SPECIALTY CHEMICALS DIVISION

SOUTH CHARLESTON PLANT ENGINEERING

September 1, 1987

TO: J. F. Dodd
D. J. McNeil
C. R. Rotthoff
M. J. Shoger
D. R. Stokely
W. N. Stratton
J. L. Worstell

CC: R. P. Campbell
S. J. Chanley
S. W. Drake
G. L. Greybill
G. R. Hattiangadi
K. P. Holz
B. D. Mollohan
W. J. Vincent
R. W. Williams

FROM: T. G. Huff

SUBJECT: Project Scope Document
B-303 Transitional Operation/Demolition Phase III
S.O. #198456, EON 87412

This scope document is issued for the approval of the Engineering Manager, the Chemical Mixing Department Head, the Specialty Chemical Division Personnel Safety Manager, the Plant Safety Department Head and the Environmental Protection Department Head.

OBJECTIVE OF THE PROJECT

The objective of this project is to complete the demolition of Bldg. 303 to provide space needed for the truck trailers that will service the east dock of the new Drumming Center.

PROJECT EXECUTION

The demolition work will be completed in two phases: III A and III B. Prior to starting Phase III A Building 303 will be completely evacuated east of Column 10 and all operations terminated with one exception: full and empty drums will be shuttling back and forth between the new Drumming Center and the old drum staging area via the temporary conveyor on the south patio.

Phase III A demolition will begin at Column 10 and start working east. The building will be brought down to the present railroad bed elevation. The patio on the south side of the building (holding the temporary conveyor) will be left in place and undisturbed. After enough real estate is cleared, yard grading, sub-surface preparation, yard drainage and paving work will begin at old Column Line 10 and proceed east. The demolition contractor will stop work and demobilize when he reaches Column 20 (just west of the existing drum staging area).

When the yard grading, drainage and paving work described above is complete, truck trailers can begin to access the truck dock-doors on the east wall of the new Drumming Center. At this point, the temporary conveyor on the south patio and the old drum staging area will no longer be needed and Phase III B demolition can begin.

Phase III B will demolish the temporary conveyor, the south patio and the remainder of Building 303 east of Column 20 down to the present railroad bed elevation. Yard grading, drainage and paving will follow after the demolition work is complete.

PHASE III A

REVISION AND REARRANGEMENT WORK

Mechanical

All mechanical work must be completed before the demolition work can start. 64 process and utility lines serving Building 303 will be severed at strategic points in two trenches south of the building, one tunnel on the northeast corner and on the central piperack in the Slurry Bay. About 80 feet of one-inch plant air and nitrogen piping will have to be buried in a new trench on the north side of the building.

Civil

Several revisions are needed before starting demolition work. These include:

- Bracing the trusses at Column 20.
- Plugging of unneeded sewer openings.
- Relocating a railroad track deadman.
- Plugging off firewater supply lines.
- Erecting temporary and permanent racks to support the electrical work.

Post Demolition Revisions include:

- o Grade the newly cleared yard between the east wall of the new Drumming Center and Column 20 and install yard drainage.
- o Prepare the sub-surface and install the asphalt and concrete paving necessary for trucks to access the new Drumming Center.
- o Openings left in the walls of the new Drumming Center after the old central piperack is removed will be closed.

Electrical

All electrical work must be completed before the demolition work can begin.

All twelve circuits feeding Building 303 (east of Column 10) originate in switchracks A and B, which are located in the Slurry Bay. These circuits will be severed at the walls of the switchrooms. THe conduit and wire connected to the gear on the racks will be removed and the gear labeled "spare".

One of these circuits feeds Switchrack "C", which is located on the north patio and inside the boundary of the Phase III A demolition zone. Switchrack "C" is the power supply center for the following distribution facilities:

- o Oilyard Tanktruck Loading Racks
- o Oilyard Tankcar Loading Racks
- o Tanktruck Cleaning Station
- o Tanktruck Scales and Associated Modular Offices

A new electrical switchrack will be built east of the tanktruck cleaning rack to replace Switchrack "C". The new rack will be supplied by a new 480 volt feeder run approximately 1000 feet from Building 428. Circuit breakers, starters, and a lighting transformer will be mounted on the new rack and tied into the existing circuits with new runs of conduit and wire. THe circuit feeding the tanktruck scales and associated modular office will run 300 feet on existing racks and pipe tunnel and 200 feet in a new utility trench.

The power and lighting for the old drum staging area on the east end of Building 303 originates in the Phase III A demolition zone. Since drum staging operations will continue during this period, a temporary switchrack will be installed on the patio directly to the north. The temporary rack will have switchgear installed to supply power to three existing conveyor power panels. A lighting transformer will supply lighting needs. The temporary rack will be fed from the new circuit feeding the tanktruck scales.

The plant fire alarm system bell control panel for Zone 6 is located insided the demolition zone. Zone 6 includes the alarm bells in several buildings in addition to Building 303. The control panel and its backup power supply system will be relocated to the Slurry Bay. All revisions to the Plant Fire Alarm System will be reviewed and approved by Mr. D. M. Hall.

Power, lighting and telephone circuits serving Scale House 304 and the tankcar rack (both located south of Building 303) will be relocated to feed out of the Slurry Bay.

Minor disconnects and revisions will be made to the telephone and lighting systems serving Building 303.

REMOVALS AND RETIREMENTS

All of the asbestos pipe and ductwork insulation will be removed from the Phase III demolition zone by a qualified asbestos abatement contractor. The contractor will then remove all fiberglass wall insulation and then all transite siding and roofing between Columns 10 and 20 (including the south patio roofing).

The handling and disposal of asbestos containing materials will be done in accordance with all Federal, State and Local Laws and Regulations as well as all UCC Standards (see "Safety and Health Considerations" for a detailed description of removal methods).

The existing structure of Building 303 will be demolished to grade between Columns 10 and 20 including the tanktruck and tankcar unloading spots to the north. Grade elevation will be at the present railroad track bed. Demolition will include steel, concrete, piping, equipment, ductwork, power circuits and office paneling. The patio on the south side of the building will be left in place and undisturbed. The railroad tracks directly south of the patio will be removed. The old central piperack running through the new Drumming Center will be removed.

PHASE III B

REVISIONS AND REARRANGEMENT WORK

Mechanical

Three sections of temporary drum conveyor will be removed from the new Drumming Center.

Electrical

The power supply to the temporary drum conveyor and the temporary drum staging switchrack will be disconnected.

Civil

All civil work will take place after demolition is complete. Included will be:

- Repair/cover pipe tunnel and trenches on north and south sides of old Building 303.

- o Prepare the sub-surface and install the asphalt and concrete paving needed on the southeast corner of the new Drumming Center.

- o Grade the newly cleared yard east of old Column 20 and install yard drainage.

RETIREMENT WORK

A qualified asbestos abatement contractor will remove the transite siding and roofing from the old drum staging area (east of Column 20).

A demolition contractor will demolish the structure to grade (present railroad track bed). Also demolished will be the temporary conveyor, the old south patio, and the dock ramp east of the old staging area.

ENVIRONMENTAL PROTECTION CONSIDERATIONS

All asbestos removal and disposal work will be done in accordance with WV APCC and NESHAPS Regulations.

A qualified asbestos abatement contractor will remove and dispose of all asbestos containing materials. Prior to starting demolition, Plant 514 Environmental Protection Department will review and approve the contractor's proposed disposal site to establish regulator compliance and liability aspects. Contractor will provide Plant 514 EPD with all the information needed for EPD to file the NESHAPS notification with Federal and State Agencies.

SAFETY AND HEALTH CONSIDERATIONS

The handling and disposal of asbestos containing materials will be done in accordance with all Federal, State and Local Laws and Regulations as well as all UCC Standards.

Asbestos pipe insulation will be removed using the OSHA approved "Glove Bag" method. (Refer to Federal Register - OSHA Regulation 1926.58).

Asbestos containing transite does not fall under Federal EPA or WV State NESHAPS Regulations because it is considered a non-friable material (will not easily crumble and pulverize so as to release air-borne asbestos fibers under hand pressure). Consequently, methods for removing and disposing of transite vary widely throughout industry. Removal will be accomplished without using a negative pressure enclosure (the size of Building 303 - roof span is 90 feet - renders it impractical).

Discussions were held with three different contractors who have current experience removing transite. All three are using the following method successfully - their personnel and area sampling are consistently showing exposure levels below the OSHA action level (0.1 fibers/cc TWA_8).

- The only personnel present within the confines of the demolition zone during transite removal activity will be the demolition contractor.

- All openings connecting the demolition zone with immediately adjacent, occupied areas will be temporarily sealed off with polyethylene covers.

  - Prior to removal, warning signs shall be erected and, if appropriate, barriers shall be erected to control the spread of asbestos-containing dusts.

  - Contractor shall provide a clean room, equipment room and wash room immediately adjacent to the demolition zone.

  - Personnel shall don protective clothing and respiratory protection as required by OSHA and the South Charleston Plant Respiratory Protection Manual prior to entering the demolition zone.

  - Contractor shall visually inspect surfaces of the transite material noting damaged and friable surfaces areas. Prior to removal, a bridging encapsulant shall be applied to the damaged and friable surfaces of the transite panels. Particular attention shall be paid to joints and seams of the materials.

  - 6 mil Polyethylene sheeting shall be placed on all surfaces below the material to be removed.

  - The transite shall be carefully and thoroughly saturated with a gentle spray mist of amended water or penetrating encapsulant/sealant as appropriate. Contractor shall carefully detach transite material from the substrate. Extreme care shall be exercised to prevent damaging transite materials. Transite materials, while still wetted shall be placed and sealed in 6 mil polyethylene disposal bags with appropriate asbestos waste warnings. All bags of asbestos materials shall then be placed in an identical bag in order to form a total thickness of 12 mils. Transite materials which cannot be placed in disposal bags shall be carefully wrapped with 6 mil polyethylene sheeting to a total thickness of at least 12 mils. All joints in the sheeting shall be secured with tape and appropriate asbestos warning labels securely affixed. All surfaces from which asbestos transite panels have been removed shall be wet-wiped or hepa-vaccumed as appropriate. All cleaning and other disposable items including protective clothing shall be treated as asbestos containing waste.

  - Transite panels which have been penetrated by pipe, conduits or structural rods require special consideration. Whenever practical, the penetrating pipe, conduit or rod will be withdrawn before removing the transite panel. When this is not practical, the transite panel will be scored and struck with a hammer to break away the necessary pieces.

- Transite materials shall be transported according to EPA, OSHA, DOT regulations.

- Disposal of asbestos-containing transite shall be at a landfill licensed to accept asbestos-containing waste according to all Federal, State, and Local authorities.

- Contractor shall fully document actual disposal of each waste load with proper waste manifests and landfill receipts.

- Contractor will ensure personnel and area air sampling is performed according to the most stringent applicable specifications and will ensure final clearance air sampling is performed and final air sampling results are within acceptable limits before releasing any project area for occupancy by unprotected personnel. If, at any time, the results of air monitoring inside or outside the work area indicates a fiber concentration above 0.1 fibers/cc TWA_8, the contractor shall modify work practices and add the controls necessary to prevent exceeding this limit.

- A UCC construction inspector/qualified safety monitor will be on-site continuously during the demolition activity. This individual will be trained and outfitted identically to the contractor's employees.

The above transite handling and disposal method has the understanding and agreement of the following:

Mr. R. P. Campbell	Production Representative
Mr. K. P. Holz	Production Representative
M. T. G. Huff	Project Manager
Mr. C. R. Rotthoff	SC Div Personnel Safety Manager
Mr. R. D. Ondocsin	Corporate Industrial Hygienist
Mr. W. J. Vincent	514 Plant Industrial Hygienist

PROJECT PLAN

Engineering will be done by South Charleston Plant Engineering, CED Construction Group will perform all Revisions and Rearrangement work. Asbestos pipe insulation and transite siding removal will be done by a qualified asbestos abatement contractor. Non-asbestos removal work will be done by a demolition contractor.

Please sign on the following page if this project, as described, meets with your approval.

Tim Huff

TGH/wdm
Ext. 2584
3633G

Project Scope Document
B-303 Transitional Operation/Demolition Phase III
S.O. #198456, EON 87412

APPROVAL SIGNATURES: DATE

for C. R. Hattrangal. 9/4/87
J. F. Dodd (Engineering Manager)

D. J. McNeil 9/10/87
D. J. McNeil (Sponsor Engineering Manager)

D. R. Stokely 9/14/87
D. R. Stokely (Production Department Head)

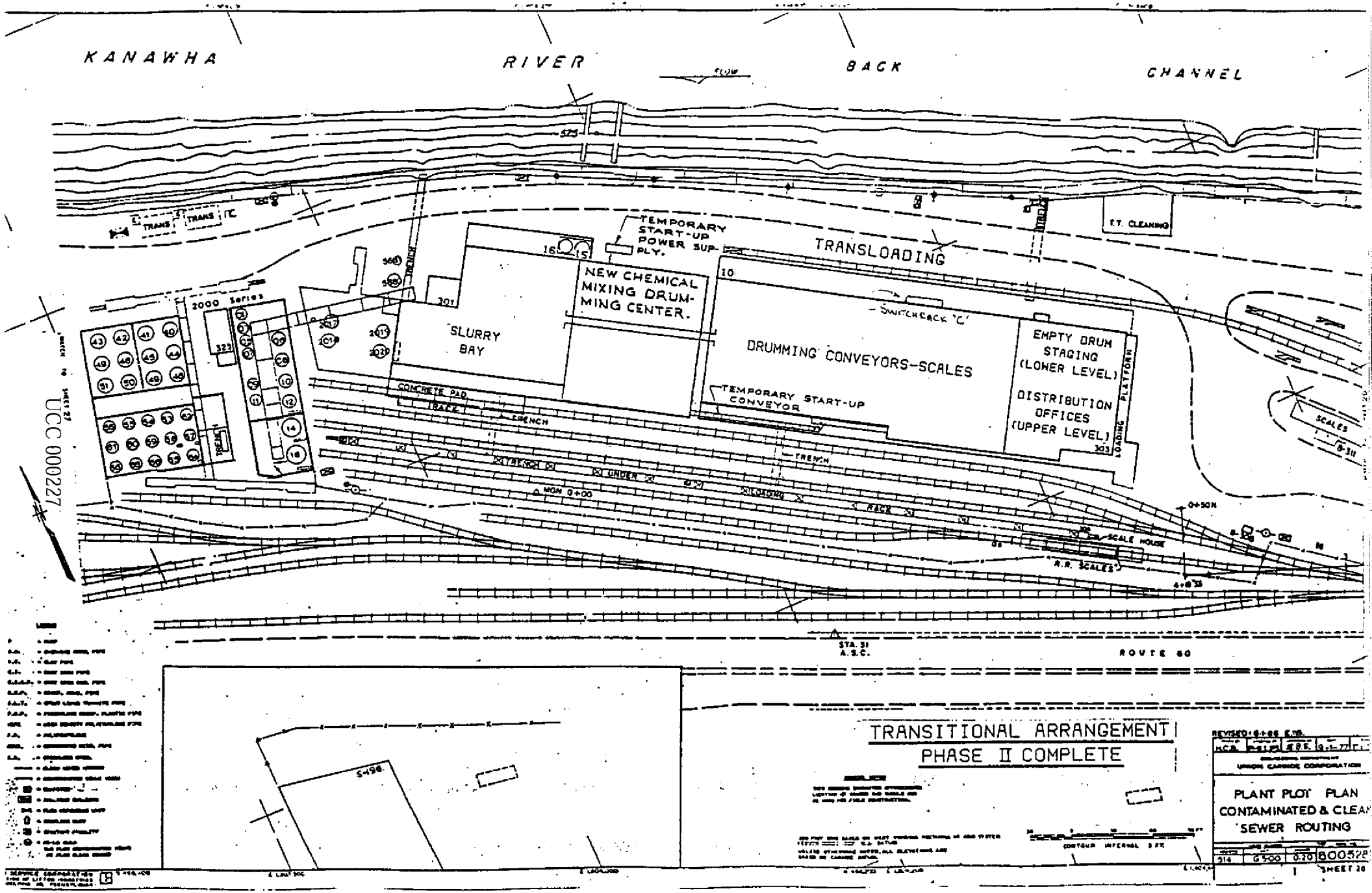
W. N. Stratton 9-28-87
W. N. Stratton (Production Department Head)

M. J. Shoger 9/28/87
M. J. Shoger (Plant Safety Department)

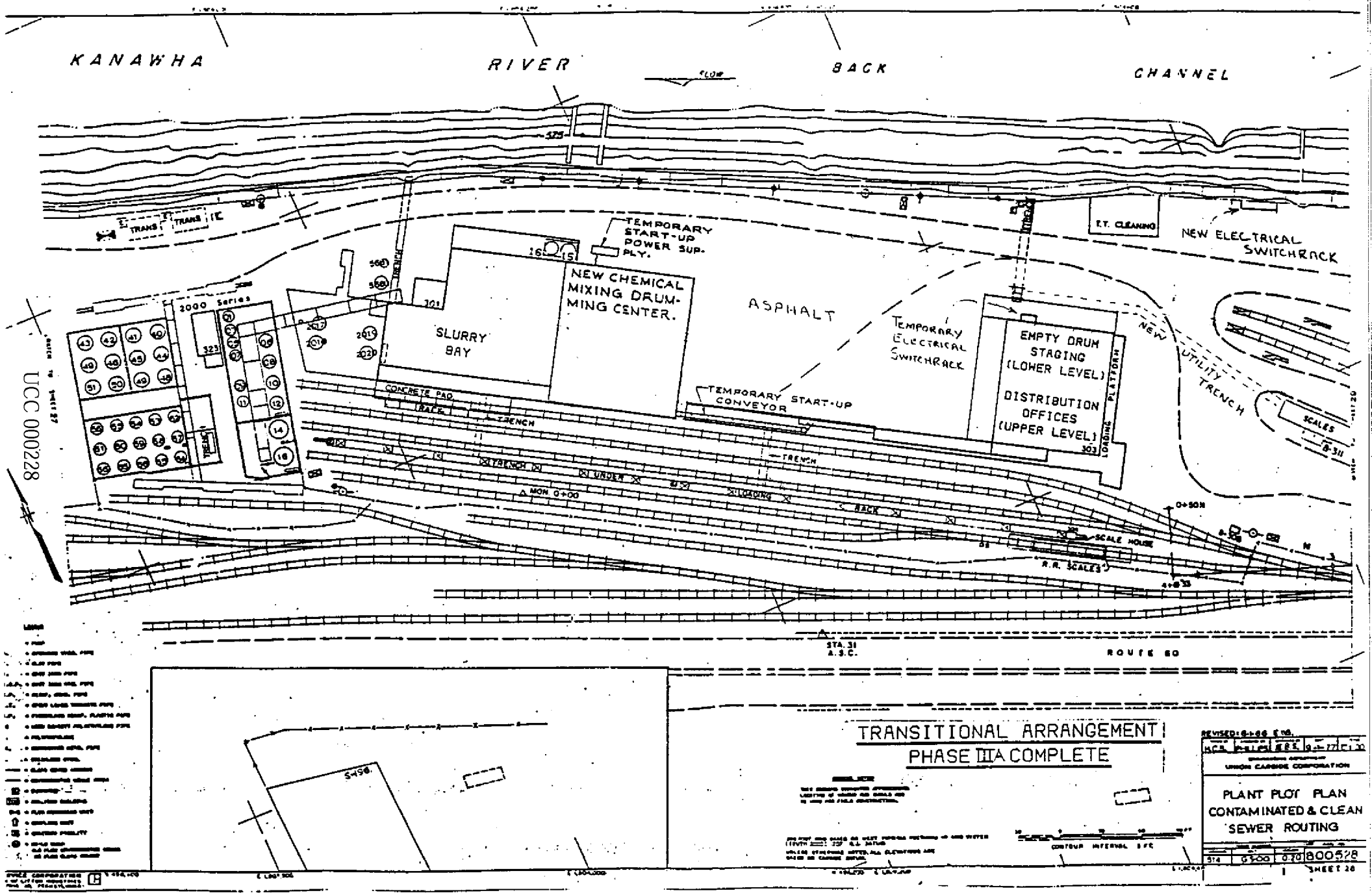
C. R. Rotthoff / GNH 9/28/87
C. R. Rotthoff (Personnel Safety Manager)

J. L. Worstell 9/28/87
J. L. Worstell (Environmental Protection Dept.)

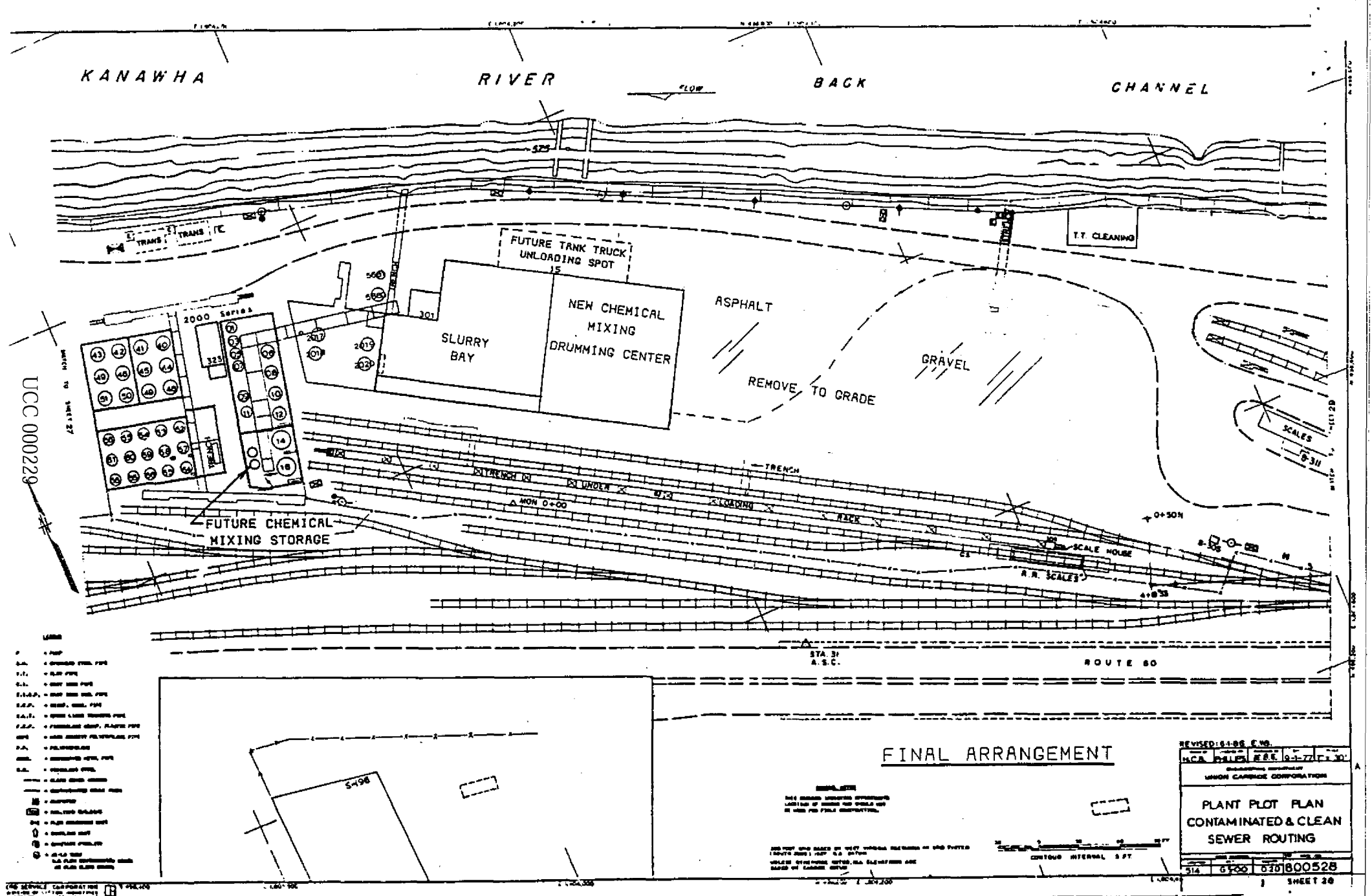
TGH/wdm
9/1/87
3633G


KANAWHA RIVER BACK CHANNEL
FLOW
TRANS
TRANS
TEMPORARY START-UP POWER SUPPLY.
TRANSLOADING
T.T. CLEANING
NEW CHEMICAL MIXING DRUMMING CENTER.
SLURRY BAY
2000 Series
SWITCHRACK 'C'
DRUMMING CONVEYORS-SCALES
EMPTY DRUM STAGING (LOWER LEVEL)
DISTRIBUTION OFFICES (UPPER LEVEL)
LOADING PLATFORM
TEMPORARY START-UP CONVEYOR
CONCRETE PAD
TRACK
TRENCH
UNDER
LOADING
MON 0+00
SCALE HOUSE
R.R. SCALES
SCALES
STA. 31 A.S.C.
ROUTE 60
S-496
TRANSITIONAL ARRANGEMENT
PHASE II COMPLETE
CONTOUR INTERVAL 5 FT.
UNION CARBIDE CORPORATION
PLANT PLOT PLAN
CONTAMINATED & CLEAN
SEWER ROUTING
514
G 500
0.20
800528
SHEET 28

UCC 000227


KANAWHA RIVER BACK CHANNEL
FLOW
TRANS
TRANS
TEMPORARY START-UP POWER SUPPLY.
NEW CHEMICAL MIXING DRUMMING CENTER.
SLURRY BAY
ASPHALT
TEMPORARY ELECTRICAL SWITCHRACK
EMPTY DRUM STAGING (LOWER LEVEL)
DISTRIBUTION OFFICES (UPPER LEVEL)
LOADING PLATFORM
T.T. CLEANING
NEW ELECTRICAL SWITCHRACK
NEW UTILITY TRENCH
SCALES
2000 Series
CONCRETE PAD
RACK
TRENCH
TEMPORARY START-UP CONVEYOR
TRENCH UNDER LOADING RACK
MON. 0+00
SCALE HOUSE
R.R. SCALES
STA. 31 A.S.C.
ROUTE 60
TRANSITIONAL ARRANGEMENT
PHASE IIIA COMPLETE
UNION CARBIDE CORPORATION
PLANT PLOT PLAN
CONTAMINATED & CLEAN
SEWER ROUTING
800528
SHEET 28

UCC 000228


KANAWHA RIVER BACK CHANNEL
FLOW
FUTURE TANK TRUCK UNLOADING SPOT
SLURRY BAY
NEW CHEMICAL MIXING DRUMMING CENTER
ASPHALT
GRAVEL
REMOVE TO GRADE
T.T. CLEANING
2000 Series
TRENCH
FUTURE CHEMICAL MIXING STORAGE
MON 0+00
UNDER LOADING RACK
SCALE HOUSE
R.R. SCALES
SCALES
STA. 31 A.S.C.
ROUTE 60
FINAL ARRANGEMENT
CONTOUR INTERVAL 5 FT
REVISED: 6-1-86 E.W.
UNION CARBIDE CORPORATION
PLANT PLOT PLAN
CONTAMINATED & CLEAN
SEWER ROUTING
514
G500
020
800528
SHEET 20

UCC 000229