



MAJOR MODIFICATION FORM FOR HOT MIX ASPHALT GENERAL PERMIT MSR70

INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality of plans to expand the acreage or "footprint" of an existing hot mix asphalt facility, waive the siting criteria of an existing operation, or construct a new air emissions source. This form must be submitted when any of the following activities is/are being proposed (check all that apply). Copies of the signed Return-Receipts and Contiguous Landowner Notification Forms shall accompany this Major Modification Form in accordance with ACT4, S-7 of the General Permit.

- "Footprint" identified in the original HMANOI is proposed to be enlarged (a modified SWPPP and an updated USGS topographic map must be submitted).
- Applicant requests waiver of facility siting criteria prescribed in ACT5 of the General Permit.
- Applicant intends to construct new air emissions source(s)

This form must be signed by the current coverage recipient under Mississippi's Hot Mix Asphalt General Permit. A different operator must have general permit coverage transferred prior to coverage being modified. Coverage recipients are authorized to implement the proposed modifications, under the conditions of the General Permit, only upon receipt of written notification of approval by the MDEQ.

ALL INFORMATION MUST BE COMPLETED (indicate "N/A" where not applicable)

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT PERSON: Hamp Sterling, P.E. Environmental Manager

COMPANY NAME: Superior Asphalt, Inc.

STREET OR P.O. BOX: 6000 I-55 South

CITY: Byram STATE: MS ZIP: 39272

PHONE # (INCLUDE AREA CODE): (601)-260-2425

PROJECT INFORMATION

HOT MIX ASPHALT GENERAL PERMIT COVERAGE NUMBER: MSR70 0 0 3 9

ADDITIONAL ACREAGE TO BE DISTURBED: 0 TOTAL ACREAGE: 9.4

DESCRIBE PROPOSED SITING CRITERIA WAIVER: n/a

LIST NEW AIR EMISSIONS SOURCES: See Attachment

FACILITY NAME: Hinds County Plant #1

CITY: Byram COUNTY: Hinds

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Hamp Sterling
Signature (must be signed by coverage recipient)

3/4/22
Date

Hamp Sterling
Printed Name

V.P.
Title

Please submit this form to: Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Public Notice
Mississippi Environmental Quality Permit Board
P. O. Box 2261
Jackson, Mississippi 39225
Telephone No. (601) 961-5171

March 8, 2022

Superior Asphalt Inc. Byram Plant at 6000 I-55 South Byram, MS 39272 has applied to the Mississippi Department of Environmental Quality (MDEQ) for coverage and/or modification under MDEQ's Multimedia Hot Mix Asphalt Facility General Permit MSR70 to construct and operate an asphalt plant. Such construction and operation may involve the clearing, grading, and excavation of land, and will involve the discharge of storm water and the operation of air emissions equipment during the operation of the facility.

General Permit MSR70 has been developed to ensure compliance with all State and Federal regulations. Facilities granted coverage under this permit and adhering to the conditions contained therein should operate within State and Federal environmental laws and standards concerning storm water discharges and the operation of air emissions equipment.

The staff of the Mississippi Environmental Quality Permit Board is soliciting all relative information pertaining to the proposed facility, including public comment, to ensure that the above referenced facility meets the eligibility requirements of the general permit. An important element of staff evaluation is public review and comment. The staff recommendation to the Board, as well as the Board decision, will be made only after a thorough consideration of all public comments.

Persons wishing to comment upon the proposed determinations are invited to submit comments in writing to the Chief, Environmental Permits Division at the Permit Board's address shown above, no later than the end of the thirty (30) day public notice. All comments received by this date will be considered in the formulation of final determinations regarding the application. A public hearing will be held if the Permit Board finds a significant degree of public interest in the proposed project. The Permit Board is limited in the scope of its analysis to environmental impact. Any comments relative to zoning or economic and social impacts are within the jurisdiction of local zoning and planning authorities and should be addressed to those authorities.

A copy of the general permit is available on the Mississippi Department of Environmental Quality's website at www.deq.state.ms.us/MDEQ.nsf/page/epd_epdgeneral or by writing or calling the above Permit Board address and telephone number. This general permit is also available for review at the following locations during normal business hours.

Mississippi Department of Environmental Quality
Office of Pollution Control
515 East Amite Street
Jackson, MS 39201

Beverly J. Brown Library
5901-B Terry Road
Byram, MS 39272

Please bring the foregoing to the attention of persons whom you know will be interested.



SUPERIOR ASPHALT, INC.

"Performance Pavements"

CONTIGUOUS LANDOWNER NOTIFICATION OF A HOT MIX ASPHALT FACILITY

I, Superior Asphalt Company, am proposing to construct and operate or modify a Hot Mix Asphalt facility at 6000 I-55 South Byram, MS 39272. The facility processes will include the operation of air emissions equipment and the discharge of storm water. In addition, construction activities such as clearing, grading and excavating may also be involved. This notification is to provide you with an opportunity to comment to the Mississippi Department of Environmental Quality Permit Board regarding the granting of permit coverage under the Multimedia Hot Mix Asphalt Facility General Permit.

This notice has been sent to you by Certified Mail - Return Receipt Requested. If you have no comments regarding this proposed facility, no response is necessary and the permitting process will continue. If you have any comments, they must be received by the Mississippi Department of Environmental Quality within 10 days of receipt. **The Department of Environmental Quality is limited in its review of this project to those environmental issues in which statutory authority has been given.** Any comments relative to zoning or economic and social impacts are within the jurisdiction of local zoning and planning authorities and should be addressed to those authorities. Comments are to be mailed to the following address:

**Chief, Environmental Permits Division Mississippi
Department of Environmental Quality
P. O. Box 2261 Jackson, MS 39225**

P. O. Box 720099 • 6000 I-55 South • Byram, Mississippi 39272

Telephone: 601.376.3000 • Fax: 601.372.5004

www.superasphalt.com

YATES CONSTRUCTION

March 4, 2022

Beverly J. Brown Library
5901-B Terry Road
Byram, MS 39272

Re: Superior Asphalt, Inc.
Superior Asphalt Byram Plant
Permit # MSR7000039
Byram, MS 39272

Enclosed is a copy of the public notice for comment on the request by Superior Asphalt, Inc. for coverage under the State of Mississippi's Hot Mix Asphalt Multimedia General Permit at the facility in Hernando, MS.. Please post this notice in the library.

Also, enclosed is a copy of information pertinent to this request. This information should be kept on hand for review by the public until April 8, 2022, after which it may be discarded. The public may photocopy all or any portion of this information, but it should not leave the library.

Finally, enclosed please find a duplication of this letter with a place for your signature and the date acknowledging your receipt of the package and your agreement to carry out our request. A self-addressed stamped envelope is enclosed for your convenience.

We are attempting to keep the public informed of and involved in this Office's actions regarding permitting of new and expanding industry. Since access to the public library is so convenient for so many we hope to use these facilities as often as possible. Your cooperation in this matter is greatly appreciated.

If you have any questions, please contact me at (601) 260-2425 or contact the Construction and Building Materials Branch of the Mississippi Department of Environmental Quality at (601) 961-5171.

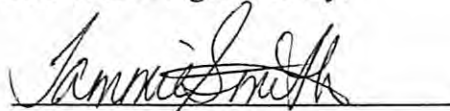
Sincerely,



Hamp Sterling, P.E.
Environmental Manager

Attachment:

Received & Agreed to By:



Signature

Tammie Smith

Printed Name

03-03-22

Date

Branch Manager

Title



SUPERIOR ASPHALT, INC.

"Performance Pavements"

March 4, 2022

Mr. Jaricus Whitlock
Environmental Permits Division
Office of Pollution Control
P O Box 2261
Jackson, Mississippi 39225

Dear Mr. Whitlock:

Re: HMA Major Modification MSR700039
Superior Asphalt Hinds County Plant #1

We are applying for a major modification of the referenced permitted site. Enclosed is a completed copy of the Hot Mix Asphalt Major Modification form. Also enclosed is the public notice, contiguous landowner notification and signed library form.

The new plant will have similar emissions to the previously permitted plant along with a fly ash silo and run cellulose fiber. Enclosed is the information of the new asphalt plant.

If you have any questions or need additional information, please feel free to call me at (601) 260-2425. Thank you for your assistance with this matter.

Sincerely,

Hamp Sterling, P.E.
Environmental Manager

Enclosures

RECEIVED

MAR 04 REC'D

Dept. of Environmental Quality

Existing

ALmix

13333 HWY 24W
Ft. Wayne, IN 46804
Phone 219-672-3004
Fax 219-672-3020
www.almix.com

Superior Asphalt
6000 I-55S
Byram, MS 39272

Attn: Mr. David Denson
Ref: Quotation #3849B

ALmix proposes to furnish to the Purchaser in accordance with the following specifications and general conditions the machinery and/or equipment and/or services described below.

I. COLD FEED SYSTEM

A. FEEDER BIN : A five (5) compartment portable feeder bin assembly is provided. Each compartment is constructed from 1/4" thick steel plate and has a 10' x 14' top opening and approximate 30 ton heaped capacity [based on 100lb/cu.ft. material]. Top lip and bin mid-section are each heavily reinforced with 3/8" thick bent steel plate for added strength and durability. Two foot high foldable bin dividers are provided to prevent cross flow of materials. Bin bottoms are designed with tapered openings to minimize bridging and reduce aggregate drag on feeder sides.

B. BELT FEEDERS : Each compartment is equipped with a 30" wide x 8' long belt feeder assembly powered by a 5 H.P., 3/60/460v, TEFC, inverter rated, helical gear motor through a fully digital AC flux vector drive. The flux vector drive is capable of producing 100% torque at zero speed without overheating. The tail shaft of each belt feeder is fitted with an optical encoder which interfaces with the Computer Control to allow automatic feeder control. Additionally, a digital TPH meter for each belt feeder is located in the operator's console. These meters provide an excellent manual back-up to the CRT displays of the Millenium Control System. Each belt feeder assembly includes 12" diameter lagged head pulley, 12" diameter self-cleaning tail

pulley, 2-ply rated belting, 4" diameter, 20° permanently sealed idler rollers on 6" centers, belt take-up assembly and adjustable flow depth control gate. The unique troughing roller design utilized by the belt feeders eliminates leakage without the need for troublesome rubber flashing. Each belt feeder is equipped with a material flow detector which activates a sequenced shut down if aggregate ceases to flow from any belt feeder for more than a preset period of time.

C. COLLECTING CONVEYOR : A 30" wide collecting conveyor driven by a 10 H.P., 3/60/460v, TEFC, motor through a shaft mounted reducer is provided. The reducer is equipped with a backstop to eliminate material rollback. The conveyor features 16" diameter lagged head pulley, 16" diameter self-cleaning tail pulley, 2-ply rated belting, permanently sealed, 4" diameter x 35° troughing idlers, belt take-up assembly and open mesh belt guard. A spring-tensioned polyurethane blade belt scraper is mounted at the head pulley to keep the belt clean. The collecting conveyor delivers material to the aggregate scalping screen.

D. SCALPING SCREEN & INCLINE CONVEYOR: A 5' x 10' single deck scalping screen is provided as a modular unit mounted over the aggregate incline conveyor. Screen is equipped with feed box, deflector plates, 5 H.P., 3/60/460v, TEFC motor, drive sheaves and screen cloth (per purchaser specification). A 30" wide truss frame incline conveyor shall be provided to transfer materials from the scalping screen discharge hopper to the dryer inlet chute. The conveyor features lagged head pulley, self-cleaning tail pulley, 2-ply rated belting, permanently sealed, 4" diameter x 35° troughing idlers, gravity type belt take-up assembly, belt scraper and open mesh belt guard. It is driven through a shaft mounted speed reducer by a 15 H.P., 3/60/460v, TEFC, motor. This conveyor contains the aggregate weighbridge and speed sensor. Winds guards are provided to insure accurate weighing. A 9" diameter auger driven by a 5 H.P., 3/60/460v motor is affixed to the side of the truss conveyor to transport lime to the pugmill mounted on the slinger conveyor.

E. PORTABILITY: The cold feed bin and cold feed conveyor are each fully portable. The cold feed bin is on a triple and the incline conveyor is on a single spring mounted 5"

diameter axle with dual 10:00 x 20 tires and wheels, turn and stop lights, fifth wheel pin, air brakes, and mud flaps.

F. BULKHEAD : A bulkhead consisting of galvanized guardrail sections is provided on the charging side of the feeder bin assembly to expedite plant set up. The bulkhead is interchangeable to allow loading on either side of the feeder bin assembly. Steel hooks are provided to allow the anchoring of a deadman.

G. FOUNDATION PLATES : Adjustable jack legs with oversized steel foundation plates are provided for the feeder bin and the incline conveyor so that the units need not be cribbed to be placed into operation.

II. PORTABLE MINERAL FILLER SYSTEM

A. GENERAL DESCRIPTION : The portable mineral filler silo has a 500 BBL capacity and 10 ft. diameter. The silo is constructed from 3/16" A-36 steel plate. The silo includes ladder with handrail and kick plate, high and low bin indicators and a 4" diameter fill line. A top mounted baghouse is provided to capture excess dust produced while filling or discharging from the silo.

B. PROPORTIONING SYSTEM : A load cell mounted metering pod is located under an air operated fill valve at the cone discharge. A 12" diameter rotary vane feeder driven by a 2 H.P., variable speed drive is connected to the silo cone section. The vane feeder discharges into a 9" diameter screw conveyor driven by a 7-1/2 H.P., 3/60/460v motor which conveys the lime to the transfer screw conveyor which is mounted on the truss conveyor. The Premium Control System generates a rate signal according to the changing weight of the pod and adjusts the vane feeder speed to maintain the proper amount of lime in the mix. The pod includes a vent pipe and air pads installed in the cone section.

C. PORTABILITY : The mineral filler silo is fully portable on two (2) 5" diameter spring mounted axles with 10:00 x 20 tires and wheels, turn and stop lights, air brakes, fifth wheel pin and mud flaps. (No Charge for portability)

III. DRYER-DRUM MIXER

GENERAL : The portable Model 100 Duo Drum CF is of the counterflow design and includes a special bolt-in flight design for maximum drying and mixing efficiency, lower stack temperature and reduced fuel consumption. The heated gases are pulled off at the transition breeching, prior to the mixing drum. Thus, the liquid asphalt and recycle are heated by conduction in a quasi-inert atmosphere without generating "blue smoke".

B. INLET CONVEYOR & PUGMILL: A 30" x 10' slinger type inlet conveyor driven by a 7.5 H.P., 3/60/460v motor through a shaft mounted Dodge TXT-325 gear reducer receives aggregate from the cold feed conveyor and conveys it into the drying drum. This relatively high speed conveyor eliminates the plugging and heat loss associated with normal inlet chutes. A Model 400 base pugmill with twin shaft drive is supplied to blend aggregate, lime and water. The pugmill mounts on the slinger conveyor during operation and receives material from the extended collecting conveyor. The pugmill includes twin 30 H.P., 3/60/460v TEFC motors and shaft mounted reducers, liquid spray bar with 2" valve, receiving hopper, replaceable AR 500 liners, replaceable and reversible shanks and tungsten carbide paddle tips. A by-pass chute is supplied so that the pugmill is not used when producing mixes which do not require the addition of lime.

C. DRYER-DRUM: The 100" diameter x 36' long drum is constructed from 3/8" thick A-572 alloy steel plate. The drum is trunnion driven through four (4) Dodge TXT - 725 shaft mounted speed reducers by four (4) 40 H.P., 3/60/460v motors. The main frame features unitized construction from heavy, structural steel members with beams supporting the trunnions and drum. Four 18" diameter x 11" face trunnions are machined and heat treated to 500 brinell and are fitted with 4-7/16" diameter spherical type roller bearings. Each trunnion assembly is mounted on a 1" thick steel plate allowing the assembly to be adjusted as a unit. The trunnions drive two 3" thick x 10" face 1045 steel tires made from one piece forgings. The drum shell is further strengthened with a 1/4" thick wrapper in the area where the tires are wedged to the shell. Two (2) 24" diameter guide rollers are provided to insure the proper operating position of the drum mixer assembly. Material is discharged from the drying drum by

a rotary elevator into a Hardrox lined discharge chute at which point the recycle material is added to begin its conductive heating process.

D. MIXING DRUM: The 84" diameter x 18' long mixer drum is constructed from 3/8" thick A-572 alloy steel plate. The mixing drum utilizes a wrap around chain drive with a foot mounted helical gear reducer driven by a 60 H.P., 3/60/460v TEFC motor. Two (2) 18" diameter x 10" face trunnions are machined and heat treated to 500 brinell and are fitted with 3-15/16" diameter spherical type roller bearings. Each trunnion assembly is mounted on a 1" thick steel plate allowing the assembly to be adjusted as a unit. The trunnions drive a 2-1/2" thick x 9" face 1045 steel tire made from a one piece forging. The discharge end of the drum is fitted with a drive shaft and spoke system connected to a 4-15/16" diameter bearing designed to absorb the end thrust. This unique design eliminates the need for trunnion adjustment. The main frame features unitized construction from heavy, structural steel members with beams supporting the trunnions and drum. An air seal constructed from high temperature belting is installed between the mixing drum and the discharge breeching. The mixing drum is insulated with 2" of high density fiberglass and covered by an aluminum skin. A 921 RBO exhaust fan driven by a 15 H.P., 3/60/460 motor through a flux vector drive is supplied to remove steam and hydrocarbons from the mixing drum.

E. BURNER ASSEMBLY: The Model 100 Dryer-Drum employs the AstraFlame burner assembly. The AstraFlame requires no refractory type ignition port or combustion chamber. Thus, thermal energy is imparted directly into the aggregate instead of losing heat through refractory radiation. The burner is capable of burning any grade of fuel oil, natural gas, liquid LP and combustible liquid waste. The burner assembly includes a high efficiency blower driven by a 75 H.P., 3/60/460v motor, automatic temperature control and flame safeguards. The burner capacity is 100,000,000 BTU/HR. This quotation encompasses the burning of light fuel oil. A fuel pump is supplied driven by a 2 H.P., 3/60/460v motor. A burner maintenance platform is provided constructed from open safety grating and including guardrails and ladder.

F. PORTABILITY: The drying drum and mixing drum are each fully portable. The drying drum is on tri and the mixing drum on tandem spring mounted 5" diameter axles with dual

11:00 x 22 tires and wheels, turn and stop lights, fifth wheel pin, air brakes, and mud flaps.

G. FOUNDATION PLATES : Hydraulically adjustable jack legs with steel foundation plates are provided so that the units need not be cribbed to be placed into operation.

IV. RECYCLE SYSTEM

A. RECYCLE BIN: The portable recycle bin is constructed from 1/4" thick steel plate and has a 9' x 14' top opening. Top lip and bin mid-section are each heavily reinforced with 3/8" thick bent steel plate for added strength and durability. Easily adjustable heavy rubber flashing is provided to prevent leakage between bin walls and belt feeder. A built-in retaining wall is provided for the recycle bin assembly. The recycle bin is fitted with a folding grizzly with 6" openings to reject oversized materials. The recycle bin is also fitted with an air cannon activated automatically in the case of a "No Flow" condition.

B. BELT FEEDER : The recycle bin is equipped with a 30" wide x 22' long belt feeder powered by a 10 H.P., 3/60/460v, TEFC, helical gear motor motor through a fully digital AC flux vector drive. The flux vector drive is capable of producing 100% torque at zero speed without overheating. The recycle belt feeder assembly includes drive sheaves, lagged head pulley, self-cleaning tail pulley, 2-ply rated belting, 4" diameter, permanently sealed idler rollers on 6" centers, belt take-up assembly, open mesh drive guard and adjustable flow depth control gate. A digital TPH meter for the belt feeder is located in the operator's console. The signal for this meter is provided by an individual optical encoder mounted on the recycle feeder tail shaft. This meter provides an excellent manual back-up to the CRT displays of the Millenium control system.

C. RAP SCREEN & INCLINED RECYCLE WEIGH CONVEYOR: The extended RAP feeder delivers material to the RAP screen. The screened RAP feeds directly on to the RAP incline belt. A 24" wide, 24" deep truss frame incline conveyor shall be provided to transfer materials from the screen discharge hopper to the reclaimed material inlet located on the drying drum. The conveyor features lagged head pulley, self-cleaning tail pulley, 2-ply rated belting, permanently sealed, 4" diameter x 20° troughing idlers, belt take-up assembly, belt scraper and

open mesh belt guard. It is driven through a shaft mounted speed reducer by a 10 H.P., 3/60/460v, TEFC, motor. This conveyor contains the recycle weighbridge and speed sensor. The load cell is insulated top and bottom with ceramic isolators and includes a heavy ground strap around the load cell for lightening protection.

D. PORTABILITY : The entire RAP system is fully portable on a single spring mounted 5" diameter axle with dual 10:00 x 20 tires and wheels, turn and stop lights, fifth wheel pin, air brakes and mud flaps.

E. FOUNDATION PLATES : Adjustable jack legs with oversized steel foundation plates are provided for the RAP feeder bin and the incline conveyor so that the unit need not be cribbed to be placed into operation.

V. FABRIC FILTER COLLECTION SYSTEM

A. GENERAL DESCRIPTION : The pollution control system includes a greatly expanded discharge breeching on the dryer-drum connecting to the baghouse entry plenum. The duct work between the drum mixer and baghouse is constructed from 3/16" steel plate. Ductwork connecting the baghouse to the exhaust fan is designed to provide minimum pressure drop. This fabric filter type dust collector is designed to handle 62,000 CFM at an air to cloth ratio of 4.87 to 1 and operating temperatures of 230 - 400° F. Bag design is of the single wall type with 900 6" diameter x 9' long bags yielding 12,717 sq.ft. of cloth area. The bags are constructed from 14 ounce virgin NOMEX with 13% glass fiber to give better filtration on the sub-micron particle sizes. Bags and cages are snap-in type hanging from 1/4" thick steel tube sheet for easy top removal through through gasketed doors. The surface of the bag is singed prior to manufacture to insure better cake release during the cleaning operation. The 8" diameter header pipe contains 50 1-1/2" diaphragm valves controlled by 50 electrically operated solenoid valves. The cleaning sequence is determined by the sequence control board which contains variable timers for controlling the frequency and duration of pulse. In the automatic mode the cleaning frequency is increased or decreased to maintain a predetermined negative draft at the burner as registered on a photohelic gauge. This automatic modulation of pulse frequency greatly increases bag life and reduces compressed air demands. An inlet mounted

high temperature sensor, with independent back-up, will shut down the burner on activation. An outlet mounted probe, on over temperature sensing, will activate the inlet probes, close the exhaust damper and shut down the exhaust fan. A motion detector on the drum will shut down the burner and feeding systems in the case of an impending loss of material veil.

B. RETURN DUST SYSTEM : The fines collection system includes a drag chain bottom driven by a 7-1/2 H.P., 3/60/460v motor which conveys collected dust to a 12" diameter center collecting screw and a 12" diameter incline screw. A 14" diameter inclined screw conveyor driven by a 15 H.P., 3/60/460v motor returns collected dust to the mixing drum.

C. EXHAUSTER : The pollution control system includes a high efficiency, low energy, BCS 445 exhaust fan with a 200 H.P., 3/60/460v motor started through a wye-delta start. The exhauster is supplied with an automatically controlled louvered damper and ported stack. The stack is positioned so that it may be tested from the baghouse top deck.

D. AIR COMPRESSOR : A 60 H.P., 3/60/460v rotary screw-type air compressor mounted on a 200 gallon receiver is provided to supply compressed air for the baghouse and silo system. The compressor is complete with automatic dump water trap. All air piping is provided.

E. PORTABILITY : The baghouse is fully portable on three (3) spring mounted 5" diameter axles with dual 11:00 x 22 tires and wheels, turn and stop lights, fifth wheel pin, air brakes and mud flaps.

VI. ASPHALT BLENDING SYSTEM

A. GENERAL : The Model 100 Duo Drum "CF" includes the ALmix Millenium Control System. The heart of blending system is a microprocessor type computer. The system retains information, system constants and scale calibrations in case of power failure or power off conditions without the use of batteries for back-up. Environmental enclosures are provided for the CPU's.

B. FORMAT : Included in the system are two (2) 17" CRT monitors with key board entry panel. The operator uses the monitor to preset the following information:

1. Percent of liquid asphalt desired in mix.
2. Percent of reclaimed material desired in mix.
3. Percent of liquid asphalt in reclaimed material.
4. Seperate start and stop delay times for AC injection.
5. Liquid asphalt tolerance percent.
6. Aggregate moisture compensation setting for each aggregate.

The following items will be displayed on the video monitor:

1. Aggregate TPH for each aggregate.
2. Aggregate total TPH at point of asphalt injection.
3. Liquid asphalt TPH.
4. Recycle TPH.
5. Total mix TPH.
6. Desired % of aggregates, recycle and liquid asphalt.
7. Actual % of aggregates, recycle and liquid asphalt.
8. Accumulated total tons of each aggregate.
9. Accumulated total tons of liquid asphalt.
10. Accumulated total tons of mix.
11. Incline conveyor FPM.
12. Liquid asphalt temperature.

C. OPTIONS : The following options are included in the present quotation:

1. Feeder Control - Permits automatic control (by tachometer) of five (5) virgin aggregate belt feeders. The video monitor will display the TPH, % desired, actual % and total accumulated virgin aggregate tons produced.
2. Recycle Control - Permits automatic control (by weighbridge) of one recycle belt feeder. The video monitor will display the TPH, % desired, actual % and total accumulated recycle tons produced.
3. Lime Control - Permits automatic control of a weigh pod located under a lime silo to blend a predetermined percentage of lime to the aggregate.
4. Mix Design Storage - This option permits the entry of mix designs in memory and permits on stream mix design changes.

The number of mixes which may be stored is limited only by hard disk space.

5. Virgin Aggregate Tolerance Alarm - This option allows the system to monitor the aggregate TPH and alarm the operator when the actual aggregate TPH is outside the tolerance setting.
6. Asphalt Temperature Compensation - Provides for the Premium Control to make temperature-volume correction to the liquid asphalt flow rate.
7. Automatic Silo Loadout - Provides for the Premium Control to automatically dispense mix into a truck from a backweighing silo. Automatic gate cut-off compensation is included.
8. Customer Names & Addresses - Provides memory for storage of customer name and address records. The number of records is only limited by hard disk space.
9. Product Names - Provides memory for storage of product names. The number of records is only limited by hard disk space.
10. Account/Mix Totals - Accumulation of number of loads and total tons to each account by each mix is accomplished.
11. C.O.D. Price Extension - Permits the operator to enter the price per ton and the sales tax percent, thus allowing the Premium Control to generate a ticket that becomes an invoice.
12. Automatic Ticket Numbering - Permits the automatic sequential numbering of tickets.
13. Delivery Ticket Printer - A 120 cps dot matrix printer is supplied to provide multi-copy printout of tickets for mix loaded into trucks.
14. Truck Parameter Assignment Table - Permits the operator to enter into memory the required load parameters against a truck code number. The operator then need only enter the truck code number to load a truck. The number of records is only limited by hard disk space.
15. Mix Parameter Printer - Allows operator selected periodic printing of all mix parameters including AC and mix temperature.

D. BLENDING EQUIPMENT : The asphalt pump package consists of a 3" jacketed, positive displacement asphalt pump with jacketed relief valve driven by a 15 H.P., AC flux vector drive. A 3" jacketed basket style strainer is located on the suction side of the pump. Following the pump assembly is a jacketed, 3-way, air cylinder actuated by-pass valve to pass asphalt to the drum (through the Meter) or recirculate the asphalt to the tank. Next is a second jacketed, positive displacement, pump with jacketed head which is used to monitor the asphalt

flow rate. The accuracy and durability of this method of metering when used in conjunction with the automatic temperature compensation feature of the Millennium Control make it far superior to the use of traditional asphalt flow meters. The pump and metering package is skid mounted for location on the asphalt tank.

VII. CONTROL HOUSE & SWITCH GEAR & CONSOLE

A. CONTROL HOUSE : The plant operator's control house is a mobile office unit specially outfitted for use as a control center. The plant operator has visibility on all four sides. The interior is paneled and has 24,000 BTU air conditioning. The 16' long x 12' wide unit contains all plant controls factory installed and wired. The control house is completely insulated with 2" of fiberglass and the windows are tinted safety glass installed in aluminum frames. All walls are finished with 1/4" wood finished plywood paneling. The floor is covered with vinyl flooring and ample fluorescent lighting is provided. Control house is to be painted Mocha Tan with black trim.

B. SWITCH GEAR : Electrical switch panels are complete with all motor starters wired and mounted in a Nema 12 enclosure in the control house. Standard current is 3/60/575v. Wiring from the main junction box to the motor control center is in SO cord with plug-in connectors for all motors under 75 H.P.

C. OPERATOR'S CONSOLE : The plant burner controls include mix and exit gas temperature indication, automatic flame detection, automatic purging of the drum mixer and burner position indication. Indicator lights including a Honeywell flame safety annunciator panel monitor the operation of the purging cycle, pilot, ignition and main flame in burner-blower operation. A chart recorder is provided for the mix temperature. All additional controls have start-stop selector switches conveniently located in the proper start-up sequence and interlocked to insure safe operation. Digital manual back-up meters (reading out in tph) and manual controlled speed pots are supplied for all process materials. Ammeters are supplied in an overhead panel for all drum motors, burner blower, asphalt pump, drag conveyor, cross drag and exhaust fan. The burner controls, start-stop panel, blending panel with CRT screen, silo loadout panel with CRT screen and ticket and log printers are all conveniently grouped for central one-man operation.

VIII. HOT MIX SURGE SYSTEM

A. GENERAL DESCRIPTION : The hot mix surge system consists of a slat conveyor with 450 TPH capacity and hot mix surge silo with 80 ton capacity combined in a single portable, self-erecting unit, featuring automatic silo loadout. Silo and drag erect simultaneously via a single telescoping hydraulic cylinder. The unit is erected at the factory to ensure safe, dependable operation. The entire unit is fully portable on three spring mounted axles with dual 11:00 x 22 tires and wheels, turn and stop lights, fifth wheel pin, air brakes and mud flaps.

B. SLAT CONVEYOR : The 32" wide x 60' long drag type conveyor is driven by a 60 H.P., 1800 RPM, 3/60/460v TEFC motor through a shaft mounted speed reducer. The twin chains are 2858, 4.04" pitch roller type, having alloy steel side bars, carburized bushings, case hardened pins and hardened rollers. The conveyor operates at approximately a fifty [50] degree incline for high efficiency and low abrasion. The head sprocket consists of a heat treated segmental ring which bolts to a hub assembly having a taper lock bushing for positive locking to the head shaft. The conveyor bottom is fitted with 5/8" thick chromium carbide liners and the sides are fitted with 1/2" thick chromium carbide liners. The spring mounted idler shaft bearings on the conveyor have a common lubrication point near grade.

C. SILO : The 80 ton capacity circular surge silo (based on 120 lb./cu.ft. material density) has an actual tank diameter of 10 ft. The silo is constructed in the same manner as our stationary silos, i.e., it is not an open top, uninsulated hopper. The tank wall is constructed from 1/4" thick ASTM steel plate while the cone is constructed from 5/16" thick abrasion resistant steel plate. The silo is insulated with 2" on the upper tank and cone sections and 4" on the roof section. The silo cone and gates are heated with hot oil channels. The double clamshell type discharge doors are operated by two (2) 4" diameter air cylinders. Truck clearance is 12' wide x 11'-2" high.

D. MATERIAL BATCHER : The silo top is equipped with a material entry batcher having an approximate 8,000 lb. capacity to prevent segregation while charging the bin. Dual gates on the batcher are similar to the lower clam doors. The

batcher gates are controlled by the blending computer with bin indicator back-up.

E. BY-PASS SYSTEM : An air cylinder operated by-pass door and diverter chute allows the operator to by-pass the silo to avoid contamination of previously stored mix. A partial bulkhead is constructed in the area of the by-pass chute to facilitate clean up of any wasted materials.

F. AUTOMATIC LOAD-OUT SYSTEM & TICKET PRINTER : The silo is mounted on four weigh bars so that its gross weight is continuously known. Material may be discharged and the silo reweighed while the independently supported entry batcher is being filled. Thus, the net weight of the mix discharge can be computed. The Millennium computer performs the required functions with visual display on the CRT and causes a weigh ticket to be printed.

IX. LIQUID ASPHALT STORAGE SYSTEM

A. ASPHALT TANK : The liquid storage system includes one (1) portable 30,000 gallon capacity hot oil heated asphalt storage tank. The asphalt tank is insulated with 3" of high density fiberglass and covered by an aluminum skin. The tank contains a total of 2,000 lineal feet of circulating coils constructed from 2-3/8" O.D. tubing. The tank is complete with 3" flanged asphalt connections, 2" valved hot oil connections, 20" diameter quick opening manhole, external ladder and level gauge. A 500 gallon light oil tank is included to supply fuel to the hot oil heater.

B. HOT OIL HEATER: An Burke Model HCH-15 helical coil type heater with 1,500,000 BTU/HR output capacity is provided to heat the liquid asphalt storage system. The fully automatic unit is complete with heat exchanger, circulating pump, burner, expansion tank and control system. The helical coiled tube heat exchanger provides for a controlled flow design of maximum thermal efficiency. The coil is schedule 40 seamless pipe close wound and welded. The coil is placed in the heater so that it can expand and contract without fatigue cracking. The last two turns are spaced approximately one inch apart to allow for thermal expansion. The burner fires down the center of the coil with the combustion gases traveling the full length of the coil. The hot gases make a return pass over the outside of the coil and exhaust through the stack at the burner

end of the heater. This 12 in. diameter stack includes rain cap with screen and high temperature limit control. The shell of the heater is fabricated from 3/16" steel plate and is lined with 2" thick high temperature ceramic fiber blanket. Front and rear doors provide access to the coil. The rear door includes a sight glass for viewing the flame pattern. The heater and all components are skid mounted. The 80 gal. expansion tank is provided mounted, piped and wired to the heater shell. The expansion tank includes two lines with valves piped to the tank for purging the system during startup. The expansion tank also includes low oil cut off and sight level gauge. The low oil level control is mounted on the expansion tank and set so that the tank must be filled to the quarter full level. A glass sight gauge is furnished for visual checking. The Power Flame #2 oil burner utilizes the lo-hi-lo firing mode. The burner includes 1/2 H.P. blower, electric spark ignition, on/off firing with automatic air control, control transformer, lo-fire switch, Fireye control flame detection system with flame failure bell, fuel pump and first out annunciator. The "first out" annunciator for trouble shooting has lights to indicate the location of a problem. Each light is connected to the interlock circuit being monitored. The following circuits are monitored:

1. low fire limit control
2. stack temperature safety limit
3. low oil level
4. heater hot oil pump motor interlock
5. high temperature oil safety limit

The system oil temperature control consists of of an indicating dial control for regulating the desired temperature. A seven day, 24 hour time clock is provided for energy management. A low oil cut off prevents operation of the burner until the proper oil level is achieved. A high temperature control shuts the burner off automatically in the case of high oil temperature. A high limit stack temperature control shuts off the burner automatically in the case of high stack temperature. A low pressure switch shuts off the burner automatically in the case of a drop in pressure on the input side of the coil. The oil circulating system includes circulating pump driven by a 5 H.P., 3/60/460v motor, Y-strainer, expansion tank with guage glass assembly, thermometer and pressure relief valve.

C. TRANSFER PUMP: A 3" jacketed asphalt pump is provided to unload incoming asphalt tankers. The pump is

complete with jacketed relief valve, 15 H.P., 3/60/460v electric motor drive and piping.

D. PIPING: The asphalt metering pump package, circulating pump package and unloading pump package are all skid mounted and pre-piped on the unit. A center heated flexible line is provided to connect the metering pump package to the drum mixer.

E. PORTABILITY : The asphalt tank is fully portable on tandem 5" diameter spring mounted axles with dual 11:00 x 22 tires and wheels, fifth wheel pin, air brakes, turn and stop lights and mud flaps.

F. FOUNDATION PLATES : Adjustable jack legs with steel foundation plates are provided for the asphalt tank unit so that no cribbing is required to place the unit into operation.

X. SPECIAL CONDITIONS

A. CAPACITY : The ALmix Model 100 Duo Drum "CF" is designed to produce 200-400 TPH depending upon aggregate and moisture characteristics. More specifically, the above quoted plant is guaranteed to produce 300 TPH of 300° F hot mix from material having an initial moisture content of 5%, at an altitude under 1,500 ft. above sea level while complying with Mississippi State and Federal air pollution control laws. The above guarantees are limited by ALmix right to supply the additional larger or more efficient equipment to correct any deficiency at no additional expense to the Purchaser.

B. CONTRACT PRICE & PAYMENT SCHEDULE : The contract price shall be paid as follows: 20% downpayment with order, balance upon delivery of the equipment. The contract price for the goods and services quoted herein is \$1,446,000.00 f.o.b. factory.

XI. SUPPLEMENTAL INFORMATION

A. WARRANTIES : ALmix shall repair or at it's option replace, f.o.b. factory, any parts furnished which within 180 days from shipment are found to be defective in design, workmanship or material, provided the equipment has been operated by the Purchaser in accordance with generally approved practice as

instructed by ALmix service personnel and/or set forth in company service instructions, if any, and provided the Purchaser notifies the Company or its area representative in writing as soon as such defect becomes apparent. ALmix shall in no event be held liable for any consequential damages or other special damages. EXCEPT AS STATED, HEREIN, INCLUDING THE WARRANTIES MADE IN SECTION X(A) ABOVE WITH RESPECT TO CAPACITY AND POLLUTION CONTROL, ALmix MAKES NO IMPLIED WARRANTY OF MERCHANTABILITY, NO IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND THERE ARE NO EXPRESS WARRANTIES EXTENDING BEYOND THE TERMS HEREOF. ALmix retains ownership of all equipment until all invoices are paid in full.

B. START-UP SERVICE : ALmix will furnish the services of a field engineer to supervise the erection and/or setting up of the equipment furnished within the scope of this quotation and will assist and instruct the employees of the Purchaser in the operation thereof.

C. MANUALS: ALmix will furnish two copies of a parts and service and operational instructions manual.

D. PURCHASER REQUIREMENTS: The following is a list of items and services which are the responsibility of the Purchaser:

1. Freight to jobsite
2. Any and all governmental tax, duty or levies.
3. Application for all necessary permits.
4. Ramp for feeder bins.
5. Foundations if required.
6. Labor and tools for erection of equipment.
7. Fuel tank and fuel lines.
8. LP tank and regulator.

Quoted by:	Accepted by:
_____	_____
For: ALmix	For: Superior Asphalt
Date:	
