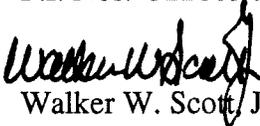


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE MLP-25(81) and STP-218-1(2) Chatham County **OFFICE** Preconstruction
P.I. Nos. 522803, and 522800

DATE October 16, 1996

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

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

Projects MLP-25(81) and STP-218-1(2) Chatham County, comprise the Jimmy Deloach Parkway Extension from 780.0m west of SR 21 eastward on new location to US 17 Alternate just west of the Houlihan Bridge.

MLP-25(81) Chatham County

This project will begin approximately 656.0m west of SR 21 where it ties to the eastern end of Jimmy Deloach Parkway (presently under construction), and proceed east on new location bridging over SR 21 and the CSX Railroad and end approximately 528.0m east of SR 21 at the proposed Flonnel Avenue Connector. The project length is 1.2km. Flonnel Avenue Connector will provide access from SR 21 to the project and will be constructed on new location from SR 21 northeast to the proposed mainline of project MLP-25(81), and connect to existing Flonnel Road.

The proposed typical section will transition from a four lane divided roadway with a 14.6m median at the end of the Jimmy Deloach Parkway to a four lane divided roadway with a 3.6m raised median with 3.0m shoulders through the grade separation over the CSX Railroad and SR 21. The roadway will then transition to four lanes with a 6.0m median to Flonnel Avenue Connector. Flonnel Avenue Connector will consist of two, 3.6m lanes in each direction separated by a 3.6m flush median. The base year traffic (1996) is 12,350 VPD and the design year traffic (2016) is 30,200 VPD. Access along this roadway will be partial limited with a speed design of 70km/h for the mainline and 50km/h for Flonnel Avenue Connector.

STP-218-1(2) Chatham County

This project is the relocation of SR 30 from the eastern terminus of project MLP-25(81) Chatham County, east on new location to US 17 Alt approximately 250.0m west of the Houlihan Bridge over the Savannah River. The project length is 2.2km. The typical section will consist of four lanes with a 6.0m median for the entire project length. This project will include two four lane bridge structures over tributaries to St. Augustine Creek.

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE MLP-25(81)/STP-218-1(2) **OFFICE** Preconstruction
Chatham County
P. I. Nos. 522803/522800 **DATE** November 5, 1996
FROM *C. Wayne Hutto*
C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION

SUBJECT 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 Keeper)
Jerry Hobbs
Herman Griffin
Darrell Elwell (ATTN: Michael Henry)
Marion Waters
Toni Dunagan
Paul Liles
Jim Kennerly
Craig Brack

STP-218-1(2) Chatham County:

(1) Bridge, 96 meters in length by 27.4 meters in width, 4 lane structure over tributary to St. Augustine Creek.

(2) Bridge, 81 meters in length by 31 meters in width, 4 lane structure over tributary to St. Augustine Creek.

Type Access: Partial Limited Access.

Traffic Control During Construction:

MLP-25(81) & STP-218-1(2) mainline - N/A (New Location).

Traffic control will be required on SR 21 on project MLP-25(81).

Traffic control will be required at Alternate US 17 on project STP-218-1(2).

Design Variances Required: MLP-25(81) & STP-218-1(2): None known of at this time.

Design Exceptions to be required:

	Yes	No	Undetermined
Horizontal Alignment	()	(X)	()
Vertical Grades	()	(X)	()
Stopping Sight Distance	()	(X)	()
Speed Design	()	(X)	()
Roadway Width	()	(X)	()
Shoulder Width	()	(X)	()
Cross Slopes	()	(X)	()
Superelevation Rates	()	(X)	()
Horizontal Clearance	()	(X)	()
Vertical Clearance	()	(X)	()
Bridge Width	()	(X)	()
Bridge Structural Capacity	()	(X)	()

Estimated Cost:	MLP-25(81)	STP-218-1(2)
Right of Way (by Locals)	\$ 1,105,000	\$ 480,000
Utilities (by Locals)	<u>\$ 303,560</u>	<u>\$ 25,000</u>
Subtotal (by Locals)	\$ 1,408,560	\$ 505,000
Construction	\$ 6,640,895	\$ 7,646,070
Inflation (1 yr. @ 5%/year)	332,045	1,205,210
E & C (10%)	697,295	885,130
Total Construction	\$ 7,670,235	\$ 9,736,410

Displacements: MLP-25(81): Residential 2; Business 0; Mobile Homes 41
STP-218-1(2): Residential 2; Business 0; Mobile Homes 0

Permits Required [MLP-25(81) & STP-218-1(2)]: USCOE 404 Wetland Permit

Level of Environmental Assessment [MLP-25(81) & STP-218-1(2)]: Environmental Assessment
Note: Preliminary discussions have been held with the U.S. Corps of Engineers, Regulatory Branch, and the Savannah Economic Development Authority. STP-218-1(2) should be evaluated for historic involvement at the east end of the project.

Level of Public Involvement [MLP-25(81) & STP-218-1(2)]: A public hearing is required.

Time Savings Procedures Appropriate? [MLP-25(81) & STP-218-1(2)]: Yes () No (X)

Other Projects in the Area: Jimmy DeLoach Parkway, Phases I and II
Phase I - Local Gov't project under construction
Phase II - Project STP-218-1(1)

Jimmy DeLoach Interchange with I-95
Project NH-STP-95-1(113)

Pooler Parkway, Phase I and II
Phase I - Local Gov't project under construction
Phase II - STP-4067(2)

Pooler Parkway Interchange with I-16
NH-16-1-(119)

Pooler Parkway interchange with U.S. 80
Local Gov't project

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT
CHATHAM COUNTY

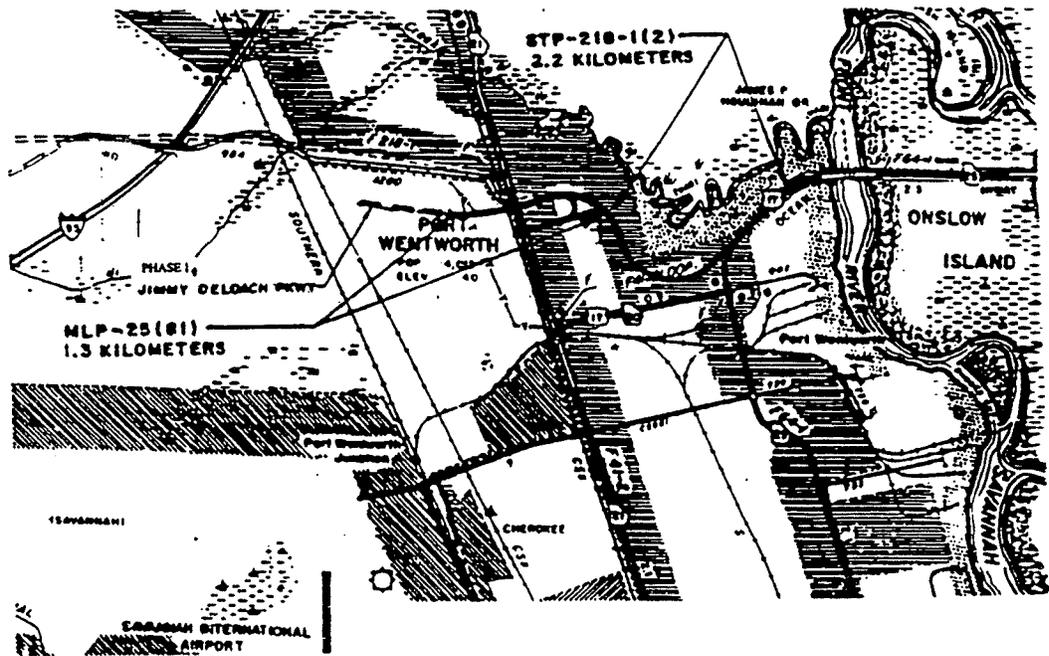
MLP-25(81), Jimmy DeLoach Parkway Interchange at S.R. 21
STP-218-1(2), S.R. 30 Relocation from S.R. 21 to Houlihan Bridge

FEDERAL ROUTE NO.: N/A

STATE ROUTE NO.: 30 ✓

GaDOT P.I. No. : 522803

GaDOT P.I. NO.: 522800



Date of Report:
September 19, 1996

Recommendation for Approval

9/27/96

Date

Jorge P. Pineda
State Urban Design Engineer

Date

State Environmental Engineer

Date

State Traffic Operations Engineer

Date

District Engineer

10/7/96

Date

Paul V. Tills Jr
State Bridge & Structural Design Engineer

Proposed Project Concept - MLP-25(81) & STP-218-1(2)

Length: MLP-25(81) Chatham County: 1.2 kilometers
STP-218-1(2) Chatham County: 2.2 kilometers

Location: Project MLP-25(81) is a new location project that begins approximately 656 meters west of U.S. 21 where it ties to the eastern end of the Jimmy DeLoach Parkway, phase I (presently under construction) and ends approximately 528 meters east of U.S. 21. The proposed roadway will transition from the 4 lane divided roadway with a 14.6m median at the end of the Jimmy DeLoach Parkway to a 4 lane divided roadway with a 3.6 meter paved raised median with 3 meter shoulders through the grade separation over the CSX Railroad and S.R. 21. The roadway will then transition to four lanes with a 6m median 150 meters north of the end of the project at the Flonnel Avenue Connector at which point it ties to project STP-218-1(2). This project will include a bridge over U.S. 21/CSX Railroad. The length of the project is 1.2 kilometers.

Project STP-218-1(2) is a new location project that begins 520 meters east of U.S. 21 and connects to U.S. 17 Alternate approximately 250 meters west of the Houlihan Bridge over the Savannah River. This project will include two bridges over tributaries to St. Augustine Creek. The length of the project is 2.2 kilometers.

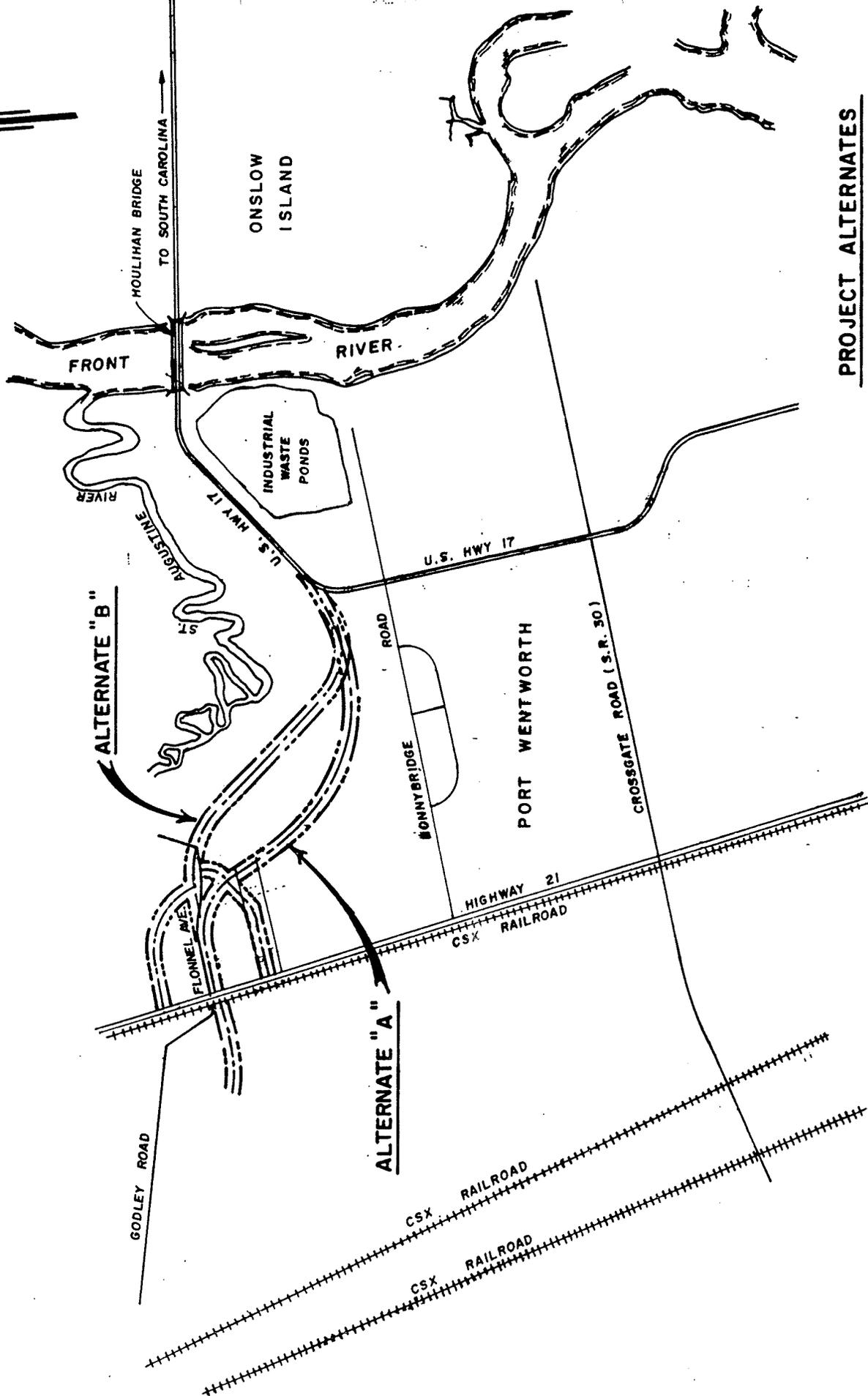
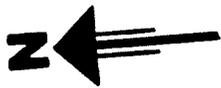
Speed Design: MLP-25(81) Chatham County: 70 kph (45 mph) on the mainline; 50 kph (30mph) on the ramps.
STP-218-1(2) Chatham County: 70 kph (45mph)

Min. Radius of Curve: MLP-25(81) Chatham County	STP-218-1(2) Chatham County
Mainline - Allowed: 175m	Mainline - Allowed: 175m
Used: 350m	Used: 350m

Max. Grade: MLP-25(81) Chatham County	STP-218-1(2) Chatham County
Mainline - Allowed: 5%	Mainline - Allowed: 5%
Used: 3.4%	Used: 3.4%

Major Structures: MLP-25(81) Chatham County:

- ✓ (1) Bridge, 70.46 meters in length by ^{24.0 m} 25 meters in width, 4 lane structure over the CSX railroad/SR 21.
- ✓ (2) Retaining Wall, approximately 235 meters in length with an average height of 5 meters.



PROJECT ALTERNATES
CHATHAM COUNTY
MLP-25(81) & STP-218-1(2)

HUSSEY, GAY, BELL & DEYOUNG
CONSULTING ENGINEERS
SAVANNAH, GEORGIA

PROJECT NO. STP-218-1(2) P.I. NO. 522800
CHATHAM COUNTY - U.S. 17 RELOCATION

MINUTES OF CONCEPT MEETING OF 4/20/95 AT CHATHAM COUNTY ENGINEERING

<u>ATTENDEES</u>	<u>AFFILIATION</u>	<u>PHONE</u>
Allan Black	Chatham County	912-652-7800
Brad Wilkinson	Savannah Electric	912-944-3702
Walker Scott	GaDOT	404-656-5436
Gerald Ross	GaDOT	404-656-5436
Darrell Church	GaDOT	404-656-5436
Allen Troha	GaDOT	912-427-5703
Keith Stewart	GaDOT	912-427-5703
Michelle Cain	GaDOT	404-699-4441
Murray Morris	Savannah Gas Company	912-234-8220
Chris Simons	GaDOT-Planning	404-656-5726
Richard L. Purcell	Savannah Electric & Power	912-944-3526
Roy Maas	Hussey, Gay, Bell & DeYoung, Inc.	912-354-4626
Steve Waters	Hussey, Gay, Bell & DeYoung, Inc.	912-354-4626

Alternate locations "A" and "B" were presented by Roy Maas on marked aerial photo prints with the recommendation to proceed with the Preliminary Design of Alternate "A".

Walker Scott introduced the recently activated GaDOT project to study the replacement of the Houlihan Bridge. The bridge replacement could effect the location of the east terminus of this project. The GaDOT will expedite Concept work on the bridge to determine the effect the bridge location will have on this project and communicate such initial location work to Chatham County ASAP.

Michelle Cain reported on the presence of eligible resources for the National Register of Historic Places on SR 17 at the east end of the project. Ms. Cain also mentioned the possible presence of wood storks in the area. Verification of the presence of the storks is required.

Roy Maas reported that wetland limits have been delineated and surveyed for the recommended Alternate "A" location. No federal permits have been initiated. Representatives of the Corps of Engineers and Fish and Wildlife Commission have walked the proposed Alternate "A" corridor.

After a brief discussion it was agreed that the project will be classified as a partially limited access facility.

ESTIMATE SUMMARY

A.	RIGHT OF WAY	\$	480,000.00
B.	REIMBURSABLE UTILITIES	\$	25,000.00

CONSTRUCTION COST SUMMARY

C.	CLEARING AND GRUBBING	\$	120,050.00
D.	EARTHWORK	\$	2,415,400.00
E.	BASE AND PAVING	\$	827,850.00
F.	DRAINAGE	\$	-147,000.00
G.	CONCRETE WORK	\$	166,000.00
H.	TRAFFIC CONTROL	\$	10,000.00
I.	TEMP. EROSION CONTROL	\$	60,000.00
J.	GUARDRAIL	\$	27,640.00
K.	SIGNS, STRIPING, SIGNALS, LIGHTING	\$	120,000.00
L.	GRASSING/LANDSCAPING	\$	30,000.00
M.	MISCELLANEOUS	\$	21,000.00
	SUBTOTAL OF ROADWAY ITEMS	\$	3,944,940.00
N.	MAJOR STRUCTURES	\$	3,701,130.00
	TOTAL CONSTRUCTION ESTIMATE	\$	7,646,070.00
	3 YEARS OF INFLATION AT 5%	\$	1,205,210.00
	10% E & C	\$	885,130.00
	TOTAL CONSTRUCTION ESTIMATE	\$	9,736,410.00

NEED & PURPOSE

**Jimmy DeLoach Parkway at SR 21 and
SR 30 Relocation from SR 21 Interchange to SR 25
(Bonnybridge Road Replacement)
MLP-25(81) and STP-218-1(2) Chatham County
P.I. No. 522803 and 522800**

Jimmy DeLoach Parkway is a new four-lane arterial in western Chatham County that is in various phases of development. The Parkway is currently under construction from US 80 north over I-95 to just west of SR 21. A planned interchange on Jimmy DeLoach Parkway at I-95 is programmed for construction in FY 1997. The proposed projects will extend Jimmy DeLoach Parkway to SR 25. The projects include an interchange at SR 21 and a new four-lane road from SR 21 to SR 25. Two-lanes were originally proposed east of SR 21, but safety concerns, primarily due to the high expected volume of trucks, precipitated an expansion to four lanes.

The extension to SR 21, including an interchange at SR 21, has recently escalated in importance due to the construction of a major industrial distribution center on Jimmy DeLoach Parkway between I-95 and SR 21. The location of the center will generate considerable truck traffic to and from the Georgia Ports Authority, where a new ship container berth is under construction specifically to serve the center. The further extension from SR 21 to SR 25 is planned for a later date.

The proposed projects were added to the Chatham Urban Transportation Study (CUTS) Long Range Plan in 1992 and were included in Chatham County's 1993 approved Local Option Sales Tax Extension. CUTS 2015 modeled traffic projections on the proposed extension are 15,800 vpd west of SR 21 and 7400 vpd east of SR 21. The projects will provide a more suitable arterial connection than SR 30 (Bonnybridge Road) from SR 21 to the Houlihan Bridge (SR 25). State Route 30 is a 6 meter-wide, residential street that carries a large percentage of trucks. The provision of an interchange at SR 21 is logical because of high projected volumes of traffic on SR 21, including considerable turning movements onto Jimmy DeLoach Parkway. An interchange in this location also helps to provide a grade separation at the CSX rail line that parallels SR 21.

The CUTS 3-year Transportation Improvement Program (TIP) contains two nearby projects. One of these projects is the aforementioned interchange at I-95 and Jimmy DeLoach Parkway (P.I. 511060 and 51Y060) which is programmed for FY 97. The other project is the replacement of the Houlihan Bridge over the Savannah River (P.I. 522610) which is programmed for FY 99. Recent discussions within the planning process indicate that the Houlihan Bridge replacement project may be changed to a rehabilitation project. The CUTS Long Range Plan also contains a project to widen SR 21 to six lanes in the vicinity of the proposed extension of Jimmy DeLoach Parkway.

J. GUARDRAIL

W-BEAM RAIL	400 M @ \$40.00	\$	16,000.00
T-BEAM RAIL	50 M @ \$92.00	\$	4,600.00
TYPE 1 ANCHORS	4 EA @ \$430.00	\$	1,720.00
TYPE 11 ANCHORS	4 EA @ \$1,330.00	\$	5,320.00
	SUBTOTAL	\$	27,640.00

K. SIGNS, STRIPING, SIGNALS, LIGHTING

STRIPING	2.0 KM @ \$15,000.00	\$	30,000.00
ROADSIDE SIGNS	LS @	\$	10,000.00
O.H. SIGNS W/LIGHTS	0 EA @ \$	\$	-0-
TRAFFIC SIGNALS	2 EA @ \$40,000.00	\$	80,000.00
RELOCATE TRAFF.			
SIGNAL	0 EA @ \$	\$	-0-
LIGHTING	LS	\$	-0-
	SUBTOTAL	\$	120,000.00

L. GRASSING/LANDSCAPING

GRASSING	2.0 KM @ \$15,000.00	\$	30,000.00
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M. MISCELLANEOUS

FIELD ENGINEER OFFICE	1 EA @ \$20,000.00	\$	20,000.00
FENCING	M @	\$	-0-
RIGHT-OF-WAY MARKERS	20 EA @ \$50.00	\$	1,000.00
NOISEWALL	0 M @ \$	\$	-0-
	SUBTOTAL	\$	21,000.00

N. MAJOR STRUCTURES

BRIDGES	0	M @	\$0	\$	-0-
	Bridge #1	Bridge #2	Total		
	Piling 1482 m	1426 m	2908 m @ \$120.00	\$	348,960.00
	Pile caps 729 m ³	744 m ³	1473 m ³ @ \$700.00	\$	1,031,100.00
	Girders 1152 m	1092 m	2244 m @ \$230.00	\$	516,120.00
	Deck 2630 m ²	2512 m ²	5142 m ² @ \$225.00	\$	1,156,950.00
	Slope Protection 3000 m ²	4200 m ²	7200 m ² @ \$90.00	\$	648,000.00
			SUBTOTAL	\$	3,701,130.00

RETAINING WALLS	0	M @	\$0	\$	-0-
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BOX CULVERTS					
CONCRETE	0	M @	\$0	\$	-0-
BAR REINF. STEEL		KG @	\$0	\$	-0-
			SUBTOTAL	\$	-0-

O. LAKE RESTORATION	0	EA @	\$0	\$	-0-
			SUBTOTAL	\$	-0-

C. CLEARING AND GRUBBING 17.15 HA @ \$7,000.00 \$ 120,050.00

D. EARTHWORK

EMBANKMENT:

1. Borrow including haul 185,800 m³ x \$13.00 \$2,415,400.00

EXCAVATION

UNCLASSIFIED	0	M @	\$0	\$	0
ROCK	0	KM @	\$0	\$	0

MISCELLANEOUS

WICK DRAINS	0	M @	\$0	\$	0
FILTER FABRIC	0	M @	\$0	\$	0
DRAINAGE MATERIAL	0	M @	\$0	\$	0
DRILL HOLES	0	M @	\$0	\$	0

SUBTOTAL \$2,415,400.00

E. BASE AND PAVING

AGGREGATE BASE

(204mm under mainline pavement, 153 mm under shoulder pavement)

GRADED AGGREGATE 17,000 Mg @ \$15.00 \$ 255,000.00

ASPHALT PAVING

38mm ASPHALTIC CONC. E	3,300 Mg @ \$49.00	\$	161,700.00
51mm ASPHALTIC CONC. B	3,800 Mg @ \$47.00	\$	178,600.00
76mm ASPHALTIC CONCRETE BASE	5,700 Mg @ \$39.50	\$	225,150.00
LEVELING	200 Mg @ \$37.00	\$	7,400.00
TACK COAT		\$	-0-

SUBTOTAL \$ 827,850.00

F. DRAINAGE

CROSS DRAIN SYSTEM

92cm RCP	90 m @ \$210.00	\$ 18,900.00
46cm RCP	1050 m @ \$96.00	\$ 100,800.00

CONCRETE BOX CULVERTS (NONE)

LONGITUDINAL SYSTEM \$ -0-

DRAINAGE STRUCTURES

CATCH BASINS	15 EA @ \$1,400.00	\$ 21,000.00
DROP INLETS	0 M @ \$0	\$ -0-
MANHOLES	0 M @ \$0	\$ -0-
92 F.E.S.	4 EA @ \$1,575.00	\$ 6,300.00

DRAINAGE LUMP SUM

(COST PER KM) M @ \$ -0-

SUBTOTAL \$ 147,000.00

G. CONCRETE WORK

APPROACH SLABS	124M @ \$100.00	\$ 12,400.00
CURB AND GUTTER, TP 7	M @	\$
CURB AND GUTTER, TP 2	3700 M @ \$32.00	\$ 118,400.00
VALLEY GUTTER	M ² @	\$
SIDEWALK	M ² @	\$
MEDIAN PAVING	880M ² @ \$40.00	\$ 35,200.00
DITCH PAVING	M @	\$
	SUBTOTAL	\$ 166,000.00

H. TRAFFIC CONTROL L.S. \$ 10,000.00

I. EROSION CONTROL L.S. \$ 60,000.00

ESTIMATE SUMMARY

A.	RIGHT OF WAY	\$	1,105,000.00
B.	REIMBURSABLE UTILITIES	\$	303,560.00

CONSTRUCTION COST SUMMARY

C.	CLEARING AND GRUBBING	\$	70,000.00
D.	EARTHWORK	\$	3,250,000.00
E.	BASE AND PAVING	\$	1,007,925.00
F.	DRAINAGE	\$	80,010.00
G.	CONCRETE WORK	\$	168,600.00
H.	TRAFFIC CONTROL	\$	35,000.00
I.	TEMP. EROSION CONTROL	\$	70,000.00
J.	GUARDRAIL	\$	57,820.00
K.	SIGNS, STRIPING, SIGNALS, LIGHTING	\$	125,000.00
L.	GRASSING/LANDSCAPING	\$	30,000.00
M.	MISCELLANEOUS	\$	21,700.00
	SUBTOTAL OF ROADWAY ITEMS	\$	4,916,055.00
N.	MAJOR STRUCTURES	\$	1,724,840.00
	TOTAL CONSTRUCTION ESTIMATE	\$	6,640,895.00
	1 YEARS OF INFLATION AT 5%	\$	332,045.00
	10% E & C	\$	697,295.00
	TOTAL CONSTRUCTION ESTIMATE	\$	7,670,235.00

**PRELIMINARY COST ESTIMATE
URBAN DESIGN OFFICE**

DATE: August 12, 1996

PREPARED BY: Roy W. Maas

PROJECT NO. STP-218-1(2)

FILE NAME:

PI. NO.:

MILEAGE: 2.0 Km

PROJECT DESCRIPTION /CONCEPT: S.R. 30 RELOCATION FROM S.R. 21 INTERCHANGE
TO HOULIHAN BRIDGE

EXISTING ROADWAY: (NEW LOCATION)

TRAFFIC (ADT): EXISTING DESIGN

- () PROGRAMMING PROGRESS
- (X) CONCEPT DEVELOPMENT
- () DURING PROJECT DEVELOPMENT

PROJECT COSTS (METRIC UNITS)

A. RIGHT OF WAY

1.	PROPERTY (Land & Easement)	\$ 200,000.00
2.	DISPLACEMENTS: Res. 2 Bus. 0 M.H. 0	\$ 160,000.00
3.	OTHER COST (adm./court, inflation)	\$ 20,000.00
4.	UST REMOVAL	\$ 100,000.00
	SUBTOTAL	\$ 480,000.00

B. UTILITIES

1.	RAILROAD	\$ -0-
2.	TRANSMISSION LINES	\$ -0-
3.	SERVICES	\$ 25,000.00
	SUBTOTAL	\$ 25,000.00

	VALLEY GUTTER	M @ \$	\$ -0-
	SIDEWALK	M @ \$	\$ -0-
	MEDIAN PAVING	M @ \$	\$ -0-
	DITCH PAVING	M @ \$	\$ -0-
		SUBTOTAL	\$ 168,600.00
H.	TRAFFIC CONTROL	L.S.	\$ 35,000.00
I.	EROSION CONTROL	L.S.	\$ 70,000.00
J.	GUARDRAIL		
	W-BEAM RAIL	1300 M @ \$40.00	\$ 52,000.00
	T-BEAM RAIL	25 M @ \$92.00	\$ 2,300.00
	TYPE 1 ANCHORS	2 EA @ \$430.00	\$ 860.00
	TYPE 11 ANCHORS	2 EA @ \$1,330.00	\$ 2,660.00
		SUBTOTAL	\$ 57,820.00
K.	SIGNS, STRIPING, SIGNALS, LIGHTING		
	STRIPING	2.0 KM @ \$25,000.00	\$ 50,000.00
	ROADSIDE SIGNS	LS @	\$ 15,000.00
	O.H. SIGNS W/LIGHTS	0 EA @	\$ -0-
	TRAFFIC SIGNALS	1 EA @ \$60,000.00	\$ 60,000.00
	RELOCATE TRAFF.		
	SIGNAL	0 EA @	\$ -0-
	LIGHTING	0 LS	\$ -0-
		SUBTOTAL	\$ 125,000.00
L.	GRASSING/LANDSCAPING		
	GRASSING	2 KM @ \$15,000.00	\$ 30,000.00

M. MISCELLANEOUS

FIELD ENGINEER'S OFFICE	1 EA @ \$20,000.00	\$ 20,000.00
FENCING	0 M @	\$ -0-
RIGHT-OF-WAY MARKER	34 EA @ \$50.00	\$ 1,700.00
NOISEWALL	0 M @	\$ -0-
	SUBTOTAL	\$ 21,700.00

N. MAJOR STRUCTURES

BRIDGES	0 M @	\$
Piling 600 m @ \$120.00		\$ 72,000.00
Pile Caps 240 m ³ @ \$700.00		\$ 168,000.00
Girders 794.6 m @ \$315.00		\$ 250,300.00
Deck 1986.5 M ² x \$360.00		\$ 715,140.00
RETAINING WALLS	1960 M ² @ \$265.00	\$ 519,400.00
BOX CULVERTS CONCRETE	0 M @	\$ -0-
BAR REINF. STEEL	KG @	\$ -0-
WATER LINE PROTECTION	186 M @ \$960.00	\$ 178,560.00 *
	SUBTOTAL	\$1,724,840.00
O. LAKE RESTORATION	0 EA @	\$ -0-
	SUBTOTAL	\$ -0-

* Not included in major structures subtotal, this cost is included in utility costs, see page 1

C. CLEARING AND GRUBBING 11.67HA @ \$6,000.00 \$ 70,000.00

D. EARTHWORK EMBANKMENT

Borrow including haul 250,000 m³ @ \$13.00 \$3,250,000.00

EXCAVATION

UNCLASSIFIED 0 M @ \$0 \$ -0-
 ROCK 0 KM @ \$0 \$ -0-

MISCELLANEOUS

WICK DRAINS 0 M @ \$0 \$ -0-
 FILTER FABRIC 0 M @ \$0 \$ -0-
 DRILL HOLES 0 M @ \$0 \$ -0-

SUBTOTAL \$ 3,250,000.00

E. BASE AND PAVING

AGGREGATE BASE
 (204mm under mainline pavement, 153 mm under shoulder pavement)

GRADED AGGREGATE 19,965 Mg @ \$15.00 \$ 299,475.00

BASE AND PAVING

38mm ASPHALTIC CONC. E 4,050 Mg @ \$49.00 \$ 198,450.00
 51mm ASPHALTIC CONC. B 4,800 Mg @ \$47.00 \$ 225,600.00
 76mm CONCRETE BASE 7,200 Mg @ \$39.50 \$ 284,400.00
 LEVELING \$ -0-
 TACK COAT \$ -0-

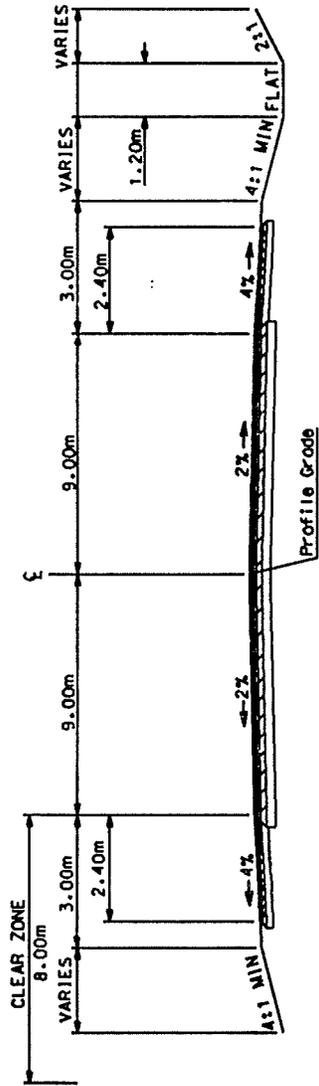
SUBTOTAL \$ 1,007,925.00

F. DRAINAGE

1.	CROSS DRAIN SYSTEM		\$	-0-
2.	CONCRETE BOX CULVERTS (NONE)		\$	-0-
3.	LONGITUDINAL SYSTEM			
	1220 mm RCP	23 m @ \$330.00	\$	7,590.00
	1070 mm RCCP	60 m @ \$260.00	\$	15,600.00
	450 mm RCP	285 m @ \$96.00	\$	27,360.00
	380 mm RCCP	11 m @ \$80.00	\$	880.00
4.	DRAINAGE STRUCTURES			
	CATCH BASINS			
	1033D	6 EA @ \$1,400.00	\$	8,400.00
	1034DD	2 EA @ \$1,950.00	\$	3,900.00
	DROP INLETS			
	1019 A(E)	2 EA @ \$1,350.00	\$	2,700.00
	1220 mm HDWL	2 EA @ \$1,800.00	\$	3,600.00
	FLARED END SECTIONS			
	1070 mm F.E.S.	2 EA @ \$925.00	\$	1,850.00
	450 mm S.E.S.	8 EA @ \$520.00	\$	4,160.00
	450 mm F.E.S.	6 EA @ \$370.00	\$	2,220.00
	380 mm F.E.S.	2 EA @ \$300.00	\$	600.00
	RIPRAP	25 M ² @ \$46.00	\$	1,150.00
	DRAINAGE LUMP SUM			
	(COST PER KM)	M @	\$	-0-
		SUBTOTAL	\$	80,010.00

G. CONCRETE WORK

APPROACH SLABS	407 M @ \$100.00	\$	40,700.00
CURB AND GUTTER, TP 7	1800 M @ \$29.50	\$	53,100.00
CURB AND GUTTER, TP 2	2200 M @ \$34.00	\$	74,800.00



FLONNEL CONNECTOR
TANGENT



FLONNEL CONNECTOR
SUPERELEVATION

**PRELIMINARY COST ESTIMATE
URBAN DESIGN OFFICE**

DATE: August 12, 1996

PREPARED BY: Roy W. Maas

PROJECT NO.: MLP-25(81)

FILE NAME:

P.I. NO. 522803

MILEAGE: 1.2 km

PROJECT DESCRIPTION/CONCEPT: JIMMY DeLOACH PARKWAY -
INTERCHANGE AT S.R. 21

EXISTING ROADWAY: NEW LOCATION

TRAFFIC (1996): ADT 12,350 **DESIGN: (2020)** AADT 30,700

- PROGRAMMING PROGRESS
- CONCEPT DEVELOPMENT
- DURING PROJECT DEVELOPMENT

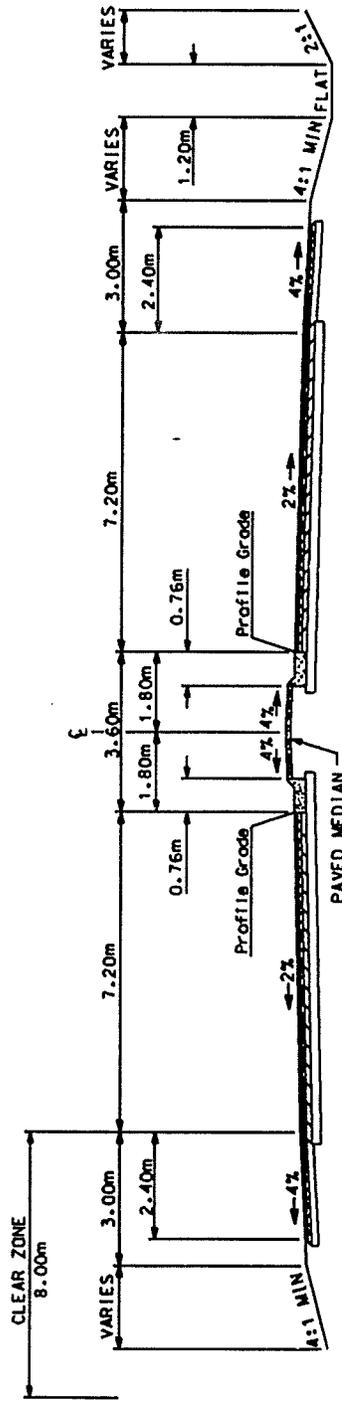
PROJECT COSTS (METRIC UNITS)

A. RIGHT OF WAY

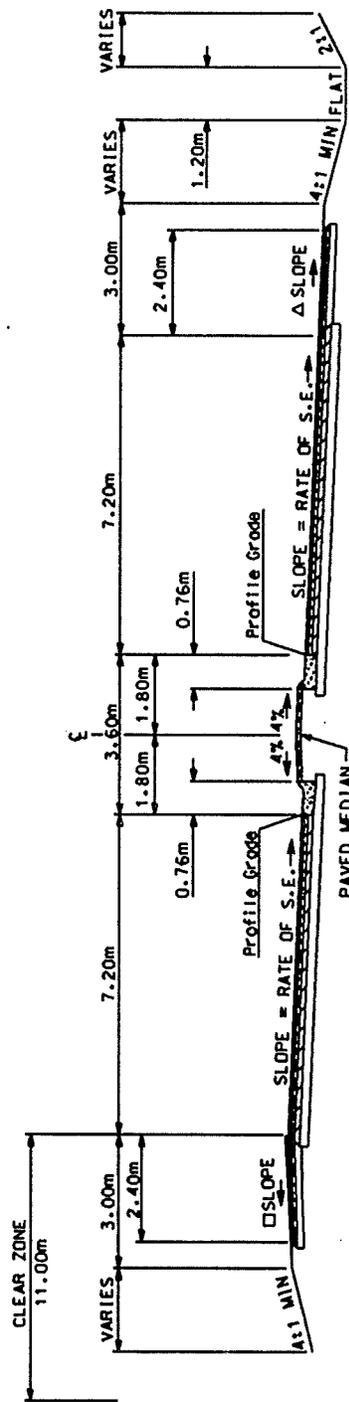
1.	PROPERTY (Land & Easement)	\$ 725,000.00
2.	DISPLACEMENTS: Res. 2, Bus. 0, Mobile Homes 41	\$ 320,000.00
3.	OTHER COST (adm./court,inflation)	\$ 60,000.00
	SUBTOTAL	\$ 1,105,000.00

B. UTILITIES

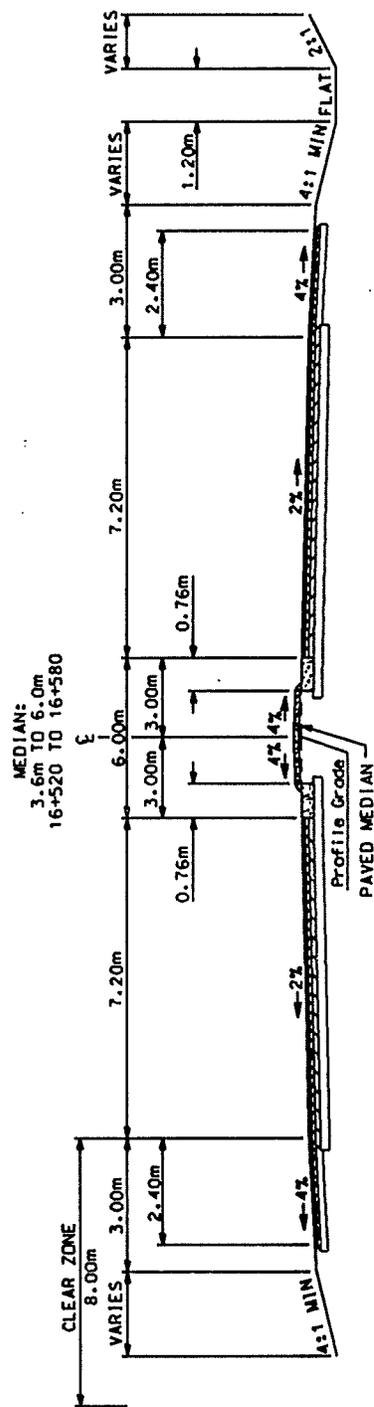
1.	RAILROAD	\$ -0-
2.	TRANSMISSION LINES	\$ -0-
3.	SERVICES	\$ 125,000.00
4.	WATER LINE PROTECTION (at bridge, see Page 5)	\$ 178,560.00
	SUBTOTAL	\$ 303,560.00



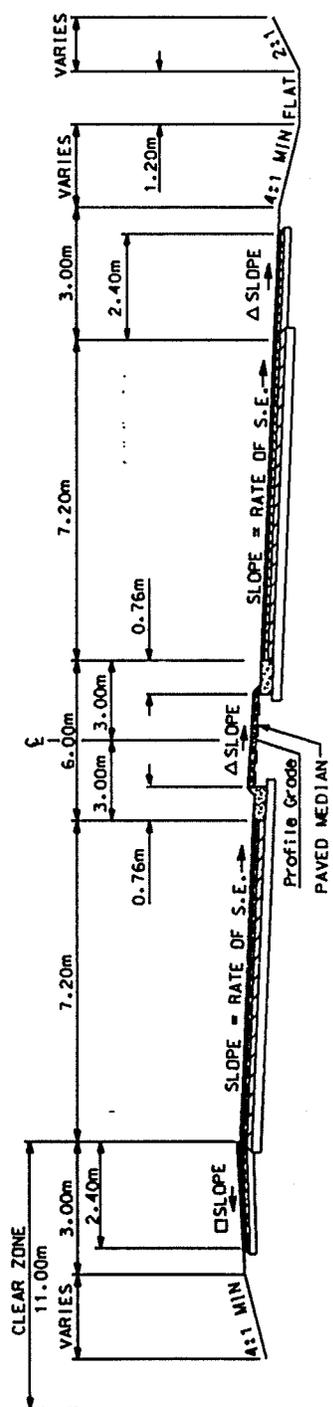
JIMMY DeLOACH PARKWAY
 MLP-25(81)
 15+800 TO 16+520
 TANGENT



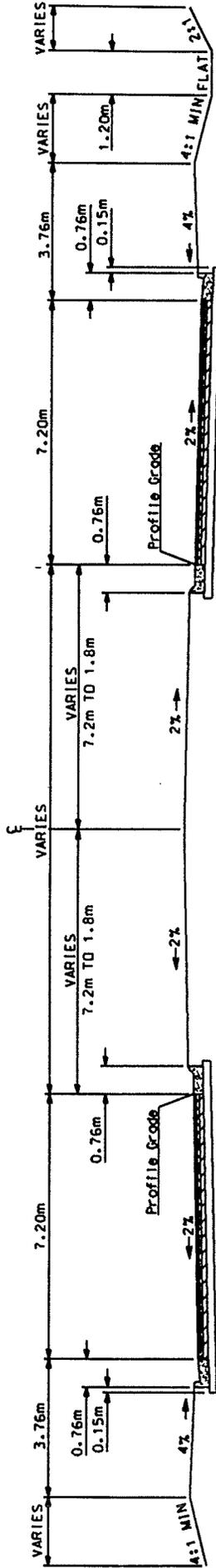
JIMMY DeLOACH PARKWAY
 MLP-25(81)
 15+800 TO 16+520
 SUPERELEVATION



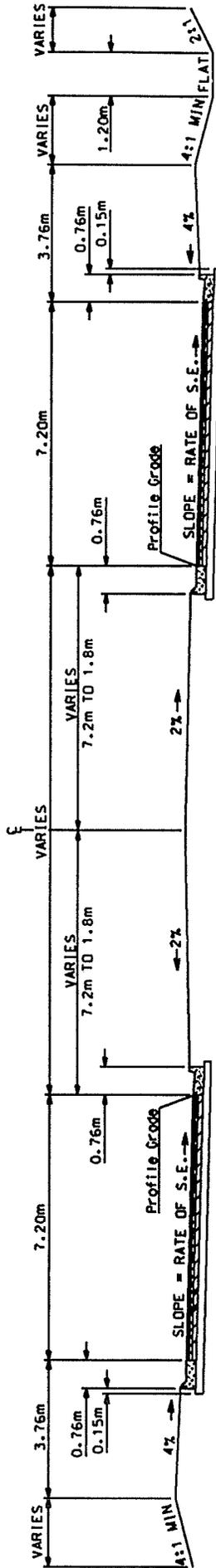
MLP-25(81)
16+520 TO FLONNEL CONNECTOR
STP-218-1(2)
FLONNEL CONNECTOR TO U.S.17
TANGENT



MLP-25(81)
16+520 TO FLONNEL CONNECTOR
STP-218-1(2)
FLONNEL CONNECTOR TO U.S.17
SUPERELEVATION



JIMMY DeLOACH PARKWAY
MLP-25(81)
BEG OF PROJECT TO 15+800
TANGENT



JIMMY DeLOACH PARKWAY
MLP-25(81)
BEG OF PROJECT TO 15+800
SUPERELEVATION

5) MLP-25(81) and STP-218-1(2) are to be partial limited access projects on new location. Access breaks will be subject to review and approval by the Department and will be based on the submittal of the property owner's development plans. Median openings, as requested due to any property owner's development plans, must also be approved by the Department. Median openings must meet the requirements of Georgia Department of Transportation MOG Section 6642. Without development plans at this time, median openings will be placed only at the cross street locations. The openings along the Jimmy DeLoach Parkway corridor are as follows:

Street Name	Location	Distance between Median Openings
Airport Connector Rd. (307.11 meters west of the end of project)	Station 15+291.00. Jimmy DeLoach Parkway.	1491 m (4892 ft.)
SR 21/Flonnel connector	Station 16+782	1508 m (approx.) (4948 ft. - approx.)
SR 30/Alternate U.S. 17 intersection	Station 18+290 (approx.)	

Attachments: Typical Sections, Preliminary Cost Estimates, Need & Purpose Statement, Alternates Considered, Concept Meeting Minutes and List of Attendees.

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE MLP-25(81) & STP-218-1(2) Chatham **OFFICE** Urban Design
Jimmy DeLoach Parkway Interchange
@ SR 21 & SR 30 Relocation from **DATE** 9-26-96
SR 21 Interchange to the Houlihan Bridge
P. I. Nos. 522803 & 522800

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

TO Bob Mustin, P.E., Project Review Engineer

SUBJECT Project Concept Report

Attached, please find a Project Concept Report for the above projects. A copy of this report is being transmitted to those listed below for their review and comments.

JPP:DWC:mj
Attachment

c: (w/attachments)
David Studstill
Marion Waters
Craig Brack
Paul Liles
Wayne Hutto

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT
CHATHAM COUNTY

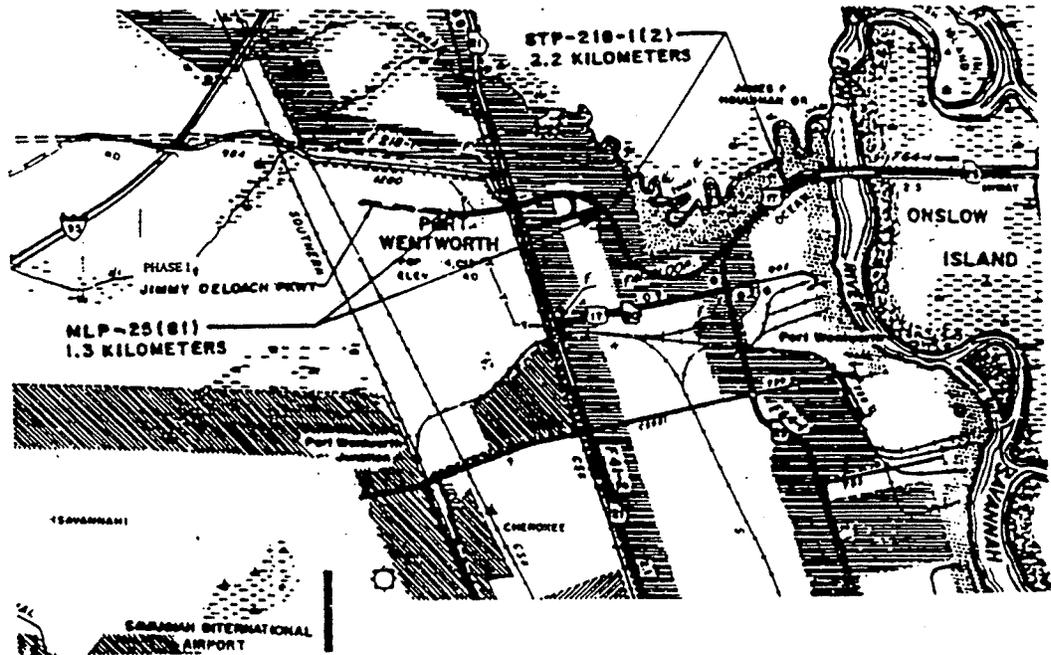
MLP-25(81), Jimmy DeLoach Parkway Interchange at S.R. 21
STP-218-1(2), S.R. 30 Relocation from S.R. 21 to Houlihan Bridge

FEDERAL ROUTE NO.: N/A

STATE ROUTE NO.: 30

GaDOT P.I. No. : 522803

GaDOT P.I. NO.: 522800



Date of Report:
September 19, 1996

Recommendation for Approval

9/27/96

Date

Joseph P. McLeod
State Urban Design Engineer

Date

State Environmental Engineer

Date

State Traffic Operations Engineer

Date

District Engineer

Date

State Bridge & Structural Design Engineer

PROJECT CONCEPT REPORT

S.R. 30 RELOCATION

Project Nos.: MLP-25(81) Chatham County, P.I. No. 522803 and
STP-218-1(2) Chatham County, P.I. No. 522800

Project Name: MLP-25(81) - Jimmy DeLoach Parkway Interchange with S.R. 21.
STP-218-1(2) - Relocation of S.R. 30 from the S.R. 21 Interchange to the Houlihan Bridge.

Location: MLP-25(81) & STP-218-1(2) are new location projects. The westernmost project, MLP-25(81) begins approximately 780 meters west of SR 21 and ties to STP-218-1(2) just east of SR 21. From just east of SR 21, STP-218-1(2) extends eastward to the Houlihan Bridge over the Savannah River. The projects are in Port Wentworth, Georgia in Chatham County.

Traffic: (Two-way ADT)

	<u>Current</u> (1996)	<u>Projected</u> (2020)
MLP-25(81)	12,350	30,200
STP-218-1(2)	7,680	18,800

PDP Classification - MLP-25(81) & STP-218-1(2): Major New Location.
Non-CA: () CA: (x) Exempt: ()

Functional Classification - MLP-25(81) & STP-218-1(2): Urban Principal Arterial

Existing Conditions - MLP-25(81) & STP-218-1(2)

Typical Section: New Location - N/A

Posted Speed Limit: N/A

Max. Degree of Curve: N/A

Maximum Grade: N/A

Major Structures: N/A

Accident History: N/A

Statement of Need and Purpose of the Projects: See attachment.

Proposed Project Concept - MLP-25(81) & STP-218-1(2)

Length: MLP-25(81) Chatham County: 1.2 kilometers
STP-218-1(2) Chatham County: 2.2 kilometers

Location: Project MLP-25(81) is a new location project that begins approximately 656 meters west of U.S. 21 where it ties to the eastern end of the Jimmy DeLoach Parkway, phase I (presently under construction) and ends approximately 528 meters east of U.S. 21. The proposed roadway will transition from the 4 lane divided roadway with a 14.6m median at the end of the Jimmy DeLoach Parkway to a 4 lane divided roadway with a 3.6 meter paved raised median with 3 meter shoulders through the grade separation over the CSX Railroad and S.R. 21. The roadway will then transition to four lanes with a 6m median 150 meters north of the end of the project at the Flonnel Avenue Connector at which point it ties to project STP-218-1(2). This project will include a bridge over U.S. 21/CSX Railroad. The length of the project is 1.2 kilometers.

Project STP-218-1(2) is a new location project that begins 520 meters east of U.S. 21 and connects to U.S. 17 Alternate approximately 250 meters west of the Houlihan Bridge over the Savannah River. This project will include two bridges over tributaries to St. Augustine Creek. The length of the project is 2.2 kilometers.

Speed Design: MLP-25(81) Chatham County: 70 kph (45 mph) on the mainline; 50 kph (30mph) on the ramps.
STP-218-1(2) Chatham County: 70 kph (45mph)

Min. Radius of Curve: MLP-25(81) Chatham County	STP-218-1(2) Chatham County
Mainline - Allowed: 175m	Mainline - Allowed: 175m
Used: 350m	Used: 350m

Max. Grade: MLP-25(81) Chatham County	STP-218-1(2) Chatham County
Mainline - Allowed: 5%	Mainline - Allowed: 5%
Used: 3.4%	Used: 3.4%

Major Structures: MLP-25(81) Chatham County:

- (1) Bridge, 70.46 meters in length by 25 meters in width, 4 lane structure over the CSX railroad/SR 21.
- (2) Retaining Wall, approximately 235 meters in length with an average height of 5 meters.

Wayne Shackelford

Page 2

MLP-25(81) and STP-718-1(2) Chatham

October 16, 1996

The base year traffic (1996) is 7,680 VPD and the design year traffic (2006) is 18,800 VPD. Access along this route will be partial limited with a speed design of 70km/h.

Environmental concerns include requiring a COE 404 permit; an Environmental Assessment will be prepared; possible historic impacts at northern end of project STP-218-1(2); 45 displacements -- 4 residents, 41 mobile homes; wetland impacts; a public hearing will be held; time saving procedures are not appropriate.

The estimated costs for this project are:

MLP-25(81) Chatham County

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)*	\$7,670,000	\$7,700,000	1997	LR
Right-of-Way & Utilities*	Local	Local		

*Chatham County will totally fund this project through local option sales tax proceeds.

STP-718-1(2) Chatham County

Construction (includes E&C and inflation)*	\$9,736,000	\$4,000,000	LR	02-01
Right-of-Way & Utilities*	Local	Local		

*Chatham County signed LGPA on 11-18-94 to be responsible for preliminary engineering, required right-of-way, and utility relocations.

I recommend these project concepts be approved.

WWS:JDQ/cj

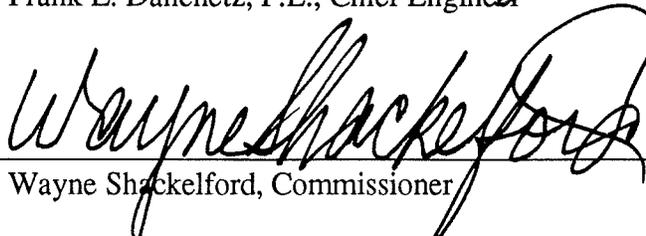
Attachment

CONCUR



 Frank L. Danchetz, P.E., Chief Engineer

APPROVE



 Wayne Shackelford, Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
OCT 02 1996
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE MLP-25(81) & STP-218-1(2) CHATHAM OFFICE Atlanta, Georgia
P.I. NO. 522803 & 522800 DATE OCTOBER 2, 1996

FROM Bob Mustin, Project Review Engineer *DTM*

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

The concept report submitted September 27, 1996 by the letter from Joseph P. Palladi dated September 26, 1996 has been reviewed and is considered satisfactory.

The estimated costs for the projects are as follows:

	<u>Unit (81)</u>	<u>Unit (2)</u>
Construction	\$ 6,641,000	\$ 7,646,000
Inflation	\$ 332,000	\$ 1,205,000
E & C	\$ 697,000	\$ 885,000
Right of Way	\$ 1,105,000	\$ 480,000
Reimbursable Utilities	\$ 303,560	\$ 25,000

DTM

c: Joe Palladi

Concept Team Meeting Date: April 20, 1995 (See attached minutes.)

Location Inspection Date: Location selected by Local Government in coordination with Local Government's consultant.

Railroad involvement: New bridge over CSX railroad on project MLP-25(81).
No involvement on project STP-218-1(2).

Possible Underground Storage Tank Sites: Old inactive gasoline service station at the east end of project STP-218-1(2). No anticipated involvement on project MLP-25(81).

Possible Hazardous Waste Sites: No anticipated sites on project MLP-25(81). Evidence of prior disposal of petroleum waste at old inactive gasoline service station at the east end of project STP-218-1(2).

Alternates Considered: MLP-25(81) and STP-218-1(2) corridor.

Alternate A: Connection to SR 21 on the south side of a grade separation with SR 21 and CSX Railroad. North-south leg of roadway approximately 560 meters east of SR 21. (See attachment, Exhibit A)

Alternate B: Connection to SR 21 on the north side of grade separation with SR 21 and CSX Railroad. North-south leg of roadway approximately 850 meters east of SR 21. (See attachment, Exhibit A)

Alternate C: Direct at-grade connection from SR 21 adjacent to existing Bonneybridge Road. Alternate was suggested by Fish and Wildlife Services of the U. S. Department of Interior, but was not considered since it did not include the requirements to tie to the Jimmy DeLoach Parkway with a grade separation at the CSX railroad.

Comments:

1) Alternate A and B were studied in detail. Alternate A was the shorter of the two schemes by some 75 meters. It provided for a direct interchange ramp for the west to northbound traffic at SR 21 and contained three major bridges and one major retaining wall. Alternate B was 3940 meters in length and contained four major bridges. Both alternates required modifications to the median openings on SR 21. Alternate A was the recommended concept for projects MLP-25(81) and STP-218-1(2) and was discussed in detail at the concept meeting.

Alternate A was recommended for the following reasons:

- a.) The north-south portion of the project impacts far less marsh area than Alternate B.
- b.) The proposed intersection of the connector road and SR 21 is positioned so that the existing median opening can be eliminated and local traffic re-routed with relative ease.
- c.) Left turn movements from east to north and south are further east of the grade separation, which will provide for a greater degree of safety.

Both alternates will require cul-de-sacs to be placed on Coldstream Road, Antrim Street and the east end of Godley Road at the CSX RR.

2) The following changes were recommended at the concept meeting for Project MLP-25(81):

a). Access is to be provided to Flannel Road as recommended by the Office of Urban Design.

b). Project plans are to be completed in metric units.

3) The recommended concept presented at the team meeting for project STP-218-1(2) was the Alternate A alignment tying to MLP-25(81) on the east end of the project and tying to U. S. 17 approaching Houlihan Bridge on the west end of the project. The project transitioned from 4 lanes to 2 lanes at the beginning and remained 2 lanes until the intersection with U.S. 17 where additional lanes were shown to accommodate turning movements. Comments concerning revisions that would be necessary to project STP-218-1(2) as presented at the concept meeting along with the Office of Urban Design's review of the preliminary plans are as follows:

a). The recommended typical section is to be revised from 2 lanes to 4 lanes as recommended by the Office of Urban Design (see attached proposed typical section).

b). Project plans are to be completed in metric units.

c). The alignments of projects MLP-25(80) and STP-218-1(2) are to be revised and STP-218-1(2) is to be designed in advance of letting MLP-25(80) to contract in order to verify that the designs are compatible and that the environmental documents adequately cover the impacts of both projects.

4). MLP-25(81) is to be advance funded by Chatham County in order to let the project earlier than the programmed let date. STP-218-1(2) will be constructed in accord with the programmed let date with the Department of Transportation, presently January, 2002.