

**Texas Department of Transportation  
Book 2 – Technical Provisions**

**Horseshoe Design-Build Project**

**Attachment 8-2  
Design Traffic, 18 Kip ESAL**

# TRAFFIC ANALYSIS FOR HIGHWAY DESIGN

Dallas District

April 2, 2012

Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2016 to 2036)			
	2016	2036		K Factor	ADT	Percent Trucks			Flexible Pavement	S	N	Rigid Pavement
<u>I-35E</u> From Eighth Street To I-30  Dallas County	232,900	315,900	57 -43	8.0	7.5	3.4	16,800	20	62,810,000	3	82,865,000 84,494,000 85,095,000	8" 10" 12"
<b>Date for Use in Air &amp; Noise Analysis</b>												
		Base Year										
		% of ADT	% of DHV									
		92.5	96.6									
		3.0	1.4									
		4.5	2.0									
<b>Date for Use in Air &amp; Noise Analysis</b>												
		Base Year										
		% of ADT	% of DHV									
		92.5	96.6									
		3.0	1.4									
		4.5	2.0									
Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2016 to 2046)			
	2016	2046		K Factor	ADT	Percent Trucks			Flexible Pavement	S	N	Rigid Pavement

Dallas County

**NOT INTENDED FOR CONSTRUCTION**

**BIDDING OR PERMIT PURPOSES**

William Erick Knowles, P.E.

Serial Number 84704



**NOT INTENDED FOR CONSTRUCTION TRAFFIC ANALYSIS FOR HIGHWAY DESIGN**

**BIDDING OR PERMIT PURPOSES**

Dallas District

William Erick Knowles, P.E.

Serial Number 84704

April 3, 2012

Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2016 to 2036)									
	2016	2036		K Factor	ADT	Trucks			DHV	Flexible Pavement	S	N	Rigid Pavement	SLAB				
	2016		2046		Dir Dist %	K Factor	ADT	Trucks	DHV	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2016 to 2046)								
I-30																		
From I-35E To West of I-45	174,700	237,600	60	-40	8.8	7.6	3.4	20	48,303,000	3	63,377,000	8"						
Dallas County											64,603,000	10"						
											65,058,000	12"						
<b>Date for Use in Air &amp; Noise Analysis</b>																		
Vehicle Class	Base Year																	
	% of ADT		% of DHV															
	92.4		96.9															
Light Duty	2.9		1.3															
Medium Duty	4.7		2.1															
Heavy Duty																		
<b>Date for Use in Air &amp; Noise Analysis</b>																		
Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2016 to 2046)									
	2016	2046		K Factor	ADT	Trucks			DHV	Flexible Pavement	S	N	Rigid Pavement	SLAB				
	2016		2046		Dir Dist %	K Factor	ADT	Trucks	DHV	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2016 to 2046)								
I-30																		
From I-35E To West of I-45	174,700	268,400	60	-40	8.8	7.6	3.4	20	77,870,000	3	102,171,000	8"						
Dallas County											104,148,000	10"						
											104,881,000	12"						

**TRAFFIC ANALYSIS FOR HIGHWAY DESIGN**

**NOT INTENDED FOR CONSTRUCTION  
DRAWING OR PERMIT PURPOSES**

William Erick Knowles, P.E.  
Serial Number 84704

April 2, 2012

Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 20 Year Period (2016 to 2036)		SLAB	
	2016	2036		K Factor	Percent Trucks	ADT			DHV	Flexible Pavement		Rigid Pavement
I-30 From Sylvan Ave To I-35E Dallas County	167,500	227,900	60 -40	8.8	7.7	3.5	16,500	30	46,928,000	3	61,576,000 62,767,000 63,210,000	8" 10" 12"
<b>Date for Use in Air &amp; Noise Analysis</b>												
<b>Vehicle Class</b>	<b>Base Year</b>											
	<b>% of ADT</b>	<b>% of DHV</b>										
Light Duty	92.3	96.5										
Medium Duty	3.0	1.4										
Heavy Duty	4.7	2.1										
Description of Location	Average Daily Traffic		Dir Dist %	Base Year			ATHWLD	Percent Tandem Axles in ATHWLD	Total Number of Equivalent 18k Single Axle Load Applications One Direction Expected for a 30 Year Period (2016 to 2046)		SLAB	
	2016	2046		K Factor	Percent Trucks	ADT			DHV	Flexible Pavement		Rigid Pavement
I-30 From Sylvan Ave To I-35E Dallas County	167,500	257,600	60 -40	8.8	7.7	3.5	16,600	20	75,678,000	3	99,302,000 101,223,000 101,936,000	8" 10" 12"



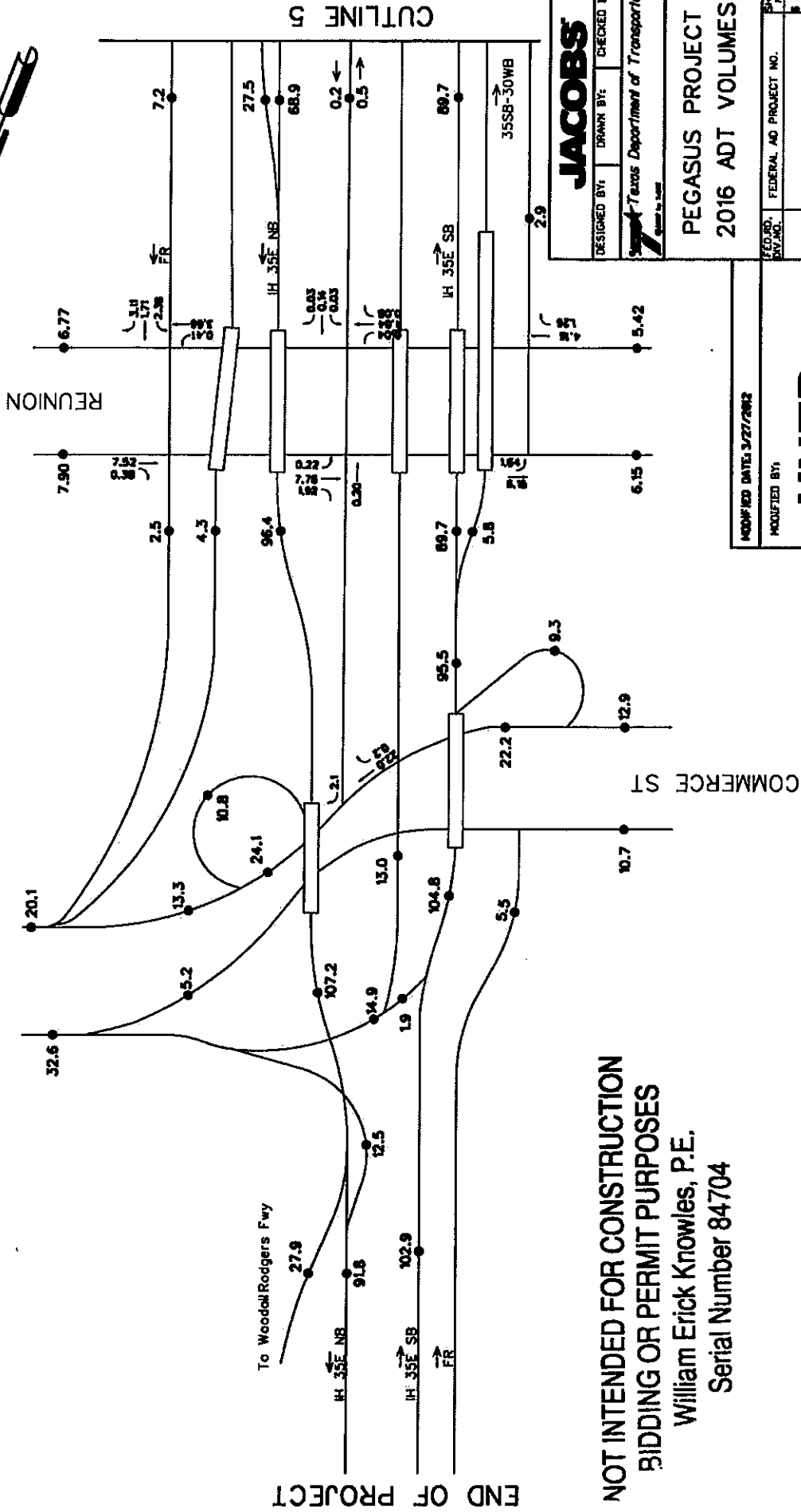












END OF PROJECT

**NOT INTENDED FOR CONSTRUCTION  
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William Erick Knowles, P.E.  
Serial Number 84704

Note:

Numbers in 1000s

**JACOBS**

DESIGNED BY: DRAWN BY: CHECKED BY:  
Texas Department of Transportation  
Created by: LMS

PEGASUS PROJECT  
2016 ADT VOLUMES

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SHEET NO.
Texas Department of Transportation			16
Created by: LMS			9
STATE:	DIST.:	COUNTY:	
TX	DALLAS	DALLAS	
CONTRACT NO.:	SECTION NO.:	JOB NO.:	HIGHWAY NO.:
0442	03 02	706 TRIPLE	1435E / IH 30

MODIFIED DATE: 3/27/2012

MODIFIED BY:

**HNTB**

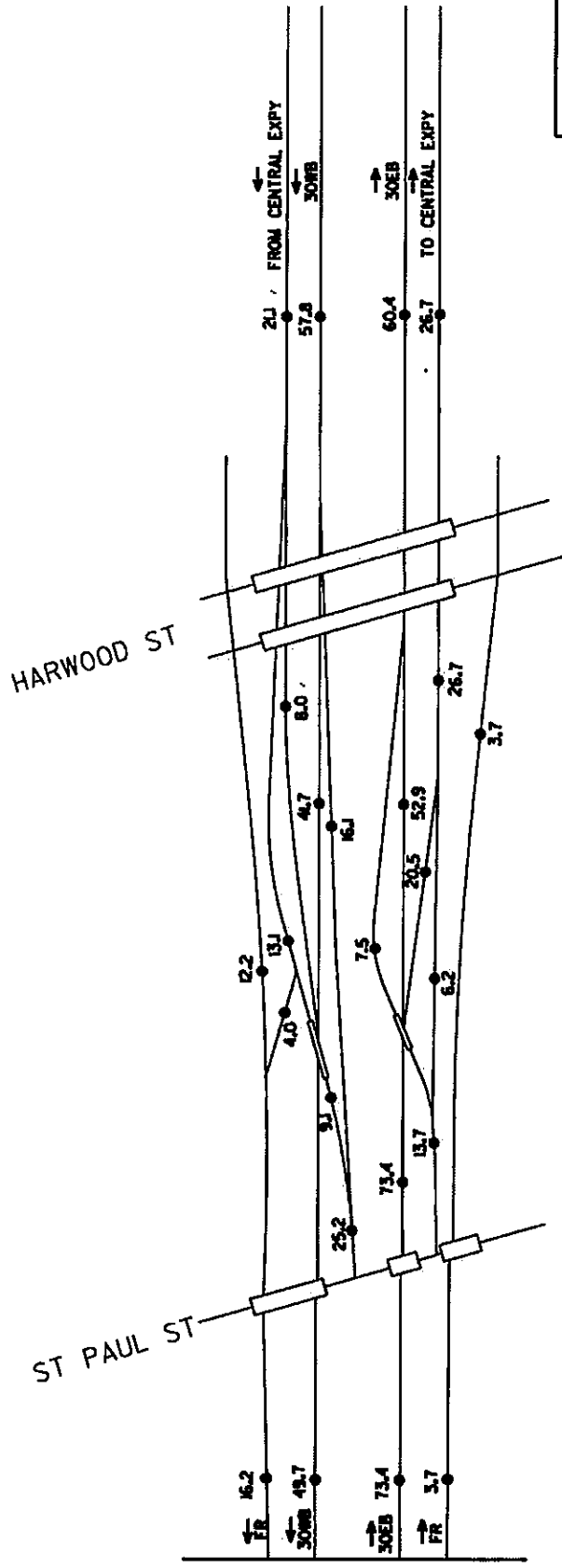
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PROJECT EXTENSION



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 Serial Number 84704

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Texas Department of Transportation

PEGASUS PROJECT  
 2016 ADT VOLUMES

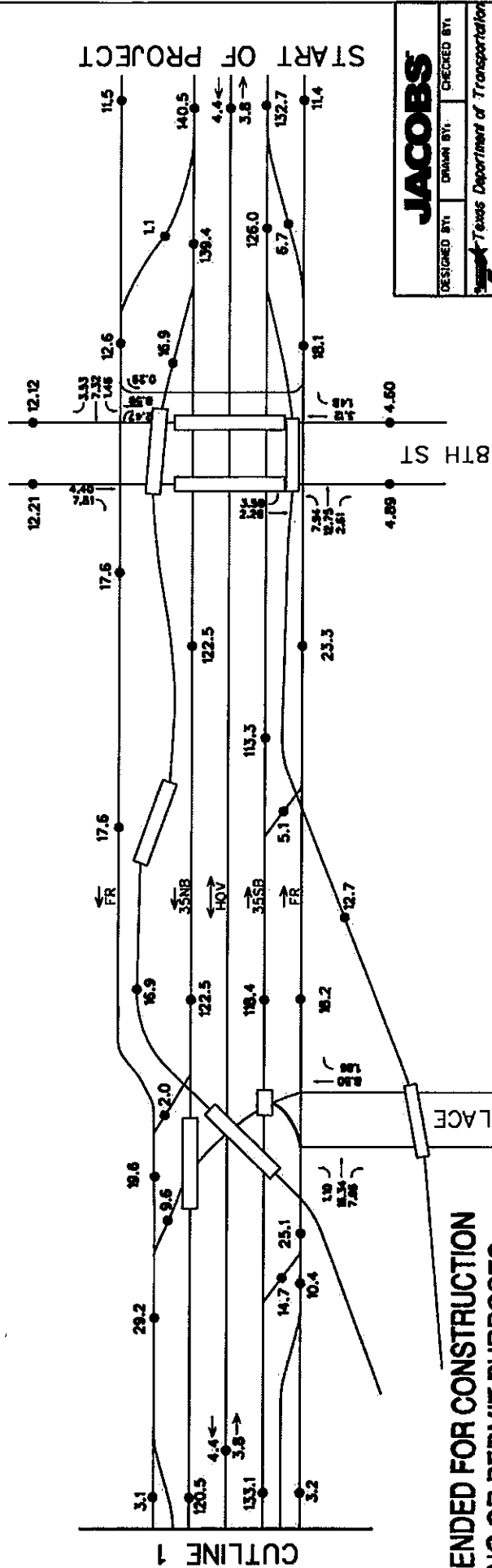
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0040	TX	DALLAS	DALLAS
0040	CONT. SECT.	03	JOB NO. 160702
0040	03	03	HIGHWAY NO. 16096 / IN 30

MODIFIED DATE: 3/27/2012

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Texas Department of Transportation

PEGASUS PROJECT  
2036 ADT VOLUMES

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
TX STATE	DIST.	COUNTY
CONTRACT NO.	SECT.	JOB
DATE	DATE	DATE

MODIFIED DATE: 3/27/2002

MODIFIED BY: \_\_\_\_\_

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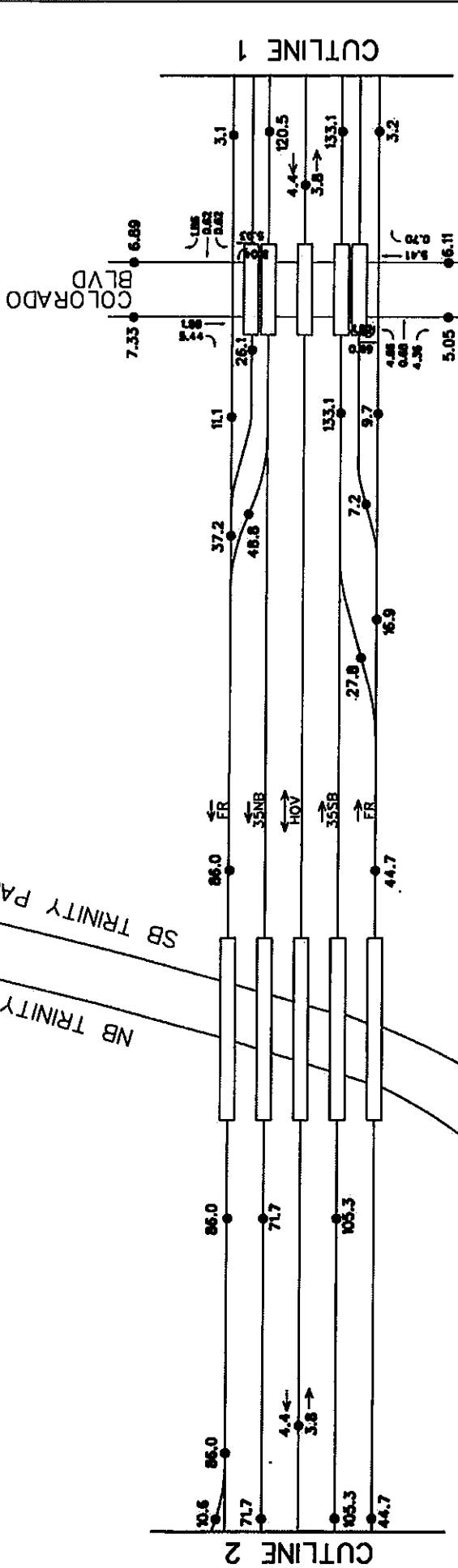
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 William Erick Knowles, P.E.  
 Serial Number 84704

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Note:  
 Numbers in 1000s



NB TRINITY PARKWAY  
 SB TRINITY PARKWAY



**JACOBS**

DESIGNED BY: DRAWN BY: CHECKED BY:

Texas Department of Transportation

PEGASUS PROJECT  
 2036 ADT VOLUMES

FED. PROJ. DIV. NO.	FEDERAL PROJ. NO.	SHEET NO.
STATE	DIST.	COUNTY
TX	DALLAS	DALLAS
CONT. NO.	SECT.	JOB NO.
0442	03	205 TR/132
DATE	SCALE	HOUSE / IN. 30
03/27/2012	1" = 100'	1/8" = 1" = 30'

MODIFIED DATE: 3/27/2012

MODIFIED BY:  
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 Numbers in 1000s

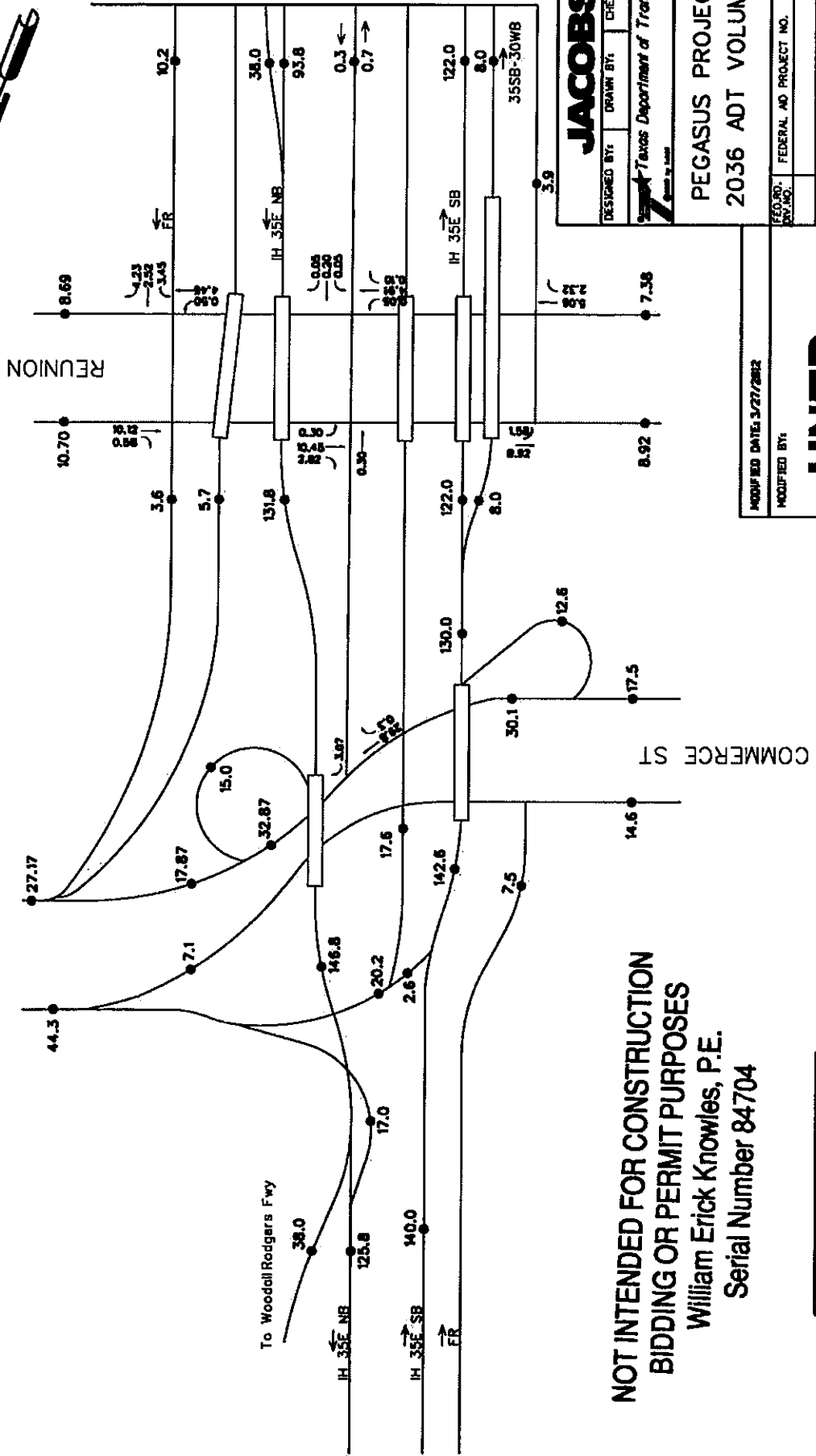
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CUTLINE 5

END OF PROJECT

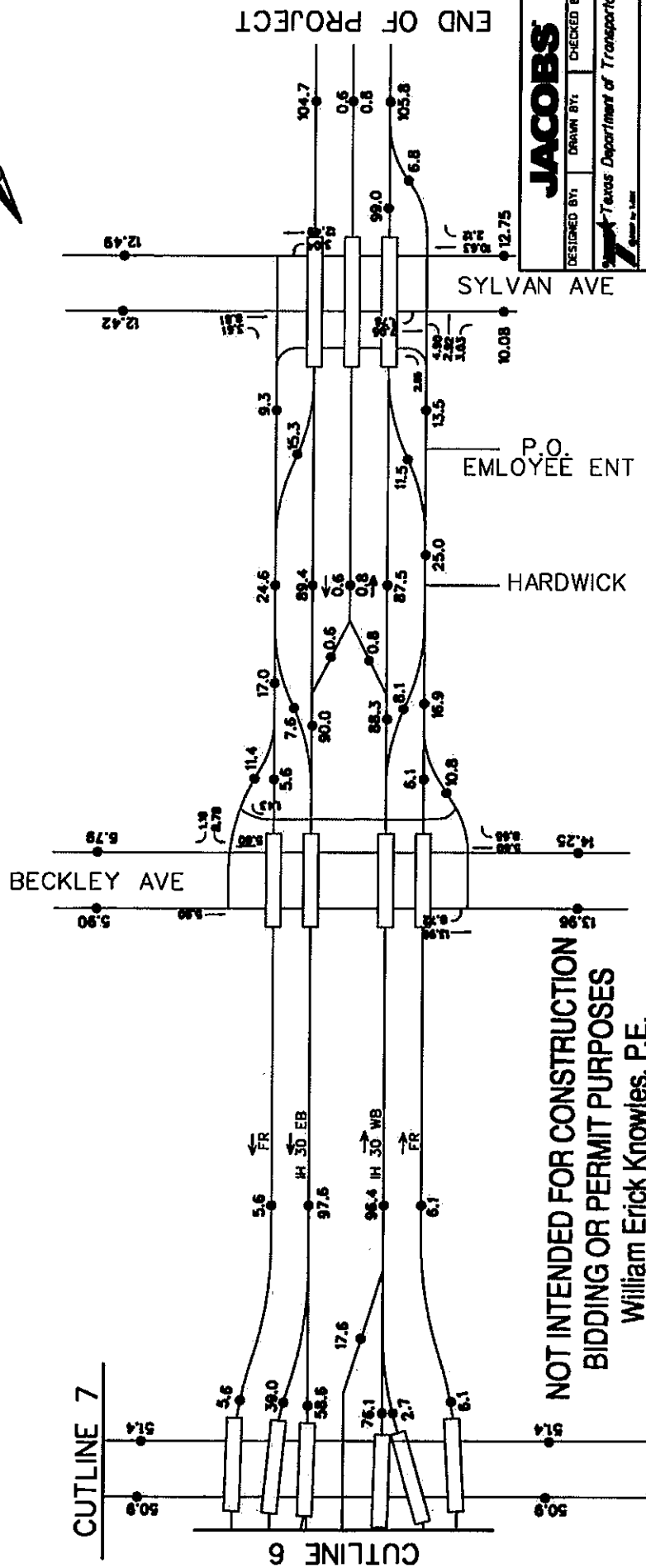
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DESIGNED BY:	CHECKED BY:
Texas Department of Transportation	
PEGASUS PROJECT	
2036 ADT VOLUMES	
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STATE	COUNTY
TX	DALLAS
CONTRACT NO.	SECTION
0442	03 03
DATE	DATE
04/16	04/16
SHEET NO. 5 OF 8	

MODIFIED DATE: 3/27/2012
MODIFIED BY:
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Numbers in 1000s



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 Texas Department of Transportation  
 State of Texas

PEGASUS PROJECT  
 2036 ADT VOLUMES

FED. ROAD DIST. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
TX	DALLAS	DALLAS
STATE	DIST.	COUNTY
CONTRACT NO. 0442	JOB NO. 203	HIGHWAY NO. 136
DATE 02/02/03	DATE 02/02/03	DATE 02/02/03

MODIFIED DATE: 3/27/2012  
 MODIFIED BY:  
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 Serial Number 84704

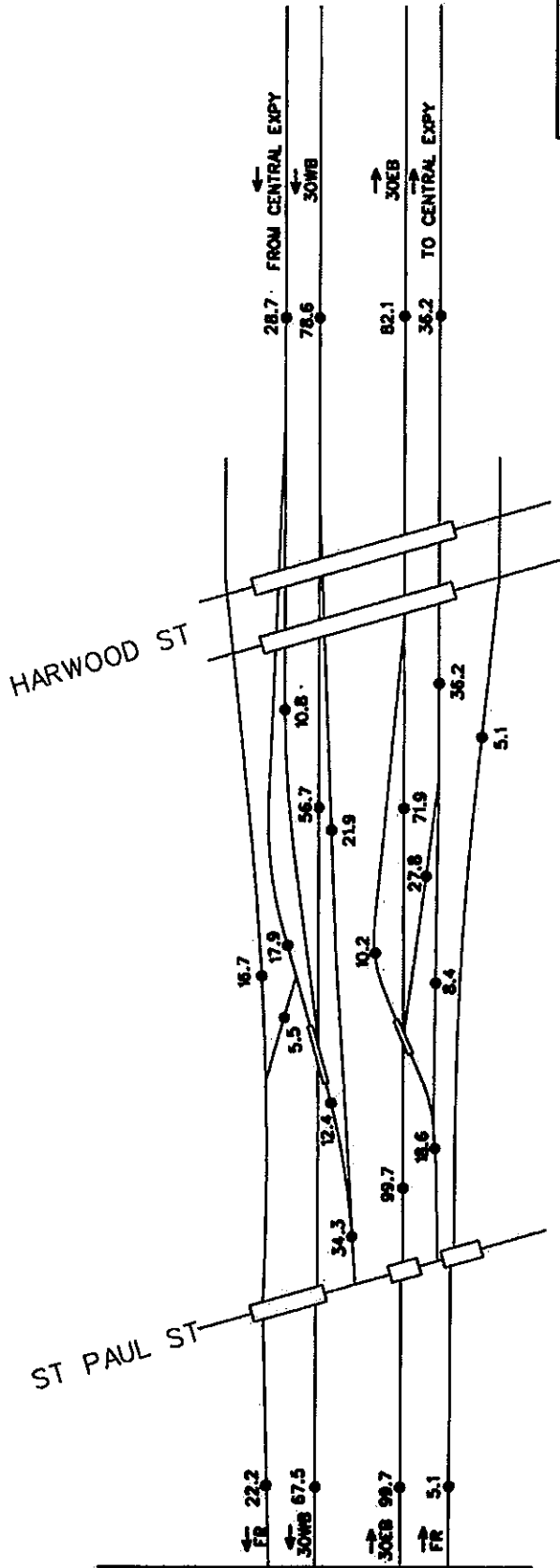
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Note:  
 Numbers in 1000s





PROJECT EXTENSION



END OF PROJECT

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 William Erick Knowles, P.E.  
 Serial Number 84704

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Texas Department of Transportation	
PEGASUS PROJECT	
2036 ADT VOLUMES	
FED. RD. DIST. NO.	FEDERAL AID PROJECT NO.
STATE	DIST.
TX	DALLAS
COUNTY	COUNTY
DALLAS	DALLAS
SECTION	SECTION
0442	08
DATE	DATE
08/14/02	08/14/02
PROJECT NO.	PROJECT NO.
2036	2036
SHEET NO.	SHEET NO.
9	9 OF 9

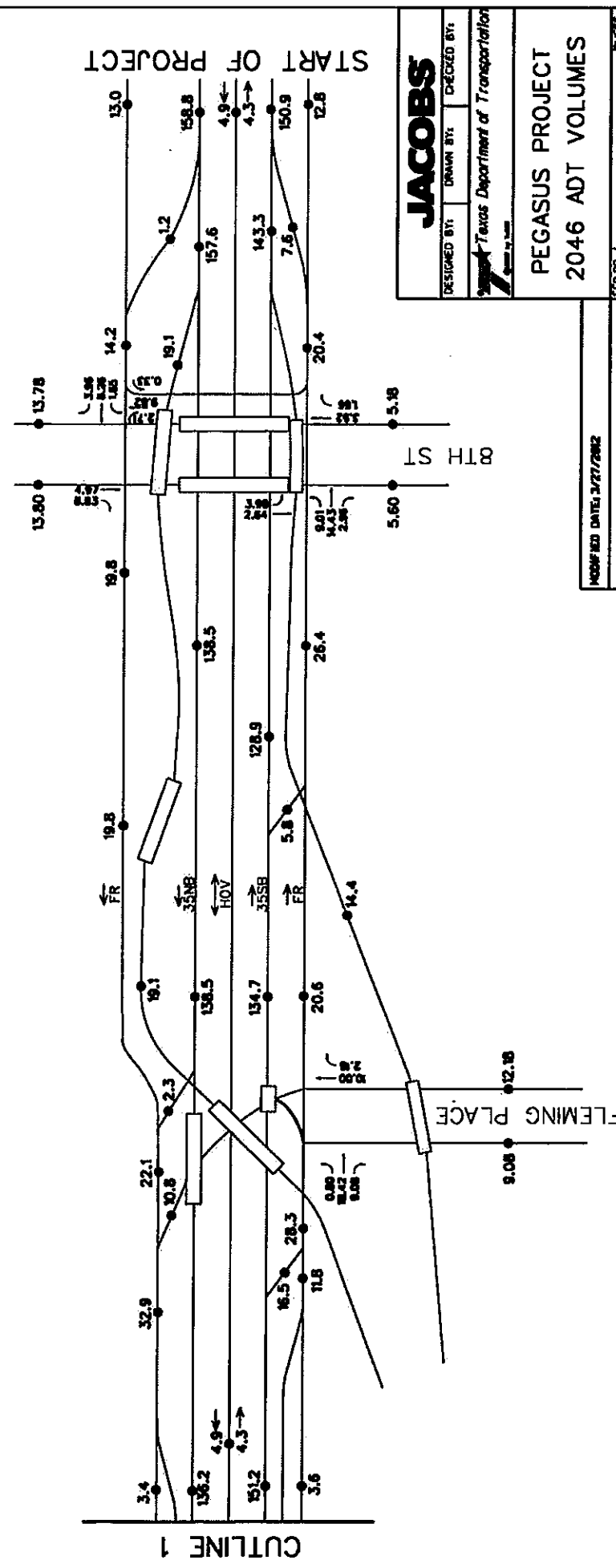
MODIFIED DATE: 3/27/2002

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 Serial Number 84704



START OF PROJECT

**JACOBS**  
 DESIGNED BY: DRAWN BY: CHECKED BY:  
 Texas Department of Transportation

**PEGASUS PROJECT  
 2046 ADT VOLUMES**

FED. PROJ. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
		1 OF 9
STATE	DIST.	COUNTY
TX	DALLAS	DALLAS
CONTRACT NO.	SECT.	JOB
0442	03 02	205 TR/132
		178
		1056 / IN 30

MODIFIED DATE: 3/27/2002  
 MODIFIED BY:

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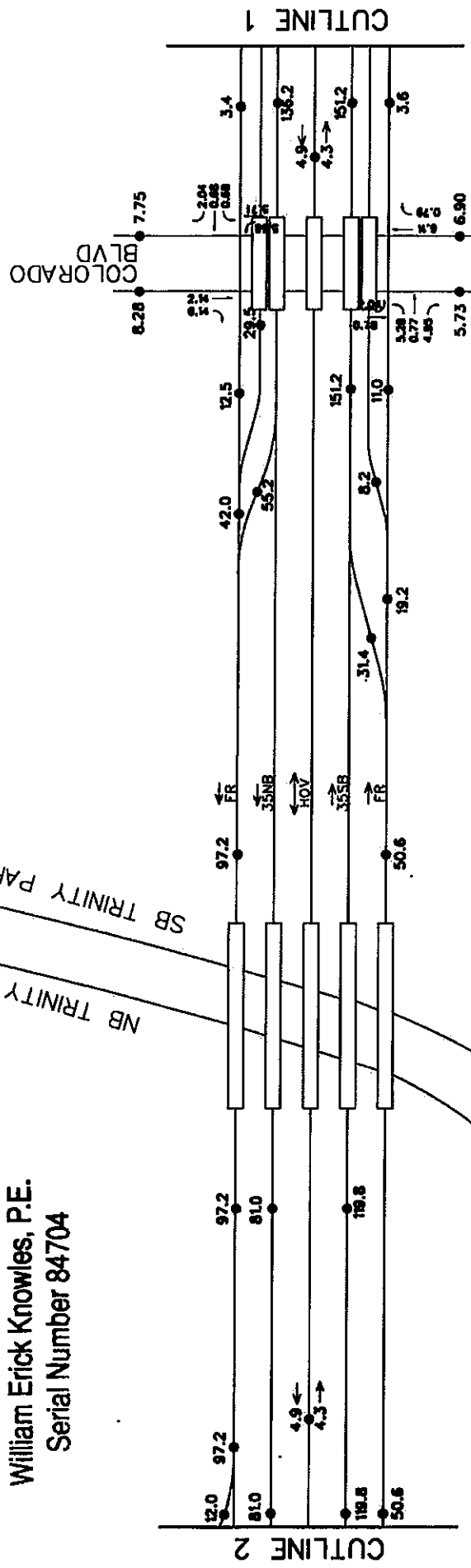
Note:  
 Numbers in 1000s





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William Erick Knowles, P.E.  
Serial Number 84704

NB TRINITY PARKWAY  
SB TRINITY PARKWAY



**JACOBS**

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Texas Department of Transportation  
Created by AutoCAD

**PEGASUS PROJECT  
2046 ADT VOLUMES**

FED. PROJ. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
TX	DALLAS	2 OF 8
STATE	DIST.	COUNTY
TX	DALLAS	DALLAS
CONTRACT NO.	SECTION	JOB
0443	03 02	205
198	18/7/3	1986 / 1 / 30

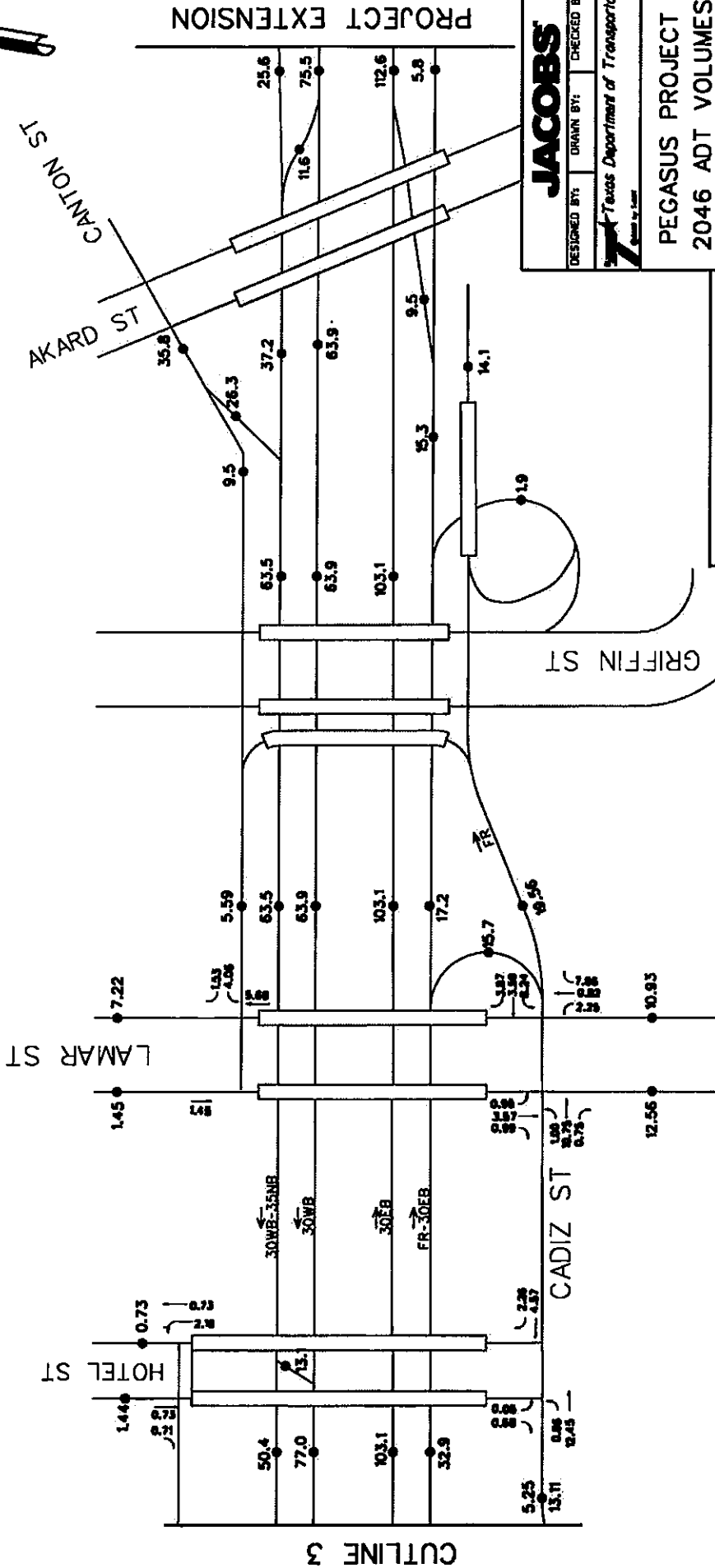
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MODIFIED BY:  
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Serial Number 84704



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Texas Department of Transportation

PEGASUS PROJECT  
2046 ADT VOLUMES

FEDERAL AID PROJECT NO.	SHEET NO.
STATE	OF
TX	DALLAS
DIST.	COUNTY
DALLAS	DALLAS
CONTRACT NO.	SECTION
0442	13 02
JOB NO.	HIGHWAY NO.
205 781/132	435E / IN 30

MODIFIED DATE: 3/27/2013

MODIFIED BY:

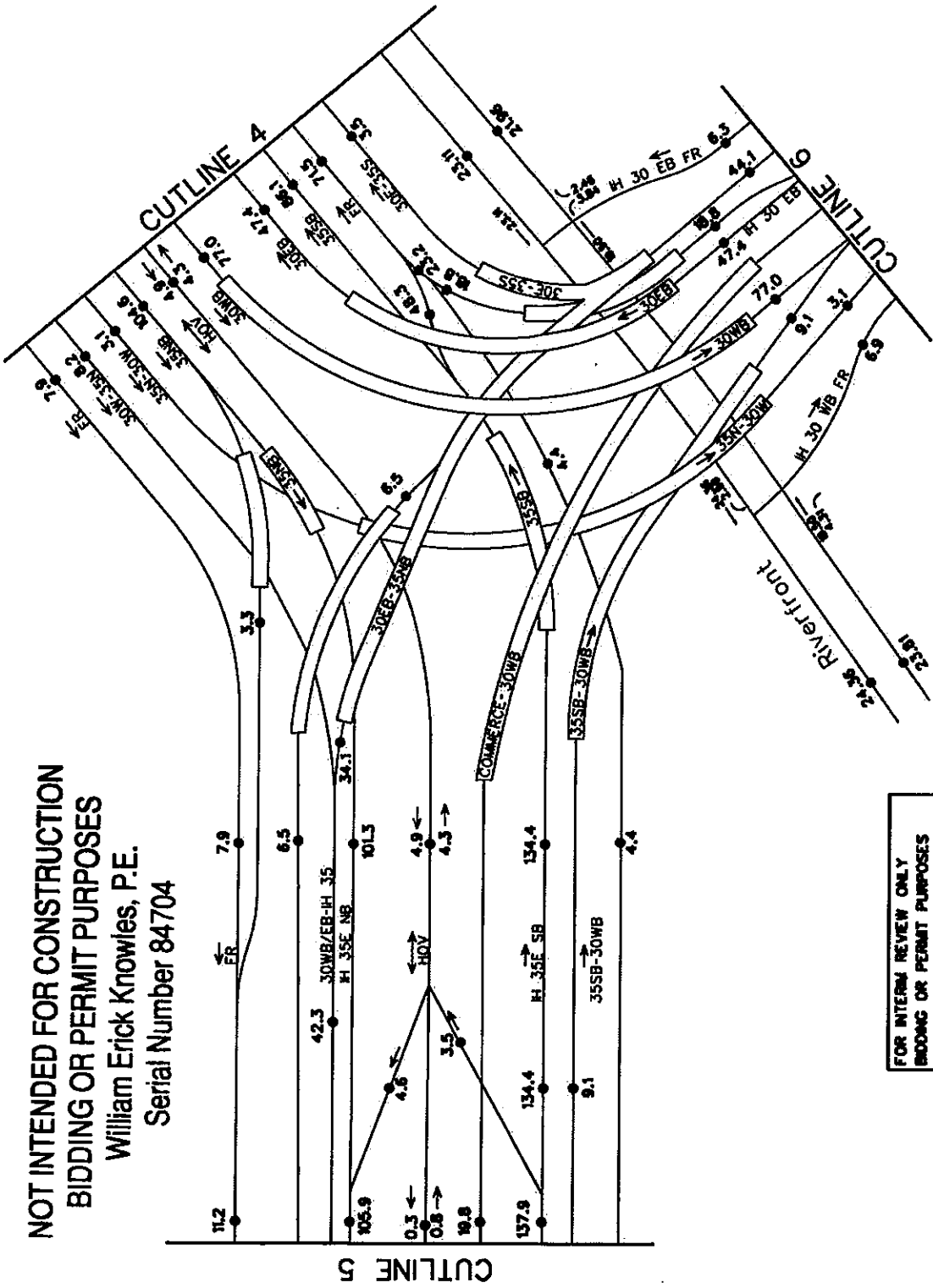
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 Numbers in 1000s



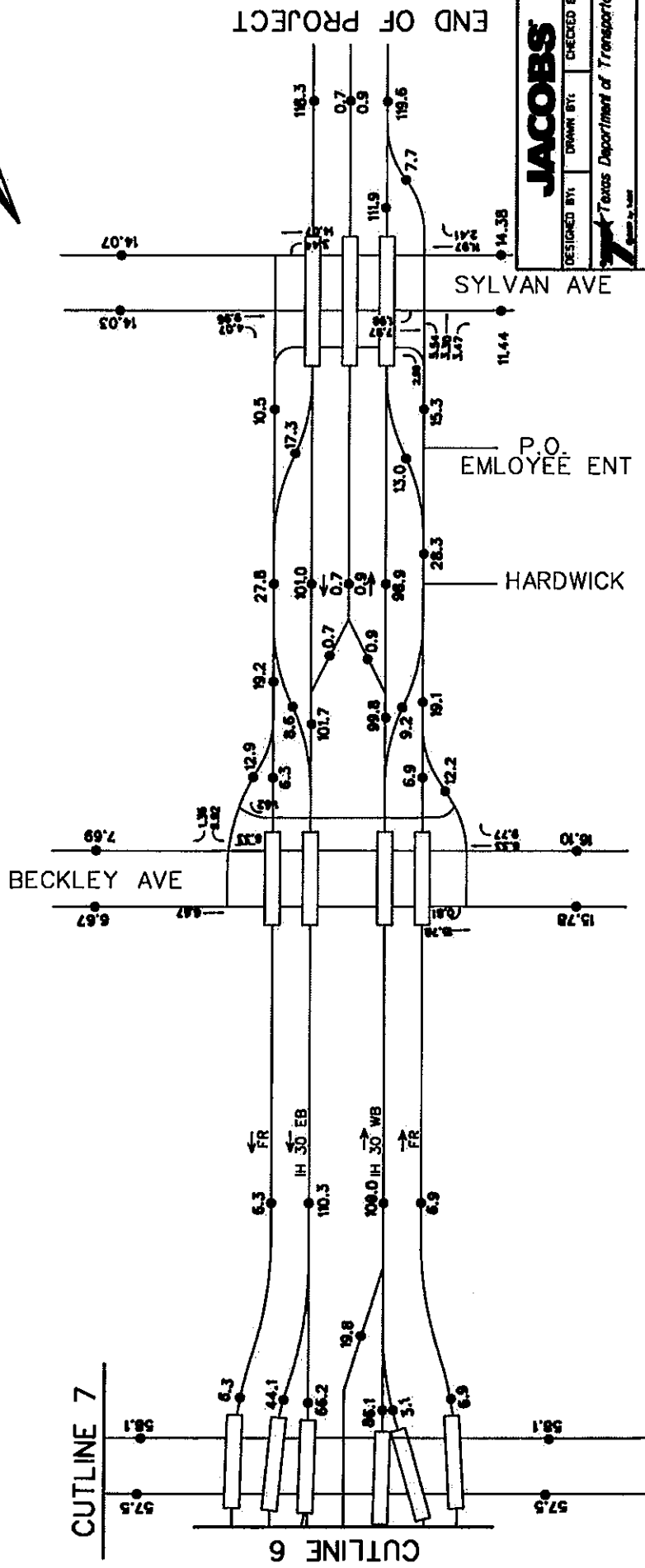
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<b>HNTB</b>	
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Texas Department of Transportation	
PEGASUS PROJECT	
2046 ADT VOLUMES	
FED. RD. DIST. NO.	PROJECT NO.
STATE	DIST.
TX	DALLAS
CONTRACT NO.	SECTION NO.
8048 0442	03 02
2005 10/13/02	4-006 / H 30
0008	04
FED. RD. DIST. NO. PROJECT NO. 5 OF 8	
STATE DIST. COUNTY DALLAS	
CONTRACT NO. SECTION NO. HIGHWAY NO.	
8048 0442 03 02 2005 10/13/02 4-006 / H 30	



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William Erick Knowles, P.E.

Serial Number 84704



MODIFIED DATE: 3/27/2002

MODIFIED BY:

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Note:  
 Numbers in 1000s

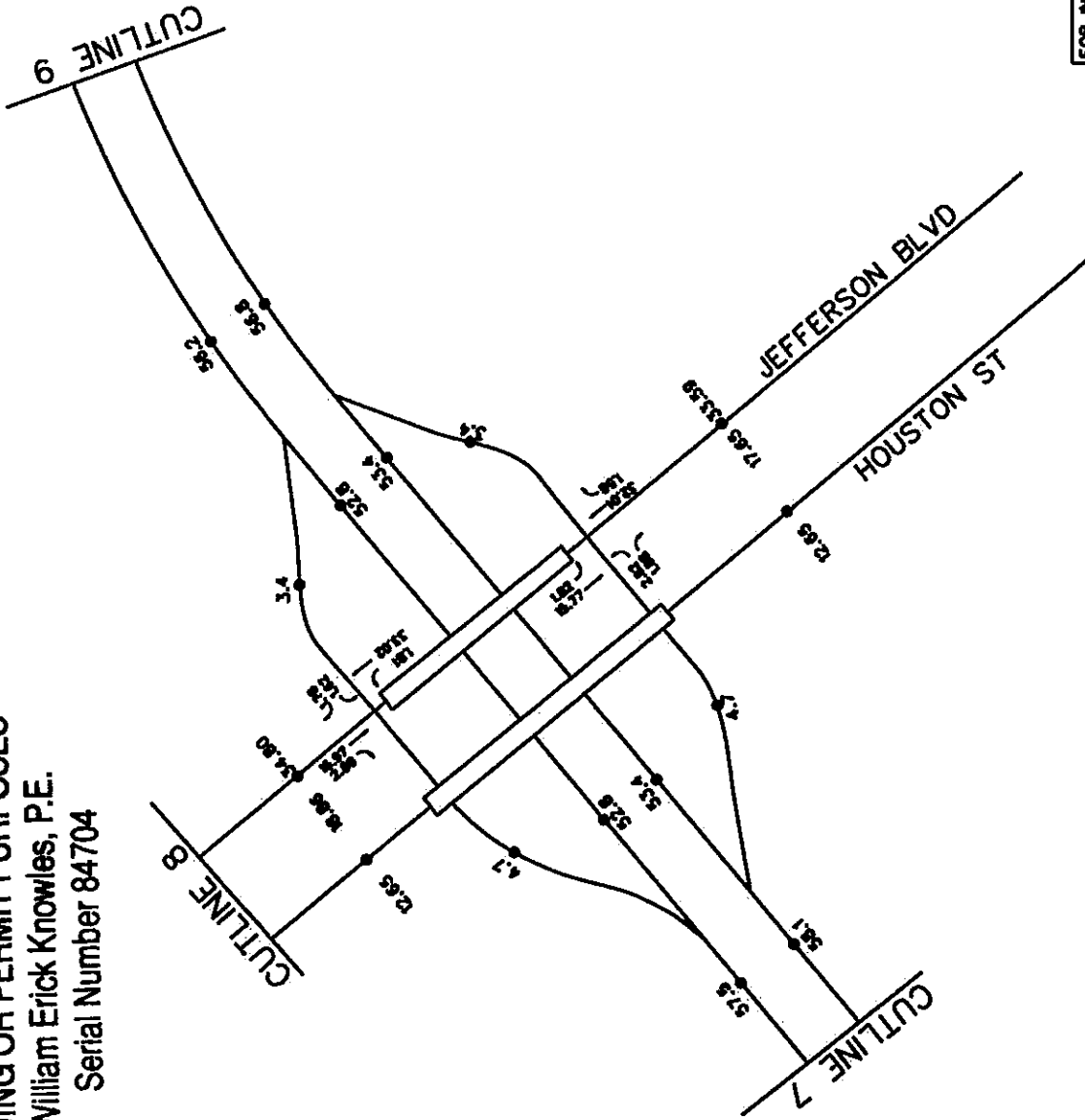
**JACOBS**

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 Texas Department of Transportation

PEGASUS PROJECT  
 2046 ADT VOLUMES

FEDERAL AID PROJECT NO.	SHEET NO.
STATE	COUNTY
TX	DALLAS
CONTRACT NO.	SECTION NO.
0447	03 02
DATE	PROJECT NO.
04	14396 / 11 30

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 Numbers in 1000s

<b>JACOBS</b>	
DESIGNED BY:	CHECKED BY:
Texas Department of Transportation	
PEGASUS PROJECT	
2046 ADT VOLUMES	
FED. RD. DIST. NO.	SHEET NO. OF 5
STATE	COUNTY
TX	DALLAS
CONTRACT NO.	JOB NO.
0442	205-TMP152
04	1056 / 24 30



