



# COCHISE COUNTY COMMUNITY DEVELOPMENT

*"Public Programs...Personal Service"*

Randy Heiss  
Executive Director  
SouthEastern Arizona Governments Organization  
1403 W. Highway 92  
Bisbee, Arizona 85603

September 8, 2014

**RE: Mini-DCR Submittal for STP Funds**

Dear Mr. Heiss,

We are pleased to submit a Mini-Concept Report for STP funds through the SEAGO process. Cochise County is looking forward to completing an improvement on Davis Rd. from Central Highway to Highway 191. Sufficient funds have been awarded through the CBI federal program to complete design and environmental clearance. These STP funds would complete the right-of-way acquisition phase of this project.

Davis Road is a significant transportation corridor in Cochise County providing connectivity for commuter, regional and commercial traffic. This route is used heavily by trucks traveling to I-10 and points beyond from the Agua Prieta and Douglas area. This traffic is expected to increase with the planned improvements to the Douglas Port of Entry. Unfortunately, this segment of Davis Rd. lacks sufficient turning radii for the oversized loads that use this route and the roadway pavement section is also not sufficient for the increased heavy traffic along this corridor.

We are requesting a total of \$525,000 (2014 dollars) for this project. Cochise County will be providing match funds. Please feel free to contact me if you have any additional questions or need more information.

Sincerely,

Karen L. Lamberton, AICP  
County Transportation Planner

**Attachment: Davis Road Right-of-Way Acquisition Mini-DCR**

**Davis Road Right-of-Way Acquisition  
Central Highway to US Highway 101**

**MINI-DCR REPORT  
PRELIMINARY – NOT FOR CONSTRUCTION**

**TRACS No. SS986 03D  
Federal Reference No. CBI-CCH-O(203)T**

**Submitted by Cochise County**



*Davis Road at U.S. Highway 191; 2011*

September 8, 2014

## **A. COVER LETTER AND TITLE PAGE**

## **B. INTRODUCTION**

This proposed project is located in Cochise County, on Davis Road between Central Highway and US Highway 191. Davis Road is classified as a Rural Major Collector and eligible for federal aid funds. This segment is approximately 2.3 miles and connects the area of McNeal to other parts of the County. Davis Road is the main route to I-10 and Tucson from the Agua Prieta and Douglas area and serves international, regional and local traffic. It is also used by trucks and oversized loads that are avoiding the steep grades of SR 80 in the Bisbee area and other constraints along U.S. Highway 191.

Cochise County was awarded Coordinated Board Infrastructure (CBI) Funds in 2011 to conduct a Project Assessment along the length of Davis Rd. between Highway 80 and Central Highway and a Design Concept Report (DCR) for segment of Davis Rd. between Central Highway and Highway 191. The DCR was awarded to EEC, Inc and the work is currently underway. The Scope of Work includes Environmental Clearance and 100% Design Plans. Geotechnical clearance has been obtained and 30% design plans are under review by ADOT at this time. Completion of the plans is expected in 2015.

The purpose of this project is to perfect historical right-of-way along this segment of Davis Road and increase the width to 150 feet. The estimated right-of-way needed for the preferred alternative is approximately 24 acre's. Temporary construction easements as well as drainage easement may also be acquired as part of this project.

Additional funds, from federal, state and local sources, would be sought to then move to the construction phase of this project.

## **C. BACKGROUND DATA**

There are no as-built plans available for Davis Road. The earliest records are from 1984 when Cochise County prepared an alignment study and right-of-way plat for the corridor as well as improvement plans for the west 14 miles of Davis Rd. The improvements consisted of horizontal and vertical alignment changes and constructed a chip seal surface treatment over a 6" base. A later County project in 1987, called "West Davis Rd" built a 24 ft roadway consisting of 3-1/2" AC over the existing chip seal and base pavement section. Also in 1987, the "East Davis Rd" County project constructed a 24 ft roadway (2" AC over 6" cement treated base) from the "West Davis Road" project to US 191. This was a surfacing project which followed the existing profile.

The terrain is gently sloping from east to west at 0.6% to 0.8%. It has sparse vegetative cover characteristic of retired farmland or irrigated fields. The high desert elevation varies between 4000' to 5000'. The as-built cross slope is 2%.

Daily Traffic volumes range from 1,290 (Saturday) up to 1,755 (Friday). According to the Oversized Load Study, Final Report, an average of 29 oversized loads per month traverse this segment of Davis Rd. There are no collision trends for this segment of roadway. During the period of August 2009 through July 2012 a total of two crashes were reported.

Land ownership along this segment of Davis Road is privately owned. The existing roadway is predominantly fenced along a 66-foot width generally centered along the roadway centerline. The fence varies at access locations and several drainage locations.

Land use is primarily ranching and agricultural along the south side and residential along the north side. The McNeal Elementary School is also located along the north side but takes primary access from W. McNeal Street (it does not abut against either Davis Rd. or Highway 191).

The drainage and transportation improvement study area is impacted by a rural watershed of varying size. Existing roadside swales are roughly one foot depths and parallel the roadway on both sides. These



swales are undersized for serious storm events and existing CMP's for driveways and under Central Highway have also been determined to be undersized. Addressing drainage both for driveways and carrying storm water southwest towards Whitewater Draw will be addressed during the construction phase.

Utilities in the area are overhead electric and underground fiber optic, telephone, gas and water. The underground fiber optic and gas run parallel to the existing roadway on the south side. There are about 35 existing power poles, all but 6 are located on the north side that will be impacted by the construction project and will potentially need relocation. Telephone pedestals may also need to be relocated prior to construction.

The posted speed limit is 55 mph with a four-way stop control at Central Highway. The speed limits drops to 45 mph at the approach to Highway 191. There is also a school crossing sign with an advisory 25 mph plaque. There are no school pavement marking signs (access for the school being taken off another roadway). The design speed is 65 mph.

#### **D. PROJECT SCOPE**

The portion of Davis Road between Central Highway and U.S. Highway 191 was first approved by the Cochise County Board of Supervisors as a County road on March 15, 1912, as evidenced by recorded survey at Book 4, page 4 of the Cochise County Recorders' Office. Per A.R.S. 28-7042, given that this roadway was constructed, laid out, opened and established significantly earlier than 1975 this roadway segment is recognized as a County Highway sixty-six feet in width. All patents along Davis Road were granted between 1914 and 1922 and therefore this roadway was pre-existing across unreserved federal lands thus meeting the requirement for RS 2477 right-of-way claims. One claim, a 1911 railroad claim exists; however, a recorded fee dedication for a 30 foot public right-of-way was conveyed to the County in 1984. A 30 foot dedicated portion of right-of-way was granted to the County as part of the 1914 McNeal townsite as noted in recorded documents DK1795PG598 & BK000PG156 on the north side of the existing roadway alignment.

32 parcels are located along this alignment as are two buildings and one irrigation well (no longer in active use) at this time. Of those, it is estimated that 8 parcels would require acquisition activities and other parcels may require negotiations related to the replacement/improvement of driveways. Approximately 24 acres of right-of-way will be acquired as part of this project. Temporary construction and drainage easements will also be acquired as part of this project; these will be identified as part of the final design and in the right-of-way plan set.

Given that a span of several years will lapse between completion of the final design and the acquisition activities it is anticipated that ownership information will need to be updated as will legal descriptions and right-of-way plans completed. Survey will also be needed to identify the exact locations of the new right-of-way for the property owner's to review as part of the appraisal process. The scope of this project will include these preliminary administrative tasks, the actual acquisition activities and the final recording and documentation required for right-of-way acquisition for federally funded projects.

#### **E. PROJECT DEVELOPMENT CONSIDERATIONS**

Cochise County, with EEC, Inc, under a CBI funded project, is completing Environmental Clearance and Design. Pavement marking plans, signing plans, and traffic control plans will be required and will be completed as part of the 100% design plan set.

Acquisition, and possibly relocation, of a large irrigation well will be necessary as part of this project. This well has not been actively used in many years; however, this will be a significant consideration during negotiations with the property owners. The well was constructed on May 14, 1975 and was drilled to a depth of 1,000 feet (ADWR Well Registration # 800414). Although the preferred alternative cannot avoid the location of this well the purchase cost of the well may prove to be a financial obstacle in completing this project. Acquisition costs are uncertain at this time.

**F. OTHER REQUIREMENTS**

The project is not listed in the current 2014-2018 Five-year Transportation Construction Program and no bid advertisement date has been established.

The preferred DCR alternative has an estimated cost of \$6,760,000 (30% design stage). Design and Right-of-Way is included in that estimate.

**G. ESTIMATED COST**

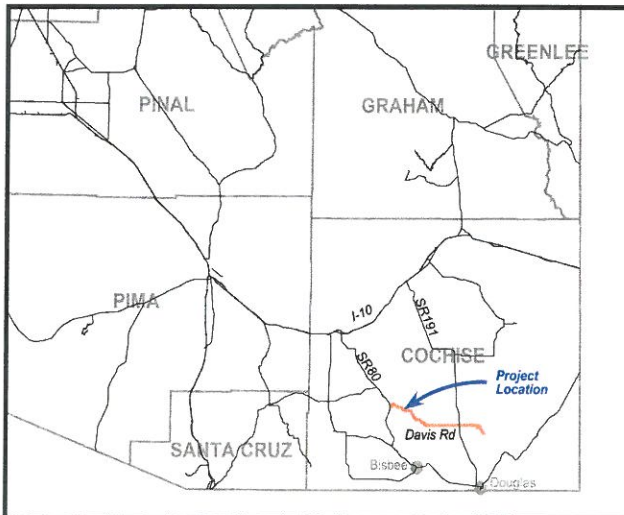
**Central Highway to U.S. Highway 191 Right-of-Way Acquisition Costs**

Project Phase/Type of Work	Estimated Cost
Preliminary Engineering-Design (ROW Plans) (Includes ADOT Review Fees)	\$45,000
Right-of-Way (30% design estimate)	\$267,000
Utility Relocation (Well Relocation)	\$150,000
Other (Survey)	\$35,000
Construction	\$0
Contingency	\$33,000
<b>Total Project Cost</b>	<b>\$525,000</b>

**H. ITEMIZED ESTIMATE**

Itemized estimate not applicable to this request.

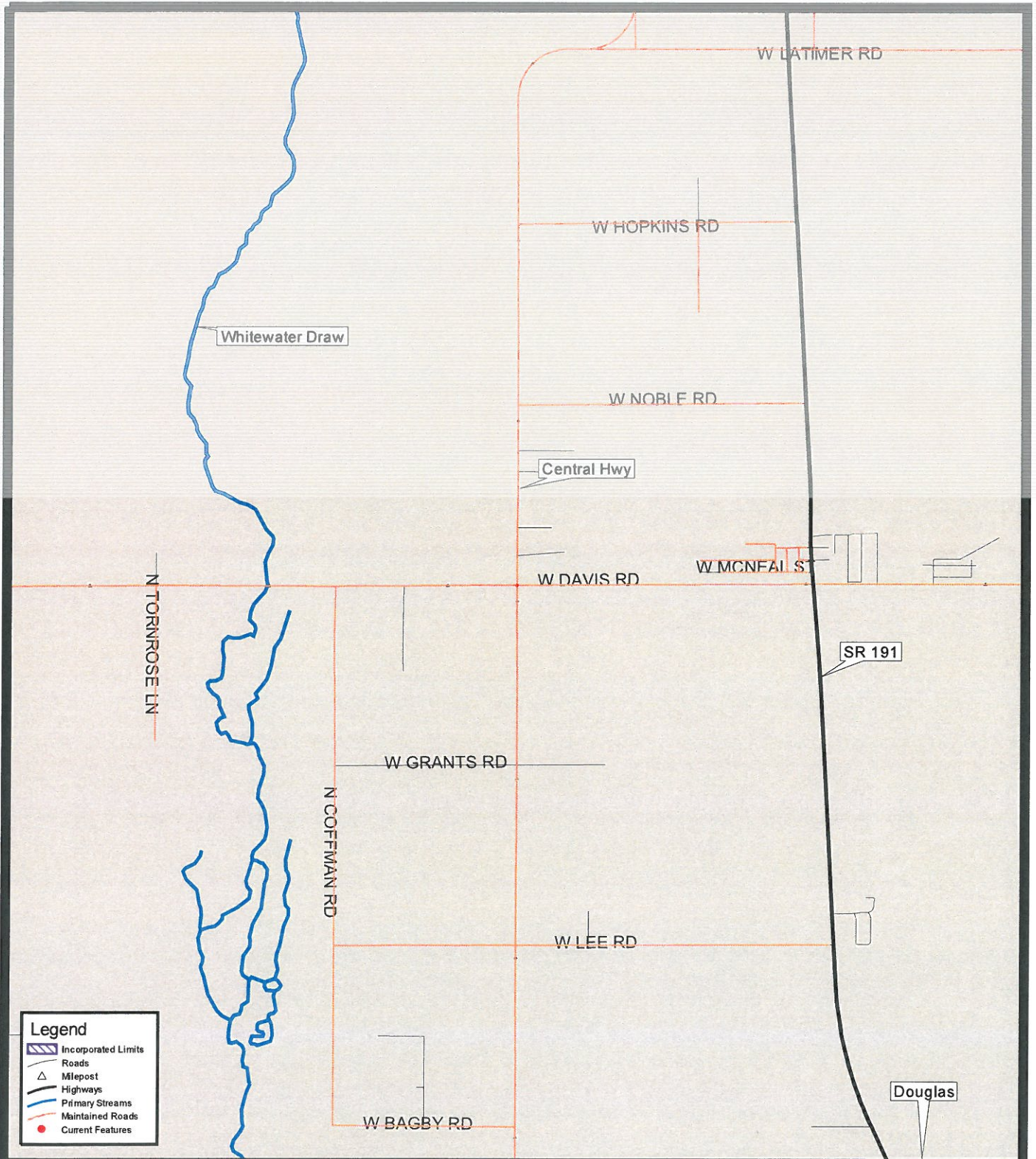
**I. VICINITY MAP**



*Davis Road location in Cochise County, Arizona*

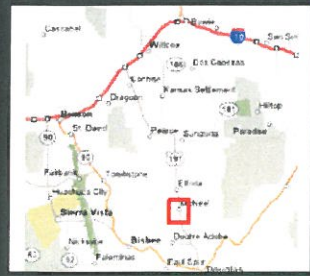
See also attached maps for location of project segment and existing dedicated right-of-way (shown in blue).





**Legend**

- Incorporated Limits
- Roads
- Milepost
- Highways
- Primary Streams
- Maintained Roads
- Current Features



**Figure 1**  
**Location of**  
**Davis Road**

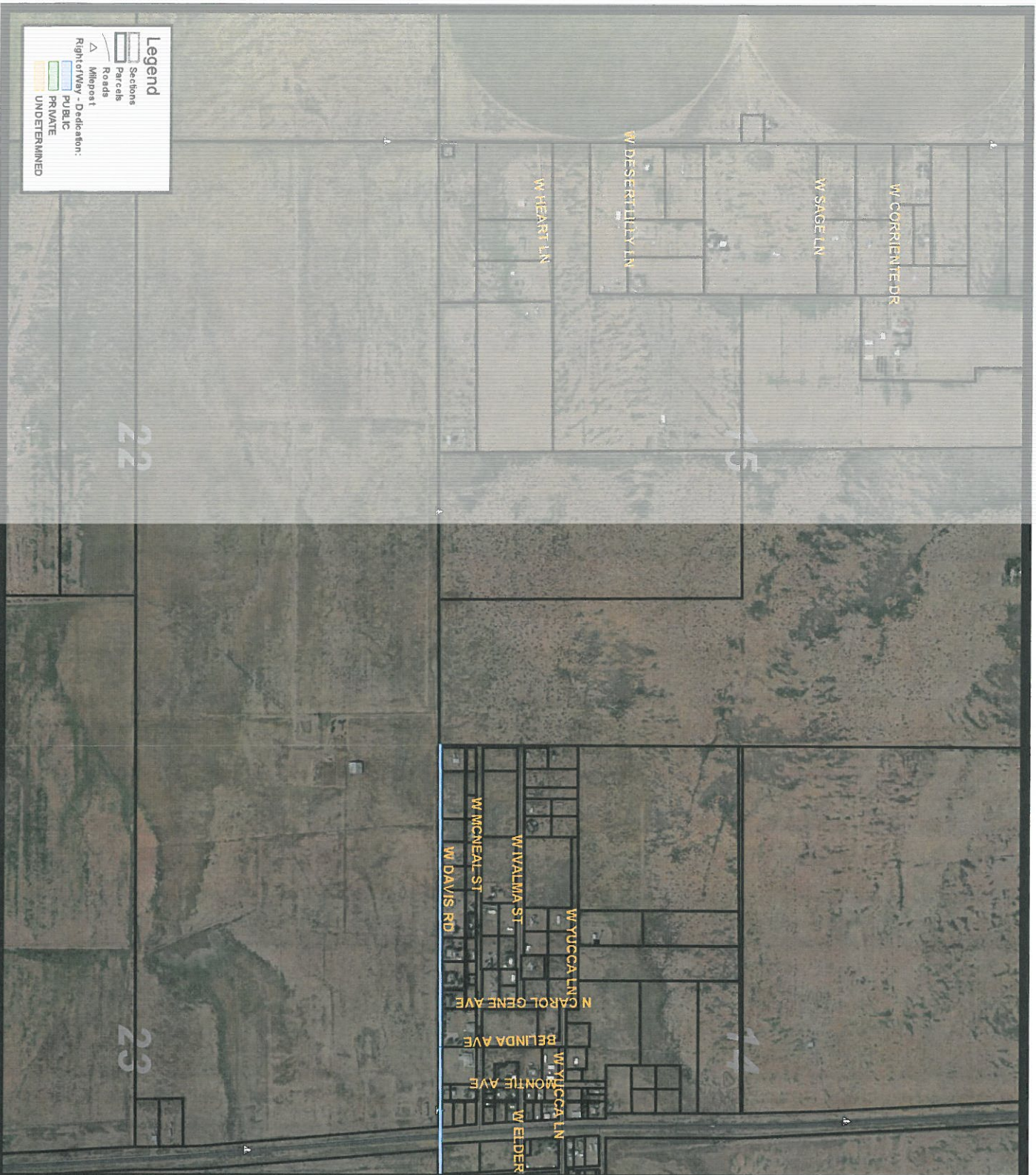
This map is a product of the  
 Cochise County GIS





## Davis Road Central Hwy to Hwy 191

This map is a product of the Cochise County GIS Information Technology Dept.



**Legend**

- Sections
- Parcels
- Roads
- Milepost

Right of Way - Dedication:

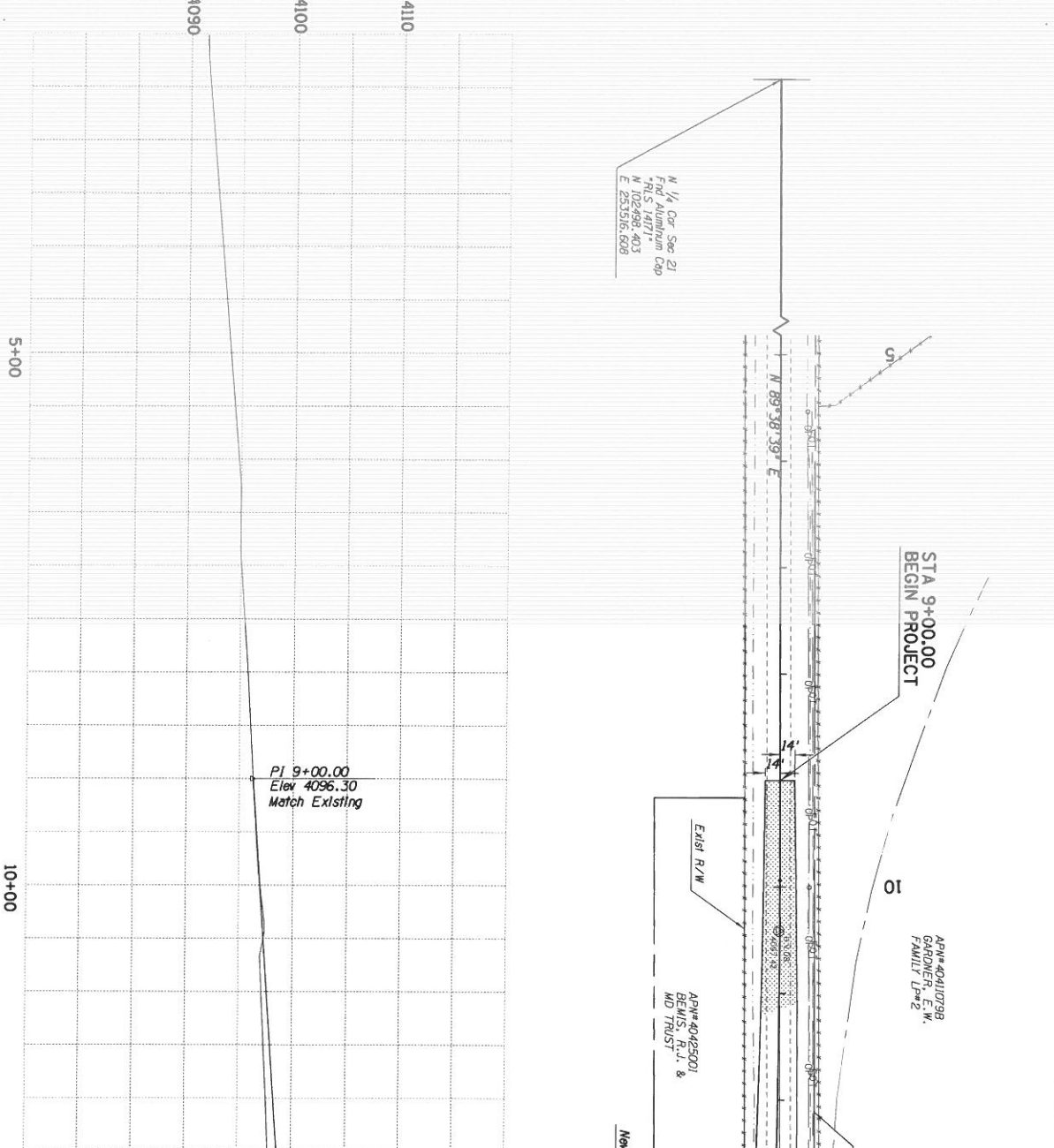
- PUBLIC
- PRIVATE
- UNDETERMINED

# APPENDIX A

## **(J) TYPICAL SECTION SKETCH & RECOMMENDED ALTERNATIVE SECTION SKETCH**

**Preliminary 30% Design Plans as prepared by EEC, INC**





N 1/4 Cor Sec 21  
 T18S R14W  
 N 102°49' 40.3  
 E 2535'6.508

STA 9+00.00  
 BEGIN PROJECT

APN# 40410799  
 GARNER, E.W.  
 FAMILY LP#2

APN# 40425001  
 BEMIS, R.J. &  
 MD TRUST

Begin Taper  
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 120+00' Lt  
 120+00' Rt

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STATE		TOTAL SHEETS	
NO.			

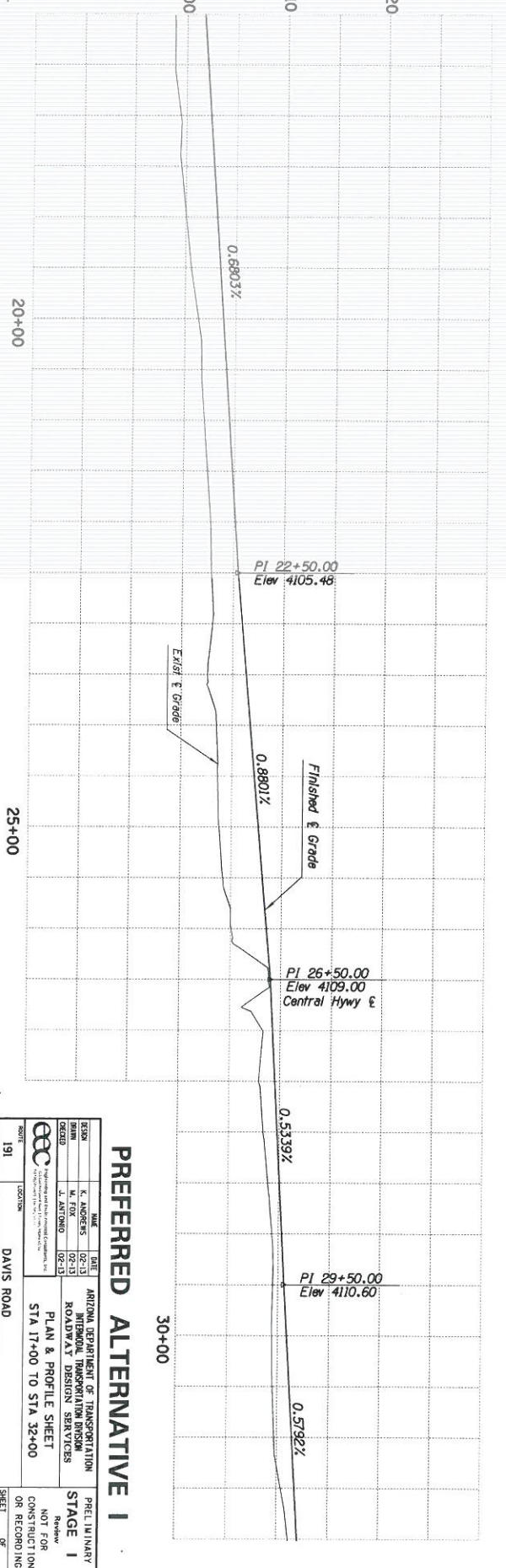
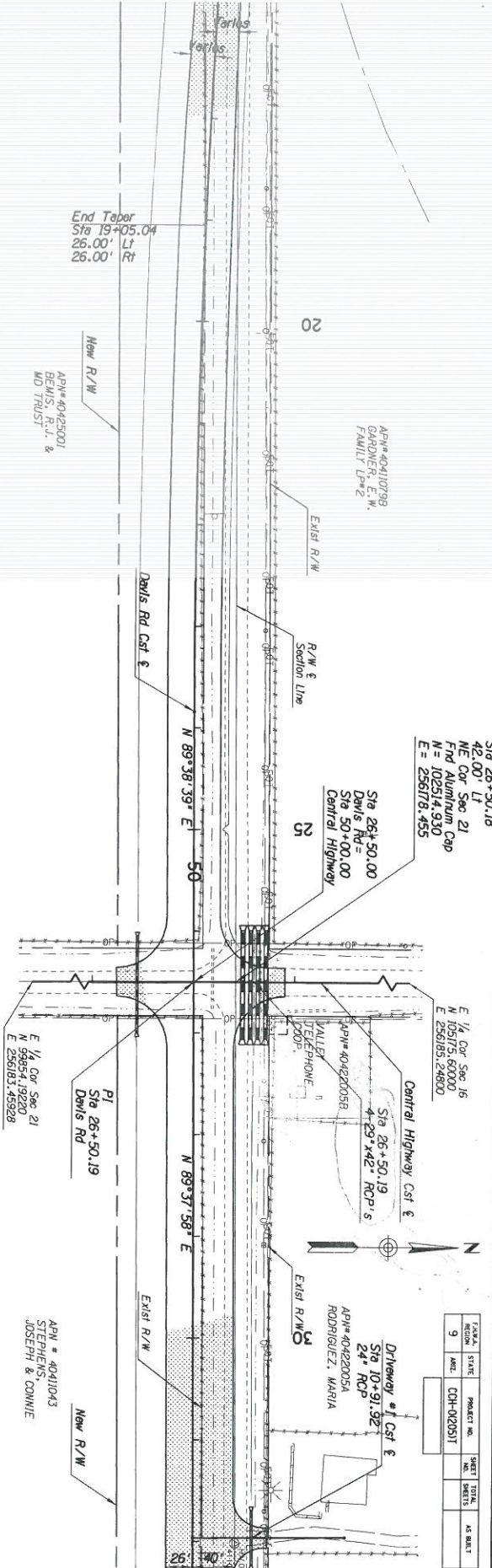
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DESIGN	K. ANDREWS	02-13	ARTONIA DEPARTMENT OF TRANSPORTATION
DESIGN	M. FOX	02-13	INDIANA TRANSPORTATION DISTRICT
DESIGN	J. ANTONIO	02-13	ROADWAY DESIGN SERVICES

Engineering and Surveying Services, Inc.  
 191 TRACS NO. 55986 03D

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PRELIMINARY  
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E = 236178.455

E 1/2 Cor Sec 16  
N 104125.090  
E 256185.24800

PI  
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Davis Rd  
E 1/2 Cor Sec 21  
N 49454.19220  
E 256183.45928

APN = 40411043  
STEPHENS,  
JOSEPH & CONNIE

Sta 26+50.19  
429'x42' RCP's  
APN = 404220058

APN = 404220051  
RODRIGUEZ, MARIA

Drive/Electrical #1 Cor E  
Sta 10+91.92  
24' RCP

**PREFERRED ALTERNATIVE 1**

DATE	NAME	ROLE
02-13	K. ANDERSON	DESIGNER
02-13	M. FOX	DRAWN
02-13	L. ANTONIO	CHECKED

Arizona Department of Transportation  
Roadway Construction Bureau  
DESIGN & CONSTRUCTION DIVISION

PLAN & PROFILE SHEET  
STA 17+00 TO STA 32+00

APN = 40411043

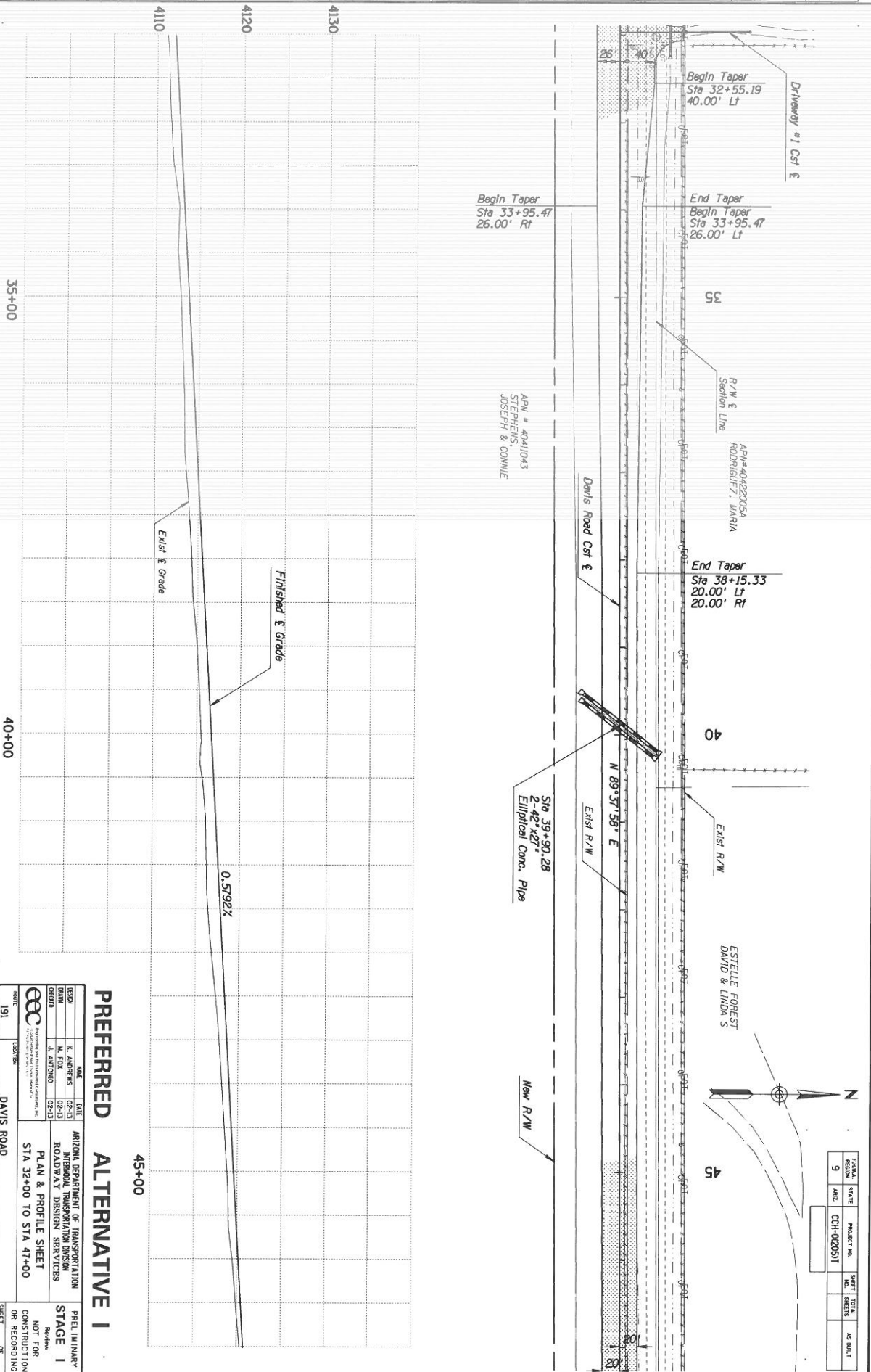
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NOT FOR CONSTRUCTION OR RECORDING

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SHEET	191
TRACS NO.	SS986 03D
PROJECT	CB-CCH-02035T
SHEET	OF

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DATE		PROJECT NO.		SHEET NO.	
9/11/13		CCH-02051T		45	
DATE		PROJECT NO.		SHEET NO.	
9/11/13		CCH-02051T		45	
DATE		PROJECT NO.		SHEET NO.	
9/11/13		CCH-02051T		45	

DESIGNER	DATE	BY	DATE
BOHANNON	02-13	K. ANDREWS	02-13
BOHANNON	02-13	M. FOX	02-13
BOHANNON	02-13	J. ANTONIO	02-13

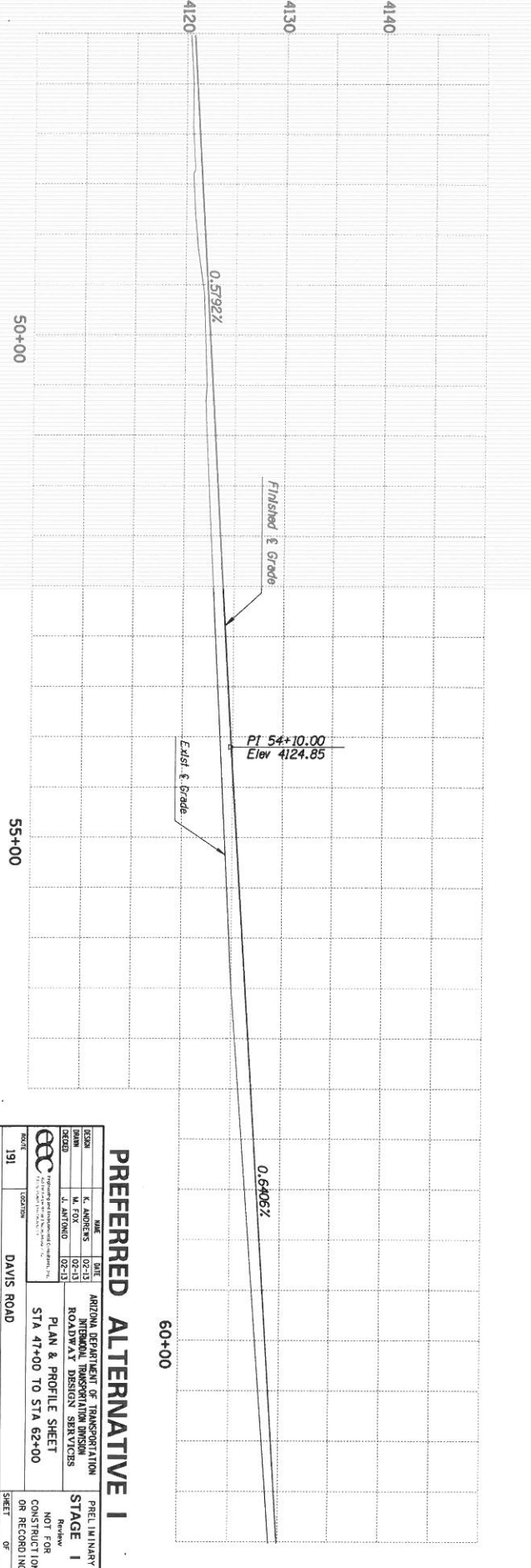
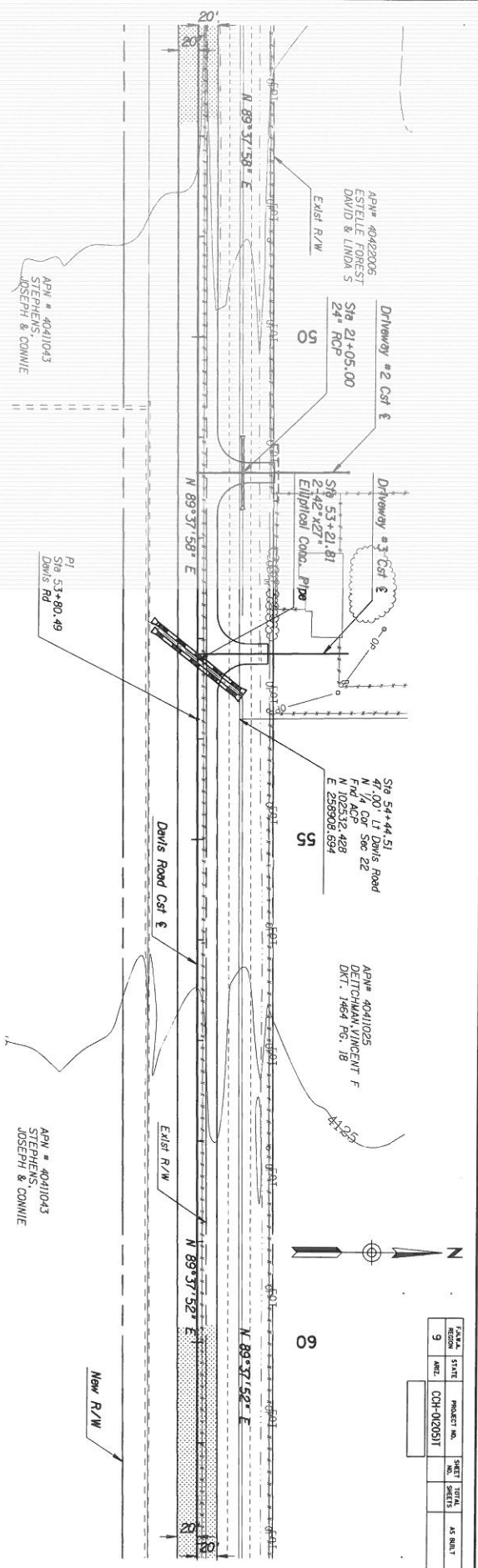
ARIZONA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 ROADWAY DESIGN SERVICES

PLAN & PROFILE SHEET  
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PROJECT NO. 55986 03D  
 TRACS NO. 191  
 DAVIS ROAD  
 CBI-CCH-02051T

PRELIMINARY  
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 NOT FOR  
 CONSTRUCTION  
 OR RECORDING

SHEET 45 OF 45



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NO.	DATE	BY	REVISION
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2	10-2-13	M. FOX	DESIGN
3	10-2-13	J. ANTONIO	DESIGN

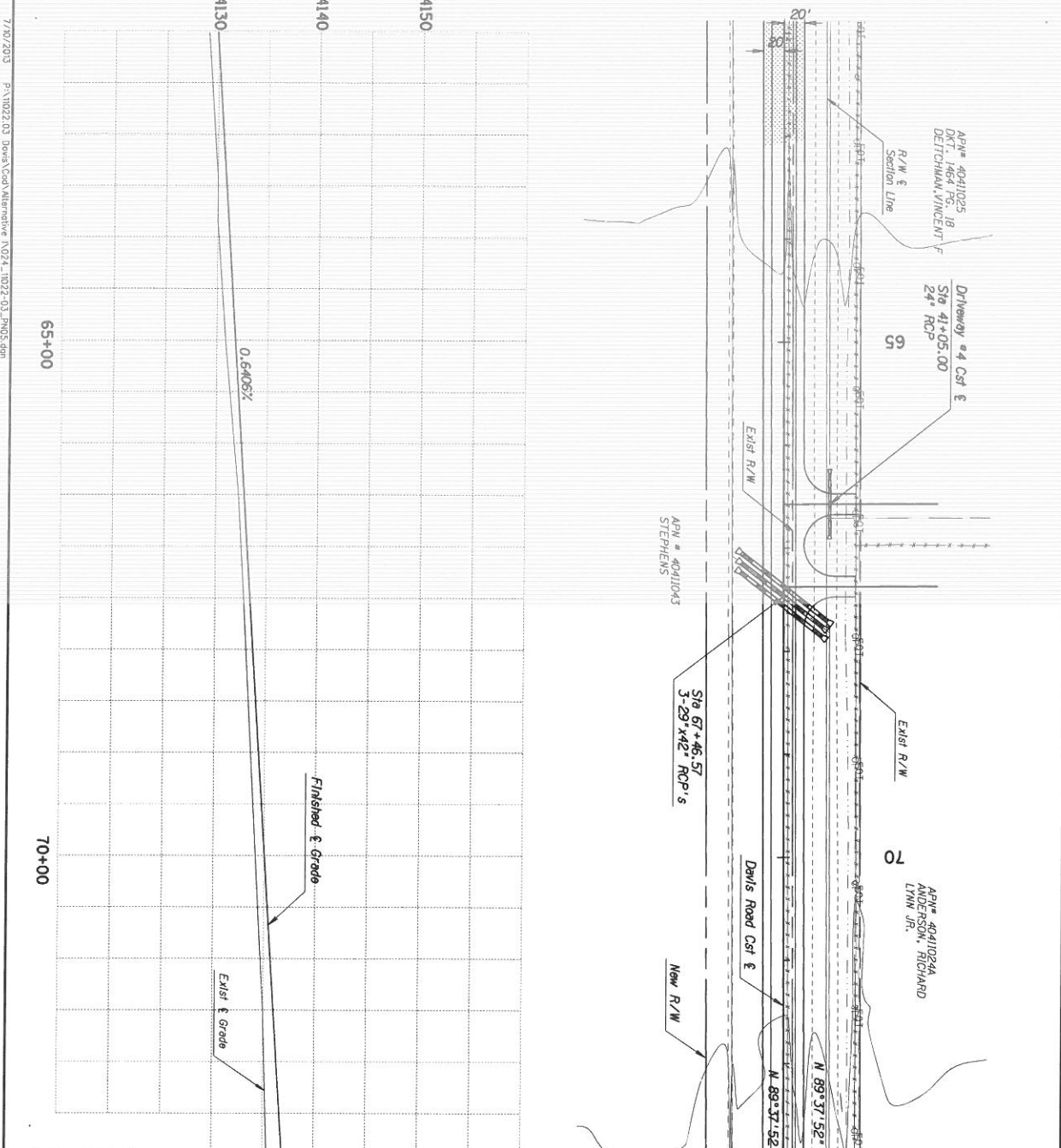
ARIZONA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION ENGINEERING DIVISION  
ROADWAY DESIGN SERVICES

PLAN & PROFILE SHEET  
STA 47+00 TO STA 62+00

PROJECT: 191 DAVIS ROAD  
SHEET 191 OF 191  
TRACTS NO. S5986 03D CBI-CCH-020501

PRELIMINARY STAGE 1  
NOT FOR CONSTRUCTION OR RECORDING





TRACTS NO. 55966 03D	DAVIS ROAD	CBI-CCH-02051T	SHEET 191	OF
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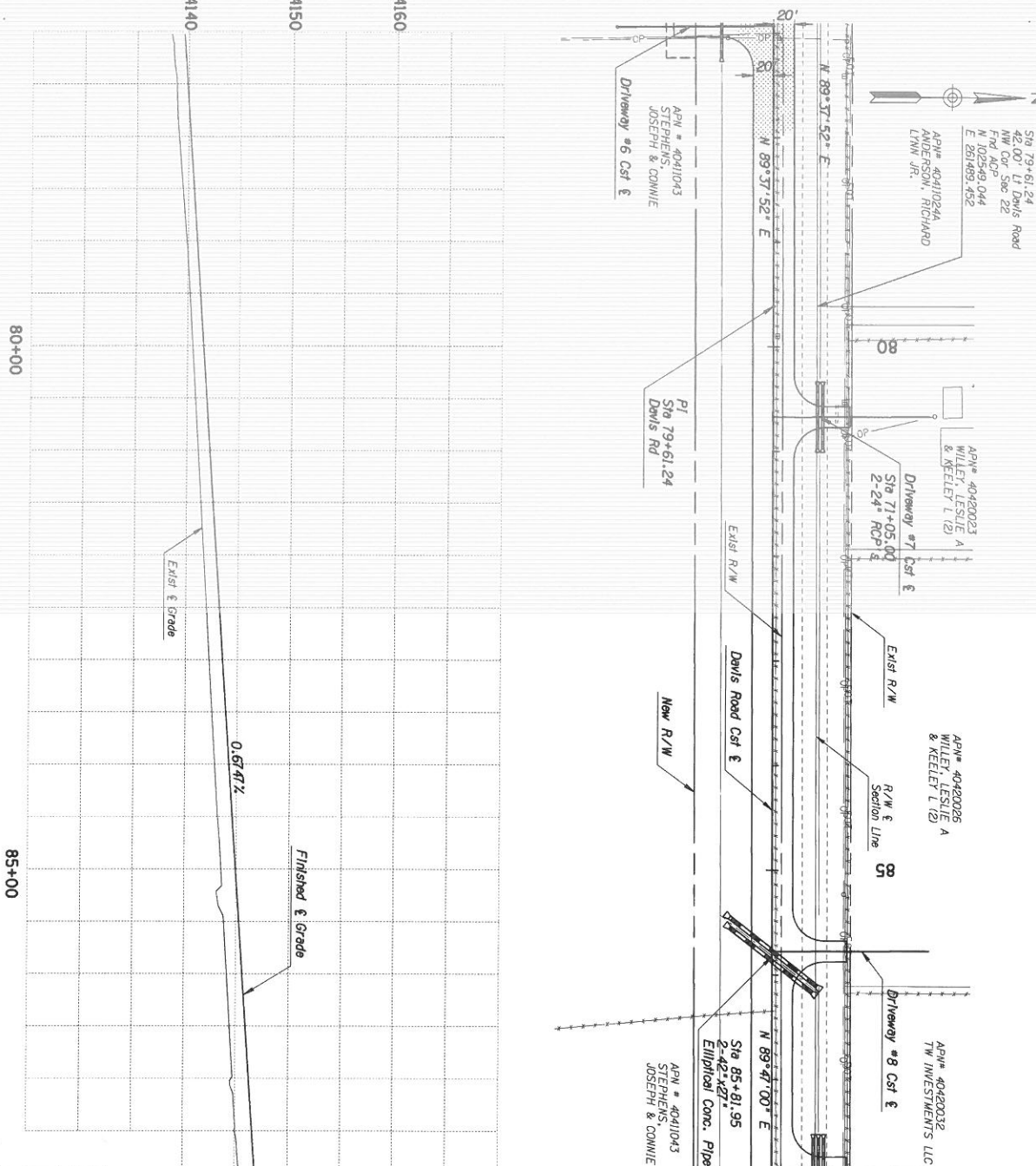
  

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DATE	2-2-13	BY	K. ANDREWS	CHECKED	M. FOX	DATE	2-2-13
DESIGNED	J. ANTONIO	DATE	2-2-13	ARIZONA DEPARTMENT OF TRANSPORTATION ARIZONA TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES			

**PREFERRED ALTERNATIVE I**  
 PRELIMINARY STAGE I  
 NOT FOR CONSTRUCTION OR RECORDING



FED. AID	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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DATE	BY	CHECKED	DATE	DATE
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ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES				
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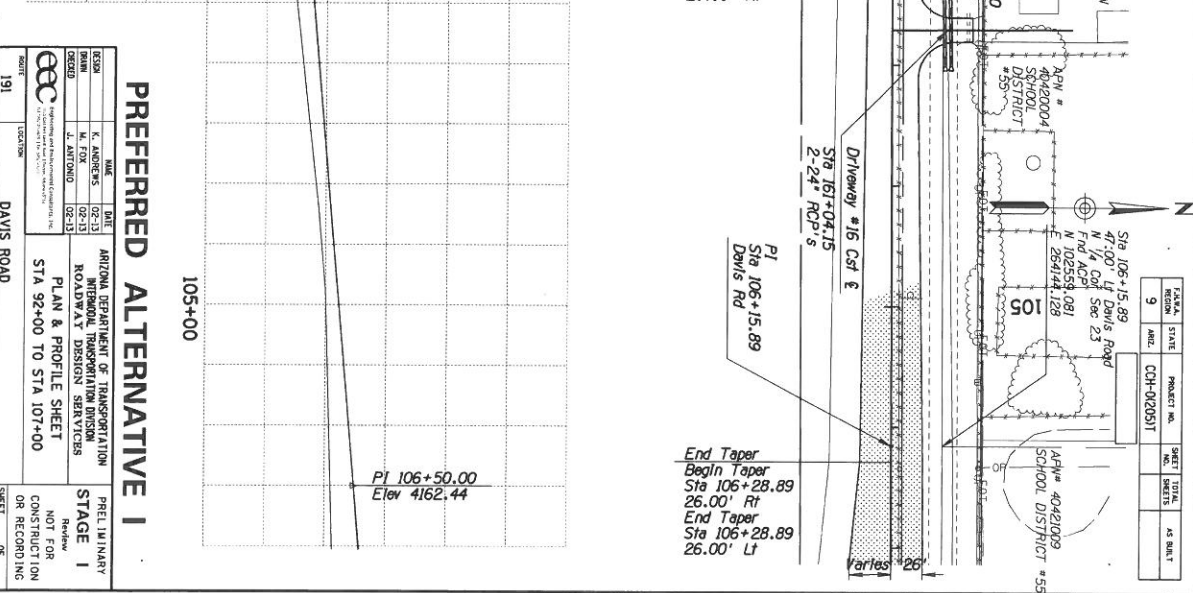
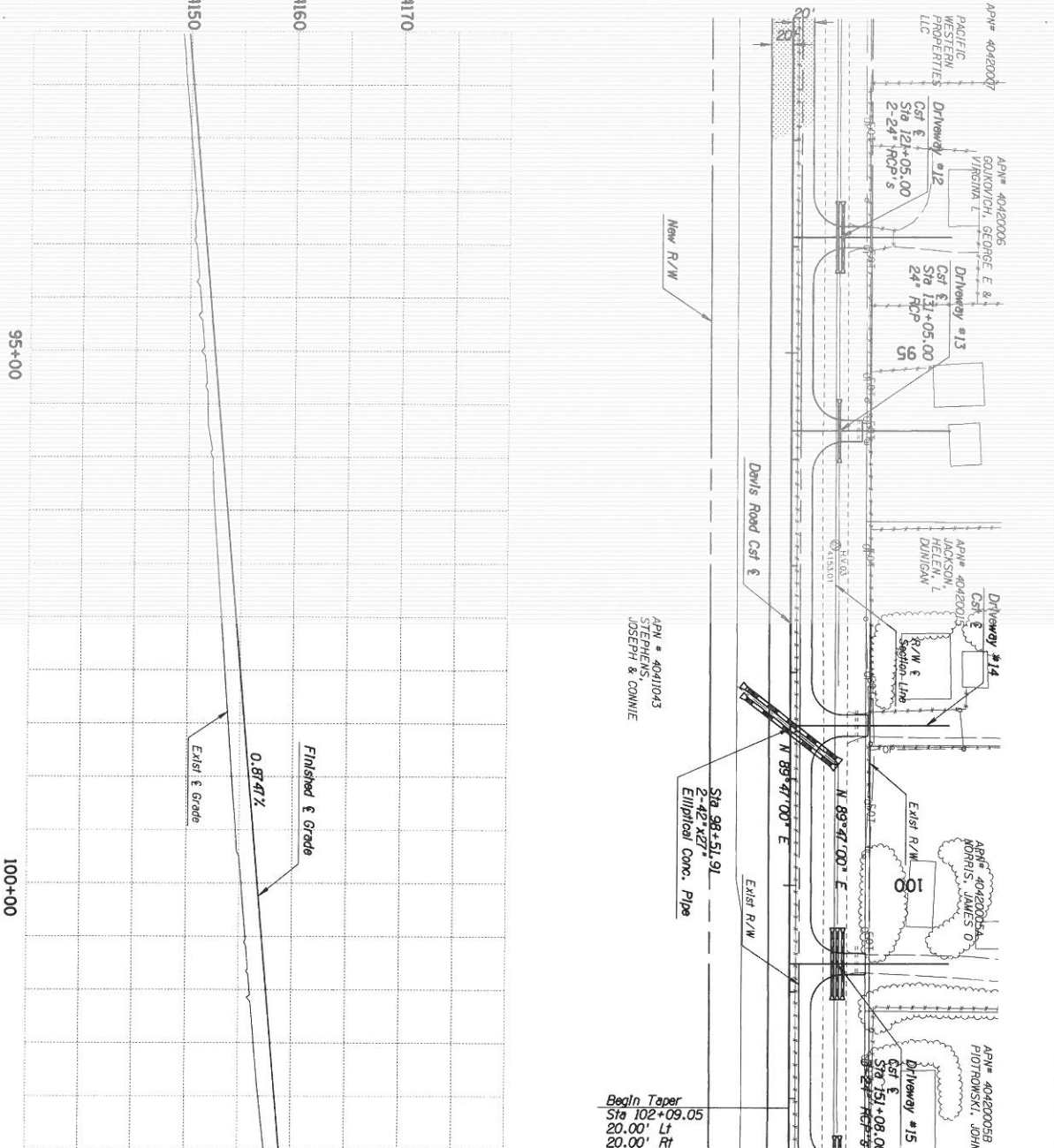
  

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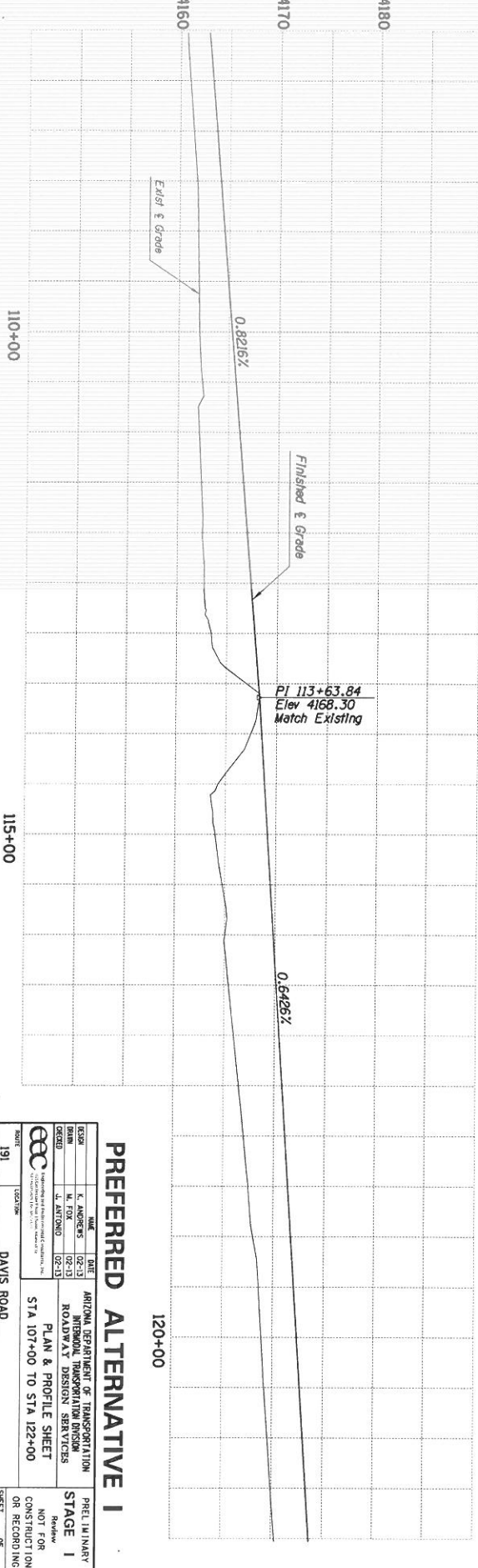
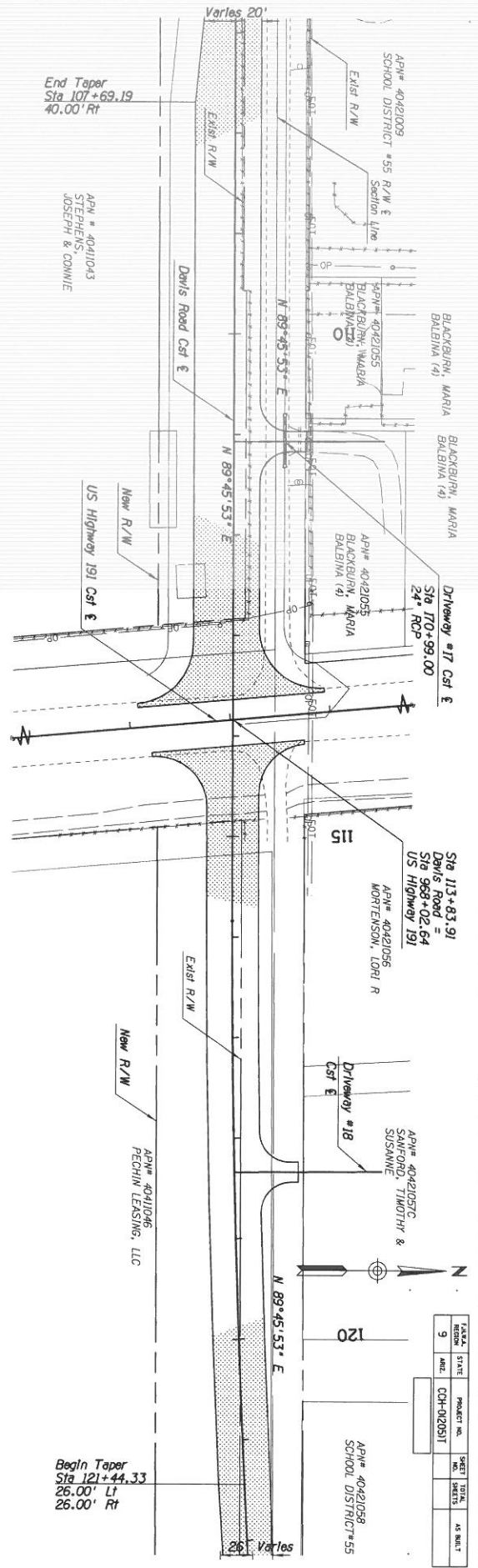
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BRUNN	02-13	K. ANDRUSIS	ROADWAY DESIGN DIVISION
DESIGNED	02-13	M. FOX	DESIGN SERVICES DIVISION
		J. ANTONIO	DESIGN SERVICES
Engineering and Construction Services, Inc. 1201 North Central Expressway, Suite 100 Scottsdale, AZ 85257			
PROJECT		DAVIS ROAD	
SHEET NO.		55986 03D	
SECTION		CBI-CCH-02051T	
DATE		191	
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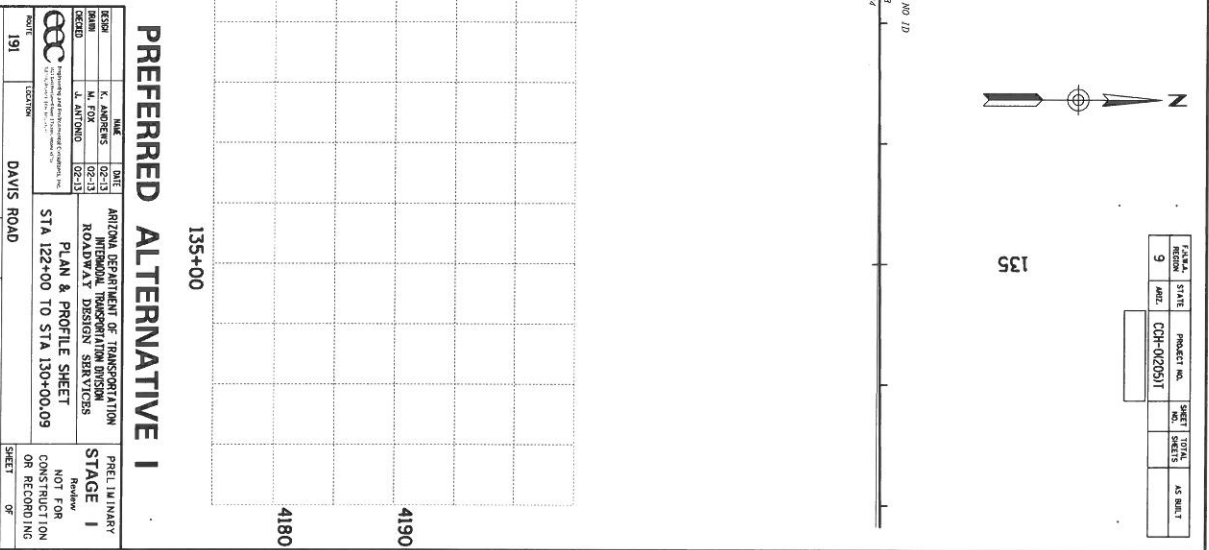
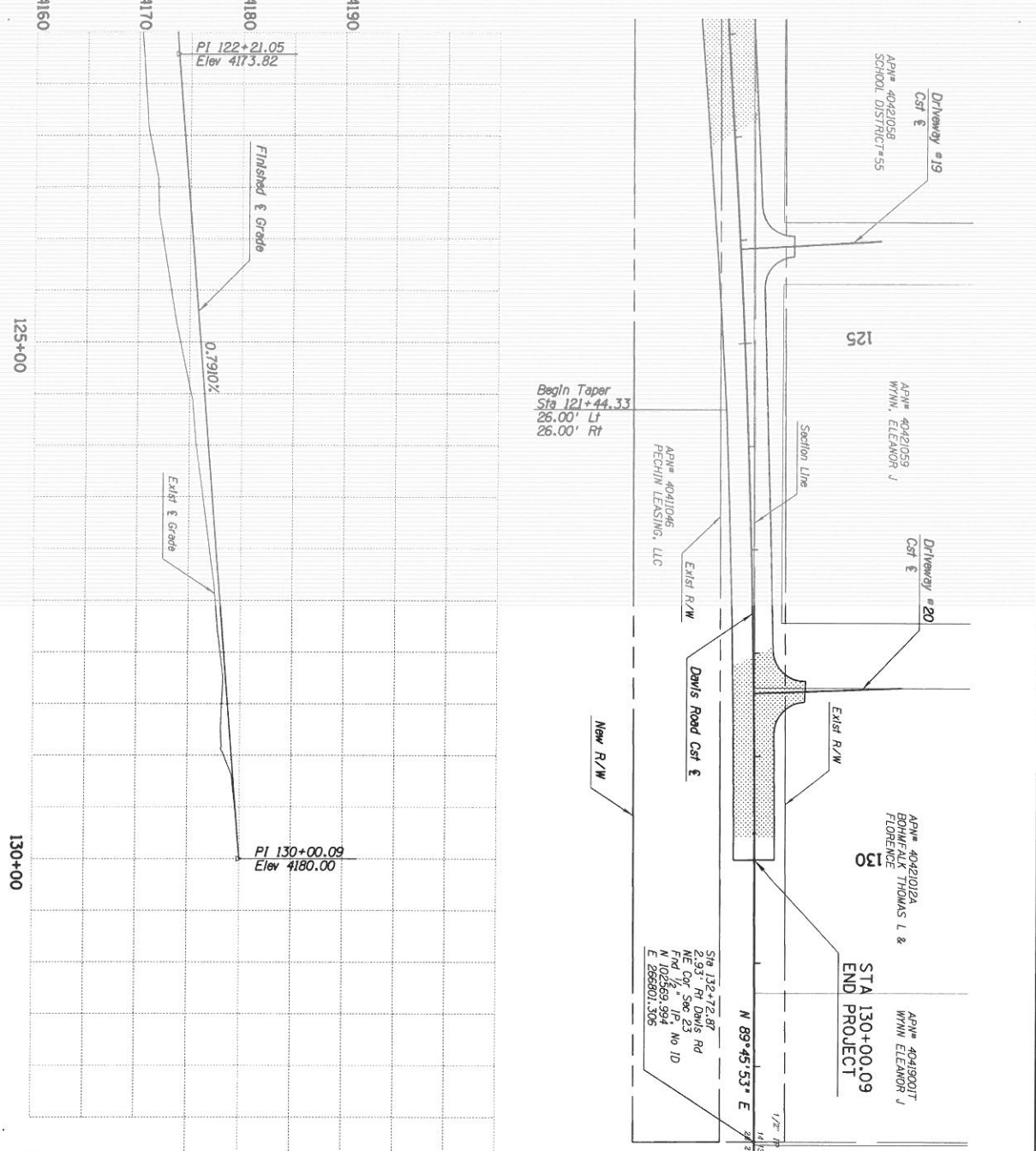
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BRN	M. FOX	02-13	ROADWAY DESIGN SERVICES
ORCD	J. ANTONIO	02-13	PLANNING AND DESIGN SERVICES
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DATE	BY	CHKD	APP'D	DESCRIPTION
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02-13	M. FOX	02-13		ROADWAY DESIGN SERVICES
02-13	L. ANTONIO	02-13		

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