

PROJECT	DESIGNATION
STP-212-4(F)	8351130
CONTRACT	
XXXX	

**INDIANA
DEPARTMENT OF
TRANSPORTATION**

**CODE NO.: 3947
DES. NO.: 8351130**

RIGHT-OF-WAY PLANS

INTERSECTION IMPROVEMENT

U.S. 6 AT RP 036+051

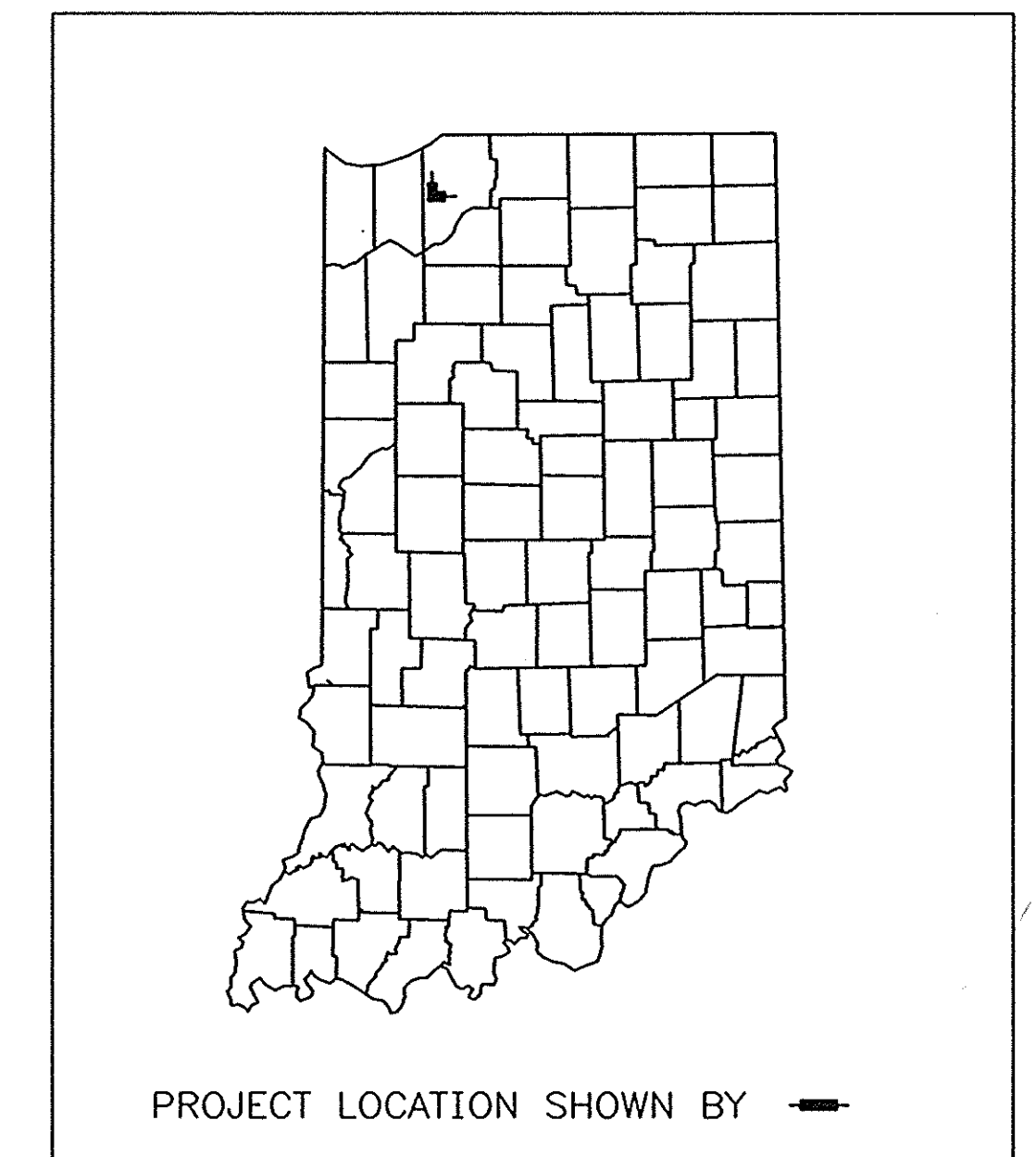
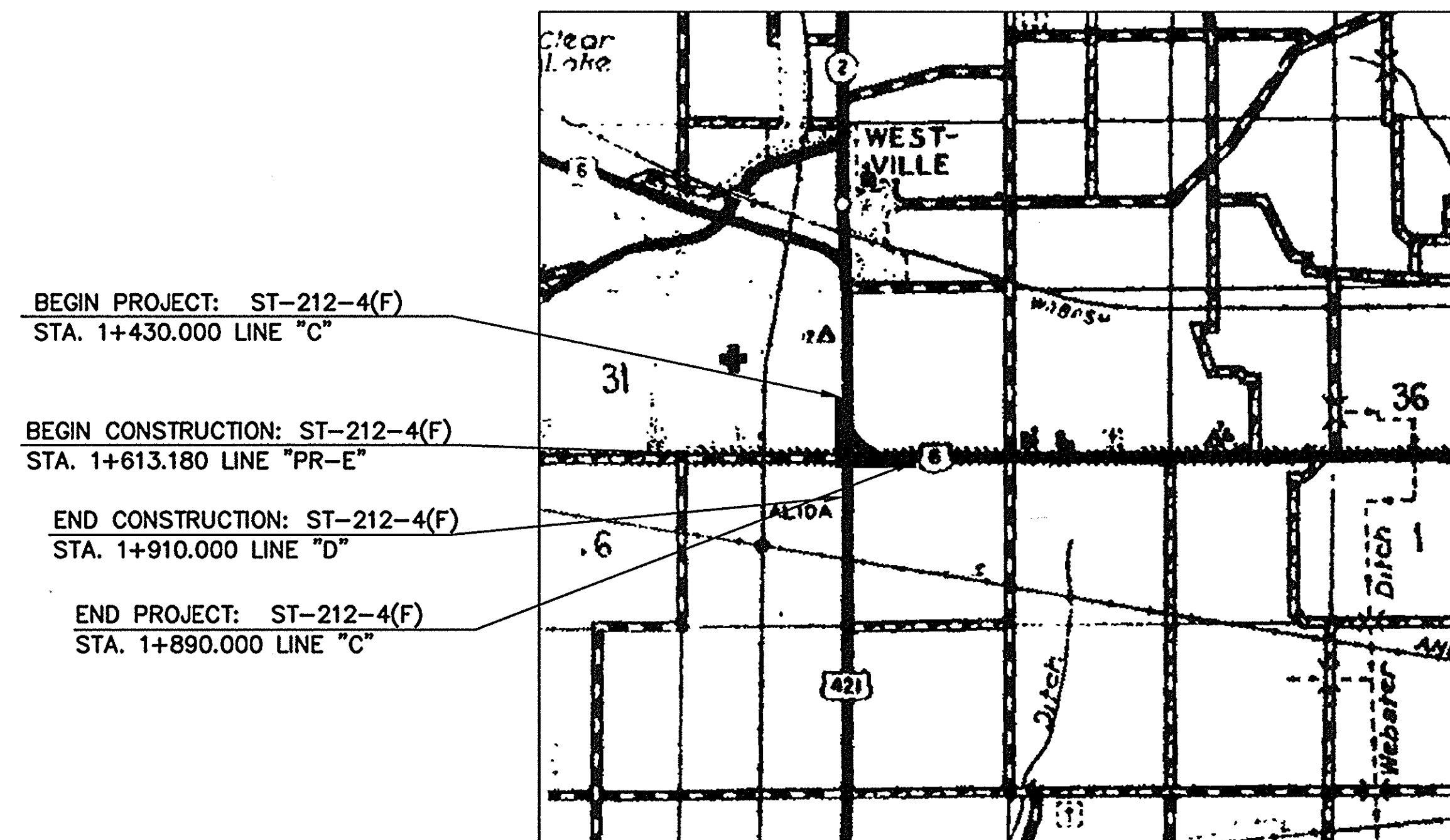
PROJECT NO. STP-212-4(F) R/W

TRAFFIC DATA	US 421	U.S. 6
A.A.D.T. (1998)	3710 V.P.D.	3830 V.P.D.
A.A.D.T. (2022)	5570 V.P.D.	5870 V.P.D.
D.H.V.	475 V.P.H.	587V.P.H.
DIRECTIONAL DISTRIBUTION	62 %	70 %
TRUCKS	14 % D.H.V.	13 % D.H.V.
	19% A.A.D.T.	17 % A.A.D.T.
DESIGN DATA		
DESIGN SPEED	90 K.P.H.	70 K.P.H.
PROJECT DESIGN CRITERIA	3R-(NON FREEWAY)	3R-(NON FREEWAY)
FUNCTIONAL CLASSIFICATION	RURAL PRINCIPAL ARTERIAL	RURAL MINOR ARTERIAL
RURAL/URBAN	RURAL	RURAL
ACCESS CONTROL	NONE	NONE
TERRAIN	LEVEL	LEVEL
EQUIVALENT SINGLE AXLE LOADS		
MAINLINE ESAL		
SHOULDER ESAL		

PROJECT LENGTH: 0.517 km

ON U.S. 6 BEGINNING APPROXIMATELY 300 m NORTH OF THE JUNCTION OF U.S. 421 AND CO. RD. 600S TO APPROXIMATELY 219 m EAST OF SAID JUNCTION, IN SECTIONS 4 & 5, T.35N., R.4W., CLINTON TOWNSHIP AND SECTIONS 32 AND 33, T.36N., R.4., NEW DURHAM TOWNSHIP, LA PORTE CO.

PROJECT LOCATION



LEGEND	
ROADWAY LENGTH (LINE "C")	0.46 km
ROADWAY LENGTH (LINE "D")	0.34 km
ROADWAY LENGTH (LINE "E")	0.21 km
MAXIMUM GRADE:	2.20 %

*Code 3947
1/3 sheets*

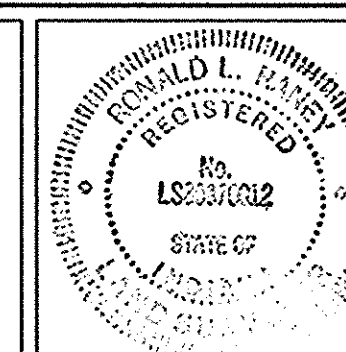
LOCATION MAP
NOT TO SCALE

[INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 1999
TO BE USED WITH THESE PLANS]



APPROVED: *Karen L. Miller 12-2-00*
CHIEF, DIVISION OF LAND ACQUISITION DATE

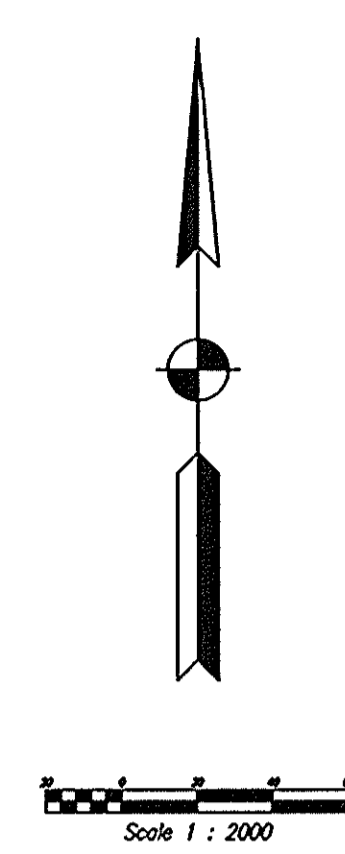
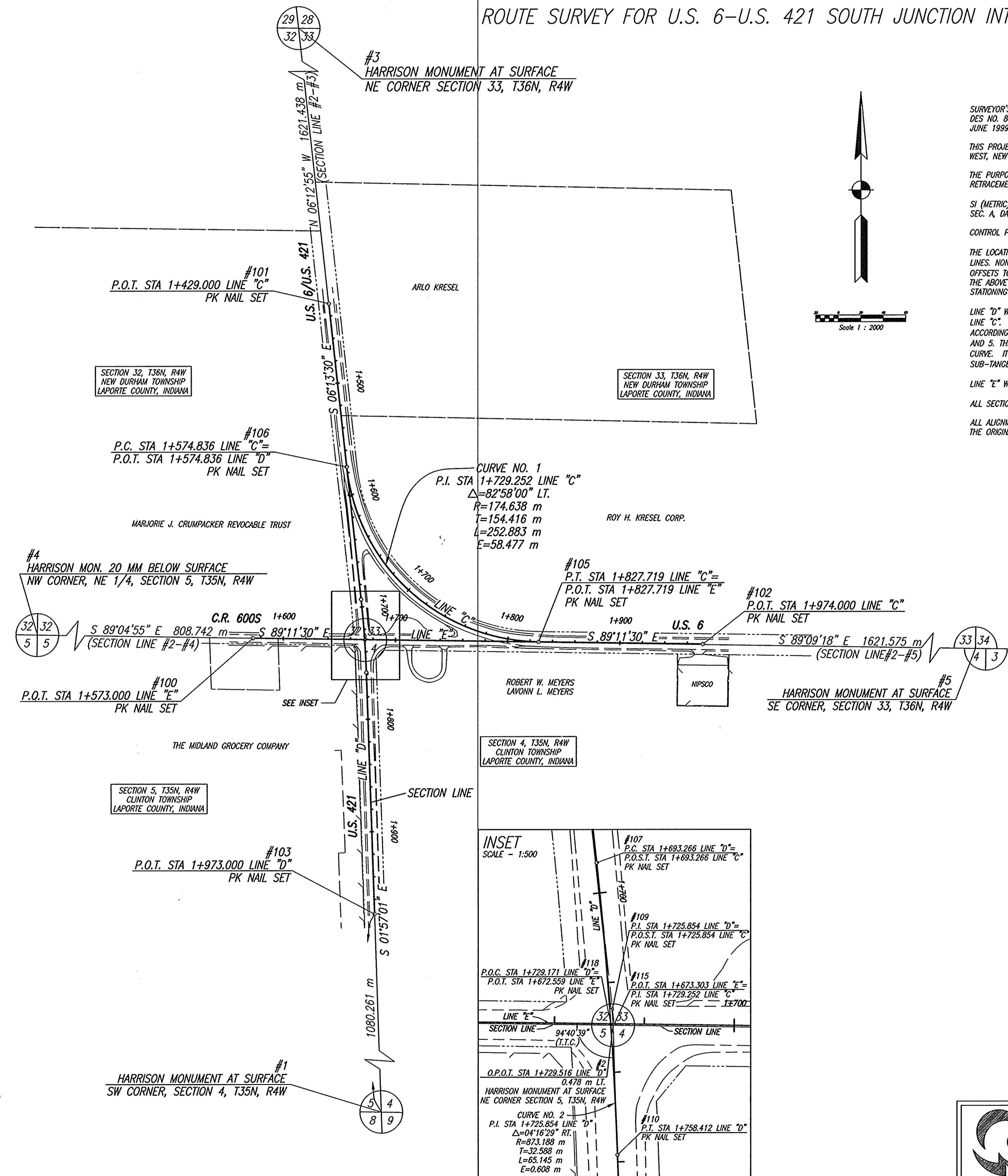
RECOMMENDED FOR APPROVAL: *Ronald L. Caney 12-12-00*
MANAGER, R/W ENGINEERING SECTION DATE



	R/W CODE	3947
	DESIGNATION	8351130
SURVEY BOOK	SHEETS	
16588	1 of 12	
CONTRACT	PROJECT	
	STP-212-4(F)	

ROUTE SURVEY FOR U.S. 6-U.S. 421 SOUTH JUNCTION INTERSECTION IMPROVEMENT, LAPORTE COUNTY, INDIANA

R/W CODE: 3947



SURVEYOR'S REPORT FOR ROUTE SURVEY - INDOT PROJECT NO. ST-212-4(F)
DES. NO. 8351130
JUNE 1999

THIS PROJECT IS LOCATED AT THE SOUTH JUNCTION OF U.S. HIGHWAY 6 AND U.S. HIGHWAY 421, IN SECTIONS 4 AND 5, TOWNSHIP 35 NORTH, RANGE 4 WEST, CLINTON TOWNSHIP, AND SECTIONS 32 AND 33, TOWNSHIP 36 NORTH, RANGE 4 WEST, NEW DURHAM TOWNSHIP, LAPORTE COUNTY, INDIANA.

THE PURPOSE OF THIS SURVEY IS TO COLLECT DATA PERTINENT TO THE DESIGN OF AN INTERSECTION IMPROVEMENT AND TO PROVIDE A BASIS FOR DESCRIBING ANY RIGHT OF WAY NEEDED FOR THIS PROJECT. IT IS NOT A PROPERTY RETRACEMENT SURVEY. WHERE APPARENT PROPERTY LINES, CORNERS, OR SECTION CORNER INFORMATION IS SHOWN, IT IS BASED ON PHYSICAL EVIDENCE OR TESTIMONY. VERY LITTLE DEED ANALYSIS WAS DONE.

SI (METRIC) UNITS WERE USED FOR THIS SURVEY. ALL COORDINATES ARE BASED FROM AN ASSUMED ORIGIN. BEARINGS ARE BASED ON THE BEARINGS OF LINE "C" AS PER INDIANA STATE HIGHWAY COMMISSION PLANS FOR PROJECT NO. 208 SEC. A, DATED 1931.

CONTROL POINT NUMBERS ARE ACTUAL FIELD SURVEY POINT NUMBERS USED FOR CONTROL AND TOPOGRAPHY.

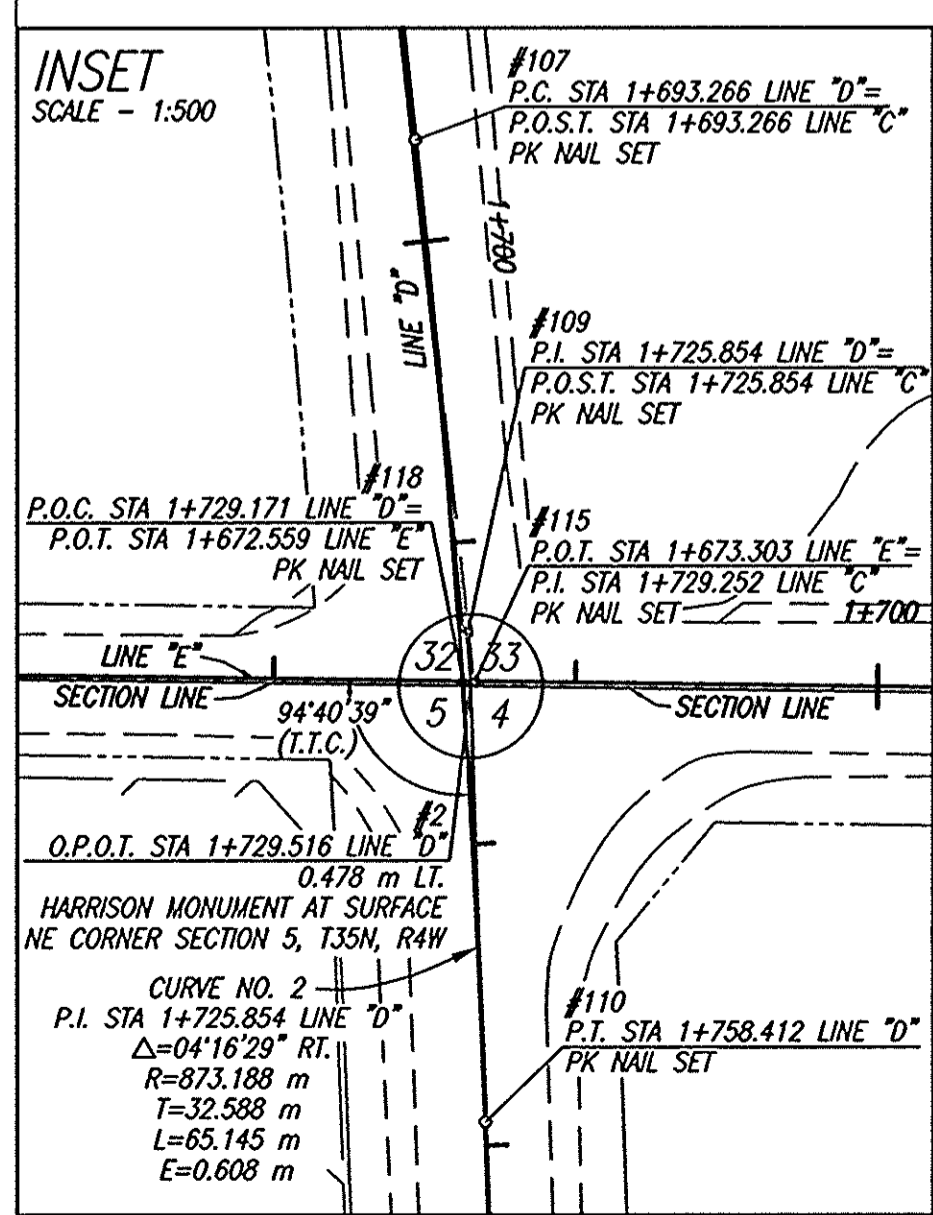
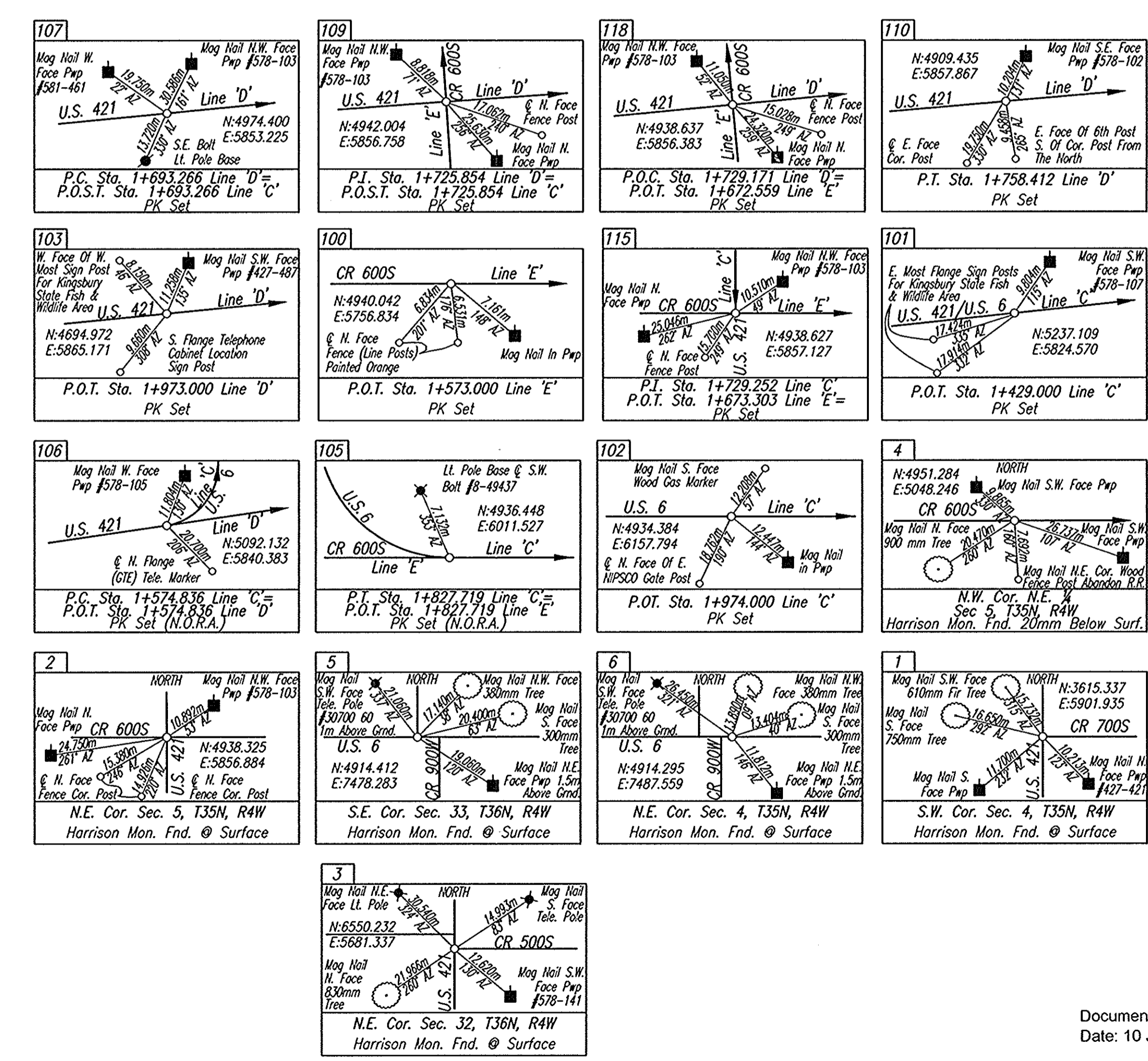
THE LOCATION OF LINE "C" WAS DIFFICULT. THE PLANS EXPLICITLY SHOW THAT THE ALIGNMENT DOES NOT LIE ON THE SECTION LINES, BUT THE PLANS OFFER LITTLE CONTROLLING DATA IN TERMS OF RELATING THE ALIGNMENT TO THE SECTION LINES. NONE OF THE ORIGINAL CENTERLINE CONTROL WAS FOUND. THE LOCATION OF LINE "C" WAS ESTABLISHED BY LOCATING THE P.I. AS DESCRIBED ON SHEET 4 OF 132 OF THE ABOVE REFERENCED PLANS. THE PLANS LOCATE THE P.I. BY OFFSETS TO THE WEST AND SOUTH LINES OF SECTION 33. THE ALIGNMENT WAS SWIVELED COUNTERCLOCKWISE AROUND THE P.I. SO THAT LINE "C" WOULD PASS THROUGH THE NORTHWEST CORNER OF SECTION 33, AS APPEARS TO BE SHOWN ON THE ABOVE REFERENCED PLANS. THIS SOLUTION APPEARS TO FIT BEST WITH THE EXISTING EVIDENCE, INCLUDING THE EXISTING LOCATION OF THE CENTERLINE OF THE PAVEMENT. STATIONING WAS ESTABLISHED BY CONVERTING THE EXISTING STATIONING TO SI UNITS, BASED ON THE US STATIONING OF THE P.I.

LINE "D" WAS BASED ON TWO DIFFERENT ALIGNMENTS: THERE IS A LINE "SR 43-C" DESCRIBED ON THE STATE HIGHWAY PLANS ABOVE REFERENCED, BUT THIS ALIGNMENT IS ONLY DESCRIBED TO A POINT ABOUT 21.3 m SOUTH OF THE P.I. OF LINE "C". THE PLANS CALL FOR THE ALIGNMENT TO FOLLOW THE BACK TANGENT OF LINE "C" AND PASS THROUGH A CURVE TO THE POINT OF TANGENCY WITH WHAT COULD BE CONSTRUED AS THE LINE BETWEEN SECTIONS 4 AND 5. ACCORDING TO INDIANA STATE HIGHWAY COMMISSION PLANS FOR PROJECT NO. 170 SEC. B, DATED 1931, THE CENTERLINE OF U.S. HIGHWAY 421 (WANATAH-WESTVILLE ROAD PER SAID PLANS) IS COINCIDENT WITH THE LINE BETWEEN SECTIONS 4 AND 5. THESE PLANS ALSO CALL FOR A CURVE NEAR THE P.I. OF THE SAID LINE "C". HOWEVER, THE RADIUS FOR THE CURVE DIFFERS BETWEEN THE TWO PLANS, ONE CALLING FOR A ONE DEGREE CURVE AND THE OTHER FOR A TWO DEGREE CURVE. IT WAS DETERMINED THAT A TWO DEGREE CURVE BEST FITS THE EXISTING CROWN OF THE ROAD THROUGH THE AREA OF THE CURVE, SO THE ALIGNMENT OF LINE "D" WAS DETERMINED BY FITTING A TWO DEGREE CURVE BETWEEN THE SUB-TANGENT OF LINE "C" AND THE LINE BETWEEN SECTIONS 4 AND 5. STATIONING WAS ESTABLISHED BY EQUATING THE BEGINNING OF LINE "D" WITH THE P.C. OF LINE "C".

LINE "E" WAS ESTABLISHED BY EXTENDING THE AHEAD TANGENT OF LINE "E" TO THE WEST. STATIONING WAS ESTABLISHED BY EQUATING THE END OF LINE "E" WITH THE P.T. OF LINE "C".

ALL SECTION CORNERS LOCATED WERE HARRISON MONUMENTS FOUND. ALL OF THESE CORNERS MATCH REFERENCES PROVIDED BY THE LAPORTE COUNTY SURVEYOR'S OFFICE. THE UNCERTAINTY OF THESE POINTS IS ASSUMED TO BE NEGLIGIBLE.

ALL ALIGNMENT POINTS SHOWN ON THIS PLAN ARE PK NAILS SET. THE UNCERTAINTY OF THESE POINTS WITH RESPECT TO THE ORIGINAL ROUTE IS ESTIMATED TO BE 0.15 m, BASED ON THE DISCREPANCIES AND INCONSISTENCIES ENCOUNTERED IN THE ORIGINAL PLANS. THE RELATIVE UNCERTAINTY BETWEEN THESE POINTS IS ASSUMED TO BE NEGLIGIBLE.



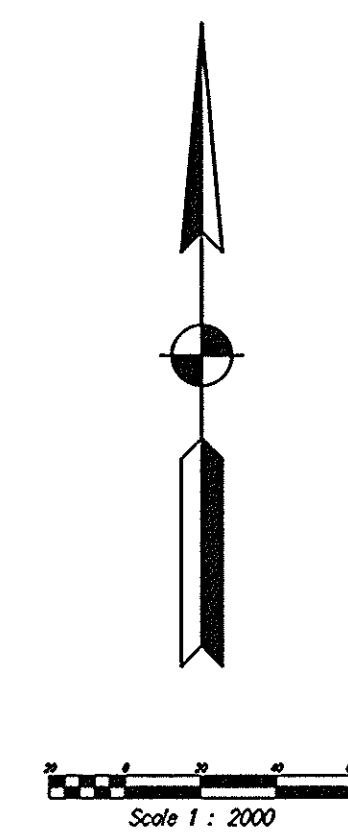
Document # 99-13067
Date: 10 June 1999

THIS SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS EXECUTED ACCORDING TO THE PROVISIONS OF 865 I.A.C. 1-12 REGARDING ROUTE SURVEYS, EXCEPT THAT ANY DATA SHOWN REGARDING THE LOCATION OR DESCRIPTIONS OF ANY NEW PARCELS TO BE ACQUIRED OR THE EXISTING PARCELS IS NOT A PART OF THIS SURVEY.

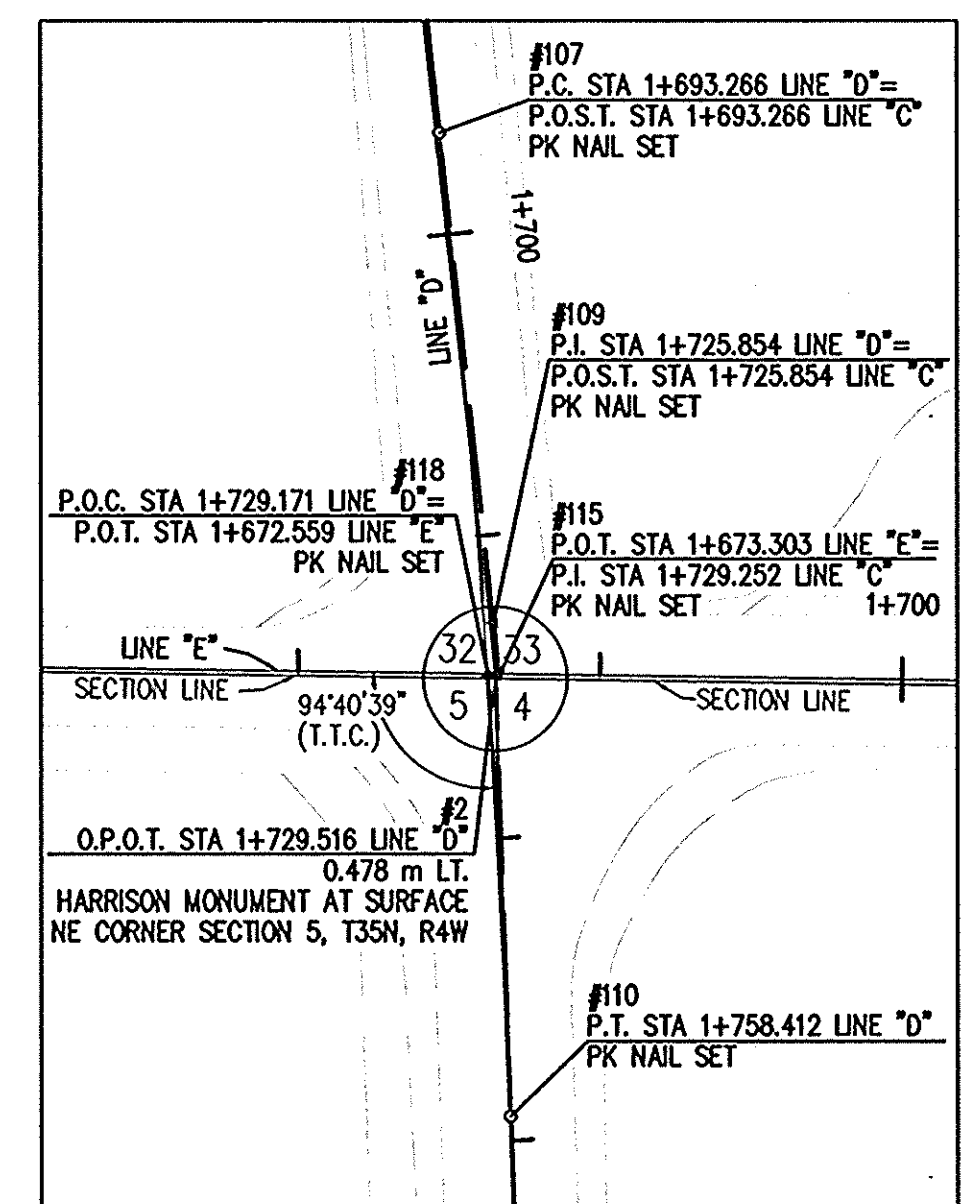
James Michael Lietzan 6-7-99
DATE
JAMES MICHAEL LIETZAN
INDIANA REGISTERED LAND SURVEYOR NO. 50475

U.S. 6-U.S. 421 INTERSECTION IMPROVEMENT			
COUNTY: LAPORTE	PROJECT NO: ST-212-4(F)		
DES. NO: 8351130	ROUTE: U.S. 6 & U.S. 421		
INDOT LOCATION CONTROL ROUTE SURVEY PLAN			
DRAWN BY: 829	CHECKED BY: 824	PROJECT NO: 891-204-200007	SHEET NO: 1 OF 1

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	STP-212-4(F)		4	12



--- EXISTING R/W OR APPARENT PROPERTY LINE
 - - - - - R/W = PROPOSED PROPERTY LINE



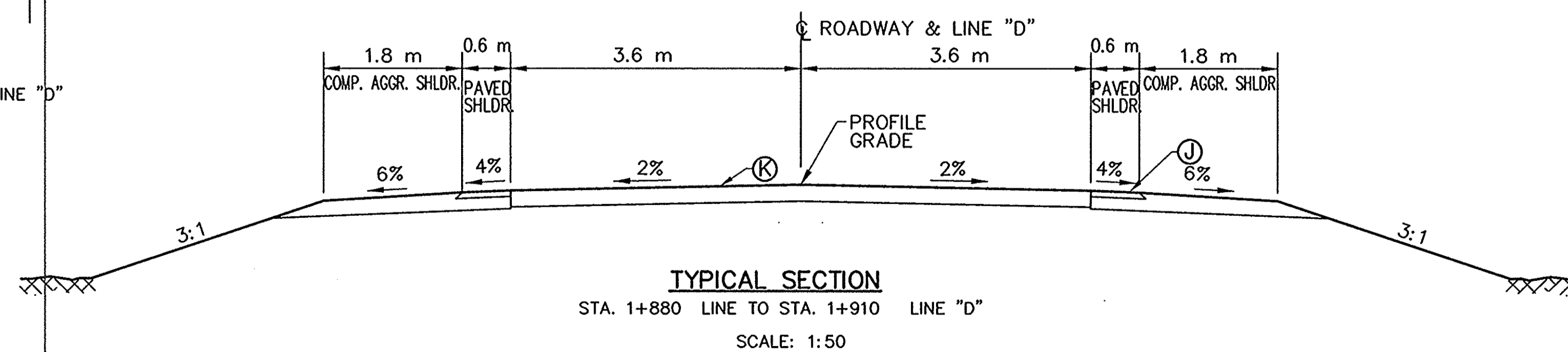
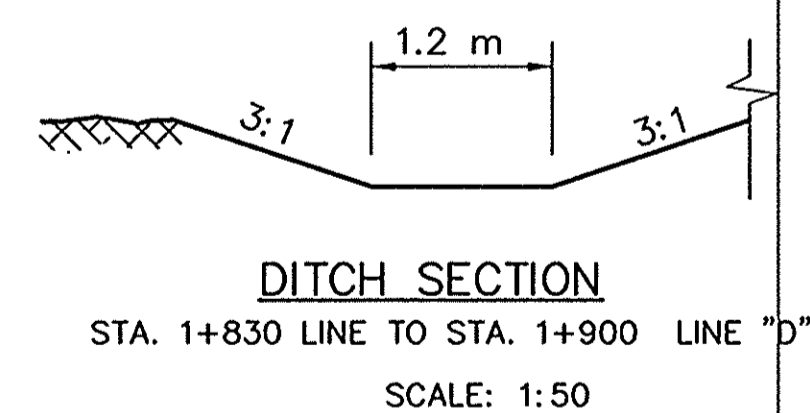
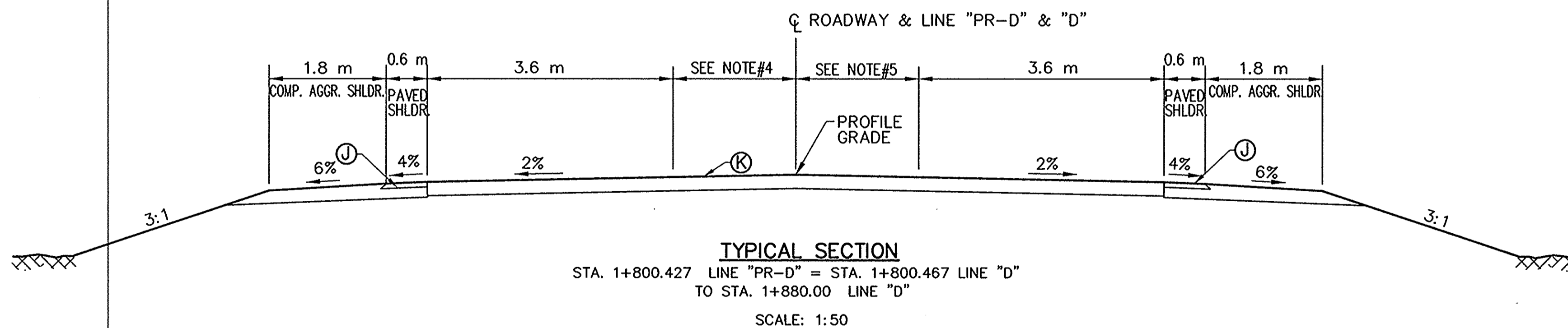
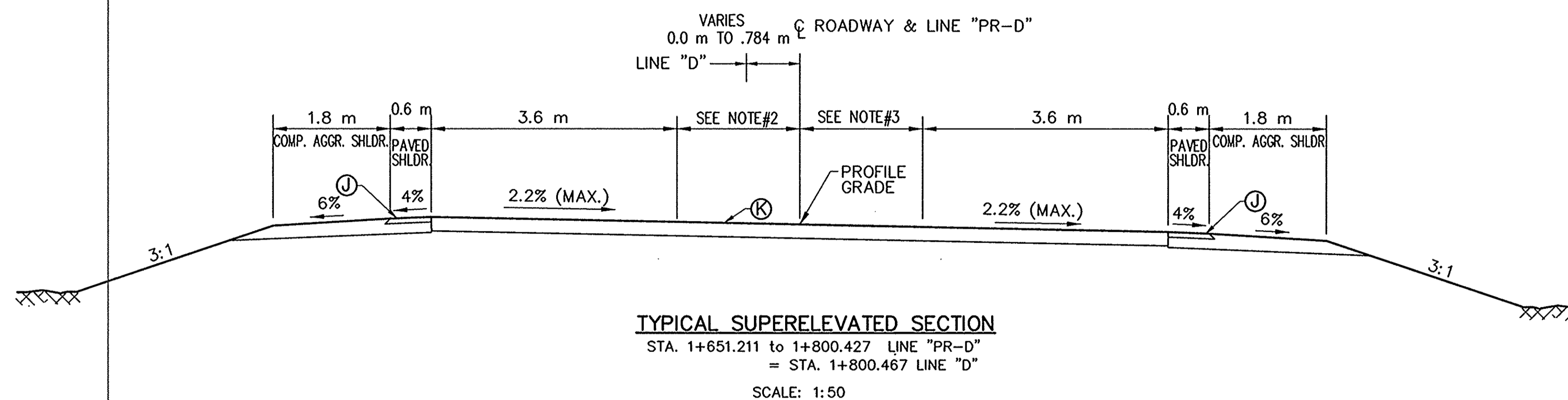
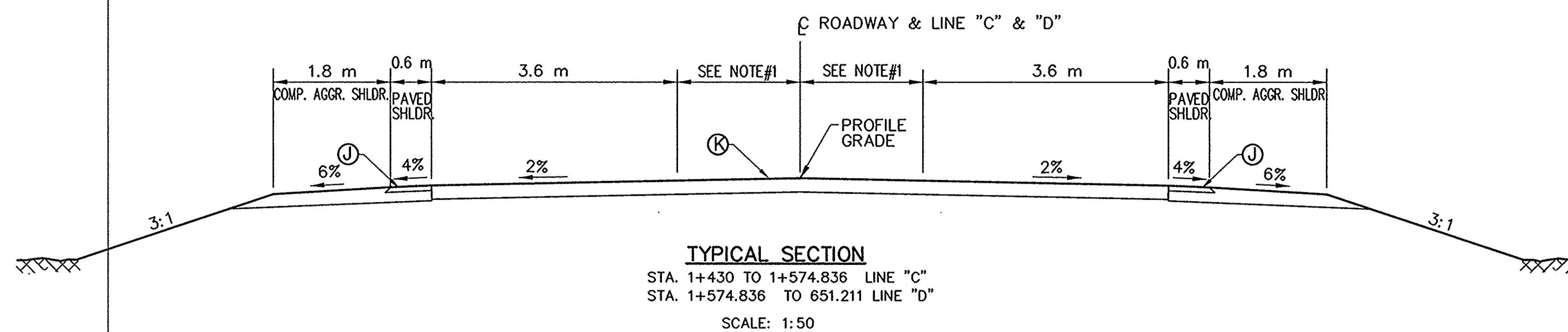
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: GJR	DRAWN: JVH	
CHECKED: SWK	CHECKED: GJR	

INDIANA DEPARTMENT OF TRANSPORTATION

PLAT No. 1

HORIZONTAL SCALE	BRIDGE FILE
1:2000	
VERTICAL SCALE	DESIGNATION
	8351130
SURVEY BOOK	SHEETS
16588	4 of 12
CONTRACT	PROJECT
	STP-212-4(F)



- NOTE#1 VARIES 0.0 m TO 1.8 m FROM STA. 1+430 TO 1+512 LINE "C"
1.8 m FROM STA. 1+512 TO 1+574.836 LINE "C"
1.8 m FROM STA. 1+574.836 TO 1+651.211 LINE "D"
- NOTE#2 1.8 m FROM STA. 1+651.211 TO 1+771.97 LINE "PR-D"
VARIES 1.8 m TO 1.18 m FROM STA. 1+771.97 TO 1+800.427 LINE "PR-D"
- NOTE#3 1.8 m FROM STA. 1+651.211 TO 1+771.97 LINE "PR-D"
VARIES 1.8 m TO 1.48 m FROM STA. 1+771.97 TO 1+800.427 LINE "PR-D"
- NOTE#4 VARIES 1.18 m TO 0.0 m FROM STA. 1+800.467 TO 1+880 LINE "D"
- NOTE#5 VARIES 1.48 m TO 0.0 m FROM STA. 1+800.467 TO 1+880 LINE "D"

- Ⓝ HMA FOR SHOULDERS
- Ⓚ FULL DEPTH HMA PAVEMENT

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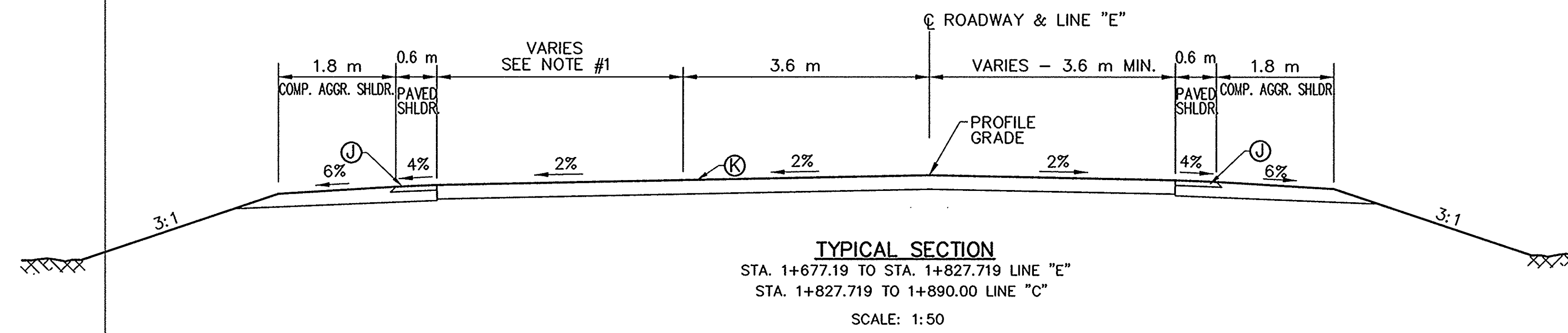
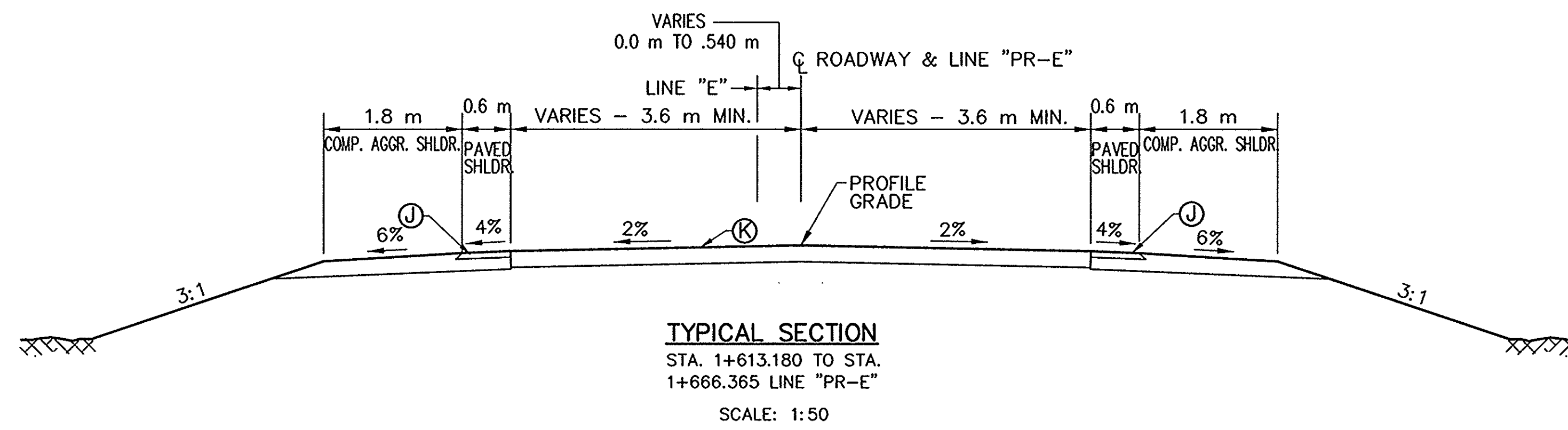
RECOMMENDED FOR APPROVAL _____
 DESIGN ENGINEER DATE

DESIGNED: GJR DRAWN: LTJ
 CHECKED: SWK CHECKED: JGR

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
 LINES "C", "D", & "PR-D"

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
NONE	8351130
SURVEY BOOK	SHEETS
16588	5 of 12
CONTRACT	PROJECT
	STR-212-4(F)



NOTE #1
 VARIES - 3.6 m (MIN.) STA. 1+677.19 TO 1+700.680 LINE "E"
 3.6 m FROM STA. 1+700.680 TO STA. 1+827.719 LINE "E"
 3.6 m FROM STA. 1+827.719 TO STA. 1+860.00 LINE "C"
 VARIES 3.6 m TO 0.0 m FROM STA. 1+860.00 LINE "C" TO
 STA. 1+890.00 LINE "C"

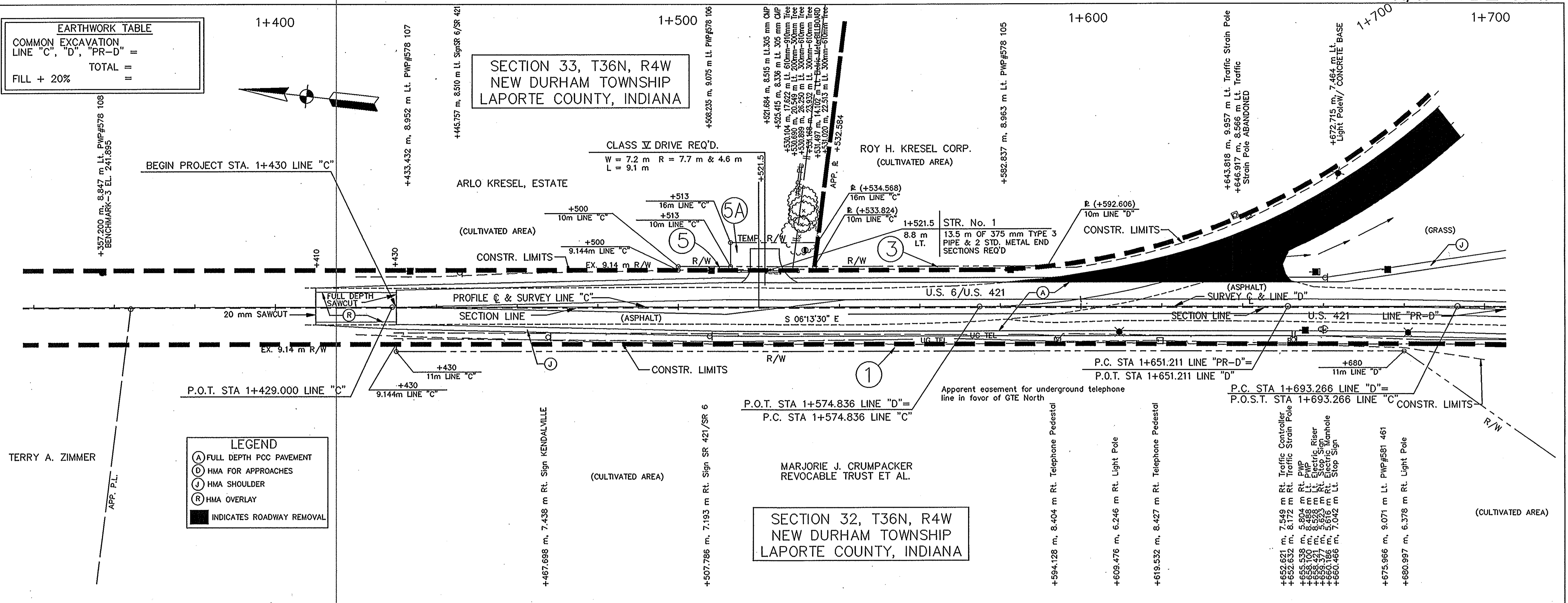
- Ⓧ HMA FOR SHOULDERS
- Ⓚ FULL DEPTH HMA PAVEMENT

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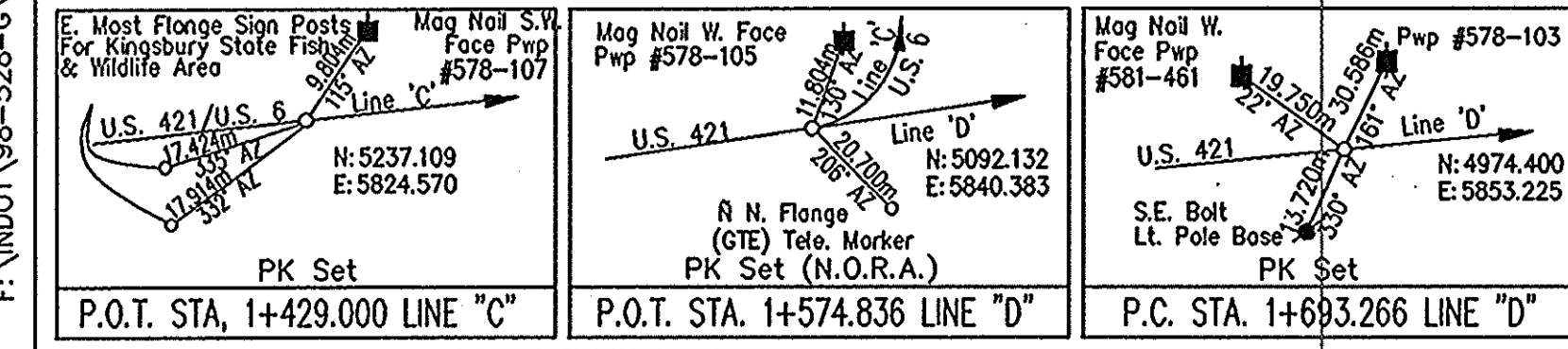
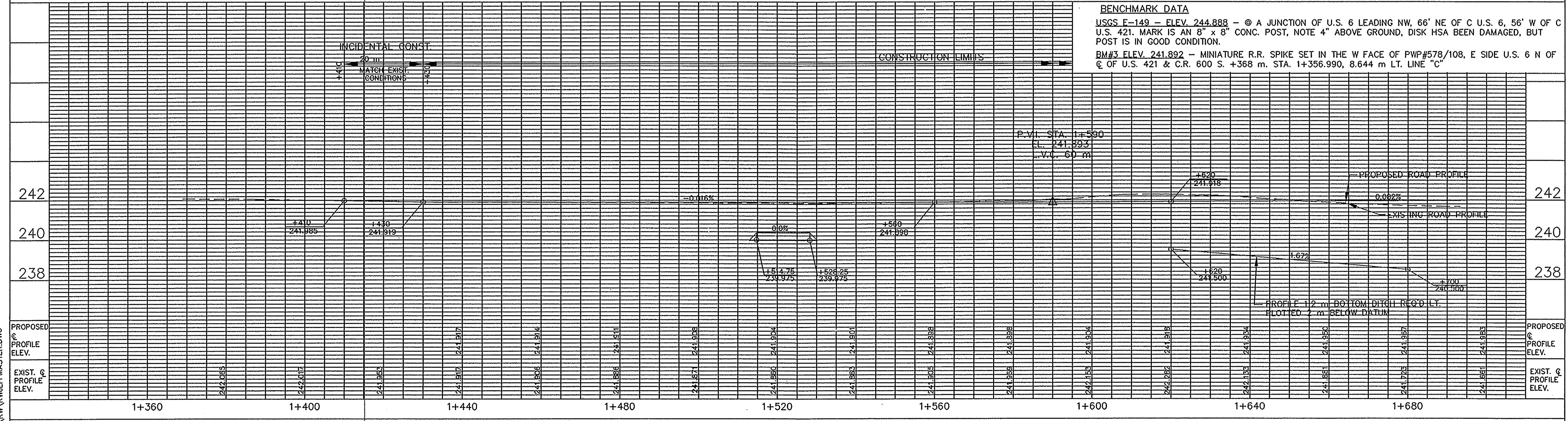
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	DESIGNED: GJR	DRAWN: LTJ	AS NOTED	
CHECKED: SWK	CHECKED: GJR	TYPICAL SECTIONS LINES "E" & "PR-E"	VERTICAL SCALE	DESIGNATION
			NONE	8351130
			SURVEY BOOK	SHEETS
			16588	6 of 12
			CONTRACT	PROJECT
				STP-212-4(F)

EARTHWORK TABLE	
COMMON EXCAVATION LINE "C", "D", "PR-D" =	
FILL + 20%	TOTAL =

SECTION 33, T36N, R4W
NEW DURHAM TOWNSHIP
LAPORTE COUNTY, INDIANA



BENCHMARK DATA
 USGS F-149 - ELEV. 244.888 - @ A JUNCTION OF U.S. 6 LEADING NW, 66° NE OF C U.S. 6, 56° W OF C U.S. 421. MARK IS AN 8" x 8" CONC. POST, NOTE 4" ABOVE GROUND, DISK HAS BEEN DAMAGED, BUT POST IS IN GOOD CONDITION.
 BM#3 ELEV. 241.892 - MINIATURE R.R. SPIKE SET IN THE W FACE OF PWP#578/108, E SIDE U.S. 6 N OF C OF U.S. 421 & C.R. 600 S. +368 m. STA. 1+356.990, 8.644 m LT. LINE "C"



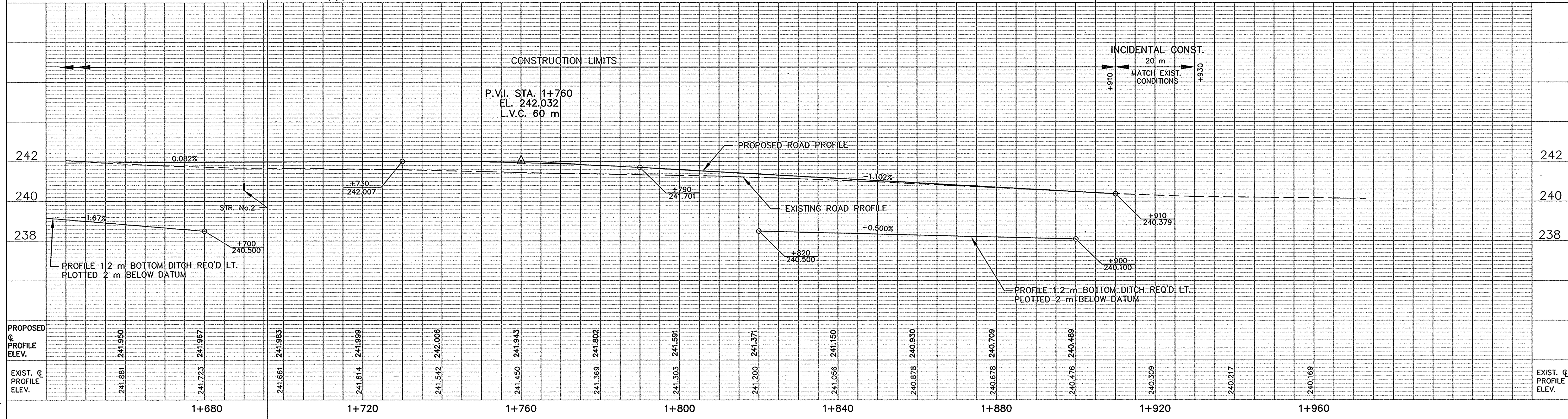
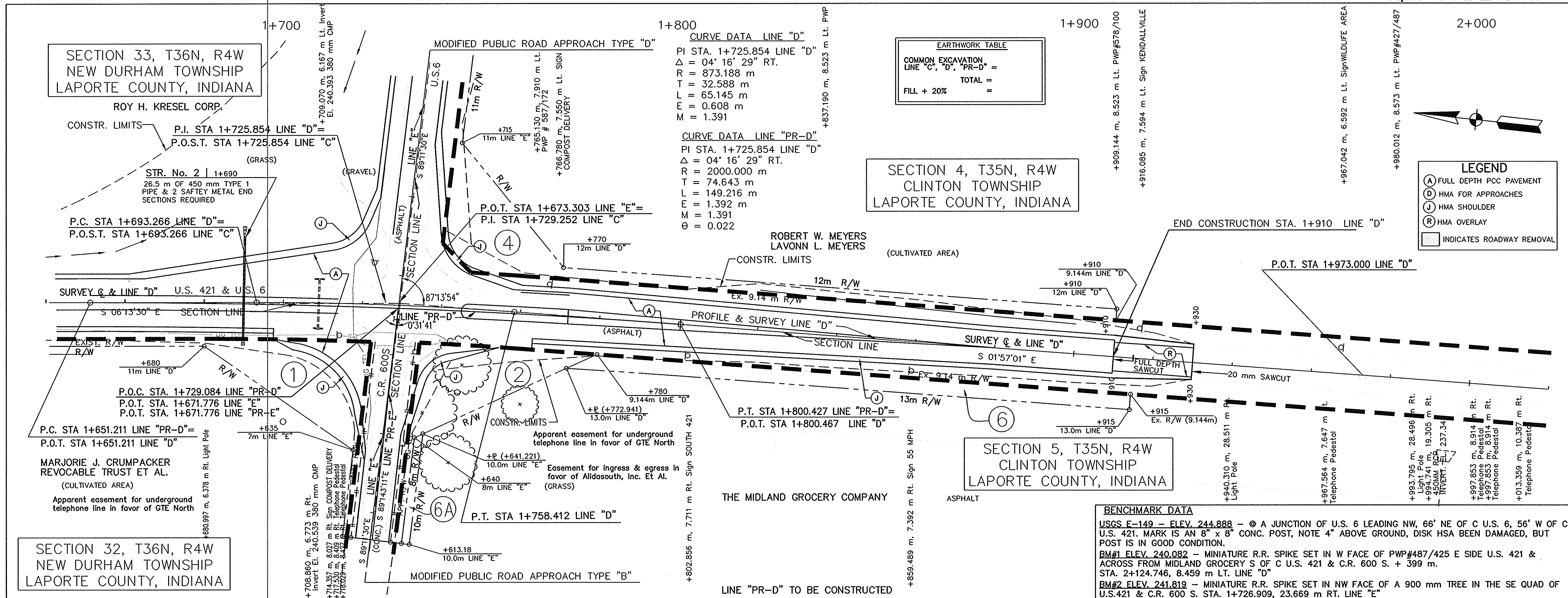
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: GJR	DRAWN: JVL/TJ	
CHECKED: SWK	CHECKED: GJR	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINE "C", "D", & "PR-D"

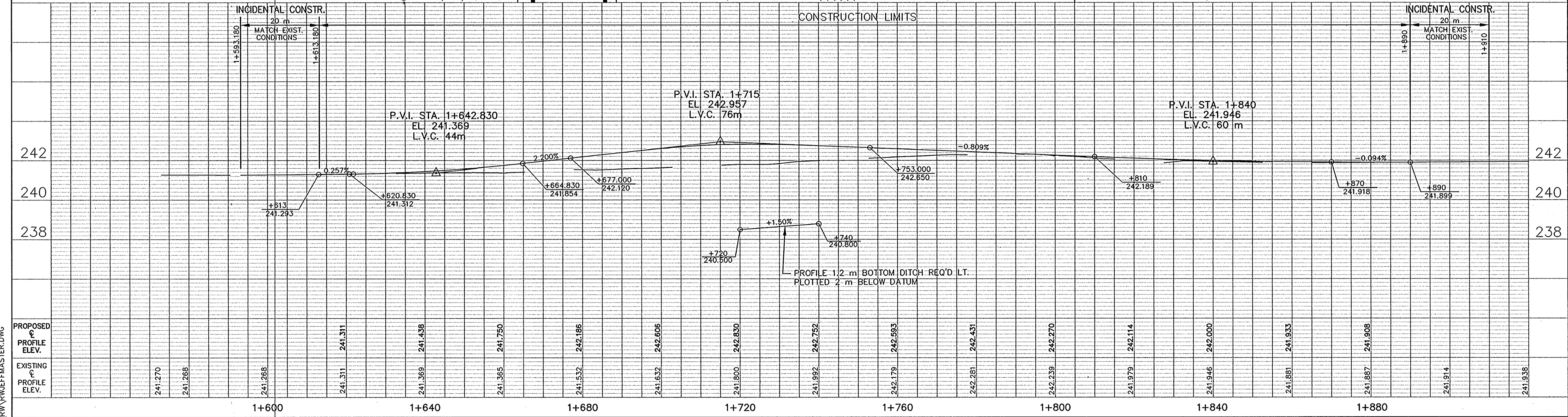
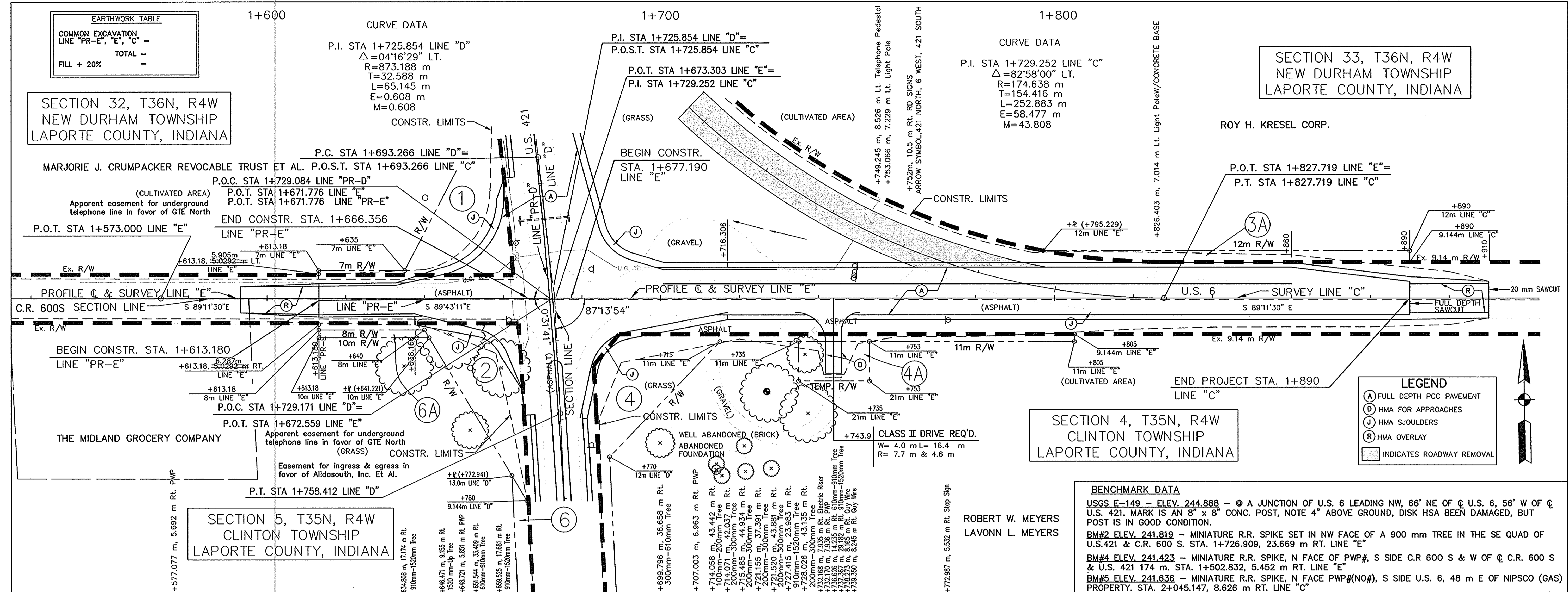
HORIZONTAL SCALE 1:500	R/W CODE 3947
VERTICAL SCALE 1:100	DESIGNATION 8351130
SURVEY BOOK 16588	SHEETS 7 of 12
CONTRACT	PROJECT STP-212-4(F)

F:\INDOT\98-528-C\RW\WLEFFMASTER.DWG



<p>RECOMMENDED FOR APPROVAL</p> <p>DESIGNED: GJR DRAWN: JWH,LTJ</p> <p>CHECKED: GJR CHECKED: GJR</p>	<p>INDIANA DEPARTMENT OF TRANSPORTATION</p> <p>PLAN & PROFILE LINES "PR-D & "D"</p>	<table border="1"> <tr><td>HORIZONTAL SCALE</td><td>R/W CODE</td></tr> <tr><td>1:500</td><td>3947</td></tr> <tr><td>VERTICAL SCALE</td><td>DESIGNATION</td></tr> <tr><td>1:100</td><td>8351130</td></tr> <tr><td>SURVEY BOOK</td><td>SHEETS</td></tr> <tr><td>16588</td><td>8 of 12</td></tr> <tr><td>CONTRACT</td><td>PROJECT</td></tr> <tr><td></td><td>ST-212-4(F)</td></tr> </table>	HORIZONTAL SCALE	R/W CODE	1:500	3947	VERTICAL SCALE	DESIGNATION	1:100	8351130	SURVEY BOOK	SHEETS	16588	8 of 12	CONTRACT	PROJECT		ST-212-4(F)
HORIZONTAL SCALE	R/W CODE																	
1:500	3947																	
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16588	8 of 12																	
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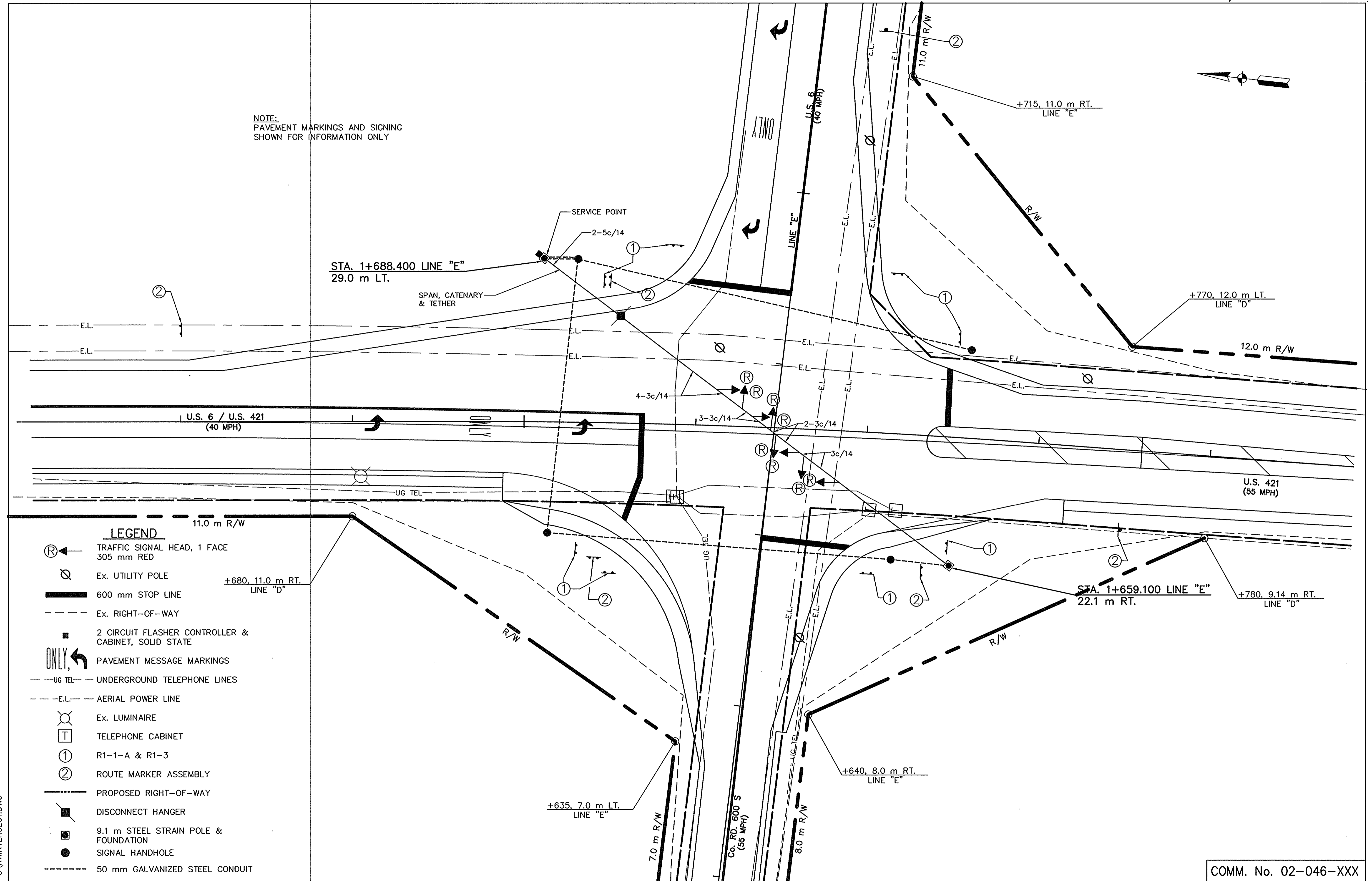
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<p>INDIANA DEPARTMENT OF TRANSPORTATION</p> <p>DESIGNED: GJR DRAWN: JVH/LTJ</p> <p>CHECKED: SWK CHECKED: GJR</p>	<p>RECOMMENDED FOR APPROVAL</p> <p>DESIGN ENGINEER DATE</p>	<p>HORIZONTAL SCALE 1:500</p> <p>VERTICAL SCALE 1:100</p> <p>SURVEY BOOK 9 of 12 SHEETS</p> <p>CONTRACT PROJECT STP-212-4(F)</p>
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NOTE:
PAVEMENT MARKINGS AND SIGNING
SHOWN FOR INFORMATION ONLY



LEGEND

- TRAFFIC SIGNAL HEAD, 1 FACE
305 mm RED
- Ex. UTILITY POLE
- 600 mm STOP LINE
- Ex. RIGHT-OF-WAY
- 2 CIRCUIT FLASHER CONTROLLER &
CABINET, SOLID STATE
- PAVEMENT MESSAGE MARKINGS
- UG TEL — UNDERGROUND TELEPHONE LINES
- E.L. — AERIAL POWER LINE
- Ex. LUMINAIRE
- TELEPHONE CABINET
- R1-1-A & R1-3
- ROUTE MARKER ASSEMBLY
- PROPOSED RIGHT-OF-WAY
- DISCONNECT HANGER
- 9.1 m STEEL STRAIN POLE &
FOUNDATION
- SIGNAL HANDHOLE
- 50 mm GALVANIZED STEEL CONDUIT

COMM. No. 02-046-XXX

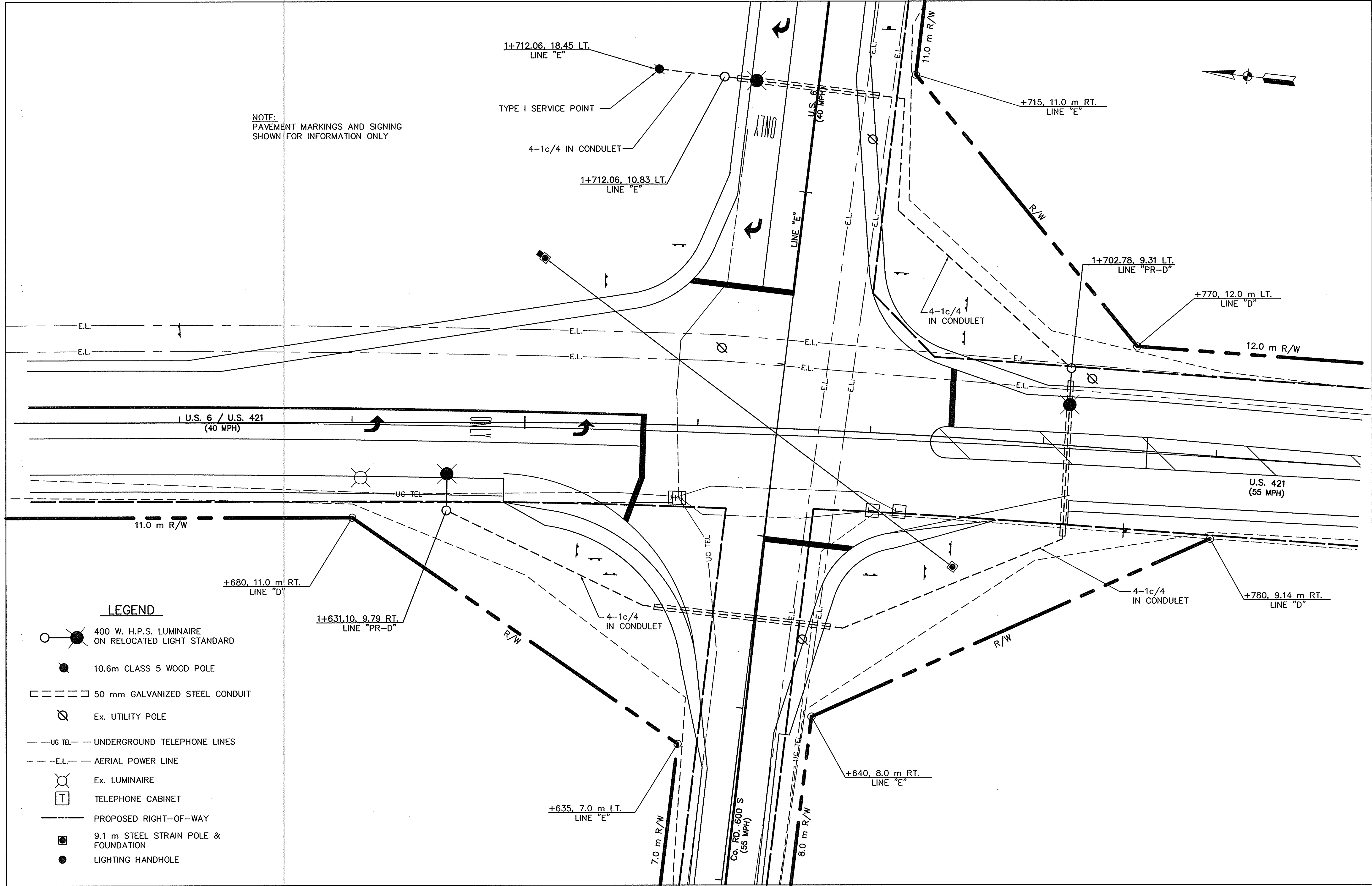
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**INDIANA
DEPARTMENT OF TRANSPORTATION**

**FLASHING BEACON INSTALLATION
U.S. 6 & U.S. 421 (SOUTH JCT.)
LAPORTE COUNTY, LAPORTE DISTRICT.**

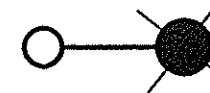

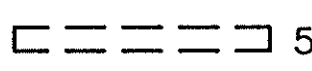


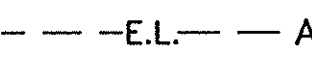


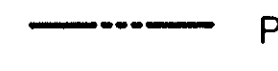


HORIZONTAL SCALE 1:200	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 8351130
SURVEY BOOK 16588	SHEETS 10 of 12
CONTRACT	PROJECT STP-212-4 (E)

DESIGNED: GJR	DRAWN: JVH
CHECKED: SWK	CHECKED: GJR



NOTE:
PAVEMENT MARKINGS AND SIGNING
SHOWN FOR INFORMATION ONLY

LEGEND

-  400 W. H.P.S. LUMINAIRE ON RELOCATED LIGHT STANDARD
-  10.6m CLASS 5 WOOD POLE
-  50 mm GALVANIZED STEEL CONDUIT
-  Ex. UTILITY POLE
-  UG TEL — UNDERGROUND TELEPHONE LINES
-  —E.L.— AERIAL POWER LINE
-  Ex. LUMINAIRE
-  TELEPHONE CABINET
-  ——— PROPOSED RIGHT-OF-WAY
-  9.1 m STEEL STRAIN POLE & FOUNDATION
-  LIGHTING HANDHOLE

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INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1:200	BRIDGE FILE
HIGHWAY LIGHTING DETAILS		VERTICAL SCALE N/A	DESIGNATION 8351130
DESIGNED: GJR	DRAWN: JVH	SURVEY BOOK 16588	SHEETS 11 of 12
CHECKED: SWK	CHECKED: GJR	CONTRACT	PROJECT ST P-212-4 (F)

