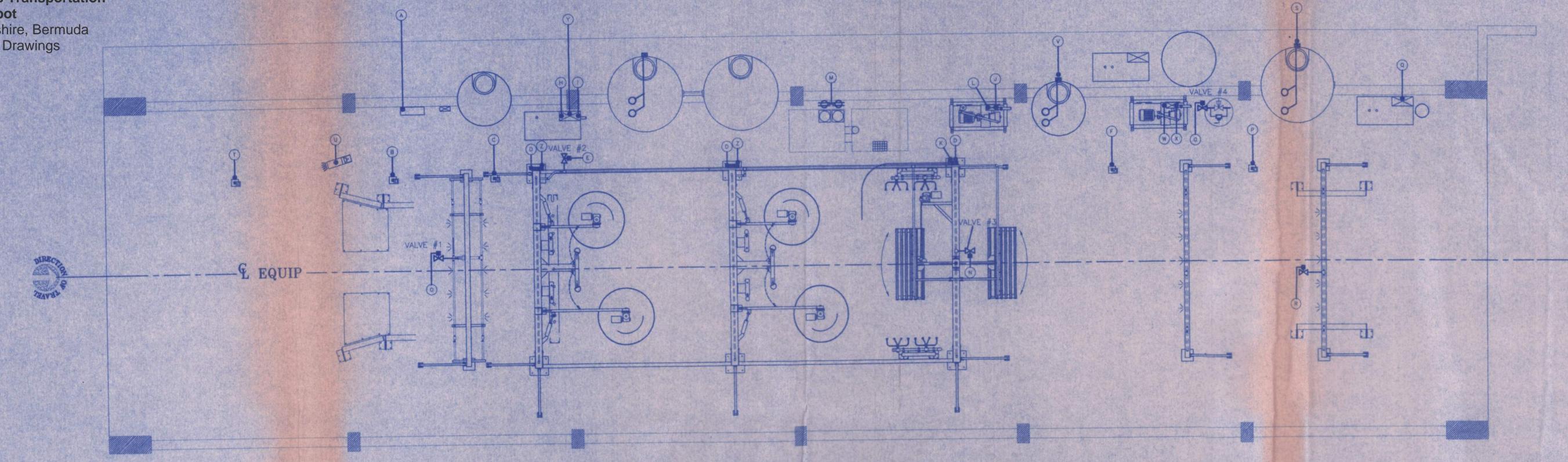


The Department of Public Transportation **Bus Wash at the Bus Depot** 26 Palmetto Road, Devonshire, Bermuda **Existing Bus Wash Facility Drawings**

Existing Bus Wash Information System 3000A 1998 / 1999

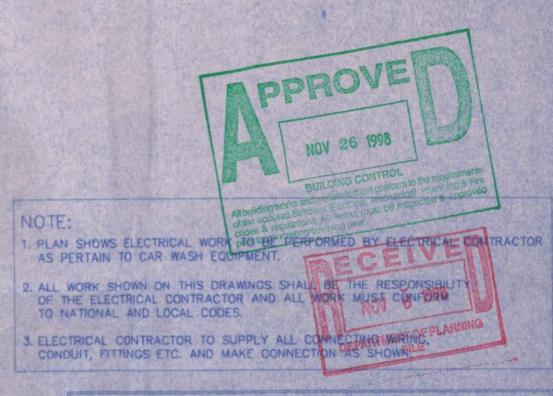


ELECTRICAL NOTES

- A- 205V, 30 60Hz POWER FOR (5) 2HP MOTORS FROM MAIN POWER SOURCE BY ELECTRICAL CONTRACTOR.
- B- 4 WIRES, 1/2" CONDUIT, 24VAC FROM MACHINE CONTROL PANEL TO ELECTRIC EYE #1 BY ELECTRICAL CONTRACTOR.
- C- 4 WIRES, 1/2" CONDUIT, 24VAC FROM MACHINE CONTROL PANEL TO ELECTRIC EYE #2 BY ELECTRICAL CONTRACTOR.
- WIRES, CONDUIT AND CONNECTIONS FROM MACHINE CONTROL PANEL TO J-BOX LEG MOUNTED (FOR ELECTRIC MOTORS) BY ELECTRICAL CONTRACTOR.
- E- 2 WIRES, 1/2" CONDUIT, 24VAC FROM SOLENOID VALVE #2 TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR
- F- 4 WIRES, 1/2" O CONDUIT, 24VAC FROM MACHINE CONTROL PANEL TO ELECTRIC EYE #3 BY ELECTRICAL CONTRACTOR.
- G- 2 WIRES, 1/2" CONDUIT, 24VAC FROM SOLENOID VALVE #4 TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- 1 2 WIRES, 1/2" CONDUIT, 24VAC FROM WRS CONTROL PANEL TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- O- 205V, 30, 60Hz FROM SOURCE TO WRS CONTROL PANEL FOR (1) 20HP MOTOR BY ELECTRICAL CONTRACTOR.

- Q- 2 WIRES, CONDUIT AND 24VAC FROM SPINNER PUMP CONTROL PANEL TO LOW-LOW LEVEL FLOAT SWITCH (N.O) IN WRS TANK BY ELECTRICAL CONTRACTOR.
- 1 WIRES, CONDUIT AND 24VAC FROM PRESSURE SWITCH ACTIVATOR (J-BOX) TO SPINNER PUMP CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- Q- 205V, 30, 60Hz FROM SOURCE TO SPINNER PUMP CONTROL PANEL FOR (1) 20HP MOTOR BY ELECTRICAL CONTRACTOR.
- (2) DUAL WEATHER PROOF RECEPTACLE OUTLETS 115V, 10 60Hz POWER FROM SOURCE FOR (2) 1/2 HP SUMP PUMPS BY ELECTRICAL CONTRACTOR.
- N- 2 WIRES, 1/2" CONDUIT, 24VAC FROM SOLENOID VALVE #3 TO SPINNER CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- O- 2 WIRES, 1/2" CONDUIT, 24VAC FROM SOLENOID VALVE #1 TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- P- 4 WIRES, 1/2" CONDUIT, 24VAC FROM R-O CONTROL PANEL TO ELECTRIC EYE #4 BY ELECTRICAL CONTRACTOR.
- Q- 205V, 30, 60Hz FROM SOURCE TO 1 1/2HP RO PUMP AND (1) 2HP RP PUMP BY ELECTRICAL CONTRACTOR.
- R- 2 WIRES, 1/2" CONDUIT, 24VAC FROM R.O. SOLENOID VALVE TO R.O. CONTROL PANEL BY ELECTRICAL CONTRACTOR.

- S- 2 WIRES, CONDUIT AND 24VAC FROM R.O. CONTROL PANEL TO LOW-LOW LEVEL FLOAT SWITCH (N.O) IN R.O. TANK BY ELECTRICAL CONTRACTOR.
- T- WIRES, CONDUIT AND CONNECTION FROM AIR RETRACT DEACTIVATION BUTTON TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- 1 WIRES, CONDUIT AND 120V 10 FROM ENTRY LIGHT TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- V- 4 WIRES, CONDUIT AND 24VAC FROM 5HP PUMP STARTER PANEL TO TANK FLOAT SWITCH J-BOX BY ELECTRICAL CONTRACTOR.
- W- 2 WIRES, CONDUIT AND 24VAC FROM 5HP PUMP STARTER PANEL TO MACHINE CONTROL PANEL BY ELECTRICAL CONTRACTOR.
- FOR (1) 5HP MOTOR BY ELECTRICAL CONTRACTOR.
- O- 2 WIRES, CONDUIT AND 24VAC FROM WRS CONTROL PANEL TO LOW LEVEL FLOAT SWITCH IN WRS TANK BY ELECTRICAL CONTRACTOR.
- 2- 2 WIRES, CONDUIT AND 24VAC FROM MACHINE CONTROL PANEL TO AIR RETRACT SOLENOID VALVES BY ELECTRICAL CONTRACTOR.



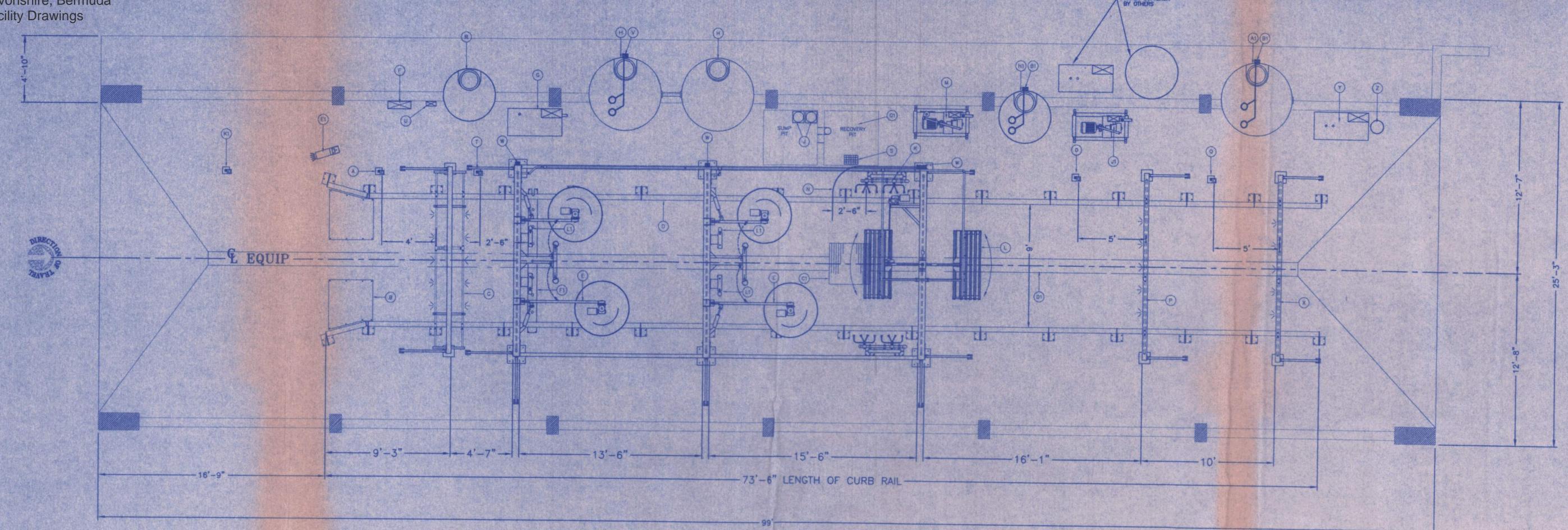
These are only general drawings produced with sole intent of showing the approximate location of equipment and utilities necessary to run soid equipment. They are by no means to be considered complete ar exact in detail. These drawings are produced as a service to assist the customer and his drahitect for preliminary planning and bidding purposes. N/S does not accept any responsibility for the accuracy, errors and omissions on said drawings.

N/S does offer at an additional charge, mechanical drawings which include electrical and plumbing information, which will be affered an a separate package quote. Contact your local N/S salesman for pricing an mechanical drawings.

The Department of Public Transportation **Bus Wash at the Bus Depot** 26 Palmetto Road, Devonshire, Bermuda Existing Bus Wash Facility Drawings

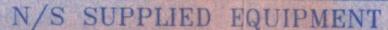
Existing Bus Wash Information Model: System 3000A Year:

1998 / 1999



EQUIPMENT PLAN

VEHICLE CLEURANCE = 12'-0"
MACHINE FRAME HEIGHT = 13'-10"



(B) - STAINLESS STEEL SKID PLATE

(A) - DETERGENT ARCH ELECTRIC EYE #1

(C) - DUAL DETERGENT SPRAY ARCH

(D) 4" ROLLING CURB RAIL

(E) WRAP-A-ROUND FLEX BRUSH

(F) -- MACHINE CONTROL PANEL STAND MOUNTED G)- 20HP WATER RECOVERY CONSOLE

(H) (2) 1,500 GALLON WRS TANKS 64" X 121" HIGH (J)— (2) 1/2HP TRANSFER PUMPS

VARIABLE HEIGHT STAND (K) -- DUAL SPINNER WHEEL WASHERS

(L) - DUAL TOP SCRUBBER CURTAINS M - 20HP WHEELWASH PUMP STATION WITH CONTROL PANEL WITH IN-LINE FILTER.

(N) WHEEL WASHER PRESSURE HOSE WITH J-BOX AND TIMER

(0) - FINAL RINSE ELECTRIC EYE #3 (P) SINGLE FINAL RINSE ARCH

(Q)- R.O. RINSE ELECTRIC EYE #4 (R)- 500 GALLON DETERGENT TANK 46"ø X 76" HIGH

(S) FILTER BASKET T -- BRUSH WASH AND UNDERCARRIAGE WASH ELECTRIC EYE #2

BRUSH WASH AND UNDERCARRIAGE WASH ELECTRIC EYE #2 U AIR DIAPHRAM DETERGENT PUMP WITH SOLENOID VALVE V) J-BOX WITH (2) LOW-LOW FLOAT

SWITCH (N.O.) (W) 6 X 6 J-BOX. (LEG MOUNTED)

X)- SINGLE R.O. ARCH WITH PVC PIPE

R.O. CONSOLE WITH 2HP RP PUMP AND 1 1/2HP R.O. PUMP CARBON FILTER AND CANNISTER

(A1) (1) 2,000 GALLON R.O. TANK 64"Ø X 144" HIGH J-BOX WITH LOW LEVEL FLOAT (N.C.) LOW-LOW FLOAT SWITCH (N.O.)

12" WIDE TRENCH DRAIN

3' X 3' X 2' DEEP SAND TRAP

ENTRANCE TRAFFIC LIGHT GREEN AND RED UNDERCARRIAGE WASH

SUMP AND RECOVERY PIT

4' X 4' X 4' DEEP EACH 500 GALLON WATER TANK 46" X 76" HIGH - SHP PUMP WITH CONTROL PANEL FINAL RINSE

- DEACTIVATION BUTTON FOR AIR RETRACTION SYSTEM (TO BE FIELD LOCATED)

- AIR RETRACT SYSTEM FOR WRAP-A-ROUND BRUSHES. AIR RETRACT CONTROL PANEL

GENERAL NOTES

- ALL ELECTRICAL CONNECTIONS FROM CUSTOMER'S MAIN POWER SUPPLY TO N/S CONTROL PANEL ARE THE RESPONSIBILITY OF THE ELEC. CONTRACTOR
- 2. ALL PLUMBING CONNECTIONS TO MACHINE AND ALL EXTERNAL MACHINE PLUMBING ARE THE RESPONSIBILITY OF PLUMBING CONTRACTOR.
- PRESSURIZED AIR LINE CONNECTIONS TO MACHINE IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
- 4. MINIMUM WATER SUPPLY TO MACHINE WITHOUT OPTIONAL PUMP SYSTEM IS 60 CPM AT 60 PSI.
- 5. ALL CONNECTIONS TO MACHINE SHALL BE FLEXIBLE. ALL CONNECTIONS TO AND FROM PUMP SYSTEM SHALL BE MADE FLEXIBLE.
- 6. WATER LINES TO BE GALVANIZED PIPE OR COPPER PIPE.
- 7. THE RECOMMENDED MINIMUM BREAKER AND REQUIRED AMPERAGE ARE AS FOLLOW:

ITEM	480V		230V		205V	
	F.L.A.	MIN. C/B	F.L.A.	MIN. C/B	P.L.A.	MIN. C/B
BASIC MACHINE	17,0A	30.0A	34.0A	55.0A	37.5	60.0A
20HP PUMP	27.0A	45.0A	54.0A	85.0A	59.4A	95.0A
2HP PUMP	3.4A	10.0A	6.8A	15.QA	7.5A	15.QA
1 1/2HP PUMP	2.6A	5.0A	5.2A	10.0A	5.7A	10.0A
SHP PUMP	7.6A	15.0A	15.2A	25,0A	16.7A	30.0A

8. N/S RECOMMENDS THAT ALL CONNECTIONS COMINGINTO OUR PANEL BOX SHOULD BE MADE INTO THE BOTTOM OF THE ENCLOSURE.

9. N/S DOES NOT SUPPLY ANCHOR BOLTS FOR EQUIPMENT. FOR RECOMMENDED SIZE: 5/8"-5 1/2" LONG ANCHOR BOLTS FOR 6" THCK CONC. SLAB

NOZZLE SCHEDULE

DUAL DETERGENT

APPLICATION ARCH (46) 4010 BRASS VEEJET NOZZLES (36) BRASS CHECK VALVES

SIDE BRUSHES APPLICATION

(16) 4010 BRASS VEEJET NOZZLES (16) BRASS CHECK VALVES

SIDE BRUSHES APPLICATION

(16) 4010 BRASS VEEJET NOZZLES (16) BRASS CHECK VALVES

(16) 0040 FEMALE S.S. NOZZLES

(23) 5020 BRASS VEEJET NOZZLES

SPINNER WASH APPLICATION

TOP SCRUBBER

(10) 4020 BRASS VEEJET NOZZLES

SINGLE FINAL

SINGLE R.O. RINSE ARCH

RINSE ARCH

(21) 5005 BRASS VEEJET NOZZLES

(18) BRASS CHECK VALVES

(21) BLACK CHECK VALVES







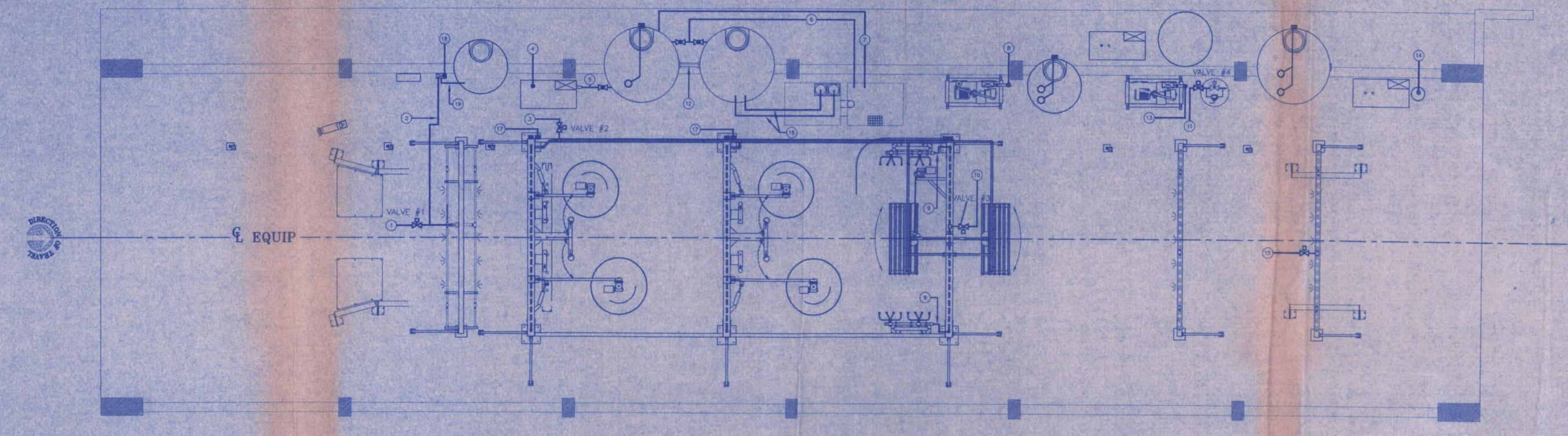
These are only general drawings produced with sale Intent of showing the approximate location of equipment and utilities necessary to run said equipment. They are by no means to be considered complete or exact in detail. These drawings are produced as a service to assist the custamer and his architect for preliminary planning and bidding purposes. N/S does not accept any responsibility for the accuracy, errors and omissions on said drawings.

N/S does ofter at an additional charge mechanical drawings which include electrical and plumbing information, which will be affered on a separate package quate. Contact your local N/S salesman for pricing on mechanical drawings.

The Department of Public Transportation **Bus Wash at the Bus Depot**

26 Palmetto Road, Devonshire, Bermuda Existing Bus Wash Facility Drawings

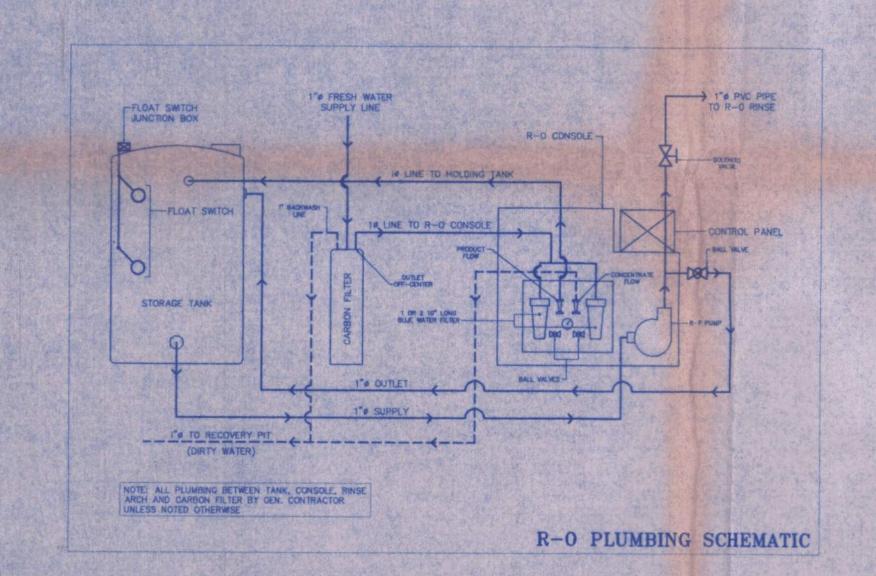
Existing Bus Wash Information
Supplier:
N/S Corporation
Model:
System 3000A
Year:
1998 / 1999

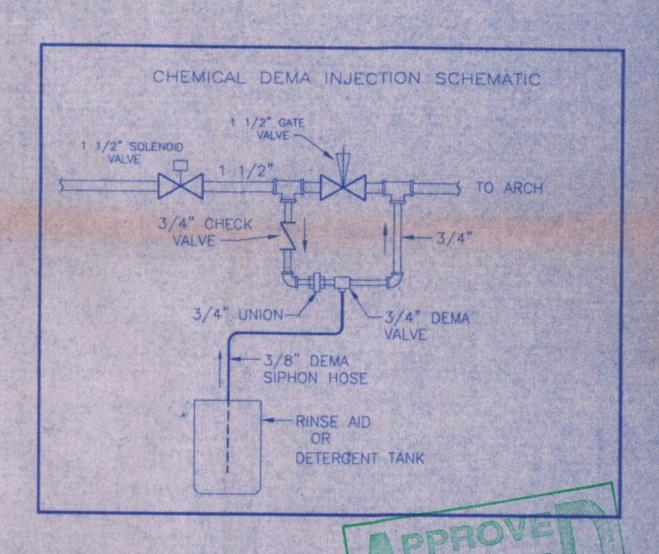


PLUMBING NOTES:

- 1 1/2" GALVANIZED PIPE OR COPPER PIPE FROM
 20 HP WATER RECOVER CONSOLE THRU 1 1/2" SOLENOID
 VALVE #1 TO DETERGENT ARCH MANIFOLD
 BY PLUMBING CONTRACTOR.
- 2 3/8" VINYL TUBING FROM AIR CHEMICAL PUMP(NS SUPPLIED)
 TO DETERGENT ARCH BY PLUMBING CONTRACTOR.
- 3 1 1/2" GALVANIZED PIPE OR COPPER PIPE FROM
 20 HP WATER RECOVER CONSOLE THRU 1 1/2" SOLENOID
 VALVE #2 TO MACHINE WASH MANIFOLD
 BY PLUMBING CONTRACTOR.
- 4- 2"# GALVANIZED PIPE OR COPPER PIPE FROM 20HP
 WATER RECOVER CONSOLE TO MACHINE WASH MANIFOLD
 AND DETERGENT ARCH MANIFOLD BY PLUMBING
- 5- 3"# GALVANIZED PIPE OR COPPER PIPE FROM WRS TANK WITH BALL VALVE TO 20HP RECOVERY CONSOLE INLET BY PLUMBING CONTRACTOR.
- 6- 1"# CONSTANT FLOW WITH (2) BALL VALVES (NS SUPPLIED)
 FROM WRS TANKS TO RECOVERY PIT BY PLUMBING
- 7 2"# OVERFLOW (NS SUPPLIED) FROM TOP OF TANK TO TO RECOVERY PIT BY PLUMBING CONTRACTOR.
- 8- 3" GALVANIZED PIPE OR COPPER PIPE FROM WRS TANK
 WITH BALL VALVE TO 20HP SPINNER PUMP INLET BY PLUMBING CONTRACTOR.
- 9- 1 1/2" PRESSURE HOSE CONNECTION FROM ARCH LEG WITH BALL VALVE TO 20HP SPINNER WHEEL WASH MANIFOLD BY PLUMBING CONTRACTOR.
- 2° GALVANIZED PIPE OR COPPER PIPE FROM 20HP SPINNER PUMP DISCHARGE TO SPINNER MANIFOLD WITH SOLENOID VALVE #3 BY PLUMBING CONTRACTOR.
- 1 1/2" GALVANIZED PIPE OR COPPER PIPE FRESH WATER SUPPLY FROM 5HP PUMP WITH GATE VALVE THRU SOLENOID VALVE #4 & DEMA LOOP TO FINAL RINSE TOP FEED MANIFOLD BY PLUMBING CONTRACTOR.
- 3" HOSE (SUPPLIED BY NS CORPORATION) CONNECTION BETWEEN WRS TANKS BY PLUMBING CONTRACTOR.
- 1 1/2" GALVANIZED PIPE OR COPPER PIPE FROM FRESH WATER TANK
 WITH BALL VALVE TO 5HP PUMP INLET
 BY PLUMBING CONTRACTOR.
- 1 FRESH WATER LINE FROM SOURCE TO R-O CARBON FILTER BY PLUMBING CONTRACTOR.

- 1 PR-0 WATER LINE (PVC) FROM R-0 CONSOLE TO R-0 RINSE MANIFOLD BY PLUMBING CONTRACTOR.
- 6- 1 1/2" RECLAIM WATER LINE FROM (2) 1/2HP SUMP PUMPS TO WRS TANK BY PLUMBING CONTRACTOR.
- 1/2" AIR LINE FROM SOURCE TO AIR RETRACT SYSTEM WITH BALL VALVE AND F.N.P.T. BY PLUMBING CONTRACTOR.
- 1/2" AIR LINE FROM SOURCE TO AIR CHEMICAL PUMP WITH BALL VALVE AND F.N.P.T. BY PLUMBING CONTRACTOR.
- 3/8" VINYL TUBING FROM AIR CHEMICAL PUMP (NS SUPPLIED)
 TO DETERGENT TANK BY PLUMBING CONTRACTOR.



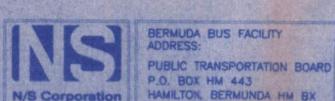


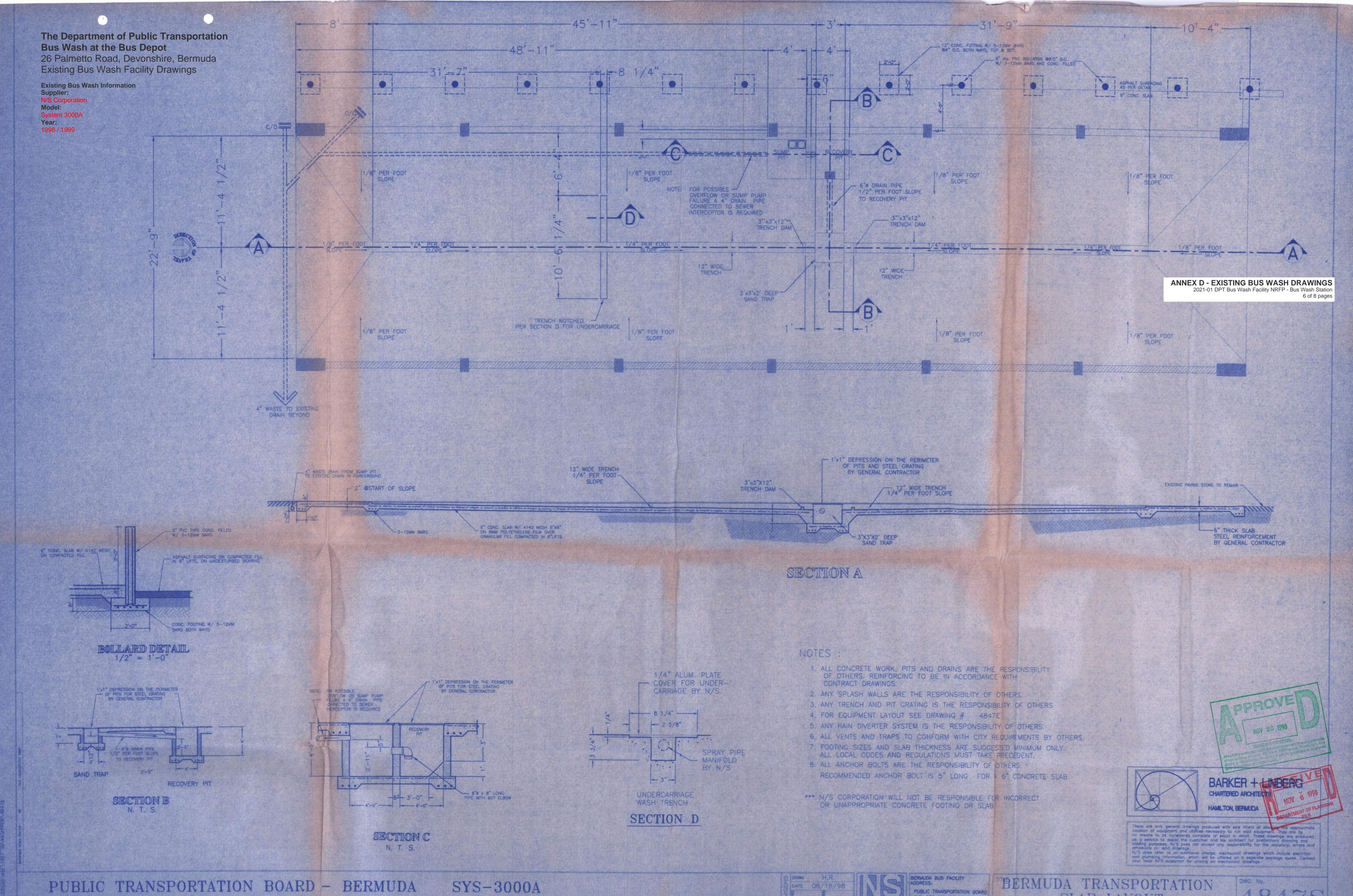
- 1. PLUMBING CONTRACTOR IS TO PROVIDE ALL PIPING SHOW AND CALLED FOR HIS ON THIS DRAWING, INCLUDING ALL CONNECTION TO EQUIPMENT
- 2. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL AND APPROVED PRESSURE TYPE BACKFLOW DEVICE ON THE FRESH WATER LINE PRIOR TO ANY INDUSTRIAL WATER CONNECTIONS TO CAR WASH EQUIPMENT.
- 3. PLUMBER IS TO PROVIDE AND INSTALL A SHUT-DEP PALVE BALL A
- 4. PLUMBER IS TO PROVIDE ANY ADDITIONAL VENTS THAT WAY BE RE BY CODE FOR DRAIN LINES.

PLUMBING LAYOUT

These are only general drawings produced with sole intent of showing the approximate location of equipment and utilities necessary to run said equipment. They are by no means to be considered complete or exact in detail. These drawings are produced as a service to assist the customer and his architect for prelliminary planning and bidding purposes. N/S does not accept any responsibility for the accuracy, errors and omissions on said drawings.

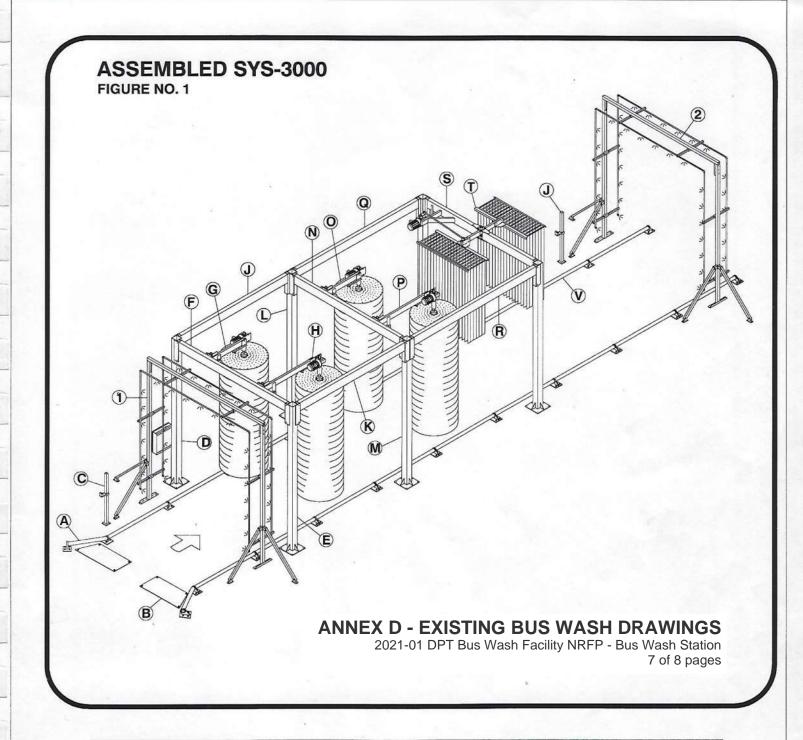
N/S does offer at an additional charge, mechanical drawings which include electrical and plumbing information, which will be offered on a separate package quote. Contact your local N/S salesman for pricing on mechanical drawings.





P.O. BOX HM 443

SLAB LAYOUT



REFERENCE DESCRIPTION

- A 4" CURB RAIL
- **B** SKID PLATES
- C MACHINE ELECTRIC EYE
- D LEFT FRONT LEG
- **E RIGHT FRONT LEG**
- F FRONT FRAME ASSEMBLY
- G FRONT SHORT BRUSH ASSEMBLY
- H FRONT LONG BRUSH ASSEMBLY
- J LEFT FRONT SIDE FRAME
- K RIGHT FRONT SIDE FRAME
- L LEFT MIDDLE LEG
- M RIGHT MIDDLE LEG

- N MIDDLE FRAME ASSEMBLY
- O MIDDLE SHORT BRUSH ASSEMBLY
- P MIDDLE LONG BRUSH ASSEMBLY
- **Q** REAR LEFT SIDE FRAME
- R REAR RIGHT SIDE FRAME
- S REAR FRAME ASSEMBLY
- T SCRUBBER CURTAIN ASSEMBLY
- **U** RINSE ELECTRIC EYE
- V CURB RAIL
- 1 DETERGENT ARCH
- 2 RINSE ARCH

