

ORIGINAL TO GENERAL FILES

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DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** IM-NH-20-2(156) DeKalb County **OFFICE** Preconstruction  
P. I. No. 713220 **DATE** July 8, 1998

**FROM**  C. Wayne Hutto, Assistant Director of Preconstruction

**TO** SEE DISTRIBUTION

**SUBJECT** REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Walker Scott  
Bobby Mustin  
David Studstill (ATTN: Harvey Keepler)  
Jerry Hobbs  
Herman Griffin  
Marta Rosen (ATTN: Michael Henry)  
Marion Waters  
Toni Dunagan  
Mitch Fowler  
Joe Palladi  
FHWA

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

RECEIVED  
MAY 14 1998  
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-20-2(156), Dekalb County  
P.I. No. 713220  
I-20 at Wesley Chapel Road and  
Relocated Snapfinger Woods Drive

OFFICE Atlanta, Georgia

DATE May 12, 1998

FROM   
Joseph Palladi, P.E., State Urban Design Engineer

TO Walker W. Scott, Jr., P.E., Director of Preconstruction

**SUBJECT Revised Project Concept Report**

The approved concept is the reconstruction of the Wesley Chapel Road interchange over I-20, including the relocation of Snapfinger Woods Drive and the widening of Wesley Chapel Road. The length of the project is 2.22 km. The following describes the approved concept:

Relocate Snapfinger Woods Drive from just west of Golf Vista Circle north on new location to New Snapfinger Woods Drive. The typical section will consist of three, 3.6 m lanes (one northbound, one southbound, and one turn lane) with curb and gutter. This relocation will eliminate the current conflict with the I-20 ramp.

Wesley Chapel Road will be widened from Rainbow Drive north to South Hairston Road. The typical section will consist of three, 3.6 m lanes in each direction with a 6.0 m concrete median and turn lanes as required. Sidewalks are proposed on both sides of Wesley Chapel Road.

Wesley Chapel Road is listed in the Atlanta Region Bicycle Transportation and Pedestrian Walkways plan, 1995 update as having bike lanes. Therefore, the approved concept shall be revised to include 1.2 m bike lanes in each direction along Wesley Chapel Road. A copy of the revised typical section and the revised cost estimate is attached to this report.

Estimated Costs:	Proposed	Approved	Prog. Date
Construction (Includes E&C and Inflation)	\$ 6,591,000	\$5,671,000	2001
Right-of-Way	\$ 3,910,000	\$2,429,000	
Utilities	\$ 510,000	\$ 510,000	

It is recommended that the proposed revision to the concept report be approved for implementation.

Concur: *Walker W. Scott, Jr.*  
Walker W. Scott, Jr., P.E.  
Director of Preconstruction

Concur: *Frank L. Danchetz*  
Frank L. Danchetz, P.E.  
Chief Engineer

Approve: *Walter E. Boydell*  
*for* Larry Dreihaupt  
Division Administrator, FHWA

Approve: *Wayne Shackelford*  
Wayne Shackelford  
Commissioner, Georgia DOT

JPP:GRS  
Attachments: Sketch Map, Cost Estimate, Typical Section

**PRELIMINARY COST ESTIMATE**  
**URBAN DESIGN OFFICE**

DATE:	5/12/98	PREPARED BY:	T.J. Robinson
PROJECT NO:	IM-NH-20-2(156)	REVISED BY:	G. Rice-Singleton
P.I. NO:	713220	FILE NAME:	713220
		MILEAGE:	2.22 km

PROJECT DESCRIPTION: Reconstruction of the interchange at I-20 and Wesley Chapel Road.  
This involves the relocation of Snapfinger Woods Drive and improvements to Wesley Chapel Road.

EXISTING ROADWAY: Snapfinger Woods Drive - Two lane urban  
Wesley Chapel Road - Four lane urban  
I-20 - Six lane urban interstate

TRAFFIC:	CURRENT ADT	PROJECTED ADT	
	58200 (2000)	93100 (2020)	I-20
	35775 (2000)	40850 (2020)	WESLEY CHAPEL

- ( ) PROGRAMMING PROCESS
- (x) CONCEPT DEVELOPMENT
- ( ) DURING PROJECT DEVELOPMENT

**PROJECT COSTS**

A. RIGHT OF WAY	\$ 3,910,000.00	\$3,910,000.00
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B. UTILITIES	\$ 510,000.00	<b>SUBTOTAL LOCAL</b>
		LOCAL

**SUBTOTAL LOCAL**

C. CLEARING AND GRUBBING	2.16 ha @	\$29,700.00	\$64,152.00
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**SUBTOTAL \$64,152.00**

**D. EARTHWORK**

Embankment

In-Place Embankment	0	m3 @	\$10.00	\$0.00
Borrow Incl Haul	0	m3 @	\$8.00	\$0.00
Per kilometer cost	2.7	km @	\$103,000.00	\$278,100.00

Excavation

Soil	0	m3 @	\$7.00	\$0.00
Rock	0	m3 @	\$13.00	\$0.00

Miscellaneous

Wick Drains	0	lm @	\$3.00	\$0.00
Filter Fabric	0	m2 @	\$9.00	\$0.00
Drainage Material	0	m3 @	\$8.00	\$0.00

Drill Holes	0	lm @	\$7.00	\$0.00
			<b>SUBTOTAL</b>	<b>\$278,100.00</b>

### E. BASE AND PAVING

<u>Aggregate Base</u>				
Graded Aggregate	27263	Mg @	\$15.00	\$408,945.00
<u>Asphalt Paving</u>				
Asph Conc E	4742	Mg @	\$36.00	\$170,712.00
Asph Conc B	4744	Mg @	\$36.00	\$170,784.00
Asph Conc Base	14135	Mg @	\$35.00	\$494,725.00
Leveling	4160	Mg @	\$38.00	\$158,080.00
Tack Coat	11200	L @	\$0.30	\$3,360.00
			<b>SUBTOTAL</b>	<b>\$1,406,606.00</b>

### F. DRAINAGE

<u>Cross Drain System</u>				
375 mm Conc. Pipe	12 lm @		\$82.00	\$984.00
450 mm Conc. Pipe	10 lm @		\$86.00	\$860.00
600 mm Conc. Pipe	55 lm @		\$102.00	\$5,610.00
750 mm Conc. Pipe	0 lm @		\$138.00	\$0.00
900 mm Conc. Pipe	8 lm @		\$178.00	\$1,424.00
1050 mm Conc. Pipe	0 lm @		\$237.00	\$0.00
1200 mm Conc. Pipe	0 lm @		\$263.00	\$0.00
375 mm F.E.S.	0 EA @		\$295.00	\$0.00
450 mm F.E.S.	0 EA @		\$365.00	\$0.00
600 mm F.E.S.	3 EA @		\$400.00	\$1,200.00
750 mm F.E.S.	0 EA @		\$540.00	\$0.00
900 mm F.E.S.	0 EA @		\$695.00	\$0.00
1050 mm F.E.S.	0 EA @		\$920.00	\$0.00
1200 mm F.E.S.	0 EA @		\$1,300.00	\$0.00
<u>Longitudinal System</u>				
375 mm Conc. Pipe	1200 lm @		\$82.00	\$98,400.00
450 mm Conc. Pipe	500 lm @		\$86.00	\$43,000.00
600 mm Conc. Pipe	50 lm @		\$102.00	\$5,100.00
<u>Drainage Structures</u>				
Catch Basins	53 EA @		\$1,380.00	\$73,140.00
Drop Inlets	15 EA @		\$1,210.00	\$18,150.00
Manholes	10 EA @		\$1,295.00	\$12,950.00
<u>Drainage Lump Sum</u>				
Cost per Kilometer	0 km @		\$0.00	\$0.00
			<b>SUBTOTAL</b>	<b>\$260,818.00</b>

### G. CONCRETE WORK

Approach Slabs	615 m2 @		\$106.00	\$65,190.00
Median Barrier	0 lm @		\$102.00	\$0.00

Curb and Gutter (Type 2 and 7)	5625 lm @	\$32.00	\$180,000.00
Valley Gutter	1400 m2 @	\$39.00	\$54,600.00
Sidewalk	1730 m2 @	\$23.00	\$39,790.00
100 mm Conc. Median	325 m2 @	\$26.00	\$8,450.00
150 mm Conc. Median	4140 m2 @	\$35.00	\$144,900.00
Ditch Paving	740 m2 @	\$28.00	\$20,720.00
		<b>SUBTOTAL</b>	<b>\$513,650.00</b>
<b>H. TRAFFIC CONTROL</b>	<b>lump sum</b>		<b>\$100,000.00</b>
		<b>SUBTOTAL</b>	<b>\$100,000.00</b>
<b>I. EROSION CONTROL</b>	<b>lump sum</b>		<b>\$105,525.00</b>
		<b>SUBTOTAL</b>	<b>\$105,525.00</b>
<b>J. GUARDRAIL</b>			
W-Beam Rail	190 lm @	\$38.00	\$7,220.00
T-Beam Rail	48 lm @	\$89.00	\$4,272.00
Type I Anchors	2 EA @	\$440.00	\$880.00
Type 11 Anchors	2 EA @	\$1,345.00	\$2,690.00
		<b>SUBTOTAL</b>	<b>\$15,062.00</b>
<b>K. SIGNS, STRIPING, SIGNALS, LIGHTING</b>			
Signing and Marking	lump sum		\$22,400.00
Overhead Signs w/Lights	0 EA @	\$0.00	\$0.00
Traffic Signals	7 EA @	\$30,000.00	\$210,000.00
Lighting	lump sum		\$0.00
		<b>SUBTOTAL</b>	<b>\$232,400.00</b>
<b>L. GRASSING/LANDSCAPING</b>	<b>1.35 ha @</b>	<b>\$1,250.00</b>	<b>\$1,687.50</b>
		<b>SUBTOTAL</b>	<b>\$1,687.50</b>
<b>M. MISCELLANEOUS</b>			
Field Engineer Office (Type 2)	1 EA @	\$23,000.00	\$23,000.00
Fencing	0 lm @	\$32.00	\$0.00
Right-of-Way Markers	82 EA @	\$60.00	\$4,920.00
		<b>SUBTOTAL</b>	<b>\$27,920.00</b>
<b>N. MAJOR STRUCTURES</b>			
Bridges	2450 m2 @	\$650.00	\$1,592,500.00
Retaining Walls	1250 m2 @	\$485.00	\$606,250.00
<u>Box Culverts</u>			
Concrete	0 m3 @	\$406.00	\$0.00
Bar Reinf. Steel	0 kg @	\$1.00	\$0.00
		<b>SUBTOTAL</b>	<b>\$2,198,750.00</b>

ESTIMATE SUMMARY

A. Right of Way	\$3,910,000.00
B. Reimbursable Utilities	LOCAL

CONSTRUCTION COST SUMMARY

C. Clearing And Grubbing	\$65,000.00
D. Earthwork	\$279,000.00
E. Base and Paving	\$1,407,000.00
F. Drainage	\$261,000.00
G. Concrete Work	\$514,000.00
H. Traffic Control	\$100,000.00
I. Erosion Control	\$106,000.00
J. Guardrail	\$16,000.00
K. Signs, Striping, Signals, Lighting	\$233,000.00
L. Grassing/Landscaping	\$2,000.00
M. Miscellaneous	\$28,000.00

**ROADWAY SUBTOTAL \$3,011,000.00**

N. Major Structures	\$2,199,000.00
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**CONSTRUCTION TOTAL \$5,210,000.00**

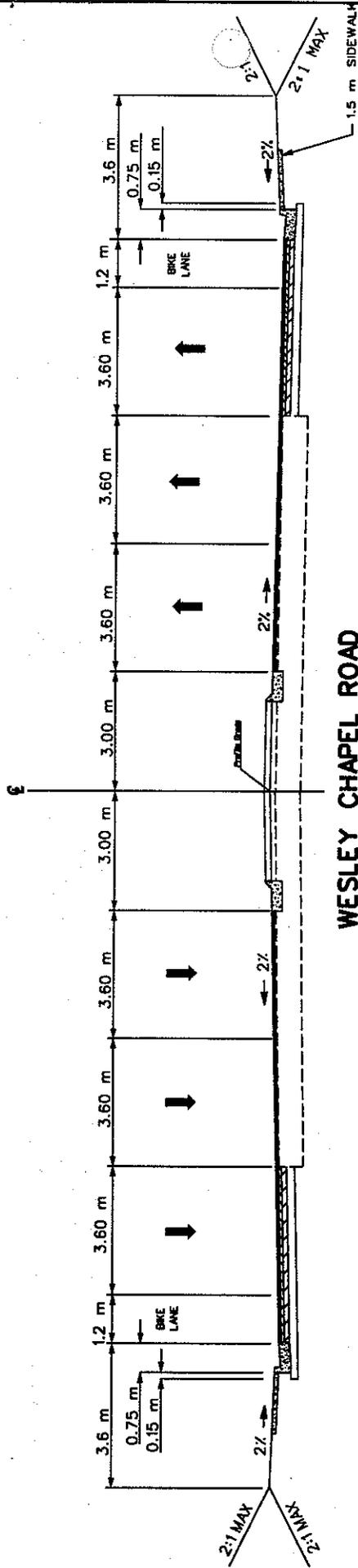
3 years of inflation at 5%	\$781,500.00
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10% E & C	\$599,150.00
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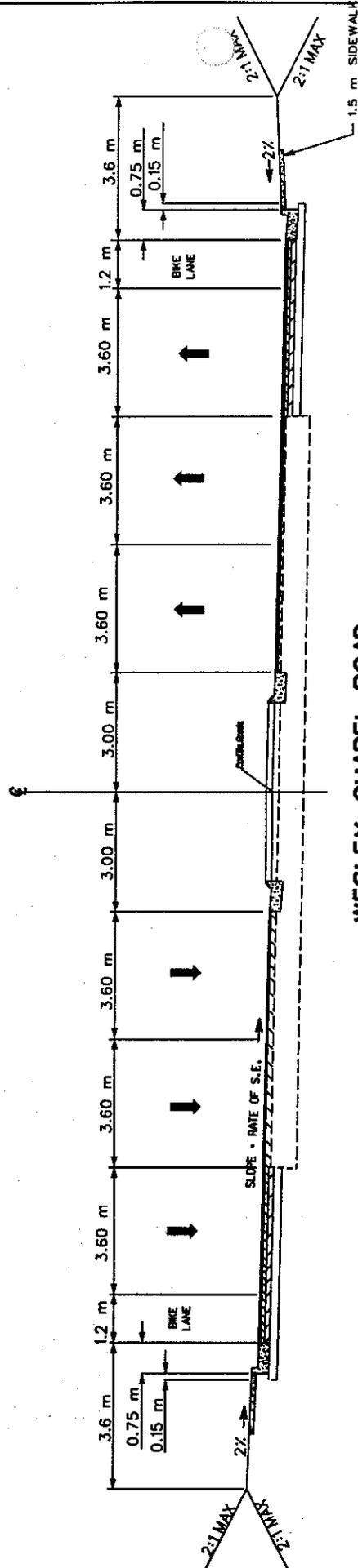
**CONSTRUCTION ESTIMATE SUBTOTAL \$6,590,650.00**

**TOTAL CONSTRUCTION ESTIMATE \$6,591,000.00**

DATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	GA-40-20-200	1	2
ISSUED DATE			



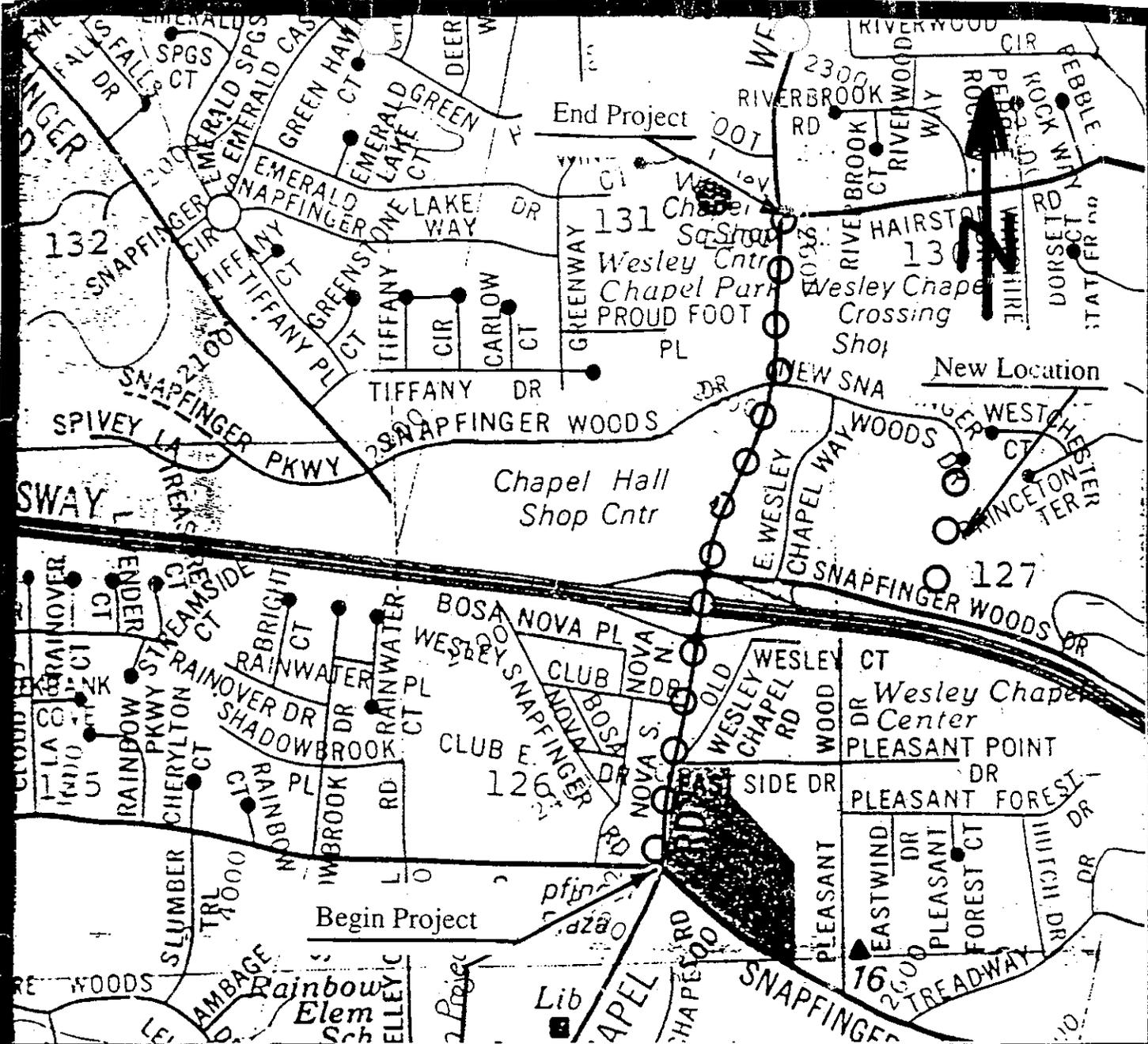
WESLEY CHAPEL ROAD  
TANGENT SECTION



WESLEY CHAPEL ROAD  
SUPERELEVATION SECTION

\* NOTE: SHOULDER SLOPES MAY VARY TO MATCH EXISTING DRIVE GRADES. SEE DRIVE PROFILES.

SLOPE		CONSTABLE	
GRADE	OUT	IN	IN
2:1	0.15m	0.15m	
1:1	0.15m	1.5-3.0m	
2:1	0.15m	1.5-3.0m	
2:1	OVER 3m	OVER 3m	



IM-NH-202(156)  
 WESLEY CHAPEL ROAD WIDENING  
 DEKALB COUNTY  
 P.I. NUMBER 713220