

**COPY**

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

701-0054

**STIPULATED AGREEMENT**

This agreement made and entered into, by and between the State of Illinois acting by and through the Illinois Commerce Commission (hereinafter referred to as the "Commission"), the Union Pacific Railroad Company (hereinafter referred to as the "Company"), the Village of Maywood (hereinafter referred to as the "Village"), and the Illinois Department of Transportation (hereinafter referred to as the "Department").

WITNESSETH:

WHEREAS, it has come to the attention of the Commission that inquiry should be made into the matter of evaluating a new type of radar-based vehicle detection technology which could be used to enhance four-quadrant gates systems installed at grade crossings located on the State and local highway systems in Illinois;

WHEREAS, the parties have selected the Illinois State Route 171 (1<sup>st</sup> Avenue, DOT 173 996K) grade crossing located in Maywood, Illinois, as set forth in Exhibit A attached hereto, as the test site for evaluating the new radar-based vehicle detection technology utilizing the crossing's existing two quadrant gate system;

WHEREAS, the parties are mutually agreeable to accomplish the proposed work upon a determination of the Commission by Order.

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements as hereinafter contained, the parties pray that the Commission enter an Order according to the provisions of Section 18c-7401 of the Illinois Commercial Transportation Law requiring that certain work as hereinafter stated be performed and that the cost for the proposed work be divided among the parties according to law and that, in the interest of the statewide traveling public, the Grade Crossing Protection Fund of the Motor Fuel Tax Law be required to bear a substantial portion of the cost.

TO WIT, the parties hereto agree as follows:

Section 1 All work encompassed by this agreement shall be made in accordance with all applicable State laws, rules, standards, regulations and orders and procedures in general.

Section 2 The parties are of the opinion that the following work should be performed in the interest of public safety:

- (a) the Company shall install and maintain Ultra-Wideband Radar (UWR) vehicle detection technology at the Illinois Route 171 (1<sup>st</sup> Avenue) crossing in

DOCKETED

the Village of Maywood, Illinois. The Company shall submit a report to the Commission which outlines the research, development and independent testing of the UWR technology. The removal of the UWR vehicle detection technology shall occur within sixty (60) days after all on-site field testing has been completed, unless a longer period of time is mutually agreed by all parties.

- (b) the Village shall install and maintain a video vehicle detection system at the aforementioned crossing to be used for the purpose of evaluating the UWR vehicle detection technology. This system shall have the ability to detect and count vehicles both traversing and stopped on the subject crossing while concurrently receiving input from the UWR device(s) and logging same data from UWR device(s) in user definable time periods side by side. It shall be able to accomplish this while transmitting video and data information concurrently via an ISDN phone line to a remote location. The removal of the video vehicle detection system shall occur within sixty (60) days after all on-site field testing has been completed, unless a longer period of time is mutually agreed by all parties.

Section 3 The Company has prepared a detailed estimate of cost to accomplish the proposed work outlined in Section 2 (a) above. The said estimate is attached hereto as Exhibit B1.

The Village has prepared a detailed estimate of cost to accomplish the proposed work outlined in Section 2 (b) above. The said estimate is attached hereto as Exhibit B2.

Section 4 The Company shall, upon the Commission's Order and in accordance with the requirements contained therein, proceed toward the completion of the proposed work outlined in Section 2 (a) above, accomplishing the work with their own forces or appropriate contracted services. The Company further agrees that appropriate times for the submission of progress reports should be at six (6) month intervals and the completion date for the proposed work outlined in Section 2 (a) above should be twelve (12) months from the date of Commission Order subsequent to this Agreement.

The Village shall, upon the Commission's Order and in accordance with the requirements contained therein, proceed to undertake the proposed work outlined in Section 2 (b) above and complete said work within a period of twelve (12) months from the date of the Commission Order subsequent to this agreement. The Village further agrees that appropriate times for the submission of progress reports should be at six (6) month intervals and the completion date for the proposed work outlined in Section 2 (b) above should be twelve (12) months from the date of Commission Order subsequent to this Agreement.

Section 5 The parties hereto agree that an equitable division of cost for the proposed work should be:

- (a) the total cost for the Company to install, maintain and remove the proposed UWR vehicle detection technology (listed on Exhibit B1 attached hereto) is estimated to be \$241,817 ; 100% of the actual cost, in an amount not to exceed \$241,817, should be funded by the Grade Crossing Protection Fund ("Fund"); and
- (b) the total cost for the Village to install, maintain and remove the proposed video detection system (listed on Exhibit B2 attached hereto) is estimated at \$100,064, 100% of the actual cost, in an amount not to exceed \$100,064, should be funded by the Grade Crossing Protection Fund ("Fund").
- (c) Should the cost to the Company or Village exceed the estimate amounts outlined in Section 5 (a) or Section 5 (b) respectively, either party may petition the Commission concerning issuance of a Supplemental Order that would provide funding for that party's cost overrun.

**Section 6 Special Provisions.**

All bills for expenditures authorized to be reimbursed from the Grade Crossing Protection Fund shall be submitted to the Department as follows:

Illinois Department of Transportation  
Engineer of Local Roads and Streets  
Darrell McMurray, Bureau Chief, Attention: Hank Chronister, Sr.  
Room 205, 2300 South Dirksen Parkway  
Springfield, Illinois 62764

The final bill for expenditures from each party shall be clearly marked "Final Bill". All bills shall be submitted to the Department no later than twenty four (24) months from the date of Commission Order subsequent to this agreement. Authorization for reimbursement from the Grade Crossing Protection Fund shall expire twelve (12) months after the completion date specified in the Order. The Department shall, at the end of the 24th month from the Commission's Order date, de-obligate all residual funds accountable for installation costs for this project.

Progress billing will be based upon the work performed during the billing period. Progress payments to the parties for material will be based on the actual cost of material purchased and received by the parties during the billing period.

The Company shall file its initial progress report within six (6) months from the date of Commission Order subsequent to this agreement with the Director of Processing of the Commission's Transportation Division. The report shall include the name, title, mailing address, phone number and facsimile number of the employee responsible for management of this project.

Upon completion of all on-site field testing, the video detection system installed by the Village shall be removed and stored at a safe location in the Village or in the Village's contractor facility for inspection by the Commission. All video detection system equipment, with the exception of the camera mounting poles, arms and foundations, shall become the property of the Commission and returned in operating condition.

Section 7 This agreement shall be binding upon the parties hereto, their successors or assigns. Upon execution of this agreement by all parties, the Commission shall enter an appropriate Order, within sixty (60) days, accepting or rejecting such stipulation according to the provisions contained herein.

In Witness Whereof, the parties have caused this agreement to be executed by their duly authorized officers, as of the dates indicated herein.

Executed by the Commission this 20<sup>th</sup> day of June, 2001.



Michael E. Stead  
Railroad Safety Program Administrator

Attest:



Daniel C. Powers  
Railroad Safety Specialist

Illinois Commerce Commission Stipulated Agreement No. 962 concerning the evaluation of a new type of radar-based vehicle detection technology which could be used to enhance four-quadrant gate systems installed at grade crossings located on the State and local highway systems in Illinois.

Executed by the Union Pacific Railroad Company  
this 28 day of June, 2001

Thomas J. Ogee

By CHIEF ENGINEER  
(Title)

Attest:

Kathy Klockner

Illinois Commerce Commission Stipulated Agreement No. 962 concerning the evaluation of a new type of radar-based vehicle detection technology which could be used to enhance four-quadrant gate systems installed at grade crossings located on the State and local highway systems in Illinois.

Executed by the Department this 30<sup>th</sup> day of July, 2001

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

By James C. Heifer  
Director of Highways

Sep-07-01 01:30P Village of Maywood  
Sep-04-01 09:54A Village of Maywood

708 344-8380  
708 344-8380  
09/21/01 04:30P P.300

P.02  
P.08

Illinois Commerce Commission Stipulated Agreement No. 982 concerning the evaluation of a new type of radar-based vehicle detection technology which could be used to enhance four-quadrant gate systems installed at grade crossings located on the State and local highway systems in Illinois.

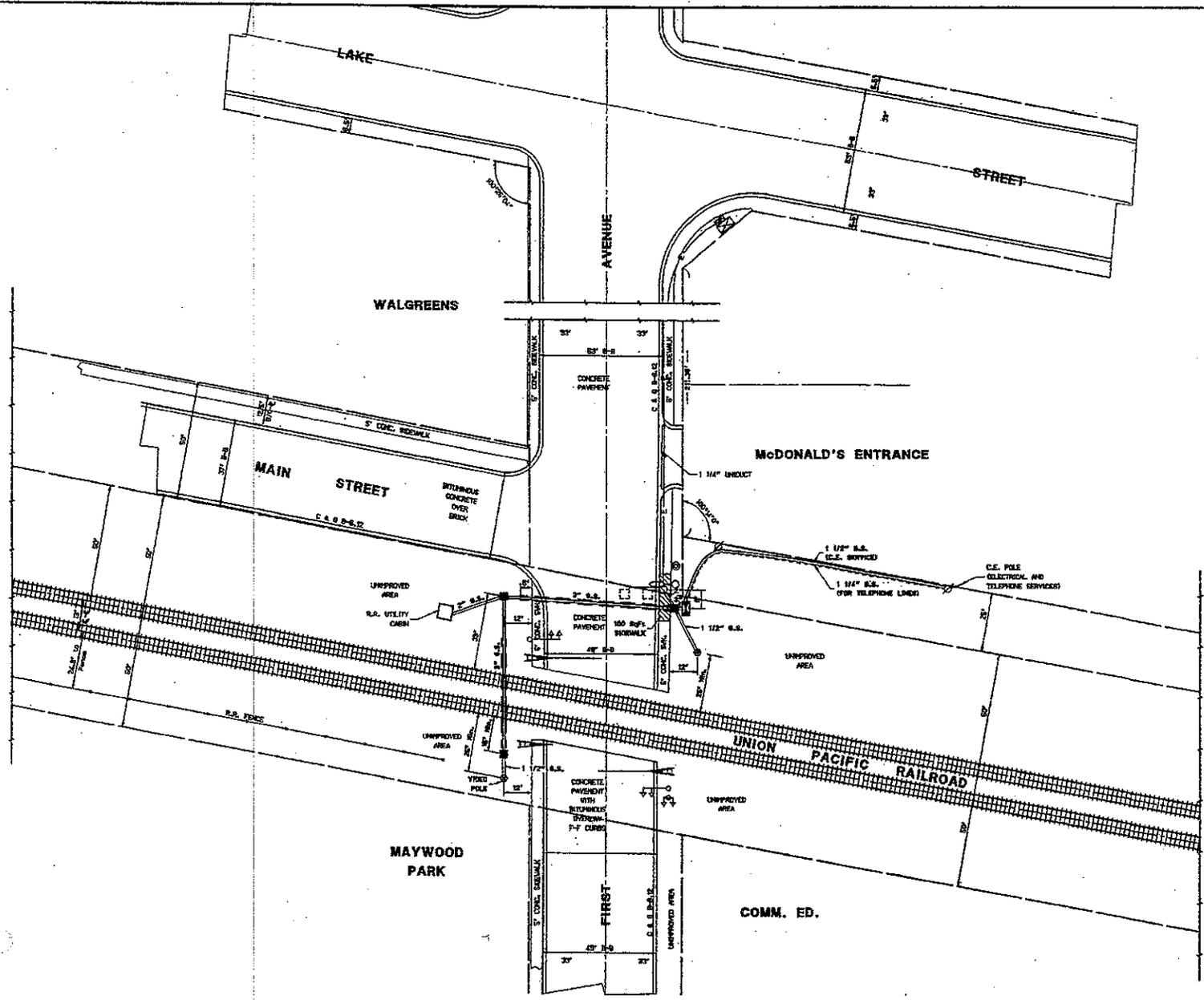
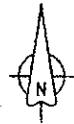
Executed by the Village of Maywood, Illinois  
the 5<sup>th</sup> day of September, 2001

Ralph W. Coome

By Village President  
(Title)

Attest

Ralph McHale, Clerk  
By Jouette Greenhaw, Deputy Clerk



**LEGEND**

EXISTING	PROPOSED	
		CONTROL BOX CABINET
		HANDHOLE
		ELECTRICAL CIRCUIT
		DETECTOR LOOP
		CROSSING SIGNALS
		RAILROAD CROSSING GATE
		LIGHT STANDARD
		C.E. POLE
		CONDUIT IN TRENCH
		CONDUIT PUSHED
		TELEPHONE LINE
		VIDEO POLE
		SIDEWALK TO BE REMOVED AND REPLACED



**EDWIN HANCOCK ENGINEERING COMPANY**  
 CONSULTING ENGINEERS  
 8833 ROOSEVELT ROAD  
 WESTONHATCHER, ILLINOIS 60164-2780  
 708 948-0300 ESTABLISHED 1941

**VIDEO DETECTION SYSTEM**  
**ILL. 171 (1ST AVENUE) @ UNION PACIFIC RAILROAD**  
**M.F.T. SECTION 00-**  
**VILLAGE OF MAYWOOD, ILLINOIS**

**EXISTING TOPOGRAPHY**  
**AND**  
**PROPOSED INSTALLATION**

SCALE 1" = 40'	DATE 8/19/2000	SHEET 1
DRAWN BY G.D.	E.P.L. NO. 688-00-0002	
DATE 8/19/2000		1

DATE: 2001-04-03

ESTIMATE OF MATERIAL AND FORCE ACCOUNT WORK  
 BY THE  
 UNION PACIFIC RAILROAD

Exhibit B1  
 Page 1 of 5

DESCRIPTION OF WORK:  
 INSTALL GRADE CROSSING VEHICLE PRESENCE DETECTOR AT FIRST ST IN MAYWOOD  
 IL. MP. 10.20 ON THE GENEVA SUB.  
 SIGNAL PROJECT MANAGER: D C CORCORAN 773-631-7992  
 RAILROAD TO PERFORM ALL WORK / COST DISTRIBUTED AS FOLLOWS:  
 SIGNAL - STATE OF ILLINOIS - 100%

PID: 39907 AWO: 03191 MP, SUBDIV: 10.20, GENEVA  
 SERVICE UNIT: 23 CITY: MAYWOOD STATE: IL

DESCRIPTION	QTY	UNIT	LABOR	MATERIAL	RECOLL	UPRR	TOTAL
<b>ENGINEERING WORK</b>							
ENGINEERING			906		906		906
LABOR ADDITIVE			2045		2045		2045
RECOLL-INSPE			1118		1118		1118
SIG-HWY XNG			740		740		740
<b>TOTAL ENGINEERING</b>			<b>4809</b>		<b>4809</b>		<b>4809</b>
<b>SIGNAL WORK</b>							
MATL STORE EXPENSE				95	95		95
SIGNAL				1967	1967		1967
BILL PREP		300			300		300
CONTRACT				190	190		190
EQUIPMENT RENTAL				1000	1000		1000
FOREIGN LINE FREIGHT				20	20		20
LABARGE VEHICLE		1749			1749		1749
PERSONAL EXPENSES				1425	1425		1425
SALES TAX				118	118		118
SIG-HWY XNG		2364			2364		2364
SYSTEM				227000	227000		227000
TRANSPORTATION CHARGES				300	300		300
USAGE EQUIPMENT				480	480		480
<b>TOTAL SIGNAL</b>			<b>4413</b>	<b>232595</b>	<b>237008</b>		<b>237008</b>
<b>LABOR/MATERIAL EXPENSE</b>			<b>9222</b>	<b>232595</b>			
<b>RECOLLECTIBLE/UPRR EXPENSE</b>					<b>241817</b>	<b>0</b>	
<b>ESTIMATED PROJECT COST</b>							<b>241817</b>
<b>EXISTING REUSEABLE MATERIAL CREDIT</b>					<b>0</b>		
<b>SALVAGE NONUSEABLE MATERIAL CREDIT</b>					<b>0</b>		
<b>RECOLLECTIBLE LESS CREDITS</b>							

THE ABOVE FIGURES ARE ESTIMATES ONLY AND SUBJECT TO FLUCTUATION. IN THE EVENT OF AN INCREASE OR DECREASE IN THE COST OR QUANTITY OF MATERIAL OR LABOR REQUIRED, UPRR WILL BILL FOR ACTUAL CONSTRUCTION COSTS AT THE CURRENT EFFECTIVE RATE.

WORK ORDER AUTHORIZ ON-DETAIL OF ESTIMATED EXPENDITURES

EST START: 04-02-02  
EST COMP: 04-02-02

PROJ NO: 39907  
A.W.O. NO: 03191  
W.O. NO:  
B.I. NO: 01EM10  
STATE: IL  
VAL SEC: 1102

Exhibit B1  
Page 2 of 5

RAILROAD: UPRR CO.  
LOCATION: MAYWOOD,IL,1ST AVE,GENEVA  
DEPARTMENT: ENGINEERING SERVICES

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----- STOCK MATERIAL PLAN -----  
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ITEM NUMBER	ITEM DESCRIPTION	UNIT COST	QTY	UM	DIRECT MATL @
09424920	CONDUIT, 4", PVC, TYPE 40	1.35	80	LF	108
09912010	WIRE #6 AWG TWISTED PAIR, SOLID	0.99	500	LF	495
09913200	WIRE,#4, 5 COND 500'ROLL SHIELDED	2.01	500	LF	1005
50516300	LUMBER, 4 X 6 X 16 FEET	29.78	2	EA	60
	NONSTOCK CABLE	300.00	1	LT	300
	TOTAL				1,968

FORM 30-1

PAGE 02 MORE

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 04-02-02

EST COMP: 04-02-02

PROJ NO: 39907

A.W.O. NO: 03191

W.O. NO:

B.I. NO: 01EN10

STATE: IL

VAL SEC: 1102

RAILROAD: UPRR CO.

LOCATION: MAYWOOD,IL,1ST AVE,GENEVA

DEPARTMENT: ENGINEERING SERVICES

Exhibit B1  
Page 3 of 5

SCOPE OF WORK

PROJECT NUMBER	VAL SEC	STATE	M.P. FROM	M.P. TO	SEGMENT	JOINT FACILITY
39907	1102	IL	10.20	0.00	0912	60604
39907	1102	IL	10.20	10.20	0912	

## WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 04-02-02  
EST COMP: 04-02-02

PROJ NO: 39987  
A.W.O. NO: 03191  
W.O. NO:  
B.I. NO: 01EN10  
STATE: IL  
VAL SEC: 1102

RAILROAD: UPRR CO.  
LOCATION: MAYWOOD,IL,1ST AVE,GENEVA  
DEPARTMENT: ENGINEERING SERVICES

SERVICE UNIT: 23

Exhibit B1  
Page 4 of 5

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INSTALL GRADE CROSSING VEHICLE PRESENCE DETECTOR AT FIRST ST IN MAYWOOD  
IL. MP. 10.20 ON THE GENEVA SUB.  
SIGNAL PROJECT MANAGER: D C CONCORAN 773-631-7992  
RAILROAD TO PERFORM ALL WORK / COST DISTRIBUTED AS FOLLOWS:  
SIGNAL - STATE OF ILLINOIS - 100%

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 04-02-02  
EST COMP: 04-02-02

PROJ NO: 39907  
A.W.O. NO: 05191  
W.O. NO:  
B.I. NO: 01EN10  
STATE: IL  
VAL SEC: 1102

Exhibit B1  
Page 5 of 5

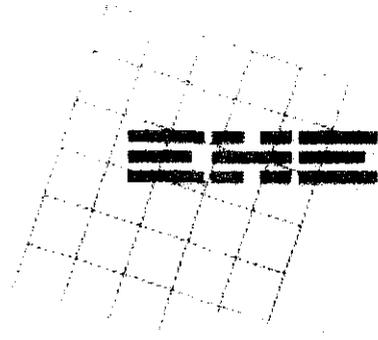
RAILROAD: UPRR CO.  
LOCATION: MAYWOOD,IL,1ST AVE,GENEVA  
DEPARTMENT: ENGINEERING SERVICES

LABOR PLAN

GANG TYPE	GANG TYPE DESCRIPTION	GANG NUMBER NBR IN GANG	WORK CODE DESCRIPTION	GANG DAYS ALLOWED	DIRECT LABOR \$
SIG005	5 PERSON FOR S	0 5	34004 SIG GENERAL	3.00	2364.00
TOTAL					2,364.00

EDWIN HANCOCK ENGINEERING COMPANY  
CIVIL ENGINEERS - MUNICIPAL CONSULTANTS  
ESTABLISHED 1911

9933 ROOSEVELT ROAD  
WESTCHESTER, IL 60154-2780  
708/865-0300 FAX 708/865-1212



June 11, 2001

Mr. Dan Powers  
Railroad Safety Specialist  
Illinois Commerce Commission

Exhibit B2  
Page 1 of 2

Re: Vehicle Detection System  
1st Avenue at Union Pacific RR Crossing  
Maywood, Illinois

Hi Dan:

From our understanding as to the scope of work that will involve the Village of Maywood in the installation of this vehicle detection system, we have the following cost estimate to submit for your consideration:

The furnishing and installation of a Video Vehicle Detection System, complete and ready to operate.....	\$ 84,564.00
Construction Contingencies.....	2,500.00
Design Engineering performed (as of 04/30/01).....	6,618.00
Additional Design Engineering.....	3,382.00
Construction Engineering.....	<u>3,000.00</u>
Total Amount.....	\$100,064.00

The cost for the detection system is the price quoted by Meade Electric. The price covers all the necessary work but we feel a contingency amount would still be proper since there may be landscaping to be done and other minor work, the scope of which cannot be clearly anticipated at this time.

This being a Motor Fuel Tax project, preparing the booklet, completing the plans with a detail sheet and a cover sheet, and whatever else (proposal?) will be require is still to be done. We do not anticipate much time will be necessary for the construction engineering phase but the paper work for closing out the project has to be taken into account.

June 11, 2001  
Page 2

I hope this is the information you need from our office. Just give me a call if you have any questions.

Respectfully,

Exhibit B2  
Page 2 of 2

EDWIN HANCOCK ENGINEERING CO.

  
\_\_\_\_\_  
Bill Bucha

enclosures: Meade's proposal  
Meade's acknowledgment of specific items of work