
CDOT Construction Manual

APPENDIX C CHANGE ORDER EXAMPLES

July 2002

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APPENDIX C

CHANGE ORDER EXAMPLES

Appendix C presents examples of the most common types of change orders that Project Engineers and Project Inspectors will prepare on a day-to-day basis. Although either the Project Engineer or the Project Inspector may prepare the change order, the Project Engineer is responsible for ensuring it is properly approved and distributed.

A sample Letter of Explanation accompanies each example change order. See Appendix B for guidance on preparing other letters and forms (e.g., Form 266).

Form 90 – Contract Modification Order and Form 94 – Minor Contract Revision Order are both available at Forms Management on the Intranet Web Site. Consultants may obtain the forms from their CDOT contact.

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: July 7, 2001

Re: 11111/NH 66-066
Route 66-South

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #3, Sight Distance Improvements

This change order was written to compensate the Contractor for sight distance improvements at County Road 9. This intersection is the site of several recent accidents attributed to limited sight distance. The accident history did not warrant these improvements in the design phase of this overlay project. However, Jim Nelemeb, Region Traffic Engineer, has requested this modification, at the urging of the local City Mayor and Fire Department.

The improvements include excavation of a cut slope between Station 239+ and Station 243+ right, which limits sight distance to 150 feet for eastbound County Road 9 traffic. After excavation, the sight distance will be 500 feet as indicated on the attached drawing and as requested by the Region Traffic Engineer. The work will also include Topsoil, Seeding (Native), and Mulching (Weed Free), in order to vegetate the slope. The seed mix was provided by Mike Banoman, Staff Landscape Architect.

Unclassified excavation will be paid at the negotiated unit price of \$7.00/cubic yard for approximately 2000 cubic yards. This is reasonable when compared to the average bid price of \$8.00/cubic yard from the *2000 Cost Data Book* for similar quantities. Topsoil will be paid at the negotiated unit price of \$8.00/cubic yard for approximately 100 cubic yards. This is reasonable when compared to the average bid price of \$7.50/linear foot from the *2000 Cost Data Book* for similar quantities. Seeding (Native) will be paid at the negotiated unit price of \$1500.00/acre for approximately 0.13 acres. This is reasonable when compared to the average bid price of \$2000/acre from the *2000 Cost Data Book* for similar quantities. Mulching (Weed Free Hay) will be paid at the negotiated unit price of \$1600.00/acre for approximately 0.13 acres. This is reasonable when compared to the average bid price of \$2100.00 from the *2000 Cost Data Book* for similar quantities. The Contractor has requested no additional mobilization for this work. The total cost of this change order is \$15,203.00

The projected cost for this project including this change order is \$1,440,000.00 or 1.7 percent under the current allotment as shown on the attached Project Financial Statement. No budget action is required. The budget summary is as follows:

Current Project Budget	\$1,500,000.00	
Projected Costs to Completion	<u>\$1,475,000.00</u>	
Projected Surplus (Deficit)	\$25,000.00	(1.7%)

The added work will be performed concurrently with other items, therefore no additional time is required. The Contractor has been directed by Form 105 to proceed with this work. A copy of the completed Form 105 is attached.

This change order was discussed with the Jim LaFuz, Project Development Area Engineer on July 4, 2001. Concurrence was obtained from Don Shotsat, Project Manager and John Cheney, Region Program Engineer on July 2, 2001. FHWA pre-approval is not required for this change order, because the total cost is less than \$250,000.00.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: July 7, 2001	Project Order No.: 3
Contractor: Good Aim Construction	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$15,203.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Sight Distance Improvements		

Your Contract is hereby modified to include sight distance improvements between Station 239 and Station 244 on Route 66. The work will include excavation of a cut slope between Station 239+ and Station 243+ right, Topsoil, Seeding (Native), and Mulching (Weed Free) in order to vegetate the slope. The work will be completed in accordance with the Contract Specifications, the attached seed mix, and as directed.

No additional time will be allowed for this work.

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
ADD:						
203 Unclassified Excavation (CIP)	CY	0	2000	2000	\$7.00	\$14,000.00
207 Topsoil	CY	0	100	100	\$8.00	\$800.00
212 Seeding (Native)	ACRE	0	0.13	0.13	\$1,500.00	\$195.00
212 Mulching (Weed Free)	ACRE	0	0.13	0.13	\$1,600.00	\$208.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$15,203.00

The Contractor accepts this change order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: June 30, 2001 RE: 11111/NH 66-066
Route 66-South

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #2, Project Extension Type I, Erosion Control

This change order was prepared to correct erosion problems on the previous Route 66 corridor project. These problems consist of ditch scour, plugged and washed out culverts, slope erosion, undermined pavement, and increased flows directed into an offsite drainage. These problems were created by inadequate design of the drainage features.

The work will consist of grading, seeding, mulching, soil retention blanket, erosion bales, S&D Paving (Asphalt), inlets, check dams, and rip rap in selected ditches where steep grades and excessive flows have contributed to ditch scour. Additional work includes cleaning of selected culverts, relaying of a washed out culvert, placing of topsoil, grading eroded slopes, seeding and soil retention blanket on steep erodible fill slopes, and placing two 24-inch culverts on North Chicken Creek Road to direct increased offsite flows out of an undersized ditch. Grading of the ditches and slopes will be performed with Blading, Dozing and Combination Loader hours.

All bid items affected by this change order will be paid at the Contract bid unit prices. Soil Retention Blanket will be paid at the negotiated bid unit price of \$2.00/square yard for approximately 2000 square yards. This is reasonable when compared to the average bid price of \$2.10/square yard from the *2000 Cost Data Book*. Relaying of pipe will be paid at the negotiated unit price of \$40.00/linear foot for 90 linear feet. This is reasonable when compared to the average bid price of \$39.50/linear foot from the *2000 Cost Data Book*. Clean culvert will be paid at the negotiated unit price of \$200.00/each for approximately 5 culverts. This is reasonable when compared to the average bid price of \$197.00/each from the *2000 Cost Data Book*.

In accordance with the *CDOT Construction Manual* the following criteria has been met:

- The Contractor is willing to perform this extra work.
- The need for this work was initially established but was not included in the plans due to budget constraints.
- The work constitutes a lengthening of this project and is similar in kind and nature to the original Contract.
- Project funds are available and the work can be completed at reasonable prices.
- The added work will be performed at Contract unit prices or negotiated unit prices.
- The total value of the extra work is less than \$100,000.00.
- The value of negotiated work does not exceed 20 percent of the value of the added work.
- Preapproval has been obtained from FHWA.

This work will be performed concurrently with other activities and will not require additional time.

The projected cost for this project including this change order is \$11,668,241.27 or 0.1 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

June 30, 2001
11111/NH 66-066
Page 2

Current Project Allotment	\$	11,656,459.00
Projected Costs to Completion	\$	11,668,241.27
Projected Surplus (Deficit)	\$	(11,782.27) -0.10%

This change order was discussed with Rock Hirschfeld, Region Program Engineer on June 23, 2001, and with Stone Jensen, Project Development Area Engineer on June 23, 2001. Concurrence was obtained from Don Shotsat, Project Manager on June 23, 2001, and from Rachel Carson, Region Planning and Environmental Manager on June 23, 2001. Written preapprovals from Gene Overseer, Chief Engineer, Dan Von Der Wagon, Project Development Branch Manager, and from Raoul Jesus of FHWA are attached.

A budget action will not be required for this change order.

In order not to delay the project, the Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

I Concur: _____
Project Development Branch Manager

I Concur: _____
Chief Engineer

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COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: June 30, 2001	Project Order No.: 2
Contractor: Good Aim Construction		Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$68,710.00
Complete Address: 14555 Lost Road Aurora, Co. 80011		Total additional days allowed to complete work: 0
Modification Title: Project Extension Type I, Erosion Control		Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Your Contract is hereby modified to include erosion control work between Milepost 243.5 and Milepost 245.6 on Route 66. No additional time will be allowed for this work. The work will be completed in accordance with the Contract Specifications and as directed.

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
INCREASE:						
203 Blading	HR	100	40	140	\$81.00	\$3,240.00
203 Combination Loader	HR	350	40	390	\$65.00	\$2,600.00
203 Backhoe	HR	350	40	390	\$123.00	\$4,920.00
203 Dozing (Landscaping)	HR	200	40	240	\$84.00	\$3,360.00
206 Structure Excavation	CY	7549	50	7599	\$5.00	\$250.00
206 Structure Backfill	CY	2148	50	2198	\$14.00	\$700.00
207 Topsoil	CY	21658	500	22158	\$3.00	\$1,500.00
208 Erosion Bales	EA	2500	200	2700	\$10.00	\$2,000.00
208 Check Dam	EA	50	10	60	\$800.00	\$8,000.00
212 Seeding (Native)	ACRE	30	3	33	\$325.00	\$975.00
212 Seeding (Native) (Hydr.)	ACRE	10	2	12	\$540.00	\$1,080.00
212 Mulching (Weed Free)	ACRE	34	3	37	\$470.00	\$1,410.00
212 Mulch Tackifier	LB	6800	300	7100	\$1.95	\$585.00
216 Soil Retention Blanket	SY	4840	2000	6840	\$2.30	\$4,600.00
506 Rip Rap (12 inch)	CY	141	75	216	\$34.00	\$2,550.00
507 Bit S & D Paving (Asphalt)	TON	4.5	15	19.5	\$216.00	\$3,240.00
604 Inlet Type C (10 foot)	EA	2	2	4	\$2,400.00	\$4,800.00
617 24-inch Culvert Pipe	LF	1964	290	2254	\$35.00	\$10,150.00
630 Flagging	HR	20000	300	20300	\$22.50	\$6,750.00
ADD:						
210 Relay Pipe (30 inch)	FA	0	6000	6000	\$1.00	\$6,000.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$68,710.00

The Contractor accepts this change order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: June 27, 2001

Re: 11111/NH 64-063
SH 64 East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #3, Project Extension, Type II

This change order was written to extend the project limits to include the Hot Bituminous Pavement widening and overlay of State Highway 64 from Milepost 499.6 to Milepost 506.6.

In accordance with the *CDOT Construction Manual*, the following information is furnished to justify this extension:

- The Contractor is willing to do the extra work.
- The proposed work is in reasonable proximity to the project (5.8 miles west).
- This section of State Highway 64 is only 20 feet wide. The existing asphalt surface is structurally deficient and in very poor condition. The need for this improvement is critical due to recent increases in traffic.
- The Region has maintenance funds, which are available for this work.
- The cost of this extension is estimated at \$775,000.00, which is less than 50 percent of the original Contract amount.
- The estimated cost of \$775,000.00 is more than 10 percent less than the estimated cost of designing, advertising, and awarding this work under a separate contract. The Region has estimated a separate contract at \$926,486.00. The Engineering Estimates and Market Analysis Unit has estimated the costs to complete the work under a separate contract and concurs with the cost savings.

All bid items affected by this change order will be paid at the Contract bid unit prices. Additional items required for this change include, Embankment Material (CIP), Aggregate Base Course (Class 6), and Hot Bituminous Pavement (Grading S)(76)(PG 64-28). Embankment Material will be paid at the negotiated unit price of \$4.00/cubic yard for approximately 5000 cubic yards. This is reasonable when compared to the average bid price of \$3.95/cubic yard from the *2000 Cost Data Book*. Aggregate Base Course (Class 6) will be paid at the negotiated unit price of \$14.00/ton for approximately 2500 tons. This is reasonable when compared to the average bid price of \$15.10/ton from the *2000 Cost Data Book*. Hot Bituminous Pavement will be paid at the negotiated unit price of \$40.00/ton for approximately 17,050 tons. This is reasonable when compared to the average bid price of \$40.50/ton from the *2000 Cost Data Book*.

A total of 25 working days will be added for this change. A schedule analysis is attached as justification for the added time. The Contractor will be compensated \$25,000.00/lump sum for additional overhead. This includes additional costs for Superintendent, trailer rental, phones, gas, fax machine, drinking water, and other miscellaneous items as listed on the attached justification from the Contractor.

The projected cost for this project including this change order is \$2,973,345.00 or 26.1% over the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

June 27, 2001
11111/NH 64-063
Page 2

Current Project Budget	\$2,198,345.00	
Projected Costs to Completion	<u>\$2,973,345.00</u>	
Projected Surplus (Deficit)	(\$775,000.00)	(26.1%)

A budget action is required and will be processed through the Region Business Office.

Written preapproval for this change order was obtained from Dan Von Der Wagon, Project Development Branch Manager, and from Gene Overseer, Chief Engineer on June 26, 2001, and is attached. Written preapproval from Randy Coates, FHWA Operations Engineer is attached. This change was discussed with Jimmy Cero, Project Development Area Engineer on June 25, 2001. Concurrence was obtained from Brent Ripperton, Region Program Engineer, Jess Coolguy, Region Transportation Director, and Rachel Carson, Region Planning and Environmental Manager, on June 26, 2001.

The work directed by this change will not begin until the Form 90 has been fully executed.

I Concur: _____
Project Development Branch Manager

I Concur: _____
Chief Engineer

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COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 64-063	Project Code (SA#): 11111
	Location: SH 64 East	
	Date: June 27, 2001	Project Order No.: 3
Contractor: Goodman Const	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$750,000.00	
Complete Address: 2215 Green Acres Drive, Happyton, CO	Total additional days allowed to complete work: 25	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Project Extension Type II-Widening and HBP		

Your Contract is hereby modified to include the widening and Hot Bituminous Pavement overlay between Milepost 499.6 and Milepost 506.6 on State Highway 64.

The items affected by this change are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
INCREASE:						
630 Flagging	HR	20000	1000	21000	\$10.00	\$10,000.00
630 Traffic Control Management	Day	100	25	125	\$100.00	\$2,500.00
630 Const Traf Sign (Panel Size A)	EA	50	10	60	\$50.00	\$500.00
ADD:						
203 Embankment Material (CIP)	CY	0	5000	5000	\$4.00	\$20,000.00
304 ABC (Class 6)(Haul)	Ton	0	2500	2500	\$14.00	\$35,000.00
403 HBP (Gr S)(76)(64-28)	Ton	0	17,050	17050	\$40.00	\$682,000.00
900 Additional Overhead	LS	0	1	1	\$25,000.00	\$25,000.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$775,000.00

All work will be performed in accordance with the Contract for this project and the following attached provisions:

- 1) *Project Special Provision, Revision of Section 401 – Plant Mix Pavements, and*
- 2) *Project Special Provision, Revision of Section 403 – Hot Bituminous Pavements.*

Twenty-five working days will be added for this work. The Contractor will be compensated \$25,000.00/lump sum for additional overhead. This includes additional costs for Superintendent, trailer rental, phones, gas, fax machine, drinking water, and other miscellaneous items, as listed on the attached justification from the Contractor.

The Contractor will provide additional bonding to cover this extension at no additional cost.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: July 4, 2001 **RE:** 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #7, Design Change-Wall B

This change order was written to eliminate retaining Wall B and to construct a rock cut on a 0.5:1 slope with rock anchor stabilization.

As part of the Right-of-Way Agreement with The Bluffers Homeowners Association, CDOT agreed not to disturb a rock outcropping along a cut slope between Station 589 and Station 591 left. Consultant Design Engineering included a ground nail wall at this cut in order to comply with the Agreement. A field investigation by the Project Engineer revealed that a 0.5:1 cut slope could be constructed at significant cost savings while still meeting the Department's commitment to the locals. Ron Anders of Staff Geotechnical agreed that a slope would be stable on a 0.5:1 with rock anchors.

The work will consist of additional unclassified excavation, rock anchors, and a lump sum settlement with the Contractor for expenses already incurred for the wall construction. A detailed tabulation of these expenses is attached. Compensation for unclassified excavation and rock anchors will be at Contract unit prices. We do not foresee exceeding the plan quantity for rock anchors; therefore, the quantity for this item will not be increased.

This work does not impact the critical path; therefore, no additional time is required.

The projected cost for this project including this change order is \$11,650,000.00 or 0.06 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$11,656,459.00	
Projected Costs to Completion	<u>\$11,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.06%

A budget action will not be required for this change. In order to avoid a project delay, the Contractor has been directed by Form 105 to begin work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Cal Tollan, Project Development Area Engineer, on June 26, 2001. Concurrence was obtained from Dan Van Der Wagon, Project Manager for this project on June 23, 2001. Written concurrence from Raoul Jesus of FHWA is attached.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-063	Project Code (SA#): 11111
	Location: Route 66 - East	
	Date: July 4, 2001	Project Order No.: 7
Contractor: Good Aim Construction	Estimated cost to project: <input type="checkbox"/> Increase <input checked="" type="checkbox"/> Decrease (\$195,019.00)	
Complete Address: 1455 Lost Road Aurora, Co 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Design Change-Wall B		

Your Contract is hereby modified to include a design change at Wall B. This change order was written to eliminate the wall and to construct the slope on a 0.5:1 slope with rock anchor stabilization.

The work will consist of additional unclassified excavation, rock anchors, and a lump sum settlement for expenses already incurred for the wall construction. Compensation for unclassified excavation and rock anchors will be at Contract unit prices.

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
INCREASE:						
203 Unclassified Excavation	CY	500,271	2,900	503,171	\$3.90	\$11,310.00
DELETE:						
504 Ground Nail Wall	SF	10,258	(6,720)	3,538	\$33.60	(\$225,792.00)
ADD:						
900 Added Costs-Wall B Deletion	LS	0	1	1	\$19,463.00	<u>\$19,463.00</u>
TOTAL ESTIMATED DECREASED COST TO PROJECT						(\$195,019.00)

This work does not impact the critical path, therefore, no additional time is required.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
 Denver, Colorado 80222
 Phone 303-757-9011



DATE: July 24, 2001 **RE:** 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as required by Region)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #6, Method of Measurement for Sediment Removal

This change order was written to change the method of measurement for Sediment Removal from cubic yard to force account.

The plans require that sediment removal be paid on a cubic yard basis. Due to the large quantities of erosion bales and silt fence on this project, it is impractical and inefficient to measure and calculate the fractions of cubic yards at various locations. This was discussed with the Contractor who agreed to accept payment on a force account basis.

There will be no additional cost for this change order.

This change does not impact the critical path; therefore, no additional time is required.

The projected cost for this project including this change order is \$11,650,000.00 or 0.06 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$11,656,459.00	
Projected Costs to Completion	<u>\$11,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.06%

A budget action will not be required for this change. The Contractor has been directed by Form 105 to accept this change in method of measurement. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Hamid Sullivan, Project Development Area Engineer, on July 21, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-063	Project Code (SA#): 11111
	Location: Route 66 - East	
	Date: July 4, 2001	Project Order No.: 6
Contractor: Good Aim Construction	Estimated cost to project: <input type="checkbox"/> Increase <input type="checkbox"/> Decrease \$0.00	
Complete Address: 1455 Lost Road Aurora, Co 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Method Of Measurement for Sediment Removal		

Your Contract is hereby modified to change the method of measurement for sediment removal from cubic yard to force account.

The items affected by this change are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
DELETE:						
250 Sediment Removal	CY	2,000	(2,000)	0	\$10.00	(\$20,000.00)
ADD:						
900 Sediment Removal	FA	0	20,000	20,000	\$1.00	<u>\$20,000.00</u>
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$0.00

This change does not impact the critical path; therefore, no additional time is required.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: October 25, 2000 Re: 11111/NH 66-066
Route 66-South
TO: (Resident Engineer or Program Engineer per Region requirements)
FROM: (Project Engineer)
SUBJECT: Contract Modification Order #11, Administrative Claim Settlement

This change order was written to settle a claim brought by the Contractor for delays, disruptions, and recoup of liquidated damages. The Contractor initially requested \$450,000 for delays and disruptions caused by right-of-way acquisition, utility relocation, design changes, and Prebbles mouse trapping. In addition, in the last stages of the project, the Contractor incurred \$70,000 of the liquidated damages they feel were beyond their control. Without admitting liability or fault, CDOT has agreed to an administrative settlement in order to avoid additional costs regarding this claim. As agreed to by the parties involved, a lump sum payment of \$50,000 will be made to the Contractor on the final estimate for the delays and disruption portion of the claim. In addition, CDOT will amend time charges to reflect no liquidated damages. Complete details of this claim will be maintained in the claim package of the project records.

The projected cost for this project including this change order is \$11,447,082.96 or 1.5 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$11,625,259.00	
Projected Costs to Completion	<u>\$11,447,082.96</u>	
Projected Surplus (Deficit)	\$178,176.04	(1.5%)

This administrative settlement was recommended and approved by Gene Overseer, Chief Engineer, on September 20, 2000. Concurrence was obtained from Brent Ripperton, Region Program Engineer, and from Jess Coolguy, Region Transportation Director, on September 20, 2000. This change order was discussed with Jimmy Cero, Project Development Area Engineer, on September 5, 2000. FHWA pre-approval is not required for this change order, because the total cost is less than \$250,000.00.

A budget action will not be required as a result of this change order.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: October 25, 2000	Project Order No.: 11
Contractor: Good Aim Construction Inc.	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$50,000.00	
Complete Address: 866 Lost Road Aurora, Co 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Administrative Claim Settlement		

This change order was written to settle a claim brought by the Contractor for delays, disruptions, and recoup of liquidated damages. CDOT has agreed to an administrative settlement as follows:

A lump sum payment of \$50,000.00 will be made to the Contractor on the final estimate for the delays and disruption portion of the claim. In addition, CDOT will amend time charges to reflect no liquidated damages.

The items affected by this change are listed below:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
<u>ADD:</u> 900 Claim Settlement	LS	0	1	1	\$50,000.00	<u>\$50,000.00</u>
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$50,000.00

By signing below, the Contractor accepts this change as full and final settlement of this claim.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: August 31, 2001 RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #9, Correction of Design Error

This change order was written to correct a design error. After a 24-inch culvert had been installed at Station 66+50 right, the owner of the water rights carried by this culvert contacted the Project Engineer and stated that the culvert was inadequate to handle the required flow. Investigation revealed that the upstream culvert was a 30-inch corrugated metal pipe, although shown on the plans as a 24-inch pipe.

The basis of payment will be at the negotiated unit price of \$40.00/linear foot. This is reasonable when compared to the average bid price of \$41.00/linear foot from the *2000 Cost Data Book*. Payment for removal of the previously placed 24-inch culvert will be at the unit bid price for removal of culvert.

This change does not impact the critical path; therefore, no additional time is required.

The projected cost for this project including this change order is \$1,650,000.00 or 0.4 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$1,656,459.00	
Projected Costs to Completion	<u>\$1,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.4%

A budget action will not be required for this change. The Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Gary Ward, Project Development Area Engineer, on July 21, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-063	Project Code (SA#): 11111
	Location: Route 66 - East	
	Date: August 21, 2001	Project Order No.: 9
Contractor: Good Aim Construction	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$2,760.00	
Complete Address: 1455 Lost Road Aurora, Co 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Design Error Correction for Culvert		

Your Contract is hereby modified to include the correction of a design error at Station 64+50 right.

The work will consist of removing the previously placed 24-inch culvert and installing a 30-inch culvert. All work will be performed in accordance with the Contract Specifications.

The items affected by this change are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
INCREASE:						
202 Removal of Culvert	LF	305	60	365	\$8.00	\$360.00
ADD:						
617 30-inch Culvert Pipe	LF	0	60	60	\$40.00	\$2,400.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$2,760.00

This work does not impact the critical path; therefore, no additional time is required.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: September 30, 2001 RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #10, Mudslide Repair and Stabilization

Heavy rains on the night of September 27, 2001 caused a mudslide between Station 72+00 and Station 74+00 right. This change order provides for the performance of all work necessary to repair and stabilize the cut slope and roadway damaged by the slide.

The work will include unclassified excavation, rounding of the cut slope, replacement of a Class I sign, removal and replacement of damaged concrete pavement, and roadway sweeping.

Payment for unclassified excavation will be at the negotiated unit price of \$10.00/cubic yard for approximately 2000 cubic yards. This is reasonable when compared to the average bid price of \$14.00/cubic yard for similar quantities in the *2000 Cost Data Book*. Rounding of the cut slope will be included in the price of unclassified excavation. Payment for replacement of the Class I Sign will be at the unit bid price for Removal of Ground Sign, Sign Panel Class I, and Steel Sign Post (2 inch round). Payment for removal and replacement of the concrete pavement will be at the negotiated unit price of \$36.00/square yard. This is reasonable when compared to the average bid price for removal of concrete pavement from the *2000 Cost Data Book* plus the unit bid price for concrete pavement. Roadway sweeping will be paid at the negotiated price of \$45.00/hour. This is reasonable as shown on the attached force account analysis.

This change will delay a construction phasing switch by three working days. Therefore three working days of additional time will be required. The Contractor will be compensated \$1600.00/lump sum for additional overhead. This includes additional costs for Superintendent, trailer rental, phones, gas, fax machine, drinking water, and other miscellaneous items as listed on the attached justification from the Contractor.

The projected cost for this project including this change order is \$1,650,000.00 or 0.4 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$1,656,459.00	
Projected Costs to Completion	<u>\$1,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.4%

A budget action will not be required for this change. The Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Gary Ward, Project Development Area Engineer, on July 21, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: September 30, 2001	Project Order No.: 10
Contractor: Good Aim Construction	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$30,142.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 3	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Mudslide Repair and Stabilization		

Your Contract is hereby modified to include work to repair the cut slope and roadway damaged by the mudslide on September 27, 2001, between Station 72+00 and Station 74+00 right.

The work will include unclassified excavation, rounding of the cut slope, replacement of a Class I sign, removal and replacement of damaged concrete pavement, and roadway sweeping. Rounding of the cut slope will be included in the price of unclassified excavation.

Three working days will be added for this work.

The items affected by this change order are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
ADD:						
203 Unclassified Excavation (CIP)	CY	0	2000	2000	\$10.00	\$20,000.00
900 Mechanical Broom	HR	0	4	4	\$45.00	\$180.00
900 Remove and Replace Concrete	SY	0	225	225	\$36.00	\$8,100.00
900 Additional Overhead	LS	0	1	1	\$1,600.00	\$1,600.00
INCREASE:						
202 Removal of Ground Sign	EA	25	1	26	\$50.00	\$50.00
614 Sign Post (2 inch round)	LF	100	12	112	\$9.00	\$108.00
614 Sign Panel (Class I)	SF	350	8	358	\$13.00	\$104.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$30,142.00

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: October 16, 2001 RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #11, Right-of-Way Agreement-Fence Change

The Right-of-Way Agreement with the owners of Parcel 46 required that Fence Combination Wire be placed between Right-of-Way Point 165 and Right-of-Way Point 166. The plans called for Fence Barbed Wire to be placed in this location. This change order authorizes the Contractor to install Fence Combination Wire instead of Barbed Wire.

Payment for Fence Combination Wire will be at the negotiated price of \$6.00/linear foot for 500 linear feet. This is reasonable when compared to the average bid price of \$5.90/linear foot from the *2000 Cost Data Book* for similar quantities.

This change does not impact the critical path; therefore no additional time is required.

The projected cost for this project including this change order is \$1,650,000.00 or 0.4 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$1,656,459.00	
Projected Costs to Completion	<u>\$1,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.4%

A budget action will not be required for this change.

The Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Kevin McGhee, Project Development Area Engineer, on September 30, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: September 30, 2001	Project Order No.: 11
	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$250.00	
Contractor: Good Aim Construction	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Complete Address: 14555 Lost Road Aurora, Co. 80011		
Modification Title: ROW Agreement-Fence Change		

Your Contract is hereby modified to include Fence Combination Wire between Right-of-Way Point 165 and Right-of-Way Point 166.

The Contractor's signature below indicates acceptance of full settlement for the work described, both direct and indirect costs. Any claims for additional impact costs associated with this change will not be considered.

No additional time will be allowed for this work.

The items affected by this change order are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
<u>ADD:</u>						
607 Fence Comb Wire w/ Metal Posts	LF	0	500	500	\$6.00	\$3,000.00
<u>DECREASE:</u>						
607 Fence Barbed Wire w/ Metal Posts	LF	5000	-500	4500	\$5.50	(\$2,750.00)
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$250.00

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: October 16, 2001 RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Resident Engineer)

SUBJECT: Contract Modification Order #12, Relocate 24-inch Water Line (Utility Adjusted)

This change order authorizes the Contractor to pay the City of Ft. Morgan to relocate their 24-inch water line. The line is located between Station 486+15 and Station 584+00; 9.5 feet left of the proposed centerline, and 2 feet above finished grade. CDOT was unaware of this line until the City pointed out the location at the Preconstruction Conference. The Region Utilities Engineer was contacted, and she determined that the work is eligible for reimbursement.

The City has provided an estimate for this work of \$490,000. A copy of this estimate is attached.

Fifteen days of additional time will be required for this work. It will take the City five days to obtain the materials and ten days to install and test the water line.

Payment will be made upon the basis of certified invoice from the Utility to the Contractor. The Utility invoice will be the actual direct and indirect cost of performing the work in accordance with established accounting procedures. Administrative compensation will be permitted per subsection 109.04 of the *Standard Specifications*.

The projected cost for this project including this change order is \$5,355,218.00 or 10.1 percent over the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$4,865,218.00	
Projected Costs to Completion	<u>\$5,355,218.00</u>	
Projected Surplus (Deficit)	(\$490,000.00)	10.1%

Need to submit Form 1186.

In order not to delay the project, the Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Don Radel, Project Development Area Engineer, on September 30, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: October 16, 2001	Project Order No.: 12
Contractor: Good Aim Construction	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$490,000.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 15	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Relocate 24-inch Water Line (Utility Adjusted)		

Your Contract is hereby modified to include the relocation of the 24-inch water line between Station 486+15 and Station 584+00. The City of Ft. Morgan will perform this work. The City will submit certified invoices to the Contractor for payment. These invoices shall be the actual direct and related indirect costs of performing the work in accordance with established accounting procedures. CDOT will reimburse the Contractor by force account for the certified invoices plus administrative loading per subsection 109.04 of the *Standard Specifications*.

The Contractor will provide additional bonding to cover the cost of this work at no cost to the project.

Fifteen days will be added for this work.

The items affected by this change order are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
ADD:						
900 Relocate Water Line	FA	0	490,000	490,000	\$1.00	\$490,000.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$490,000.00

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: October 16, 2001 **RE:** 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Resident Engineer)

SUBJECT: Contract Modification Order #12, Relocate 24-inch Water Line (Contractor Adjusted)

This change order authorizes the Contractor to relocate a 24-inch water line owned by the City of Ft. Morgan. The line is located between Station 486+15 and Station 584+00; 9.5 feet left of the proposed centerline, and 2 feet above finished grade. CDOT was unaware of this line until the City pointed out the location at the Preconstruction Conference. The Region Utilities Engineer has determined that the work is eligible for reimbursement.

The Region Utilities Engineer has also obtained a Contractor-Adjusted Utility Agreement with the City of Ft. Morgan to cover this work.

Payment will be made based on the negotiated unit price of \$50.00/linear foot for approximately 9785 linear feet. This is reasonable when compared to the average bid price of \$55.00/linear foot from the *2000 Cost Data Book* for similar quantities.

Fifteen days of additional time will be required for this work. It will take the Contractor five days to obtain the materials and ten days to install and test the water line. The Contractor will be compensated \$15,000.00/lump sum for additional overhead. This includes additional costs for Superintendent, trailer rental, phones, gas, fax machine, drinking water, and other miscellaneous items as listed on the attached justification from the Contractor.

The projected cost for this project including this change order is \$5,065,218.00 or 4.1 percent over the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$4,865,218.00	
Projected Costs to Completion	<u>\$5,065,218.00</u>	
Projected Surplus (Deficit)	(\$200,000.00)	4.1%

Need to submit Form 1186.

In order not to delay the project, the Contractor has been directed by Form 105 to begin this work. A copy of the completed Form 105 is attached.

This change order was discussed with Rock Howell, Region Program Engineer and with Don Radel, Project Development Area Engineer, on September 30, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: October 16, 2001	Project Order No.: 12
Contractor: Good Aim Construction	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$504,250.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 15	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Relocate 24-inch Water Line (Contractor Adjusted)		

Your Contract is hereby modified to include the relocation of the 24-inch water line between Station 486+15 and Station 584+00. The Contractor will provide additional bonding to cover the cost of this work at no cost to the project.

Fifteen days will be added for this work. The Contractor will be compensated \$15,000.00 lump sum for additional overhead. This includes additional costs for Superintendent, trailer rental, phones, gas, fax machine, drinking water, and other miscellaneous items as listed on the attached justification from the Contractor.

The items affected by this change order are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
ADD:						
900 Relocate Water Line	LF	0	9785	9785	\$50.00	\$489,250.00
900 Additional Overhead	LS	0	1	1	\$15,000.00	\$15,000.00
TOTAL ESTIMATED INCREASED COST TO PROJECT						\$504,250.00

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
		Approved by Resident Engineer:	Date:
Approved by Region Transportation Director:	Date:	<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM**DEPARTMENT OF TRANSPORTATION**

4201 E. Arkansas Avenue
 Denver, Colorado 80222
 Phone 303-757-9011



DATE: October 18, 2001

RE: 11111 / NH 66-063
 Route 66 - East

TO: (Program Engineer)

FROM: (Region Utilities Engineer)

SUBJECT: Contract Modification Order #U1, Increased Cost of Waterline

This change order authorizes payment of an additional \$4,000.00 to the City of Chambersburg Water Department for the increased cost of relocating their waterline.

The original agreement dated August 15, 2000 authorized payment in the amount of \$86,750.00 for the relocation of the 48-inch waterline.

During construction, the Utility Contractor encountered very unstable soil that increased the cost of this relocation. It is estimated that the increased cost will be \$4,000.00

The Water Department will submit a certified invoice for the actual cost of this extra work after completion. Payment will be made for actual direct and related indirect costs in accordance with established accounting procedures.

The projected cost for this project including this change order is \$5,355,218.00 or 0.1 percent over the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$5,351,218.00	
Projected Costs to Completion	<u>\$5,355,218.00</u>	
Projected Surplus (Deficit)	(\$4,000.00)	0.1%

This work associated with this change has been completed. No additional time is required for this change.

This change order was discussed with Rock Howell, Region Program Engineer and with Don Radel, Project Development Area Engineer, on September 30, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: October 18, 2001	Project Order No.: U1
Contractor: Chambersburg Water Department	Estimated cost to project: <input checked="" type="checkbox"/> Increase <input type="checkbox"/> Decrease \$4,000.00	
Complete Address: 4555 Main Street Chambersburg, CO. 81111	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Increased Cost of Waterline		

This change order authorizes an increase in your Contract by \$4,000.00. This increase is for additional costs related to correction of unstable soil conditions. The new total of your Contract is hereby modified to be \$90,150.

The Water Department will submit a bill with a certified invoice for the actual cost of this extra work after completion. Payment will be made for actual direct and related indirect costs in accordance with established accounting procedures.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE <i>CDOT CONSTRUCTION MANUAL</i>		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: July 25, 2001

Re: 11111/NH 66-066
Route 66-South

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #14, Traffic Control Plan Change

This change order is written to authorize a major revision to the Traffic Control Plan.

The Contractor has proposed constructing a temporary box structure to allow haul trucks to pass under the roadway from the cut area to the fill area. Specifications for this project limit the time the Contractor may interfere with traffic between the hours of 8:30 AM and 4:00 PM. The boxes will reduce impacts to the traveling public and allow the Contractor to work longer hours.

The structure will be erected at Station 582+00, 40 feet left of the existing traffic alignment. After backfilling, a detour will be constructed over this box. The existing pavement and embankment at the box outlet will be excavated to allow the trucks to pass through. Traffic will be maintained on this added detour for the duration of Phase I. Upon completion of the hauling operation, the structure will be removed and the excavation will be backfilled in accordance with the *Project Special Provisions*.

A licensed engineer in the State of Colorado designed the structure for the Contractor.

The proposed alignment and traffic control plan changes have been reviewed and are acceptable, as revised, for the posted speed of this road. The changes have been attached.

All costs associated with this change shall be the responsibility of the Contractor.

There will be no additional time or cost due to this change.

The projected final cost for this project, including this change order, is \$13,445,007.38 or 0.3 percent over the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$13,400,000.00	
Projected Costs to Completion	<u>\$13,445,007.38</u>	
Projected Surplus (Deficit)	(\$45,007.38)	(0.3%)

The Contractor will not begin work on this change until receiving an approved Form 90.

This change order was discussed with Abby Butment, Staff Bridge Engineer on July 2, 2001. This change order was discussed with the Jimmy Cero, Project Development Area Engineer on July 4, 2001. Concurrence was obtained from Rob Crawford, Project Manager, Matt Bemelen, Region Traffic Engineer, and John Cheney, Region Program Engineer on July 2, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: July 25, 2001	Project Order No.: 14
Contractor: Good Aim Construction	Estimated cost to project: <input type="checkbox"/> Increase <input type="checkbox"/> Decrease \$0.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Traffic Control Plan Change		

You are hereby authorized to make a major revision in the Traffic Control Plan for this project. The Traffic Control Plan as revised will be in accordance with your approved Method of Handling Traffic (attached). The revised Traffic Control Plan will be implemented to accommodate a more efficient method of hauling excavated material from the cut area to the fill area. Instead of hauling across the road, the Contractor will be permitted to construct a temporary structure and associated detour to facilitate hauling under the road.

The structure will be constructed at Station 582+00, 40 feet left of existing centerline. After backfilling, a detour shall be constructed over this box. The existing pavement and embankment at the box outlet will be excavated to allow the trucks to pass through. Upon completion of the hauling operation, the Contractor shall backfill the excavation in accordance with the *Project Special Provisions*.

A licensed engineer in the State of Colorado shall design the structure for the Contractor.

No additional time will be allowed for this change. All costs associated with this change are the responsibility of the Contractor.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted Approved Funding by Region Program Engineer: _____ Date: _____	

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: October 30, 2001 **RE:** 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #10, Acceptance and Price Reduction of Hot Bituminous Pavement

This change order authorizes the Contractor to leave 1800 tons of Hot Bituminous Pavement placed between Station 40+00 and Station 51+00 right in place at a price reduction. A price reduction equal to 28.5 percent of the unit bid price will be applied to this quantity of Hot Bituminous Pavement.

The composite Pay Factor for density, gradation, and asphalt content was 0.90. This is within the specification requirements of subsection 105.03. The Lottman test result representing this quantity of Hot Bituminous Pavement was a 55, which is less than the minimum requirement of 70. The price reduction for the failing Lottman, as calculated in accordance with subsection 105.03, is 28.5 percent.

Normally, a 28.5 percent price reduction would require the removal and replacement of the out of specification material. With the concurrence of the Region Materials Engineer, CDOT has decided to allow the material to remain in place at the calculated price reduction for the following reasons:

- This Hot Bituminous Pavement is part of a detour transition alignment that will be removed as part of a future corridor project.
- The composite pay factor for density, gradation, and asphalt content was acceptable.
- The Hot Bituminous Pavement has been in place for three weeks and has been subjected to high traffic volumes. No pavement degradation is evident.

No additional time is required for this change.

The projected cost for this project including this change order is \$1,650,000.00 or 0.4 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$1,656,459.00	
Projected Costs to Completion	<u>\$1,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.4%

A budget action will not be required for this change.

This change order was discussed with Rock Howell, Region Program Engineer and with Gary LaForce, Project Development Area Engineer, on October 25, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-066	Project Code (SA#): 11111
	Location: Route 66-South	
	Date: October 30, 2001	Project Order No.: 10
Contractor: Good Aim Construction	Estimated cost to project: <input type="checkbox"/> Increase <input checked="" type="checkbox"/> Decrease \$20,520.00	
Complete Address: 14555 Lost Road Aurora, Co. 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Acceptance and Price Reduction for Hot Bituminous Pavement		

Your contract is hereby modified to include a 28.5 percent price reduction for 1800 tons of Hot Bituminous Pavement placed between Station 40+00 and Station 51+00 right. A 28.5 percent price reduction is equivalent to a price reduction of \$11.40/ton. CDOT will allow the Hot Bituminous Pavement to remain in place.

No time will be added for this change.

The items affected by this change order are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
<u>ADD:</u>						
900 Price Reduction for HBP	TON	0	-1800	-1800	\$11.40	(\$20,520.00)
TOTAL ESTIMATED INCREASED COST TO PROJECT						(\$20,520.00)

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.

REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: November 5, 2001

RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #16, Purchase of Excess Material

This change order provides for the purchase of Wildflower Seed Mix from the Contractor. Due to a change in the amount of seeding on the project, the Contractor had an excess of 80 pounds of the mix. The Contractor indicated that the supplier would not restock the mix because the germination date had passed and it was of no use to them. The Contractor also had no use for the material. The Region Maintenance Section was contacted and indicated that there was no use for the mix and they didn't want it in the storeroom.

The basis of payment will be the cost of the material plus a handling charge as justified by the attached invoice.

No additional time is required for this change.

The projected cost for this project including this change order is \$1,650,000.00 or 0.4 percent under the current allotment as shown on the attached Project Financial Statement. The budget summary is as follows:

Current Project Budget	\$1,656,459.00	
Projected Costs to Completion	<u>\$1,650,000.00</u>	
Projected Surplus (Deficit)	\$6,459.00	0.4%

A budget action will not be required for this change.

This change order was discussed with Rock Howell, Region Program Engineer and with Hal Ghavan, Project Development Area Engineer, on November 3, 2001.

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: May 25, 2001

Re: 11111/NH 66-066
Route 66-South

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Contract Modification Order #3, Sound Fence Value Engineering

This change order authorizes a Value Engineering Proposal to install Fence Carsonite (Sound Barrier)(60 inch) in lieu of Fence Metal (Sound Barrier)(60 inch) between Station 400+00 and Station 405+75 right.

The Value Engineering Proposal has been accepted by the Project Engineer based on the following:

- The change will produce a savings to the Department of \$36,869.00.
- The change will provide a product with equivalent quality and desired appearance.
- The materials used are recycled rubber and plastic. The fence will be easy to maintain and environmentally friendly.

The basis of payment is the negotiated price of \$126.76/linear foot for 575 feet of fence. The Contractor has submitted a cost analysis, which has been reviewed and approved by the Project Engineer. The Value Engineering Proposal and cost analysis are attached.

This change will not impact the critical path of the project; therefore, no additional time will be added.

The projected final cost for this project, including this change order, is \$12,193,128.79 or 0.5 percent under the current allotment as shown on the attached Project Financial Statement. No budget action is required. The budget summary is as follows:

Current Project Budget	\$12,254,290.43	
Projected Costs to Completion	<u>\$12,193,128.79</u>	
Projected Surplus (Deficit)	\$61,161.64	(0.5%)

This work has been authorized to proceed in order not to delay the project.

This change order was discussed with the Jimmy Cero, Project Development Area Engineer on July 4, 2001. Concurrence was obtained from Rob Crawford, Project Manager and John Cheney, Region Program Engineer on July 2, 2001.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACT MODIFICATION ORDER	Project No.: NH 66-063	Project Code (SA#): 11111
	Location: Route 66 - East	
	Date: May 25, 2001	Project Order No.: 3
Contractor: Good Aim Construction	Estimated cost to project: <input type="checkbox"/> Increase <input checked="" type="checkbox"/> Decrease (\$36,869.00)	
Complete Address: 1455 Lost Road Aurora, Co 80011	Total additional days allowed to complete work: 0	Federal Oversight? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Modification Title: Sound Fence Value Engineering		

Your Contract is hereby modified to change the Fence Metal (Sound Barrier)(60 inch) to Fence Carsonite (Sound Barrier)(60 inch) in accordance with your Value Engineering Proposal. This change affects the materials only. All other specifications pertaining to the sound barrier will remain the same.

The items affected by this change are as follows:

<u>ITEM DESCRIPTION</u>	<u>UNIT</u>	<u>PREVIOUS QUANTITY</u>	<u>ADDED QUANTITY</u>	<u>REV. PLAN QUANTITY</u>	<u>UNIT PRICE</u>	<u>INCR. COST TO PROJECT</u>
DELETE:						
607 Fence Metal(Sound Barrier)(60 inch)	LF	575	(575)	0	\$255.00	(\$146,625.00)
ADD:						
900 Fence Carsonite(Sound Barrier)(60 inch)	LF	0	575	575	\$126.76	\$72,887.00
900 Value Engineering Incentive	LS	0	1	1	\$36,869.00	<u>\$36,869.00</u>
TOTAL ESTIMATED INCREASED COST TO PROJECT						(\$36,869.00)

This change does not impact the critical path; therefore, no additional time is required.

The Contractor accepts this Change Order for work to be performed and prices on which payment is to be based.			
REQUIRED IN ACCORDANCE WITH INSTRUCTIONS IN THE CDOT CONSTRUCTION MANUAL		REQUIRED FOR ALL CHANGE ORDERS	
Approved by FHWA Operations Engineer:	Date:	Authorized by Project Engineer:	Date:
OPTIONAL		Contractor Representative:	Date:
Approved by Region Transportation Director:	Date:	Approved by Resident Engineer:	Date:
		<input type="checkbox"/> Participating <input type="checkbox"/> Non-participating <input type="checkbox"/> Participation as noted	
		Approved Funding by Region Program Engineer:	Date:

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 E. Arkansas Avenue
Denver, Colorado 80222
Phone 303-757-9011



DATE: December 4, 2001 RE: 11111 / NH 66-063
Route 66 - East

TO: (Resident Engineer or Program Engineer as per Region requirements)

FROM: (Project Engineer)

SUBJECT: Minor Contract Revisions

This change order was written to authorize the following minor contract revisions:

LINE ITEM #1) Change Order #3 - ITEM 900-70035 MUCK EXCAVATION

This item was added to compensate the Contractor for Muck Excavation between Station 453+00 and Station 455+00 left. This muck was created by existing drainage problems and was due to no fault of the Contractor. The excavated area is approximately 200 feet by 50 feet by six feet deep.

Due to the difficulty in estimating the cost of this work, the work was performed by force account. The total estimated cost of this item is \$9,000.00. This item is participating.

This item was performed concurrently with other work and did not require additional time.

LINE ITEM #2) Change Order #5 - ITEM 210-01200 RESET END ANCHORAGE

Approximately 463 linear feet of guardrail was removed at Station 414+00 to provide access to a planned fill area. The existing end anchorage had to be reset at the end of the remaining guardrail run. There was no item in the plans to pay for this work.

The basis of payment for this item is the negotiated price of \$522.50/each for one anchor. For similar quantities, the average bid price from the *2000 Cost Data Book* varied between \$525.00/each to \$600.00/each. Therefore, the price is reasonable. The total estimated cost of this item is 1 each @ \$552.50/each or \$522.50. This item is participating.

This item was performed concurrently with other work and did not require additional time.

LINE ITEM #3) Change Order #9 - ITEM 412-12320 Portland Cement Concrete Pavement SPECIFICATION CHANGE

This item was added to allow a change to the Portland Cement Concrete Pavement specifications. The change to utilize the most current CDOT specification regarding sawing, sealing, and tining was recommended by the Region Materials Engineer. For all Portland Cement Concrete Pavement on this project, the Contractor shall comply with the attached sawing, sealing, and tining specification.

The Contractor agreed to this change at no cost to the project. This item is participating.

This item was performed concurrently with other work and did not require additional time.

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