

**TOWN OF BEDFORD  
BEDFORD CONNECTOR ROAD**

**PRELIMINARY CONSTRUCTION COSTS**

<u>IMPROVEMENT LOCATION</u>	<u>ESTIMATED COST OF IMPROVEMENT ***</u>
WALLACE ROAD AT ROUTE 101	\$ 550,000
WALLACE ROAD AT CONNECTOR ROAD	\$ 450,000
CONNECTOR ROAD	\$ <u>4,100,000</u>
NASHUA/COUNTY ROAD WIDENING AT SCHOOL	\$ 120,000
NASHUA/BELL HILL LT-TURN RESTRICTIONS AT ROUTE 101	\$ 200,000
NASHUA TO BELL HILL OVERPASS OF ROUTE 101	\$ 6,000,000

*\$ 1,320,000*

\*\*\* DOES NOT INCLUDE LAND ACQUISITION COSTS



# CONSTRUCTION COST ESTIMATE

Date Prepared  
12/13/2005

SHEET \_\_\_ OF \_\_\_

PROJECT  
BEDFORD CONNECTOR

STATE PROJECT NO FEDERAL PROJECT NO

LOCATION  
BEDFORD, NHDEPARTMENT  
HIGHWAYESTIMATOR  
FMK

CHECKED BY

## BASIS FOR ESTIMATE

- PRE-PRELIMINARY  
 PRELIMINARY  
 SLOPE & DRAIN  
 PRELIMINARY PS+E  
 FINAL PS+E  
 OTHER

## PRELIMINARY SUBMISSION

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
<b>#1 - WALLACE ROAD AT NH 101 - Widening of Wallace Road</b>					
<b>NORTH SIDE</b>					
203 1	COMMON EXCAVATION	CY	\$10 00	130	\$1 300 00
203 6	EMBANKMENT-IN-PLACE (F)	CY	\$10 00	100	\$1 000 00
209 1	GRANULAR BACKFILL	CY	\$30 00	35	\$1 050 00
2 4	FINE GRADING	U	\$780 00	1	\$780 00
304 2	GRAVEL (F)	CY	\$20 00	130	\$2 600 00
304 3	CRUSHED GRAVEL (F)	CY	\$25 00	130	\$3 250 00
403 11	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60 00	90	\$5 400 00
608 12	2" BITUMINOUS SIDEWALK (F)	SY	\$20 00	300	\$6 000 00
608 26	6" CONCRETE SIDEWALK (F)	SY	\$40 00	120	\$4 800 00
609 01	STRAIGHT GRANITE CURB	LF	\$18 00	880	\$15 840 00
<b>SOUTH SIDE</b>					
203 1	COMMON EXCAVATION	CY	\$10 00	790	\$7 900 00
2 4	FINE GRADING	U	\$1 150 00	1	\$1 150 00
304 2	GRAVEL (F)	CY	\$20 00	185	\$3 700 00
304 3	CRUSHED GRAVEL (F)	CY	\$25 00	185	\$4 625 00
403 11	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60 00	30	\$1 800 00
<b>OTHER</b>					
618 61	UNIFORMED OFFICERS WITH VEHICLE	\$	\$32 000 00	1	\$32 000 00
618 7	FLAGGERS	HR	\$25 00	1280	\$32 000 00
619	MAINTENANCE OF TRAFFIC	U	\$30 000 00	1	\$30 000 00
	MODIFY SIGNAL HARDWARE		\$90 000 00	1	\$90 000 00
	RETAINING WALL	SF	\$100 00	400	\$40 000 00
SUBTOTAL A					\$391 100 00
MISCELLANEOUS ITEMS 15% X SUBTOTAL A					\$43 679 25
SUBTOTAL B					\$434 779 25
DRAINAGE ITEMS 10% X SUBTOTAL B					\$33 487 43
SUBTOTAL C					\$468 266 68
WATER POLLUTION CONTROL 5% X SUBTOTAL C					\$18 418 68
MOBILIZATION 5% X SUBTOTAL C					\$18 418 68
SUBTOTAL D					\$505 104 04
CONST. ENGINEERING & CONTINGENCIES 25% X SUBTOTAL D					\$101 299 46
ROADWAY TOTAL					\$606 403 50
ESTIMATED FINAL DESIGN ENGINEERING COST 8% X ROADWAY TOTAL					\$41 000 00
FINAL COST (ROUNDED UP TO NEAREST \$50K)					\$550 000 00

# VHB CONSTRUCTION COST ESTIMATE

Date Prepared  
12/13/2005

SHEET \_\_\_ OF \_\_\_

PROJECT  
BEDFORD CONNECTOR

STATE PROJECT NO FEDERAL PROJECT NO

LOCATION  
BEDFORD, NH

DEPARTMENT  
HIGHWAY

ESTIMATOR  
FMK

CHECKED BY

- BASIS FOR ESTIMATE
- PRE-PRELIMINARY
  - PRELIMINARY
  - SLOPE & DRAIN
  - PRELIMINARY PS+E
  - FINAL PS+E
  - OTHER

## PRELIMINARY SUBMISSION

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
<b>#2 - WALLACE ROAD WITH NEW CONNECTOR - Widening of Wallace Road</b>					
203.1	COMMON EXCAVATION	CY	\$10.00	2830	\$28,300.00
203.6	EMBANKMENT-IN-PLACE (F)	CY	\$10.00	60	\$600.00
209.	GRANULAR BACKFILL	CY	\$30.00	40	\$1,200.00
214	FINE GRADING	U	\$7,200.00	1	\$7,200.00
304.2	GRAVEL (F)	CY	\$20.00	1200	\$24,000.00
304.3	CRUSHED GRAVEL (F)	CY	\$25.00	1200	\$30,000.00
403.11	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60.00	820	\$49,200.00
608.12	2" BITUMINOUS SIDEWALK (F)	SY	\$20.00	325	\$6,500.00
609.01	STRAIGHT GRANITE CURB	LF	\$18.00	580	\$10,440.00
618.61	UNIFORMED OFFICERS WITH VEHICLE	S	\$24,000.00	1	\$24,000.00
618.7	FLAGGERS	HR	\$25.00	960	\$24,000.00
619.	MAINTENANCE OF TRAFFIC	U	\$20,000.00	1	\$20,000.00

SUBTOTAL A \$225,440.00

MISCELLANEOUS ITEMS 15% X SUBTOTAL A \$33,816.00

SUBTOTAL B \$259,256.00

DRAINAGE ITEMS 15% X SUBTOTAL B \$38,888.40

SUBTOTAL C \$298,144.40

WATER POLLUTION CONTROL 5% X SUBTOTAL C \$14,907.22

MOBILIZATION 5% X SUBTOTAL C \$14,907.22

SUBTOTAL D \$313,051.62

CONST. ENGINEERING & CONTINGENCIES 25% X SUBTOTAL D \$78,262.91

ROADWAY TOTAL \$391,314.53

ESTIMATED FINAL DESIGN ENGINEERING COST 8% X ROADWAY TOTAL \$31,305.16

FINAL COST (ROUNDED UP TO NEAREST \$50K) \$450,000.00



# CONSTRUCTION COST ESTIMATE

Date Prepared  
12/13/2005

SHEET \_\_\_ OF \_\_\_

## PROJECT

BEDFORD CONNECTOR ROAD

STATE PROJECT NO

FEDERAL PROJECT NO

## LOCATION

BEDFORD, NH

DEPARTMENT

HIGHWAY

ESTIMATOR

JAM

CHECKED BY

## BASIS FOR ESTIMATE

- PRE-PRELIMINARY  
 PRELIMINARY  
 SLOPE & DRAIN  
 PRELIMINARY PS+E  
 FINAL PS+E  
 OTHER

## PRELIMINARY SUBMISSION

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
<b>#3 - BEDFORD CONNECTOR ROAD - 165' BRIDGE SPAN</b>					
203 1	COMMON EXCAVATION	CY	\$10 00	6800	\$68 000 00
203 2	ROCK EXCAVATION	CY	\$22 00	700	\$37 400 00
203 6	EMBANKMENT IN-PLACE (F)	CY	\$10 00	19850	\$198 500 00
209 1	GRANULAR BACKFILL	CY	\$20 00	200	\$4 000 00
214	FINE GRADING	U	\$26 000 00	1	\$26 000 00
304 2	GRAVEL (F)	CY	\$20 00	4350	\$87 000 00
304 3	CRUSHED GRAVEL (F)	CY	\$25 00	4350	\$108 750 00
403 1	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60 00	2900	\$174 000 00
603 00315	15" R C PIPE 30000	LF	\$40 00	1660	\$66 400 00
603 00318	18" R C PIPE 30000	LF	\$45 00	630	\$28 350 00
603 00324	24" R C PIPE 30000	LF	\$50 00	160	\$8 000 00
604 12	CATCH BASINS TYPE B	U	\$1600 00	33	\$52 800 00
604 125	CATCH BASINS TYPE B 5-FOOT DIAMETER	U	\$1 800 00	2	\$3 600 00
606 14	BEAM GUARDRAIL (STANDARD SECTION- WOOD POSTS; GR-140	LF	\$20 00	300	\$6 000 00
606 1452	BEAM GUARDRAIL (TERMINAL UNIT TYPE ELT)	U	\$1 900 00	6	\$11 400 00
608 12	2" BITUMINOUS SIDEWALK (F)	SY	\$40 00	1800	\$72 000 00
609 01	STRAIGHT GRANITE CURB	LF	\$18 00	6400	\$115 200 00
618 6	UNIFORMED OFFICERS WITH VEHICLE	S	\$1 00	4000	\$4 000 00
618 7	FLAGGERS	HR	\$25 00	160	\$4 000 00
619 1	MAINTENANCE OF TRAFFIC	U	\$20 000 00	1	\$20 000 00
	DETENTION BASIN LOCATION 1	U	\$75 000 00	1	\$75 000 00
	DETENTION BASIN LOCATION 2	U	\$50 000 00	1	\$50 000 00
	RETAINING WALL	U	\$275 000 00	1	\$275 000 00
					\$0 00
					\$0 00
SUBTOTAL A					\$1,488,000.00
MISCELLANEOUS ITEMS 15% X SUBTOTAL A					\$224,340.00
SUBTOTAL B					\$1,712,340.00
WATER POLLUTION CONTROL 5% X SUBTOTAL C					\$85,997.00
MOBILIZATION 5% X SUBTOTAL C					\$85,997.00
SUBTOTAL C					\$1,884,334.00
CONST. ENGINEERING/ADMINISTRATION & CONTINGENCIES 25% X SUBTOTAL C					\$472,983.50
ROADWAY TOTAL					\$2,357,317.50
BRIDGE TOTAL					\$1,400,000.00
ROADWAY & BRIDGE TOTAL					\$3,757,317.50
ESTIMATED FINAL DESIGN ENGINEERING COST 8% X ROADWAY TOTAL					\$302,000.00
FINAL COST (ROUNDED UP TO NEAREST \$50K)					\$4,100,000.00





# CONSTRUCTION COST ESTIMATE

Date Prepared  
12/13/2005SHEET    OF   PROJECT  
BEDFORD CONNECTOR

STATE PROJECT NO FEDERAL PROJECT NO

LOCATION  
BEDFORD, NHDEPARTMENT  
HIGHWAYESTIMATOR  
FMK

CHECKED BY

## BASIS FOR ESTIMATE

- PRE-PRELIMINARY  
 PRELIMINARY  
 SLOPE & DRAIN  
 PRELIMINARY PS+E  
 FINAL PS+E  
 OTHER

## PRELIMINARY SUBMISSION

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
<b>#5 - NASHUA / BELL HILL LT-TURN RESTRICTION</b>					
203.1	COMMON EXCAVATION	CY	\$10.00	650	\$6,500.00
203.6	EMBANKMENT IN-PLACE (F)	CY	\$5.00	25	\$250.00
214	FINE GRADING	U	\$1,300.00	1	\$1,300.00
304.2	GRAVEL (F)	CY	\$20.00	220	\$4,400.00
304.3	CRUSHED GRAVEL (F)	CY	\$25.00	220	\$5,500.00
403.1	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60.00	360	\$21,600.00
608.26	6" CONCRETE SIDEWALK (F)	SY	\$40.00	280	\$11,200.00
609.0	STRAIGHT GRANITE CURB	LF	\$18.00	300	\$5,400.00
618.61	UNIFORMED OFFICERS WITH VEHICLE	S	\$8,000.00	1	\$8,000.00
618.7	FLAGGERS	HR	\$25.00	320	\$8,000.00
619.1	MAINTENANCE OF TRAFFIC	U	\$10,000.00	1	\$10,000.00

SUBTOTAL A \$82,100.00

MISCELLANEOUS ITEMS 15% X SUBTOTAL A \$12,322.50

SUBTOTAL B \$94,422.50

DRAINAGE ITEMS 10% X SUBTOTAL B \$9,442.25

SUBTOTAL C \$103,864.75

WATER POLLUTION CONTROL 5% X SUBTOTAL C \$5,193.24

MOBILIZATION 5% X SUBTOTAL C \$5,193.24

SUBTOTAL D \$114,151.23

CONST. ENGINEERING &amp; CONTINGENCIES 75% X SUBTOTAL D \$85,613.42

ROADWAY TOTAL \$200,000.00

ESTIMATED FINAL DESIGN ENGINEERING COST 8% X ROADWAY TOTAL \$12,000.00

FINAL COST (ROUNDED UP TO NEAREST \$50K) \$200,000.00



# CONSTRUCTION COST ESTIMATE

Date Prepared  
12/13/2005

SHEET \_\_\_ OF \_\_\_

18300  
BEDFORD CONNECTOR  
18350

- BASIS FOR ESTIMATE**
- PRE-PRELIMINARY
- PRELIMINARY
- SLOPE & DRAIN
- PRELIMINARY PS+E
- FINAL PS+E
- OTHER

\*8400  
BEDFORD, NHDEPARTMENT  
HIGHWAYESTIMATOR  
FMK

CHECKED BY

## PRELIMINARY SUBMISSION

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
<b>#6 - NASHUA ROAD / BELL HILL ROAD OVERPASS OF 101</b>					
203 1	COMMON EXCAVATION	CY	\$10 00	15400	\$154 000 00
203 2	ROCK EXCAVATION	CY	\$22 00	26100	\$574 200 00
203 6	EMBANKMENT IN PLACE (F)	CY	\$10 00	32100	\$321 000 00
209 1	GRANULAR BACKFILL	CY	\$30 00	216	\$6 300 00
214	FINE GRADING	U	\$18 250 00	1	\$18 250 00
304 2	GRAVEL (F)	CY	\$20 00	3530	\$70 600 00
304 25	GRAVEL FOR DRIVES	CY	\$20 00	150	\$3 000 00
304 3	CRUSHED GRAVEL (F)	CY	\$25 00	3530	\$88 250 00
304 1	SAND (F)	CY	\$15 00	830	\$12 450 00
403 11	HOT BITUMINOUS PAVEMENT MACHINE METHOD	TON	\$60 00	2390	\$143 400 00
403 12	HOT BITUMINOUS PAVEMENT HAND METHOD	TON	\$80 00	110	\$8 800 00
608 12	2" BITUMINOUS SIDEWALK (F)	SY	\$20 00	140	\$2 800 00
608 26	6" CONCRETE SIDEWALK (F)	SY	\$40 00	140	\$5 600 00
603 00315	15" R C PIPE 3000D	LF	\$40 00	1790	\$71 600 00
603 00318	18" R C PIPE, 3000D	LF	\$45 00	500	\$22 500 00
603 00324	24" R C PIPE 3000D	LF	\$50 00	50	\$2 500 00
604 12	CATCH BASINS TYPE B	U	\$1 600 00	26	\$41 600 00
605 906	6" PIPE UNDERDRAIN (CONTRACTORS OPTION)	LF	\$15 00	1900	\$28 500 00
606 14	BEAM GUARDRAIL (STANDARD SECTION WOOD POSTS; GR 140	LF	\$20 00	1100	\$22 000 00
606 1452	BEAM GUARDRAIL (TERMINAL UNIT TYPE ELT)	U	\$1 900 00	4	\$7 600 00
609 01	STRAIGHT GRANITE CURB	LF	\$18 00	2400	\$43 200 00
618 61	UNIFORMED OFFICERS WITH VEHICLE	S	\$48 000 00	1	\$48 000 00
618 7	FLAGGERS	HR	\$25 00	3850	\$96 250 00
619 1	MAINTENANCE OF TRAFFIC	U	\$30 000 00	1	\$30 000 00
	DETENTION BASIN		\$75 000 00	1	\$75 000 00
	RETAINING WALL		\$40 00	2000	\$80 000 00

SUBTOTAL A \$1,377,200.00

MISCELLANEOUS ITEMS 15% X SUBTOTAL A \$206,610.00

SUBTOTAL B \$1,583,810.00

WATER POLLUTION CONTROL 5% X SUBTOTAL B \$79,190.50

MOBILIZATION 5% X SUBTOTAL B \$79,190.50

SUBTOTAL C \$1,742,191.00

CONST. ENGINEERING &amp; CONTINGENCIES 25% X SUBTOTAL C \$435,547.75

ROADWAY SUBTOTAL \$1,306,643.25

BRIDGE (OVERPASS) SUBTOTAL \$2,400,000.00

ESTIMATED FINAL DESIGN ENGINEERING COST 8% X (ROADWAY AND BRIDGE) TOTALS \$443,000.00

FINAL COST (ROUNDED UP TO NEAREST \$50K) \$6,000,000.00