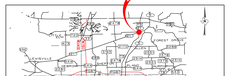
DESIGN SCHEMATIC SH 121 1"=100' ROLL 1 OF 11

INTERCHANGE AT SH 121 AND US 75
COLLIN COUNTY, TEXAS
CSJ: 0364-04-040

PROJECT LOCATION



VICINITY MAP
NTS

TEXAS DEPARTMENT OF TRANSPORTATION
DALLAS DISTRICT
WILLIAM HALE, P.E. - DISTRICT ENGINEER

NORTH TEXAS TOLLWAY AUTHORITY
JORGE FIGUEREDO - EXECUTIVE DIRECTOR

JUNE, 2008

SURVEY CONTROL POINTS

POINT NAME	NORTHING	EASTING	ELEVATION	STATION AND OFFSET (FEET)
ARS 75-01	7169051.7753	2531495.8859	651.210	75 @ STA 6+90.00,18625 RT
ARS 121-01	7169 [illegible]	2531 [illegible]	675.380	121 @ STA 121+00.00,0.000 RT
ARS 121-02	7169 [illegible]	2532 [illegible]	675.380	121 @ STA 121+00.00,5.0148 RT
ARS 121-06	7167 [illegible]	2531 [illegible]	660.21	121 @ STA 121+00.00,95.88 RT
ARS 121-10	7169 [illegible]	2531 [illegible]	679.820	121 @ STA 121+00.00,100.00 LT

LEGEND

	EXISTING	PROPOSED
MAIN LANE		
RAMP		
FRONTAGE ROAD		
CROSS STREETS		
RIGHT-OF-WAY/PROPERTY LINES		
CONTROL-OF-ACCESS		
MAINLINE/FRONTAGE/RAMP TRAFFIC LANE DIRECTIONAL INDICATOR		
RETAINING WALLS	NOT SHOWN	
BRIDGES		
DIRECT CONNECTOR		

FUNCTIONAL CLASSIFICATION
URBAN FREEWAY

PROJECT LENGTH
SH 121 = 7.8 MILES
US 75 = 5.9 MILES
TOTAL = 13.7 MILES

DESIGN SPEEDS

MAIN LANES	70 MPH BASED ON URBAN ALTERNATE FREEWAY
FRONTAGE ROADS	40 MPH
DIRECT CONNECT RAMPS	50 MPH BASED ON MID RANGE
ON/OFF RAMPS	50 MPH BASED ON MID RANGE
LOOP RAMPS	25 MPH
CROSS STREETS	45 MPH (30 MPH WHERE NOTED)

TYPICAL SECTIONS

A	13' CROP
B	4' HMAC (TY B)
C	13' FL BASE W/12' CROP
D	14' CROP
E	10' CROP

PROPOSED ALIGNMENTS

MAINLANES	
FRONTAGE ROADS	
ON/OFF RAMPS	
DIRECT CONNECT RAMPS	
CROSS STREETS	

SCALE
PLAN: 1"=100'
PROFILE: HORZ 1"=100' VERT 1"=10'

NOTES:
1. HORIZONTAL AND VERTICAL CONTROL BASED ON NAD 83 COORDINATES.
2. GANTRY LOCATIONS BASED ON TOLL TRAFFIC AND REVENUE STUDY BY HALBGEWACHS, DATED 2/2007.
3. ALL STATIONS ARE REFERENCED TO SH 121 BASELINE UNLESS NOTED OTHERWISE.
4. COMPLETE REMOVAL OF EXISTING PAVEMENT AND STRUCTURES IS INTENDED WITHIN CONSTRUCTION LIMITS, EXCEPT WHERE SHOWN OTHERWISE.

INDEX OF ROLLS
ROLL 1 AND 2 = PLAN AND PROFILE SH 121 MAIN LANES
ROLL 3 AND 4 = PLAN AND PROFILE US 75 MAIN LANES
ROLL 4 AND 5 = PLAN AND PROFILE US 75 MAIN LANES
ROLL 6 AND 7 = PROFILES SH 121 FRONTAGE ROADS
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Texas Department of Transportation

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NORTH TEXAS TOLLWAY AUTHORITY

DESIGN SCHEMATIC
SH 121 AT US 75
COLLIN COUNTY, TEXAS

JACOBS
BRIDGEFARMER
SECTION 4

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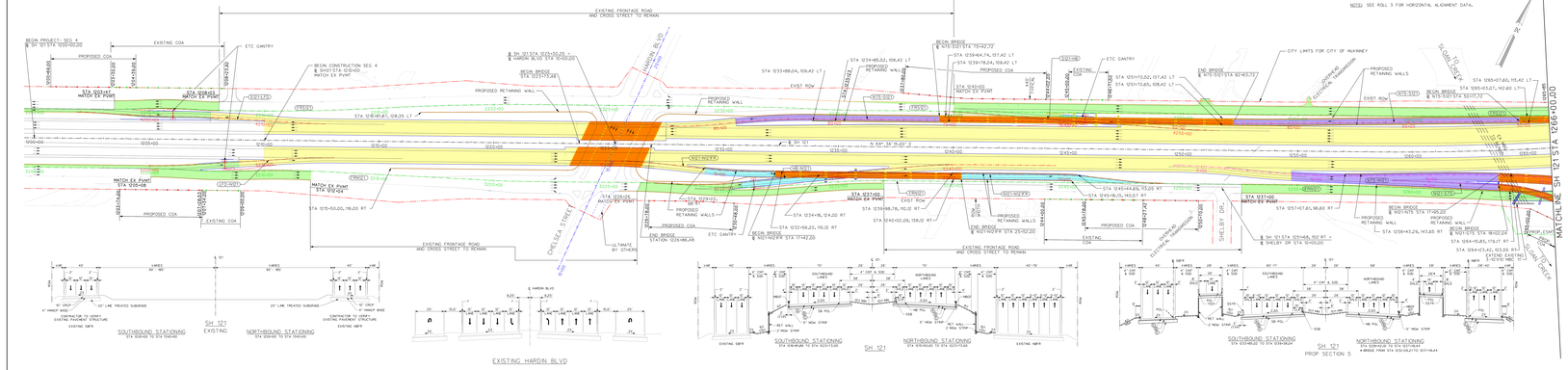
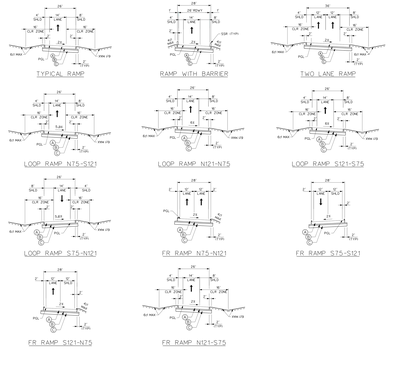
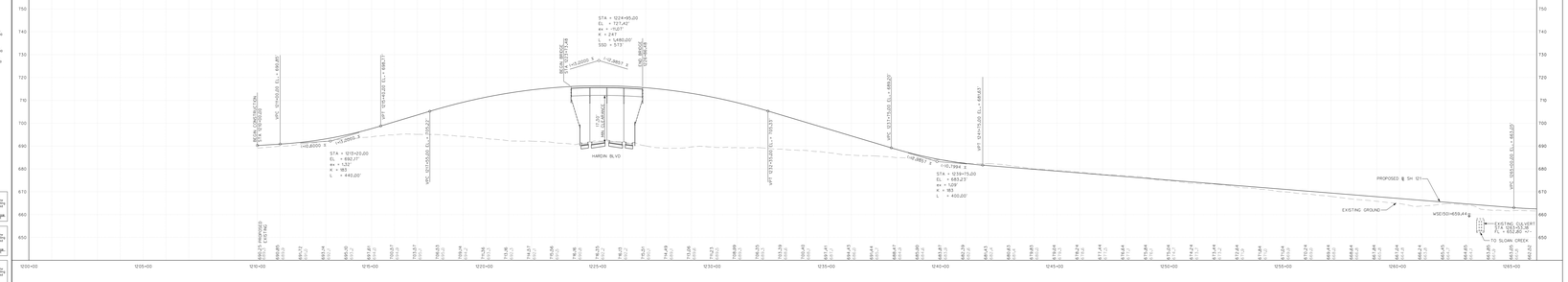
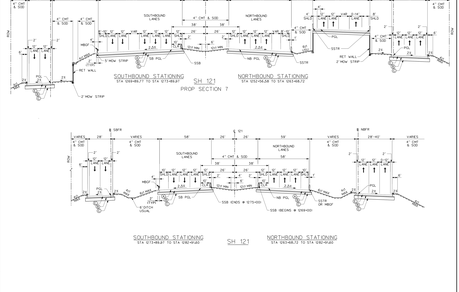
Prepared in accordance with the laws of the State of Texas to be submitted for review by a Texas Licensed Professional Engineer.
Date Prepared: 06/27/2008
Registered Professional Engineer: [illegible]

CONTRACT 0292-04-121-04-PS-PM ROLL 1 OF 11









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