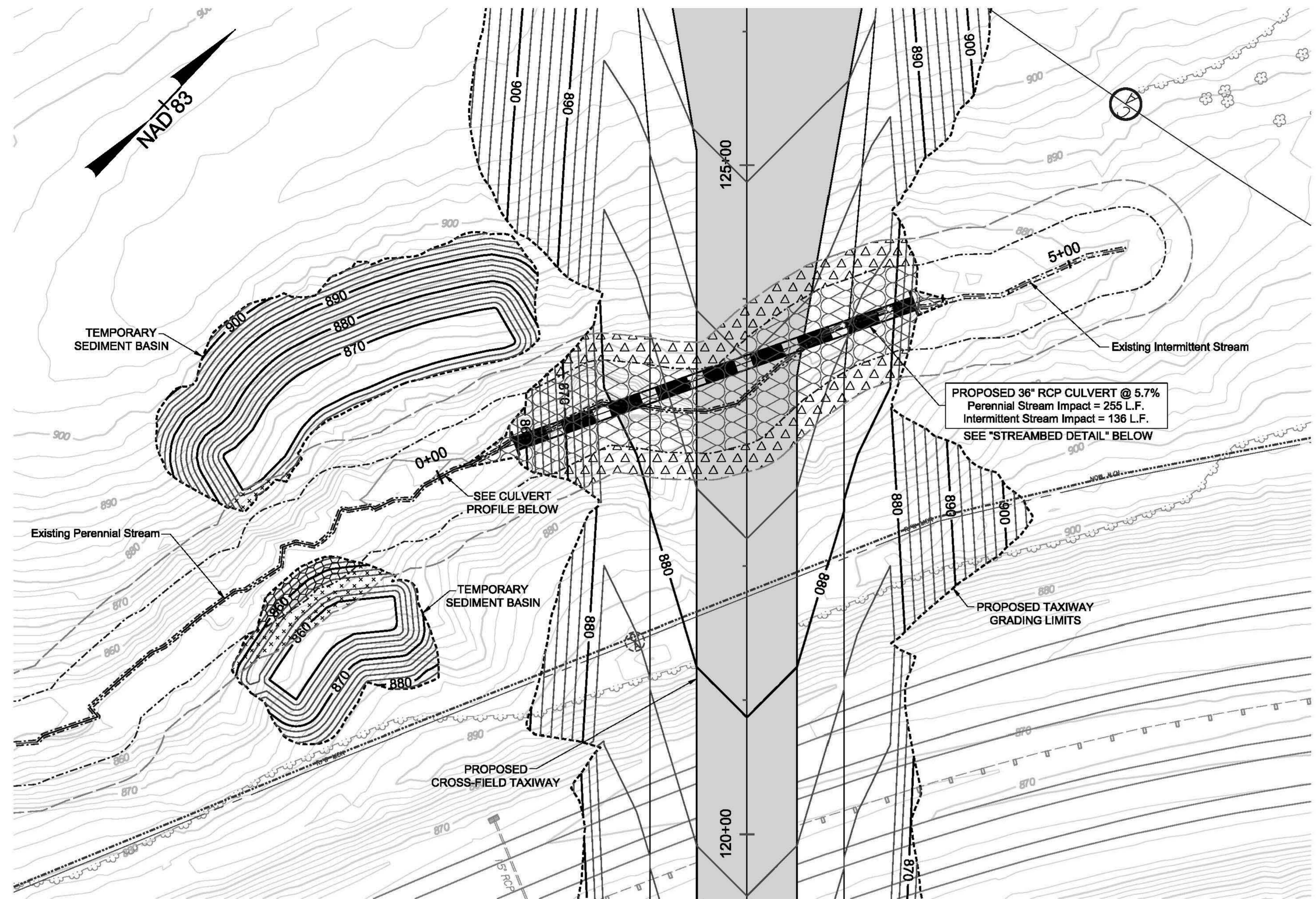
- LEGEND**
- EXISTING PTIA PROPERTY LINE
  - ⊕----- NCDOT RIGHT-OF-WAY LINE
  - ⊕----- NCDOT CONTROLLED ACCESS ROW
  - PROPOSED GRADING LIMITS
  - ▨----- EXISTING WETLANDS
  - PERENNIAL STREAM
  - INTERMITTENT STREAM
  - 50FT JORDAN BUFFER (30' ZONE 1)
  - 50FT JORDAN BUFFER (20' ZONE 2)
  - 835----- EXISTING CONTOUR
  - 835----- PROPOSED CONTOUR
  - ▭----- PROPOSED ASPHALT PAVEMENT
  - PROPOSED DRAINAGE

NW CONNECTOR TAXIWAY TO BRIDGE ACROSS I-73



NO.	DATE	BY	DESCRIPTION

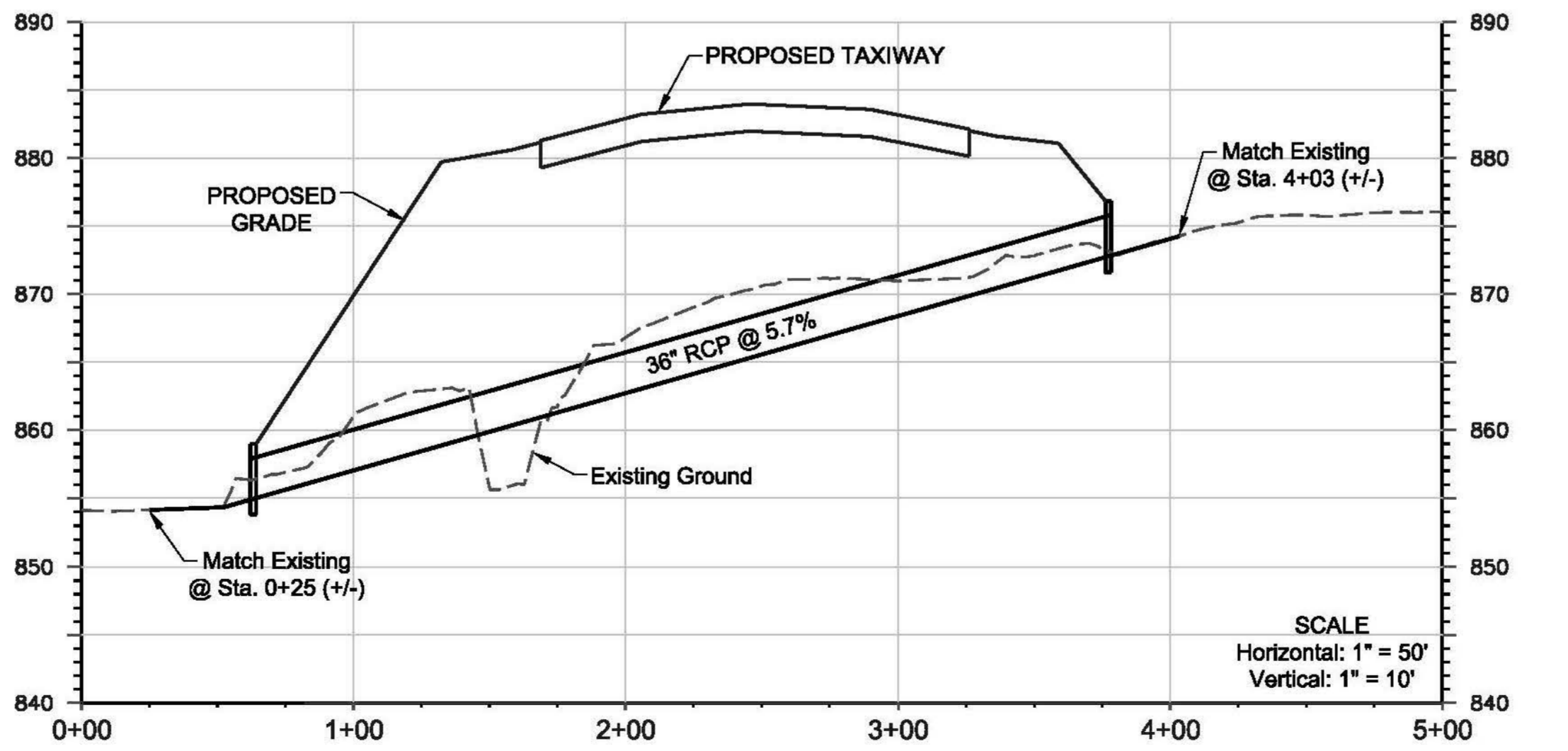
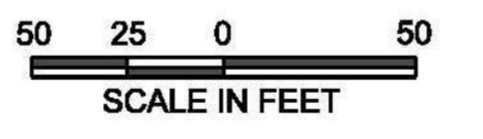
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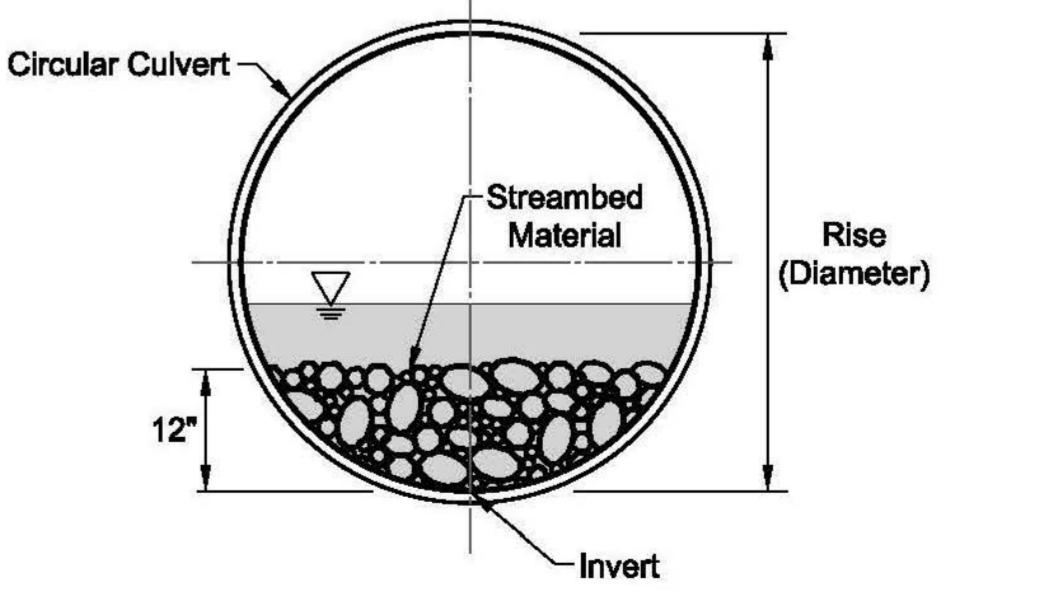
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  - ⊕ NCDOT CONTROLLED ACCESS ROW
  - PROPOSED GRADING LIMITS
  - ▨ EXISTING WETLANDS
  - PERENNIAL STREAM
  - INTERMITTENT STREAM
  - 50FT JORDAN BUFFER (30' ZONE 1)
  - 50FT JORDAN BUFFER (20' ZONE 2)
  - 835 EXISTING CONTOUR
  - 835 PROPOSED CONTOUR
  - PROPOSED ASPHALT PAVEMENT
  - PROPOSED DRAINAGE
  - ▨ 50' Jordan Buffer (30' Zone 1) Permanent Impact = 19,930 s.f.
  - ▨ 50' Jordan Buffer (30' Zone 1) Temporary Impact = 1,540 s.f.
  - ▨ 50' Jordan Buffer (20' Zone 2) Permanent Impact = 11,324 s.f.
  - ▨ 50' Jordan Buffer (20' Zone 2) Temporary Impact = 2,950 s.f.

PROPOSED 36" RCP CULVERT @ 5.7%  
 Perennial Stream Impact = 255 L.F.  
 Intermittent Stream Impact = 136 L.F.  
 SEE "STREAMBED DETAIL" BELOW

**PROPOSED 36" CULVERT AT TAXIWAY STREAM CROSSING**



**PROPOSED CULVERT PROFILE**



**STREAMBED DETAIL**  
 Not To Scale

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 NORTHWEST SITE DEVELOPMENT  
 PROPOSED DEVELOPMENT IMPACTS PLAN**



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LJA CHECKED	S.O.

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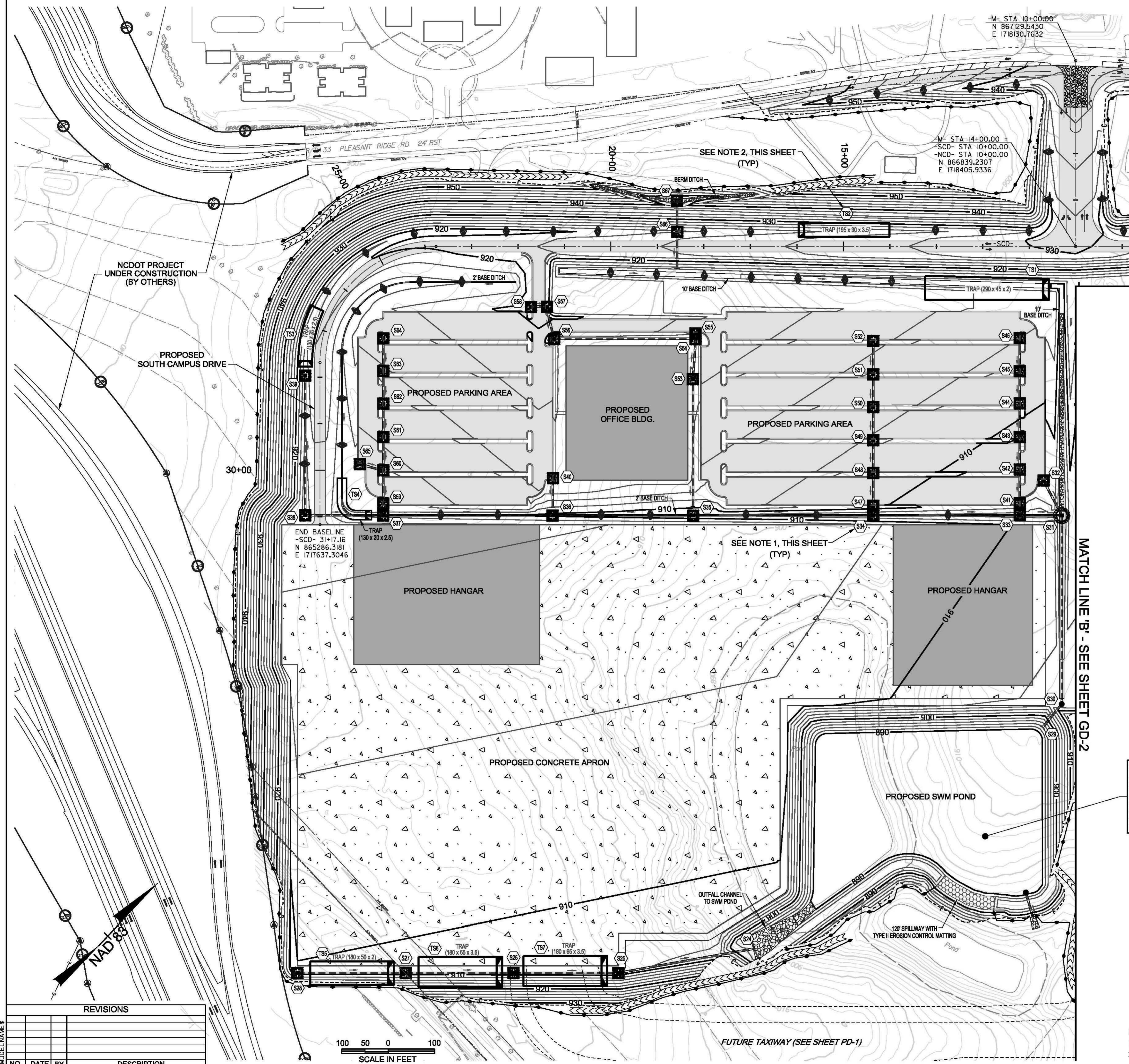
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SHEET

**PD-3**  
 OF PD-3

NO.	DATE	BY	DESCRIPTION



- LEGEND**
- EXISTING PTIA PROPERTY LINE
  - NCDOT RIGHT-OF-WAY LINE
  - NCDOT CONTROLLED ACCESS ROW
  - - - - - PROPOSED SITE GRADING LIMITS
  - [Hatched Box] EXISTING WETLANDS
  - PERENNIAL STREAM
  - INTERMITTENT STREAM
  - 50FT JORDAN BUFFER
  - 835 EXISTING CONTOUR
  - 835 PROPOSED CONTOUR
  - [Grey Box] PROPOSED ASPHALT PAVEMENT
  - [Dotted Box] PROPOSED CONCRETE PAVEMENT
  - [Dark Grey Box] PROPOSED BUILDING LOCATION
  - [Arrow with #] PROPOSED DRAINAGE
  - [Trapezoid] GRAVEL CONSTR. ENTRANCE (Detail 3, Sheet EC-1)
  - [Line with Dashes] STREAM BUFFER DELINEATION FENCE (ORANGE SAFETY FENCE)
  - [Line with Dots] SEDIMENT FENCE (Detail 2, Sheet EC-1)
  - [Wavy Line] TEMPORARY DIVERSION CHANNEL (Detail 4, Sheet EC-2)
  - [Box with #] TEMPORARY SEDIMENT BASIN (Detail 2, Sheet EC-2)
  - [Square with #] BLOCK AND GRAVEL INLET PROTECTION (Detail 1, Sheet EC-3)
  - [Circle with #] ROCK DOUGHNUT INLET PROTECTION (Detail 3, Sheet EC-4)
  - [C-shape with #] ROCK PIPE INLET PROTECTION (Detail 1, Sheet EC-4)
  - [Diamond with #] ROCK CHECK DAM (Detail 4, Sheet EC-3)
  - [TSD Symbol] TEMPORARY SLOPE DRAIN (Detail 2, Sheet EC-4)
  - [Grid Pattern] EROSION CONTROL MATTING (Detail 1, Sheet EC-1)
  - [Stippled Pattern] RIP RAP CHANNEL LINING

**SEDIMENT BASIN S1**  
 D.A.=68.88 Ac.  
 10 YR Q=364.55 cfs  
 REQ'D SEDIMENT STORAGE=122,065.7 CF  
 DESIGN SEDIMENT STORAGE=325,512.19 CF  
 REQ'D SURFACE AREA=158,578.4 SF  
 DESIGN SURFACE AREA=168,693.44 SF  
 TRAP DIMENSIONS=600' L x 250' W x 2' D  
 WEIR LENGTH=120'  
 BOTTOM ELEVATION=890.0

NO. DATE BY DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NOTE:  
 1. SEE SHEET DS-1 FOR SOUTH CAMPUS DRAINAGE STRUCTURE TABLES.  
 2. SEE SHEET EC-2 FOR TEMPORARY BMP DESIGN DATA.

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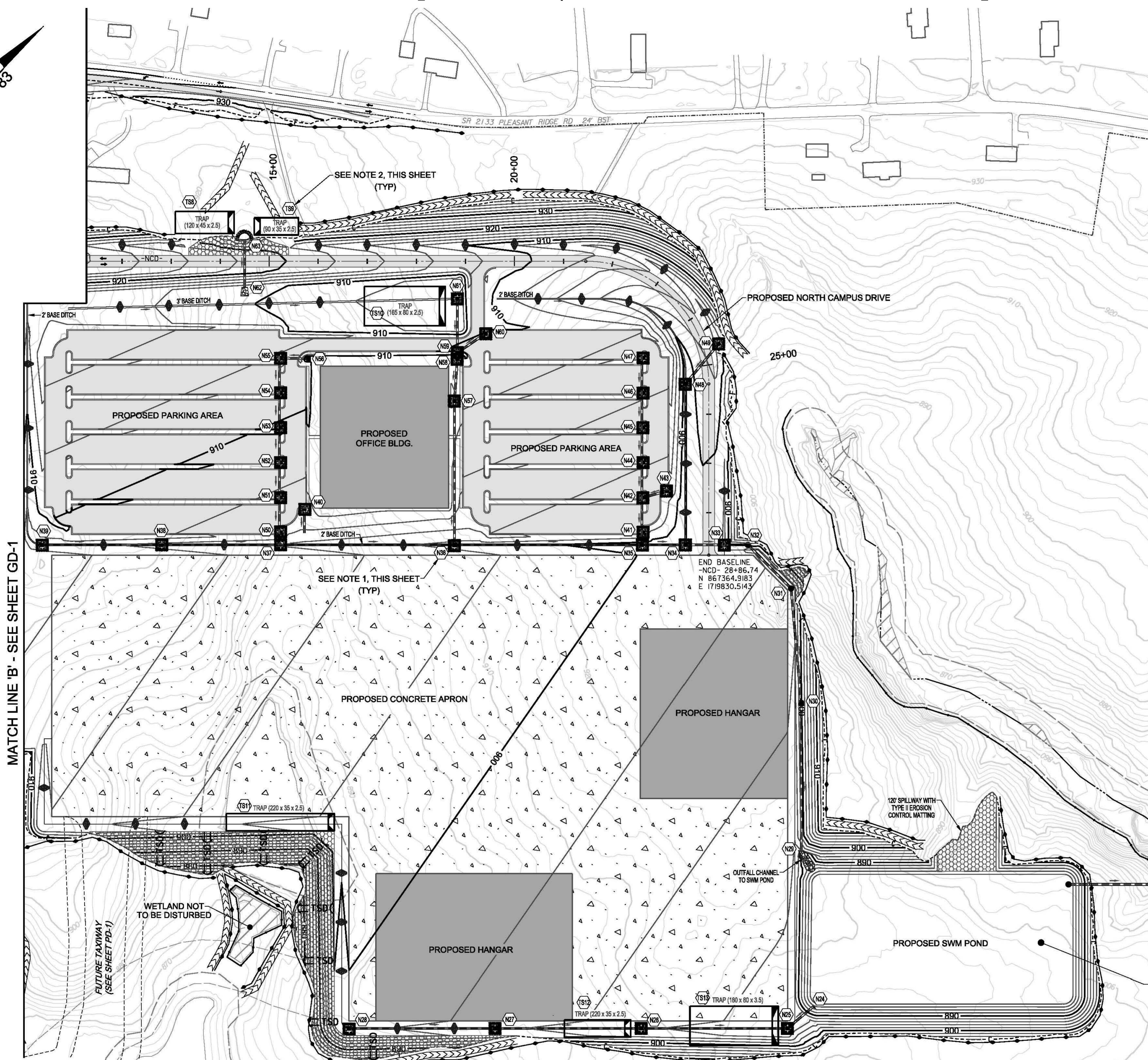
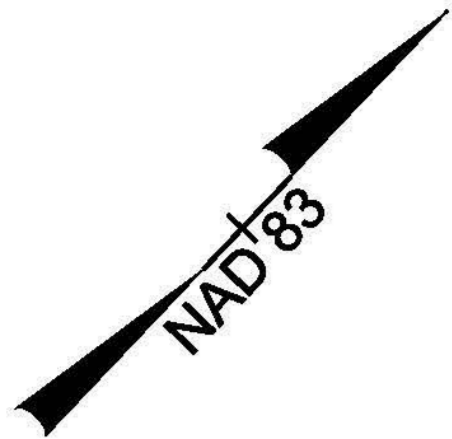
PIEDMONT TRIAD INTERNATIONAL AIRPORT  
 NORTHWEST SITE DEVELOPMENT  
 PROPOSED SOUTH CAMPUS  
 GRADING, DRAINAGE AND EROSION CONTROL PLAN

NORTH CAROLINA  
 PROFESSIONAL  
 SEAL  
 027429  
 ENGINEER  
 LARRY J. ALLEN

DCT	DCT
DESIGNED	DRAWN
LJA	
CHECKED	S.O.

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 SHEET  
**GD-1**  
 OF GD-2



- LEGEND**
- EXISTING PTIA PROPERTY LINE
  - NCDOT RIGHT-OF-WAY LINE
  - NCDOT CONTROLLED ACCESS ROW
  - - - - - PROPOSED SITE GRADING LIMITS
  - [Hatched Box] EXISTING WETLANDS
  - PERENNIAL STREAM
  - INTERMITTENT STREAM
  - 50FT JORDAN BUFFER
  - 835 EXISTING CONTOUR
  - 835 PROPOSED CONTOUR
  - [Solid Grey Box] PROPOSED ASPHALT PAVEMENT
  - [Dotted Box] PROPOSED CONCRETE PAVEMENT
  - [Dark Grey Box] PROPOSED BUILDING LOCATION
  - [# in Circle] PROPOSED DRAINAGE
  - [Trapezoid] GRAVEL CONSTR. ENTRANCE (Detail 3, Sheet EC-1)
  - [Line with Dashes] STREAM BUFFER DELINEATION FENCE (ORANGE SAFETY FENCE)
  - [Line with Dots] SEDIMENT FENCE (Detail 2, Sheet EC-1)
  - [Zigzag Line] TEMPORARY DIVERSION CHANNEL (Detail 4, Sheet EC-2)
  - [# in Rectangle] TEMPORARY SEDIMENT BASIN (Detail 2, Sheet EC-2)
  - [Square with X] BLOCK AND GRAVEL INLET PROTECTION (Detail 1, Sheet EC-3)
  - [Circle with X] ROCK DOUGHNUT INLET PROTECTION (Detail 3, Sheet EC-4)
  - [C-shape] ROCK PIPE INLET PROTECTION (Detail 1, Sheet EC-4)
  - [Diamond] ROCK CHECK DAM (Detail 4, Sheet EC-3)
  - [C-shape with Arrow] TSD TEMPORARY SLOPE DRAIN (Detail 2, Sheet EC-4)
  - [Hexagonal Pattern] EROSION CONTROL MATTING (Detail 1, Sheet EC-1)
  - [Stippled Pattern] RIP RAP CHANNEL LINING

MATCH LINE 'B' - SEE SHEET GD-1

SEE NOTE 2, THIS SHEET (TYP)

SEE NOTE 1, THIS SHEET (TYP)

END BASELINE  
 -NCD- 28+86.74  
 N 867364.9183  
 E 1719830.5143

**SEDIMENT BASIN N1**  
 D.A.=62.24 Ac.  
 10 YR Q=328.04 cfs  
 REQ'D SEDIMENT STORAGE=112,025.8 CF  
 DESIGN SEDIMENT STORAGE=278,619.15 CF  
 REQ'D SURFACE AREA=142,695.71 SF  
 DESIGN SURFACE AREA=143,149.98 SF  
 TRAP DIMENSIONS=545' L x 245' W x 2' D  
 WEIR LENGTH=120'  
 BOTTOM ELEVATION=882.0

NO.	DATE	BY	DESCRIPTION



NOTE:  
 1. SEE SHEET DS-2 FOR NORTH CAMPUS DRAINAGE STRUCTURE TABLES.  
 2. SEE SHEET EC-2 FOR TEMPORARY BMP DESIGN DATA.

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 NORTHWEST SITE DEVELOPMENT  
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DCT DESIGNED	DCT DRAWN
LJA CHECKED	S.O.

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SHEET  
**GD-2**  
 OF GD-2