

Industrial Construction Co., Inc.

CHEMICAL PLANTS
RUBBER PLANTS
POWER PLANTS
CARBON BLACK PLANTS

P. O. BOX 5456 -- PHONES 439-3400 ' 436-9468
LAKE CHARLES, LOUISIANA 70606

REFINERIES
GASOLINE PLANTS
COMPRESSOR STATIONS
PIPE LINES

September 12, 1986

Vista Chemical Company
P. O. Box 605
Westlake, Louisiana 70669

J C Rumm 9/12/86

Attention: Mr. Guy Bergeron

Subject: Furan Trench Installation, Block I and II

Gentlemen:

We propose to furnish supervision, labor, construction equipment, tools and material to perform work on project mentioned above for the lump sum price of Seventy One Thousand and No/100 Dollars (\$71,000.00).

It is understood that the Furan Trench will be supplied by Vista with all associated cleaners, primers and glue.

The amount of deductible for the Builders All Risk Insurance coverage is \$1000.00.

We estimate the number of calendar days to complete this project to be 40 days.

The separate price for doing the paving in Block I is Six Thousand Five Hundred and No/100 Dollars (\$6,500.00), which is not included in lump sum price quoted above.

We hope this meets with your approval.

Yours very truly,
Charles Boudreaux
Charles Boudreaux

CB/bw

CWH 000000382

Industrial Construction Co., Inc.

CHEMICAL PLANTS
RUBBER PLANTS
POWER PLANTS
CARBON BLACK PLANTS

P. O. BOX 5456 -- PHONES 439-3400 ' 436-9468

LAKE CHARLES, LOUISIANA 70606

REFINERIES
GASOLINE PLANTS
COMPRESSOR STATIONS
PIPE LINES

September 12, 1986

Vista Chemical Company
P. O. Box 605
Westlake, Louisiana 70669

Attention: Mr. Guy Bergeron

Subject: Furan Trench Installation, Block I and II

Gentlemen:

We propose to furnish supervision, labor, construction equipment, tools and material to perform work on project mentioned above for the lump sum price of Seventy One Thousand and No/100 Dollars (\$71,000.00).

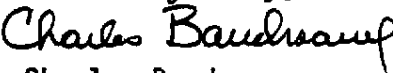
It is understood that the Furan Trench will be supplied by Vista with all associated cleaners, primers and glue.

The amount of deductible for the Builders All Risk Insurance coverage is \$1000.00.

We estimate the number of calendar days to complete this project to be 40 days.

The separate price for doing the paving in Block I is Six Thousand Five Hundred and No/100 Dollars (\$6,500.00), which is not included in lump sum price quoted above.

We hope this meets with your approval.

Yours very truly,

Charles Boudreaux

CB/bw

CWH 000000383

PROPOSAL

J.C. Rouse 9/12/86

To: Vista Chemical

Date: September 11, 1986

Attention:

Guy Bergeron

Dear Sir:

Having carefully examined the instructions to bidders, we make the following proposal concerning:

"Furan Trench Installation, Block I & II"

as well as the premises and conditions affecting the work, the undersigned proposes to furnish all necessary materials, labor, equipment, tools, transportation, services, etc., for completion of the work in accordance with above documents for the sum of:

Seventy Nine Thousand Five Hundred Twenty Eight Dollars and No 00/100—Dollars
(\$ 79,528.00).

If notified of the acceptance of this proposal within Three (3) days of the time set for receiving the bids, the undersigned agrees to execute work on the above stated job.

The estimated number of calendar days to complete this project is 40 days.

The estimated field labor man-hours up to and including the level of General Foreman or equivalent supervisor to complete this project is 2,720.

The undersigned is registered as a federal and state employer's registration numbers are as follows:

Federal: 72-0971726

State Louisiana

State License 16829

Mailing Address:

Vincon, Inc.
P.O. Box 2536
Sulphur, Louisiana
70664-2536

Very Truly, yours,

Andrew Vincon
Title President

Company Vincon, Inc.

ALTERNATES:

Alternate I

Alternate II

Alternate III

Guy Bergeron
9/12/86

CWH 000000384

PROPOSAL

SC Rosen 9/12/86

To: Vista Chemical

Date: September 11, 1986

Attention:
Guy Bergeron

Dear Sir:

Having carefully examined the instructions to bidders, we make the following proposal concerning:

* Item #28 " Furan Trench Installation in Block I (area paving) "

as well as the premises and conditions affecting the work, the undersigned proposes to furnish all necessary materials, labor, equipment, tools, transportation, services, etc., for completion of the work in accordance with above documents for the sum of:

Four Thousand Seven Hundred Eighty One Dollars and 52/100 Dollars
(\$4,781.52).

If notified of the acceptance of this proposal within one (1) days of the time set for receiving the bids, the undersigned agrees to execute work on the above stated job.

The estimated number of calendar days to complete this project is 5 days.

The estimated field labor man-hours up to and including the level of General Foreman or equivalent supervisor to complete this project is 140.

The undersigned is registered as a federal and state employer's registration numbers are as follows:

Federal: 72-0971726

State Louisiana

State License 16829

Mailing Address:

Vincon, Inc.
P.O. Box 2536
Sulphur, Louisiana 70663-2536

Very Truly yours,

Andrew Vincon

Title President

Company Vincon, Inc.

ALTERNATES:

Alternate I

Alternate II

Alternate III

CWH 000000385

*Assuming that existing paving is 4" thick.

Guy Bergeron
9/12/86

BASIS OF BIDS

1. (*) Submit a lump sum bid for materials, procurement of materials, sales tax, labor health and welfare benefits, insurance, payroll taxes, tools, equipment, expense items and supervision for:
Furan Trench Installation, Block I + II.
2. The Contractor Safety Manual, Plant Security and Safety Rules, VCM Appendix and Contractor's current General Services Contract will become part of the final work agreement.
3. Prior to submitting the invoice for final payment, the Contractor shall furnish the Company a completed, signed and dated, and notarized copy of the Company's Appendix K, Contractor Affidavit.
4. The Contractor shall provide "all risk" protection on equipment materials, and machinery which will become a part of the project, (a) whether furnished by the Company or Contractor; (b) while awaiting and during erection or installation; and (c) until the project is completed and accepted by Company. The value of materials, equipment and machinery furnished by the Company is \$50,000.00. Any loss will be paid by Contractor except for equipment, materials and machinery which were ordered by Company and the loss occurred before acceptance by Contractor.
5. (*) Include in your bid the amount of the deductible for the Builder's All Risk Insurance coverage.
6. (*) Include in your bid the number of calendar days to complete the job after you begin field construction, and the number of calendar days to begin after formal notification is given. *(Finish end of October or sooner)*
Time is important
7. The Company reserves the right to reject any and all bids, and no public opening of the bids will be held.
8. All contractors must quote to do the job exactly as the Basis of Bids specifies. However you are welcome to submit alternatives.
9. The Contractor Field Foreman must contact the Company Representative when he feels he has had to or anticipates that he will have to perform extra work that will result in an additional cost. This must be done promptly. Do not wait until the job is completed to inform the Company Representative of the "extra".

CWH 000000386

- * 10. The Company Representative will require a meeting with the Contractor's Field Foreman prior to commencing work for the purpose of introducing him to the requirements of the job. This will not occur the day work is scheduled to begin; it will occur beforehand when the impetus to "get started" is not present.
- 11. A VCM safety orientation will be required for all Contractor employees before commencing work (1 hour).
- 12. The Contractor shall furnish drinking water for its employees from a source outside the plant.
- 13. The Contractor shall furnish toilet facilities for its employees.
- 14. Smoking areas will be designated by the Company for the Contractor's employees.
- 15. The Contractor must completely clean up the area after the job is completed. Likewise the area will be kept reasonably clean during execution of the work.
- * 16. Submit your quote by 9/12/86. Bring the quote to the Company Representative's office, by 11 AM.

CWH 000000387

→ 17 All open trenches shall be provided with suitable barriers and signs sufficient to the extent that adequate protection is provided.

→ 18 When doing any work in the trench, where it is a possibility of coming into contact with the fluid in the trench or any residual contaminants in the trench you must wear complete rubber suits including gloves and boots. This includes building dams and handling of old concrete.

→ 19 The contractor must, of course, pump around the section of trench that is to be worked on and consequently dams will have to be constructed in the necessary places. The contractor builds the dams.

→ 20 When pumping around realize that we can not tolerate downtime on the pumps. Provide the necessary spares. Use ← air-operated diaphragm pumps.

→ 21 Vista will reroute all pipes that currently drain into the trench before the contractor starts.

→ 22 Vista will install a brick dam around the work area to prevent fluids from entering trench. After the job starts the contractor will be held responsible for upkeep of the brick dams.

→ 23 * Hot work permits will be given only for excavation of the existing trenches inside the process area.

→ 24 The Air Compressor will be set outside of the process area.

→ 25 A Non-motorized lifting device (Motor Hoist) will be needed to set Suran trenches. The heaviest Suran section is approximately 600 lbs.

*

CWH 000000389

→ 26 Vista will supply Suran trenches, pelsal and Suran motor. The contractor will supply grating^(galv.) (1½ inches thick) and all other materials needed to complete the job.

27 Attached are illustrations showing installation, lay-out, materials that will be used, tie-ins (drains). These items will be discussed in the bid meeting.

*28 A section of pavement in Block I north of the trench will be replaced after the trench is installed in Block I. The pavement dimensions are approximately 70 ft x 10 ft. A separate bid price is required for this work (for accounting purposes only). 4" fine

→ 29 Concrete shall be a minimum 3000 # with gravel as the aggregate (no limestone).

→ 30 The contractor will supply all containers and materials needed to mix and apply the mortars.

31. Scope of Work

I. Installation

A. Concrete

To be disposed
of in area
north of plant.

Rebar
12" centers

- ① Remove existing trench ^{pg 11}
- ② Excavate soil in trench for ^{pg 14}
walls 12 inches thick and
a mud slab 8 inches thick.

- ③ Set slope of trench with
bricks or concrete pillar.
Trench will set on either of these.

- ④ Place rebar in trench as ^{pg 14}
shown in illustration.

- ⑤ Set trench and make joints. ^{pg 15}

- ⑥ Form grating supports and ^{pg 14}
trench walls. Will need to
secure trench so that concrete
does not push (^{float}) trench up.

- ⑦ Pour concrete.

$\frac{1}{2}$ "
expansion
joint

B. Elevations

- ① Furan trenches will be set in place
so that the bottom of the trench
forms a constant slope. Dimensions ^{pg 16}
on the trench depth are provided.

- ② Furan trenches will be installed
in a stair-stepping manner. ^{pg 13}
See illustration.

B. Elevations (cont.)

- ③ Grating will be held at a constant (existing) elevation. There may be areas where pavement and grating are not at the same elevation. In these areas slope the concrete (between grating and pavement) accordingly. In areas where the pavement is lower than the grating (thus forming low spots that will not drain) install drain pipes.

C. Furcan Joints

- ① Before installation check the exterior asphalt liner on the furcan trench. If damaged patch with Tuffclem II.
- ② Clean both the male & female by 15 ship-lap joints of the trenches being adhered together. Coat joint with the PLV-2000 primer.
- ③ Apply Pelscal Caulk to bottom part of joint ($\frac{1}{8}$ " thick), both male and female. Putty knives work well.
- ④ Slide trench into place. The Pelscal caulk should ease into the top part of the joint. CWH 000000392

C. Furan Joints (cont.)

- ⑤ After concrete poured and has set, use the FN Furan mortar to fill in the rest of the gap in the joint. P. 15

D. Concrete Trench Tie-Ins

- ① Where the concrete trench will be connected to the existing trench the rebar will be doweled into the existing trench. A bonding agent will be needed to bond old concrete to new concrete.

→ E. Drain Tie Ins

- ① Some of the tie-ins probably can be made above the furan trench although some will be made through the furan.
- ② When drilling (cutting) the furan adequate support of the trench wall is required.
- ③ Important to minimize the spacing between hole & sleeve.

F. Trench Installation

- ① Block I - Start at Acid Brick section (east side) and work westward.
- ② Block II - Start at East end, complete large section (north-south section) first, then work westward. Block II will be done in halves.

10

If there are any questions or any item needs clarification,
please don't hesitate to contact the Company Representative:

Guy Bergeron
494-5035

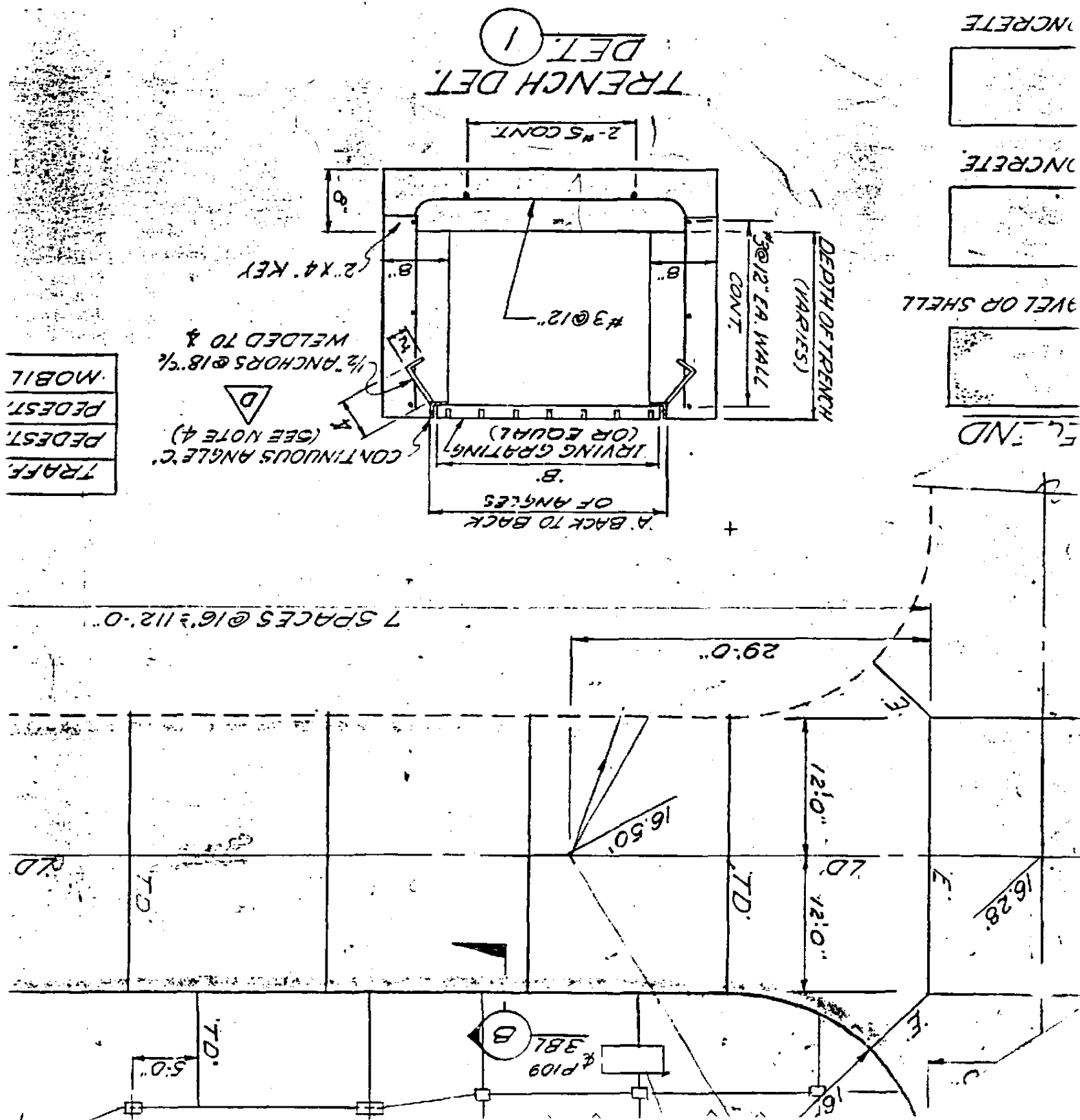
*Denotes items that must be included in the bid. The Company
will reject any bid that omits these items.

Safety is a high priority at the VCM Plant. We do not take
shortcuts at the expense of safety.

CWH 000000395

Rebar Design of Existing Trench

CMH 000000396



PRE-CAST TRENCH

PENNYWALT "FURNALOG CONCRETE"



CWH 000000397

ELEVATION VIEW OF TRENCH PITCH

GRADE
LEVEL

LIQUID
LEVEL

8' SECTION

(ENLARGEMENT)

GRADE
LEVEL

LIQUID
LEVEL

90°

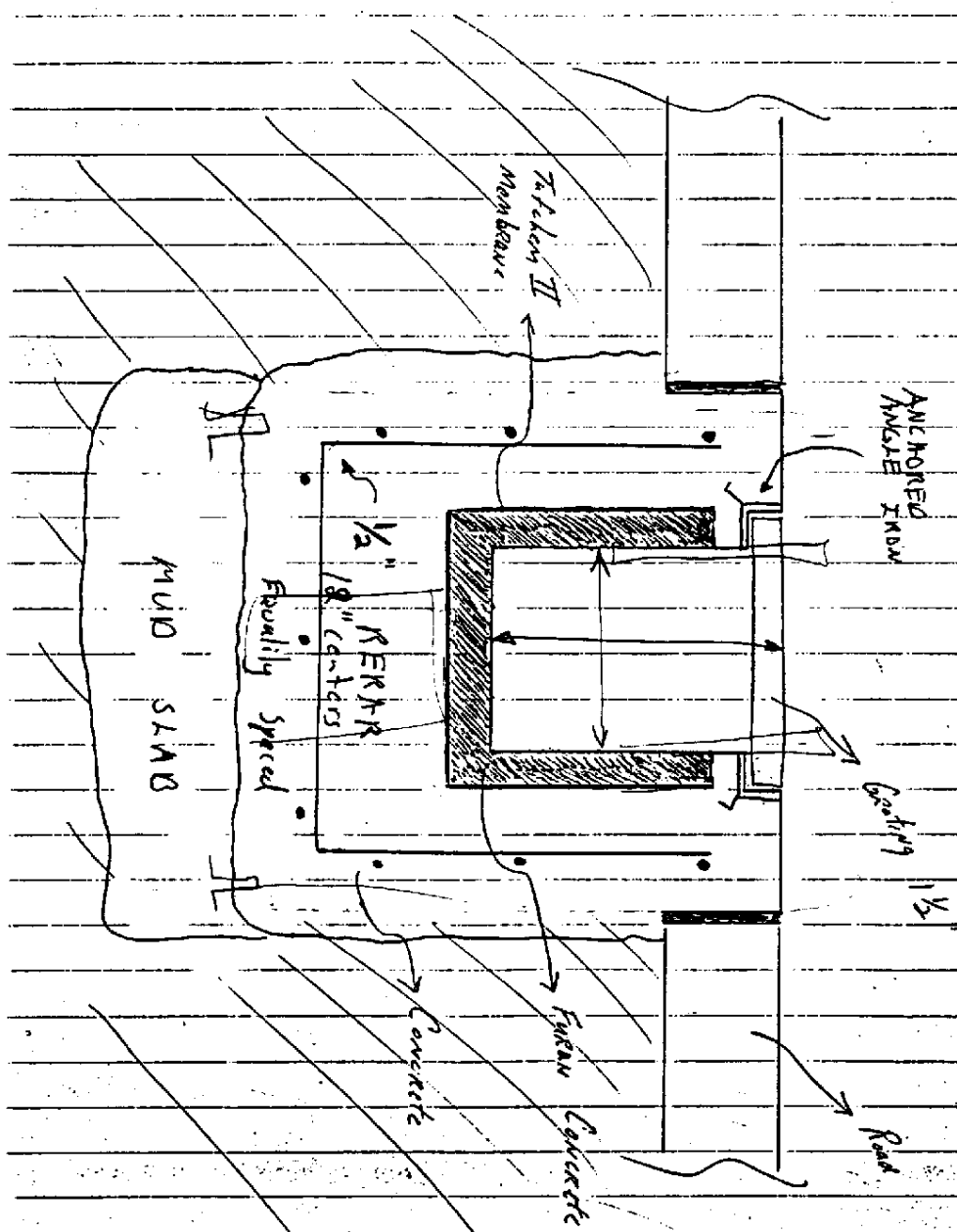
8'

90°

PRE-CAST TRENCH
SECTIONS

PRE-CAST TRENCH
SECTIONS

CWH 000000398



SHIP-LAP JOINT DETAIL (BOTTOM)

PENNWALT FURALAC FN MORTAR

PELSEAL FLUOROELASTOMER CAULK

PENNWALT FURALAC CONCRETE

2"

1"

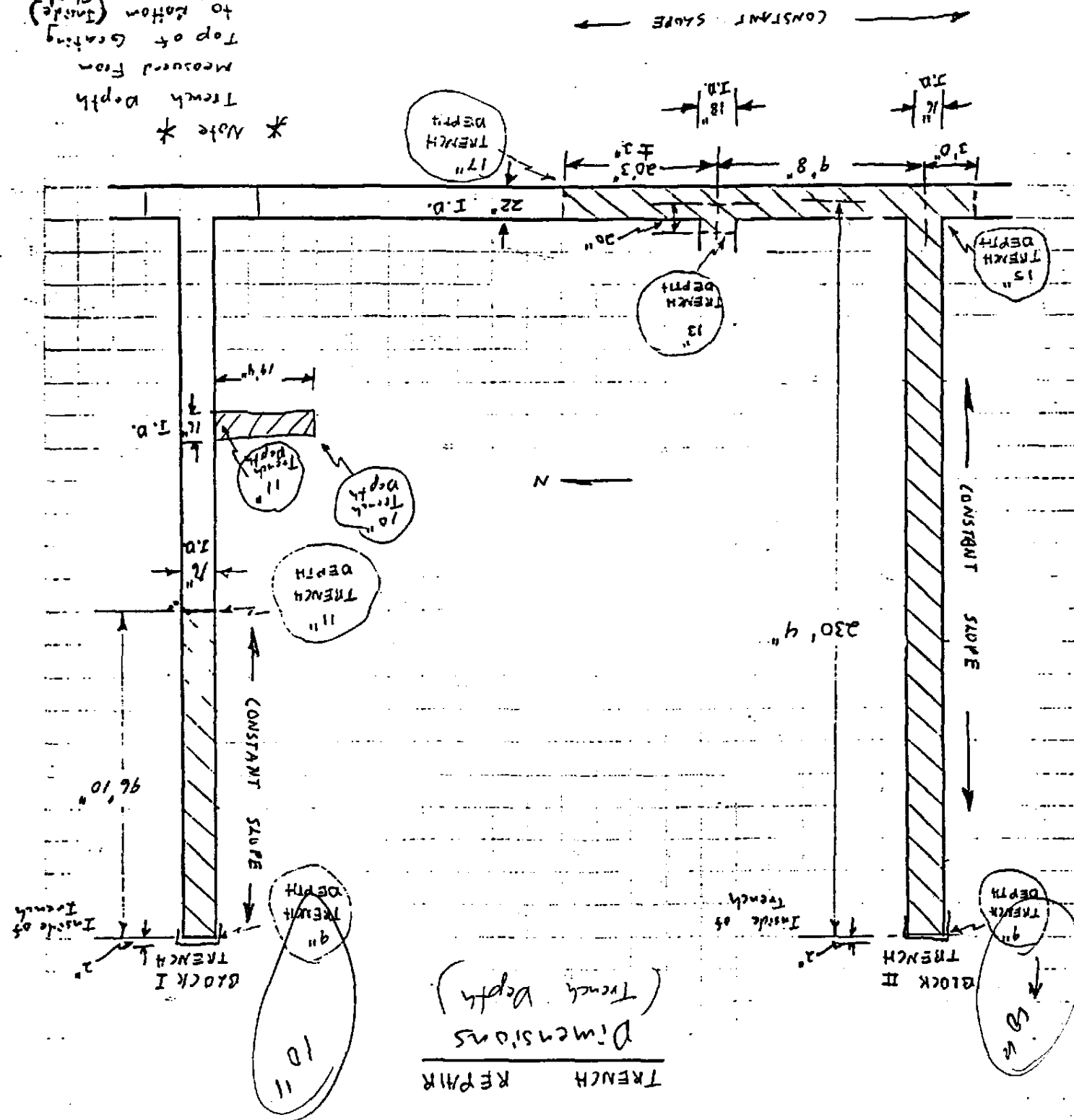
Made By _____
Date _____
Page _____ of _____

Job No.

CUH 000000401

Trench depth
measured from
Top of Grating
to Bottom (Inside)
of Trench (fluid)

* Note *



Calculation Sheet

To —
From

VLSIA

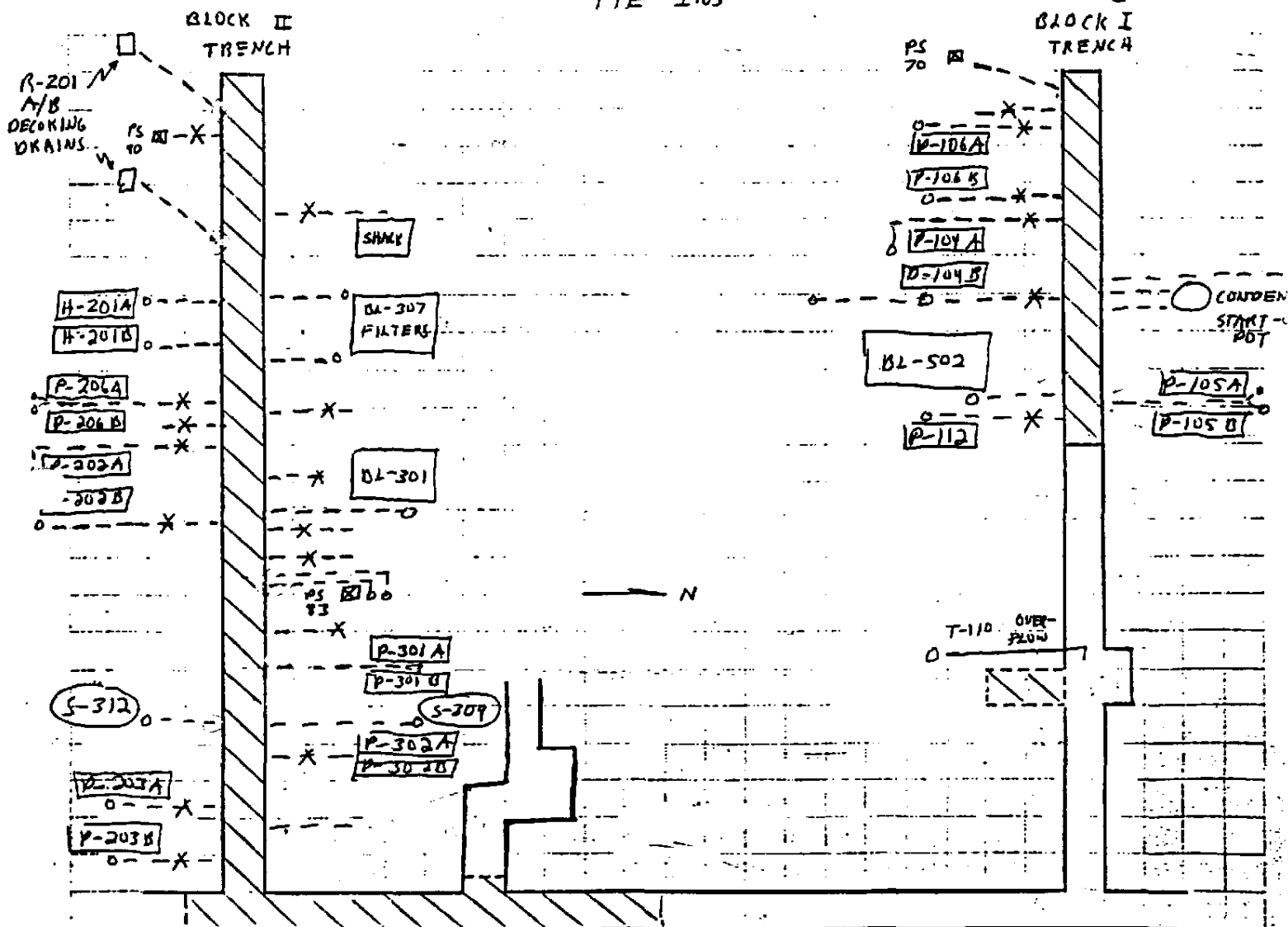
To _____

From _____

Calculation Sheet

TRENCH REPAIR

DRAINS
TIE INS



Made By _____
Date _____
Page _____ of _____

V3-20G-5

Job No. CWH 000000402
Title _____