



THE UNION PACIFIC COAL COMPANY

CONSTRUCTION OF TIPPLE - D. O. CLARK MINE

(C L O S E D)

Part 1

From: September 3, 1937

To: December 31, 1937

PRESIDENT
VICE-PRESIDENT
LE ADDRESS
AR" CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS


McCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Dec. 31st, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
1416 Dodge St.,
Omaha, Nebraska.

Dear Mr. McAuliffe:-

We wish to acknowledge and thank you for copy
of agreement C. D. 22880, covering the construction of tipple
for the D. O. Clark Mine at Superior, Wyoming.

Wishing you a very Happy and Prosperous New
Year, we beg to remain,

Yours very truly,

ALLEN & GARCIA COMPANY

BY

L. von Perbandt

LVP:HL

353-12

Dec. 30, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
332 South Michigan Ave.,
Chicago, Illinois.

Gentlemen:

Herewith one executed copy of agreement C. D.
22880 between The Union Pacific Coal Co. and Allen & Garcia Co.
dated Nov. 25, 1937, covering the construction of tipples for
the D. O. Clark Mine at Superior, Wyoming.

Will you kindly acknowledge receipt.

Sincerely yours,

353-12

Omaha - Dec. 30, 1937.

Mr. G. B. Pryde:

Herewith the original of agreement C.D. No. 22880 between The Union Pacific Coal Co. and Allen & Garcia Co., covering the construction of tipples for the D. O. Clark Mine. One file copy is also attached.

The other signatory copy has been transmitted to the Allen & Garcia Co.

Original
EUGENE L. CHAFFE
Per [illegible]

C-22880

Omaha, December 29, 1937.

Mr. Eugene McAuliffe:

Contract between UPCoalCo. and Allen &
Garcia Company - construction of 700-ton
per hour capacity 3-Track coal tipple
for "D.O.Clark Mine" at Superior, Wyoming.

Referring to your letter of December 27th, file
353-12:

The above contract has been approved as to execu-
tion and the duplicate executed counterparts and two extra
copies are handed you herewith.

John A. Bennewitz

Encl.

OMAHA - December 28, 1937.

File B-5101-5130-12

Mr. Eugene McAuliffe:

I will appreciate it highly if you will advise
me points of origin of material entering into the construction
of the new tipple at Superior, Wyoming.

R. R. MITCHELL 

PRESIDENT
VICE-PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Dec . 27th, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
1416 Dodge Street,
Omaha, Nebr.

Dear Sir:-

We have your memoranda prepared by Mr. H. C. Livingston, regarding proposed changes in construction of tipple and as soon as we find it possible to settle details with the manufacturer, will confirm its incorporation into contract.

Yours very truly,

ALLEN & GARCIA COMPANY

BY

L. von Perbandt

LVP:HL

353-12

Omaha - Dec. 27, 1937.

Mr. J. A. Bennowitz:

Herewith original and duplicate copy of contract No.
C.D. 22880 written between The Union Pacific Coal Co. and Allen
& Garcia Co., Chicago.

Please note corrections in specifications, pages 10-12
and 28. Will you kindly change your file copies accordingly, ap-
proving the attached instruments as to execution and return to me,
together with two file copies.

Original Signed
EUGENE MCAULIFFE

353-12

Dec. 26, 1937.

Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Sirs:

Herewith memo prepared by Mr. E. C. Livingston covering proposed changes in detail of construction of tipples for the D. O. Clark Mine, which I understand was agreed to jointly with your company and Allen & Garcia with Mr. Livingston on his recent trip to Chicago.

If satisfactory to you, will you please treat same as an amendment to our specifications, acknowledging receipt.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

SUBJECT: Link-Belt Co.
Belt Conveyor System, D.O. Clark Mine.

The following items under question regarding detailed plans for construction of conveying system, have been discussed by Messrs. G.B. Pryde, I.N. Bayless, C.E. Swann and H.C. Livingston, and concluded as follows:

1. Revised elevation top of Head or Magnetic Pulley on Conveyor No. 1 is to be established at 7286.82 or 2.39 ft. lower than original location, leaving a slight vertical curve in upper end of conveyor No. 1.
2. Motor and Speed Reducer for conveyor No. 1 at Mine Mouth shall be set on concrete as shown on original plans, bolts to be set in pipe sleeves and 1 inch grout allowance made for setting equipment.
3. All fittings for lubrication system are to be Alomite Button Head Industrial Type.
4. Prints of steel timbering details, also The U. P. C. Co. tracings No. 2146.32 G and No. 2146.32 H will be furnished Link-Belt Co., it being understood that above mentioned tracings must be returned to the owner.
5. Type 4048 Rubber Roll Idlers may be substituted for Type 61 Idlers called for at loading points on conveyor at no expense to The U. P. Coal Co.
6. Self-Aligning idler spacing will be changed from 49' - 0" Centers to 56' - 0" Centers to allow standard fabrication of conveyor structure.

7. Four (4) Waldron Torque Ring Couplings Catalog No. 52 Page 9 of 125 H.P. rating will be substituted for four (4) Type A 14 Link-Belt Couplings of 86 H.P. rating. The differential and additional cost to The U.P. Coal Co. to be \$768.00 complete in place.
8. Conveyor No. 4 is to be lengthened a distance of 6.0 ft. below No. 15 loading station to protect against spillage from dribble chute, this to be done at no expense to The U.P. Coal Co.
9. Magnetic Thruster Brake, Spring Set, as called for on plans is to be used on all conveyors. It is desirable that adjustment be provided to allow a slight forward drift of conveyor.
10. Link-Belt Co. proposal for connection of dribble plate at No. 7 Loading Station to interlocking controls is not approved. It is desirable to hinge dribble plate to allow coal from Conveyors No. 3 and No. 4 to pass under same.

H. Livingston

353-12

Dec. 26, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Dear Sirs:

Herewith memo prepared by Mr. H. C. Livingston covering proposed changes in detail of construction of tipples for the D. C. Clark Mine, which I understand was agreed to jointly with your company and the Link-Belt Co. with Mr. Livingston on his recent trip to Chicago.

If satisfactory to you, will you please treat same as an amendment to our specifications, acknowledging receipt.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

SUBJECT: Allen & Garcia Co.
Coal Tipple, D.O. Clark Mine

The following items under question regarding detailed plans for construction of Coal Tipple, have been discussed by Messrs. G.B. Pryde, I.N. Bayless, C.E. Swann and H.C. Livingston, and concluded as follows:

1. Proposed changes in Shaking picking tables and shaking screens as shown on Allen & Garcia Co. layout sketches, including therein revisions suggested as to curving and warping chutes at ends of picking tables and location of carrying stilts as per original plans, are acceptable to The U.P. Coal Co.
2. Elevation top of head or magnetic pulley on conveyor No. 1 is to be 7286.82 or 2' - 4 11/16" lower than original elevation.
3. Increase in width of lump table above house coal conveyor from 4' x 0" to 5' x 0" as per A. & G. Co. plan is acceptable.
4. Drive rods on picking tables are to be as called for on original plans, two (2) to each table, The U.P. Coal Co. having no objection to the use of adjustable Cast Iron Quarter Box mounting in lieu of Heavy Duty Breaker Bearings called for. Drive Rods must be 3 inch xx W.S. Pipe, eccentrics drilled and tapped for a heavy square thread, pipe threaded for a jam nut and welded to shell of eccentric. Also all eccentrics and adjustable cross head on drive rods should be increased over type used on Reliance installation to take care of additional loading. Considerable difficulty has been encountered at Reliance with drive rods pulling out of eccentrics due to the threaded connection.

5. Stilts for picking tables are to be of laminated construction.
6. Allen & Garcia Co. plan for emergency mine run chute, changing pitch from 26 degrees to 30 degrees, is acceptable.
7. Telescoping slack loading chute is to be changed from rack and pinion lift chute to a true telescoping chute in inclined position, the lower half of chute to telescope outside the upper half with clearance line for same being established at the column line. This chute is to be manual chain control and operated from lower clearance line of tipplo by car changer.
8. Jones Speed Reducers of adequate capacity may be furnished in lieu of Link-Belt type specified. This equipment is to carry the guarantee of both manufacturer and contractor.
9. Changes in floor elevations and roof lines due to pendulum type screen drive are acceptable on condition that girts and corrugated siding be furnished to allow the desired uniform elevation of lower line of structure.
10. Allen & Garcia design for loading boom tower support, counterweight and checks ^{be} to/installed within column flanges, is acceptable.
11. Design of structural support for picking table drive shaft bearings or quarterboxes should be given careful consideration. Structural support for the above on Reliance installation are racking and will have to be stiffened.

H. Livingston

Rock Springs - December 23, 1937

Mr. Eugene McAuliffe:

Mr. Bayless, Mr. Swann, Mr. Livingston and I have gone over the suggestions made by the Allen & Garcia Company with regard to the installation of the tipple at the D. O. Clark Mine, and the memo herewith, in duplicate, covers the points brought up.

In most of them, we are in agreement with the Allen & Garcia Company, except the single eccentric drive for the shaking picking tables. We desire to have two drives because, in looking over the Reliance arrangement, where we have only one, we do not consider that heavy enough for the amount of coal that will have to be handled, and these single eccentric drives at Reliance are already showing signs of very heavy wear.

If, after you have gone over this, you agree with us as to our recommendations, I suggest that you forward one copy of this memo to the Allen & Garcia Company, keeping a copy for your files.

We believe this memo and that on the belt conveyor will clear up the points brought up by the Allen & Garcia Company and the Link-Belt people with Mr. Livingston.

George Minge

Rock Springs - December 23, 1937

Mr. Eugene McAuliffe:

Since Mr. Livingston returned from Chicago, Mr. Bayless, Mr. Swann, Mr. Livingston and I have gone over the suggestions made by the Link-Belt people with regard to the installation of the belt conveyor, and I am attaching herewith two copies of a memo prepared by Mr. Livingston, with which we are in complete agreement.

I suggest, inasmuch as you have been corresponding with the Link-Belt Company on this, that, if it meets your approval, you send it forward to them, retaining copy for your files.

George Ange

RESIDENT
VICE-PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS


McCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Dec. 24th, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
1416 Dodge St.,
Omaha, Nebraska.

Dear Sir:-

We are enclosing the two signed copies of the contract covering the tipple for your D. O. Clark Mine and would thank you for returning one copy to us with your signature.

We have found everything in order with the exception of page 10 of the specifications under the head of "Three Track Coal Tipple", where we have taken the liberty of striking out the words describing the shaker screen which is now superseded by our pendulum screen as described on page 11.

May we again take this opportunity of thanking you for entrusting this work to us.

Yours very truly,

ALLEN & GARCIA COMPANY

BY

William von Meding

WVM:HL

Encl.

353-12

Dec. 24, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
332 Mich. Ave.,
Chicago, Ill.

Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Sirs:

When can I expect return of contract sent your
company for execution on Dec. 7th, contract let November 24th?

Sincerely yours,

Original Signed
EUGENE McAULIFFE

COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

WESTERN UNION

(46)

SYMBOLS

DL = Day Letter
 NM = Night Message
 NL = Night Letter
 LC = Deferred Cable
 NLT = Cable Night Letter
 Ship Radiogram

R. B. WHITE
PRESIDENTNEWCOMB CARLTON
CHAIRMAN OF THE BOARDJ. C. WILLEVER
FIRST VICE-PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.
 Received at 1323 Farnam Street, Omaha, Neb. TELEPHONE JACKSON 5300

CA748 8=CHICAGO ILL 18 341P

EUGENE MCAULIFFE= 326 U.P. Hdgtr

5610 FARNAM OMAHA NEBR=

LEAVING ELEVEN PM SATURDAY COMPLETED WORK BOTH COMPANIES=
 H C LIVINGSTON.

GL1409

Dw 421p

E. m.
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 An

PM.

THERE IS NO DEPENDABLE SUBSTITUTE FOR WESTERN UNION TIME

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

300 W. PERSHING ROAD (THIRTY NINTH ST.) CHICAGO

December 15, 1937

Mr. Eugene McAuliffe, President
Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

Dear Mr. McAuliffe:

This letter will confirm our telephone conversation of yesterday, the 14th instant, at which time we suggested that you arrange, if possible, to have Mr. Livingston visit Chicago at this time for about a couple days in order to check into quite a few differences we have found in several instances on your drawings.

We made the above request feeling that it was to the interest of both companies, inasmuch as neither of us wished to have any errors creeping in on this particular proposition.

A little later on, in January, we shall be ready again to receive Mr. Livingston so that he may go over the general arrangements and details before the shop drawings are placed in our shop for fabrication just as originally agreed upon at our last interview in your office when the contracts were closed.

We want to thank you very much for your telegram advising that Mr. Livingston will arrive in Chicago at eight o'clock A.M. on Thursday, the 16th instant, and to assure you that we appreciate this fine co-operation on your part.

Your contract at the present time is in the course of checking and we are going into it very carefully so that no portions of it are conflicting in any way to either of us and I am sure you will approve of this careful checking on our part.

With very kindest regards, we are

Yours very truly

LINK-BELT COMPANY

Engineer

Coal Preparation Division

GSJaxon/w
Copy for
Union Pacific Coal Co.
Rock Springs, Wyoming.

RESIDENT
VICE-PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Dec. 14th, 1937.

Mr. Eugene McAuliffe,
The Union Pacific Coal Co.,
1416 Dodge St.,
Omaha, Nebraska.

Dear Sir:-

We wish to acknowledge receipt of your letter of the 7th inst., with enclosed copies of contract CD-22880, covering the construction of the tipple for your D. O. Clark Mine at Superior, Wyoming. Mr. Garcia is out of the office at the present time and upon his return we will have both copies properly executed and returned to you for signature. In the meantime, we are going right ahead with the job and are making good progress.

Yours very truly,

ALLEN & GARCIA COMPANY

BY

William von Meding

WVM:HL

UNION PACIFIC RAILROAD COMPANY

TELEGRAM

M

GR N AW

Rock Springs 5 PM Dec 14 1937

EMCA Omaha.

Livingston leaving here tonight No 28 for Chicago B-94

GBP 1013 PM

MESSAGE	DAY LETTER	DEFERRED	NIGHT LETTER	SHIP RADIOGRAM
Patrons should check class of service desired; otherwise message will be transmitted as a full-rate communication.				

WESTERN UNION

R. B. WHITE
PRESIDENT

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

CHECK
ACCT'G INFMN.
TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Omaha, Neb., Dec. 14, 1937.

George S. Jaxon, Engr.,
Link-Bolt Co.,
300 W. Pershing Road,
Chicago, Ill.

Mister Livingston arrives Chicago eight am sixteenth reporting to you.

Eugene McAliffe

Chgo U.P. Coal Co.

THE QUICKEST, SUREST AND SAFEST WAY TO SEND MONEY IS BY TELEGRAPH OR CABLE,

December 10, 1937

Allen & Garcia Company
McCormick Building
Chicago, Illinois

Gentlemen: Attention Mr. L. von Perbandt.

Your letter of December 6th and accompanying print,
Job No. 1195-L1:

We have had no request from the Link-Belt Company regarding permission to lower the magnetic pulley 2.89 feet to elevation 7286.32, and, with the information at hand submitted by your firm, do not feel that it is necessary to do so.

With regard to shaking picking tables as outlined on your Drawing L-1, we request that you follow the design as shown on our Drawing No. 2146.31K in its entirety, drive rods, gates, etc., to be exactly as shown. Mechanically operated slide gates in mixing conveyor to loading booms are to be as shown on Drawing No. 2146.31M.

The dimensions shown on refuse conveyor are to govern. The spread of 4 inches between upper and lower runs at loading points has been deliberate, to insure sufficient clearance.

We have noted no changes as outlined in your letter or from the information at hand that will be of any benefit to the purchaser, and are advising that the design, plans and specifications must be followed very closely with the exception of the pendulum type screen drive and necessary structural changes therefor.

Any change from the original design must be of equal standard as to materials, workmanship, etc., fully detailed and presented for discussion before acceptance of same.

Yours very truly,

Original Signed

H. C. LIVINGSTON

Assistant Chief Engineer.

Approved:

Original Signed:

C. E. SWANN

Chief Engineer

CC - Mr. Eugene McAuliffe
Mr. George B. Pryde
Mr. I. N. Bayless

12/17
353-12

Dec. 7, 1937.

Link-Belt Co.,
307 W. Mich. Ave.,
Chicago, Ill.

Dear Sirs:

Herewith in duplicate contract C.D. No. 22879 covering the construction of belt conveyor system for the D. O. Clark Mine, Superior.

Certain modifications have been made in the specifications to conform to changes arrived at in our conference, a new page three (3) of specifications inserted in lieu of the old one.

I would appreciate your checking the specifications carefully and if the contract is satisfactory to you, kindly execute both copies, returning same to me for completion and return to you of one copy of same.

Sincerely yours,

Original Signed
EUGENE MCMAULIFFE

353-12

Dec. 7, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, I ll.

Dear Sirs:

Herewith two copies of Contract C.D. No. 23880 covering the construction of tipple for our D. O. Clark Mine, Superior, Wyoming.

Certain changes were made in the specifications in order to cover the application of your screen drive, also the withholding of 20 per cent of cost price instead of 10 per cent.

I would appreciate your checking over these specifications carefully, disregarding those previously sent to you, keeping in mind that as per paragraph 2, section 1, page 2, no changes shall be made in the screens as set forth in the original plans, except those that are necessary for the substitution of your drive for the Link-Belt drive.

If satisfactory, kindly arrange for execution on the form prescribed, returning to me for completion and return to you of your copy.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

353-12

Omaha - Dec. 7, 1937.

Mr. J.A. Bonnewitz :

Herewith four copies of page 3 of specifications to be attached to agreement C.D. No. 22880 between the Union Pacific Coal Co. and Allen & Garcia Co., covering construction of tipple for the new D.O. Clark Mine at Superior, Wyoming, the new sheet changing the method of payment to comply with that set out in the contract itself.

I have substituted the new sheet for the old one in the duplicate originals of this agreement sent me with your letter of Dec. 6th and sent same to Allen & Garcia Co. for execution.

Original Signed
EUGENE MCAULIFFE

Omaha - December 6, 1937.

Mr. E. McAuliffe:

Proposed contract with Allen & Garcia
Company covering construction of Coal
Tipple for the "D.O. Clark Mine" at
Superior, Wyoming.

Referring to your letter December 4, file 353-12:

In accordance with your request, I have revised
Page 2 of this proposed contract.

The duplicate originals of the revised draft are
returned to you herewith.

Mr. Pryde's letter December 2nd is returned here-
with.

John A. Bennewitz

+

Rock Springs - December 2, 1937

Mr. Eugene McAuliffe:

Referring to yours of November 29th, file 353-12:

I am returning herewith Cont. Dept. No. 22880, between The Union Pacific Coal Company and Allen & Garcia Company.

Paragraph (2), on page 2, should read as follows:

"As set out on page 11 of the Annexed Specifications, standard Allen & Garcia Pendulum Type Hanger Shaker Screen Drives with Center Cranks will be substituted for the type of screen drive indicated on the plans, and it is understood and agreed that the details of all necessary changes in structural members and their locations, together with the design and dimensions of said Standard Allen & Garcia Pendulum Type Drives, shall be submitted by the Contractor to the Chief Engineer of the Company for approval before the construction thereof is begun."

As the paragraph now reads, it would give Allen & Garcia permission to substitute their screens, whereas it was the intention that no changes should be made in the screens, these changes to be made in the drives only, the Allen & Garcia drive to be substituted for the Murray drive, this set out in the last paragraph of your letter under date of November 24th, file 353-12 to Allen & Garcia Company.

With this exception, there are no changes necessary in the contract.

George B. Benge

ERH

Pls note & return

FWA

*Mr. McAuliffe -
Noted & returned.
EPH.
12/6*

Omaha - December 6, 1937.

Mr. E. McAuliffe:

Proposed contract with Link-Belt Company covering construction of belt conveyor system for the "D.O. Clark Mine" at Superior, Wyoming.

Referring to your letter of December 4, file

353-12:

In accordance with your request, I have revised Page 2 of this proposed contract and have substituted revised Page 3 in the specifications.

The duplicate originals of the revised draft are returned to you herewith.

John A. Bennewitz

352-12

Dec. 7, 1937.

Mr. W. F. Barnes, Mgr. of Sales,
The Jeffrey Mfg. Co.,
Columbus, Ohio.

Dear Mr. Barnes:

On my return from the east I find yours of Dec. 1st. Both Mr. Rayless and Mr. Pryde fully expected your company would receive the tippie contract, if not the conveyor belt contract and I confess we were all disappointed, but as heretofore stated, having specified what we wished the various companies to bid upon, with your bid out of line, we were forced to place the business elsewhere.

One of the advantages that accrued to us in being able to place the tippie contract with Allen & Garcia Co., was the fact that such represented a complete denial of certain rumors which reached me that the Link-Belt Co. had the contract because of our borrowing Mr. Evans for help in designing the plant.

I hope that we have something else to let and that your company will be fully in line.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

cc: Mr. H. C. Horne,
Jeffrey Mfg. Co.,
Denver, Colo.

353-12

Dec. 7, 1937.

Mr. Alfred Kauffman, Pres.,
Link-Belt Company,
307 N. Mich. Ave.,
Chicago, Ill.

Dear Mr. Kauffman:

On my return from the east I find yours of Nov. 29th.

Your company won the belt conveyor installation job fairly and honestly, but you were out of line in the matter of the tipple, having laid down definite principles for guidance, i.e., we would only deal with responsible people, in which class we included Allen & Garcia Co., we were compelled to give them the tipple job on prices. I am sure they will be very glad to work closely with your company.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

353-12

Omaha - Dec. 4, 1937.

Mr. J. A. Bonnewitz:

Herewith duplicate originals of Agreement C.D. No. 22879, between The Union Pacific Coal Co. and Link-Belt Company, covering construction of Belt Conveyor System for the D. O. Clark Mine at Superior, Wyoming.

Will you please revise, eliminating item (d), Section 2, page 2.

Paragraph 5, page 3 of the specifications has been eliminated and six copies of revised page 3 are handed you herewith.

Original Signed
EUGENE MCAULIFFE

Omaha - Dec. 4, 1937.

Mr. J. A. Bennewitz:

I am returning herewith the duplicate originals of proposed agreement C. D. No. 22880 between The Union Pacific Coal Co. and Allen & Garcia Company, covering construction of tipple for the D. O. Clark Mine, Superior, Wyoming.

Will you kindly revise paragraph (2), page 2, to read as follows:

"As set out on page 11 of the Annexed Specifications, standard Allen & Garcia Pendulum Type Hanger Shaker Screen Drives, with Center Cranks will be substituted for the type of screen drive indicated on the plans, and it is understood and agreed that the details of all necessary changes in structural members and their locations, together with the design and dimensions of said Standard Allen & Garcia Pendulum Type Drives, shall be submitted by the Contractor to the Chief Engineer of the Company for approval before the construction thereof is begun."

Original Signed
EUGENE MCAULIFFE

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

COLUMBUS, OHIO,



December 1, 1937

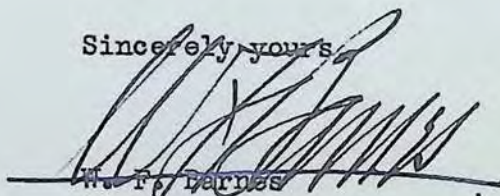
Eugene McAuliffe, President
Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

Dear Mr. McAuliffe;

This will acknowledge your letter of November 24 giving us the sad news that you had awarded to others the contract for your equipment at Superior, Wyoming. May I say personally that I appreciated the impartial manner in which your company handled the letting of this contract. While we are sorry that we were unable to participate in this business we are entirely satisfied that we were given every consideration and will greatly appreciate it if you will call us in on any future business that you may have to place.

It was a pleasure to meet and talk to you personally and I hope that I may see you again on my next trip west.

Sincerely yours,



W. F. Barnes

Manager of Sales
Coal Preparation Division

WFB:B

CC: E. C. Horne

Rock Springs - December 2, 1937

Mr. Eugene McAuliffe:

Referring to yours of November 29th, 353-12:

I am returning herewith Cont. Dept. No. 22879 between The Union Pacific Coal Company and Link-Belt Company.

This has been checked very carefully, and the only change that should be made is to eliminate item (d), Section 2, on page 2, regarding track in place in the Belt Conveyor Slope, also paragraph 5, page 3, of specifications covering the above. The Link-Belt Company has knowledge of the fact that the track in the Conveyor Slope may or may not be left in place. They have also expressed a wish that the track be removed to expedite their work. My understanding is that they will take the material and concrete through the Manway Slope and through the crosscuts.

Other than the above changes, the contract is correct.

George M. Mays

CONTRACTS LET FOR BELT CONVEYOR AND TIPPLE FOR HUGE SUPERIOR MINE

BIGGEST COAL PLANT IN WEST WILL RESULT

Contracts for the last major construction items at the new million-dollar D. O. Clark mine of The Union Pacific Coal company at Superior have been let, it was revealed by company officials Tuesday.

The contracts were for the construction and erection of a tippie and a belt conveyor system, both capable of handling 700 tons of coal an hour.

The Link Belt Company of Chicago was successful bidder for the belt conveyor work while the Allen and Garcia company of Chicago was given the contract for the tippie.

The belt conveyor will be the first used in the West for coal mine haulage. The same system is being used in the East by the

(Continued on page eleven)

Frick Coal company near Pittsburgh.

When in operation the mine will be the biggest coal plant in the West.

The manway and material slope is completed, the belt conveyor slope is 90 per cent completed, and the two air shafts are completed.

The two newest contracts call for the companies to have completed the manufacturing of parts so that erection can begin on March 15, 1938, and for the tippie to be built and the belt conveyor to be ready for operation on August 1, 1938.

The belt conveyor system will be some 2,500 feet long. It will be divided into four sections, each section being a continuous six-ply belt made like and exceptionally heavy automobile tire. Each of the four sections will be operated by a 125 horsepower electric motor.

The motors of all the sections will have an interlocking control so that if there should be an interruption in service on any one section, the sections below it will stop and thus will not cause coal to be piled up at any place in the conveyor slope.

Each belt also will have a magnetic thrust brake so that if power is cut off suddenly, the belt will be held in place and will not go backward because of the weight of the coal on it.

There will be two rotary dumps along the belt conveyor slope. One of the dumps will handle coal from two seams and the other will take the product of three seams. The dumps will be of the same type used in the tippie at the Reliance mine.

The new system is expected to be the last word in safety. The only men to be in the conveyor slope will be those patrolling and operating the conveyor. There will be ample room for them beside the conveyor throughout the length of the slope.

The tippie, to be built of reinforced concrete and steel, will be built on the same order as the Reliance tippie but will have a capacity larger by 200 tons an hour.

Included in it will be screening facilities, shaking and picking tables, and a magnetic pulley to remove tramp iron from the coal.

Omaha - November 29, 1937.

Mr. E. McAuliffe:

Proposed contract with Link-Belt Company covering construction of belt conveyor system for the "D.O. Clark Mine" at Superior, Wyoming.

Referring to your letter of November 25, file

353-12:

I am handing to you herewith the duplicate originals of this proposed contract.

The Link-Belt Company's proposal is returned to you herewith.

The set of plans that you sent to me with your letter were returned to you Saturday.

John A. Bennewitz

Omaha - November 29, 1937.

Mr. E. McAuliffe:

Proposed contract with Allen & Garcia Company covering construction of Coal Tipple for the "D.O. Clark Mine" at Superior, Wyoming.

Referring to your letter of November 25:

I am handing to you herewith the duplicate originals of the proposed contract.

In accordance with your memorandum of November 29, file 353-12, I have corrected the first line, paragraph 2, page 28, of the Specifications to read "220-volts" instead of "200-volts".

Revised page 11, sent to you with Mr. Pryde's letter of November 27, has been inserted in the Specifications, and old page 11 has been removed therefrom and destroyed. The first paragraph on page 12 of the Specifications has been stricken out as requested by Mr. Pryde.

Mr. Pryde's letter and the copy of Mr. Livingston's letter of November 27 are returned herewith.

Allen & Garcia's proposal is also returned herewith.

The blueprints which you sent to me with your letter were returned to you Saturday.

John A. Bennewitz

Rock Springs - November 29, 1937

Mr. Eugene McAuliffe:

I am in receipt of yours of November 26th, 353-12, with original copies of specifications for the belt conveyor and tipple for the D. O. Clark Mine, and have made the corrections in Item 2, Page 28.

George

The McNally-Pittsburg Mfg. Corp.

COAL PREPARATION EQUIPMENT

GENERAL OFFICES & WORKS
PITTSBURG, KANSAS

GENERAL SALES OFFICE
307 N. MICHIGAN AVENUE
CHICAGO, ILLINOIS

THOS. McNALLY,
PRESIDENT

Pittsburg, Kansas

November 29, 1937

Mr. Eugene McAuliffe, President
Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

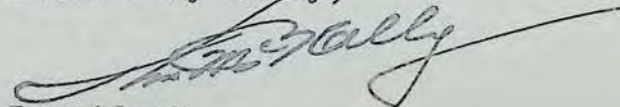
Dear Mr. McAuliffe:

Thank you very much for your letter of the 24th. Naturally we would have been indeed pleased to have been the successful bidder on your D. O. Clark mine installation but we feel that we were treated entirely fairly and that your award to the two successful bidders was concluded with the utmost fairness on your part.

I want you to know that we appreciated very much the opportunity given us of submitting a proposal for this work and also your statement that some day you are in hopes that our company may be given an opportunity of building a plant for you.

With kindest personal regards, I am

Yours very truly,


President

TM:NEH
cc - Chicago



NORTON.....
AUTOMATIC COAL
WASHING SYSTEM

ALL CONTRACTS AND SHIPMENTS ARE SUBJECT TO STRIKES, FIRES, ACCIDENTS AND OTHER CAUSES BEYOND OUR CONTROL.

K-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS
EXECUTIVE OFFICES: 307 N. MICHIGAN AVE., CHICAGO

November 29th, 1937

Mr. Eugene McAuliffe, President,
The Union Pacific Coal Company,
1416 Dodge Street,
Omaha, Nebraska.

Dear Mr. McAuliffe:-

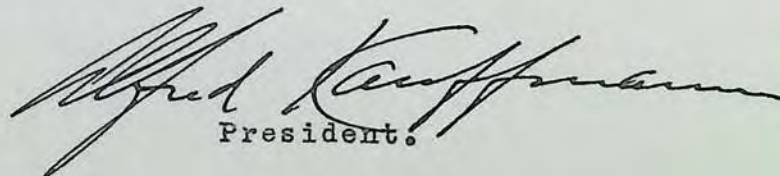
I won't say that I was exactly disappointed, because these days even part of a job is better than nothing at all, but I did think our crowd good enough and smart enough to get the entire job. However, Allen & Garcia are a good outfit, and it may be possible for us to persuade them that they should buy from us some of the machinery that goes into the tipple.

We are grateful to you and your associates for favoring us with the belt conveyor, and I can assure you that the work will go thru to completion in a satisfactory manner.

I also appreciate your courtesy shown to our representatives.

With kindest regards, I am,

Sincerely yours,


President.

353-12

Omaha - Nov. 29, 1937.

Mr. G. B. Fryde:

Herewith proposed contracts covering construction of belt conveyor by the Link-Belt Co., and tippie by the Allen & Garcia Co., together with the contractors' proposals. Please have same checked carefully, and return to me as early as convenient.

Original Signed
EUGENE MCAULIFFE

353-12

Nov. 29, 1937.

Mr. L. von Perbandt, Treas.,
Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Dear Mr. von Perbandt:

Yours of the 27th on the application of automatic
couplers to our mine cars:

You will recall we went into this matter rather
thoroughly, deciding against buying automatic couplers at the
present time, in fact one hundred cars are now on the ground
with the standard link and pin coupler.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

Rock Springs - November 27, 1937

Mr. George B. Pryde:

Enclosing herewith revised prints of specifications for coal tipple, D. O. Clark Mine, describing the Allen & Garcia Company's pendulum type screen drive.

This revision is to replace all of page eleven (11) and paragraph one (1), page twelve (12) of Coal Tipple specifications which describes the Link-Belt type screen drive originally specified, but not to be included under the contract with the Allen and Garcia Company.

These are to be forwarded to Omaha for inclusion in the contract with Allen and Garcia Company.

(sgd) H. C. Livingston.

COPY

Rock Springs - November 27, 1937

Mr. Eugene McAuliffe:

Herewith copy of letter from Mr. Livingston, with six copies of print referred to, this revision to replace all of Page 11 and Paragraph 1 on Page 12 of the Coal Tipple specifications, on account of changing over to the Allen & Garcia type of screens from our original specifications, which referred entirely to the Link-Belt screen drive.

Will you please make the necessary changes in the draft of the contract you are preparing, and you will probably desire to send one to the Allen & Garcia Company, calling their attention to this change in the specifications.

Leon Muger

Rock Springs - November 27, 1937

Mr. Eugene McAuliffe:

Referring to your letter of November 24th, file 353-12,
to Allen & Garcia Company and Link-Belt Company:

Two sets each of the four prints you mentioned have
been sent to Allen & Garcia and to George S. Jaxon, of the Link-
Belt Company, yesterday.

George

Rock Springs - November 27, 1937

Mr. Eugene McAuliffe:

I am in receipt of yours of November 25th, file 353-12, with copies of letters to the Jeffrey Manufacturing Company and the McNally-Pittsburgh people, and thank you for same.

I have today advised the Stearns-Roger Manufacturing Company, Denver, Colorado, and Mr. R. S. Chisler, The Goodyear Tire & Rubber Company, Inc., Omaha, Nebraska, of the awarding of the contracts, in accordance with your previous requests.

George Munge

IDENT
PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS

MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Nov. 27th, 1937.

The Union Pacific Coal Company,
1416 Dodge St.,
Omaha, Nebraska.

Gentlemen: Atten.- Mr. Eugene McAuliffe.

In connection with the new work at Superior, Wyoming, it has occurred to us that it might be decidedly to your advantage to equip the mine cars with semi-automatic safety couplers as indicated and shown on the enclosed pamphlet. We have at various times called this matter to your attention reciting its merits and its unparalleled success in preventing injuries so often occurring with the type of coupler indicated and shown on your Reliance pit car drawing.

Therefore, in behalf of safety, we would appreciate an opportunity of quoting you a price for equipping your new cars with these couplers should you be willing to entertain the idea.

Trusting that we shall hear further from you in this respect, we beg to remain,

Yours very truly,

ALLEN & GARCIA COMPANY

BY

L. von Perbandt

LVP:HL

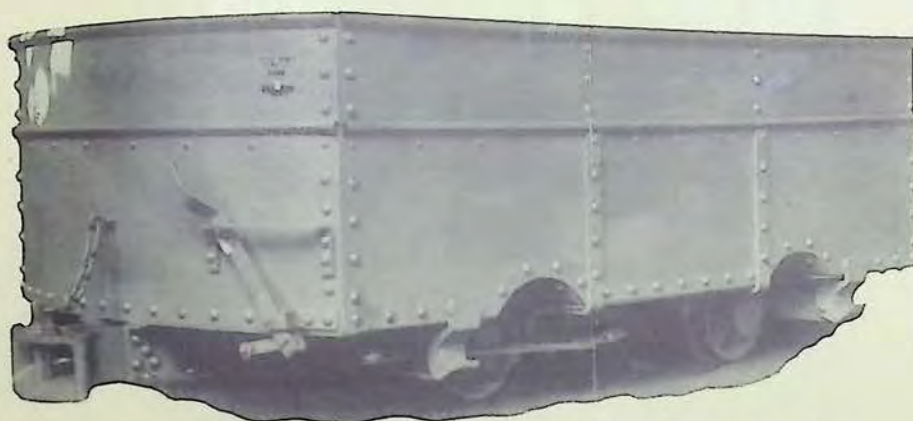
Encl.

Allen & Garcia

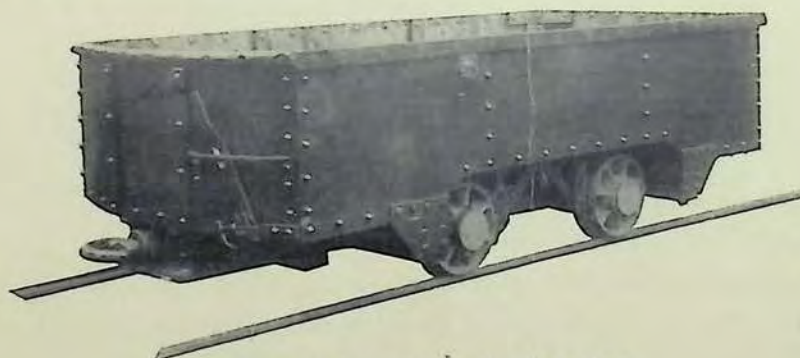
(Patented)

Semi-Automatic Safety Coupler

For Mine and Industrial Cars



5-ton Car—Wildwood Mine, Butler Consolidated Coal Co., Wildwood, Pa.

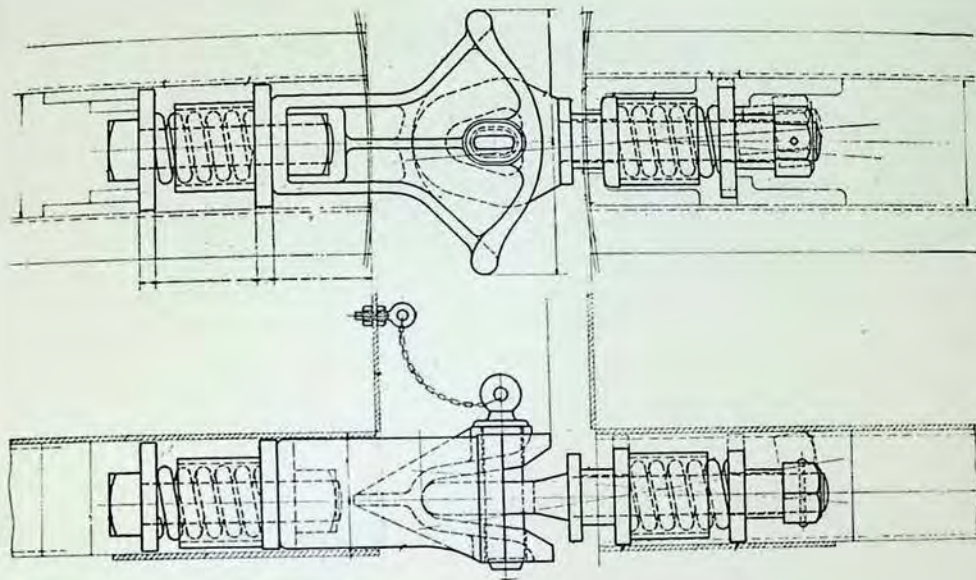


4-ton Car—Warden Mine, Pittsburgh Coal Co.

ALLEN & GARCIA CO.
Engineers

332 So. Michigan Ave., Chicago, Ill., U. S. A. 8 Market St., Pittsburgh, Pa.

Printed in U.S.A.



COUPLES AUTOMATICALLY WHEN set in coupling position, not otherwise.
Coupler swivels without any special attachment, thus adapting it to trip operation with rotary dump.

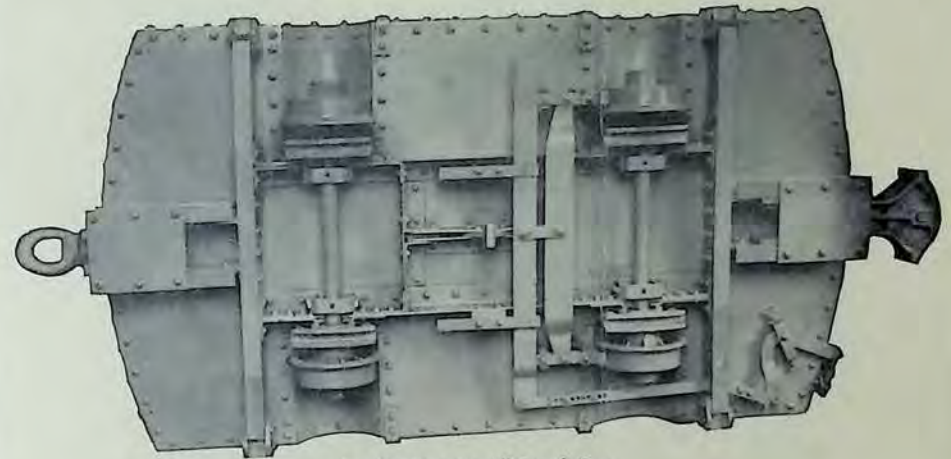
Eliminates Coupling Accidents:

No one has to place his hands or body between cars when coupling. Pin may be dropped by hand, but this requires only one hand in a perfectly safe operation.
WILL COUPLE AND OPERATE ON A 25 TO 30 FT. RADIUS CURVE.
OPERATES EQUALLY WELL PUSHING OR PULLING, holding trip stiff and steady.
SPRING MOUNTING BOTH FOR PULLING and bumping, thus enabling locomotive to handle more cars.
Made of alloy steel castings and forgings. Stands up under the heaviest service.
OPERATES PERFECTLY ON UNEVEN TRACK, does not jam on derailment.
Can be mounted either above or below bottom of car or with center line at car bottom, as desired according to your car construction. Easily applied or removed by simply removing keeper plate.
Locomotive couplings also.

Your car builder can furnish the couplers under our supervision.

This coupler was originally designed, some eight years ago, for one of the largest and most progressive operators in America, who had tried unsuccessfully to obtain a practical coupler to eliminate coupling accidents. Since that time the coupler has been progressively developed, perfected and greatly cheapened. THERE ARE NOW OVER 2500 SETS IN USE. It is offered to the operators of the country with confidence that they will find in this apparatus a real help to economical operation.

In order to assure ourselves that the coupler can be properly applied to your cars, we require a drawing of your car and information regarding minimum curvature of your mine track before obtaining quotation.



Application to All-Steel Car

GENERAL OFFICES
REIDER BUILDING

BUTLER CONSOLIDATED COAL COMPANY

BUTLER, PA.
PHONE 3721

MINE OWNERS and OPERATORS

ERICO KINCAID ARGENTINE ENTERPRISE WILDWOOD FENELTON McMILLAN SMARTLANDER PLUMVILLE

Jan. 9, 1931.

Mr. C. J. LaMena,
Allen & Garcia Company,
332 S. Michigan Ave.,
Chicago, Ill.

Dear Sir:

In October 1929, 5 ton steel mine cars equipped with Allen & Garcia Semi Automatic Couplers were put in service in the Wildwood Mine.

From that time until the present date there has been 889,752 tons of coal handled. During this time there has been no hand or finger accidents caused by coupling or uncoupling.

Yours very truly,

BUTLER CONSOLIDATED COAL CO.

Per E. J. Weimer
Supt.

353-12

Omaha - Nov. 29, 1937.

Mr. E. R. Houghton:

The Coal Company will do all tipple lighting as per specifications. The contractor will do all wiring for motors, starters, and controls from disconnecting switch of transformers bank. Please correct line 1, paragraph 2, page 28 to read 220 volts.

Original Signed
EUGENE McAULIFFE

UNION PACIFIC RAILROAD COMPANY

TELEGRAM

M

GRFAS

Rock Springs 11AM Nov 28, 1937

E McA., Omaha

M-22. Coal company will do all tipple lighting as per specifications contractor will do all wiring for motors starters and controls from Disconnecting switch of transformers Bank . Please correct line 1 paragraph 2 page 28 to read 220 volts.

G.B.P.

1233pm

Rock Springs - November 26, 1937

Mr. Eugene McAuliffe:

Referring to yours of November 24th, 353-1:

I have inserted the amount of the bid made by the McNally Pittsburgh Company, and have retained copy for my files, attaching one herewith for your files. I think the division of the awarding of the contracts, that is, the tippie to Allen & Garcia Company and the conveying system to the Link Belt Company, will give us an excellent job, and I agree with you this was the best thing to do.

Mr. Livingston has told me about the belt that will be furnished by the Link Belt Company.

George B. Ruge

COMPARISON OF BIDS, D. O. CLARK TIPPLE AND CONVEYOR BELT INSTALLATION

<u>Contractor</u>	<u>Tipple</u>	<u>Conveyor Belt</u>	<u>Combined</u>
Allen & Garcia	\$85,000	\$219,628	\$287,000
Link-Belt Co.	88,631	204,500	288,000
Jeffrey Mfg. Co.	97,910 ✓	206,766	300,736
McNally Pittsburgh Co.	-	-	362,705

As Awarded

Allen & Garcia	Tipple	\$85,000	<u>Combined</u>
Link-Belt Co.	Conveyor	<u>204,500</u>	<u>\$289,500</u>

The conveyor awarded Link-Belt Co. account superior quality of belt over A. & G., we to receive 19-24 belt from Link-Belt vs. 15-19 as specified. The tipple awarded Allen & Garcia on price, A.& G. standard drive to be used in tipple, Murray drive excluded from all final specifications. Twenty per cent of price held back for completion and contractors given until Aug. 1, 1938.

ASIDENT
PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS


McCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Nov. 27, 1937.

Dear Mr. McAuliffe:

Even at the risk of embarrassing you I could not help making ~~an~~ stab at thanking you for the courteous treatment you gave me and my associates in Omaha. We definitely like the way you do business and frankly, we are more than pleased at the opportunity of working with you again.

I am a firm believer in the business of handing a man the "posers" due him while he is still young enough to appreciate them, so this is to be construed as one from us to you.

Please give my best to Mrs. McAuliffe and Kathleen.

Cordially yours,

John A. Garcia, Jr.

Omaha - Nov 27 1937

G B PRYDE - Rock Springs Wyo

It was my general understanding that contractor would install all lighting facilities in tipple. Item 3 page 28 specifications provide coal company furnishing. Should specifications govern? M-23

Eugene McAuliffe

Nov. 27, 1937.

Mr. L. von Perbandt, Treas.,
Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Illinois.

Dear Mr. von Perbandt:

Your letter of Nov. 26th:

In the third paragraph of same, you suggest that a check of the drawings and specifications indicate that the concrete work at the mouth of the slope is the function of the belt conveyor contractor; you refer to drawing 2146.32-C.

My check of this print and also print 2146.31 indicates plainly that all the concrete work outside the face of the mine portal is a part of the tippie contract, altho you will have to obtain from the Link-Belt Co. the location for the foundation belt holes; that really is the major item of coordination that we have discussed.

An examination of drawing 2146.32-C shows the face of the concrete portal and the foundation you refer to all located at the right of this line and in tippie territory.

In making both contracts we are inserting a provision that the yardage and weight of iron used in foundations by both contractors are tentative and that the final settlement will be based on the actual material used:

Under this arrangement, it would seem to make no particular difference who did the work as far as we are concerned. In other words, if you agreed with Mr. Jaxon that he should take care of the drive foundation outside the portal, such would add to his yardage and weight of iron and correspondingly reduce yours.

Will you not make further examination of the prints and also the specifications, checking Item 1, page 21 on the specifications furnished you with Item 1, page 15 of the belt conveyor specifications of which you have a copy as well as the prints? I will be passing thru Chicago, Tuesday, the 30th and I will drop into your office at that time.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



E. C. HORNE
SALES REPRESENTATIVE
ERNEST & CRANMER BUILDING

November 26, 1937

Mr. Eugene Mc Auliffe, President,
The Union Pacific Coal Co.,
1416 Dodge Street,
Omaha, Nebraska

Dear Sir:

We wish to acknowledge herewith receipt of your letter of November 24th advising us of the disposition of the contracts for the D. O. Clark Mine at Superior, Wyoming.

I wish to assure you that we appreciate the consideration given to the Jeffrey Manufacturing Company in respect to the letting of these contracts and are very glad to have had the opportunity of submitting our proposals and while we naturally regret that the Jeffrey Manufacturing Company were not in position to be of service to your company on this particular contract, we hope to be able to serve you in connection with your future requirements for equipment of this kind and will be very pleased to submit for your consideration specifications, as you may be interested in equipment of this kind.

Yours very truly,

ECH:GCP
C. C. to Mr. G. Pryde

THE JEFFREY MANUFACTURING CO.,
Per *E. C. Horne*

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS
300 W. PERSHING ROAD (THIRTY NINTH ST.) CHICAGO

November 26, 1937

Mr. Eugene McAuliffe
The Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

Dear Mr. McAuliffe:

Thank you very much for your letter of the 24th inst. advising us that you have awarded the Link-Belt Company the contract for the construction of the proposed Belt Conveyor System used in connection with The Union Pacific Coal Company's D.O. Clark Mine located at Superior, Sweetwater County, Wyoming, all as per specifications and prints previously furnished our company.

Price of Conveyor Equipment including Belts, Foundations and other attendant Equipment in place and in proven working order, properly related to a Steel Tipple to be constructed by Allen & Garcia Company of Chicago, Illinois: Price for the Equipment as per our quotation to you on your proposal forms, submitted to you in Omaha on last Tuesday, the 23rd instant.

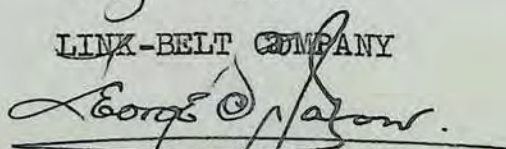
We note that your Legal Department is now preparing formal contract covering the construction of the above conveyor with its attendant apparatus and same will be submitted to us for check and approval within the next few days.

We are also preparing at the present time a full proposal specifying the Equipment throughout, all as per your designs and specifications which we believe may be an aid to your company in preparing your formal contract.

Thanking you once more for your valued acceptance of our proposal and assuring you of our very best efforts, we are

Very truly yours

LINK-BELT COMPANY



Engineer
Coal Preparation Division

GS Jaxon.w

IDENT
PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Nov. 26th, 1937.

Mr. Eugene McAuliffe, President,
The Union Pacific Coal Company,
1416 Dodge Street,
Omaha, Nebraska.

Dear Mr. McAuliffe:-

We have this morning received your formal notification of our being awarded the contract for construction of steel tipple at your D. O. Clark Mine, and the Allen & Garcia Company organization wishes to thank you sincerely for this opportunity of serving you, and assure you of our intention to execute the contract fully and to our best ability.

We have also received from you the new revised set of specifications embodying the minor amendments which were agreed to verbally in Omaha, and will follow them in laying out our work. The changes we expect to make in the design as it now stands, will be solely for the purpose of substituting our patented crank shaft screen drive and pendulum hangers for the Murray drive originally set up on the prints and specifications.

If you will recall, there was some discussion regarding the concrete work at the mouth of the slope and upon our return to Chicago, we checked into the drawings and specifications and find that this portion of the concrete work was included under the belt conveyor plans and specifications. Upon referring to your drawing No. 214632-C, you will find where they have been detailed and if you will check over the quantities of concrete required under both divisions, you will find this yardage was included in the belt conveyor system. Under these conditions we believe that you will agree that this part of the work should be handled by Link-Belt Company, or if you prefer to have it handled by us, it should be deducted from the belt conveyor quotation and re-assigned to the tipple portion. We will await your further advice in this respect before doing anything further with this portion..

We will also reduce the space between the inside column of the domestic fuel bin and railroad cars on the lump track from 9'6" to 9'0", in order to provide 9' clearance between center line of the passing track and outer end of tipple columns.

Mr. Eugene McAuliffe. 11/26/37.

As soon as we receive your form of contract prepared by your legal department, we will sign and return it to you promptly.

Yours very truly,

ALLEN & GARCIA COMPANY

LVP:HL

BY

L. von Perbandt

353-12

Omaha - Nov. 26, 1937.

Mr. W. M. Jeffers:

I beg to advise that on Wednesday, Nov. 24th, we completed contract arrangements with Link-Belt Co., Chicago, for the complete installation of the belt conveyor system, including furnishing and placing of all underground machinery (rotary dumps furnished by the coal company) for our D. O. Clark Mine, Superior, the work of detail design now under way, installation to be complete by Aug. 1, 1938, construction price, \$204,500.

I also placed contract with Allen & Garcia Co. for the construction of the steel tippie, D. O. Clark Mine, the work of detail design to commence at once, the tippie to be completed and in operation, Aug. 1, 1938, total cost, including all labor and material, \$85,000.

Plans covering all installations were made in our Rock Springs offices and thereafter fully approved by both of the contracting companies as well as the two unsuccessful bidders, McNally Pittsburgh Co., Pittsburgh, Kansas, and the Jeffrey Manufacturing Co., Columbus, Ohio.

Original Signed
EUGENE McAULIFFE

353-12

Omaha - Nov. 26, 1937.

Mr. G. B. Pryde:

Herewith original copies of specifications for the belt conveyor and tibble for the D. O. Clark Mine, left by Mr. Livingston.

We revised one page of the tibble specifications to cover galvanized steel instead of black iron. Six sets of prints were made from specifications for contract purposes. The contracts are now on the way.

Original Signed
EUGENE MCAULIFFE

353-12

Omaha - Nov. 25, 1937.

Mr. G. B. Pryde:

Your letter of Nov. 23rd with reference to notifying the Jeffrey Manufacturing Co. and the McMally Pittsburgh people that the contract for the tipple and conveyor system at our D. O. Clark Mine has been awarded:

I have already done this and for your information I am attaching copy of my letter to the above concerns.

Original Signed
EUGENE MCAULIFFE

Rock Springs - November 23, 1937

Mr. Eugene McAuliffe:

Do you desire me to notify the Jeffrey Manufacturing Company and the McNally Pittsburg people that the contract for the tipple and conveyor system at our D. O. Clark Mine has been awarded, or do you desire to do that personally.

George A. [unclear]

Omaha - Nov. 25, 1937.

Mr. J. A. Bonnewitz:

I am handing you herewith a full set of blueprints a number of which are referred to in the first paragraph of the proposal executed by Link-Belt Co., the remaining prints referred to in the first paragraph of the proposal executed by Allen & Garcia Co.

I have checked the prints which I am handing you against the numbers and find the references to be correct. For the convenience of the respective contractors, I am sending certain prints, which are provided for in the one contract, to the other contractor and vice versa. Will you kindly prepare two contracts, the first to be written between The Union Pacific Coal Co. and Allen & Garcia Co., a Delaware Corporation, located in the McCormick Building, Chicago.

This contract should contain the specifications which I will also hand to you, the over-all contract price for the tippie complete and in service, \$85,000.

With reference to Item 2, first page, please provide that the price for concrete foundation in place includes excavations and re-filling and that the unit prices will govern, settlement to be made on the basis of actual cubic yards of concrete foundation in place plus the actual weight of reinforcing anchor bolts and pipe sleeves. It is not desirable, in my opinion, to write the proposal into the contract.

Referring to page 2 of the proposal, 20% of the monthly estimates of work and material furnished and accepted will be withheld until the tippie is complete and giving satisfactory service, the Coal Co. however to limit the period of delayed acceptance to 30 days. In the event any minor matters remain uncorrected after the 30 day period, then only a sufficient amount of the total contract price will be withheld to protect for the correction of same.

Provide that the A. & G. Co. will furnish proof of payment for all bills for labor and material furnished or otherwise in the case of material, furnish satisfactory waiver of liens from sub-contractors furnishing material for inclusion in the job.

Provide that the standard A. & G. shaking pendulum screen and drive may be substituted for the type of screen and drive set forth in pages 10, 11 and 12 of the specifications, with the provision that all necessary changes in structural steel, together with

design and dimensions of substitute pendulum shaking screen drive will be submitted to the Coal Company's engineer for approval before same is constructed and installed.

Provide that the work of design and construction will commence as of Nov. 26, 1937, the tippie to be completed, tested, and ready for service on or before Aug. 1, 1938.

Provide that the tippie covered by the A. & G. contract is one unit of a combined underground belt conveyor transport system to be constructed by Link-Belt Co., Chicago, the A. & G. Co. to co-ordinate their work of design and construction with that of Link-Belt Co., each company, however to be responsible for its own portion of the combined job.

If you will look over the prints and specifications not later than Monday, Nov. 29th, I will be very glad to check same with you. I am compelled to leave that evening for the remainder of the week, Nov. 28 to Dec. 4, inclusive.

Original Signed
EUGENE MCAULIFFE

Omaha - Nov. 25, 1937.

Mr. J. A. Bennowitz:

I am handing you herewith a complete set of prints referred to in the attached proposal for the construction of a belt conveyor system for the D. O. Clark Mine, Superior, Wyoming. In addition to the prints referred to in the first paragraph of the proposal, I am sending Link-Belt Co. additional prints assuring the work of co-ordination between their portion of the job and that of building the steel tippie by the Allen & Gascia Co. referred to in a separate letter.

The over-all cost of the work to be done and the material to be furnished in place and in full operating condition on the part of the Link-Belt Co., should be fixed at \$204,500, this sum including the concrete and reinforcing material referred to in Item 3, first page of the proposal.

I will hand you the necessary copies of specifications for inclusion in the contract. I would appreciate your covering the following items by contract.

The Coal Co. to furnish hoisting facilities for the transport of material when placed on tram cars from the mine portal to point of unloading, the labor for loading and unloading to be furnished by Link-Belt Co.

Please provide, first paragraph, page 2, that 20% of monthly estimates of material and labor furnished will be retained until the job is completed and accepted, such acceptance, however, to be restricted to a maximum of 30 days, with the provision that any minor matters that are not corrected within 30 days will be covered by a sufficient retention of the contract price to protect the Coal Co., the remaining amount to be paid to the Link-Belt Co.

Provide that the Link-Belt Co. will furnish proof of payment for all labor and material furnished, the Coal Co., however, accepting waiver of lien supplied by the manufacturers or sub-contractors furnishing material for use in connection with the job.

Please set forth the fact that the construction of the belt conveyor system must be related to the tippie being constructed by Allen & Gascia Co. While each Company will be responsible for its own contract responsibilities, a full measure of co-ordination should be established and maintained thruout the designing and construction period, the above conveyor and the tippie integral parts of one job.

After you are through with the blueprints, I would appreciate

- 2 -

the return of same to me.

As stated in the case of the A. & G. contract, I will be here until Monday evening, Nov. 29th and will be glad to go over the contract with you.

Original Signed
EUGENE MCAULIFFE

353-12

Nov. 25, 1937.

Mr. Alfred Kauffman, Pres.,
Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Mr. Kauffman:

Referring to your wire of Nov. 16th, assuring me of adequate responsibility in the construction of belt conveyor and steel tipple for our D. O. Clark Mine. As you have been informed, the belt conveyor system was awarded to your company, altho I had one bid slightly below that returned by Mr. Jaxon, this matter not mentioned to him, the decision based on our belief that your company would give us a somewhat better job.

The tipple was awarded to the Allen & Garcia Co., who were the lowest bidder and whom I believe will give us a satisfactory job.

I enjoyed working with Mr. Jaxon and your Mr. Phillips and I am sure the work will go thru to completion in a satisfactory manner.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

353-12

Nov. 24, 1937.

Mr. R. S. Chisler,
The Goodyear Tire & Rubber Co., Inc.,
101 North Ninth Street,
Omaha, Nebr.

Dear Sir:

I beg to advise that the contract for the D. O. Clark
Mine tippie, Superior, was awarded the Allen & Garcia Co., McCormick
Building, Chicago, and the belt conveyor system to the Link-Belt Co.,
300 W. Pershing Road, Chicago.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

353-12

Nov. 24, 1937.

Stearns-Roger Mfg. Co.,
1718 California St.,
Denver, Colo.

Dear Sirs:

I beg to advise that the contract for the D. O. Clark
Mine tippie, Superior, was awarded the Allen & Garcia Co., McCormick
Building, Chicago, and the belt conveyor system to the Link-Bolt Co.,
300 W Pershing Road, Chicago.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

353-1

Omaha - Nov. 24, 1937.

Mr. G. B. Fryde:

Herewith two copies of a memo of bids received from all but the McMally Pittsburgh Co, however I failed to obtain these figures from Mr. Livingston. Will you please insert the McMally Pittsburgh bid on one sheet of the attached memo, returning to me for my files. I think the memo is self-explanatory. Frankly I preferred giving the Link-Belt Co. the conveyor, altho Allen & Garcia would give us a good job. However we are promised a better belt from the Link-Belt Company, the detail of which Mr. Livingston will explain to you.

I will arrange with the Legal Dept. for quick preparation of the contract and as soon as it is completed I will send to you for check and approval, thereafter returning same to me for forwarding to the contracting companies.

Original Signed
EUGENE MCAULIFFE

COMPARISON OF BIDS, D. O. CLARK TIPPLE AND CONVEYOR BELT INSTALLATION

<u>Contractor</u>	<u>Tipple</u>	<u>Conveyor Belt</u>	<u>Combined</u>
Allen & Garcia	\$85,000	\$219,638	\$267,000
Link-Belt Co.	88,631	204,500	268,000
Jeffrey Mfg. Co.	97,910	206,766	300,736
McNally Pittsburgh Co.			

As Awarded

Allen & Garcia	Tipple	\$85,000	<u>Combined</u>
Link-Belt Co.	Conveyor	<u>204,500</u>	<u>\$269,500</u>

The conveyor awarded Link-Belt Co. account superior quality of belt over A. & G., we to receive 19-24 belt from Link-Belt vs. 15-19 as specified. The tipple awarded Allen & Garcia on price, A. & G. standard drive to be used in tipple, Murray drive excluded from all final specifications. Twenty per cent of price held back for completion and contractors given until Aug. 1, 1938.

Comparison of bids, D.O. Clark Tipple and
Conveyor Belt Installation.

<u>Contractor</u>	<u>Tipple</u>	<u>Conveyor Belt</u>	<u>Combined</u>
Allen & Garcia	\$85,000	\$219,628	\$287,000
Link Belt Co	88,631	204,500	288,000
Jeffrey Mfg Co	97,910	206,766	300,736
McNally Pittsburg Co.			

As Awarded

Allen & Garcia	Tipple	\$85,000	<u>Combined</u>
Link Belt Co	Conveyor	204,500	\$289,500

The Conveyor awarded Link Belt Co
account superior quality of belt ~~vs 15-19~~
over avg, we to receive 19-24, belt from
Link Belt vs 15-19 as specified. B
The Tipple awarded Allan & Garcia on
price, avg standard drive to be used
in Tipple. Merry drive excluded from
all final specifications. Twenty %
of price held back for completion
Contractors given until Aug. 1, 1938,

RECEIPT FOR INSURED MAIL *A & G*

DOMESTIC
(Including Canada and Newfoundland)

No. *1069*

Postage *28* cts.

Insurance fee paid *10* cts.

Accepting employee will place his initials in spaces applicable to indicate endorsements and insert the fees paid.

Postmark of *OMAHA, NEBR. NOV 24 1937*

Mailing Office)

POSTMASTER, By _____

CLAIMS MUST BE FILED WITH POSTMASTER WITHIN SIX MONTHS FROM DATE OF MAILING.

Fee paid for return receipt _____ cts.

Restricted delivery fee _____ cts.

Special delivery fee _____ cts.

Special handling charge _____ cts.

Fragile _____

Perishable _____

Eggs _____

Value up to \$5 _____

Value up to \$25 _____

Value up to \$50 _____

Value up to \$100 _____

Value up to \$150 _____

Value up to \$200 _____

Maximum chargeable to Newfoundland.

Apply at post office window for information concerning fees and indemnity applicable to insured mail for foreign countries other than Canada and Newfoundland.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Mr. Geo. S. Jaxon,
Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Sirs:

I am forwarding to you today by insured parcel post three sets of all prints relating to the construction of the D.O. Clark Mine tippie for the A. & G. Co. and three sets of prints relating to the belt conveyor system to the L.R. Co., with the exception of the following prints:

- #1940.35 A-TT-33
- #145-TL-U1
- #3146.312
- #1740.38-TT-33

I am enclosing one set of the above four prints to each company and sending copy of this letter to Mr. Fryde with the request that he prepare two sets of each of the four prints, forwarding same direct to the Link-Belt Co. care of Geo. S. Jaxon, and with two sets of four prints each to be forwarded to the Allen & Garcia Co., as early as convenient.

Enclosed with the prints sent the respective companies will be found three copies of the specifications, with a revised page 26 covering changes in glass and covering for tippie, no changes made in the conveyor belt specifications.

The A. & G. Co. will keep in mind reducing the space between the inside column of the domestic fuel bin and railroad car on lump track, six inches, or from 9 ft. 6 inches to 9 feet, thus shortening the tippie so as to admit of nine foot clearance between the center line of passing track and outer end of tippie.

The A. & G. Co. have also been requested in letter of acceptance of their bid of even date, to make only such changes in general tippie design as may be required to adapt to the same of track shaft center drive for the

Form 3818

RECEIPT FOR INSURED MAIL *1068*

DOMESTIC
(Including Canada and Newfoundland)

No. _____

Postage *24* cts.

Insurance fee paid *10* cts.

Accepting employee will place his initials in spaces applicable to indicate endorsements and insert the fees paid.

Postmark of *OMAHA, NEBR. NOV 24 1937*

Mailing Office)

POSTMASTER, By _____

CLAIMS MUST BE FILED WITH POSTMASTER WITHIN SIX MONTHS FROM DATE OF MAILING.

Fee paid for return receipt _____ cts.

Restricted delivery fee _____ cts.

Special delivery fee _____ cts.

Special handling charge _____ cts.

Fragile _____

Perishable _____

Eggs _____

Value up to \$5 _____

Value up to \$25 _____

Value up to \$50 _____

Value up to \$100 _____

Value up to \$150 _____

Value up to \$200 _____

Maximum chargeable to Newfoundland.

Apply at post office window for information concerning fees and indemnity applicable to insured mail for foreign countries other than Canada and Newfoundland.

Nov. 24, 1937.

Mr. B. C. Horne,
The Jeffrey Mfg. Co.,
315 Ernest & Cramer Bldg.,
Denver, Colo.

Mr. W. F. Barnes, Mgr. of Sales,
The Jeffrey Mfg. Co.,
Columbus, Ohio.

Dear Sirs:

I beg to advise that after careful consideration, the construction of our proposed steel tibble for our new B. C. Clark Mine, Superior, Wyo., was awarded to Allen & Garcia Co., Chicago, the lowest bidder, the belt conveyor and attendant underground equipment was awarded to the Link-Belt Co., of Chicago, who were also the lowest bidder.

I am deeply obliged to your company for the consideration shown us in the preparation of your bid and I am only regretful that we do not have an equal amount of work which we could award your company.

The revised bid submitted by Mr. Barnes, under date of Nov. 19th, included all the changes provided for in the proposal submitted by the Allen & Garcia Co. and Link-Belt Co., we deciding to eliminate the Link-Belt drive, reducing all bids to the standard shaking screen type of drive.

Very sincerely yours,

Original Signed
EUGENE MCAULIFFE

Nov. 24, 1937.

Mr. Thomas McNally,
McNally-Pittsburgh Mfg. Corp.,
Pittsburgh, Kansas.

Dear Mr. McNally:

After very careful consideration of several bids received in connection with the construction of the steel tippie and underground conveyor system for our D.O. Clark Mine, Superior, Wyo., I beg to advise that the tippie contract was awarded to the Allen & Garcia Co., Chicago, the lowest bidder, the underground conveyor belt system with attendant equipment awarded to the Link-Belt Co., Chicago.

I am very much obliged to your company for the work done in connection with the preparation of estimates and bid and I trust that at some future date we will be able to arrange a contract with your company, the disposal of the contract based wholly on prices quoted, equipment, as you will recall, specified by our engineers, only one change made thruout, i.e., that of substituting standard crank drive for tippie screens in lieu of the Murray Drive recommended by the Link-Belt Co. With the elimination of this patented device, all bids were brought to a uniform basis.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

Nov. 24, 1937.

Mr. Geo. S. Jaxon,
Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Mr. Jaxon:

This letter will serve as advice of the awarding to the Link-Belt Co. the contract for the construction of the proposed belt conveyor system used in connection with The Union Pacific Coal Company's D. O. Clark Mine located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company. Price of conveyor equipment, including belts, foundations and other attendant equipment in place and in proven working order and properly related to a steel tibble, to be constructed by Allen & Garcia Co., Chicago, \$204,500.

It is understood and agreed that work of design and construction will start at once, the plant to be completed and in running order on or before Aug. 1, 1938.

On receipt of properly audited bills for labor and material previously furnished, The Union Pacific Coal Co. will, when such bills are approved by its engineer, pay to your company 80% of the total cost of such labor and material promptly after such monthly bills are received.

It is understood that 20% of the total cost for labor and material so furnished will be withheld until the plant is completed and in proven condition for operation, such final payments will, however, be made within 30 days of completion and proven working capacity of the plant.

I am arranging with our Legal Dept. to prepare formal contract covering the construction of conveyor and attendant apparatus, which will be submitted to your company for check and approval within a few days.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

THE UNION PACIFIC COAL COMPANY
WASHINGTON UNION COAL COMPANY

EUGENE MCAULIFFE,
PRESIDENT

1416 DODGE STREET
OMAHA, NEBRASKA

IN REPLY, PLEASE REFER TO

FILE 355-22

Nov. 24, 1937.

Mr. Geo. S. Jaxon,
Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Mr. Jaxon:

This letter will serve as advice of the awarding to the Link-Belt Co. the contract for the construction of the proposed belt conveyor system used in connection with The Union Pacific Coal Company's D. O. Clark Mine located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company. Price of conveyor equipment, including belts, foundations and other attendant equipment in place and in proven working order and properly related to a steel tippie, to be constructed by Allen & Garcia Co., Chicago, \$204,500.

It is understood and agreed that work of design and construction will start at once, the plant to be completed and in running order on or before Aug. 1, 1938.

On receipt of properly audited bills for labor and material previously furnished, The Union Pacific Coal Co. will, when such bills are approved by its engineer, pay to your company 80% of the total cost of such labor and material promptly after such monthly bills are received.

It is understood that 20% of the total cost for labor and material so furnished will be withheld until the plant is completed and in proven condition for operation, such final payments will, however, be made within 30 days of completion and proven working capacity of the plant.

I am arranging with our Legal Dept. to prepare formal contract covering the construction of conveyor and attendant apparatus, which will be submitted to your company for check and approval within a few days.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

THE UNION PACIFIC COAL COMPANY
WASHINGTON UNION COAL COMPANY

EUGENE MCAULIFFE,
PRESIDENT

1416 DODGE STREET
OMAHA, NEBRASKA

IN REPLY, PLEASE REFER TO

FILE 353-12

Nov. 24, 1937.

Mr. Geo. S. Jaxon,
Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Mr. Jaxon:

This letter will serve as advice of the awarding to the Link-Belt Co. the contract for the construction of the proposed belt conveyor system used in connection with The Union Pacific Coal Company's D. O. Clark Mine located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company. Price of conveyor equipment, including belts, foundations and other attendant equipment in place and in proven working order and properly related to a steel tippie, to be constructed by Allen & Garcia Co., Chicago, \$204,500.

It is understood and agreed that work, of design and construction will start at once, the plant to be completed and in running order on or before Aug. 1, 1938.

On receipt of properly audited bills for labor and material previously furnished, The Union Pacific Coal Co. will, when such bills are approved by its engineer, pay to your company 80% of the total cost of such labor and material promptly after such monthly bills are received.

It is understood that 20% of the total cost for labor and material so furnished will be withheld until the plant is completed and in proven condition for operation, such final payments will, however, be made within 30 days of completion and proven working capacity of the plant.

I am arranging with our Legal Dept. to prepare formal contract covering the construction of conveyor and attendant apparatus, which will be submitted to your company for check and approval within a few days.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

353-12

Nov. 24, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Dear Sirs:

Confirming arrangement made in Omaha, Nov. 23rd, with your Messrs. von Forbandt, von Noding and John A. Garcia, Jr., it will be understood that you will construct complete in proven operating condition, a steel tippie for our D. O. Clark Mine, located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company.

It is understood and agreed that in lieu of the Murray Drive for shaker screens, you will substitute your standard Pendulum hanger crank shaft drive for shaker screens, making only such changes in general design of tippie as are necessary to provide adequate rigid support for your type of shaker screen drive.

Certain minor amendments, which were agreed to will be included in the formal contract, the lump sum cost of the tippie to be \$85,000 which item includes 95 cubic yards of concrete foundation in place at \$22 per cubic yard, 3000# plain steel reinforcing in place at 7½ cents per pound and 2000 pounds of anchor bolts pipe sleeves in place at 10 cents per pound. It is understood and agreed that the above price for foundation work and material are based on Kellogg Lumber Company's proposal, copies of which have been furnished you and which includes all necessary excavation and backfilling. Any increase or decrease in the measure of concrete foundation, reinforcing, or anchor bolts and sleeves, to be adjusted, actual yardage and weights to be paid for on the basis above outlined.

It is further agreed that the tippie will be completed and ready for operation on or before Aug. 1, 1938, and that monthly estimates of labor and material furnished will be prepared by your engineers and when approved by the engineer of The Union Pacific Coal Co., such amounts, less 20% of the total work and material furnished, will be paid by the coal company to the Allen & Garcia Co. promptly.

It is further agreed that final settlement will be made within 30 days of completion of the plant, providing any minor changes or corrections have been made by your company and evidence of payment of all material and labor bills have been furnished the engineer of the coal company, waivers of liens from manufacturers of machinery to be accepted in lieu of evidence of payment, the Allen & Garcia Co. to assume all liability

- 2 -

royalties on patented machinery or equipment used in the construction
the tippie.

I am arranging with our Legal Dept. to prepare form of con-
tract which will be expedited as much as possible and thereafter sub-
mitted to you for execution.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

THE UNION PACIFIC COAL COMPANY
WASHINGTON UNION COAL COMPANY

W. E. MCAULIFFE,
PRESIDENT

1416 DODGE STREET
OMAHA, NEBRASKA

IN REPLY, PLEASE REFER TO

FILE 353-12

Nov. 24, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Dear Sirs:

Confirming arrangement made in Omaha, Nov. 23rd, with your Messrs. von Porbandt, von Meding and John A. Garcia, Jr., it will be understood that you will construct complete in proven operating condition, a steel tippie for our D. O. Clark Mine, located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company.

It is understood and agreed that in lieu of the Murray Drive for shaker screens, you will substitute your standard Pendulum hanger crank shaft drive for shaker screens, making only such changes in general design of tippie as are necessary to provide adequate rigid support for your type of shaker screen drive.

Certain minor amendments, which were agreed to will be included in the formal contract, the lump sum cost of the tippie to be \$95,000 which item includes 95 cubic yards of concrete foundation in place at \$22 per cubic yard, 3000# plain steel reinforcing in place at 7½ cents per pound and 2000 pounds of anchor bolts pipe sleeves in place at 10 cents per pound. It is understood and agreed that the above price for foundation work and material are based on Kellogg Lumber Company's proposal, copies of which have been furnished you and which includes all necessary excavation and backfilling. Any increase or decrease in the measure of concrete foundation, reinforcing, or anchor bolts and sleeves, to be adjusted, actual yardage and weights to be paid for on the basis above outlined.

It is further agreed that the tippie will be completed and ready for operation on or before Aug. 1, 1938, and that monthly estimates of labor and material furnished will be prepared by your engineers and when approved by the engineer of The Union Pacific Coal Co., such amounts, less 20% of the total work and material furnished, will be paid by the coal company to the Allen & Garcia Co. promptly.

It is further agreed that final settlement will be made within 30 days of completion of the plant, providing any minor changes or corrections have been made by your company and evidence of payment of all material and labor bills have been furnished the engineer of the coal company, Waivers of liens from manufacturers of machinery to be accepted in lieu of evidence of payment, the Allen & Garcia Co. to assume all liability

- 2 -

royalties on patented machinery or equipment used in the construction
the tipple.

I am arranging with our Legal Dept. to prepare form of con-
tract which will be expedited as much as possible and thereafter sub-
mitted to you for execution.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

THE UNION PACIFIC COAL COMPANY
WASHINGTON UNION COAL COMPANY

W. E. MCAULIFFE,
PRESIDENT

1416 DODGE STREET
OMAHA, NEBRASKA

IN REPLY, PLEASE REFER TO

FILE 355-12

Nov. 24, 1937.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Dear Sirs:

Confirming arrangement made in Omaha, Nov. 23rd, with your Messrs. von Perbandt, von Meding and John A. Garcia, Jr., it will be understood that you will construct complete in proven operating condition, a steel tippie for our D. O. Clark Mine, located at Superior, Sweetwater County, Wyo., as per specifications and prints previously furnished your company.

It is understood and agreed that in lieu of the Murray Drive for shaker screens, you will substitute your standard Pendulum hanger crank shaft drive for shaker screens, making only such changes in general design of tippie as are necessary to provide adequate rigid support for your type of shaker screen drive.

Certain minor amendments, which were agreed to will be included in the formal contract, the lump sum cost of the tippie to be \$85,000 which item includes 95 cubic yards of concrete foundation in place at \$22 per cubic yard, 3000# plain steel reinforcing in place at 7½ cents per pound and 2000 pounds of anchor bolts pipe sleeves in place at 10 cents per pound. It is understood and agreed that the above price for foundation work and material are based on Kellogg Lumber Company's proposal, copies of which have been furnished you and which includes all necessary excavation and backfilling. Any increase or decrease in the measure of concrete foundation, reinforcing, or anchor bolts and sleeves, to be adjusted, actual yardage and weights to be paid for on the basis above outlined.

It is further agreed that the tippie will be completed and ready for operation on or before Aug. 1, 1938, and that monthly estimates of labor and material furnished will be prepared by your engineers and when approved by the engineer of The Union Pacific Coal Co., such amounts, less 20% of the total work and material furnished, will be paid by the coal company to the Allen & Garcia Co. promptly.

It is further agreed that final settlement will be made within 30 days of completion of the plant, providing any minor changes or corrections have been made by your company and evidence of payment of all material and labor bills have been furnished the engineer of the coal company, waivers of liens from manufacturers of machinery to be accepted in lieu of evidence of payment, the Allen & Garcia Co. to assume all liability

ties on patented machinery or equipment used in the construction
tipple.

I am arranging with our Legal Dept. to prepare form of con-
tract which will be expedited as much as possible and thereafter sub-
mitted to you for execution.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

TABULATION BIDS - 11-23-1937

(1) COAL TIPPLE.

LINK-BELT CO.

86,020.00
2,194.50
236.25
180.00
\$88,630.75 ✓

ALLEN & GARCIA Co.

\$85,000.00 ✓

(2) BELT CONV. SYSTEM.

LINK BELT Co. \$204,500.00 ✓

ALLEN & GARCIA Co. \$219,628.00 ✓

(3) COAL TIPPLE & BELT CONV. AS A UNIT

LINK-BELT Co. \$288,000.00 ✓

ALLEN & GARCIA \$287,000.00 ✓

splitting Job as follows:

ALLEN & GARCIA TIPPLE

\$85,000.00 ✓

LINK BELT CONV. SYSTEM

204,500.00 ✓

\$289,500.00 ✓

\$1,500.00 over LINK-BELT BID
2,500.00 " A & G. BID.

Lusk-Belt Company
Illinois Corporation
Vice Pres

Allan & Garcia Company
Illinois Corp
President

152 GR N AW

Rock Springs 6 PM Novr 22 1937

WICA Omaha

M-16 Necessary to Make some of the prints but will mail them to you
train fourteen tomorrow. B-84.

GBP 1105 PM

cl.

P-

[illegible]

Omaha - Nov 22 1937

RUSH

G B Pryde - Rock Springs, Wyo.

Arrange for three additional sets all prints, tracings for D. O. Clark
Tipple and conveyor system, sending here. M-16

Eugene McAuliffe

RUSE RUSE

Omaha - Nov 23 1937

G B Pryde - RockSprings Wyo

Wish to talk to you and Mr. Bayless about 1:30 P.M. today
your time. M-17

Eugene McAuliffe

Concrete for Tipple	)	
and anchor bolts	)	
& excavations	)	\$2,610.75
Same for Belts, Pits,	)	
Bin Supports,	)	
Excavations, etc.	)	
		<u>7,134.32</u>
		\$9,745.07

Tipple	\$86,020.00
Concrete	<u>2,610.75</u>
	\$88,630.75
Belts	\$197,365.00
Concrete	<u>7,134.32</u>
	\$204,499.32
Combined	\$278,254.93
Concrete	<u>9,745.07</u>
	\$288,000.00

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PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM AND COAL TIPPLE AS A
UNIT
D. O. CLARK MINE SUPERIOR, WYOMING

Having visited the site and inspected the location of the proposed Belt Conveyor System and Three-Track Coal Tipple for The Union Pacific Coal Company's D.O.Clark Mine at Superior, Wyoming, also having carefully examined the drawings and specifications for the above, the drawings being designated by sheet numbers as follows: 2146.32, 2146.32A, 2146.32B, 2146.32C, 2146.32D, 2146.32E, 2146.32F, 2146.32G, 2146.32H, 2146.32I, 2146.32J, 2146.32K, 2146.32M, 2146.31, 2146.31A, 2146.31B, 2146.31C, 2146.31D, 2146.31E, 2146.31F, 2146.31G, 2146.31H, 2146.31I, 2146.31J, 2146.31K, 2146.31L, 2146.31M, 2146.31N, 2146.31P, also drawings Nos. P145, 1740.3B and 1940.35A included for the bidder's information, the Bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

BELT CONVEYOR SYSTEM:

ITEM ONE (1) The following machinery, structures and belt conveyor system erected complete as follows: Two Car Feeders and Two Trip Makers, completed, including ~~stations~~, Two Steel Hoppers and Feeders, Belt Conveyors, Belt Conveyor Drives, Structural Steel, ~~Reinforced Concrete Bins~~, the erection of Two Rotary Mine Car Dumps, all as per plans and specifications: *not including Concrete Bins or Foundations.*

"A" LUMP SUM BID See Page Two, included in Combined Price)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

ITEM TWO (2). 42-oz. Duck, 48-inch, 6-ply National Brand Rubber Belts, 3/16" R.C. and 1/16" R. C. Backing, all belts to be made continuous during erection by vulcanizing the splices.

"B" Lump Sum Bid See Page two, included in Combined Price)

ITEM THREE(3). 175.0 Cubic Yards Concrete Foundations, complete in place as per plans and specifications.

See Unit Prices Page two. () Per Cu.Yd.
Above to include Anchor Bolts.

THREE-TRACK COAL TIPPLE:

ITEM ONE (1). Tipple structure erected complete, including belt conveyor gallery, drive house at mine mouth, domestic fuel bin, refuse bin, car retarders, mechanical equipment, motors and control panel, structural steel, grating walks, stairs, grating platforms, reinforced concrete floors, and covering, as per plans and specifications:

"C" LUMP SUM BID See Page Two, included in Combined Price)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

ITEM TWO (2). 95 Cubic Yards concrete foundation in place.

TWENTY THREE DOLLARS TEN CENTS (\$ 23¹⁰/₁₀₀) Per Cu.Yd.

3,000# Plain Steel reinforcing in place.

SEVEN & SEVEN EIGHTHS CENTS (\$.07875) Per Pound

2,000# Anchor bolts and pipe sleeves in place.

NINE CENTS (\$.09) Per pound

NOTES: It is mutually agreed and understood that the Bidder bases this Proposal on the specific conditions of the successful Bidder being awarded a contract for the construction of the proposed belt conveyor system and coal tipple in their entirety.

Unit Prices are to be written and numerical.

Remarks:

10. CUB YDS PLAIN CONCRETE FOOTINGS, EXCAVATIONS, SETTING ANCHOR BOLTS ETC FOR SUPPORTS IN TUNNEL

THIRTY NINE DOLLARS FORTY CENTS PER CUB YD. (\$39.40) PER CUB YD. IN PLACE

165 CUB YDS. REINFORCED CONCRETE FOR DUMP BIN SUPPORTS, CAR FEEDERS & TRIP FEEDERS PITS

THIRTY FIVE DOLLARS EIGHTY AND ONE HALF CENTS (\$35.805) PER CUB YD. IN PLACE

10000# REINFORCING STEEL - SEVEN AND SEVEN EIGHTHS CENTS (\$.07875) PER LB.

500# OF ANCHOR BOLTS - NINE CENTS (\$.09) PER LB.

PRICE COVERING "A B & C" ON PAGE 1. DELIVERED AND ERECTED TWO HUNDRED SEVENTY EIGHT THOUSAND TWO HUNDRED FIFTY FOUR DOLLARS NINETY THREE CENTS (\$278,254.93) NOT INCLUDING CONCRETE - REINFORCING STEEL - ANCHOR BOLTS & EXCAVATIONS.

Monthly estimates with ten per cent ¹⁰⁰(20%) retained until the contract is approved and accepted will govern the payment to the Contractor.

All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sum and the total amount of the quantities at the unit prices.

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above stated compensation in the form of a standard agreement, and agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let.

The Contractor further agrees that he will complete this work in —200— working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C.E. Swann, Chief Engineer, not later than 2:00 o'clock P.M., _____

All bids are to be sealed and marked "Proposal for the Construction of a Coal Tipple and Belt Conveyor System as a Unit at the D.O. Clark Mine of The Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

LINK-BELT COMPANY.

Witness:

J. C. Hacker

By

[Signature]
VICE PRESIDENT

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
COAL TIPPLE - D.O. CLARK MINE
SUPERIOR WYOMING

Having visited the site and inspected the location of the proposed Coal Tipple, also having carefully examined the drawings and specifications for The Union Pacific Coal Company's coal tipple at the D.O. Clark Mine at Superior, Wyoming, the drawings as follows: Drawings No. 2146.31, 2146.31A, 2146.31B, 2146.31C, 2146.31D, 2146.31E, 2146.31F, 2146.31G, 2146.31H, 2146.31I, 2146.31J, 2146.31K, 2146.31L, 2146.31M, 2146.31N, and 2146.31P, drawings Nos. 1740.38 and 1940.35A included for the bidder's information, the bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

ITEM ONE (1). Tipple structure erected complete, including belt conveyor gallery, drive house at mine mouth, domestic fuel bin, refuse bin, car retarders, mechanical equipment, motors and control panel, structural steel, grating walks, stairs, grabing walks, stairs grating platforms, reinforced concrete floors, and covering, as per plans and specifications:

LUMP SUM BID EIGHTY SIX THOUSAND TWENTY DOLLARS ———— (\$ 86,020 ⁰⁰/₁₀₀)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting.) (Except as noted.)

ITEM TWO (2) 95 cubic yards concrete foundation in place.

TWENTY THREE DOLLARS TEN CENTS. (\$ 23 ¹⁰/₁₀₀) Per Cu. Yd.

3,000# Plain Steel reinforcing in place.

SEVEN & SEVEN-EIGHTHS CENTS. (\$.07875) Per Pound.

2,000# Anchor bolts and pipe sleeves in place.

NINE CENTS. (\$.09) Per Pound

NOTE: Unit Prices are to be written and numerical.

Remarks:

NO PATENTED MURRY DRIVE INCLUDED IN ABOVE LUMP SUM BID

Monthly estimates with ten per cent (10%) retained until the contract is approved and accepted will govern the payment to the Contractor.

All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sum and the total amount of the quantities at the unit prices.

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above-stated compensation in the form of a standard agreement, and agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let. The Contractor further agrees that he will complete this work in —200— working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief Engineer, not later than 2:00 o'clock P.M.

All bids are to be sealed and marked "Proposal for the Construction of a Coal Tipple at the D. O. Clark Mine of The Union Pacific Coal Company, at Superior, Wyoming.

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

LINK-BELT COMPANY.

Witness:

J. B. Hacker By [Signature]
VICE PRESIDENT

ALLEN & GARCIA CO.
Revised Bid
Nov. 22nd 1937

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM AND COAL TIPPLE AS A UNIT
D. O. CLARK MINE - SUPERIOR, WYOMING

Having visited the site and inspected the location of the proposed Belt Conveyor System and Three-Track Coal Tipple for The Union Pacific Coal Company's D. O. Clark Mine at Superior, Wyoming, also having carefully examined the drawings and specifications for the above, the drawings being designated by sheet numbers as follows: 2146.32, 2146.32A, 2146.32B, 2146.32C, 2146.32D, 2146.32E, 2146.32F, 2146.32G, 2146.32H, 2146.32I, 2146.32J, 2146.32K, 2146.32M, 2146.31, 2146.31A, 2146.31B, 2146.31C, 2146.31D, 2146.31E, 2146.31F, 2146.31G, 2146.31H, 2146.31I, 2146.31J, 2146.31K, 2146.31L, 2146.31M, 2146.31N, 2146.31P, also drawings Nos. P145, 1740.38 and 1940.35A included for the bidders' information, the Bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

BELT CONVEYOR SYSTEM:

ITEM ONE (1). The following machinery, structures and belt conveyor system erected complete as follows: Two Car Feeders and Two Trip Makers, completed, including foundations, Two Steel Hoppers and Feeders, Belt Conveyors, Belt Conveyor Drives, Structural Steel, Reinforced Concrete Bins, the erection of Two Rotary Mine Car Dumps, all as per plans and specifications:

Lump Sum Bid Two hundred ten thousand five thirty^{five} (\$ 210,535)⁰⁰
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

ITEM TWO (2). 42-oz. Duck, 48-inch, 6-ply National Brand Rubber Belts, 3/16" R.C. and 1/16" R.C. Backing, all belts to be made continuous during erection by vulcanizing the splices.

Lump Sum Bid Forty-four thousand eight ninety five (\$ 44,895)⁰⁰

ITEM THREE (3). 175.0 Cubic Yards Concrete Foundations, complete in place as per plans and specifications.

Forty-five (\$ 45)⁰⁰ Per Cu. Yd.
Above to include Anchor Bolts.

THREE-TRACK COAL TIPPLE:

ITEM ONE (1). Tipple structure erected complete, including belt conveyor gallery, drive house at mine mouth, domestic fuel bin, refuse bin, car retarders, mechanical equipment, motors and control panel, structural steel, grating walks, stairs, grating platforms, reinforced concrete floors, and covering, as per plans and specifications:

Lump Sum Bid Seventy-six thousand four sixty five (\$ 76,465)⁰⁰
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

95
20 (2). ~~2~~ cubic yards concrete foundation in place.

Twenty two Dollars (\$ 22 ⁰⁰) Per Cu. Yd.

3,000# Plain Steel reinforcing in place.

Seven and one Half cents (\$.07 ¹/₂) Per Pound.

2,000# Anchor bolts and pipe sleeves in place.

Ten cents (\$.10) Per Pound

NOTES: It is mutually agreed and understood that the Bidder bases this proposal on the specific condition of the successful Bidder being awarded a contract for the construction of the proposed belt conveyor system and coal tipple in their entirety.

Unit Prices are to be written and numerical.

Remarks:

Item #1 same remarks apply as to individual
prices for belt conveyor system and coal Tipple
No state sales tax or bonds included in
the above prices

Monthly estimates with ten per cent (~~20~~ ^{20%}) retained until the contract is approved and accepted will govern the payment to the Contractor.

~~All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sum and the total amount of the quantities at the unit prices.~~

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above stated compensation in the form of a standard agreement, and ~~agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal~~ provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let.

Contractor further agrees that he will complete this work in 200 working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief Engineer, not later than 2:00 o'clock P.M., _____.

All bids are to be sealed and marked "Proposal for the Construction of a Coal Tipple and Belt Conveyor System As a Unit at the D. O. Clark Mine of The Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

Allen & Garcia Co.

Witness:

William von Weding
Secy.

By L. von Perbault, T.P.

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM - D. O. CLARK MINE
SUPERIOR, WYOMING

Allen and Garcia⁶
Revised Bid
Nov. 22nd 1937

Having visited the site and inspected the location of the proposed Belt Conveyor System, also having carefully examined the drawings and specifications for The Union Pacific Coal Company's Belt Conveyor System at the D. O. Clark Mine at Superior, Wyoming, the drawings as follows: Drawings Nos. 2146.32, 2146.32A, 2146.32B, 2146.32C, 2146.32D, 2146.32E, 2146.32F, 2146.32G, 2146.32H, 2146.32I, 2146.32J, 2146.32K and 2146.32M, drawings Nos. 1740.38, P145 and 1940.35A included for the Bidder's information, the Bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

ITEM ONE (1). The following machinery, structures and belt conveyor system erected complete as follows: Two Car Feeders and Two Trip Makers, completed, including foundations, Two Steel Hoppers and Feeders, Belt Conveyors, Belt Conveyor Drives, Structural Steel, Reinforced Concrete Bins, the erection of Two Rotary Mine Car Dumps, all as per plans and specifications:

Lump Sum Bid Two hundred nineteen thousand six hundred ^{twenty-eight} (\$ 219,628⁰⁰)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting.) (Except as noted.)

ITEM TWO (2). 42-oz. Duck, 48-inch, 6-ply National Brand Rubber Belts, 3/16" R.C. and 1/16" R.C. Backing, all belts to be made continuous during erection by vulcanizing the splices.

Lump Sum Bid Forty-four thousand eight hundred ninety five (\$ 44,895⁰⁰)

ITEM THREE (3) 175 Cubic Yards Concrete Foundations, complete in place as per plans and specifications.

Forty-five dollars (\$ 45⁰⁰) Per Cu. Yd.
Above to include Anchor Bolts.

NOTE: Unit prices are to be written and numerical.

Remarks:

Item #1 covers complete belt conveyor system including
items #2 + #3 and vulcanizing of belt. #2 covers the cost of the
belt only delivered to the job. Item #3 covers the cost per
cubic yard of the foundations including the reinforcing steel as
well as the anchor bolts. Price based on the Kellogg Lumber Co
proposal with the understanding that their unit prices
include excavation and back fill.
No sales tax or Surety Bonds included in above prices

Monthly estimates with ten per cent (20%) retained until the contract is approved and accepted will govern the payment to the Contractor.

~~All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sums and the total amount of the quantities at the unit prices.~~

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above-stated compensation in the form of a standard agreement, and ~~agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal~~ provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let. The Contractor further agrees that he will complete this work in 200⁰⁰ working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief Engineer, not later than 2:00 o'clock P.M.,

All bids are to be sealed and marked "Proposal for the Construction of a Belt Conveyor System at the D. O. Clark Mine of The Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

Allen & Garcia Co.

Witness:

William von Wedding
Secy.

By J. von Perbandt, V.P.

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

NATIONAL EQUIPMENT CO.
SALES REPRESENTATIVE
101 WEST SECOND SOUTH STREET
TELEPHONE WASATCH 1722

SALT LAKE CITY UTAH



Nov. 19, 1937.

Union Pacific Coal Company,
Omaha, Nebraska.

Attention: Mr. Eugene McAuliffe,
President.

Gentlemen:

In accordance with your request we submit the following information as an addendum to our bid dated Nov. 3rd, 1937; covering the construction of the Tipple and Slope Conveyor for your mine at Superior, Wyoming.

- (1) If surety bond is not required you may make the following deductions in our prices

<u>Bid Item</u>	<u>Orig. Price</u>	<u>Deduction</u>	<u>Rev. Price</u>
<u>Separate Bids</u>			
Slope Conveyor	\$164,240.00	\$ 2464.00	\$161,776.00
Conveyor Belts	45,675.00	685.00	44,990.00
Tipple	99,400.00	1490.00	97,910.00
Total	\$309,315.00	\$ 4639.00	\$304,676.00
<u>Combined Bid</u>			
Slope Conveyor	\$164,240.00	\$ 2464.00	\$161,776.00
Conveyor Belts	45,675.00	685.00	44,990.00
Tipple	95,400.00	1430.00	93,970.00
Total	\$305,315.00	\$4579.00	\$300,736.00

Bids on concrete reinforcing steel and anchor bolts do not change.

Nov. 19, 1937.

- (2) If special "Murry Floating Drive" for shaker screens is omitted, we have quoted a deduction of \$2610.00. We would substitute a braced construction similar to the general construction shown on your design drawings but replacing the floating platform with a heavy horizontal girder to distribute the drive vibrations to rigid bracing along the center line of the columns on each side of the screen. Thru this braced construction this vibration would be dissipated into foundations and the ground. There would be no deduction in total tonnage of steel used.
- (3) It is understood that terms of payment on this contract shall be changed from 90% of the monthly estimates to 80% of monthly estimates. The balance of 20% to be held back by you until completion and acceptance of the construction covered by this contract.
- (4) Date of delivery and completion shall be changed to 200 days from date of signing of contract for this construction.

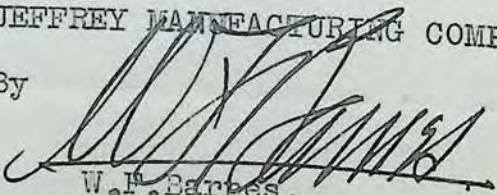
We believe that this letter, in addition to our original bid gives you all the information you have requested. Please let Mr. Horne in Denver know if any items are not entirely clear to you or if additional information is required.

As requested we are mailing this to you and will not call upon you except at your invitation.

Yours very truly,

JEFFREY MANUFACTURING COMPANY

By


W. F. Barnes,
Manager of Sales
Coal Preparation Division

BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS
300 W. PERSHING ROAD (THIRTY NINTH ST.) CHICAGO

November 19, 1937

Union Pacific Coal Company
Mr. Eugene McAuliffe, President
Rock Springs, Wyoming

Dear Mr. McAuliffe:-

This letter is supplementary to our bid made on your proposal form and submitted November 4th, 1937.

Since you are willing to grant us additional time to complete the work it will not be necessary to resort to any overtime either in the engineering department, the shops or the erection and naturally there are some economies secured by working on this basis. We understand that if the work can be completed in 193 days instead of 130 days, specified in our contract the schedule will meet with your requirements.

Very careful consideration has been given to your suggestion that we review our estimate with the idea of determining what economies in price can be made due to the time extension for completion which you are willing to grant.

We are, therefore, proposing to furnish
the equipment for the prices mentioned below:-

Revised price on Belt Conveyor system
only -- including quantities of concrete,
reinforced concrete, excavations,
reinforced steel and anchor bolts as
called for in your proposal form
TWO HUNDRED FOUR THOUSAND FIVE HUNDRED
DOLLARS . . . \$204,500.00

Revised price on steel tipple complete
only -- including quantities of concrete
foundations, excavations, reinforcing steel
and anchor bolts as called for in your
proposal form but not including Murry
drive
EIGHTY EIGHT THOUSAND SIX HUNDRED THIRTY ONE
DOLLARS . . . \$88,631.00

The price on the tipple equipment will be
increased by the sum of - \$2,790.00 if
the Murry patented drive platform is
included.

If you award us the contract for both the
Belt Conveyor system and its accessory equip-
ment and the Tipple, including the quantities
of concrete, foundations, excavations,
reinforced steel and anchor bolts as
specified on your proposal form, we shall
be pleased to furnish the equipment delivered
and erected for the sum of
TWO HUNDRED NINETY ONE THOUSAND TWO HUNDRED
SEVENTY TWO DOLLARS . . . \$291,272.00
including the patented Murry drive platform.

If the patented Murry drive platform is omitted
and in its place is substituted rigid structural
steel drive supports, there will be a reduction
of - \$2,790.00 making the contract price for
the combined equipment
TWO HUNDRED EIGHTY EIGHT THOUSAND FOUR HUNDRED
EIGHTY TWO DOLLARS . . . \$288,482.00

In view of your willingness to not require us to submit a Surety Bond covering the full contract price, we are willing to modify our terms of payment as follows:

On or before the 10th day of each month during the period of manufacture and construction we shall submit a complete estimate of all work done, material used and provided for use and other expenses connected with the manufacture, delivery and erection of the property covered by the contract during the previous months.

A payment of 80% of said estimate less previous payment on account shall be due and payable within 10 days thereafter. The balance shall be paid within 30 days after completion.

Terms of payment should be affected in no way should the equipment be damaged or destroyed after delivery at the site of installation by fire, the elements or by any cause unless damaged or destroyed through our own active fault or negligence.

On important and large work of this character we have found it of outstanding advantage to our clients to have them assign to us during the process of general design and detail, one of their best engineers to approve the designs and details while they are in the process of preparation. By following this procedure the very definite advantage is gained of making prompt and satisfactory decisions.

LINK-BELT COMPANY

SHEET NO. 4

DATE November 19, 1937

CONTINUATION OF LETTER TO Union Pacific Coal Company

Mr. Eugene McAuliffe, President

We are very appreciative of the cordial manner which has characterized the handling of this project and trust we shall have the continued pleasure of working with you in the development of this important plant.

Very truly yours

LINK-BELT COMPANY

George. Jaxon

Engineer
Coal Preparation Division

GSJaxon:bm

WALK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

300 W. PERSHING ROAD (THIRTY-NINTH ST.) CHICAGO
November 19, 1937

Union Pacific Coal Company
Mr. Eugene McAuliffe, President
Rock Springs, Wyoming

Dear Mr. McAuliffe:-

This letter is supplementary to our bid made on your proposal form and submitted November 4th, 1937.

Since you are willing to grant us additional time to complete the work it will not be necessary to resort to any overtime either in the engineering department, the shops or the erection and naturally there are some economies secured by working on this basis. We understand that if the work can be completed in 193 days instead of 130 days, specified in our contract the schedule will meet with your requirements.

Very careful consideration has been given to your suggestion that we review our estimate with the idea of determining what economies in price can be made due to the time extension for completion which you are willing to grant.

We are, therefore, proposing to furnish
the equipment for the prices mentioned below:-

Revised price on Belt Conveyor system
only -- including quantities of concrete,
reinforced concrete, excavations,
reinforced steel and anchor bolts as
called for in your proposal form
TWO HUNDRED FOUR THOUSAND FIVE HUNDRED
DOLLARS . . . \$204,500.00

Revised price on steel tippie complete
only -- including quantities of concrete
foundations, excavations, reinforcing steel
and anchor bolts as called for in your
proposal form but not including Murry
drive
EIGHTY EIGHT THOUSAND SIX HUNDRED THIRTY ONE
DOLLARS . . . \$88,631.00

The price on the tippie equipment will be
increased by the sum of - \$2,790.00 if
the Murry patented drive platform is
included.

If you award us the contract for both the
Belt Conveyor system and its accessory equip-
ment and the Tippie, including the quantities
of concrete, foundations, excavations,
reinforced steel and anchor bolts as
specified on your proposal form, we shall
be pleased to furnish the equipment delivered
and erected for the sum of
TWO HUNDRED NINETY ONE THOUSAND TWO HUNDRED
SEVENTY TWO DOLLARS . . . \$291,272.00
including the patented Murry drive platform.

If the patented Murry drive platform is omitted
and in its place is substituted rigid structural
steel drive supports, there will be a reduction
of - \$2,790.00 making the contract price for
the combined equipment
TWO HUNDRED EIGHTY EIGHT THOUSAND FOUR HUNDRED
EIGHTY TWO DOLLARS . . . \$288,482.00

BELT COMPANY

SHEET NO.

3

DATE November 19, 1937

CONTINUATION OF LETTER TO

Union Pacific Coal Company

Mr. Eugene McAuliffe, President

In view of your willingness to not require us to submit a Surety Bond covering the full contract price, we are willing to modify our terms of payment as follows:

On or before the 10th day of each month during the period of manufacture and construction we shall submit a complete estimate of all work done, material used and provided for use and other expenses connected with the manufacture, delivery and erection of the property covered by the contract during the previous months.

A payment of 80% of said estimate less previous payment on account shall be due and payable within 10 days thereafter. The balance shall be paid within 30 days after completion.

Terms of payment should be affected in no way should the equipment be damaged or destroyed after delivery at the site of installation by fire, the elements or by any cause unless damaged or destroyed through our own active fault or negligence.

On important and large work of this character we have found it of outstanding advantage to our clients to have them assign to us during the process of general design and detail, one of their best engineers to approve the designs and details while they are in the process of preparation. By following this procedure the very definite advantage is gained of making prompt and satisfactory decisions.

COM SHE
YMA
K-BELT COMPANY

November 19, 1937

Union Pacific Coal Company

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
~~and Eugene, Portland, Portland, Portland~~

CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

300 W. PERSHING ROAD (THIRTY-NINTH ST.) CHICAGO

We are very appreciative of the cordial manner
which has characterized the handling of this project and
trust we shall have the continued pleasure of working with
you in the development of this important plant.

Very truly yours

LINK-BELT COMPANY

George E. Jaxon

Engineer

Coal Preparation Division

GSJaxon:bm

LINK-BELT COMPANY

Dear Mr Mc Auliffe

The writer will be in
Omaha Monday and will call you
on the telephone to advise what
Hotel & Room number he may be
reached at.

With very kind regards.

Very truly yours.

George S. Jayou.

11/20/37.

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



E. C. HORNE
SALES REPRESENTATIVE
ERNEST & CRANMER BUILDING

November 19, 1937

Mr. Eugene Mc Auliffe, President,
The Union Pacific Coal Co.,
Omaha, Nebraska

Dear Sir:

We are just in receipt of a letter of instructions from Mr. G. B. Pryde, with respect to the proposals we submitted on the construction of the tipple and belt conveying system for your D. O. Clark Mine of Superior, Wyoming.

This is to advise you that we will be very pleased to submit for your consideration a revised proposal in line with the instructions as outlined by Mr. Pryde.

1. Eliminate the cost of Surety Bond.
2. Accepting the arrangement outlined of the Union Pacific Coal Company retaining 20% of monthly payments on contract price in lieu of Surety Bond.
3. Submitting quotation on Jeffrey Rigid Drive for the Shaking Screens in place of the Link-Belt Murray Drive with the understanding there should be no change in the general design of the tipple or any reduction in the total amount of steel for the tipple construction.
4. We can complete the contract within the maximum period of 200 days allowable.

Because of this modification in your original form of bid which we filled out and submitted, we will submit to you a revised quotation conforming to the outline above and have it in your hands by Monday morning, November 22nd, and I have communicated your wishes in this matter to our principals and we will be governed accordingly.

Yours very truly,

ECH:GCP

C. C. to Mr. G. B. Pryde,
Rock Springs, Wyo.

THE JEFFREY MANUFACTURING CO.,
Per *E. C. Horne*

November 18, 1937

Mr. E. C. Horne
Jeffrey Manufacturing Company
Denver, Colorado

Dear Mr. Horne:

Referring to your proposals of November 1, 1937, for the construction of the tippie and belt conveying system at our D. O. Clark Mine, Superior, Wyoming:

This matter has been given consideration, and we have decided as follows:

1. To waive the necessity of a surety bond.
2. In lieu thereof, to retain twenty per cent of the monthly payments on the contract price until the job is completed. That is, each month the work will be estimated, and twenty per cent of the payments retained until the conclusion of the contract and the acceptance of the completed project.
3. We would be willing to agree to a change from the Link-Belt-Murray Drive to your own type of rigid drive, with the understanding that we would not allow any change in the general design of the tippie except such changes necessitated by changing from the Link-Belt drive to the drive of your own design, nor would we allow any reduction in the total amount of steel for the tippie construction.
4. Also, while you mention no time, we would be willing to allow a maximum period of 200 days from the time of signing the contract to the completion of the project.

Our thought is that, with these modifications, you might desire to recast your bid, giving us a revised estimate, being very careful to set up the amount of your bid for each project, that is, one for the tippie and one for the conveying system, separately.

If you are agreeable to doing this, will you please get in touch with your Company at Columbus, determining if they are willing to make a revised bid on this basis, and, if so, will you please send the revised proposal to Mr. Eugene McAuliffe, President of The Union Pacific Coal Company, 1416 Dodge Street, Omaha, Nebraska, by mail, so as to reach him not later than Monday, November 23rd, sending copy to me at Rock Springs. It will not be necessary for either you or any representative of the Jeffrey people to go to Omaha or come to Rock Springs, except on the request of Mr. McAuliffe.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe. ✓

At Rock Springs, Wyoming
November 16, 1937

The Stearns-Roger Manufacturing Co.
1718 California Street
Denver, Colorado

Attention: Messrs. Brennan and Cole

Gentlemen:

On my arrival yesterday, Mr. Pryde handed me your wire of the 15th.

A careful analysis of your message would indicate that you are definitely certain that you could effect a saving in the cost of our Superior installation, but you are not willing to even hazard a portion of your profit by submitting a firm bid, which we have said to you repeatedly is the only basis upon which we propose to construct the Superior plant.

Perhaps we are wrong, and may pay more for the installation than we anticipated, but, having a substantial amount of construction work to do in the years to come, we jointly decided that it was worth while to try, at least once, the theory of asking for a definite, completed cost, eliminating the speculative element from our consideration.

I regret that you have not submitted anything new in your wire, and it will be necessary for us to award the business to one of the companies who are willing apparently to bid on the basis of our presentation.

Very sincerely yours,

Original Signed:
EUGENE MCANULIFFE

CC - Mr. George B. Pryde.

COPY OF WESTERN UNION TELEGRAM

1937 NOV 15 PM 3 46

KHA19 180 DL 1/138--DENVER COLO 15 234P
GEORGE B PRYDE--

GENERAL MANAGER UNION PACIFIC CO RW--

DUE TO THE LARGE SIZE OF YOUR SUPERIOR PROJECT INVOLVING MANY CLASSES OF EQUIPMENT WHICH WE GET SPECIAL DISCOUNTS ON WE FIRMLY BELIEVE THAT THROUGH A COOPERATIVE METHOD OF HANDLING YOU CAN CUT THE COST OF THIS PROJECT MANY THOUSAND DOLLARS STOP THIS MORNING WE GAVE YOU JUST A FEW OF THE SPECIAL DISCOUNTS WHICH WE ENJOY AND UNDER A COOPERATIVE METHOD OF HANDLING WOULD BE PASSED ON TO YOU STOP WE WOULD LIKE TO HANDLE THIS PROJECT FOR YOU ON PRACTICALLY THE SAME BASIS AS YOUR POWER PLANT STOP THIS PERMITS YOU TO TAKE ADVANTAGE OF CONFIDENTIAL DISCOUNTS SHOP COSTS ORGANIZED CONSTRUCTION FORCE WHICH WILL ASSURE YOU OF A HIGH CLASS OPERATING JOB AT LOWEST COST AND THE JOB WILL BE DONE TO CONFORM WITH A DEFINITE SCHEDULE STOP IF THE BIDDERS PROPOSALS SEEM EXCESSIVE WE ARE SURE YOU WILL FIND IT TO YOUR ADVANTAGE TO GIVE A COOPERATIVE PROPOSITION CONSIDERATION AND WOULD APPRECIATE AN OPPORTUNITY TO TALK WITH YOU AND MR MCAULIFFE STOP WE ARE READY TO LEAVE FOR ROCKSPRINGS ANY TIME TO PRESENT FURTHER FACTS AND FIGURES--

THE STEARNS ROGER MFG CO BRENNAN COLE

DEFERRED	SHIP RADIOGRAM
NIGHT LETTER	
DAY LETTER	
DAY RATE	
DAY LETTER	

Patrons should check class of service desired; otherwise message will be transmitted as a full-rate communication.

AL TIPPLE.

Link Belt Co.

97,321.75^v

A+G Co.

92,657.00^v

BELT CONV. SYSTEM.

LINK BELT Co.

206,951.33^v

A+G Co.

225,128.00^v

WE WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

1201-S

WESTERN UNION (59)

R. B. WHITE
PRESIDENT

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

SYMBOLS

DL = Day Letter
NM = Night Message
NL = Night Letter
LC = Deferred Cable
NLT = Cable Night Letter
Ship Radiogram

Time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

1937 NOV 17 AM 11:00

Received at

KHA 24 10=CHICAGO ILL NOV 17 1130A

EUGENE MCAULIFFE=

THE UNION PACIFIC COAL CO RW=

RETEL OUR REPRESENTATIVE WILL BE YOUR OMAHA OFFICE MONDAY
MORNING=

ALLEN AND GARCIA CO.

THE QUICKEST, SUREST AND SAFEST WAY TO SEND MONEY IS BY TELEGRAPH OR CABLE

COPY OF
WESTERN UNION TELEGRAM

DAY	DEFERRED
NIGHT	LETTER
SHIP	RADIOGRAM

Senders should check class of service required; otherwise message will be transmitted as a full-rate communication.

Rock Springs - November 17, 1937

Allen & Garcia Co.
McCormick Bldg.
Chicago, Ill.

WIRE SIXTEENTH. CANNOT AGREE TO ANY CHANGES IN DESIGN OF STRUCTURE OTHER THAN THOSE NECESSARY TO SUBSTITUTING YOUR TYPE SCREENS, OTHERWISE PREFER TO STAND ON ORIGINAL SPECIFICATIONS ENTIRELY. SUGGEST YOU MAKE DEFINITE DIVISION BETWEEN COST TIPPLE AND CONVEYOR JOBS, SENDING REPRESENTATIVE TO MY OFFICE, OMAHA, MONDAY TWENTY SECOND FOR DISCUSSION DETAILS.

Eugene McAuliffe.

COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

1201-S

WESTERN UNION

R. B. WHITE
PRESIDENT

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

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SYMBOLS

DL = Day Letter
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Ship Radiogram

all-rate
Cable-
ess its de-
character is in-
ed by a suitable
symbol above or pre-
ceding the address.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

Received at

KH63 83 NL=CHICAGO ILL 16
THE UNION PACIFIC COAL CO=
ROCKSPRINGS WYO=

RETEL SIXTEENTH SATISFACTORY TO WITHHOLD TWENTY FIVE PERCENT
UNTIL JOB ACCEPTED IF YOU WAIVE ALL BONDS STOP NEW PRICE
TIPPLE EIGHTY FIVE THOUSAND DOLLARS OUR SHAKER SCREEN AND
NEW DESIGN OF STRUCTURE NOT INCLUDING BOND STOP TOTAL LUMP
SUM PRICE TIPPLE AND BELT CONVEYOR COMPLETE WITHOUT BOND
TWO HUNDRED EIGHTY SEVEN THOUSAND DOLLARS STOP HAVE NOT HAD
TIME TO FURNISH WEIGHTS BUT GUARANTEE STRUCTURE SAME
RIGIDITY AS RELIANCE SUGGEST YOU PERMIT US TO SEND
REPRESENTATIVE TO ROCK SPRINGS TO FURNISH DETAILS PLEASE
WIRE=

ALLEN & GARCIA CO_{LA} T AND SAFEST WAY TO SEND MONEY IS BY TELEGRAPH OR CABLE

Postal Telegraph

THE INTERNATIONAL SYSTEM

Commercial
Cables



All America
Cables

Mackay

Radio

This is a full rate Telegram, Cablegram or Radiogram unless otherwise indicated by signal in the check or in the address.

DL	DAY LETTER
NL	NIGHT LETTER
NM	NIGHT MESSAGE
LCO	DEFERRED CABLE
NLT	NIGHT CABLE LETTER
	RADIOGRAM

STANDARD TIME
INDICATED ON THIS MESSAGE

8 V R 68 1 EXTRA

BX CHICAGO ILLS 315 PM NOV 16-1937

EUGENE MCAULIFFE PRES UNION PACIFIC COAL CO

ROCK SPRINGS WYO

I HAVE REVIEWED WITH BURNELL LAYOUT AND PRICES COVERING YOUR COAL PREPARATION PLANT STOP JUST PHONED JAXON AND PHILIPS OUR THOUGHTS IN THE MATTER IN VIEW OF PRESENT MARKET CONDITIONS STOP AS TO OUR FINANCIAL RESPONSIBILITY WE ARE PREPARED TO MEET ANY CONDITIONS TO SUPPORT OUR GUARANTEE STOP WE CAN DO A JOB FOR YOU THAT WILL PROVE TO BE A SOURCE OF SATISFACTION TO US BOTH.

ALFRED KAUFFMANN, PRESIDENT, LINK BELT CO

240 PM

Telephone Your Telegrams to Postal Telegraph

TO DO TODAY

26

26

24

27

26

25

26

13

129

154

26

180

193

MONDAY, AUGUST 9, 1937

JULY							AUGUST							SEPTEMBER						
Su	Mo	Tu	We	Th	Fr	Sa	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Su	Mo	Tu	We	Th	Fr	Sa
							1	2	3	4	5	6	7							
							8	9	10	11	12	13	14							
							15	16	17	18	19	20	21							
							22	23	24	25	26	27	28							
							29	30	31											

221st Day

Patented

144 Days to Come

Superior Coal Company

GILLESPIE, ILLINOIS

Nov. 9, 1937

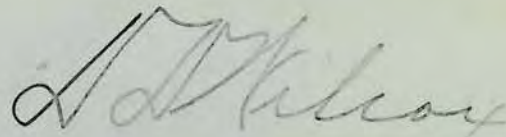
Mr. Eugene McAuliffe,
President,
The Union Pacific Coal Co.
Omaha, Nebraska.

Dear Mr. McAuliffe:-

Today I received, not only the back numbers of the Employees' Magazines, but also a copy of the Code of Standards from Mr. Pride, and I am grateful for all of this.

It seems as though that I could have handled your visit here a little better, as every one of our mine officials that I have talked to since your visit have said to me that they would have liked to have met you. The day after your visit here our Engineering office place on my desk a copy of your book, Railway Fuel, and I am certain that if you visit us again there will be several questions asked you about some parts of this book. May I extend to you a whole hearted invitation to return again at your convenience.

Yours very truly,



General Superintendent

Rock Springs - November 8, 1937

Mr. Eugene McAuliffe:

I have yours of November 5th regarding your inspection of the Link-Belt and Jeffrey tipples, and have turned same over to our Engineering Department and Mr. Bayless.

The cleaning of coal represents a very large expense in operating the Link-Belt tipple.

George Amge

353-12

Omaha - Nov. 8, 1937.

Mr. G. B. Pryde:

Your 'phone statement of the amount of bids on the D. O. Clark tipple and conveyor installation rather shocked me, the original AFE amounting to \$201,300, the estimate of costs which we took to the Chicago meeting, which includes \$23,774.99, engineering and contingencies, totalling \$261,200.

Just at this moment I am waiting to hear from Mr. Knickerbocker, who wants me to attend a meeting with one of the dam engineers and G. W. Evans, with some man working on coal-coking. I wired him I could be in Portland or Seattle on the 12th and if that works, I can be back in Rock Springs the morning of the 15th. I will keep you advised as to my arrival.

Original Signed
EUGENE MCAULIFFE

Omaha - Nov. 5, 1937.

Mr. G. B. Pryde:

When the contract for the D. O. Clark tippie and conveyor belt is definitely determined, please advise Mr. R. S. Chisler, The Goodyear Tire & Rubber Company, Inc., 101 North 9th Street, Omaha, Nebraska, obliging.

Original Signed
EUGENE MCAULIFFE

GOODYEAR
YEAR TIRE & RUBBER COMPANY, INC.
AKRON, OHIO

JA 4190

R. S. CHISLER
MECHANICAL GOODS SALES

101 NORTH 9TH STREET
OMAHA, NEB.

Omaha - Nov. 5, 1937.

Mr. C.E. Matthai:

Mr. W. F. Patterson of the St. Paul Indemnity Company wrote me Nov. 4th stating that the best rate he could make on security bond on our tipple would be 1 per cent of the contract price regardless of the penalty of the bond.

As this contract will approximate \$200,000, the cost of the bond would be \$2000. I am inclined to think I will try to work out some kind of a personal bond such as we used with the Utah Construction Co.

Original Signed
EUGENE MCAULIFFE

Omaha - Nov. 5, 1937.

Mr. G. B. Fryde:

I visited all four mines (outside) of the Superior Coal Co. at Gillespie on Monday, Nov. 1, noting particularly the two new tipples - one by Link-Belt, the other by Jeffrey.

Mr. D. D. Wilcox, Gen. Supt., brought out his superintendents, mine managers and his engineer and I found them very proud of both tipples, Mr. Wilcox leaning a little bit toward the Jeffrey, largely because of its attractive appearance. I examined the Link-Belt screen device and look upon it as entirely practicable - no vibration on the tipple, the screen device moving about one-sixteenth of an inch.

I noticed considerable vibration in the tipple due to the cross-movement of the shaking-picking tables - Mr. Wilcox advising it was their intention to add some steel to overcome this situation.

There was very little screen vibration on the Jeffrey tipple and no cross vibration due to the fact that they use metal conveyors rather than shaking conveyors, used by Link-Belt. I was astonished at the number of blue-band pickers - 20 men on the Link-Belt tipple where 2700 tons are being hoisted in seven hours,

Original Signed
EUGENE MCAULIFFE

RESIDENT
VICE PRES.
TREASURER

Saint Paul Mercury
INDEMNITY COMPANY
OF SAINT PAUL

M.D. PRICE, Vice Pres.
G.R. WENTZ, Secretary
R.B. CLARK, Asst. Secy.
W.F. SOMERVILLE, Asst. Secy.

Wm. F. Patterson, Agent
Insurance
1017 First Nat'l Bank Bldg.
Omaha, Nebraska
Phone Ja. 6260

SAINT PAUL, MINNESOTA

November 4, 1937

Mr. Eugene McAuliffe, President
Union Pacific Coal Company
326 Union Pacific Building
1416 Dodge Street
Omaha, Nebraska

Dear Mr. McAuliffe:

Recently I talked with you in your office regarding the contract you plan to let soon for a steel tipple and a conveyor belt.

You will recall that you gave me a list of four contracting firms who are bidding on this business and you asked me what our company, the St. Paul Mercury Indemnity Company, would do in the way of rate on this business.

I am advised by my Home office now that the conference rate on this business is $1\frac{1}{2}\%$ of the contract price regardless of the penalty of the bond.

Our rate on this class of business will be 1% applied in the same fashion as the conference rate, that is against the contract price.

I believe our rate of 1% is the lowest you will find on this class of work and while I cannot tell you definitely that we would write a bond for all of the contractors bidding, I feel rather confident that they will qualify for a bond should they get the job.

What we would like to ask is that in case you consider us for the bond we be permitted to look over the last financial statement of the successful bidder upon which we can promptly make a decision as to whether we would execute as surety or not.

I hope that this rate is agreeable and will be of some benefit to you and I should like very much to take care of this business at the time it comes up.

Yours very truly,
W.F. Patterson

WFP/MM

Rock Springs - November 4, 1937

Mr. Eugene McAuliffe:

The prints on the D. O. Clark Mine coal tipple,
returned by Roberts and Schaefer, referred to in your letter
of November 1st, have been received and turned over to Mr. Swann.

Eugene McAuliffe

Nov. 3, 1937.

Mr. F. S. Pfahler, Pres.,
Superior Coal Co.,
400 W. Madison St.,
Chicago, Ill.

Dear Fred:

Yours of the 29th on my visit to Gillespie:

I spent four hours with Mr. Wilcox and his staff yesterday looking at your four tipples. I found Mr. Wilcox leans a little bit to the Link-Belt and is very proud of the Jeffrey tipple, his engineer favoring the Jeffrey installation.

I had a delightful day, was treated most kindly and picked up a good deal of information. Standing over your shafts, I detected the old Illinois upcast smell, the first time in some years, all our fans on exhaust.

Very sincerely yours,

Original Signed
EUGENE MAULIFFE

Superior Coal Company

CHICAGO AND NORTH WESTERN RAILWAY COMPANY COAL PROPERTY
400 WEST MADISON STREET
CHICAGO

F. S. PFAHLER
PRESIDENT

October 29, 1937

Mr. Eugene McAuliffe, President,
Union Pacific Coal Company,
1416 Dodge St.,
Omaha, Nebraska.

Dear Gene:

Replying to your letter of October 27 with reference to a visit to our mines to inspect both the Link-Belt and Jeffrey screens, on November 2:

You can rest assured we shall be delighted to have you visit our mines and while I cannot be in Gillespie on that date, Mr. D.D. Wilcox, our General Superintendent, will be pleased to take you around and show you anything you desire to see.

The best way for you to go from St. Louis is over the Illinois Terminal. They have a train that leaves St. Louis at 8:40 in the morning, arriving Gillespie at 10:10 A.M. Go direct to our office which is two blocks north of the Illinois Terminal station. Mr. Wilcox will be waiting to take you wherever you wish to go.

You can return to St. Louis leaving Gillespie at either 2:10 or 4:40 in the afternoon.

If you are sure you will be there on November 2 and will go out on the 8:40 train, I suggest you write to Mr. Wilcox direct at Gillespie and he will be very glad to meet you with his car on your arrival at Gillespie. I am sending him a copy of this letter.

With very best wishes and hoping to see you soon,

Yours very truly,

F. S. Pfahler

FSP-GB

Rock Springs - October 30, 1937

Mr. Eugene McAuliffe:

The McNally people telephoned Mr. Swann Thursday and told him they would be unable to get their bid for the D. O. Clark Mine tipple here until November 3rd. I have told them that would be satisfactory. I have also told the McNally people that they should mail the bid and not bring it to Rock Springs. So far, the Link-Belt and Allen & Garcia people have not asked for an extension.

George M. Mays

Omaha - Nov. 1, 1937.

Mr. G. B. Pryde:

I am returning to you today via registered railroad baggage the prints returned by Roberts and Schaefer on the D. O. Clark Mine coal tipple.

Original Signed
EUGENE MCAULIFFE,
Per R. W. P.

Oct. 31, 1937.

Mr. L. von Perbandt, Treas.,
Allen & Garcia Co.,
332 S. Mich. Ave.,
Chicago, Ill.

Dear Mr. von Perbandt:

Your letter of the 30th re delay in submitting
bid for our D. O. Clark Mine coal tippie and belt conveyor system,
Superior, Wyoming:

It will be entirely satisfactory for you to mail
the bid on Tuesday or even Wednesday, next.

Sincerely yours,

Original Signed
EUGENE McCAULIFFE

ELC

cc: Mr. G. B. Pryde

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Oct. 30th, 1937.

Mr. Eugene McAuliffe, President,
The Union Pacific Coal Co.,
1416 Dodge Street,
Omaha, Nebraska.

Dear Mr. McAuliffe:-

During our last conference in connection with the coal tipple and belt conveyor system for Superior, Wyoming, it was requested that bids be submitted on November 1st. We have completed our gathering of data governing our proposal and expect to have it ready for formal submission so that we will be able to mail it not later than Tuesday. 172

Trusting that this will be satisfactory and that it will not seriously inconvenience you, we beg to remain,

Yours very truly,

ALLEN & GARCIA COMPANY

BY

L. von Perbandt

LVP:HL

At Rock Springs, Wyoming
October 27, 1937

Mr. F. S. Pfahler, President
Superior Coal Company
400 West Madison Street
Chicago, Illinois

My dear Fred:

I would like to visit your new Link-Belt
tipple in Montgomery County on Tuesday, November 2nd.
Do you mind asking your Superintendent to let me
look the tipple over? What I wish particularly to
investigate is the Link-Belt type of screens. And
I would perhaps like to see your new Jeffrey tipple,
also.

Kindly advise me at Omaha, if this will
be satisfactory to you.

Sincerely yours,

Original Signed:
EUGENE MCANULIFFE

Jeffrey Mfg. Co.
H. C. Horns Machy Co.
315 Ernest & Gramer Bldg.,
Denver, Colo.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

McNally-Pittsburgh Mfg. Corp.,
Pittsburgh, Kans.

Link-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Jeffrey Mfg. Co.
40 E. C. Horns Mchgy Co.
215 Ernest & Gruner Bldg.
Denver, Colo.

Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

McNally-Pittsburgh Mfg. Corp.,
Pittsburgh, Kans.

Link-Bolt Co.,
300 W. Forthing Road,
Chicago, Ill.

At Rock Springs, Wyoming
October 27, 1937

Mr. E. C. Horne
The Jeffrey Manufacturing Company
Ernest & Cranmer Building
Denver, Colorado

Dear Mr. Horne:

I have copy of your letter of October 25th addressed to me at Omaha.

After discussing the matter with Mr. Pryde this morning, we are agreed that there is no necessity for Mr. Barnes's personally bringing his proposition to Rock Springs. In fact, I would prefer that you follow the routine which we have requested the other companies to follow, i.e., send your proposition, with all supplementary matter, to us at Rock Springs, a delay of two or three days not causing us any embarrassment.

After Mr. Pryde wires me that all four bids are received, I will return to Rock Springs, and we will attempt to analyze same, thereafter calling on the representative of the successful bidder to meet us with reference to details of the contract, etc. Among other things I am looking into is the cost of the security bond. If same becomes unduly high, we may desire to work out a personal bond, such as has been given us by the officers of the Utah Construction Company on a contract amounting to more than a quarter million dollars.

If bids received are relatively close, we, of course, may wish to see two or more of the bidders' representatives, but I do not wish to be a party to amendments that will change prices except as required by changes in the details of the construction.

Yours very truly,

Original Signed:
EUGENE MCANULIFFE

CC - Mr. George B. Pryde.

Rock Springs - October 25, 1937

Mr. Eugene McAuliffe:

Yours of October 23rd:

When the bids have been made and the contract awarded,
we will give the name of the successful bidder to the Stearns-
Roger Manufacturing Company.

George Sample

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



E. C. HORNE
SALES REPRESENTATIVE
ERNEST & CRANMER BUILDING

October 25, 1937

Mr. Eugene Mc Auliffe, President,
The Union Pacific Coal Co.,
Omaha, Nebraska

Dear Sir:

In connection with proposals for the D.O. Clark Mine at Superior, Wyoming on which it was requested that we submit proposals and have them in your hands at Rock Springs, Wyoming November 1st, I am just in receipt of a telegram from Mr. W. F. Barnes, Manager, Coal Preparation Division, which message I am inclosing, expressing the inability of the Jeffrey Mfg. Company to have their proposition ready to submit to you until November 3rd.

As indicated in the telegram, Mr. Barnes is personally coming to Rock Springs to present our proposition and will arrive on Train 49 at Green River at 11:40 A.M. November 3rd, and I will meet him there and bring him to Rock Springs, where he will be able to present our proposal to you on that date.

While I regret his delay for the two days beyond the time limit you have established, I am, of course, without any information as to its cause other than as contained in the telegram and I am following instructions from my Home Office in acquainting you with this fact, with the sincere hope that this slight delay will not be the source of any inconvenience or annoyance to your company. Copies of this letter are being forwarded to Mr. George Pryde and to Mr. C. Swan.

Yours very truly,

THE JEFFREY MANUFACTURING CO.
Per *E. C. Horne*

ECH:GCP

C. C. to Mr. G. Pryde
Mr. C. Swan

Postal Telegraph

THE INTERNATIONAL SYSTEM

Commercial
Cables



All America
Cables

Mackay

Radio

This is a full rate Telegram, Cablegram or Radiogram unless otherwise indicated by signal in the check or in the address.

DL	DAY LETTER
NL	NIGHT LETTER
NM	NIGHT MESSAGE
LCO	DEFERRED CABLE
NLT	NIGHT CABLE LETTER
	RADIOGRAM

STANDARD TIME
INDICATED ON THIS MESSAGE

Form 16A
CB277 19 SER

PJ COLUMBUS OHIO 25 330P

1937 OCT 25 PM 2 19

E C HORNE MACHINERY CO

E C HORNE 315 ERNEST & CRANMER BLDG DENVER

ARRIVING GREENRIVER 11:40 AM ON FORTY NINE. NOVEMBER THIRD. WILL

YOU ADVISE UNION PACIFIC UNABLE PRESENT PROPOSITION BEFORE THEN

JEFFREY MFG CO W F BARNES.



COPY TO MR. EUGENE MC AULIFFE, PRESIDENT, UNION PACIFIC COAL CO.

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



October 23, 1937

Mr. G. S. Jaxon, Engineer, Coal Prep. Division,
Link-Belt Company,
500 West Pershing Road,
Chicago, Illinois

Dear Sir:

We wish to acknowledge receipt of your letter at this office of October 20th, with a quotation to the Jeffrey Manufacturing Company on 1 - Link Belt Patented "Murry" Screen Drive Suspended Platform, together with your blueprint No. CE-25727, all as requested by Mr. Eugene Mc Auliffe, President, Union Pacific Coal Company.

This information together with your quotation and blueprint has been forwarded to our principals to be incorporated in the proposal they are preparing to submit to the Union Pacific Coal Company, and we appreciate your quotation and the receipt of this information.

Yours very truly,

THE JEFFREY MANUFACTURING CO.,
Per

E. C. Horne

RCR:GCP

Copies sent to:

Mr. Eugene Mc Auliffe - Omaha
Mr. G. B. Pryde, Rock Springs
Mr. C. E. Swann, Rock Springs
Mr. W. F. Barnes, Columbus

Omaha - October 23, 1937.

Mr. G. B. Pryde:

Mr. Cole of the Stearns Rogers Company called today. I promised to mention his firm to the successful contractor for the D. O. Clark Tipple. At the same time we should give the name of the successful contractor to Stearns Rogers.

EUGENE A. WILF

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS
300 W. PERSHING ROAD (THIRTY-NINTH ST.) CHICAGO

Mr. Thomas McNally
McNally-Pittsburg Coal Company
Pittsburg, Kansas

Gentlemen:

At the request of Mr. Eugene McAniff, President, Union Pacific Coal Company, Rock Springs, Wyoming, we take pleasure in quoting you for Screen Drive Suspended Platform, as per the accompanying blue print GE-25797, as follows:

ONE Link-Belt Patented "Hurry" Screen Drive Suspended Platform to accommodate Purchaser's crank shaft and attendant parts, necessary for 10'0" wide balanced run-of-mine Shaking Screens, as shown on the Union Pacific Coal Company's blue print No. 2146-31-J. The Suspended Platform will consist of the necessary heavy structural members with solid bottom steel plate arranged for supporting concrete counterbalance, eight heavy steel hanger arm castings complete with coupling bolts and bored for 3-7/16" diameter steel pins, eight rugged steel hanger shaft bearing castings bored for and fitted with graphite bronze bushings, four special steel hanger castings bored for 3-7/16" hanger shafts, eight steel hanger shafts 3-7/16" diameter, 3' - 8-5/8" long with ends drilled and tapped for grease cups and necked for and fitted with split set collars, all complete for suspending from Purchaser's Structure, for the sum of \$3,960.00 net f.o.b. Chicago, Illinois with freight allowed to Superior, Wyoming.

The weight of the material covered by the above quotation is approximately 17,000 pounds.

Our above price does not include the Run-of-Mine Shaking Screens, Screen Connecting Rods, Crank Shaft with its four heavy Bearings, two Flywheel Pulleys, Set Collars, V-Belt Drive, Drive Guard and Motor.

It will be necessary for the Purchaser to provide the necessary Concrete Counterbalance for Motor and Drive and 4" concrete

floor on Suspended Platform.

The Screens as detailed on the Union Pacific Coal Company's blue print No. 3146-S1-J, which you have, are approximately 5,000 pounds out of balance; on account of this we, in our bid to the Union Pacific Coal Company are figuring on making all plates in the lower shaking screen of 3/8" steel, thus effecting a closer balance of this unit and avoiding the introduction of an excessive amount of concrete counterbalance in the Suspended Platform.

By following the above procedure, longer life to the screen in question will result and it will only be necessary for you to include sufficient concrete counterbalance to offset the weight of Electric Motor, V-Belt Drive and Guard.

If weight is not added to the Lower Shaking Screen in the manner described, it will be necessary for you to include about 25,000 pounds of additional Concrete Counterbalance in the Suspended Platform.

Copy of this quotation is being mailed to the Union Pacific Coal Company.

We are

Yours very truly

LINE-BELT COMPANY

G. S. Jaxon
Engineer
Coal Preparation Division

GS Jaxon/w

Copies to:

Mr. Eugene McAuliffe, Pres.
Union Pacific Coal Co.
1416 Dodge Street
Omaha, Nebraska

Mr. C. B. Pryde, V.P.
Union Pacific Coal Company
Rock Springs, Wyoming

Union Pacific Coal Company
C/o C. E. Swann, Chief Engineer
Rock Springs, Wyoming

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA

CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

300 W. PERSHING ROAD (THIRTY-NINTH ST.) CHICAGO

Mr. John A. Garcia
Allen & Garcia Company
McCormick Building
Chicago, Illinois

Gentlemen:

At the request of Mr. Eugene McAuliffe, President, Union Pacific Coal Company, Rock Springs, Wyoming, we take pleasure in quoting you for Screen Drive Suspended Platform as per the accompanying blue print CR-28797, as follows:

ONE Link-Belt Patented "Murry" Screen Drive Suspended Platform to accommodate Purchaser's crank shaft and attendant parts, necessary for 10'0" wide balanced run-of-mine Shaking Screens, as shown on the Union Pacific Coal Company's blue print No. 3146-31-J. The Suspended Platform will consist of the necessary heavy structural members with solid bottom steel plate arranged for supporting Concrete Counterbalance, eight heavy steel hanger arm castings, complete with coupling bolts and bored for 3-7/16" diameter steel pins, eight rugged steel hanger shaft bearing castings bored and fitted with graphite bronze bushings, four Special Steel Hanger Castings bored for 3-7/16" diameter hanger shafts, eight steel hanger shafts 3-7/16" diameter, 3'-2-5/8" long with ends drilled and tapped for grease cups and necked for and fitted with split set collars, all complete for suspending from Purchaser's Structure, for the sum of \$3,980.00 net, f.o.b. Chicago, Illinois with freight allowed to Superior, Wyoming.

The weight of the material covered by the above quotation is approximately 17,000 pounds.

Our above price does not include the Run-of-Mine Shaking Screens, Screen Connecting Rods, Crank Shaft with its four heavy Bearings, two Flywheel Pulleys, Set Collars, V-belt Drive, Drive Guard and Motor.

It will be necessary for the Purchaser to provide the necessary Concrete Counterbalance for Motor and Drive and 4" Concrete

COPY

10-20-37

floor on Suspended Platform.

The Screens as detailed on the Union Pacific Coal Company's blue print No. 2146-31-J, which you have, are approximately 5,000 pounds out of balance; on account of this we, in our bid to the Union Pacific Coal Company are figuring on making all plates in the lower shaking screen of 3/8" steel, thus effecting a closer balance of this unit and avoiding the introduction of an excessive amount of concrete counterbalance in the Suspended Platform.

By following the above procedure, longer life to the screen in question will result and it will only be necessary for you to include sufficient concrete counterbalance to offset the weight of Electric Motor, V-Belt Drive and Guard.

If weight is not added to the Lower Shaking Screen in the manner described, it will be necessary for you to include about 85,000 pounds of additional Concre to Counterbalance in the Suspended Platform.

Copy of this quotation is being mailed to the Union Pacific Coal Company.

We are,

Yours very truly

LINC-BELT COMPANY

Geo. S. Jaxon

Engineer
Coal Preparation Division

GSJaxon/w

Copies sent to:
Mr. Eugene McAuliffe, Pres.
Union Pacific Coal Co.
1416 Dodge Street
Omaha, Nebraska

Mr. G.B. Pryde, V.P.
Union Pacific Coal Company
Rock Springs, Wyoming

Union Pacific Coal Company
C/o G.B. Swann, Chief Engineer
Rock Springs, Wyoming

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA

CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

300 W. PERSHING ROAD (THIRTY-NINTH ST.) CHICAGO

The Jeffrey Manufacturing Company
c/o E. C. Horne Machinery Company
515 Barnest & Cramer Building
Denver, Colorado

Gentlemen:

At the request of Mr. Eugene McAuliffe, President, Union Pacific Coal Company, Rock Springs, Wyoming, we take pleasure in quoting you for Screen Drive Suspended Platform as per the accompanying blue print CE-25787, as follows:

ONE Link-Belt Patented "Hurry" Screen Drive Suspended Platform to accommodate Purchaser's crank shaft and attendant parts, necessary for 10'0" wide balanced run-of-mine shaking screens, as shown on the Union Pacific Coal Company's blue print No. 2146-S1-J. The Suspended Platform will consist of the necessary heavy structural members with solid bottom steel plate arranged for supporting concrete counterbalance, eight heavy steel hanger arm castings complete with coupling bolts and bored for 3-7/16" diameter steel pins, eight rugged steel hanger shaft bearing castings bored for and fitted with graphite bronze bushings, four special steel hanger castings bored for 3-7/16" hanger shafts, eight steel hanger shafts 3-7/16" diameter 5' - 2-5/8" long with ends drilled and tapped for grease cups and necked for and fitted with split set collars, all complete for suspending from Purchaser's Structure, for the sum of \$3,960.00 net, f.o.b. Chicago, Illinois with freight allowed to Superior, Wyoming.

The weight of the material covered by the above quotation is approximately 17,000 pounds.

Our above price does not include the Run-of-Mine Shaking Screens, Screen Connecting Rods, Crank Shaft with its four heavy bearings, two Flywheel Pulleys, Set Collars, V-Belt Drive, Drive Guard and Motor.

It will be necessary for the Purchaser to provide the necessary Concrete Counterbalance for Motor and Drive and 4" concrete

COPY

2

10-20-37
The Jeffrey Mfg. Co.

floor on Suspended Platform.

The Screens as detailed on the Union Pacific Coal Company's blue print No. 2146-51-J, which you have, are approximately 5,000 pounds out of balance; on account of this, we, in our bid to the Union Pacific Coal Company, are figuring on making all plates in the lower shaking screen of 3/8" steel, thus effecting a closer balance of this unit and avoiding the introduction of an excessive amount of concrete counterbalance in the Suspended Platform.

By following the above procedure, longer life to the screen in question will result and it will only be necessary for you to include sufficient concrete counterbalance to offset the weight of Electric Motor, V-Belt Drive and Guard.

If weight is not added to the Lower Shaking Screen in the manner described, it will be necessary for you to include about 25,000 pounds of additional Concrete Counterbalance in the Suspended Platform.

Copy of this quotation is being mailed to the Union Pacific Coal Company.

We are

Yours very truly

JEFFREY MFG. COMPANY

Geo. J. Jaxon

Engineer
Coal Preparation Division

GSJaxon/w

Copies sent to:

Mr. Eugene McAuliffe, Pres.
Union Pacific Coal Co.
1416 Dodge Street
Omaha, Nebraska

Mr. G. B. Pryde, V.P.
Union Pacific Coal Company
Rock Springs, Wyoming

Union Pacific Coal Company
C/o C. E. Swann, Chief Engineer
Rock Springs, Wyoming.

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



E. C. HORNE
SALES REPRESENTATIVE
ERNEST & CRANMER BUILDING

October 18, 1937

The Union Pacific Coal Company,
Mr. Eugene Mc Auliffe, President,
Omaha, Nebraska

Dear Sir:

We wish to acknowledge and thank you for your letter of October 14th, advising us that the Link-Belt Mfg. Co. will enter into an arrangement with the Jeffrey Manufacturing Company, which will permit them to use the particular type of Shaker Screen Drive which your Engineers have specified, as being desirable for the tipple installation at Superior.

This information is being relaid to our principals at Columbus, Ohio and in accordance with this arrangement, we will submit that type of screen drive in the proposal, which we understand is to be sent to Rock Springs, Wyoming by November 1st.

The writer and Mr. W. F. Barnes, Manager, of our Coal Preparation Division, will be at Rock Springs on November 1st, available for any questions or consultation that may be desirable in connection with the proposal from the Jeffrey Manufacturing Company, which will be submitted on that date.

Yours very truly,

THE JEFFREY MANUFACTURING CO.,
Per

E. C. Horne

ECH:GCP

C. C. to Mr. G. Pryde - Rock Springs
Mr. W. F. Barnes - Columbus

October 18, 1937.

Mr. Warren R. Roberts, President,
Roberts and Schaefer Company,
Wrigley Building,
Chicago, Illinois.

Dear Colonel Roberts:

I have yours of October 12th, and this morning received the papers on our proposed D. O. Clark Mine Tipple and Underground Conveyor.

I would have been glad to have had your company bid on the work, and if possible become the successful bidder, but I can readily understand the circumstances which prompted your withdrawal.

Perhaps at some future time we can get together again.

Sincerely yours,

Original Signed
EUGENE McCAULIFFE

Omaha - October 18, 1937.

F. G. E. Swann:

Herewith Conveyor Catalog No. 47, Stephens-Adamson
Company.

I am inclined to think that Allen & Garcia expect
to quote S. A. Company's conveyor machinery.

ROBERTS AND SCHAEFER COMPANY



ENGINEERS AND CONTRACTORS

WRIGLEY BUILDING

CHICAGO

ADDRESS ALL COMMUNICATIONS
TO THE COMPANY

IN REPLY PLEASE REFER TO WRR

SPECIALTIES
COAL MINING PLANTS
COAL CLEANING PLANTS
COALING STATIONS
CINDER HANDLING PLANTS
ROTARY CAR DUMPERS

CABLE ADDRESS "RANDS"
WESTERN UNION CODE

October 12, 1937

Mr. Eugene McAuliffe,
Pres., The Union Pacific Coal Co.,
1416 Dodge Street, Omaha, Neb.

Dear Mr. McAuliffe:

At our conference this morning, at which time we discussed very fully the matter of bidding on your proposed new Mining Plant at Superior Mine, it was concluded that it would not be advantageous for either our company or yours for us to try to present a proposition.

I think this decision was the best one for both our companies. We are therefore returning to you your plans, specifications and Proposal Form.

We wish to express our very great appreciation for all the courtesies extended to us and to say we enjoyed the conferences notwithstanding final decision that it was not beneficial for us to submit a proposal.

Yours sincerely,

Warren R. Roberts

PRESIDENT

ROBERTS AND SCHAEFER COMPANY

MM

10/11-10/13 '77 Chicago Meeting

		Phone
Bidders	Allen & Garcia Eng Co	Harrison 2472
	Jeffrey Mfg Co	
	Levin Beet Co	Boulevard 8100
	McNally Pittsburg Co	Franklin 5182

Bond required	Supple	\$20,000
	Below Bond	30,000
	Total	50,000

Bids to be in Nov 1 '77
Contract let Nov 15 "
Construction start March 15 '38
Completion date Aug 1 "

Co 130 to 3pm
Messrs Horn
" Barnes
" Medley

11/11 37 A & G G Morrison
2472
Mr Von Medding
" Von Furbank 300 per to
" Garcia Jr 500 per

10/12 Cal Roberts 9³⁰ 10⁴⁵
Withdrawn

10/12 Mr Waterman 11⁰⁰ a 12³⁰

10/12 Link Belt Co
Mr Taxon 130 per to
Mr Phillips 500 per

10/12 Jeffreys Horn
Bones 400 per

THE UNION PACIFIC COAL COMPANY
BELT CONVEYOR SYSTEM AND COAL TIPPLE
D. O. Clark Mine, Superior, Wyoming

INFORMATION ON CONCRETE

Aggregates:

- Green River sand and gravel as per specification.
1. Sand, \$1.80 per ton f.o.b. cars, Superior.
 2. Gravel \$1.80 per ton, f.o.b. cars, Superior.
 3. Cement, \$0.93 per sack in carload lots, f.o.b. Superior.

Average Unit Price Bids from local Contractors:

Belt Conveyor System Concrete:

1. Concrete footings for Conveyor structure underground, \$37.50 per cubic yard complete in place.
2. Concrete bins at loading stations, also sub-structure for car feeders and trip makers, \$34.10 per cubic yard, complete in place. Reinforcing steel \$0.075 per lb. complete in place.

Coal Tipple Concrete:

1. Concrete piers for tipple and drive house for conveyor at mine mouth, \$22.00 per cubic yard complete in place. Reinforcing steel \$0.075 per lb. complete in place.
2. Reinforced concrete floors in tipple and conveyor gallery, \$0.45 per sq. ft. complete in place, including reinforcing steel.

THE UNION PACIFIC COAL COMPANY
ESTIMATE FOR BELT CONVEYOR
D. O. CLARK MINE
SUPERIOR, WYOMING

Item	Amount	List	Rate	Cost Add 20%	Cost
1. 48" Belt, 6-ply, 42-oz., 3/16" R.C.F., 1/16" R.C.B.	5,120.01	\$9.00/' in place			\$46,080.00
2. #40 Troughing Idlers, 6" diameter	610	\$41.00 ea.			20,008.00
3. #41 Return Idlers, 6" diameter	162	19.00 ea.			2,566.10
4. #60 Heavy-Duty R.C. Idlers, 6" diameter	12	90.00 ea.			864.00
5. #62 Self-Aligning Idlers, 6" diameter	50	88.00 ea.			3,520.00
6. #59 Heavy-Duty Troughing Idlers	3	68.00 ea.			163.20
7. 24" x 51" F., C. I. Pulley, Tail Snub	4	257.00 ea.			822.40
8. 42" x 51" F., C. I. Pulley (Lagged) Drive	4	620.00 ea.			1,984.00
9. 16" x 51" F., C. I. Pulley, Snub	1	142.00 ea.			113.60
10. 30" x 51" F., C. I. Pulley, Head Snub	4	322.50 ea.			1,032.00
11. 48" x 36" Gravity Take-ups	4	572.00 ea.			1,830.40
12. 5 15/16" Roller Bearing Pillow Blocks, P600	8	450.00 ea.			2,880.00
13. 3 15/16" Rigid Pillow Blocks, #1300	10	16.00 ea.			128.00
14. 3 7/16" Rigid Pillow Blocks, #1300	8	13.00 ea.			83.20
15. 6 1/2" C. R. Shaft	24'	2,750#	0.20/#		550.00
16. 3 15/16" C.R. Shaft	30'	1,250#	0.20/#		250.00
17. 3 7/16" C. R. Shaft	24'	760#	0.20/#		152.00
18. 6 1/2" Safety Collars	8	\$11.70 ea.			74.90
19. 3 15/16" Safety Collars	10	3.60 ea.			28.80
20. 3 7/16" Safety Collars	8	3.00 ea.			19.20
21. Flexible Couplings, Type A-14	8	120.00 ea.			768.00
22. Herringbone Speed Reducer, Type D-18	4	3,300.00 ea.			10,560.00
23. A.C. Spring-Set Thruster Brake, Complete	4	175.00 ea.			560.00
24. 12" Sheaves	24	7.50			144.00
25. 1/2" wire rope, 6/16, Flow Steel	480'	0.20/'			115.20
26. Concrete	175 cu	50.00		1,100.00	8,750.00
27. Reciprocating Feeders (Without Motor)	2	550.00		3,240.00	1,320.00
28. Car Feeders (Without Motor)	2	1,620.00		1,990.00	3,890.00
29. Trip Makers (Without Motor)	2	995.00			2,390.00
30. Setting Rotary Dumps	2	300.00			600.00
31. Structural Steel	194,000#	0.10			19,400.00
32. Dings Magnetic Pulley	1	4,550.00		4,550.00	5,005.00
33. 7 1/2-H.P. Trans. for Magnetic Pulley	1	575.00			632.50
			Forward		\$137,284.50

THE UNION PACIFIC COAL COMPANY
ESTIMATE FOR COAL TIPPLE
D. O. CLARK MINE
SUPERIOR, WYOMING

Item	Amount	List	Rate	Cost Add 20%	Cost
1. R.O.M. Chute Belt to Screens	1,420.00		.50	\$ 710.00	-
2. R.O.M. Chute Screens to Hopper	3,400.00		.14	476.00	-
3. R.O.M. Chute and Hoist	1,560#		.16	249.60	-
4. Undercut Gate and Hopper	3,500#	.	.145	507.50	-
5. Gate and Chute to Slack	850#		.15	127.50	-
6. Upper Screen	17,000#		.10	1,700.00	-
7. Lower Screen	17,000#		.10	1,700.00	-
8. Drive Castings, Hangers, etc.	6,400#		.20	1,280.00	-
9. Drive Machinery	11,000#		.20	2,200.00	-
10. 40-H.P. Motor, Base and Pulley	1,250#			625.00	-
11. Slack Shaking Table	1,800#		.237	426.00	-
12. 2 Nut Picking Tables	5,785#		.237	1,370.00	-
13. Lump Picking Table	1,800#		.237	426.00	-
14. 1 3 15/16" x 33' 8 1/2" C.R.S. Shaft 30 ks & k	1,280#		.20	256.00	-
15. 9 3 15/16" Breaker Bearings	950#	\$216.00		-	\$ 216.00
16. 8 Adj. Ecc., 3" to 6" Stroke	1,280#			-	840.00
17. 8 Cross Heads and Ecc. Rods	975#		.20	-	195.00
18. 1 3 15/16" Coupling	195#			-	71.00
19. 1 Tex.Rope Drive 6.96 to 1, 25 H.P.	100#	}			
20. 1 Sheave, 10 Grooves, 9.2" P.D.	300#			300.00	-
21. 1 Fly Wheel, 10", 64" P.D.	2,600#			450.00	-
22. 1 25-H.P. Motor, 690 R.P.M.	900#				
23. 2 Loading Booms	17,400#		.12	-	2,088.00
24. 2 LRS-4 Shaw Box Boom Hoists, 8,000#				750.00	-
25. 2 10-H.P. Motors, 1160 R.P.M.	800#			650.00	-
26. 2 D6 Speed Reducers	1,274	610.00		-	1,220.00
27. 2 Griffith Loading Chutes	1,700#		.20	-	340.00
28. 9 Stair Treads, 10" x 2' 0"	9		2.20	19.80	-
29. 110 Stair Treads	110		2.20	242.00	-
30. 651 Sq. Ft. 1 1/4" x 3/16" Floor Grating	651 Sq. '		.50	325.50	-
31. 4,510 Sq. Ft. Roofing, #22 Ga. Corr. Steel, 5,400 Sq. Ft. Cross	5,400 Sq. '		.052	280.80	-
32. 5,880 Sq. Ft. Siding, #24 Ga. Corr. Steel, 7,520 Sq. Ft. Cross	7,250 Sq. '		.052	391.04	-
33. 3,730 Sq. Ft., 4" Reinforced Concrete Flooring				1,865.00	-

Forward

\$17,327.74 \$4,970.00

<u>Item</u>	<u>Amount</u>	<u>List</u>	<u>Rate</u>	<u>Cost</u> <u>Add 20%</u>	<u>Cost</u>
Brought Forward				\$17,327.74	\$ 4,970.00
34. Structural Steel	206,400.00#		.09		18,576.00
35. 1 #22 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear			1.75/sq'	-	13.50
36. 5 #32 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear				-	103.00
37. 4 #31 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear				-	40.50
38. 2 #22140 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear				-	28.50
39. 5 #32-160 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear				-	103.00
40. 40 #33-161 Steel Sash, 14" x 20" Lts., D.S. Wire Glass, Clear				-	1,220.00
41. 180 Sq. Ft. Corr. Wire Glass Skylight			1.50/sq'	-	270.00
42. 120 Lin. Ft. #22 Ga. Steel Ridge Roll			.052	-	16.00
43. 220 Lin. Ft. #22 Ga. Steel Flashing, 8"			.052	-	13.00
44. 200 Lin. Ft. #22 Ga. Steel Flashing, 18"			.052	-	21.00
45. 109 Cu. Yds. Concrete Foundations			23.00	-	2,507.00
46. 2,000# Anchor Bolts	2,000.00#		.08	-	160.00
47. Reinforcing Steel	4,000.00#		.08	-	320.00
48. 140 Cu. Yds. Excavation			1.00	-	140.00
49. 335 Lin. Ft. Double 1 1/4" Pipe Handrail	2,345#		.10	-	234.50
50. 380 Bd. Ft. Ash Boards, & Maple				-	38.00
51. 1 Cu. Yd. Concrete for Counterweight, Boom Hoist			25.00	-	25.00
52. Chutes to Mixing Conveyor	250.00		.20	-	50.00
53. Refuse Bin Chute and Gate, Comp.	1,500.00		.20	-	300.00
54. Magnetic Iron Refuse Chute and Box	900.00		.20	-	180.00
55. 3 #5 Car Retarders, Complete			1,607.00	-	4,820.00
56. Mixing Conveyor Steel	9,890.00		.12	-	1,186.80
57. 1 20-H.P. Motor, 1160 R.P.M.	800.00			-	400.00
58. 1 D6 Speed Reducer, 26.86 : 1	637#	\$610.00	.20	-	485.00
59. 1 Steel Base for Motor and Red.	310.00			-	62.00
60. 2 3 7/16 A.P.B., Series 1500		34.00	.20	-	27.00
61. Machinery	2,900.00			-	580.00
62. 1 Cut Steel Gear 58T, 2DP, 29"P.D.		112.20		-	90.00
63. 1 Cut Steel Pinion, 16T, 2DP, 8" P.D.		32.75		-	26.00
64. 4 Sprockets, 6T, for 998 Chain	1,720.00	320.00		-	256.00
65. 2 Strands 998 Chain, 80' each	1,632	400.00		-	320.00
66. 106 S22 Attachments	1,272	212.00		-	170.00
				\$17,327.74	\$37,751.80
		Forward			

Item	Amount	List	Rate	Cost Add 20%	Cost
Brought Forward				\$17,327.74	\$37,751.80
67. 2 2 15/16" D.S. Take-ups		58.00		-	46.70
68. 1 2 15/16" Flex. Coupling		13.50		-	11.00
69. Chutes to Loading Boom	1,690.00		.20	-	338.00
70. Chute to Refuse Conveyor	190.00		.20	-	38.00
71. Structural Steel for Refuse Conveyor	15,800.00		.20	-	3,160.00
72. 1 10-H.P. Motor, 860 R.P.M.	540.00			-	270.00
73. 1 D8 Reducer, 59.42 to 1	1,219.00	890.00		-	720.00
74. 1 Coupling RC 6018 R		17.20			13.00
75. 1 Coupling, B12		65.00			48.60
76. 2 3 15/16" A.P.B. Series 1500		48.00			36.00
77. 4 Sprockets for 678 Chain, 5T		112.00			84.00
78. 160 S22 Attachments		1.10			140.80
79. 2 3 7/16" D.S. Take-ups, 12"		198.00			149.00
80. Machinery	1,108.00		.20	-	221.60
81. 4 2 15/16" G.I. Sprockets, 6T, 15.46 P.D. for #458 Chain		68.00			54.50
82. 4 2 15/16" G.I. Sprockets, 4T, 10.45 P.D. for #458 Chain		52.00			41.70
83. Steel Base for Motor and Reducer	320.		.20		64.00
84. Miscellaneous Steel	10,000		.09	-	900.00
85. 360 Feet 3/8" 6/37 Flexible Steel, Flow Steel Rope			.18		64.80
86. 8 Wire Rope Blocks with Stiff Hook, but no Becket					32.00
87. Electrical Control, Push Button Panels					500.00
88. Electrical Conduits, etc.			.20		3,600.00
89. 2 Motor and Reducer Bases for Loading Booms	450.00				90.00
90. 4 2 15/16" A.P.B. Series 1500		28.80			23.00
91. 2 2 15/16" Flex. Coup. RC 8018 R		56.20			45.00
92. 2 1 1/8" Flex. Coup. RC 5016 R		27.00			21.70
93. 4 #16 Style AA Take-up, 2 15/16" Diameter		100.00			80.00
94. 4 Strands #458 Chain, 87' 0" Ea.		382.80			316.00
95. 132 A22 Flight Attachments		102.96	.20	-	82.00
96. 1 Item Machinery	2,120.00		.10		424.00
97. Motor Starters					360.00
98. Steel for Stairways (To Ground)	2,700.00				270.00
99. Engineering and Contingencies, 10 per cent					7,079.00
				3,465.55	
				20,793.29	57,076.20
					\$77,869.49
					Total Cost

<u>Item</u>	<u>Amount</u>	<u>List</u>	<u>Rate</u>	<u>Cost</u> <u>Add 20%</u>	<u>Cost</u>
Brought Forward					
34. 125-H.P. Drive Motors	4	\$2,855.00			\$137,284.50
35. 125-H.P. Drive Starters	4	1,119.00			12,562.00
36. 125-H.P. Transformers	4	180.00			4,923.60
37. Car Feeder, Trip Maker and Plate Feeder Motors		1,460.00			871.20
38. Car Feeder, Trip Maker and Plate Feeder Starters		1,580.00			1,606.00
39. Car Feeder, Trip Maker and Plate Feeder Push Button Control		36.00			1,738.00
40. Interlocking Push Button Conveyor Controls		200.00			39.60
					220.00
<u>The U. P. Coal Co. Wiring, etc.</u>					
41. 2,300-volt Cable, Stands, Messenger Signal Wire					6,050.00
42. 220-volt Cable, Wiring, etc., for Loading Stations					<u>1,365.00</u>
				Sub-Total	\$166,659.90
43. Plus 10 per cent, Engineering and Contingencies					<u>16,665.99</u>
				TOTAL	\$183,325.89

<u>Item</u>	<u>Est.</u> <u>Cost</u>	<u>A.F.E.</u>
Three-Track Coal Tipple	\$77,900.00	\$60,000.00
Belt Conveyor System	<u>183,300.00</u>	<u>141,200.00</u>
TOTAL	\$261,200.00	\$201,200.00

Estimated cost over-runs A.F.E. 30 per cent, due to increase in materials and labor, also changing maximum capacity of operation from 500 tons per hour to 700 tons per hour.

October 14, 1937.

The Jeffrey Mfg. Company,
c/o H. C. Horne Machinery Co.,
315 Ernest & Cramer Bldg.,
Denver, Colorado.

Mr. John A. Garcia,
Allen & Garcia Co.,
McCormick Building,
Chicago, Illinois.

Mr. Thomas McNally,
McNally-Pittsburgh Mfg. Corp.,
Pittsburg, Kansas.

Dear Sirs:

Confirming our verbal understanding made in Chicago, October 12th and 13th, the Link-Belt Manufacturing Company will furnish to the three companies addressed above the full details of their shaker screen drive, with net price, enabling you to establish a fully competitive bid.

As further advised, we are entirely agreeable to receiving an alternate proposal covering standard shaker screen drive, with details of same, enabling us to effect a choice as between the two drives.

Sincerely yours,

CC-Link-Belt Co.,
300 W. Pershing Road,
Chicago, Illinois.

Mr. G. B. Pryde,
Vice President, U.P. Coal Co.,
Rock Springs, Wyoming.

Oct. 8, 1937.

Little-Belt Co.,
300 W. Pershing Road,
Chicago, Ill.

Dear Sirs:

I am without reply to my letter of Sept. 29th re meeting our Asst. General Manager, I. H. Bayless, and Asst. Chief Engineer, H. C. Livingston, and myself at the Union League Club, Chicago, 9:00 A.M., October 11th, for conference in connection with the construction of our proposed D. O. Clark Mine tipple, Superior, Wyoming.

I am writing you this further letter with the thought that my letter of Sept. 29th may have gone astray.

Sincerely yours,

Original signed
EUGENE McADUFFE

At Rock Springs, Wyoming
October 5, 1937

Union League Club
Chicago, Illinois

Gentlemen:

Will you kindly reserve a conference room, with tables and chairs and a capacity of fifteen, for a meeting at 9 A.M., Monday, October 11th. I have some engineering problems to discuss, and would appreciate ample table room for blue prints, etc.

Also, please reserve rooms for Mr. I. N. Bayless, Mr. H. C. Livingston and myself, arriving 9 A.M., Monday, the eleventh, obliging

Yours very truly,

Original Signed:
EUGENE MCMAULIFFE

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



E. C. HORNE
SALES REPRESENTATIVE
ERNEST & CRANMER BUILDING

October 5, 1937

Mr. Eugene Mc Auliffe, President,
The Union Pacific Coal Company,
Omaha, Nebraska

Dear Sir:

We wish to acknowledge receipt of your recent letter and in appreciation of the invitation to attend meeting with yourself and your Engineers with interested bidders on this contract for the D. O. Clark Mine, the Jeffrey Manufacturing Company will be represented at that meeting by Mr. W. F. Barnes, Manager, Coal Preparation Division, Columbus, Ohio and Mr. E. C. Horne of the Denver office.

Yours very truly,

J. C. Penn

GCP

Rock Springs - October 1, 1937

Mr. Eugene McAuliffe:

I have your letter of September 29th, with copy of your letter to the contractors who have been asked to bid on the D. O. Clark Mine tipple and conveyor system, and it is entirely satisfactory to me. In accordance with my understanding with you, I am attaching herewith copy of letter I have written to Mr. Evans today. I thought it well to write him now, in order to give him time to make preparations. In the event of any change in the date, I will wire him.

Glen Muge

October 1, 1937

Mr. T. A. Evans
1326 Winnemac Avenue
Chicago, Illinois

Dear Mr. Evans:

Mr. McAuliffe plans to be in Chicago, Illinois, at the Union League Club, at 9 A.M., Monday, October 11th, for the purpose of interviewing the contractors and entering into a general discussion of the plans sent out for the D. O. Clark Mine tippie and belt conveying system. Present at that meeting for The Union Pacific Coal Company also will be Mr. I. N. Bayless, Assistant General Manager, and Mr. H. C. Livingston, Assistant Chief Engineer.

As you are very familiar with the plans, Mr. McAuliffe would like you to sit in with the members of our staff, giving him the benefit of your advice and experience, you to be our representative, and we to pay you for your services. I am writing you at this time, so that you may make the necessary arrangements. I would appreciate very much your reporting to Mr. McAuliffe at the Union League Club, Chicago, on the date indicated.

They plan to have a general discussion of the project, meeting the representatives of the five firms to whom the plans have been sent, i.e., The Jeffrey Manufacturing Company, Allen & Garcia Company, Link-Belt Company, McNally-Pittsburgh Manufacturing Corporation, and Roberts and Schaefer Company. No doubt these firms will have numerous suggestions to make, and Mr. McAuliffe plans to listen to all of them, and, at the close of the discussion, the firms will be given an opportunity to say when it will be convenient for them to present their bids.

If there are any changes in the date, I will wire you.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

The McNally-Pittsburg Mfg. Corp.

GENERAL OFFICES & WORKS.
PITTSBURG, KANSAS.

COAL PREPARATION
MACHINERY
COAL TIPPLES
COAL WASHERIES
MATERIAL HANDLING
EQUIPMENT

GENERAL SALES OFFICE
307 N. MICHIGAN AVENUE
CHICAGO, ILLINOIS

THOS. McNALLY,
PRESIDENT

Pittsburg, Kansas

September 30, 1937

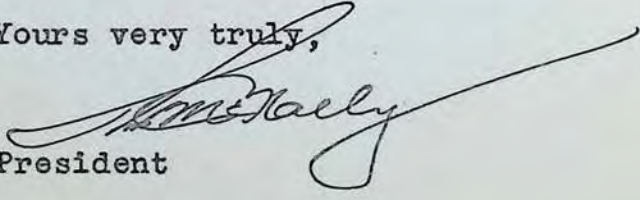
Mr. Eugene McAuliffe, President
Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

Dear Mr. McAuliffe:

Thank you for your letter of the 29th.

We are forwarding this information to our Mr.
Waterman and have asked him to meet with you
and other bidders at the Union League Club,
Chicago, 9:00 A. M. Monday, October 11.

Yours very truly,


President

TM:NEH
cc - Mr. Waterman



NORTON
AUTOMATIC COAL
WASHING SYSTEM

ALL CONTRACTS AND SHIPMENTS ARE SUBJECT TO STRIKES, FIRES, ACCIDENTS AND OTHER CAUSES BEYOND OUR CONTROL.

ALLEN & GARCIA COMPANY
CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Sept. 30th, 1937.

Mr. Eugene McAuliffe, President,
The Union Pacific Coal Co.,
1416 Dodge St.,
Omaha, Nebraska.

Dear Sir:-

We have your letter of September 29th calling
for a conference at 9:00 A.M. Monday, October 11th, and
wish to advise that we will have our representative there
at the proper time.

Looking forward to seeing you, we beg to re-
main,

Yours very truly,

ALLEN & GARCIA COMPANY

BY

L. von Perbandt

LVP:HL

ROBERTS AND SCHAEFER COMPANY



ENGINEERS AND CONTRACTORS

WRIGLEY BUILDING

CHICAGO

SPECIALTIES
COAL MINING PLANTS
COAL CLEANING PLANTS
COALING STATIONS
CINDER HANDLING PLANTS
ROTARY CAR DUMPERS

CABLE ADDRESS "RANDS"
WESTERN UNION CODE

ADDRESS ALL COMMUNICATIONS
TO THE COMPANY

IN REPLY PLEASE REFER TO

37113-WRR

September 30, 1937

Mr. Eugene McAuliffe,
Pres., The Union Pacific Coal Company,
1416 Dodge Street, Omaha, Neb.

Dear Mr. McAuliffe:

RE: PROPOSED PLANT FOR SUPERIOR MINE
UNION PACIFIC COAL CO.

I am replying to your circular letter of the 29th addressed to our company and four others, advising that you will visit our City with certain of your assistants on Monday, October 11th, for the purpose of a general discussion regarding the plans and specifications for this proposed plant.

We shall be very happy to meet you at the Union League Club at such hour as will meet our mutual convenience after you arrive. Therefore, if you will telephone us suggesting an hour for our conference, we shall endeavor to comply with your arrangements.

I hope I shall be in the City and have the pleasure of personally being present. Should I be away, some of our competent engineers in this line of work will meet your men for these discussions.

Yours sincerely,

Warren R. Roberts

PRESIDENT

ROBERTS AND SCHAEFER COMPANY

MM

(Telephone No. Superior 5460)

Sept. 29, 1937.

Mr. Jeffrey Mfg. Company,
c/o R. C. Morse Machinery Co.,
315 Trust & Guaranty Bldg.,
Denver, Colorado.

Mr. John A. Garcia,
Allen & Garcia Co.,
McCormick Bldg.,
Chicago, Ill.

Mr. George S. Jaxon,
Link-Belt Co.,
330 W. Pershing Road,
Chicago, Ill.

Mr. Thomas McElly,
McElly-Pittsburgh Mfg. Corp.,
Pittsburgh, Kansas.

Mr. Warren R. Roberts, Pres.,
Roberts and Schaefer Co.,
Trigley Bldg.,
Chicago, Ill.

Dear Sirs:

Supplementing previous letters relative to contracting the construction of steel tipples and underground belt conveyor equipment for our R. C. Clark Mine located at Superior, Brewster County, Wyoming, I beg to advise that I would appreciate representatives of the five companies addressed meeting the undersigned, together with Asst. General Manager, I. H. Bayless, and Asst. Chief Engineer, H. C. Livingston of our Company, at the Union League Club, Chicago, 9:00 A.M., Monday, October 11th, for the purpose of a general discussion of the project.

It is not our intention to deviate materially from the plans heretofore submitted to your companies. I do feel, however, that at least a portion of the day can well be spent in general conference, admitting of representatives of the engineering firms asking and receiving answers relative to any questions that may arise, thereafter, it is our plan to meet with the representatives of the several companies separately in such order as will be convenient to them.

At the conclusion of the individual conferences, the necessary time will be given the several firms to prepare bids in line with prints, specifications and proposal furnished, including any minor amendments to same that may be developed in the general conference.

If this arrangement is satisfactory to you, will you kindly advise me at Omaha.

Sincerely yours,

B/C-Mr. G.B.Pryde:

Original Signed
EUGENE MCAULIFFE

Omaha - Sept. 29, 1937.

Mr. G. B. Fayle:

Herewith copy of a letter which has been sent to the five
tippie firms today. I trust the arrangement will be satisfactory to
you and on receipt of acknowledgments from the several companies, I
will advise you definitely with regard to same.

Original Signed
EUGENE McAULIFFE

The McNally-Pittsburg Mfg. Corp.

GENERAL OFFICES & WORKS.
PITTSBURG, KANSAS.

COAL PREPARATION
MACHINERY
COAL TIPPLES
COAL WASHERIES
MATERIAL HANDLING
EQUIPMENT

GENERAL SALES OFFICE
307 N. MICHIGAN AVENUE
CHICAGO, ILLINOIS

THOS. McNALLY,
PRESIDENT

Pittsburg, Kansas

September 27, 1937.

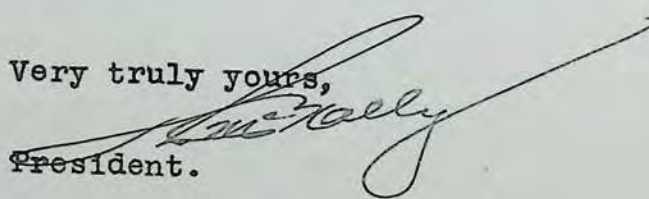
Mr. Eugene McAuliffe, President,
The Union Pacific Coal Company,
1416 Dodge Street,
Omaha, Nebraska.

Dear Mr. McAuliffe:

Thank you for your
favor of the 24th inst., advising us that
your conference for discussing tipple
construction will perhaps be held about
October 11 in Chicago.

I have notified Mr. Waterman
of our Chicago Office accordingly and I am
sure he will make his arrangements to be on
hand.

Very truly yours,


President.



TM/E
NORTON .cc- Chicago.
AUTOMATIC COAL
WASHING SYSTEM

ALL CONTRACTS AND SHIPMENTS ARE SUBJECT TO STRIKES, FIRES, ACCIDENTS AND OTHER CAUSES BEYOND OUR CONTROL.

Sept. 24, 1937.

Mr. Thos. McNally, Pres.,
The McNally-Pittsburgh Mfg. Corp.,
Pittsburgh, Kansas.

Dear Mr. McNally:

Mr. Pryde has given me a copy of your letter to him of Sept. 17th. While I cannot yet definitely set the date of the conference, I think it will be held in Chicago, Monday, Oct. 11th. This I will definitely confirm later.

Sincerely yours,

Original Signed
EUGENE MCAULIFFE

Sept. 24, 1937.

Colonel Warren R. Roberts, Pres.,
Roberts and Schaefer Co.,
Wrigley Bldg.,
Chicago, Ill.

My dear Colonel Roberts:

On my return I found your letter of Sept. 23rd:

A couple of years ago we let three companies submit designs and bid on our Reliance tippie, Allen & Garcia the successful bidders.

Much money was spent by the three companies in sending men out to Wyoming and preparing initial designs, thereafter when we accepted the A. & G. design with modifications proposed by our people, the other two companies were unhappy, claiming their design was better than the A. & G., etc. I did not feel at liberty to say that the difference in bids exceeded any possible difference in type of equipment, recommended, therefore, to avoid any criticism of this sort we decided to design the tippie in our own Rock Springs offices with the help of a competent engineer who had been employed by both the A. & G. Co., and the Link-Belt Company.

With the full approval of our people this engineer was allowed to specify certain equipment, with the distinct understanding that every bidder would be given an opportunity to substitute equivalent equipment, the general design, however, to remain unchanged.

I understand that this eliminates every theory of special design, bringing the job down to one of detailing the structure and placing therein approved machinery, whether the same be that specifically mentioned in the prints or an equivalent.

As I see the matter now, I will probably ask the five companies to send a representative to a general meeting which I will call in Chicago about Oct. 11th (the date not yet definitely decided) and accompanied by our Asst. General Manager, and Asst. Chief Engineer, we will go over the whole situation in the frankest way possible, bringing, if we can obtain him, the engineer who drew the plans, this gentleman being an employe of The Union Pacific Coal Company during the conference period.

After a day spent in discussing the matter in a friendly way between the five companies who wish to attend, we will then start in holding individual conferences, taking the companies in alphabetical

order unless they find it desirable to swap positions and during the individual conferences we can go into suggested substitution more minutely, the general plan however to stand. If there is a material difference in the cost of certain portions of the equipment, or if any of the engineers can show our people they have a better idea than the one presented (the general plans still to stand) we are open to conversion.

In handling the thing this way, we save three or four bidders the expense of drawing up plans, making trips to Superior, Wyoming, etc, all of which would be necessary if every company started to erect a structure for given tonnage, for given purpose at the slope mouth and reaching over certain railroad tracks. I hope you will be represented at our general conference, thereafter whatever position you care to take will be determined by you without much loss of time or expense. I do hope however that you will stay in.

Very sincerely yours,

Original Signed
EUGENE McAULIFFE

Sept 24 1937

T J O'Brien

c/o H J Flumhof - Salt Lake City

Wire me date and train your passing thru Omaha. M-83

Eugene McMuliffe

ROBERTS AND SCHAEFER COMPANY

ENGINEERS AND CONTRACTORS

WRIGLEY BUILDING

CHICAGO



ADDRESS ALL COMMUNICATIONS
TO THE COMPANY

SPECIALTIES
COAL MINING PLANTS
COAL CLEANING PLANTS
COALING STATIONS
CINDER HANDLING PLANTS
ROTARY CAR DUMPERS

CABLE ADDRESS "RANDS"
WESTERN UNION CODE

IN REPLY PLEASE REFER TO WRR-37113

September 23, 1937

Mr. Eugene McAuliffe,
Pres., The Union Pacific Coal Co.,
1416 Dodge St., Omaha, Nebraska.

Dear Mr. McAuliffe:

We recently received through your Vice President and General Manager, Mr. Pryde, the complete plans, specifications and Bidding Forms for the new Tipple, Belt Conveyor System, etc. for your Clark Mine at Superior, Wyoming. Mr. Pryde stated that any further correspondence regarding this new plant should be addressed to you at Omaha.

Upon receiving all this data from Mr. Pryde I went over the plans, both for the tipple and for the conveying and other equipment within the mine, and also the three different proposal forms, one for the Tipple, one for the Conveyor and other equipment under ground, and one for a combined proposal for both of the above proposals. I immediately noted that both the plans and specifications were very complete in every detail and did not require nor permit any engineering suggestions by bidders. Therefore it appeared to me that it was not a plant on which there would be much opportunity for us to use our ability as engineers nor to apply our very excellent equipment developed through long years of experience. It seemed to be a job just for a contractor.

However, I turned all the data over to our Engineering Department and asked two of our best engineers to review the plans and specifications carefully and report back to me on the advisability of our submitting a proposition for your new plant. I have just received this report and discussed the whole matter with them. They advised me that not only are the plans complete in every detail, so that no engineering is required, but the equipment both for the tipple and for the under-ground machinery is all specified as that of certain manufacturers and therefore none of our fine equipment can be used, as we assume that you wish all bidders to be on the competitive basis by bidding strictly according to your plans and specifications.

If this assumption is correct and you would not agree to consider any alternate proposal on our equipment, then it seems it would not seem worth while for us to make a proposal.

9-23-37

I am impressed, however, with the fact that you are building a plant for a large tonnage, permanent mine and therefore should be interested in having the best equipment that the market affords. Since our company have perfected all such equipment, which is recognized by a great many of the largest and best operating companies in this country, we are going to suggest that we shall be very happy to submit an alternate at least on the ground equipment and for the reasons stated below:

Our Rotary Dumps, Car Feeders, together with all the electrical control for handling coupled-up trips through the Rotary Dump are recognized as not only the best but the cheapest to operate on the market and have been used on many of the largest installations built in recent years.

This equipment is entirely different from that designated in your specifications which do - not call for coupled-up dumping.

If you will refer to Coal Age for November 1935, Page 455, you will find a description with numerous illustrations of this equipment furnished for the Harman Mine at Harman, Virginia. On page 456 you will see illustrations of this equipment for coupled-up dumping.

As stated therein you will see this is for a very large mine which is now producing about 600 tons per hour and where trips of up to 50 or 60 cars, averaging from 5 to 7 tons each are automatically handled through this dump by one man, including the weighing of the cars. I have watched this equipment operate on several visits to the mine when they were averaging 4 to 5 cars per minute through the dump. It has been in operation for two years and has been found not only adequate, but very economical in operation.

This is only one of many installations which we have installed in the last few years using this same equipment.

We are enclosing two reprints showing the details of certain very essential features of our dump from which you will note that these essential parts of the dump are of the very highest quality and design of machinery.

We are also enclosing one sheet illustrating our electric reciprocating car feeder which is coupled-up and works automatically with push button control by one Operator who weighs the coal in addition to operating the dump, feeder, etc.

Mr. Eugene McAuliffe, Cont'd.

9-23-37

Please pardon me for writing you at this length but it did seem to me that the opportunity for you to consider using doubtless the best equipment for this purpose that is available, might be well worth while for such a mine as you are developing. Low maintenance and reliability for continuous operation are vital factors in selecting such equipment, and our machinery has been perfected to meet these vital requirements.

We shall await your reply to our suggestion with much interest.

Yours very truly,

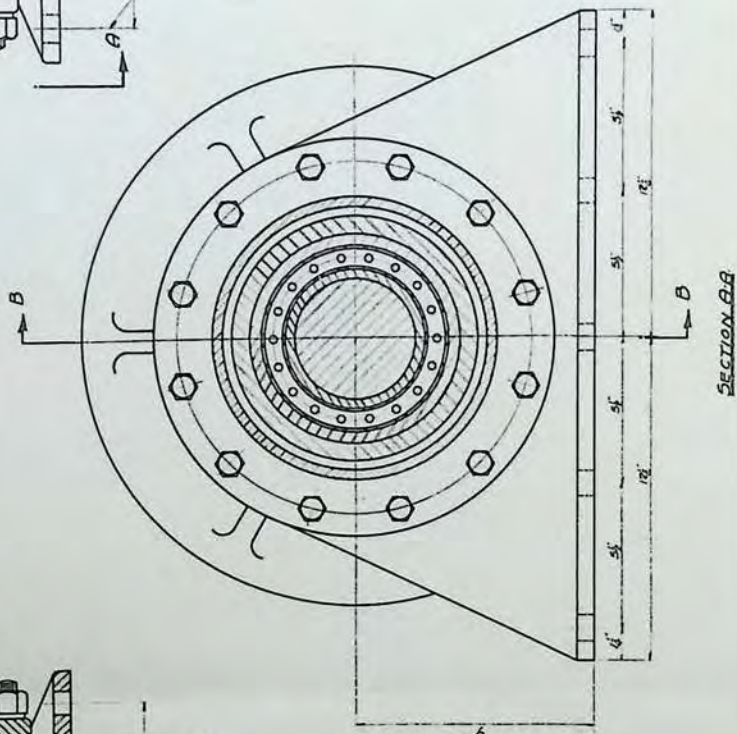
ROBERTS AND SCHAEFER COMPANY

Warren R. Roberts

PRESIDENT

MM

ENCLS.

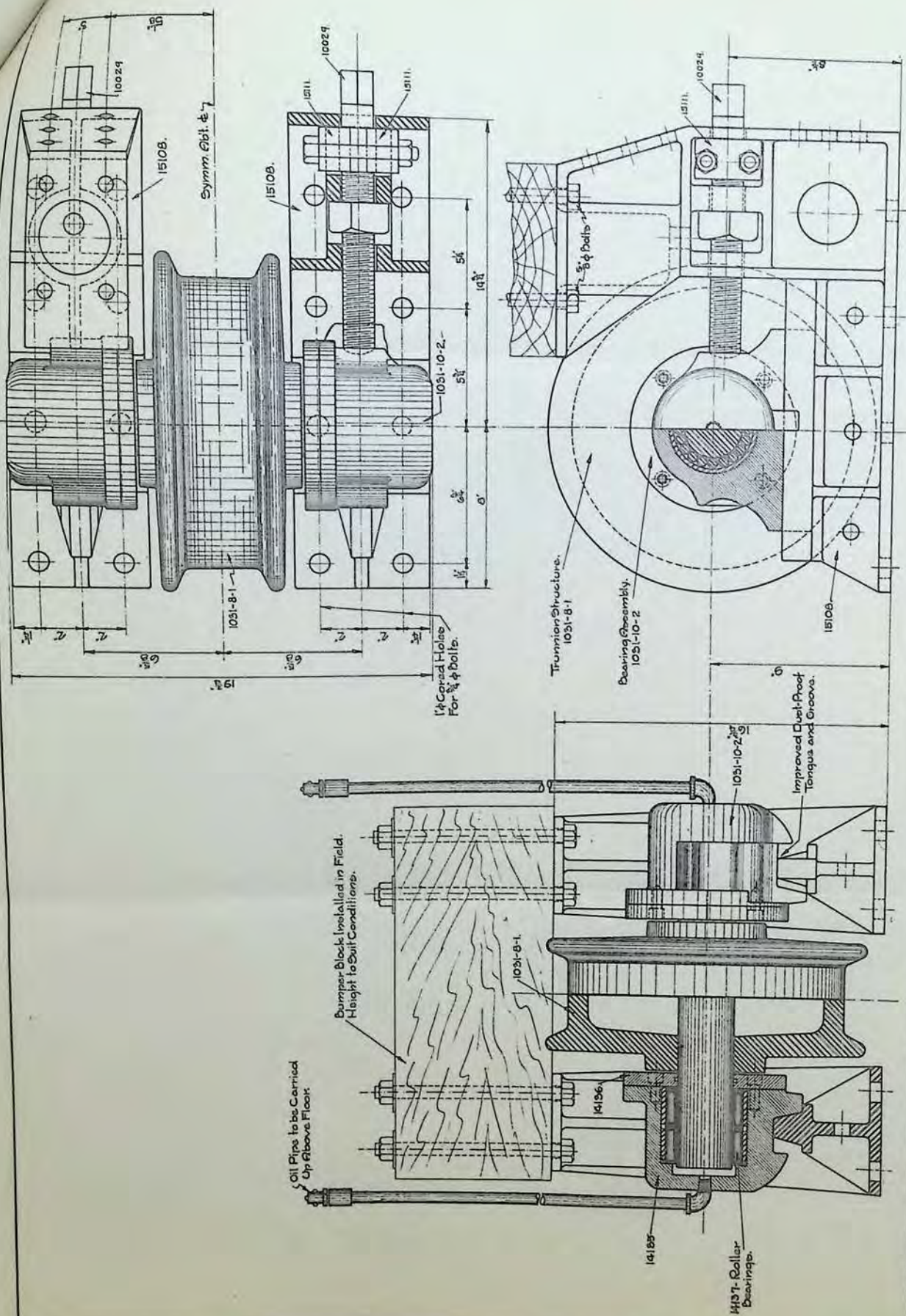


DO NOT ASSEMBLY TO PREVENT SECURITY USING LOCK WASHERS.
TO MAKE RIGID ON PAPER JUMP, TURN ALL ON AND DOWN
PLUS TIGHT TO PREVENT LEAKAGE FASTER ASSEMBLY SECURITY
TO RIGID JUMPING STRUCTURE USING BOLT AND LOCK WASHER
ADJUST STRAND TO UNIFORM SUPPORT ON JUMP WHERE REQUIRED

ROBERTS AND SCHAEFER COMPANY
ENGINEERS AND CONTRACTORS
CHICAGO, ILL. U. S. A.

ASSEMBLY OF
DRIVING TRUNNION FOR
ELECTRIC CAR DUMPER
STANDARD

1038-105-A



COMPARE THIS DRAWING WITH THE DRAWING OF THE PREVIOUS EDITION.
 IF PREVIOUS EDITIONS ARE USED, THE FOLLOWING PARTS, MATERIALS, AND DIMENSIONS, AND THE FOLLOWING PARTS, MATERIALS, AND DIMENSIONS, SHALL BE USED IN THE PREVIOUS EDITIONS.
 "STANDARD" DRAWING FOR THE PREVIOUS EDITIONS.
 "STANDARD" DRAWING FOR THE PREVIOUS EDITIONS.

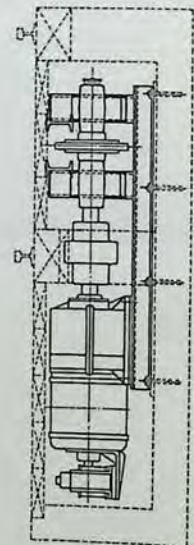
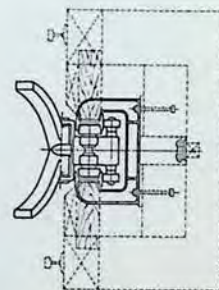
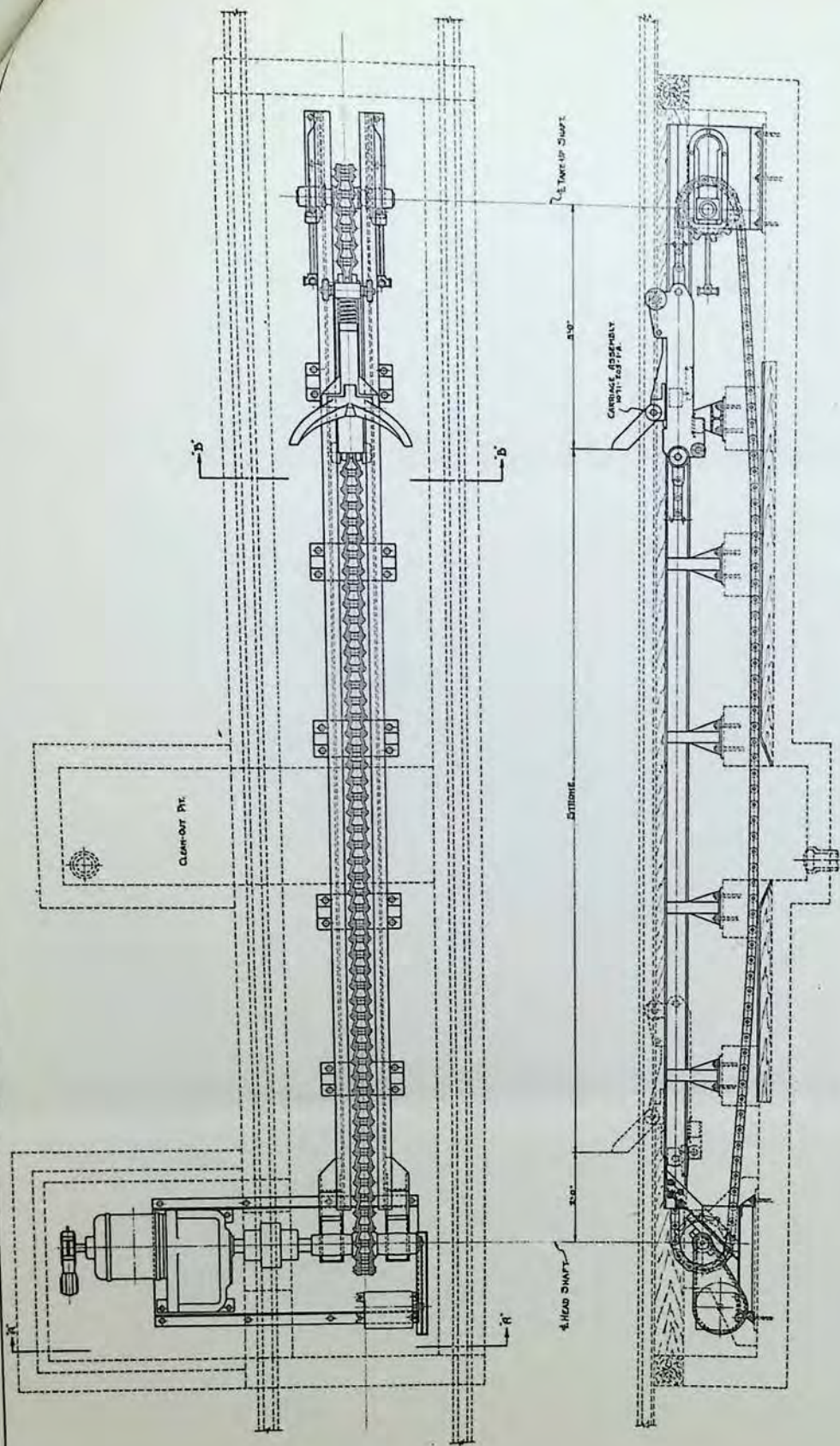
STANDARD

ROBERTS AND SCHAEFER COMPANY
 ENGINEERS AND CONTRACTORS
 BOSTON, U. S. A.

SUPPORTING TRUNNION
 ASSEMBLY
 Suit for use in the construction of the
 Propeller Bearings.

REV.	DATE	BY	CHKD.	APPROVED	REVISION
1	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
2	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
3	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
4	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
5	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
6	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
7	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
8	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
9	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A
10	10/1/31	W. C. G.	W. C. G.	W. C. G.	1031-10-A

1031-10-A



ROBERTS AND SCHAEFER COMPANY ENGINEERS AND CONTRACTORS	
ASSEMBLY OF ELECTRIC RECIPROCATING CAR-FEEDER.	
DATE: 6-15-32	BY: J. B. Schaefer
CHECKED: J. B. Schaefer	APPROVED: J. B. Schaefer
1071-208.A	

Rock Springs - Sept. 20, 1937

Mr. Eugene McAuliffe:

Herewith copies of letters from The Jeffrey Manufacturing Company and The McNally-Pittsburg Mfg. Corp.

With regard to the letter from Mr. McNally: I am not under the impression that you set a definite date for the conference in Chicago, but that you were to determine when all were ready to meet you.

George Munge

THE JEFFREY MANUFACTURING CO.

E. C. Horne
Sales Representative
Ernest & Cranmer Building

DENVER, COLORADO

September 17, 1937

Mr. George Pryde, Vice President,
The Union Pacific Coal Co.,
Rock Springs, Wyoming

Dear Sir:

We acknowledge herewith receipt of your letter of the 15th together with copy of proposal forms and specifications for the equipment which it is contemplated to be purchased for the D. O. Clark Mine at Superior, Wyoming.

We are submitting these specifications and instructions to our principals for their consideration and should it develop it is necessary or required that we have further information, your instructions with respect to corresponding with Mr. Eugene McAuliffe at Omaha, Nebraska will be followed.

We hope to be in position to be of service to your company in connection with your requirements for this equipment.

Yours very truly,

(sgd) E. C. Horne

ECH:GCP

COPY

THE McNALLY-PITTSBURG MFG. CORP.

Pittsburg, Kansas

Thos. McNally
President

September 17, 1937

Mr. George B. Pryde, V. P. & Gen. Mgr.
The Union Pacific Coal Company
Rock Springs, Wyoming

Dear Mr. Pryde:

Acknowledging receipt of yours of the 15th
and also the specifications and drawings of
your proposed new coal tipple.

We will retain these in our Pittsburg engineering
office for a few days and later send them to
our Chicago office with our comments, and have
asked our Mr. Waterman to arrange for the con-
ference on Saturday, the 25th, as per the
original plans given us by Mr. McAuliffe.

Yours very truly,

(sgd) Thos. McNally
President

TM:NEH
cc - Chicago

COPY

Rock Springs - Sept. 16, 1937

Mr. Eugene McAuliffe:

Mr. T. A. Evans has completed his work here, and
returned to Chicago today.

George

Sept. 18, 1937.

Mr. Hugh G. Sinclair, Advertising Dept.,
The Goodyear Tire & Rubber Company, Inc.,
Akron, Ohio.

Dear Mr. Sinclair:

I have yours of the 16th with two copies of
Coal Age reprints:

Passing the personal element, I beg to com-
pliment you on the gripping character of the advertisement.

Will you please say to Mr. Cartwright that
we have furnished prints and specifications, covering the con-
struction of our D. O. Clark Mine at Superior to five companies,
viz.

Link-Belt Co., - Chicago
Roberts and Schaefer Co., - Chicago
Allen & Garcia Co. - Chicago
Jeffrey Manufacturing Co. - Denver
McNally-Pittsburgh Mfg. Corporation - Pittsburgh,
Kansas.

Our proposition has been submitted on the basis
of the construction complete ready for operation.

Realizing that the belt conveyor construction is
a work distinct from building a tippie, we have asked that the two
items be shown separately.

I will be glad if your sales representative would
get in touch with the five construction companies, the preliminary
detail going to them on the 15th and after they have had a chance to
absorb same, our people will confer with each company separately re-
garding details of construction, etc.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

GOOD YEAR

The Goodyear Tire & Rubber Company, Inc.

Akron, Ohio

September 16, 1937

Mr Eugene McAuliffe, President
The Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

Dear Sir:

Mr Cartwright is out of the city, but before leaving he asked me to forward to you the enclosed Coal Age reprints.

He thought that you might be interested in seeing these, and if you would like to have additional copies please let us know and we will be glad to send them to you.

Yours very truly

H. G. Sinclair
Advertising Department

Hugh G Sinclair
BEC

See Coal Age Aug. 1937

Omaha - Sept. 17, 1937.

Mr. G. B. Fryde:

Yours of the 15th with copies of letters to the prospective bidders on the D. O. Clark Mine tipple:

The copies of the prints and specifications with the proposal I have are now sufficient.

Original Signed
EUGENE MCAULIFFE

Rock Springs - September 15, 1937

Eugene McAuliffe:

Herewith copies of letters I have written the five prospective bidders on the work at the D. O. Clark Mine, sending them the proposals, specifications and prints.

The corrections have been made in the proposal form as you requested, and I am sending you one copy of each of the revised form.

If you want any further copies of the prints or specifications, will be glad to forward them to you.

Geo. A. Inge

September 15, 1937

The Jeffrey Manufacturing Company
c/o E. C. Horne Machinery Company
315 Ernest & Cramer Building
Denver, Colorado

Gentlemen:

Referring to Mr. McAuliffe's letter to you
under date of September 3rd:

We are sending you herewith one copy each
of proposal forms and specifications, and under
separate cover one copy of each of the prints,
covering the coal tipple and belt conveyor system
for our D. O. Clark Mine, at Superior, Wyoming.

If, after studying these prints and
specifications, you desire any further information,
please correspond with Mr. Eugene McAuliffe, 1416
Dodge Street, Omaha, Nebraska.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe
Mr. C. E. Swann

September 15, 1937

Mr. John A. Garcia
Allen & Garcia Company
McCormick Building
Chicago, Illinois

Dear Mr. Garcia:

Referring to Mr. McAuliffe's letter to you
under date of September 3rd:

We are sending you herewith one copy each
of proposal forms and specifications, and under
separate cover one copy of each of the prints,
covering the coal tipple and belt conveyor system
for our D. O. Clark Mine, at Superior, Wyoming.

If, after studying these prints and
specifications, you desire any further information,
please correspond with Mr. Eugene McAuliffe, 1416
Dodge Street, Omaha, Nebraska.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe
Mr. C. E. Swann

September 15, 1937

Mr. Thomas McNally
McNally-Pittsburgh Manufacturing Corporation
Pittsburgh, Kansas

Dear Sir:

Referring to Mr. McAuliffe's letter to
you under date of September 3rd:

We are sending you herewith one copy each
of proposal forms and specifications, and under
separate cover one copy of each of the prints,
covering the coal tipple and belt conveyor system
for our D. O. Clark Mine, at Superior, Wyoming.

If, after studying these prints and
specifications, you desire any further information,
please correspond with Mr. Eugene McAuliffe, 1416
Dodge Street, Omaha, Nebraska.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe
Mr. C. E. Swann

September 15, 1937

Mr. Warren R. Roberts, President
Roberts and Schaefer Company
Wrigley Building
Chicago, Illinois

Dear Sir:

Referring to Mr. McAuliffe's correspondence
with you:

We are sending you herewith one copy each
of proposal forms and specifications, and under
separate cover one copy of each of the prints,
covering the coal tipple and belt conveyor system
for our D. O. Clark Mine, at Superior, Wyoming.

If, after studying these prints and
specifications, you desire any further information,
please correspond with Mr. Eugene McAuliffe, 1416
Dodge Street, Omaha, Nebraska.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe
Mr. C. E. Swann

September 15, 1937

Mr. George S. Jaxon
Link-Belt Company
300 W. Pershing Road
Chicago, Illinois

Dear Sir:

Referring to Mr. McAuliffe's letter under
date of September 3rd to Mr. Benedict Shubart, Denver,
Colorado:

We are sending you herewith one copy each
of proposal forms and specifications, and under separate
cover one copy of each of the prints, covering the
coal tipple and belt conveyor system for our D. O.
Clark Mine, at Superior, Wyoming.

If, after studying these prints and
specifications, you desire any further information,
please correspond with Mr. Eugene McAuliffe, 1416
Dodge Street, Omaha, Nebraska.

Yours very truly,

Original Signed:
GEORGE B. PRYDE

CC - Mr. Eugene McAuliffe
Mr. C. E. Swann
Mr. Benedict Shubart

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
COAL TIPPLE - D. O. CLARK MINE
SUPERIOR, WYOMING

Having visited the site and inspected the location of the proposed Coal Tipple, also having carefully examined the drawings and specifications for The Union Pacific Coal Company's coal tipple at the D. O. Clark Mine at Superior, Wyoming, the drawings as follows: Drawings No. 2146.31, 2146.31A, 2146.31B, 2146.31C, 2146.31D, 2146.31E, 2146.31F, 2146.31G, 2146.31H, 2146.31I, 2146.31J, 2146.31K, 2146.31L, 2146.31M, 2146.31N, and 2146.31P, drawings Nos. 1740.38 and 1940.35A included for the bidder's information, the bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

ITEM ONE (1). Tipple structure erected complete, including belt conveyor gallery, drive house at mine mouth, domestic fuel bin, refuse bin, car retarders, mechanical equipment, motors and control panel, structural steel, grating walks, stairs, grating platforms, reinforced concrete floors, and covering, as per plans and specifications:

Lump Sum Bid _____ (\$ _____)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting.) (Except as noted.)

ITEM TWO (2) 95 cubic yards concrete foundation in place.

_____ (\$ _____) Per Cu. Yd.

3,000# Plain Steel reinforcing in place.

_____ (\$ _____) Per Pound.

2,000# Anchor bolts and pipe sleeves in place.

_____ (\$ _____) Per Pound

NOTE: Unit Prices are to be written and numerical.

Remarks:

Monthly estimates with ten per cent (10%) retained until the contract is approved and accepted will govern the payment to the Contractor.

All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sum and the total amount of the quantities at the unit prices.

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above-stated compensation in the form of a standard agreement, and agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let. The Contractor further agrees that he will complete this work in _____ working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief Engineer, not later than 2:00 o'clock P.M.,

All bids are to be sealed and marked "Proposal for the construction of a Coal Tipple at the D. O. Clark Mine of The Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

Witness:

By

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM - D. O. CLARK MINE
SUPERIOR, WYOMING

Having visited the site and inspected the location of the proposed Belt Conveyor System, also having carefully examined the drawings and specifications for The Union Pacific Coal Company's Belt Conveyor System at the D. O. Clark Mine at Superior, Wyoming, the drawings as follows: Drawings Nos. 2146.32, 2146.32A, 2146.32B, 2146.32C, 2146.32D, 2146.32E, 2146.32F, 2146.32G, 2146.32H, 2146.32I, 2146.32J, 2146.32K and 2146.32M, drawings Nos. 1740.38, P145 and 1940.35A included for the Bidder's information, the Bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

ITEM ONE (1). The following machinery, structures and belt conveyor system erected complete as follows: Two Car Feeders and Two Trip Makers, completed, including foundations, Two Steel Hoppers and Feeders, Belt Conveyors, Belt Conveyor Drives, Structural Steel, Reinforced Concrete Bins, the erection of Two Rotary Mine Car Dumps, all as per plans and specifications:

Lump Sum Bid _____ (\$ _____)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting.) (Except as noted.)

ITEM TWO (2). 42-oz. Duck, 48-inch, 6-ply National Brand Rubber Belts, 3/16" R.C. and 1/16" R.C. Backing, all belts to be made continuous during erection by vulcanizing the splices.

Lump Sum Bid _____ (\$ _____)

ITEM THREE (3) 175.Cubic Yards Concrete Foundations, complete in place as per plans and specifications.

_____ (\$ _____) Per Cu. Yd.
Above to include Anchor Bolts.

NOTE: Unit prices are to be written and numerical.

Remarks:

Monthly estimates with ten per cent (10%) retained until the contract is approved and accepted will govern the payment to the Contractor.

All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sums and the total amount of the quantities at the unit prices.

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above-stated compensation in the form of a standard agreement, and agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let. The Contractor further agrees that he will complete this work in _____ working days after the contract is let. The Company reserves the right to postpone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto in writing within ten (10) days after the submission of bids, and the parties hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief Engineer, not later than 2:00 o'clock P.M.,

All bids are to be sealed and marked "Proposal for the Construction of a Belt Conveyor System at the D. O. Clark Mine of the Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject any and all bids or parts thereof. The time of starting work and date of completion will also be considered.

Proposed and Agreed by

Witness:

By

PROPOSAL FORM
FOR CONSTRUCTION OF
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM AND COAL TIPPLE AS A UNIT
D. O. CLARK MINE - SUPERIOR, WYOMING

Having visited the site and inspected the location of the proposed Belt Conveyor System and Three-Track Coal Tipple for The Union Pacific Coal Company's D. O. Clark Mine at Superior, Wyoming, also having carefully examined the drawings and specifications for the above, the drawings being designated by sheet numbers as follows: 2146.32, 2146.32A, 2146.32B, 2146.32C, 2146.32D, 2146.32E, 2146.32F, 2146.32G, 2146.32H, 2146.32I, 2146.32J, 2146.32K, 2146.32M, 2146.31, 2146.31A, 2146.31B, 2146.31C, 2146.31D, 2146.31E, 2146.31F, 2146.31G, 2146.31H, 2146.31I, 2146.31J, 2146.31K, 2146.31L, 2146.31M, 2146.31N, 2146.31P, also drawings Nos. F145, 1740.38 and 1940.35A included for the bidders' information, the Bidder bases his findings on the conditions set forth, and The Union Pacific Coal Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

The undersigned proposes to execute in accordance with his findings and the said plans and specifications, as follows:

BELT CONVEYOR SYSTEM:

ITEM ONE (1). The following machinery, structures and belt conveyor system erected complete as follows: Two Car Feeders and Two Trip Makers, completed, including foundations, Two Steel Hoppers and Feeders, Belt Conveyors, Belt Conveyor Drives, Structural Steel, Reinforced Concrete Bins, the erection of Two Rotary Mine Car Dumps, all as per plans and specifications:

Lump Sum Bid _____ (\$ _____)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

ITEM TWO (2). 42-oz. Duck, 48-inch, 6-ply National Brand Rubber Belts, 3/16" R.C. and 1/16" R.C. Backing, all belts to be made continuous during erection by vulcanizing the splices.

Lump Sum Bid _____ (\$ _____)

ITEM THREE (3). 175.0 Cubic Yards Concrete Foundations, complete in place as per plans and specifications.

_____ (\$ _____) Per Cu. Yd.
Above to include Anchor Bolts.

THREE-TRACK COAL TIPPLE:

ITEM ONE (1). Tipple structure erected complete, including belt conveyor gallery, drive house at mine mouth, domestic fuel bin, refuse bin, car retarders, mechanical equipment, motors and control panel, structural steel, grating walks, stairs, grating platforms, reinforced concrete floors, and covering, as per plans and specifications:

Lump Sum Bid _____ (\$ _____)
(The Union Pacific Coal Company will furnish and install all electric wiring and lighting, except as noted.)

95
(2). ~~#~~ cubic yards concrete foundation in place.

(\$ _____) Per Cu. Yd.

3,000# Plain Steel reinforcing in place.

(\$ _____) Per Pound.

2,000# Anchor bolts and pipe sleeves in place.

(\$ _____) Per Pound

NOTES: It is mutually agreed and understood that the Bidder bases this proposal on the specific condition of the successful Bidder being awarded a contract for the construction of the proposed belt conveyor system and coal tipple in their entirety.

Unit Prices are to be written and numerical.

Remarks:

Monthly estimates with ten per cent (10%) retained until the contract is approved and accepted will govern the payment to the Contractor.

All bids are to be based on a Surety Bond, furnished at the Contractor's expense, covering the contract price to be determined by the total amount of the lump sum and the total amount of the quantities at the unit prices.

The Contractor will state, in a separate signed sheet, the method or methods and type of equipment he proposes to use in executing the work. Also, to avoid delay in preparing the Contract, the name of Bidder or Bidders, furnishing a complete list of Partners, Corporate name, State where incorporated, Home Office and title of authorized official, as the case may be.

CONTRACT

The undersigned agrees to execute a contract for the above stated compensation in the form of a standard agreement, and agrees to furnish a Surety Bond satisfactory to The Union Pacific Coal Company covering the full amount of the contract or proposal provided he be notified within ten (10) days after the time set for the submission of bids.

It is understood that the work is to be continuous and the Company desires this job completed as soon as possible after the contract is let.

Contractor further agrees that he will complete this work in _____
_____ days after the contract is let. The Company reserves the right to post-
pone the work in case the weather is not favorable for proper execution of same.

It is further agreed that the Company will notify the parties hereto
in writing within ten (10) days after the submission of bids, and the parties
hereto will start work immediately thereafter.

Bids shall be submitted to the Engineering Department, The Union
Pacific Coal Company, Rock Springs, Wyoming, in care of C. E. Swann, Chief
Engineer, not later than 2:00 o'clock P.M., _____.

All bids are to be sealed and marked "Proposal for the Construction
of a Coal Tipple and Belt Conveyor System As a Unit at the D. O. Clark Mine
of The Union Pacific Coal Company, at Superior, Wyoming."

The Union Pacific Coal Company reserves the right to accept or reject
any and all bids or parts thereof. The time of starting work and date of com-
pletion will also be considered.

Proposed and Agreed by

Witness:

By _____

ROBERTS AND SCHAEFER COMPANY

ENGINEERS AND CONTRACTORS

WRIGLEY BUILDING

CHICAGO

SPECIALTIES
COAL MINING PLANTS
COAL CLEANING PLANTS
COALING STATIONS
CINDER HANDLING PLANTS
ROTARY CAR DUMPERS

CABLE ADDRESS "RANDS"
WESTERN UNION CODE



PLEASE ALL COMMUNICATIONS
TO THE COMPANY

IN REPLY PLEASE REFER TO 37113-WRR

September 13, 1937

Mr. Eugene McAuliffe,
Pres., The Union Pacific Coal Co.,
1416 Dodge St., Omaha, Nebraska.

Dear Mr. McAuliffe:

We have just received your very interesting letter of the 11th giving us a great deal of information of the general requirements of the new mine you are going to open at Superior-- Sweetwater County, Wyoming.

We note that by the 15th of this month you will be in position to mail full set of prints, general specifications, etc. covering the detailed requirements of your new plant, together with map of surface conditions, profiles xx and dimensions of the two slopes, together with form of proposal for bids.

Please note we will be very happy to receive all this data and hope the time between its receipt and the time bids are to be received will be ample to enable us to work up a very careful and economical design for you.

Expressing our very great appreciation of this opportunity of figuring on this proposed Tipple Equipment, etc. we are

Yours very truly,

ROBERTS AND SCHAEFER COMPANY

Warren R. Roberts
PRESIDENT

MM

Sept. 11, 1937.

Colonel Warren R. Roberts, Pres.,
Roberts and Schaefer Co.,
Wrigley Bldg.,
Chicago, Ill.

My dear Colonel Roberts:

I have yours of Sept. 7th. I beg to advise that the mine we have under construction is known as the D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the company, Mr. George B. Pryde, Vice-President and General Manager in charge at Rock Springs.

The mine may be reached from Rock Springs by a well-surfaced highway, as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes on a ten-degree pitch, one to be used as a Manway and for material only, the other to contain a four-section, 48-inch belt conveyor, the coal dumped on the belt through rotary dumps at two different points. The approximate length of the slopes is 2,600 feet.

The tippie will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. Adequate transportation facilities for material will be provided by the Company in the shape of railroad tracks in place, with necessary electric hoists. Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tippie will be shown on a surface map accompanying the general specifications, and will be practically on the site of the tippie. The conveyor belt material will, of course, have to be transported from the railroad cars to the point of erection in the Slope.

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, a copy of general specifications and the nature of the equipment desired, together with a map of the surface conditions, and a print showing the profile and dimensions of the two slopes, together with form of proposal for bid.

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications as prepared by the Coal Company. Thereafter, if you are desirous of sending an engineer to Superior

purpose of inspecting the physical conditions above and below ground, with living conditions for construction laborers, etc., arrangements made to give such engineer all the information desired.

We have attempted to reduce the preliminary expense of companies bidding on the mine to the minimum limit, our requirements set out very completely in the prints and specifications referred to above.

Sincerely yours,

Original Signed
EUGENE McAULIFFE

PRESIDENT
VICE-PRESIDENT
ADDRESS
CHICAGO

ALLEN & GARCIA COMPANY
CONSULTING & CONSTRUCTING ENGINEERS


McCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

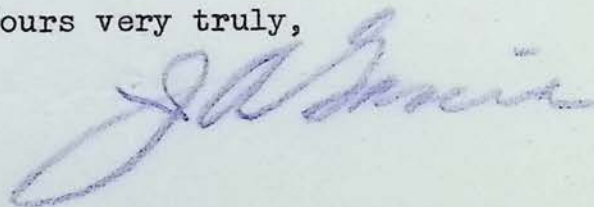
Sept. 7th, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
Rock Springs, Wyoming.

Dear Sir:-

The address of Roberts & Schaefer Company,
is 400 N. Michigan Ave., Chicago, Illinois.

Yours very truly,



JAG:HL

CC-Mr. Eugene McAuliffe,
1416 Dodge St.,
Omaha, Neb.

ALLEN & GARCIA COMPANY

CONSULTING & CONSTRUCTING ENGINEERS



MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

WM. VON MEDING, SECRETARY
L. VON PERBANDT, TREASURER

PHONE
HARRISON 2472

Sept. 7th, 1937.

Omaha
Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
Rock Springs, Wyoming.

Dear Sir:-

We acknowledge yours of the 3rd, and would be glad to submit a proposition on your proposed new plant at D. O. Clark Mine, Superior, Sweetwater County, Wyoming, and would thank you to send us your prints and specifications when completed.

Our Mr. von Meding is now in Alberta, Canada, returning by auto about the end of this week, and has been instructed to stop over at Rock Springs to inspect the physical conditions, etc., as per your suggestion.

Yours very truly,

JAG:HL

CC-Mr. Eugene McAuliffe,
1416 Dodge St.,
Omaha, Nebr.

Omaha - Sept. 10, 1937.

G. B. Pryde:

I now have advice from Mr. Thomas McNally, President of The McNally-Pittsburgh Mfg. Corporation, Pittsburgh, Kansas and from Mr. E. C. Horne of The Jeffrey Manufacturing Co., Ernest & Cramer Bldg., Denver, expressing their desire for copy of the plans and specifications, together with prints and map of the surface conditions in connection with bidding on the D. O. Clark tipple. This completes our returns from the five companies we are asking to bid on the property.

Original Signed
EUGENE McAULIFFE

THE JEFFREY MANUFACTURING CO.

ESTABLISHED 1877

COAL MINING MACHINERY, ELECTRIC LOCOMOTIVES,
CHAINS, CONVEYING AND CRUSHING MACHINERY

DENVER, COLORADO



September 8, 1937

The Union Pacific Coal Co.,
Mr. Eugene Mc Auliffe, President,
1416 Dodge Street,
Omaha, Nebraska

Dear Sir:

Thank you for your letter of September 3rd outlining your plans for your new coal tippie as well as conveying equipment for the D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming.

We will be pleased to prepare for you a proposal for this equipment and will greatly appreciate a set of plans and specifications, together with prints and map of the surface conditions, so we may have our Engineers work this up to submit to you.

We will arrange to be present at Chicago or any other designated point to confer with you on this proposition.

Thanking you for this opportunity to participate in this bid,
we are

Yours very truly,

E. C. Horne

P:G

The McNally-Pittsburg Mfg. Corp.

GENERAL OFFICES & WORKS.
PITTSBURG, KANSAS.

COAL PREPARATION
MACHINERY
COAL TIPPLES
COAL WASHERIES
MATERIAL HANDLING
EQUIPMENT

GENERAL SALES OFFICE
307 N. MICHIGAN AVENUE
CHICAGO, ILLINOIS

THOS. McNALLY,
PRESIDENT

Pittsburg, Kansas

September 8, 1937
(Dict. 9/7/37)

Mr. Eugene McAuliffe, President
The Union Pacific Coal Company
1416 Dodge Street
Omaha, Nebraska

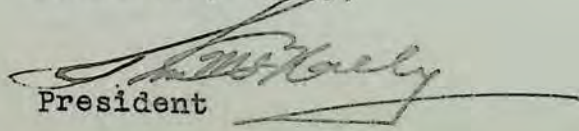
Dear Mr. McAuliffe:

Acknowledging receipt of yours of the third. Indeed we will be very much interested in having your specifications and the opportunity of quoting on the new project at Superior. We have asked our Mr. Wilson, who will be in Salt Lake City, to return via Superior and secure such information as is necessary to properly set up our proposal.

We are very conscious, in our Chicago office as well as our Pittsburg office, of the position the Union Pacific Coal Company enjoys in the West and the knowledge that only the very best design and the very best equipment is good enough, and when we quote on your work we of course will keep these thoughts in mind.

In order that you may know what progress our company has made in the last few years in coal preparation, I am sending to you, under separate cover, a copy of the "March With Time", and I feel that you will be interested in taking a few minutes to review some of the plants built by us.

Yours very truly,


President



NORTON.....
AUTOMATIC COAL
WASHING SYSTEM

TM:NEH

ALL CONTRACTS AND AGREEMENTS ARE SUBJECT TO STRIKES, FIRES, ACCIDENTS AND OTHER CAUSES BEYOND OUR CONTROL.

Omaha - Sept. 8, 1937.

Mr. G. B. Fryde:

I have the following acknowledgments relative to bidding on the D. O. Clark tippie:

Allen & Garcia Co., McCormick Bldg., Chicago; desire prints, specifications and proposition when completed. Mr. von Noding now in Alberta, Canada, returning by auto the end of this week and has been requested to stop over at Rock Springs to inspect physical conditions, etc.

Mr. Warren R. Roberts, President of the Roberts and Schaefer Co., Wrigley Bldg., Chicago, is desirous of receiving specifications, etc.

The Link-Belt Co., Mr. Benedict Shubart, Boston Bldg., Denver, requests one set of prints and papers for his use, with a set sent to George S. Jaxon, Link-Belt Company, 300 W. Pershing Road, Chicago, which he advises will save time and insure more effective cooperation.

As soon as I hear from the Jeffrey Manufacturing Company and McNally-Pittsburgh Manufacturing Corporation, I will advise you.

I would like to see a copy of the proposal for bids, submitting same to our Law Dept. before you finally send them out. Can you send me a draft of the proposal?

Omaha - Sept. 8, 1937.

Mr. W. M. Jeffers:

Having substantially completed our plans and specifications for the new D. O. Clark tipple, I am asking five construction firms to bid on same, complete in place, viz:

Link-Belt Company - Chicago
Roberts & Shaefer Company - Chicago
Allen & Garcia Company - Chicago.
Jeffrey Manufacturing Company - Denver.
McNally-Pittsburgh Manufacturing Corporation - Pittsburgh, Kans.

We are submitting prints and specifications in detail to the five companies and will require all bidders to conform to same, making a price complete ready for operation. In this way we will obviate the necessity of the five companies sending engineers into the field and thereafter submitting tentative plans, which makes it impossible to determine the relative value received for the money expended.

We contemplate the work of construction to commence April 1, 1938, with approximately three months for construction.

Original Signed
EUGENE MCAULIFFE

LINK-BELT COMPANY

ENGINEERING PLANTS: CHICAGO, PHILADELPHIA, SAN FRANCISCO, TORONTO, ATLANTA
CHAIN FACTORIES AND MALLEABLE FOUNDRIES: INDIANAPOLIS

BOSTON BUILDING, DENVER, COLORADO
ROCKY MOUNTAIN REPRESENTATIVES: SHUBART & SCHLOSS

BENEDICT SHUBART
CHARLES M. SCHLOSS

Sept. 7, 1937

Mr. Eugene McAuliffe, Pres.,
Union Pacific Coal Co.,
1416 Dodge St.,
Omaha, Nebraska.

D.O. CLARK TIPPLE & CONVEYOR

Dear Mr. McAuliffe:

In acknowledgment of your letter of Sept. 3rd, it will be a great pleasure to quote on both the tipple and the belt conveyor, and I can assure you that the Link-Belt Company is taking a very great interest in this work.

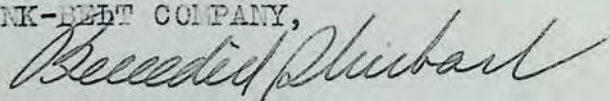
When you are ready, it will help us a lot if you can send us two sets of the prints and specifications, so one set may go on to Chicago, and one be kept in Denver so we may cooperate with Chicago. Better yet, we suggest you send one copy to George S. Jaxon, Link-Belt Company, 300 W. Pershing Road, Chicago, Illinois, and send the other copy to us, and this will save time.

Your consideration in this matter is appreciated.

Sincerely yours,

LINK-BELT COMPANY,

By



BS/LO

c/c Mr. George B. Pryde

ROBERTS AND SCHAEFER COMPANY

ENGINEERS AND CONTRACTORS

WRIGLEY BUILDING

CHICAGO

SPECIALTIES
COAL MINING PLANTS
COAL CLEANING PLANTS
COALING STATIONS
CINDER HANDLING PLANTS
ROTARY CAR DUMPERS

CABLE ADDRESS "RANDS"
WESTERN UNION CODE

ADDRESS ALL COMMUNICATIONS
TO THE COMPANY

IN REPLY PLEASE REFER TO

WRR

September 7, 1937

Mr. Eugene McAuliffe,
Pres., The Union Pacific Coal Co.,
1416 Dodge Street, Omaha, Nebraska.

My Dear McAuliff:

Have just received yours of the 5th advising that about September 15th you would complete your data and other requirements for opening up a new mine and would be asking for specifications and proposals for the construction work.

We would be very happy to receive full information regarding your requirements for this new mine and submit plans, specifications and proposal for these improvements. We express our hearty appreciation for this opportunity to compete for your business.

You will be happy I am sure to learn that we have been very successful during the past year in competing for such improvements, especially tipples and coal preparation plants. During this time we have built several plants in West Virginia, Kentucky and western Pennsylvania including several of the largest and best plants which have been built for sometime. During August we contracted with the Island Creek Coal Company for a complete Coal Preparation Plant, including Tipple, Wet Washery and our Air-Flow Cleaner for the fine coal. This is the largest and most complete plant which has been let for at least a year and we are happy to have been successful in securing the contract as the award was based very largely on the meeting of very severe preparation requirements.

With kind personal regards, I am

Yours sincerely,

Warren R. Roberts
PRESIDENT
ROBERTS AND SCHAEFER COMPANY

MM

Sept. 7th, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
Rock Springs, Wyoming.

Dear Sir:-

We acknowledge yours of the 3rd, and would be glad to submit a proposition on your proposed new plant at D. O. Clark Mine, Superior, Sweetwater County, Wyoming, and would thank you to send us your prints and specifications when completed.

Our Mr. von Meding is now in Alberta, Canada, returning by auto about the end of this week, and has been instructed to stop over at Rock Springs to inspect the physical conditions, etc., as per your suggestion.

Yours very truly,

JAG:HL

CC-Mr. Eugene McAuliffe,
1416 Dodge St.,
Omaha, Nebr.

GARCIA COMPANY
ENGINEERING & CONSTRUCTING ENGINEERS

MCCORMICK BUILDING
332 S. MICHIGAN AVE.

CHICAGO

SHEET NO. _____

Sept. 7th, 1937.

Mr. Eugene McAuliffe, Pres.,
The Union Pacific Coal Co.,
Rock Springs, Wyoming.

Dear Sir:-

The address of Roberts & Schaefer Company,
is 400 N. Michigan Ave., Chicago, Illinois.

Yours very truly,

JAG:HL

CC-Mr. Eugene McAuliffe,
1416 Dodge St.,
Omaha, Neb.

Sept. 5, 1937.

Colonel Warren R. Roberts,
Robinson-Shafer Co.,
1110 Wrigley Bldg.,
Chicago, Ill.

Dear Colonel Roberts:

Nearly two years ago I promised to give you
an opportunity to bid on any new steel tippie built by The Union
Pacific Coal Company.

We are constructing a new mine and will put
out prints, specifications and proposal for bids about Sept. 15th.

Do you wish me to send you copies of the above
papers?

Very sincerely yours,

Original Signed
EUGENE MCAULIFFE

file copy

At Rock Springs, Wyoming
September 3, 1937

Link-Belt Company
c/o Shubart & Schloss
Boston Building
Denver, Colorado

Gentlemen:

The Union Pacific Coal Company has under construction its D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the Company.

The mine may be reached from Rock Springs by a well-surfaced highway, as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes on a ten-degree pitch, one to be used as a Manway and for material only, the other to contain a four-section, 48-inch belt conveyor, the coal dumped on the belt through rotary dumps at two different points. The approximate length of the slopes is 2,600 feet.

The tippie will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. Adequate transportation facilities for material will be provided by the Company in the shape of railroad tracks in place, with necessary electric hoists. Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tippie will be shown on a surface map accompanying the general specifications, and will be practically on the site of the tippie. The conveyor belt material will, of course, have to be transported from the railroad cars to the point of erection in the slope.

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, a copy of general specifications and the nature of the equipment desired, together with a map of the surface conditions, and a print

showing the profile and dimensions of the two slopes, together with form of proposal for bid.

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications as prepared by the Coal Company. Thereafter, if you are desirous of sending an engineer to Superior for the purpose of inspecting the physical conditions above and below ground, together with living conditions for construction laborers, etc., arrangements will be made to give such engineer all the information desired. //

If you will kindly advise me at my office at Omaha your willingness to consider bidding on the work above referred to, I will ask our Rock Springs office to forward to you copies of prints and specifications as soon as completed, approximately September 15th.

Yours very truly,

Original Signed:
EUGENE MCMAULIFFE

At Rock Springs, Wyoming
September 3, 1937

Allen & Garcia Company
McCormick Building
Chicago, Illinois

Gentlemen:

The Union Pacific Coal Company has under construction its D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the Company.

The mine may be reached from Rock Springs by a well-surfaced highway, as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes on a ten-degree pitch, one to be used as a Manway and for material only, the other to contain a four-section, 48-inch belt conveyor, the coal dumped on the belt through rotary dumps at two different points. The approximate length of the slopes is 2,600 feet.

The tipple will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. Adequate transportation facilities for material will be provided by the Company in the shape of railroad tracks in place, with necessary electric hoists. Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tipple will be shown on a surface map accompanying the general specifications, and will be practically on the site of the tipple. The conveyor belt material will, of course, have to be transported from the railroad cars to the point of erection in the Slope.

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, a copy of general specifications and the nature of the equipment desired, together with a map of the surface conditions, and a print

showing the profile and dimensions of the two slopes, together with form of proposal for bid.

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications as prepared by the Coal Company. Thereafter, if you are desirous of sending an engineer to Superior for the purpose of inspecting the physical conditions above and below ground, together with living conditions for construction laborers, etc., arrangements will be made to give such engineer all the information desired.

If you will kindly advise me at my office at Omaha your willingness to consider bidding on the work above referred to, I will ask our Rock Springs office to forward to you copies of prints and specifications as soon as completed, approximately September 15th.

Yours very truly,

Original Signed:
EUGENE MAULIFFE

At Rock Springs, Wyoming
September 3, 1937

The Jeffrey Manufacturing Company
c/o E. C. Horne Machinery Company
315 E. & C. Building
Denver, Colorado

Gentlemen:

The Union Pacific Coal Company has under construction its D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the Company.

The mine may be reached from Rock Springs by a well-surfaced highway, as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes on a ten-degree pitch, one to be used as a Manway and for material only, the other to contain a four-section, 48-inch belt conveyor, the coal dumped on the belt through rotary dumps at two different points. The approximate length of the slopes is 2,600 feet.

The tippie will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. Adequate transportation facilities for material will be provided by the Company in the shape of railroad tracks in place, with necessary electric hoists. Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tippie will be shown on a surface map accompanying the general specifications, and will be practically on the site of the tippie. The conveyor belt material will, of course, have to be transported from the railroad cars to the point of erection in the slope.

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, a copy of general specifications and the nature of the equipment desired, together with a map of the surface conditions, and a print

showing the profile and dimensions of the two slopes, together with form of proposal for bid.

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications as prepared by the Coal Company. Thereafter, if you are desirous of sending an engineer to Superior for the purpose of inspecting the physical conditions above and below ground, together with living conditions for construction laborers, etc., arrangements will be made to give such engineer all the information desired.

If you will kindly advise me at my office at Omaha your willingness to consider bidding on the work above referred to, I will ask our Rock Springs office to forward to you copies of prints and specifications as soon as completed, approximately September 15th.

Yours very truly,

Original Signed:
EUGENE McAULIFFE

At Rock Springs, Wyoming
September 3, 1937

Mr. Thomas McNally
McNally-Pittsburgh Manufacturing Corporation
Pittsburgh, Kansas

Dear Sir:

The Union Pacific Coal Company has under construction its D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the Company.

The mine may be reached from Rock Springs by a well-surfaced highway, as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes on a ten-degree pitch, one to be used as a Manway and for material only, the other to contain a four-section, 48-inch belt conveyor, the coal dumped on the belt through rotary dumps at two different points. The approximate length of the slopes is 2,600 feet.

The tippie will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. Adequate transportation facilities for material will be provided by the Company in the shape of railroad tracks in place, with necessary electric hoists. Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tippie will be shown on a surface map accompanying the general specifications, and will be practically on the site of the tippie. The conveyor belt material will, of course, have to be transported from the railroad cars to the point of erection in the Slope.

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, a copy of general specifications and the nature of the equipment desired, together with a map of the surface conditions, and a print

showing the profile and dimensions of the two slopes, together with form of proposal for bid.

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications as prepared by the Coal Company. Thereafter, if you are desirous of sending an engineer to Superior for the purpose of inspecting the physical conditions for construction laborers, etc., arrangements will be made to give such engineer all the information desired.

If you will kindly advise me at my office at Omaha your willingness to consider bidding on the work above referred to, I will ask our Rock Springs office to forward to you copies of prints and specifications as soon as completed, approximately September 15th.

Yours very truly,

Original Signed:
EUGENE McAULIFFE

The Union Pacific Coal Company has under construction its D. O. Clark Mine, located at Superior, Sweetwater County, Wyoming, approximately 22 miles from Rock Springs, the operating headquarters of the Company.

The ~~D. O. Clark~~ Mine may be reached from Rock Springs by a well-surfaced highway as well as freight railroad connections. The freight rates from outside points to Superior are identical with those governing shipments to Rock Springs.

The character of the development of the D. O. Clark Mine is that of two slopes, ^{on a ten degree pitch,} one to be used ^{as a} for Manway and for Material only; ^{through Rotary dumps} the other will contain a four-section, 48-inch belt conveyor, the coal dumped on the belt ^{at} two different points. The approximate length of the slopes is 2,600 feet.

Adequate transportation facilities for material will be provided by the Company in the shape of ^{railroad} tracks in place, ^{with necessary} electric hoists, ~~on both slopes.~~

The tipple will be of three-loading-track construction, the coal delivered on the shaker screens by the last section of the belt above referred to. S

Water and electric power will be furnished by the Coal Company on the premises.

The distance required for the transport of material from cars to the place of erection of the tipple will be shown on a surface map accompanying the general specifications, and will be ^{practically} on the site of the tipple. The conveyor belt material will, of course, have to be transported from the ^{railroad cars} surface to the point of erection ^{in the slope.}

On or about September 15th, the Coal Company will be in a position to mail you a full set of prints, ^{a copy of} ~~setting~~ ^{the} ~~out the~~ general specifications and the nature of the equipment desired, together with ^a ~~the~~ map of the surface conditions, and a print showing the profile and dimensions of the two slopes, *together with form of proposal for bid.*

After receipt of prints, together with specifications, providing your company is desirous of bidding on the job, an appointment will be arranged with your company in Chicago for the purpose of going over with your engineers all of the details set forth in the general specifications ^{as prepared by} ~~to be submitted~~ *The Coal Company.* ~~to you.~~ Thereafter, if you are desirous of sending an engineer to Superior for the purpose of inspecting the physical conditions above and below ground, together with living conditions for construction laborers, etc., arrangements will be made to give such engineer all the information desired.

If you will kindly advise me at my office at Omaha your willingness to consider bidding on the work above referred to, I will ask our Rock Springs office to forward ^{to you} copies of prints and specifications as soon as completed, approximately September 15th. ~~Form of proposal for bid will~~

At Rock Springs, Wyoming
September 3, 1937

Mr. John A. Garcia, President
Allen and Garcia Company
McCormick Building
Chicago, Illinois

Dear John:

Some time ago I promised to let Col. Roberts,
of Roberts and Sheaffer, bid on our D. O. Clark Mine
tipple.

Will you advise me at Omaha, the address
of Roberts and Sheaffer, as I do not find it, or
their advertisement, in the Keystone Catalogue, or
in Coal Age.

Sincerely yours,

Original Signed:
EUGENE McAULIFFE

SPECIFICATIONS
FOR DESIGNING, DETAILING, MANUFACTURING, FABRICATING
AND CONSTRUCTING
THE UNION PACIFIC COAL COMPANY'S
BELT CONVEYOR SYSTEM
AT SUPERIOR, WYOMING

DESCRIPTION OF WORK:

The work covered by these specifications consists of:

1. Excavating for the concrete foundations and back-fill around the foundations after pouring.
2. Excavating for the concrete foundations for trip makers and car feeders with back-fill around the foundations after pouring.
3. Building all concrete foundations, concrete hopper supports, concrete manway and walls.
4. Detailing, fabricating and erecting structural steel work.
5. Designing, detailing, manufacturing, installing mechanical equipment and its supports.
6. Furnishing and installing belts.
7. Furnishing and installing motors and magnetic pulley.
8. Furnishing all material required to build a complete belt conveyor system.

DRAWINGS:

The following drawings from the office of the Chief Engineer of The Union Pacific Coal Company accompanying these specifications are considered as forming a part of the same:

2146.32 Masonry Plan.

2146.32A Masonry Plan.

2146.32B Masonry Plan.

2146.32C Masonry Plan.

2146.32D Belt Conveyor System, Sta. 10 plus 71.02 to Sta. 24 plus 81.68.

2146.32E Belt Conveyor System, Sta. 1 plus 01.50 to Sta. 10 plus 71.02.

2146.32F Belt Conveyor System, Sta. 0 plus 15.96 to Sta. 1 plus 02.06.

2146.32G Hopper, Feeder Plates and Feeder Pan Details.

2146.32H Hopper Plate Details.

2146.32I Reciprocating Feeder and Drive Details.

2146.32J Layout at Loading Point, Station 10 plus 38.11.

2146.32K Trip Makers and Car Feeders.

2146.32M Details of Concrete Bin Supports and Concrete Manway.

1940.35A Plan and Profile, Rock Slopes.

P145 The Union Pacific Coal Company's drawing of cars.

1740.38 Proposed Railroad Tipple Tracks.

WORK INCLUDED:

The work under this contract consists of furnishing all labor, foundations, steel work, machinery, belts, machinery supports, motors, electrical control, magnetic pulley, installation and erection and field painting of entire material erected.

The Contractor is to furnish all of above and all necessary labor, tools, superintendence, equipment, false work, forms, lumber, temporary walks, loading and unloading of all materials, operating expense, and all other items, unless it is specifically stated otherwise.

COAL COMPANY TO FURNISH:

The Union Pacific Coal Company will furnish the following:

Water: Water piped to the mouth of the manway of the north rock tunnel. The Contractor shall furnish drinking water available in close proximity to the work.

Electricity: Electricity is to be furnished, alternating current, 3-phase, 60-cycle, voltage to be 2,300, 440 and 220, delivered to the mouth of the rock slope.

Tracks: The Railroad tracks shown in red on General Elevation Drawing No. 2146.31 will be in place. Any demurrage charges are to be paid for at the Contractor's expense. The balance of finished railroad grade intended for future tracks will be available for storage of materials.

The Coal Company will also furnish a 42-inch gauge track from the mouth of the Belt Conveyor gallery to the foot of the Belt Conveyor gallery (this track is now in place). It may be necessary to shift these tracks in order to place some of the concrete footings (the tracks may interfere with some footings). These tracks shall be removed by the Contractor after they have served their purpose. The Company will furnish hoisting facilities for lowering material down into the mine.

METHOD OF PAYMENT:

Monthly estimates, falling or becoming due on the last day of each calendar month, will be prepared by the Engineer on a basis of 90% of the amount due for material on the site and for work completed during the calendar month.

Payments shall be remitted to the Contractor on or before the 15th day of the following month, it being specifically understood that 10% of the amount due for completed work will be retained until such time as the contract is completed, approved and accepted by The Union Pacific Coal Company.

CONTRACTOR TO BASE BID:

The Contractor is to visit the site and familiarize himself with the conditions. His bid is to be based on his findings, and the Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

SECTION NO. 1

GENERAL CONDITIONS

GENERAL:

The General Conditions as hereinafter set forth shall apply to all specifications used in connection with the work.

COMPANY, ENGINEER AND CONTRACTOR DEFINED:

The word Company shall designate The Union Pacific Coal Company, and the word Engineer, the said Company's Engineering Department's representative, or the Company's officials in charge, and the word Contractor, the contracting party or parties.

DRAWINGS FURNISHED BY THE COMPANY:

The drawings furnished by the Company shall be considered as part of and illustrating these specifications. The specifications are intended to supplement the drawings, the two being considered co-operative. Drawings and specifications will be part of the contract and are equally binding. They are the property of the Company and shall be returned when the work is completed.

The drawings show the arrangement, location and type of equipment desired, the sections of all main structural steel members, details of walls, foundations, grades, elevations (the Contractor shall detail and design the foundations for the trip makers and car feeders) and clearances.

The Contractor shall not execute any work until he has submitted detail drawings in duplicate and received the Engineer's approval of same. All work must be made in strict accordance with such detail.

Figures on drawings shall take precedence over measurements by scale, detail drawings over small-scale drawings. The decision of the Engineer shall be final as to the interpretation of drawings and specifications.

ERRORS AND DISCREPANCIES:

If the Contractor, in the course of his work, finds any discrepancy between the plans and specifications and the

physical conditions of the locality, or any errors in the plans and specifications, or in the points given for the construction of the work, it shall be his duty to immediately inform the Engineer in writing, and the Company will promptly verify and, if necessary, correct the same. Any work done after such discovery until authorized will be done at the Contractor's risk.

CO-RELATED WORK:

When the work of this Contractor engages with the work of any other Contractor or the Company, he must co-operate with the other Contractor or the Company, and exercise extraordinary care to prevent injury to any work or material. This Contractor shall do all necessary cutting and fitting of his work where same engages the work of another Contractor or the Company.

SPECIAL MATERIALS:

Special brands of material, type of equipment, or devices mentioned in specifications or on drawings are for the purpose of establishing a standard or criterion of quality, type and character desired. Other material of equal quality and adaptability to purpose for which they are intended may be substituted, but only with the written approval of the Engineer. If the Contractor desires to substitute some other brand of material for that mentioned on the drawings or in the specifications, he must submit a statement with his proposal clearly and fully describing such substitution as he desires to make.

Where specific make or kind of apparatus is called for and furnished by Contractor, the furnishing of the apparatus does not relieve the Contractor of liability until he shall make such apparatus or appliance operate so that it will successfully perform the function for which it is intended.

TEMPORARY TOILET FACILITIES:

The Contractor shall establish and maintain adequate temporary toilet facilities for accommodation of Contractor's employees, to be located where directed by the Engineer. Such facilities shall be constructed and maintained to conform to the local legal requirements and shall be removed by the Contractor on completion of the work.

FIELD OFFICE:

The Contractor shall erect a field office on the

works, of weather-tight construction, provided with ample windows, and supply such hardware as may be necessary to lock the office. The office is to be sufficient in size to accommodate both the Contractor and Engineer. The Contractor shall pay for and install a telephone service where the service is available.

SUPERINTENDENCE:

The Contractor shall constantly superintend all work embraced in this contract during erection, in person or by a duly authorized manager acceptable to the Company.

He must always keep on the premises, during construction, a suitable foreman to direct operations and receive instructions in his absence.

PROTECTION AGAINST LIABILITY FOR ACCIDENTS:

The Contractor shall, at his own expense, erect and maintain all requisite lights and barriers for the protection of his work and for the safety of the premises or persons, subject to the order of the Engineer.

OBJECTIONABLE WORKMEN:

The Engineer reserves the right to require the removal of any particular workman or workmen on the work, if, in his judgment, it shall be for the best interests of the work that such particular workman or workmen should be removed.

INSPECTION AND TESTING:

The Contractor shall make a thorough inspection of all material and shall furnish, if required, certified copies of mill tests.

The Contractor shall inspect all materials, which must be new and the best of their respective kinds, when delivered, so as to prevent the unloading of bad material or to remove the same promptly without awaiting orders from the Engineer.

He must also have materials delivered in good order and promptly stored and protected from injury until used. The disposal and locating of material and equipment shall be subject at all times to the Engineer's directions.

Should any work be already in place in the structure which, in the judgment of the Engineer, is not in accordance with the specifications or plans, either as regards material or workmanship, the Engineer may either require the said work to be taken down or replaced by work in accordance with the plans and specifications, or he may allow the said work to remain and may deduct from the contract price an amount which in his judgment shall be a proper allowance for the inferiority of said work, including also in his deduction the amount of all damages of whatever nature or kind that may result from such cause.

The Engineer reserves the right to make such inspection of the material at the mills or shops or at the structure as he may deem necessary, and the Contractor shall give the Engineer all necessary facilities for making a thorough inspection of the work and shall notify him in sufficient time before shipment of material so he can make a shop inspection of same. Material or workmanship not conforming to the provisions of this specification shall be rejected at any time defects are found during the progress of the work, even if accepted by the Shop Inspector.

The Contractor shall permit the Engineer and all persons appointed by him to visit and inspect the said work, and every part thereof, at all times and places during the progress of the work, and shall provide sufficient, safe and proper facilities for such inspection.

CO-OPERATION WITH OTHER CONTRACTORS AND WITH THE COMPANY:

The Contractor shall, at an early date, put himself in communication with other contractors whose work may affect his so as to promote harmony of work, and shall co-operate with them and with the Engineer as to the proper conduct of the work and any difference of opinion shall be arbitrated by the Engineer.

"EXTRAS":

All extras must be ordered by the Engineer in writing on form "Order on Contractor" and the price for said extras agreed upon beforehand.

In default of such agreement, the Engineer shall fix the valuation of said extras and his decision shall be final and binding.

No claims for extras will be allowed unless accompanied by the written order for said extras.

Failure to understand the drawings or specifications or ignorance of the contents of either will not be accepted as an excuse for omissions, or inferior character of work or material, nor will such misunderstanding or ignorance be allowed to justify a claim for extra work ordered as above described.

PROTECTION AGAINST STORM:

The Contractor shall be required to properly brace and secure the work during construction, against wind and storms, and will be held wholly responsible for the safety of any work until its completion and acceptance.

PROTECTION AGAINST FIRE:

The Contractor and any of his employees are strictly forbidden to smoke or light fires of any kind about the structure, except by written consent of the Engineer, and if any man or men be found violating this rule, such violation will be deemed sufficient to cause his or their removal from the work and premises.

PROTECTION OF WORK:

The Contractor shall not use any part of barricades or structure for advertising purposes.

CLEANING UP:

At the completion of the work embraced under this contract, the entire work must be left clean and whole, floors cleaned and all rubbish of every description removed from the premises regardless of or by whom made, there being no division of responsibility in regard to this.

The work, when completed, will be accepted in a finished, perfect and undamaged state only. The Contractor shall protect his work during its progress, and, if damaged, will do all patching necessary to its full and satisfactory completion.

TEMPORARY HEAT:

Wherever temporary heat or heat during construction of structure is required for prevention of damaging of material by freezing, or for any other reason, such heat shall be provided for by the Contractor and the entire expense in connection therewith shall be borne by him.

The Contractor shall provide all salamanders, coke and attendance and supply temporary heat from these as required until the work is finished.

SUB-LETTING AND SUB-CONTRACTORS:

The Contractor, if he wishes to sub-let portions of the work, must have the approval of the Company, but this does not in any way relieve him of the responsibility for the proper execution of the work. The Company's representative is only expected to deal with the Contractor or the Contractor's authorized representative.

SHIPMENT OF MATERIAL AND ROUTING:

The Contractor is to base his bid on shipping all material by railroad, and the Company reserves the right to designate the routing of railroad shipment of any materials furnished by the Contractor, and he shall make no shipments without having first obtained from the Company instructions as to routing of said shipments.

ASSISTANCE:

The Contractor shall render all necessary assistance as may be requested or required to take and furnish necessary levels, measurements, etc., on the work or grounds as the case may be. This to apply to minor details, replacement of stakes, etc. The Company's Engineering Department will furnish all necessary alignment, grade and finishing stakes, and other work necessary to determine the earth work, and locate various items, stake out retaining walls, piers, etc. The Contractor is to preserve all stakes and references as far as possible. If the Contractor's employees, through carelessness or neglect, destroy the Engineer's stakes, so that they have to be replaced, and such replacement is more than a reasonable amount, the Contractor will be required to pay the Company the extra expense incurred by the Company.

CODES, LAWS AND ORDINANCES:

The Contractor is to conduct any and all work in such manner as not to involve the Company in any controversy in regard to Federal Codes, State and Federal Laws, Ordinances, and comply with all Workman's Compensation Laws. The Contractor shall also comply with all underground Mining Laws of the State of Wyoming, and the Safety rules of The Union Pacific Coal Company.

FINALLY:

It is the intent of the plans and specifications to have a complete job in all its details, small items not specified but necessary to complete the job are to be done in the usual manner, good practice to govern. The Contractor is not to take advantage of any manifest omission, but is to figure on complete execution in his bid, and all items are to be executed as though specified where they are necessary to comply with the intent and purport of the plans and specifications taken as a whole. The unit price bids are to be considered complete compensation for the job in its entirety.

SECTION NO. 2

BELT CONVEYOR SYSTEM

DETAILS AND CONSTRUCTION

Designs, details, manufacture, fabrication and construction of Car Feeders, Trip Makers, Rotary Dumps, Hoppers, Feeders, Belt Conveyors, Drives, Excavation, Foundations, Walls, Reinforced Concrete and Back-fill, and any and all other items necessary to complete the work as a whole are included in the work to be performed by the Contractor. All work shall be done in an expeditious, substantial and workmanlike manner to the satisfaction and acceptance of the Company, in accordance with plans and specifications. Good practice throughout is to be the basis of the Contractor's bid, also any and all items necessary in connection with the work are to be included in the bid as though specified or shown on the plans.

CAR FEEDERS:

Two car feeders, 17' 4" center to center of sprockets, composed of two strands of chain, rollers 5" diameter, 1 3/4" tread, single flanged chilled tread, inside rollers 5" diameter, chilled tread, 2" face, side bars 3 1/2" x 1/2", of #1040 carbon steel, forged steel tilting bars with hardened faces. The tilting bars are to be set so as to move cars either to or from the dump. This feeder is to be a self-contained unit, mounted in a structural steel frame. Each feeder shall have the capacity to handle 500 tons of coal per hour. Cars weigh 4,500# each and have a capacity of 4 tons each, 40 cars in a trip. (See car drawing, The Union Pacific Coal Company's #P145.)

The car feeder speed shall be sufficient to provide a uniform passage of cars.

The Contractor is to furnish and install two complete machines, including the necessary excavation, back-fill and foundations. The rock at one feeder is sandstone and at the other shale. The Contractor shall furnish dust-proof motor and shall guarantee these machines.

TRIP MAKERS:

Two trip makers, 40' 0" center to center of sprockets, composed of one strand #998 Rivetless chain, heat-treated, with M-2 attachments every 3' 0", cast-steel tilting spurs attached to M-2 attachments with 1" diameter steel pins. The tilting spurs are to have hardened steel faces. The foot

shaft and head shaft bearings, sprockets and drive shall be as shown on Drawing No. 2146.32K.

The trip makers shall be complete, with necessary steel supports and foundations.

The trip makers' speed shall be sufficient to provide a uniform passage of empty (4500#) cars. The cars shall travel at a rate sufficient to carry 500 tons of coal per hour (car capacity 4 tons each) for either trip maker.

The Contractor is to furnish and install two complete machines, including the necessary excavation, back-fill and foundations. The rock at one trip maker is sandstone and at the other shale. The Contractor shall furnish a dust-proof motor, and shall guarantee these machines.

ROTARY CAR DUMPERS:

The Contractor shall transport the rotary dumps from the railroad track adjacent to the mine mouth to their proper location over the belt conveyor feeders in the mine and erect them over the concrete supports for loading bins. He shall also transport and erect the supporting members and dump shields for the rotary dumps. (The rotary dump is manufactured by the C. S. Card Iron Works Company, Denver, Colorado, and detailed on their drawing No. D-2133-1.) The Contractor shall erect the complete equipment for the rotary car dumpers, leaving them in perfect working order. The foundations are shown on Drawing No. 2146.32M.

FEEDERS:

Two 62" wide x 8' 9" reciprocating feeders for transferring the run of mine coal from the dump hoppers to the belt conveyors, inclined about 5%, arranged to operate at 60 strokes per minute, adjustable stroke from 3" to 6". The feeder plate shall be 1/2" steel plate, the side plates 1/4" steel plates, all as detailed on Drawing No. 2146.32G. The feeder drives shall be of the material, sizes and arrangement as shown on Drawing No. 2146.32I.

BELT CONVEYOR SYSTEM:

The Belt Conveyor System consists of the following: Belts 48" wide, 6-ply, 42-oz. duck, 3/16" rubber cover, 1/16" rubber backing, National brand belt, of lengths as shown on Drawings Nos. 2146.32D, 2146.32E and 2146.32F. The troughing

Idlers shall be Type 40, spaced 3' 6" centers, with Type 62 self-aligning troughing idlers every 14th space (51' 0"). Conveyor No. 4 shall have three heavy-duty type 60 idlers covered with 1" rubber at the loading point. Conveyor No. 3 shall have three heavy-duty Type 60 idlers covered with rubber at the loading point. Conveyor No. 2 shall have three heavy-duty Type 60 idlers covered with rubber at the transfer loading point, and shall have three heavy-duty troughing idlers, Type 59, at the loading point for Feeder at Station 10 plus 38.11 with extra type 40 troughing idlers beneath the skirt boards as shown on Drawing No. 2146.32E. Conveyor No. 1 shall have three heavy-duty Type 60 idlers at its loading point. Type 41 return idlers shall be used for the return belt, spaced as shown on drawings. Extended grease pipes shall be provided for all idlers. Take-up pulleys shall be C.I., 36" diameter, with a 51" face, mounted on a 3 15/16" diameter C.R.S. shaft, all mounted on an automatic take-up of the horizontal type, complete with frames, rollers, and roller bearings, including wire ropes, eye-bolt take-up on wire rope (for alignment), 12" wire rope sheaves, shafts, bearings, counterweight boxes and the required counterweight. The head shafts shall be 6 1/2" diameter, necked at the bearings to 5 15/16". Bearings shall be roller bearings, Series P 600 for 5 15/16" shaft. The Drive Pulley shall be 42" diameter, C.I., with 51" face, lagged, mounted on the head shaft. The head shaft shall be connected by flexible couplings Type A #14 to Type D 18 herringbone speed reducers, ratio 27.2 to 1. They shall be connected by means of a Type C #12A flexible coupling, one-half to have a flange cast on it 14" O.D., 6 1/2" face (shown on Drawing No. 2146.32E) to a 125-H.P., 865-R.P.M. motor. There shall be mounted an A. C. Spring Set Thrustor Brake, C.R.9516, Size 465, to work on the flanged portion of the coupling. The flanged portion of the coupling shall be mounted on the speed reducer. The Thrustor Brake shall have a capacity sufficient to hold the conveyors from reversing direction of travel under full load.

Conveyor No. 1 will have the following special equipment: The head pulley will be 42" diameter and 50" face "Dings" High Intensity Magnetic Pulley, complete with shaft and roller bearings, set collars, collector rings, dust-proof collector ring housing, outside-operated steel switch cabinet with bullseye indicator and special resistor, for 110-volt D.C. operation, complete with transformer.

A 42" diameter by 51" face C.I. snub pulley, mounted on a 6 1/2" C.R.S. shaft, necked to 5 15/16" at the ends, roller bearings, Type Series P-600, will be mounted on a steel frame as shown on Drawing No. 2146.32F.

A second Snub Pulley will be provided at point of bend in the return belt, 24" diameter by 51" face, C.I., mounted on a 3 7/16" C.R.S. shaft, complete with angle bearings.

A third snub pulley will be provided for the return belt, and will be placed adjacent to the take-up as shown on Drawing No. 2146.32E.

Conveyors Nos. 2, 3, and 4, will have the following special equipment: One snub pulley each adjacent to the drive pulley, having a 30" diameter by 51" face, C.I. pulley, mounted on a 3 15/16" C.R.S. shaft and having 3 15/16" solid journal bearings with babbitted bearings.

A second snub pulley will be provided for the return belt, and will be placed adjacent to the take-up as shown on Drawings Nos. 2146.32E and 2146.32D.

Belt scrapers and dribble chutes shall be provided at points noted on drawings.

Steel chutes and steel skirt boards shall be built of 1/4" steel, and shall be thoroughly braced and supported from the steel structures as shown on Drawings Nos. 2146.32E, 2146.32D, and 2146.32F. All skirt boards shall have a 4 1/4" rubber strip of Royalite adjacent to the belt.

At Station 10 plus 38.11 is a second loading station. The feeder at this loading station feeds to a plate. Just below the plate we have a series of four steel pivoted fingers. See Drawings Nos. 2146.32E and 2146.32J. The fingers have a movement of about 8 inches in a direction perpendicular to the belt at their low ends. The fingers are mounted on a stationary shaft. Collars shall be provided between the hubs for the fingers to provide for easy movement of fingers in a vertical direction. Below the fingers, the Contractor shall provide a movable plate, operated by means of a rack and pinion. This plate shall have a movement, in an inclined direction of 33 degrees, of 3' 0". This plate shall run in grooves provided on the side skirt plates. This movable plate shall be in the upper position when there is coal on Belt Conveyors Nos. 3 and 4, and in the lower position when there is no coal on Belt Conveyors Nos. 3 and 4. The rack and pinion shall be operated by a hand wheel on the side of the conveyor adjacent to the walkway.

Forward of the fingers the Contractor shall mount the steel counterweights as shown on Drawing No. 2146.32J.

The Contractor shall guarantee all of the equipment specified or shown on drawings.

SECTION NO. 3

CONCRETE WORK

ITEM 1. SCOPE:

The concrete work covers the concrete foundations and walls for the car feeders and trip makers, the concrete supports for loading bins at rotary dumps, feeder supports, belt conveyors and belt conveyor drives Nos. 2, 3 and 4 (the foundations for belt conveyor No. 1 drive and walls for conveyor No. 1 drive house are in the tippie contract) and concrete for belt conveyor counterweights.

ITEM 2. MATERIALS AND LABOR:

1. Contractor to furnish: The Contractor is to furnish all tools, material, equipment, forms, scaffolding, etc., also all labor and expense in connection with the concrete work covered by Item 1.

2. Company to furnish: The Company is to furnish the datum lines, grades, etc., and the contractor is to be governed by these as well as the plans, Drawings Nos. 2146.32, 2146.32A, 2146.32B, 2146.32C, and 2146.32M, also the following specifications.

ITEM 3. CONCRETE MATERIALS:

1. All materials and concrete work shall be such as to meet the requirements of the American Society of Testing Materials.

2. Aggregates: Good, clean aggregates are to be used, consisting of approved, clean, washed, Green River gravel and sand, suitably graded.

3. Water: The water used for mixing concrete shall be clean and free from strong acids, strong alkalis or organic materials.

4. Metal Reinforcement: The metal reinforcement shall be open hearth, and is to be plain round, clean and free from rust or scale. All reinforcement is to be carefully handled and stored in order that reinforcement may not be distorted, rusty, or dirty when placed in the forms. All reinforcing is to be tied with wire ties at the intersection of the longitudinal and cross bars in order to hold them in place. Suitable approved methods are to be used in order to keep the reinforcement properly placed with reference to the walls or slabs, also

to provide or develop the proper grip or bond between the bars and the concrete. The ends of all rods are to be hooked in an approved manner where necessary. All laps are to be not less than 40 diameters where the full strength of the bar is required.

5. Forms and finished concrete: All forms for concrete work are to be tight, true, well made, and the face concrete is to be in true planes when the forms are removed. All forms are to be well braced, secure and having suitable ties to hold them in alignment. Pine lumber is to be used for the face of the forms, with fir dimension lumber used for studs, braces, plates, etc. Temporary openings shall be provided where necessary to facilitate cleaning and inspection immediately before depositing concrete. The concrete surfaces are to be true, neat and smooth after the forms are removed. All form wires are to be carefully cut, and any and all imperfections patched in a suitable manner to conform with the rest of the work.

ITEM 4. MIXING AND PLACING:

1. Water removal, cleaning forms and equipment: Water shall be removed from all excavations before concrete is deposited. Before placing concrete, all equipment for mixing and transporting the concrete shall be cleaned, and any and all debris or ice removed from places to be occupied by the concrete, forms wetted except in freezing weather. Concrete shall not be placed before inspection and approval by the Company.

2. Mixing: The concrete shall be mixed to a homogeneous mass in an approved batch mixer of such type as to insure the correct portions of the ingredients. Mixing shall continue for at least one and one-half minutes after all the ingredients are in the mixer.

3. Transporting and placing: All concrete shall be handled in a proper approved manner as rapidly as possible by methods to prevent separation or loss of ingredients, and placed in uniform layers around the work so as to avoid re-handling or flowing. Under no circumstances shall concrete that is partially hardened or set be deposited in the work. When concreting is once started, it shall be carried on in a continuous operation until the placing of the section or panel is completed. Concrete shall be thoroughly compacted by puddling with suitable tools during the operation of placing, and thoroughly worked around reinforcement, around embedded fixtures, and into the corners of the form, also along all surfaces, so as to give a smooth surface.

ITEM 5. CONSTRUCTION JOINTS:

Where joints are necessary, they shall be made and located so as not to impair the strength. Where a horizontal joint is made, any excess water and laitance shall be removed from the surface after concrete is deposited. Before depositing of concrete, the surface shall be cleaned and roughened and all weak concrete removed and the surface grouted.

ITEM 6. CONCRETE QUALITY AND MIX:

The concrete shall be designed for 3,000-pound minimum ultimate 28-day strength. Six (6) sacks of cement shall be used for each cubic yard of finished concrete. The field mix is to be approximately 1, $2\frac{1}{2}$ to $3\frac{1}{2}$, which may be varied to give a more suitable mix, but the total amount of aggregates is to remain the same. A good, workable concrete is usually obtained by using a ratio of 1,500 pounds of sand and 2,100 pounds of gravel. In ordering, to care for waste, and loss, the ratio is usually 1,600 pounds of sand and 2,200 pounds of gravel. The resulting mixture is to be plastic, and not to be over-sanded, or harsh on account of using too much gravel.

The water-cement ratio is to be carefully maintained at a minimum in order to give the required strength. The water ratio, with proper correction for moisture carried by the aggregates, in no case is to exceed unity, or $7\frac{1}{2}$ gallons of water per sack of cement. Where a more plastic mix is required, the amount of aggregates per sack of cement is to be reduced.

ITEM 7. CURING AND PROTECTING:

Exposed surfaces of concrete shall be kept moist for a period of 7 days after being deposited. Wetted more than once daily if required in hot weather.

When depositing concrete at or near freezing temperatures, the concrete shall have a temperature of at least 50 degrees F. but must not be more than 120 degrees F. The concrete shall be maintained at a temperature of at least 50 degrees F. for not less than 72 hours after placing. Frozen materials, or materials containing ice shall not be used. Any and all methods of protecting the concrete during cold weather are to meet the approval of the Company, and the Contractor shall be governed by their requirements.

ITEM 8. RETEMPERING:

Retempering mortar or concrete, i.e., remixing with water after it has partially set, will not be permitted.

ITEM 9. PROTECTION OF FINISHED OR PARTIALLY FINISHED WORK:

The Contractor shall take all necessary precautions to protect all work done or material furnished under this agreement from injury by action of the elements or by the process of construction. He shall also take proper means to protect adjacent or adjoining property in any way encountered or which might be injured by the process of construction to be taken under this agreement.

The Contractor shall properly guard and protect all finished or partially finished work, and shall be responsible for the same until the entire contract is completed and accepted by the Engineers.

ITEM 10. LOSSES AND DAMAGE:

All losses or damage arising out of the nature of the work to be done or from the action of the elements or from any unforeseen circumstances in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work shall be sustained and borne by the Contractor at his own cost and expense.

ITEM 11. GENERAL WORK INCLUDED WITH CONCRETE WORK:

1. The Contractor shall excavate any and all material necessary to install footings, walls, concrete foundations (the rock excavation for the bin supports at car dumpers will be done by others), and excavation for footings of bin supports. After the concrete work is in place, the Contractor shall back-fill and grade in an approved manner. All back-filling is to be of suitable material, thoroughly tamped or settled, and all grading is to conform with the natural and other graded surfaces as far as possible. Loose material is to be removed from footings in order to have a good footing surface. All excess material shall be disposed of by the Contractor.

The tops of the forms are to be carefully graded to the proper pitch of the slopes in the belt conveyor tunnel according to alignment and grade datum furnished by the Company's Engineering Department.

2. The Contractor is to furnish, install and remove all forms, and clean up the work for approval. Any and all forms are to be left in place at least 7 days, unless special arrangement and permission is given by the Engineer.

ITEM 12. FINALLY:

A good, first-class, neat, smooth, sound job, complete in all its details, shall be required. The Design and Control of Concrete Mixtures, Third Edition, by the Portland Cement Association, shall apply unless otherwise specified herein.

SECTION NO. 4

SPECIFICATIONS FOR STRUCTURAL STEEL

The structural steel shall conform to the Standard Specifications of the American Society for Testing Materials for Structural Steel for Buildings, Serial Designation A9-21 and as amended to date.

All steel shall be Open Hearth.

Rusted or pitted steel shall not be used.

Rivets: Allowable working stresses for rivets shall be as follows:

Hand-driven rivets, single shear,	10000#	per sq. in.
bearing,	20000#	per sq. in.
double shear,	20000#	per sq. in.
Power-driven rivets, single shear,	12000#	per sq. in.
bearing,	24000#	per sq. in.
double shear,	24000#	per sq. in.

Eccentric connections will not be allowed in members carrying stress.

Initial Stress: Laterals shall be designed for the maximum stress due to 5000# initial tension and the maximum stress due to wind.

Splices of main members shall be designed to carry the full strength of the member.

Painting: All steel shall receive one coat of red lead in shop. All parts inaccessible after assembly or erection shall receive one coat of red lead paint before assembly or erection.

Field Paint: All steel work shall receive one coat of aluminum paint after erection. No painting shall be done when the steel is wet. All grease, dirt, rust or scale shall be removed with wire brushes before painting.

The Standard Specifications for Structural Steel for Buildings as adopted by the American Institute of Steel Construction shall govern except as specified heretofore.

The drawings show the minimum sections.

Code of Practice: The Code of Standard Practice as adopted by the American Institute of Steel Construction shall govern except as follows:

1st. One coat of aluminum paint shall be given all steel work after erection.

2nd. The Contractor shall be responsible for the strength of foundations, as well as the leveling and elevations of all bearing surfaces.

3rd. Anchor bolts: All anchor bolts or foundation bolts shall be set by the Contractor.

4th. Cancel the last paragraph Divisions e and n, Section 7.

5th. Temporary Floors: The Contractor shall furnish all flooring required.

6th. Omit Sections 8, 9 and 10.

SECTION NO. 5

MISCELLANEOUS

Approval of Drawings: Blue prints of all detail and design drawings shall be submitted for approval in duplicate. One set of prints will be returned to the Contractor, either approved for general details and design, or returned with corrections noted thereon. If not approved, the corrections shall be made on the drawings and duplicate prints shall then be returned for the approval of the Engineer.

Record Prints: After approval of the drawings, the Contractor shall furnish four complete sets of blue prints of all design and detail drawings, and shall furnish five complete sets of erection drawings to The Union Pacific Coal Company.

The drawings and specifications are intended to supplement, not duplicate, each other, so that anything that is shown by drawing or specification is to be done as if shown by both.

Protection of Material and Work: The Contractor shall be responsible for all material furnished by the owner, and use due care in its use, and properly protect his own and all other material and work during the erection and completion of the work. The Contractor shall replace, at his own expense, all materials so damaged or improperly used.

Extras: No extras will be allowed unless ordered by the Engineer in writing.

SECTION NO. 6

BELT CONVEYOR SYSTEM SPECIFICATIONS FOR ELECTRICAL INSTALLATION

DESCRIPTION:

1. The installation of all motors, starters, transformers and controls shall conform strictly to the requirements of the National Electric Code specification for Industrial Plants. All motors will be remotely controlled from central control push-button stations, with buttons on control panel arranged so as to start and stop the plant operation in proper sequence.

2. An interlocking control system for the belt conveyor drives will be required, this system also to interlock with reciprocating feeders at loading stations, its operation to manipulate as follows:

Push-button control panel is to be located at Operator's cab in tippie. Control for Conveyor No. 1 is first thrown in and this conveyor must attain maximum speed before control for Conveyor No. 2 is next contacted, Conveyor No. 2 then attaining maximum speed before engaging control for Conveyor No. 3, and No. 3 Conveyor must attain its speed before control button for Conveyor No. 4 may be contacted. The control is to work through a flash-light signal device and in such sequence that Conveyor No. 1 must be running to allow No. 2, No. 3 and No. 4 to operate, conveyor No. 2 must operate to permit No. 3 and No. 4, and Conveyor No. 3 must gain its maximum speed before Conveyor No. 4 shall operate. All belts must have separate push-button controls interlocked within each other, also interlocking with the controls for reciprocating plate feeders at No. 7 and No. 15 dump stations, so that these feeders may not be started unless the belt adjacent to them is in operation.

3. The control for reciprocating plate feeders, as well as for the trip maker and car feeder at each loading station, will be located in a separate push-button control panel in close proximity to the control lever for the rotary dumps, these controls to be magnetically operated, line-starter, push-button controls.

4. It is specifically understood that the Contractor is to furnish all materials, labor and tools to properly connect and wire transformers to controls and controls to motors and starters. The Union Pacific Coal Company will do all wiring from transformers at controls to main arteries of power.

5. The Contractor is to furnish the following:

(a) Four (4) 2,300-volt, 125-H.P., 3-phase, 60-cycle, General Electric, Type MT, Frame #6335, totally enclosed, dust-proof construction, ball-bearing motors for conveyor drives, equipped with automatic magnetic starters and interlocking push-button control system described above. All transformers for operating drive motor controls must be Pyronol type.

(b) Two (2) 220-volt, 25-H.P., 3-phase, 60-cycle, Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motors with automatic magnetic starters and push-button control for car feeders at dump stations No. 7 and No. 15. Also four (4) 220-volt, 10-H.P. 3-phase, 60-cycle, Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motors with automatic magnetic starters and push-button controls for trip makers and reciprocating feeders at dump stations No. 7 and No. 15. A bank of three Pyronol transformers, 2,300 volts to 220 volts, must be provided and installed for the above described motors at each dump station No. 7 and No. 15.

6. All materials, method of installation and completed operation must be approved and accepted in its entirety by the Chief Electrical Engineer of The Union Pacific Coal Company. Specifications hereinbefore mentioned under Belt Conveyor specifications, as to materials, workmanship, methods of installation, etc., and any and all other items not herein mentioned are to govern throughout.

7. The control for the Thruster brakes shall be controlled from control panel and interlocked with the control for the 125-H.P. motors. It must operate from the first contactor.

SPECIFICATIONS
FOR
DESIGNING, DETAILING, MANUFACTURING, FABRICATING
AND CONSTRUCTING
THE UNION PACIFIC COAL COMPANY'S
COAL TIPPLE
AT SUPERIOR, WYOMING

DESCRIPTION OF WORK:

The work covered by these specifications consists of:

1. Excavation for the concrete foundations and back-fill around the foundations after pouring same.
2. Building all concrete foundations required.
3. Detailing, fabricating and erecting structural steel work.
4. Designing, detailing, manufacturing and installing mechanical equipment and its supports.
5. Designing, detailing, manufacturing, installing electrical control and motors.
6. Furnishing and erecting all covering, windows, sky-lights, hand rails, gear guards, doors, floor gratings and stair treads.
7. Building all concrete floors.
8. Furnishing all material required to build a complete tipple.

DRAWINGS:

The following drawings from the office of the Chief Engineer of The Union Pacific Coal Company accompanying these specifications are considered as forming a part of the same:

- 2146.31 General Plan and Elevations.
- 2146.31A General Floor Plan, Roof Plan, and Covering Diagrams.

- 2146.31B Masonry Plan.
- 2146.31C Roof Plan, Main Floor Plan, and Domestic Fuel Bin.
- 2146.31D Screen Drive and Picking Table Floor.
- 2146.31E Elevations D-D and C-C.
- 2146.31F Elevations I-I, 5-5, and B-B.
- 2146.31G Elevations 3-3, E-E, and 4E-4D.
- 2146.31H Belt Conveyor Gallery and House at Tunnel Portal.
- 2146.31I Boom Hoist Support.
- 2146.31J Run of Mine Shaker Screens.
- 2146.31K Shaking Picking Tables and Chutes.
- 2146.31L Run of Mine and Slack Chute and Iron Refuse Box and Chute.
- 2146.31M Mixing Conveyor.
- 2146.31N Refuse Conveyor.
- 2146.31P Car Loading Booms.

WORK INCLUDED:

The work under this contract consists of furnishing of all materials, labor, tools and equipment for the complete erection of foundations, steel work, machinery, machinery supports, floors, covering, windows, doors, skylights, stairs, motors, electrical control installation and erection and field painting of entire material erected.

The Contractor is to furnish all of above and all necessary labor, tools, superintendence, equipment, false work, forms, lumber, temporary walks, loading and unloading of all materials, operating expense and all other items, unless it is specifically stated otherwise.

COAL COMPANY TO FURNISH:

The Union Pacific Coal Company will furnish the

following:

Water: Water piped to the mouth of the manway of the north rock tunnel. The Contractor shall furnish drinking water available in close proximity to the work.

Electricity: Electricity is to be furnished alternating current, 3-phase, 60-cycles, voltage 2,300, 440 and 220, delivered to the mouth of the rock slope.

Tracks: The Railroad tracks shown in red on General Elevation Drawing 2146.31 will be in place. Any demurrage charges are to be paid for at the Contractor's expense. Balance of finished Railroad grade intended for future tracks will be available for storage of materials.

METHOD OF PAYMENT:

Monthly estimates, falling or becoming due on the last day of each calendar month, will be prepared by the Engineer on a basis of 90% of the amount due for material on the site and for work completed during the calendar month.

Payments shall be remitted to the Contractor on or before the 15th day of the following month, it being specifically understood that 10% of the amount due for completed work will be retained until such time as the contract is completed, approved and accepted by The Union Pacific Coal Company.

CONTRACTOR TO BASE BID:

The Contractor is to visit the site and familiarize himself with the conditions. His bid is to be based on his findings, and the Company is not to be held responsible for any information on physical conditions given by any of its representatives or employees.

SECTION NO. 1

GENERAL CONDITIONS

GENERAL:

The General Conditions as hereinafter set forth shall apply to all specifications used in connection with the work.

COMPANY, ENGINEER AND CONTRACTOR DEFINED:

The word Company shall designate The Union Pacific

Coal Company, and the word Engineer, the said Company's Engineering Department's representative, or the Company's officials in charge, and the word Contractor, the contracting party or parties.

DRAWINGS FURNISHED BY THE COMPANY:

The drawings furnished by the Company shall be considered as part of and illustrating these specifications. The specifications are intended to supplement the drawings, the two being considered co-operative. Drawings and specifications will be part of the contract and are equally binding. They are the property of the Company and shall be returned when the work is completed.

The drawings show the arrangement, location and type of equipment desired, the location and size of all windows and doors, the area to be covered with corrugated steel, type, location and kind of floors, the sections of all main structural steel members, including details of foundations. The Contractor shall not execute any work until he has submitted detail drawings in duplicate and received the Engineer's approval of same. All work must be made in strict accordance with such detail.

Figures on drawings shall take precedence over measurements by scale, detail drawings over small scale drawings, and the decision of the Engineer shall be final as to the interpretation of drawings and specifications.

ERRORS AND DISCREPANCIES:

If the Contractor, in the course of his work, finds any discrepancy between the plans and specifications and the physical conditions of the locality, or any errors in the plans and specifications, or in the points given for the construction of the work, it shall be his duty to immediately inform the Engineer in writing, and the Company will promptly verify and, if necessary, correct the same. Any work done after such discovery until authorized will be done at the Contractor's risk.

CO-RELATED WORK:

When the work of this Contractor engages with the work of any other Contractor or the Company, he must co-operate with the other Contractor or the Company, and exercise extraordinary care to prevent injury to any work or material. This Contractor shall do all necessary cutting and fitting of his work, where same engages the work of another contractor or the Company.

PROTECTION AGAINST LIABILITY FOR ACCIDENTS:

The Contractor shall, at his own expense, erect and maintain all requisite lights and barriers for the protection of his work and for the safety of the premises or persons, subject to the order of the Engineer.

OBJECTIONABLE WORKMEN:

The Engineer reserves the right to require the removal of any particular workman or workmen on the work, if, in his judgment, it shall be for the best interests of the work that such particular workman or workmen should be removed.

INSPECTION AND TESTING:

The Contractor shall make a thorough inspection of all material and shall furnish, if required, certified copies of mill tests.

The Contractor shall inspect all materials, which must be new and the best of their respective kinds, when delivered, so as to prevent the unloading of bad material or to remove the same promptly without awaiting orders from the Engineer.

He must also have materials delivered in good order and promptly stored and protected from injury until used. The disposal and locating of material and equipment shall be subject at all times to the Engineer's directions.

Should any work be already in place in the structure which, in the judgment of the Engineer, is not in accordance with the specifications or plans, either as regards material or workmanship, the Engineer may either require the said work to be taken down or replaced by work in accordance with the plans and specifications, or he may allow the said work to remain and may deduct from the contract price an amount which in his judgment shall be a proper allowance for the inferiority of said work, including also in his deduction the amount of all damages of whatever nature or kind that may result from such cause.

The Engineer reserves the right to make such inspection of the material at the mills or shops or at the structure as he may deem necessary, and the Contractor shall give the Engineer all necessary facilities for making thorough inspection of the work and shall notify him in sufficient time

before shipment of material so he can make a shop inspection of same. Material or workmanship not conforming to the provisions of this specification shall be rejected at any time defects are found during the progress of the work even if accepted by the Shop Inspector.

The Contractor shall permit the Engineer and all persons appointed by him to visit and inspect the said work, and every part thereof, at all times and places during the progress of the work, and shall provide sufficient, safe and proper facilities for such inspection.

CO-OPERATION WITH OTHER CONTRACTORS AND WITH THE COMPANY:

The Contractor shall, at an early date, put himself in communication with other contractors whose work may affect him so as to promote harmony of work, and shall co-operate with them and with the Engineer as to the proper conduct of the work and any difference of opinion shall be arbitrated by the Engineer.

"EXTRAS":

All extras must be ordered by the Engineer in writing on form "Order on Contractor" and the price for said extras agreed upon beforehand.

In default of such agreement the Engineer shall fix the valuation of said extras and his decision shall be final and binding.

No claims for extras will be allowed unless accompanied by the written order for said extras.

Failure to understand the drawings or specifications or ignorance of the contents of either will not be accepted as an excuse for omissions, or inferior character of work or material, nor will such misunderstanding or ignorance be allowed to justify a claim for extra work ordered as above described.

PROTECTION AGAINST STORM AND FIRE:

The Contractor shall be required to properly brace and secure the work during construction, against wind and storms, also use every precaution to eliminate fire hazards, and will be held wholly responsible for the safety of any work until its completion and acceptance.

PROTECTION OF WORK:

The Contractor shall not use any part of barricades or structure for advertising purposes.

CLEANING UP:

At the completion of the work embraced under this contract, the entire work must be left clean and whole, floors cleaned and all rubbish of every description removed from the premises regardless of or by whom made, there being no division of responsibility in regard to this.

The work, when completed, will be accepted in a finished, perfect and undamaged state only. The Contractor shall protect his work during its progress, and, if damaged, will do all patching necessary to its full and satisfactory completion.

TEMPORARY HEAT:

Wherever temporary heat or heat during construction of structure is required for prevention of damaging of material by freezing, or for any other reason, such heat shall be provided for by the Contractor and the entire expense in connection therewith shall be borne by him.

The Contractor shall provide all salamanders, coke and attendance and supply temporary heat from these as required until the work is finished.

SUB-LETTING AND SUB-CONTRACTORS:

The Contractor, if he wishes to sub-let portions of the work, must have the approval of the Company, but this does not in any way relieve him of the responsibility for the proper execution of the work. The Company's representative is only expected to deal with the Contractor or the Contractor's authorized representative.

SHIPMENT OF MATERIAL AND ROUTING:

The Contractor is to base his bid on shipping all material by railroad, and the Company reserves the right to designate the routing of railroad shipment of any materials furnished by the Contractor, and he shall make no shipments without having first obtained from the Company instructions as to routing of said shipments.

ASSISTANCE:

The Contractor shall render all necessary assistance as may be requested or required to take and furnish necessary levels, measurements, etc., on the work or grounds as the case may be. This is to apply to minor details, replacement of stakes, etc. The Company's Engineering Department will furnish all necessary alignment, grade and finishing stakes, and other work necessary to determine the earth work, and locate various items, stake out retaining walls, piers, etc. The Contractor is to preserve all stakes and references as far as possible. If the Contractor's employees, through carelessness or neglect, destroy the Engineer's stakes, so that they have to be replaced, and such replacement is more than a reasonable amount, the Contractor will be required to pay the Company the extra expense incurred by the Company.

CODES, LAWS AND ORDINANCES:

The Contractor is to conduct any and all work in such manner as not to involve the Company in any controversy in regard to Federal Codes, State and Federal Laws, Ordinances, and comply with all Workman's Compensation Laws.

FINALLY:

It is the intent of the plans and specifications to have a complete job in all its details, small items not specified but necessary to complete the job are to be executed as though specified. Any and all such items are to be done in the usual manner, good practice to govern. The Contractor is not to take advantage of any manifest omission, but is to figure on complete execution in his bid, and all items are to be executed as though specified where they are necessary to comply with the intent and purport of the plans and specifications taken as a whole. The unit price bids are to be considered complete compensation for the job in its entirety.

SECTION NO. 2

THREE-TRACK COAL TIPPLE

DETAILS AND CONSTRUCTION

One pair of factory-balanced, overhead-suspended type shaking screens, arranged to receive ROM coal from head end of Belt Conveyor No. 1, and grade same into four sizes, viz: Plus 6" Lump, $2\frac{1}{2}$ " x 6" Grate, 1" x $2\frac{1}{2}$ " Nut and 1" x 0" Slack, all as per blue print No. 2146.31J, consisting of the following:

One Triple-Deck, Upper Shaking Screen, 10' 0" wide, about 33' 0" long over'all, with side plates of $\frac{1}{4}$ " steel. Top deck arranged with extension for receiving dribble as may occur at head end of Belt Conveyor, emergency run of mine hinged fly gate, with clear opening of not less than 27" wide, tee iron scalping fingers, and equipped with two stepped sections of $\frac{1}{4}$ " thick, 1 $\frac{5}{8}$ " diameter perforated screen plates, each 4' 0" long, three stepped sections of $\frac{1}{4}$ " thick $2\frac{1}{2}$ " diameter perforated screen plates, each 4' 0" long, and blank $\frac{1}{4}$ " dead plate at lower end. Intermediate deck arranged with five stepped sections of $\frac{3}{16}$ " thick, 1" diameter perforated screen plates each 4' 0" long, and blank $\frac{3}{16}$ " thick dead plate at lower end. Bottom gathering deck made of $\frac{3}{16}$ " thick blank plate. The screen is to be equipped and stiffened with structural steel shapes of at least the sizes indicated on blue print No. 2146.31J. All rivets on bottom and sides of inside portions of decks are to be countersunk for freedom of passage of coal along each deck. The screen is to be equipped with steel trunnion shafts for driving and supporting same.

One double-deck, lower shaking screen, 10' 0" wide by about 26' 0" long, with sides of $\frac{1}{4}$ " steel plates. Top deck arranged with blank $\frac{1}{4}$ " dead plate about 6' 0" long, two stepped sections of $\frac{3}{8}$ " thick, 6" diameter perforated screen plates, each 4' 0" long, equipped with $\frac{1}{4}$ " plate at lower end, designed to deliver lump coal to picking table as indicated on blue print No. 2146.31J. Bottom gathering deck of $\frac{1}{4}$ " steel plate arranged to receive and deliver 1" x $2\frac{1}{2}$ " coal to nut picking table and $2\frac{1}{2}$ " x 6" coal to grate picking table. The screen is to be equipped and stiffened with structural steel shapes of at least the sizes indicated on blue print No. 2146.31J. All rivets on bottoms and sides of inside portions of decks are to be countersunk for freedom of passage of coal along each deck. Screen is to be equipped with steel trunnion shafts for driving and supporting same.

SHAKING SCREEN CRANK CONNECTING RODS:

Two pairs of 4" extra heavy pipe shaking screen crank connecting rods, one pair about 10' 3" CL to CL and one pair about 14' 6" CL to CL. Each rod to be fitted at one end with cast iron split crosshead, bored to 4 3/16" diameter to fit shaking screen trunnion shafts, and opposite end to be fitted with cast-steel split crank pin box, brass bushed, and bored to 5 7/16" diameter to suit crank shaft. Brass bushings to be fitted with adequate number of securing dowel pins and provided with cut grease grooves for proper distribution of lubrication. Rods to have approved welded connections of pipes to stub end forgings at each end for attachment to crossheads and crank pin boxes. Adequate brass shims are to be provided for both cast iron split crossheads and cast-steel split crank pin boxes.

CRANK SHAFT:

One forged steel 4 15/16" diameter crank shaft with crank pins of 5 7/16" diameter, finished all over. Shaft to be equipped with four 4 15/16" extra-heavy, approved-type rigid bearings, each equipped with adequate number and size grease cups. Two cast iron fly-wheel pulleys, 2150 pounds rim weight, 10 1/2" face, hubs 10 1/2" long. One fly-wheel to have 10 grooves for Type C Texropes, cut in the face of the rim.

CRANK SHAFT DRIVE:

One 40-H.P. motor, 3 phase, 60 cycles, 220 volts, 860 R.P.M., Frame 536, Type ~~MF~~ (omit pulley) with slide base. One Texrope sheave, 10" P.D., 10 grooves, 10 3/8" face and ten Texropes, #C270.

SUSPENDED SCREEN DRIVE FRAME:

Eight cast steel hanger bearings, 8 C.R.S. shafts, eight cast steel hanger arms, four cast steel hangers, and structural steel frame. This unit shall be assembled in the shop. The cast steel hanger arms shall be bored after assembly with steel frame. The suspended screen drive frame, motor, connecting rods, fly wheels, crank shaft and bearings shall be brought to an even balance by means of a concrete counterweight. The total weight shall be sufficient to make the drive stable under all conditions of unbalanced live loads on the screens.

ADJUSTABLE FORGED STEEL HANGER RODS FOR ROM SHAKING SCREENS:

Eight adjustable forged steel hanger rods made of

cold rolled stock with ends gradually swelled and fitted with suitable brass bushings, grease grooves and adequate grease fittings for attaching to shaking screen trunnion shafts and screen hanger shafts. Each rod to be made in two parts with one end swelled and threaded and fitted with forged steel turnbuckles to facilitate shaking screen setting and adjustment. NOTE: Contractor shall provide suitable diagonal clip rod bracing between each pair of hanger rods in order to prevent tendency of side sway of shaking screens.

EMERGENCY ROM CHUTE: (Drawing 2146.31L)

One emergency ROM chute, constructed of 3/16" side plates and 3/16" nickel steel venser bottom plate, well braced and stiffened with adequate structural steel shapes and arranged for supporting from structural steel tipple members. Chute to be of sufficient width at upper end to receive ROM coal from Belt Conveyor No. 1 by means of fly gate in upper shaking screen, without spillage or leakage. The chute will be terminated by a slack hopper located directly over the slack track.

GRAVITY SLACK DISCHARGE CHUTE FROM SHAKING SCREENS TO SLACK

HOPPER AND SLACK SHAKING TABLE: (Drawing 2146.31L)

One gravity slack discharge chute, made of 3/16" steel plate, thoroughly braced and stiffened with suitable structural steel shapes. Chute to be made bifurcated and equipped with accessible lever-operated hinged fly gate to permit delivery of slack coal directly to slack hopper or to slack coal shaking table.

SLACK COLLECTING HOPPER, UNDERCUT GATE, AND TELESCOPING LOADING

CHUTE: (Drawing 2146.31L)

One slack and run of mine collecting hopper made of 3/16" steel plate, thoroughly braced and stiffened with suitable structural steel shapes. (Sections to be as shown or heavier.)

One undercut gate, to be opened and closed from the ground, the gate to be balanced for easy operation. Gate to be made of 1/4" structural steel plates, and to include necessary mechanical parts to make a complete gate, including necessary operating mechanism.

One telescoping chute, to be made of 3/16" steel, and with necessary tracking and supports for a complete unit. The chute to be counterweighted and operating mechanism to be so arranged that the same operator can control both the undercut gate and telescopic chute from the same location. The telescopic chute is to run and be supported by four pair of 6" diameter C.I., S.F. rollers, having 2 1/4" face, complete with bearings, shafting and grease cups to make a complete unit.

SHAKING PICKING TABLES AND SHAKING CONVEYOR: (Drawing 2146.31K)

Three shaking picking tables and one shaking conveyor. The plus 6" lump shaking picking table shall be 4' 0" wide, with 4" sloping sides, 29' 0" long. This table shall be equipped with a vertically-pivoted, lever-operated gate and short side chute. The gate, when closed, forms a part of one side of the table, and when opened, it will divide and divert one-half of the lump coal to the upper strand of the refuse conveyor. The gate is to be rigid in either the opened or closed position. When opened, the nose of the gate is to be protected by an inclined piece of steel fastened permanently to the center of the screen, this to act as a plow to divert the coal and prevent breakage.

The 6" x 2 1/4" shaking picking table is to be 5' 0" wide, with sloping sides 6 1/2" high, and about 31' 0" long. This table shall be equipped with two horizontally hinged, lever-operated gates, either of which may be raised, permitting approximately one-half of the coal to pass through. A vertical steel plate shall be placed between the gates to prevent the coal from passing from either side to the opposite opening. The down track end of the shaking picking table shall be curved and dropped as indicated on Drawing 2146.31K. Below the gates are two chutes, one chute feeding to the down track side of the mixing conveyor and the other chute feeding to the up track side of the mixing conveyor.

The 2 1/4" x 1" shaking picking table is to be 5' 0" wide, with sloping sides 6 1/2" high, and about 30' 0" long. This table shall be equipped with one horizontally hinged, lever-operated gate. This gate will permit approximately one-half of the coal to pass through. A vertical steel plate shall be placed in the center of this picking table to divide the coal into two streams, and shall be of such a length as to prevent the coal from passing from one side to the other. The down track end of the shaking picking table shall be curved and dropped as indicated on the Drawing No. 2146.31K.

The slack shaking table is 4' 0" wide, with vertical sides 9" high, and about 26' 0" long. The down track end shall be curved as shown on Drawing 2146.31K.

The tables shall have plates with minimum thickness as shown on Drawing No. 2146.31K. The tables shall be well reinforced. They shall be supported by means of ash-board stilts of a proper length and thickness to carry the loads and give first-class service. The tables will have a pitch at picking portion of 9 degrees.

The four tables will be driven from a common eccentric shaft, driven by a 25-H.P., 690 R.P.M. motor, the motor pulley to be 9" P.D., 10 3/8" face, grooved for ten Texropes No. 240C. The fly wheel shall be 64" P.D., 11 1/2" face and grooved for above ropes. The rim weight shall be 2100 pounds.

The eccentric shaft shall be 3 15/16" diameter, C.R.S., equipped with heavy-duty breaker bearings. The eccentrics shall be ball-faced, adjustable-stroke (3" to 6") type. They shall be key seated to the eccentric shaft as noted on the drawing. The couplings shall be Type A flexible couplings.

The connecting rods shall be 3" extra-strong pipe, with adjustable crosshead bearings at picking table end. Connecting rods are to be welded to stub end of crosshead, and to the shell of the eccentric. Stub shaft shall be supported at rear end of shaking picking tables as indicated on the drawing.

Twelve 3/16" steel pickers boxes are to be provided (six to have steel grating) for delivering refuse to lower run of refuse conveyor. A picker's guard is to be provided on each side of the three picking tables, the guards to be supported from the picker's floors. The guards are to have a maple top, all as indicated on Drawing No. 2146.31D.

REFUSE CONVEYOR:

One refuse conveyor, 26" center to center of chains, bar flight type, for delivering the refuse pickings from picking tables to refuse bin, also to carry lump coal to the domestic fuel bin, about 71' 7 1/2" horizontal centers, the domestic fuel end curved up at a radius of 18' and 14' from a point 20' 4 1/2" from the take-up end, the rise being about 8' 6". The refuse end is curved up at a radius of 24' from a point about 34' 0" from the drive shaft, the rise being 10' 6", all as shown on

Drawing No. 2146.31N. The Conveyor is to operate at a chain speed of about 72.5 feet per minute for an hourly capacity of about 95 tons, divided at approximately 60 tons domestic fuel and 35 tons of refuse. The conveyor line is made up of 3" x 1/2" x 1' 10 1/2" side steel bar flights attached at intervals of 24" to two equal strands of 6" pitch #678 rivetless drop-forged steel heat-treated chains, with S22 attachments, 24" centers.

The head and foot machinery shall be as follows: 3 15/16" and 3 7/16" diameter C.R.S. head and foot shafts, with fittings, rigid angle bearings with grease cups for head shaft, 12" style D.S. take-up bearings, with grease cup lubricated bearings for foot shaft to take up slack in the conveyor line, 19.42" P.D. Flint Rim head and foot sprockets, a type B 12 flexible coupling on head shaft connecting to a Herringbone speed reducer, Type T8, ratio 83.94 to 1, and a R.C. 6018 R Flexible Coupling connecting to a 10-H.P., 1160 R.P.M. motor. The motor and speed reducer are to be mounted on a rigid steel base.

The Contractor will furnish a structural steel supporting frame for the conveyor and terminal machinery from tipple structure. The troughing for carrying the runs shall be made of 1/4" steel plates with angle sides, 3" x 3/4", S.A.E. 9250 wearing bars, holding down angles and 3" x 1/2" S.A.E. 9250 wearing bars as shown on Drawing No. 2146.31N.

MIXING CONVEYOR:

One 48 1/2" center to center of chains, bar flight type mixing conveyor for delivering the various coals to either or both loading booms, about 34' 6" centers, horizontal. The coals are carried on the top run of the conveyor and the return run carries drippings back over the tail pulley onto the loading booms. This conveyor is to operate at a speed of about 107 feet per minute, for an hourly capacity of about 225 tons of slack, 117 tons of 2 1/2" x 1", 90 tons of 6" x 3" coal per hour, with conveyor line made up of 6" x 3/8" x 3'8" wide steel bar flights, attached at intervals of 3'0" with S22 M.I. attachments to two strands of 9" pitch #998 Rivetless drop-forged steel heat-treated chain.

The head and foot machinery for this conveyor will consist of 3 7/16" and 2 15/16" diameters C.R.S. head and foot shafts, with fittings, rigid angle bearings with grease cups for head shaft, 12" style "D.S." protected screw take-ups with

grease-cup-lubricated bearings for foot shaft to take up slack in the conveyor line, 34.77" P.D. Flint Rim head and foot sprockets, C.S. cut gear 58T., 2 D.P., 29" P.D., 4½" F on head shaft, cut steel pinion 16 T. 2 D.P., 8" P.D., 4½" F. pinion on herringbone speed reducer, Type D6, ratio 26.86 to 1, flexible coupling RC-5016R on the high-speed shaft connecting it to a 10-H.P., 1160 R.P.M. motor. The Contractor will furnish a rigid steel base for the reducer and motor, and an oil-tight, dust-proof gear guard.

The Contractor will furnish a structural steel supporting frame for the conveyor, for support from the steel structure, complete with supports for terminal machinery, troughing for carrying run to be made up of 1/4" steel bottom plate, with angle sides and 1/4" bent plate troughing sides with 4" x 3/8" S.A.R. 9250 steel wearing bars, all as shown on Drawing No. 2146.31M.

The Contractor will provide a 3/16" division plate 10' 8" long to keep the various sizes of coal separate at the rack and pinion sliding gate. The gate shall be as shown on above drawing, complete with hand wheel, bevel gears, bearings, rack and pinion gear, guides and plates, to make a complete gate.

LOADING BOOMS:

Two scraper conveyor type loading booms for loading out coal to railroad cars on new track, to have about 14' 0" centers horizontal and stationary, and the pivoted section 28' 0" centers hinged and adjustable in a vertical direction, arranged to operate at a chain speed of about 114 feet per minute for a maximum hourly capacity of 350 tons, and with a conveyor line made up of 3" x 2" triangular shaped 3/16" steel angle flights, 42" long, attached at intervals of 32" to two strands of 4" pitch #458 Rivetless drop-forged steel heat-treated chain.

This conveyor will have a drive and take-up machinery, consisting of a 2 15/16" drive or foot shaft and a 2 15/16" C.R.S. take-up or head shaft, with fittings, rigid angle bearings with grease cups for drive shaft, 12" adjustment, screw-type take-ups with grease-cup-lubricated head-shaft bearings for taking up slack in the conveyor line, 10.45" P.D. Flint-rim head sprockets connected by an 8" extra-heavy pipe around head shaft, secured to the inner hubs of the sprockets to facilitate discharge of coal over head shaft. 15.46" P.D.

Flint Rim foot sprockets, 2 RC8018R Flexible couplings, herringbone speed reducers, Type D.6, Ratio 40.9 to 1, RC5016R flexible couplings to 10-H.P., 1160-R.P.M. motor. Include a 2 15/16" diameter C.R.S. shaft turning in grease-cup-lubricated solid box bearings at the hinge points.

Contractor will furnish steel frames for the horizontal and stationary section of conveyor to be carried from the structure, complete with supports for drive machinery and for boom hinge shaft bearings, 1/4" steel plate trough for carrying run with 1/4" thick S.A.E. 9250 steel track bars in bottom for conveyor chains and with guard angles over chains, and angle track slides for conveyor chains on return run; a structural steel frame-hinged boom for the adjustable section of the conveyors, 12" channel side stringers, 1/4" steel plate trough for carrying run with 1/4" S.A.E. 9250 steel track bars on bottom of conveyor for carrying chains and with guard angles over chains, angle track slides, with angle track slides for return chains. 3/16" steel guard plates on underside of boom at outer end, a 3/16" plate channel section suitably fastened to the 12" high channel sides forming trough sides for the boom, heavy structural steel lifting bails.

The Contractor will furnish suitable steel base for supporting the speed reducer and motor, also 3/16", 12" high channel-shaped sides on the stationary portion of the loading boom as well as a 3/16" bottom plate extending back 8' 6" from the hinge point.

The Contractor shall also furnish two 8,000# capacity single-speed lug suspension type electric hoists for raising and lowering the outer end of booms, having a maximum lift of 24 feet, complete with sheave block for attaching to bail, wire rope and suitable motor wound for 220V-volt, 3-phase, 60-cycle current, with push-button control and limit switches. All as indicated on Drawing No. 2146.31P.

Two Griffith car changing chutes for the end of loading booms, to permit continuous loading while changing cars, complete with wire ropes, sheaves, guides for counterweight, roller tracks, and supports for hinge shafts.

IRON REFUSE CHUTE AND COLLECTING HOPPER:

The Iron Refuse Chute shall be made of 3/16" steel with a 3/16" steel chute, 1'0" outside diameter. The chute shall be flanged at the lower end and bolted to the web of the girder of the Refuse Hopper. The Refuse Hopper shall have

a suitable opening in it to permit the free flow of the refuse into the refuse hopper. All as shown on Drawing No. 2146.31L.

CAR RETARDERS:

The Contractor shall furnish three car retarders, complete with necessary 5/8" wire rope and erect them, complete, ready for operation.

The car retarders shall be of the self-energizing type, with rewinding motors. The drums shall be 12" diameter, 12" wide out to out of drum flanges. The ring gear shall have 100 teeth, meshing with a pinion having 30 teeth on the counter shaft. The motor shall have a 1-H.P. motor, 1200 R.P.M., with an 18-tooth pinion meshing with a 72-tooth gear, also mounted on the counter shaft. The gears on the counter shaft are to be cast in one piece and to run free on the counter shaft. The drum shaft and counter shafts shall be fixed to the frame. One end of the drum shall be rigidly attached to the ring gear, the other end to have a brake drum rigidly attached to it. There shall be a counterweighted brake bar with an adjustable counterweight to operate by means of a cable to the operator, the operator's end of the cable to have a hand ball of sufficient weight to keep the cable fairly taut. The drum, mechanical parts and motor shall have a steel housing over them to keep out dirt and water. The slack cable shall be wound on the drum automatically by electrical control. It shall have sufficient capacity to hold two loaded cars on a 2% grade. The location of the car retarders and hold-back sheaves are given on drawing No. 2146.31B.

The hold-back sheaves shall be 12" diameter, mounted horizontally in a steel housing for 90-degree lead of cables. The housing shall have a U-bolt connecting to an eye-bolt by means of a vertical pin. The eye-bolt shall extend through a housing and through a compression spring and through a spring cap and shall have a hex nut with a lock hex nut on the end, all mounted on a cast-steel base.

The steel base shall have a lug projecting into the masonry to carry shear, and it shall also have holes for four 7/8" diameter anchor bolts.

Sufficient 5/8" diameter wire rope to handle two cars, complete with all necessary attachments shall be furnished by the Contractor for the three car retarders. The Contractor shall guarantee this equipment.

SECTION NO. 3

SPECIFICATIONS FOR STRUCTURAL STEEL

The structural steel shall conform to the Standard Specifications of the American Society for Testing Materials for Structural Steel for Buildings, Serial Designation A9-21 and as amended to date.

All steel shall be Open Hearth.

Rusted or pitted steel shall not be used.

Rivets: Allowable working stresses for rivets shall be as follows:

Hand-driven rivets,	single shear,	10000#	per Sq.In.
	bearing,	20000#	per Sq.In.
Power driven rivets,	double shear,	20000#	per Sq.In.
	single shear,	12000#	per Sq.In.
	bearing,	24000#	per Sq.In.
	double shear,	24000#	per Sq.In.

Eccentric connections will not be allowed in members carrying stress.

Initial Stress: Laterals shall be designed for the maximum stress due to 5000# initial tension and the maximum stress due to wind.

Splices of main members shall be designed to carry the full strength of the member.

Painting: All steel shall receive one coat of red lead in shop. All parts inaccessible after assembly or erection shall receive one coat of red lead paint before assembly or erection.

Field Paint: All steel work shall receive one coat of aluminum paint after erection. No painting shall be done when the steel is wet. All grease, dirt, rust or scale shall be removed with wire brushes before painting.

The Standard Specifications for Structural Steel for Buildings as adopted by the American Institute of Steel Construction shall govern except as specified heretofore.

The drawings show the minimum sections.

Code of Practice: The Code of Standard Practice as adopted by the American Institute of Steel Construction shall govern except as follows:

1st. One coat of aluminum paint shall be given all steel work after erection.

2nd. The Contractor shall be responsible for the strength of foundations, as well as the leveling and elevations of all bearing surfaces.

3rd. Anchor bolts: All anchor bolts or foundation bolts shall be set by the Contractor.

4th. Cancel the last paragraph Divisions E and n, Section 7.

5th. Temporary Floors: The Contractor shall furnish all flooring required.

6th. Omit Sections 8, 9 and 10.

SECTION NO. 4

CONCRETE WORK

ITEM 1. SCOPE:

The concrete work covers the concrete footings, the concrete foundations and walls at the mouth of the belt conveyor gallery, the concrete foundations for the coal tippie, refuse bin, domestic fuel bin, boom hoist support, concrete footings for stairs, reinforced concrete footings for car retarders, concrete counterweights for car changing chutes, reinforced concrete floor for the belt conveyor gallery from No. 1 Belt Conveyor Drive House to the tippie, and the reinforced concrete floors in the tippie.

ITEM 2. MATERIALS AND LABOR:

1. Contractor to furnish: The Contractor is to furnish all tools, material, equipment, forms, scaffolding, etc., also all labor and expense in connection with the concrete work covered by Item 1.
2. Company to furnish: The Company is to furnish the datum lines, grades, etc., and the Contractor is to be governed by these as well as the plans, Drawings Nos. 2146.31H, 2146.31A and 2146.31B, also the following specifications.

ITEM 3. CONCRETE MATERIALS:

1. All materials and concrete work shall be such as to meet the requirements of the American Society of Testing Materials.
2. Aggregates: Good, clean aggregates are to be used, consisting of approved, clean, washed, Green River gravel and sand, suitably graded.
3. Water: The water used for mixing concrete shall be clean and free from strong acids, strong alkalis or organic materials.
4. Metal Reinforcements: The metal reinforcement shall be Open Hearth, and is to be plain round, clean and free from rust or scale. All reinforcement is to be carefully handled and stored in order that reinforcement may not be distorted, rusty, or dirty when placed in the forms. All

reinforcing is to be tied with wire ties at the intersection of the longitudinal and cross bars in order to hold them in place. Suitable approved methods are to be used in order to keep the reinforcement properly placed with reference to the walls or slabs, also to provide or develop the proper grip or bond between the bars and the concrete. The ends of all rods are to be hooked in an approved manner where necessary. All laps are to be not less than 40 diameters where the full strength of the bar is required.

5. Forms and finished concrete: All forms for concrete work are to be tight, true, well made, and the face concrete is to be in true planes when the forms are removed. All forms are to be well braced, secure and having suitable ties to hold them in alignment. Pine lumber is to be used for the face of the forms, with fir dimension lumber used for studs, braces, plates, etc. Temporary openings shall be provided where necessary to facilitate cleaning and inspection immediately before depositing concrete. The concrete surfaces are to be true, neat and smooth after the forms are removed. All form wires are to be carefully cut, and any and all imperfections patched in a suitable manner to conform with the rest of the work.

ITEM 4. MIXING AND PLACING:

1. Water removal, cleaning forms and equipment: Water shall be removed from all excavations before concrete is deposited. Before placing concrete, all equipment for mixing and transporting the concrete shall be cleaned, and any and all debris or ice removed from places to be occupied by the concrete, forms wetted except in freezing weather. Concrete shall not be placed before inspection and approval by the Company.

2. Mixing: The concrete shall be mixed to a homogeneous mass in an approved batch mixer of such type as to insure the correct portions of the ingredients. Mixing shall continue for at least one and one-half minutes after all the ingredients are in the mixer.

3. Transporting and placing: All concrete shall be handled in a proper approved manner as rapidly as possible by methods to prevent separation or loss of ingredients, and placed in uniform layers around the work so as to avoid re-handling or flowing. Under no circumstances shall concrete that is partially hardened or set be deposited in the work.

When concreting is once started, it shall be carried on in a continuous operation until the placing of the section or panel is completed. Concrete shall be thoroughly compacted by puddling with suitable tools during the operation of placing, and thoroughly worked around reinforcement, around embedded fixtures, and into the corners of the form, also along all surfaces, so as to give a smooth surface.

ITEM 5. CONSTRUCTION JOINTS:

Where joints are necessary, they shall be made and located so as not to impair the strength. Where a horizontal joint is made, any excess water and laitance shall be removed from the surface after concrete is deposited. Before depositing of concrete, the surface shall be cleaned and roughened and all weak concrete removed and the surface grouted.

ITEM 6. CONCRETE QUALITY AND MIX:

The concrete shall be designed for 3,000-pound minimum ultimate 28-day strength. Six (6) sacks of cement shall be used for each cubic yard of finished concrete. The field mix is to be approximately 1, $2\frac{1}{2}$ to $3\frac{1}{2}$, which may be varied to give a more suitable mix, but the total amount of aggregates is to remain the same. A good, workable concrete is usually obtained by using a ratio of 1,500 pounds of sand and 2,100 pounds of gravel. In ordering, to care for waste and loss, the ratio is usually 1,600 pounds of sand and 2,200 pounds of gravel. The resulting mixture is to be plastic, and not to be over-sanded, or harsh on account of using too much gravel.

The water-cement ratio is to be carefully maintained at a minimum in order to give the required strength. The water ratio, with proper correction for moisture carried by the aggregates, in no case is to exceed unity, or $7\frac{1}{4}$ gallons of water per sack of cement. Where a more plastic mix is required, the amount of aggregates per sack of cement is to be reduced.

ITEM 7. CURING AND PROTECTING:

Exposed surfaces of concrete shall be kept moist for a period of 7 days after being deposited. Wetted more than once daily if required in hot weather.

When depositing concrete at or near freezing temperatures, the concrete shall have a temperature of at least 50 degrees F. but must not be more than 120 degrees F. The concrete shall be maintained at a temperature of at least 50 degrees F for not less than 72 hours after placing. Frozen materials, or materials containing ice shall not be used. Any and all methods of protecting the concrete during cold weather are to meet the approval of the Company, and the Contractor shall be governed by their requirements.

ITEM 8. RETEMPERING:

Retempering mortar or concrete, i.e., remixing with water after it has partially set, will not be permitted.

ITEM 9. PROTECTION OF FINISHED OR PARTIALLY FINISHED WORK:

The Contractor shall take all necessary precautions to protect all work done or material furnished under this agreement from injury by action of the elements or by the process of construction. He shall also take proper means to protect adjacent or adjoining property in any way encountered or which might be injured by the process of construction to be taken under this agreement.

The Contractor shall properly guard and protect all finished or partially finished work, and shall be responsible for the same until the entire contract is completed and accepted by the Engineers.

ITEM 10. LOSSES AND DAMAGE:

All losses or damage arising out of the nature of the work to be done or from the action of the elements or from any unforeseen circumstances in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work shall be sustained and borne by the Contractor at his own cost and expense.

ITEM 11. GENERAL WORK INCLUDED WITH CONCRETE WORK:

1. The Contractor shall excavate any and all material necessary to install the concrete footings, walls and foundations. After the concrete work is in place, the Contractor shall back-fill and grade in an approved manner. All back-filling is to be of suitable material, thoroughly tamped or settled, and all grading is to conform with the natural and

other graded surfaces as far as possible. Loose material is to be removed from footings in order to have a good footing surface. All excess material shall be disposed of by the Contractor.

2. The Contractor is to furnish, install and remove all forms, and clean up the work for approval. Any and all forms are to be left in place at least seven days, unless special arrangement and permission is given by the Engineer.

ITEM 12. REINFORCED CONCRETE FLOORS:

1. The reinforced concrete floors shall be 4 inches thick and designed to carry a live load of 125# per Sq. Ft. The surface shall be $3\frac{1}{2}$ " above the top of the supporting steel work. There shall be a steel curb angle $3" \times 2\frac{1}{2}" \times \frac{1}{4}"$ around all openings and on the edge of all concrete floors. The mix shall be the same as used for the foundations except that the coarse aggregate shall not be over $\frac{3}{4}"$ in diameter. A layer of grout about $\frac{1}{4}"$ in thickness shall be placed on the forms just ahead of the concrete. All grout that is allowed to take a partial set shall be removed. The grout shall consist of 1 part Portland Cement to 2 parts clean sand.

2. Floor finish: The floor shall have a rough finish. It shall be made level and smooth with a trowel. In place of the hard trowel final finish, the Contractor shall take a Janitor's Broom similar to #T14 Shapeleigh Hardware Cat. #350, Page #996. A handle about 8' 0" long shall be used on this broom and a weight is to be added near the brush. The weight shall be just enough to make the brush cause a nice, even, rough surface on the concrete. The brush shall be drawn across the line of natural traffic. The surface should have an even and uniform roughness.

ITEM 13. FINALLY:

A good, first-class, neat, smooth, sound job, complete in all its details, shall be required. The Design and Control of Concrete Mixtures, Third Edition, by the Portland Cement Association, shall apply unless otherwise specified herein.

SECTION NO. 5

COVERING

The structure will have #22 gauge corrugated steel roofing and #24 gauge corrugated steel siding, all painted black in shop, and one coat of aluminum paint after erection.

The corrugated steel sheeting shall be fastened with #18 gauge steel straps 3/4" wide. The ridge roll shall be #22 gauge steel painted black in shop.

The structure shall have six corrugated wire glass skylights of about 30 square feet net surface each. The windows shall be steel sash fitted with 14" x 20" D.S. clear wire glass. The putty shall be litharge. The windows shall have pivoted sections for ventilation and shall have push bars and latches where required for opening and securing the movable sections.

The steel doors shall be as shown and detailed on drawing. The corrugated iron, skylights, steel sash and doors shall be water tight.

SECTION NO. 6

MISCELLANEOUS

Floor Grating: Floor grating shall be 1 1/4" x 3/16" Klemp (or equal) grating. Stair treads shall be 1" x 3/16" Klemp (or equal) grating (Safety type).

Safety Guard: Suitable steel guard of ample strength, located as shown on Drawing No. 2146.31I shall be provided around counterweights for car changing chutes.

Approval of Drawings: Blue prints of all detail and design drawings shall be submitted for approval in duplicate. One set of prints will be returned to the Contractor, either approved for general details and design, or returned with corrections noted thereon. If not approved, the corrections shall be made on the drawings and duplicate prints shall then be returned for the approval of the Engineer.

Record Prints: After approval of the drawings, the Contractor shall furnish four complete sets of blue prints of all design and detail drawings, and shall furnish five complete sets of erection drawings to The Union Pacific Coal Company.

The drawings and specifications are intended to supplement, not duplicate, each other, so that anything that is shown by drawing or specification is to be done as if shown by both.

Protection of Material and Work: The Contractor shall be responsible for all material furnished by the owner, and use due care in its use, and properly protect his own and all other material and work during the erection and completion of the work. The Contractor shall replace, at his own expense, all materials so damaged or improperly used.

Extras: No extras will be allowed unless ordered by the Engineer in writing.

The Contractor shall be responsible for the entire construction of the tibble, and shall guarantee the satisfactory operation of the same.

The various patented mechanical units may be changed to equivalent units that are equal to or better than the ones specified. The units changed shall be guaranteed to be as good as or better than the units specified after approval of such changes by the Engineer.

Housing Facilities: Housing facilities for labor will be available to the Contractor in close proximity to the work.

SECTION NO. 7

THREE-TRACK COAL TIPPLE SPECIFICATIONS FOR ELECTRICAL INSTALLATION

DESCRIPTION:

1. The installation of all motors, starters, transformers, and controls shall conform strictly to the requirements of the National Electric Code specifications for Industrial Plants. All motors will be remotely controlled from centrally located push-button control station, with buttons on control panel arranged so as to start and stop the plant operation in proper sequence.

2. All tippie motors are to be 200-volt, 3-phase, 60-cycle, Westinghouse, Type CS, totally enclosed dust-proof construction, ball-bearing motors with automatic magnetic starters and push-button control. ~~All transformers are to be Pyronel type.~~ The Contractor is to furnish all materials, labor and tools to properly connect and wire transformers to starters, controls and motors. The Union Pacific Coal Company will do all wiring from transformers at controls to main arteries of power, also all lighting on tippie.

3. The Contractor will furnish push-button control panel complete, to be located in Operator's cab, also complete switch panel controls to be mounted on a single frame and centrally located.

4. The Contractor is to furnish the following:

(a) One (1) 220-volt, 40-H.P., 860-R.P.M., Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motor, with automatic magnetic starters and push-button control for creens, from Operator's cab.

(b) One (1) 220-volt, 25-H.P., 690-R.P.M., Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motor, with automatic magnetic starters and push-button control for shaking picking tables.

(c) One (1) 220-volt, 10-H.P., 1160-R.P.M., Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motor, with automatic magnetic starters and push-button control for refuse conveyor.

(d) One (1) 220-volt, 10-H.P., 1160-R.P.M., Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motor, with automatic magnetic starters and push-button control for mixing conveyor.

(e) Two (2) 220-volt, 10-H.P., 1160-R.P.M., Westinghouse, Type CS, totally enclosed, dust-proof construction, ball-bearing motor, with automatic magnetic starters and push-button control for loading booms.

(f) Two (2) 220-volt, hoists for loading booms, the hoists to have a lifting capacity of 8,000#, Shaw-Box type LRS-4 or equivalent.

5. All materials, method of installation and completed operation must be approved and accepted in its entirety by the Chief Electrical Engineer of The Union Pacific Coal Company. Specifications hereinbefore mentioned under Coal Tipple specifications, as to materials, workmanship, methods of installation, etc., and any and all other items not herein mentioned are to govern throughout.