PLANS

FOR THE CONSTRUCTION OF THE

WATER POLLUTION CONTROL PLANT MODIFICATIONS

VOLUME II

CITY OF WENATCHEE
WASHINGTON

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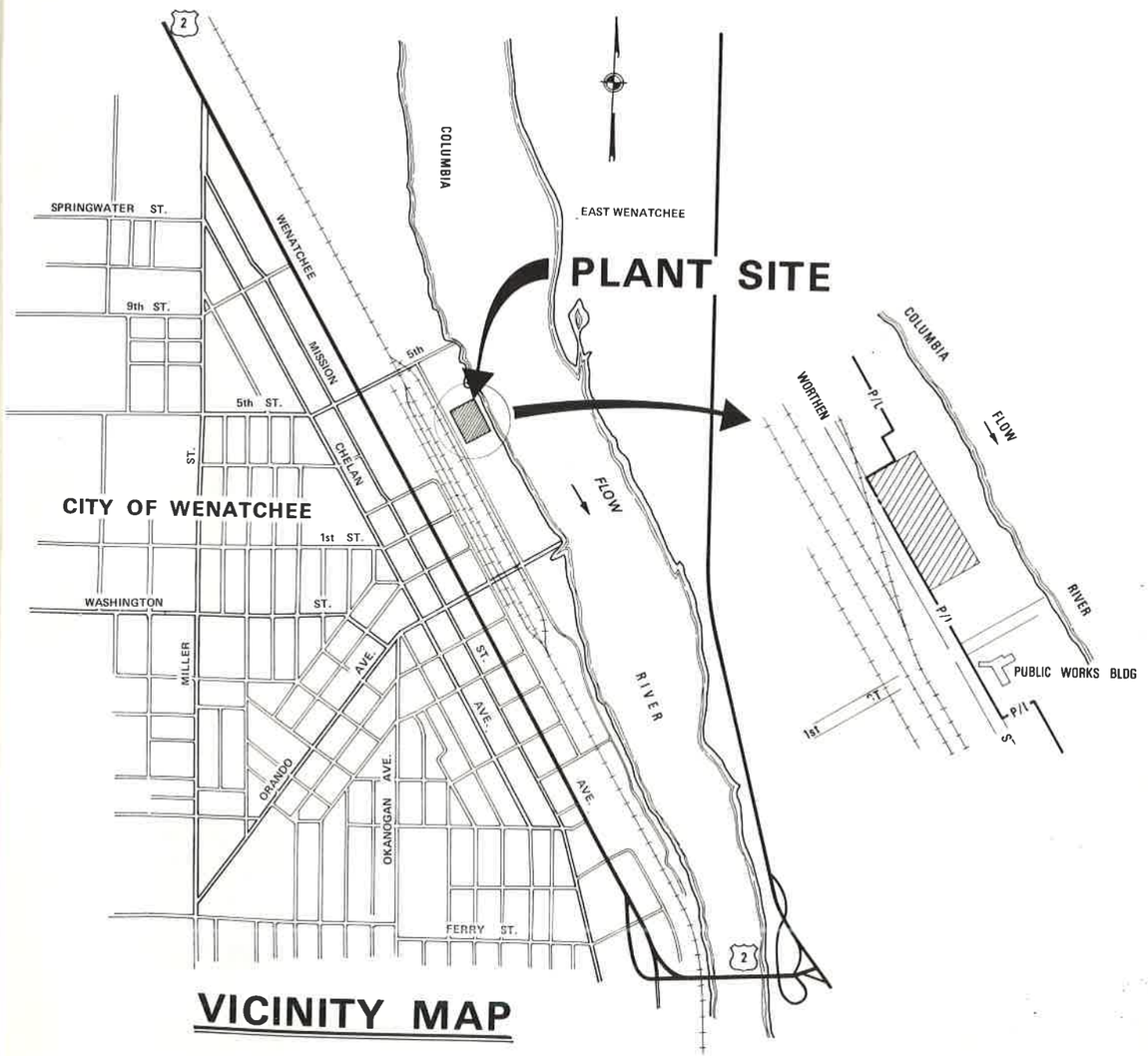
JULY 1973

CITY OF WENATCHEE WASHINGTON

WATER POLLUTION CONTROL PLANT MODIFICATIONS



VICINITY MAP

0 1000 2000 3000
SCALE IN FEET

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

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CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL
PLANT MODIFICATIONS

GENERAL -
VICINITY MAP AND
INDEX TO DRAWINGS

DES JGG	SHEET 1
DR WVK	OF 78
CK JGG	DATE JAN. 1973
RN 37039.1	SCALE: AS SHOWN

TOPOGRAPHIC LEGEND AND NOTES

NOTES:

1. IN GENERAL EXISTING STRUCTURES ARE SHOWN IN LIGHT LINE WEIGHTS.
2. IN GENERAL NEW STRUCTURES ARE SHOWN IN HEAVY LINE WEIGHTS.
3. FINISH GRADES SHALL SLOPE UNIFORMLY BETWEEN SPOT ELEVATIONS SHOWN.
4. CLEAR AND GRUB TO LIMITS SHOWN OR SPECIFIED.
5. BORROW AND WASTE ONLY IN INDICATED AREAS.

LEGEND:

- EXISTING STRUCTURES.
- NEW STRUCTURES.
- P/L — PROPERTY LINE.
- EXISTING FENCE.
- EXISTING FENCE TO BE MOVED.
- NEW FENCE - TYPE AS SPECIFIED.
- EXISTING STRUCTURE TO BE REMOVED (CROSS HATCHED WHERE REQUIRED FOR CLARITY).
- EXISTING ROADS
- NEW A.C. PAVEMENT:
- NEW CURB -
- 1000.9 / 1000.4 — CURB ELEVATION / GUTTER ELEVATION.
- GRAVEL SURFACE
- DRAINAGE DITCH.
- S.W. — CONCRETE SIDEWALK
- 1000 — EXISTING CONTOUR
- 1000 — NEW CONTOUR.
- ⊗ 1000 — FINISH GRADE.
- 3:1 — EXISTING EMBANKMENT - SLOPE AS INDICATED.
- 4:1 — NEW EMBANKMENT - SLOPE AS INDICATED.
- EXISTING TREES - REMAIN OR REMOVE.
- MANHOLE
- CATCH BASIN
- B-1 — TEST HOLE LOCATION. (BORING)
- J-1 — TEST HOLE LOCATION (JETTED AT RIVER BOTTOM)
- LIMITS OF REFUSE REMOVAL
- SIGN.
- BENCHMARK

PLUMBING AND PIPING LEGEND AND NOTES

GENERAL PIPING NOTES:

1. LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS.
2. SIZE OF FITTINGS SHOWN ON PLANS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE THE SAME AS SHOWN FOR ADJACENT STRAIGHT RUN OF PIPE.
3. LOCATION AND NUMBER OF PIPE HANGERS AND PIPE SUPPORTS SHOWN IS ONLY APPROXIMATE. FINAL SUPPORT REQUIREMENTS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. MAXIMUM SPACING SHALL BE AS SPECIFIED.
4. BELL WALL CASTINGS SHALL HAVE A PUSH-ON JOINT. ALL JOINTS SHALL BE WATERTIGHT.
5. ALL FLEXIBLE CONNECTORS OR FLANGED COUPLING ADAPTERS SHALL BE PROVIDED WITH THRUST TIES OR STUDS UNLESS OTHERWISE NOTED. THRUST PROTECTION SHALL BE ADEQUATE FOR TEST PRESSURES SPECIFIED.

PLUMBING AND PIPING LEGEND AND NOTES (CONTINUED)

GENERAL PIPING NOTES: (CONTINUED)

6. ALL BURIED PIPING EXCEPT FLANGED OR SCREWED SPECIFIED TO BE PRESSURE TESTED SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS AT ALL DIRECTION CHANGES, UNLESS OTHERWISE NOTED. MINIMUM AREA OF THRUST BLOCK POURED AGAINST UNDISTURBED EARTH SHALL BE AS FOLLOWS:

SIZE OF PIPE	MINIMUM AREA OF THRUST BLOCK		
	90° BEND	45° BEND	22½° BEND
4"	2 SF	2 SF	2 SF
6"-8"	3 SF	3 SF	2 SF
10"-12"	4 SF	3 SF	2 SF

> 12" PROVIDE 1 SF PER 1500# THRUST BASED ON SPECIFIED TEST PRESSURE.

7. NUMBER AND LOCATION OF UNIONS SHOWN ON PLANS IS ONLY APPROXIMATE. PROVIDE ALL UNIONS NECESSARY TO FACILITATE CONVENIENT REMOVAL OF VALVES AND MECHANICAL EQUIPMENT.
8. SYMBOLS, LEGENDS AND USE IDENTIFICATIONS WHICH ARE SHOWN ARE FOLLOWED THROUGHOUT THE PLANS WHEREVER APPLICABLE. ALL OF THE VARIOUS PIPING APPLICATIONS ARE NOT NECESSARILY UTILIZED IN THE PROJECT.

PIPE USE IDENTIFICATION:

- NP — NP WATER - NON POTABLE - PLANT EFFLUENT PROCESS WATER.
- HW — HOT WATER (POTABLE - INTERIOR)
- CW — COLD WATER (POTABLE - INTERIOR)
- W — COLD WATER (POTABLE-EXTERIOR)

- SG — SEWAGE GAS
- A — COMPRESSED AIR
- PC — PNEUMATIC CONTROL SIGNAL (3-15 PSI).
- V — VENT
- VTR — VENT THRU ROOF
- D — DRAIN
- SD — STORM DRAIN
- CG — CHLORINE GAS
- CS — CHLORINE SOLUTION
- SA — SAMPLE.
- SM — SCUM.

- R/S — RAW SLUDGE
- A/S — RECIRCULATED ACTIVATED SLUDGE
- W/S — WASTE ACTIVATED SLUDGE
- P/S — PRIMARY DIGESTED SLUDGE
- D/S — DIGESTED SLUDGE
- S/L — SUPERNATANT LIQUOR
- T/S — THICKENED SLUDGE

PIPE MATERIALS:

CI	CAST IRON
CIF	CAST IRON FLANGED
CIMJ	CAST IRON MECHANICAL JOINT
CISP	CAST IRON SOIL PIPE
GL	GLASS LINED
GLCI	GLASS LINED CAST IRON
GLS	GLASS LINED STEEL
WS	WELDED STEEL
GS	GALVANIZED STEEL
WI	GENUINE WROUGHT IRON
BS	BLACK STEEL

PLUMBING AND HEATING LEGEND AND NOTES (CONTINUED)

PIPE MATERIALS: (CONTINUED)

CUH	COPPER - HARD TEMPER
CUS	COPPER - SOFT TEMPER
CONC	CONCRETE
CC	CONCRETE CYLINDER
PVC	PLASTIC - SCHEDULE AND TYPE AS SPECIFIED
CMP	CORRUGATED METAL PIPE
SS	STAINLESS STEEL

- OR — EXISTING PIPE TO BE REMOVED.
- OR — EXISTING PIPE TO REMAIN.
- OR — NEW PIPE

HEATING AND VENTILATING LEGEND: SEE SHEET 54

PIPING SYMBOLS:

- FLANGED COUPLING ADAPTER (SEE NOTE 5)
- FLEXIBLE COUPLING (SEE NOTE 5)
- PIPE HANGER - IN PLAN
- PIPE HANGER - IN ELEVATION

- GATE VALVE (KNIFE GATE IF SO DESIGNATED)
- PLUG VALVE
- BUTTERFLY VALVE
- BALL VALVE
- GLOBE VALVE
- FLOW — CHECK VALVE
- M — MOTORIZED VALVE
- H — 3 WAY VALVE - LETTER DENOTES HOMESTEAD ARRANGEMENT ON PLUG VALVE
- PRESSURE REGULATING VALVE
- PRESSURE REGULATING VALVE WITH INTEGRAL PRESSURE GAUGE.
- S — SOLENOID VALVE
- PRESSURE RELIEF VALVE
- DRAIN VALVE
- C — COCK

PLUMBING AND HEATING LEGEND AND NOTES (CONTINUED)

MISCELLANEOUS PLUMBING ITEMS:

- HOSE VALVE - TYPE AS SPECIFIED
- UNION
- GAUGE (W COCK WHERE SHOWN)
- PS — PRESSURE SWITCH
- HOSE RACK (TYPE AS INDICATED)
- NON FREEZE (HB-2) HOSE VALVE W/HOSE RACK
- THERMOMETER
- STRAINER

PIPING LEGEND

PS	PIPE SUPPORT	RD	ROOF DRAIN (TYPE AS SPECIFIED)
PH	PIPE HANGER	FD	FLOOR DRAIN (TYPE AS SPECIFIED)
AB, MB	ANCHOR BOLT OR MACHINE BOLT	P	PLUMBING FIXTURE (TYPE AS SPECIFIED)
INV	PIPE INVERT	HD	PIPE HUB DRAIN
℄	CENTER LINE		
TB	THRUST BLOCK		

WALL PIPES

PE	PLAIN END
B	BELL
F	FLANGE

PIPE AND FITTING END PATTERNS

B	BELL
S	SPIGOT
F	FLANGE
MJ	MECHANICAL JOINT
PE	PLAIN END

MJ PE F

ABOVE DENOTES MECH JT X PLAIN END X FLANGED TEE

ARCHITECTURAL ABBREVIATIONS - SEE SHEET 61

STRUCTURAL ABBREVIATIONS - SEE SHEET 61

A / 1/2

SECTION OR DETAIL DESIGNATION

SHEET WHERE SECTION OR DETAIL IS SHOWN

SHEET WHERE SECTION OR DETAIL IS TAKEN

SECTION DESIGNATION

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
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1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

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CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL
PLANT MODIFICATIONS

GENERAL -
GENERAL LEGENDS

DES JGG
DR BM
CK GRB
RN S70391
DRAWING NO. C 7039-1
SHEET 2 OF 78
DATE JAN.
SCALE AS SH

S (CONTINUED)

AS SPECIFIED)
AS SPECIFIED)
TYPE AS SPECIFIED

ATTERNS

X PLAIN END X
E

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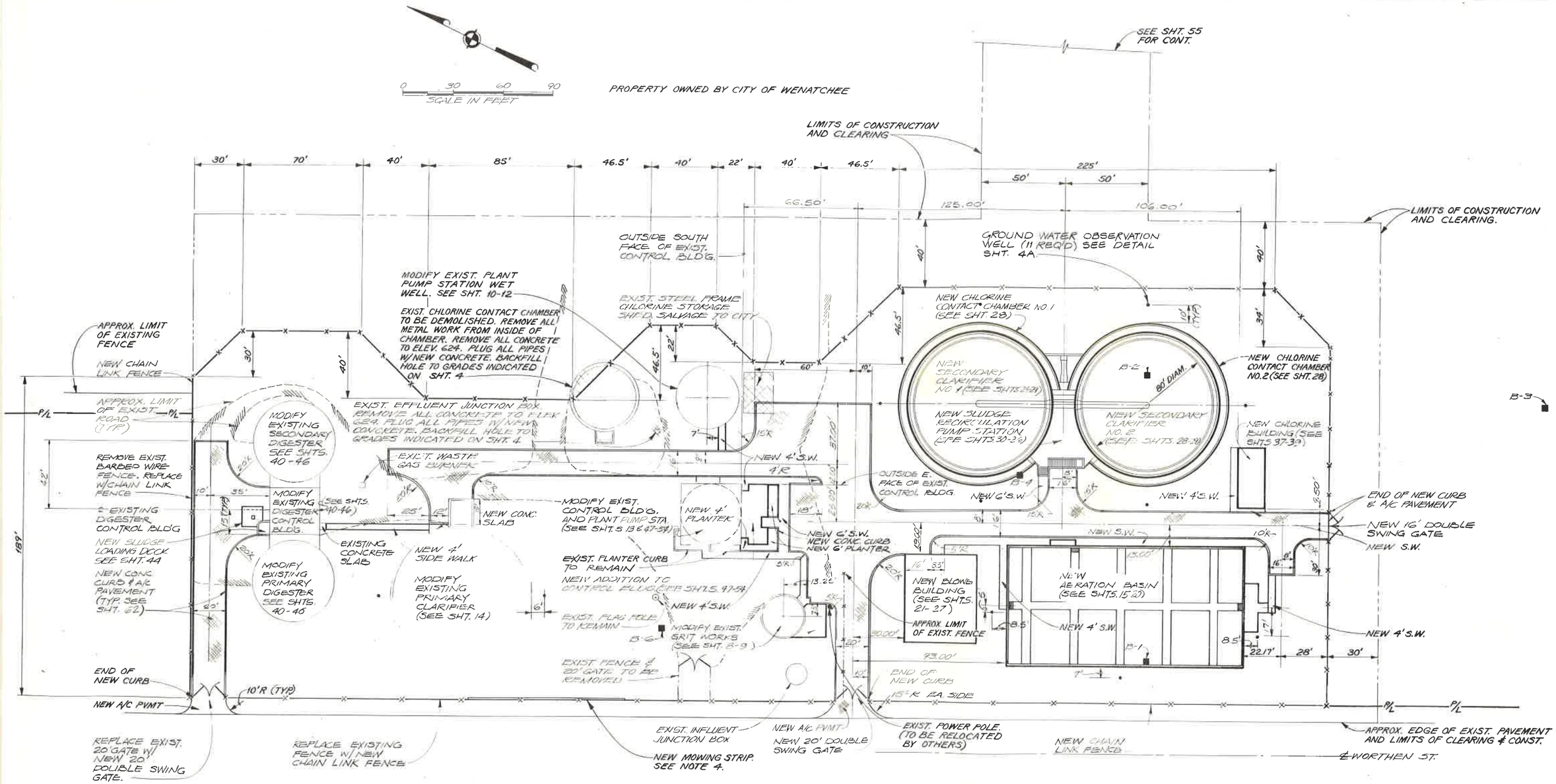

NOTES:

1. DISTANCES SHOWN ARE FROM BACK OF CURB TO BACK OF CURB & FROM OUTSIDE TO OUTSIDE OF FOUNDATION WALL.

2. SEE SHT. 5 FOR SOILS LOGS.

3. NEW FENCE SHALL BE PLACED ON SAME LINE AS EXISTING FENCE AS INDICATED.

4. PROVIDE MOWING STRIP UNDER ALL NEW FENCE EXCEPT AT GATES.

DES JGG	SHEET 2
DR BM	OF 78
CK GRG	DATE JAN. 197
RN 570391	SCALE: AS SHOW
DRAWING NO	
C 7039-1	

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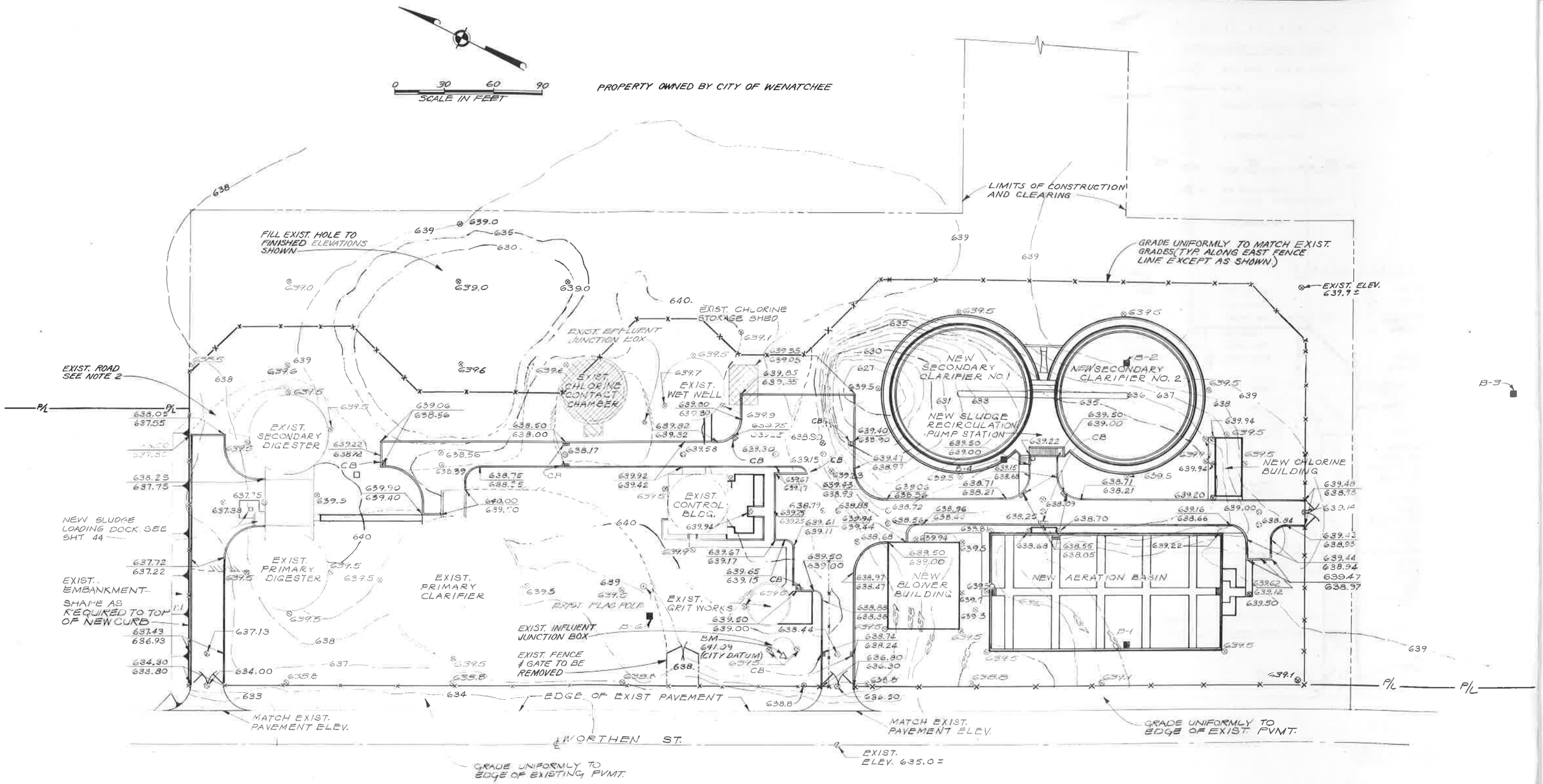
WATER POLLUTION CONTROL PLANT MODIFICATIONS

GENERAL - SITE PLAN

DES JGG	SHEET 3
DR WVK	OF 78
CK GRG	DATE: JAN. 1973
RN 57039.1	SCALE: AS SHOWN
DRAWING NO.	
C 7039-1	



NOTE:

1. LIMITS OF TOPSOIL SHALL BE:
   A EDGE OF EXIST. PVMT. ALONG WEST BOUNDARY.
   B FENCE LINE ALONG NORTH, SOUTH & EAST BOUNDARY.

2. SCARIFY EXIST. ROAD TO 3" MAXIMUM PARTICLE SIZE FOR DEPTH OF 6" UNDER ALL AREAS TO RECEIVE TOPSOIL.

3. SEE SHT 62 FOR CATCH BASIN DETAILS.

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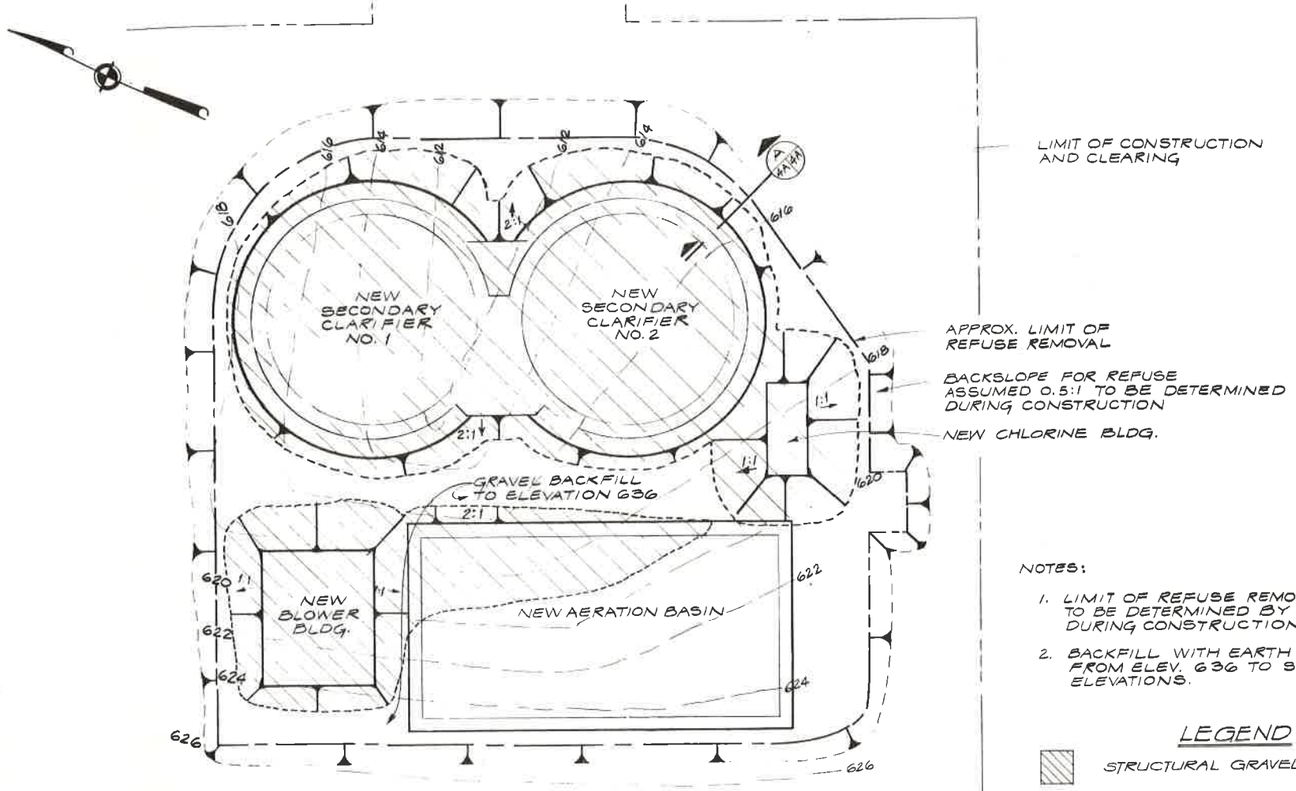
GENERAL - GRADING PLAN

DES JGG	SHEET
DR ECS	OF 78
CK GRG	DATE: JAN. 19
RN 2039.1	SCALE: AS SHO
DRAWING NO. C 7039-1	



FOUNDATION MATERIALS PLAN

1" = 30'

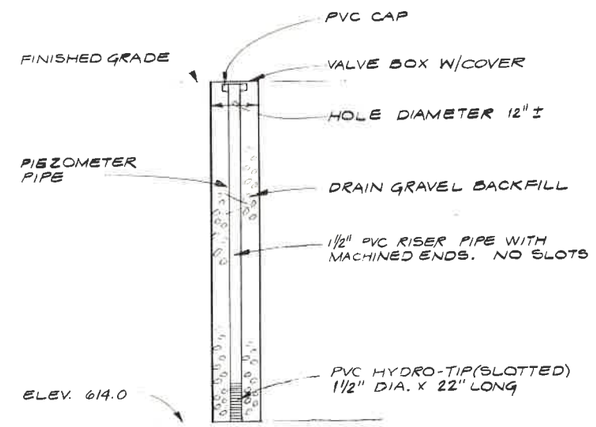
NOTES:

1. LIMIT OF REFUSE REMOVAL TO BE DETERMINED BY ENGINEER DURING CONSTRUCTION.
2. BACKFILL WITH EARTH BACKFILL FROM ELEV. 636 TO SUBGRADE ELEVATIONS.

LEGEND

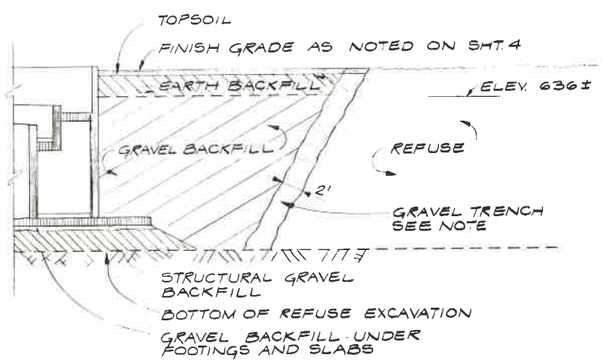
STRUCTURAL GRAVEL BACKFILL

APPROXIMATE BOTTOM OF REFUSE EXCAVATION. BOTTOM SURFACE TO BE DETERMINED BY ENGINEER DURING CONSTRUCTION.



GROUNDWATER OBSERVATION WELL - DETAIL

N.T.S.



SECTION A 4A 4A

N.T.S.

NOTE:

GRAVEL TRENCH SHALL EXTEND ALONG NORTH, EAST AND SOUTH LIMITS OF REFUSE REMOVAL. DISCONTINUE GRAVEL TRENCH UNDER ROADS, 2 FEET OUT FROM BACK OF CURB.

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WATER POLLUTION CONTROL PLANT MODIFICATIONS

FOUNDATION MATERIALS PLAN AND SECTION

DES MDG	SHEET 4A
DR DLS	OF 78
CK	DATE JAN. 1973
RN S7039.1	SCALE AS SHOWN
DRAWING NO. C 7039-1	

B-1 3/1/72

ELEV 638.6

N		Description
		GRAVEL 1" MINUS 2" THICK
5	1 ML	SILT W/SAND WET SOFT BRN
		SAND W/SILT MOIST, SOFT, BRN
		REFUSE AT 5'
54	2	REFUSE PAPER AND WOOD W/SILT MOIST, SOFT
14	3	REFUSE (LOST SAMPLE)
		FEELS LIKE GRAVEL AT 15' DRILLS SMOOTHLY AT 15'
23	4 ML	SILT AND SAND (LOST SAMPLE)
		3-1-72 ; 3-3-72 ; 3-7-72
		DRILLS HARD AT 25'
100+	5 SM	SAND SILTY (LOST SAMPLE)
		32' DRILLS HARD BUT SMOOTH 32' HITWATER
100+	6 ML	SILT DRY, FIRM, LT. GRAY
100+	7	SILT DRY, HARD, TAN-GRAY SOME ORGANIC SILT
100+	8 ML	SILT DAMP, HARD, TAN
100+	9 SP	SANDSTONE DAMP, SOFT, GRAY
100+	10 SP	SAND W/SILT, DAMP, FIRM, GREENISH
100+	11 SM	SAND CEMENTED, DAMP, HARD, GRAY
100+	12 ML	SHALE DRY, HARD, GRAY
100+	13 ML	SILTSTONE DRY, SOFT, GRAY
100+	14	SILTSTONE FEW PEBBLES, DRY, HARD AND GRAY
100+	15	SANDSTONE DRY, HARD, GRAY
100+	16	SHALE DRY, HARD, GRAY
100+	17	LOST SAMPLE SILTSTONE IN TIP
		INSTALLED PIEZOMETER

B-2 3/1/72

ELEV 639.6

N		Description
		GRAVEL 1" MINUS 2" THICK REFUSE PAPER, WIRE WOOD, CANS. DRILLS V EASY AND SMOOTHLY
3-1-72 ; 3-3-72		DRILLS FIRM
100+	1 SP	SAND W/SILT DRY, HARD, WHITE GREEN.
100+	2 ML	SHALE DRY, SOFT GRAY 34'- SAND COMING UP ON AUGER
100+	3 ML	SILTSTONE FLAKEY DAMP, SOFT, GRAY-GREEN
100+	4 ML	SILTSTONE FLAKES DAMP SOFT GRAY WITHIN LAYERS FINE SAND
100+	5 ML SP	SANDSTONE AND LAYERS SILTSTONE DAMP, SOFT, GRAY
100+	6 ML	SILTSTONE FLAKEY GRAY BROWN, SOFT, DRY
100+	7 ML	SILTSTONE MICACEOUS, FLAKEY DAMP, SOFT, GRAY

B-3 3/11/72

ELEV 639.6

N		Description
		SILT W/SAND AND GRAVEL DAMP, SOFT, BRN
		REFUSE PAPER, CANS
3-1-72		
100+	1	REFUSE W/SILT (PAPER)
61	2 SM	SAND SILTY W/GRAVEL, MOIST, HARD GRAY-GREEN HIT WATER AT 20'
100+	3 SP	SANDSTONE MOIST, SOFT, GRAY WEATHERED
100+	4 SP	SANDSTONE WEATHERED, DAMP, SOFT, GRAY
100+	5 ML	SILTSTONE DRY, SOFT, GRAY
100+	6	SAND W/SILT, MOIST, HARD GRAY
100+	7 SM	SANDSTONE GRAY, SOFT
100+	8 ML	SHALE W/SAND LAYERS DRY, HARD, GRAY
100+	9 ML	SILTSTONE DAMP, SOFT, GRAY
100+	10 SP	SANDSTONE MOIST, SOFT, GRAY

B-4 3/3/72

ELEV 634.1

N		Description
		GRAVEL W/SAND TO 12' REFUSE PAPER, WOOD CANS
3-3-72		
18	1 SM	SAND SILTY W/SOME GRAVEL DAMP, MED, BROWN
5	2	WOOD DECAYED, SOFT, BRN
		SILT W/FINE SAND, MOIST, GRY, SOFT
21	3 ML	SILT COMPACT, DRY, GRAY, FIRM
21	4 ML	SILT DRY, GRAY, FIRM DRILLS FIRM AT 28 FT.
80	5 ML	SILT FIRM, MOIST, FLAKEY TO 28.75' THEN SOFT DRY SILTSTONE
100+	6 ML	SILTSTONE DRY, SOFT, GRAY
100+	7 ML	SILTSTONE DRY, SOFT, GRAY
100+	8	SILTSTONE SOME FRACTURED GRAVEL, DAMP, HARD, GRAY
100+	9 ML	SILTSTONE SOFT, GRAY
100+	10 ML	SILTSTONE DRY, HARD, GRAY, FLAKEY
100+	11 ML	SILTSTONE DAMP, MED, GRAY

B-5 3/2/72

ELEV 637.8

N		Description
		SILT W/SAND REFUSE PAPER, CANS
		GRAVEL 1" MINUS W/SAND AND SILT COMING UP ON AUGER.
		ROCKS OR CONC. RUBBLE DRILLS V SOFT AT 21 FT.
17 ; 3-2-72	1 ML	SILT W/COARSE SAND, WET, BRN
3-3-72		STILL DRILLS V SOFT 10-20 SEC. FOR 5 FT.
	2	REFUSE WOOD, PLASTIC, METAL END CRIMPED ON STEEL
52	3	GRAVEL 3" MINUS W/WOOD AND SILT WET, SOFT, BLACK. HIT WATER AT 31 FT.
14	4 SP	SAND V FINE AND SILT WET, SOFT, BRN
15	5 SP	SAND FINE W/SILT, WET, SOFT, BRN
		HIT HARD MATERIAL AT 41 FT.
100+	6 SW	SAND COARSE W/QUARTZ AND PYRITE WET, HARD, GRAY, SILT
45	7 SW	SAND W/GRAVEL, MOIST, FIRM GRAY, HEAVED 1 1/2 FT.
INSTALLED PIEZOMETER		UNABLE TO PENETRATE DEEPER THAN 50'

B-6 3/3/72

ELEV 638.4

N		Description
		SILT W/SAND, WET, SOFT
		REFUSE PAPER, CANS
		HIT METAL UNABLE TO PENETRATE DEEPER THAN 7'. MOVED DRILL 5' HORIZ. AND DRILLED AGAIN
		GRAVEL AND SAND, MOIST, HARD, GRAY, SOME SILT
3-3-72		
58	1 SP	SANDSTONE HIGH IN QUARTZ, DRY, SOFT, GRAY
100+	2 SM	SAND SILTY, DRY, HARD, GRAY DRILLS FIRM BUT SMOOTH AT 21'
100+	3 SP	SAND V FINE W/SILT, DRY, HARD, GRAY
100+	4 SP	SAND FINE W/SILT, DRY, HARD, GRAY
		HOLE CAVED IN TO 15' AND NO WATER VISIBLE.

DEPTH IN FEET: 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

J-1 3/8/72

ELEV 593

GRAVEL 3" MINUS W/8" COBBLES 1" MINUS W/6" COBBLES AND SAND

J-2 3/8/72

ELEV 578

GRAVEL 3" MINUS W 12" COBBLES BLACK, SOFT, SLUDGE MATRIX

GRAVEL 1" MINUS W/SAND FEW 4" COBBLES

J-3 3/8/72

ELEV 608

GRAVEL 3" MINUS W/8" COBBLES AND SAND

DEPTH IN FEET: 0, 5, 10

LEGEND

B-6 — BORING NO. (J) - JETTING NO.
2/2/71

A. 3" SPLIT SPOON SAMPLE
1. BLOWS FT.
2. SAMPLE NO., LOCATION AND DISTANCE DRIVEN
3. APPROXIMATE AMOUNT OF SAMPLE RETAINED

STRATIFICATION LINE

B. 3" SHELBY TUBE SAMPLE
1. SAMPLE NO.
2. LOCATION AND DISTANCE PUSHED

2-21-71 — WATER LEVEL ELEVATION AND DATE RECORDED

ELEV 14 (GROUND ELEV)

SAND SILTY, LOOSE, MOIST, BRN

COLOR
MOISTURE CONSISTENCY
CONSISTENCY
SECONDARY MATERIAL

UNIFIED CLASSIFICATION

NOTE:
1. THIS LOG REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE CHARACTER OF MATERIALS ENCOUNTERED IN THE TEST HOLES. NO WARRANTY, EXPRESSED OR IMPLIED, IS GIVEN IN REGARD TO ANY VARIATIONS WHICH MAY OCCUR BETWEEN TEST HOLE SITES.
2. THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.
3. SEE SHTS 3, 4, AND 55 FOR LOCATION OF TEST HOLE LOCATIONS.

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

RICHARD L. FERGUSON — STATE OF WASHINGTON — PROFESSIONAL ENGINEER

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD

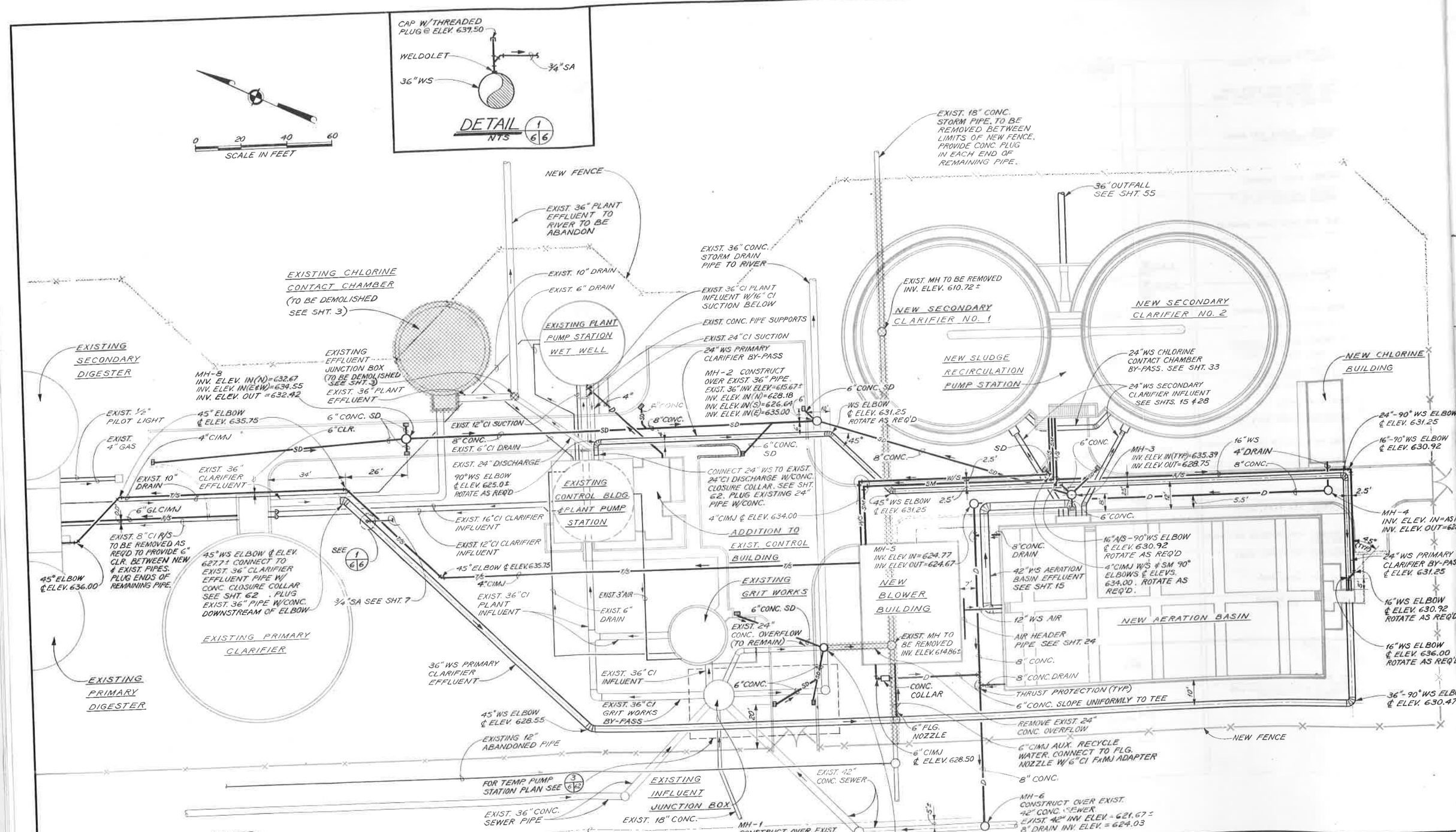
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

GENERAL - SOIL LOGS

DES. RLF	SHEET 5
DR. BCC	OF 78
CK. VMW	DATE: JAN. 1973
RN 7039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	

BILLAR STATIONERY & PRINTING CO., PORTLAND, ORE.



NOTES:

1. PIPES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS SHOWN.
2. MINIMUM SLOPE ON 6" CONC. SD PIPING SHALL BE 0.0240 FT/FT.
3. PIPES 18" AND LARGER SHOWN DOUBLE LINE. PIPES SMALLER THAN 18" SHOWN SINGLE LINE.
4. DISTANCES SHOWN ARE FROM OUTSIDE OF FDN. WALL OR BACK OF CURB TO PIPE ℄.

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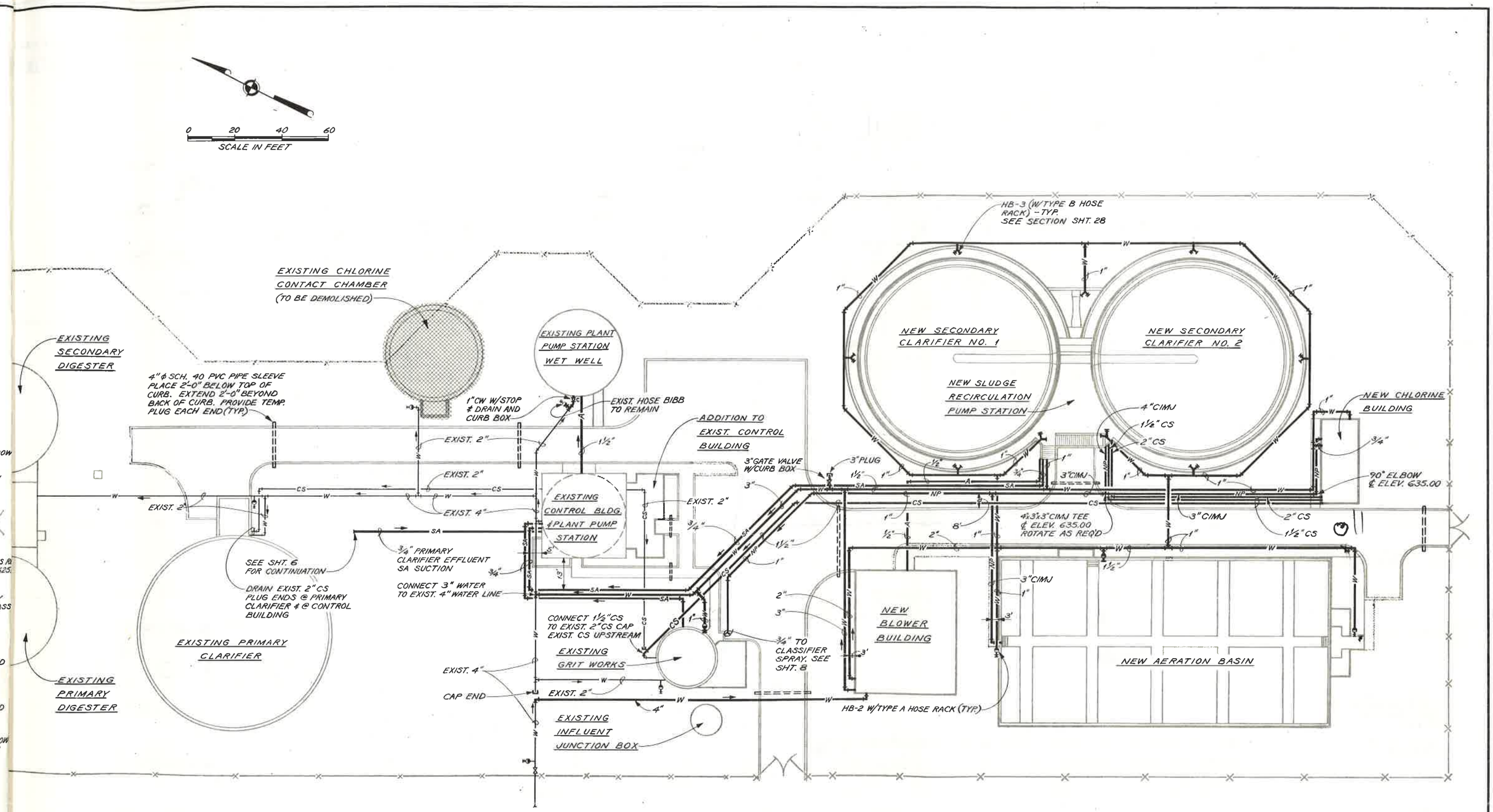
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL - PIPING PLAN

DES JGG
DR RAH
CK GRG
RN 93039.1
DRAWING NO. C 7039-1



THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
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JAMES G. GOETZ — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

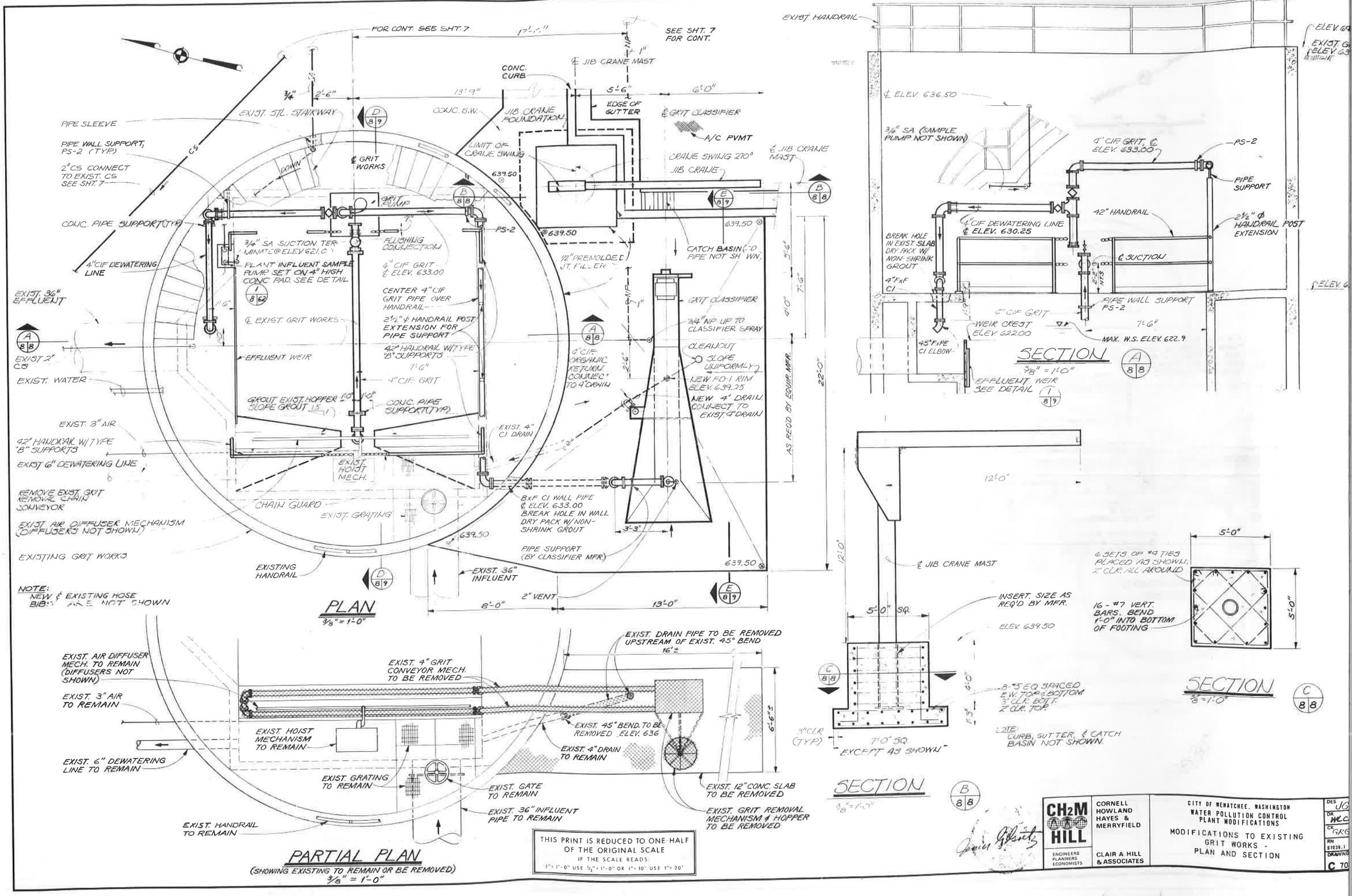
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL
PLANT MODIFICATIONS

GENERAL -
WATER, NONPOTABLE WATER & MISC. PLUMBING PLAN

DES JGG	SHEET 7
DR RAH	OF 18
CK GRG	DATE: JAN. 1973
RN 57039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	


FOR CONT. SEE SHT. 7
SEE SHT. 7 FOR CONT.
℄ JIB CRANE MAST
CONC. CURB
EDGE OF GUTTER
℄ GRIT CLASSIFIER
A/C PVMT
JIB CRANE FOUNDATION
CONC. S.W.
EXIST. STL. STAIRWAY
PIPE SLEEVE
PIPE WALL SUPPORT, PS-2 (TYP)
2" CS CONNECT TO EXIST. CS SEE SHT. 7
LIMIT OF CRANE SWING
CRANE SWING 270°
JIB CRANE
℄ GRIT WORKS
GRIT PUMP
CONC. PIPE SUPPORT (TYP)
4" CIF DEWATERING LINE
3/4" SA SUCTION TERMINATE @ ELEV 621.0
FLUSHING CONNECTION
PLANT INFLUENT SAMPLE PUMP SET ON 4" HIGH CONC PAD. SEE DETAIL
4" CIF GRIT ℄ ELEV. 633.00
CENTER 4" CIF GRIT PIPE OVER HANDRAIL
2½" ϕ HANDRAIL POST EXTENSION FOR PIPE SUPPORT
42" HANDRAIL W/TYPE "B" SUPPORTS
7'-6"
4" CIF GRIT
EXIST. 36" EFFLUENT
℄ EXIST. GRIT WORKS
EFFLUENT WEIR
EXIST 2" CS
EXIST. WATER
GROUT EXIST. HOPPER SLOPE GROUT
CONC. PIPE SUPPORT (TYP)
EXIST. 3" AIR
42" HANDRAIL W/TYPE "B" SUPPORTS
EXIST 6" DEWATERING LINE
EXIST. HOIST MECH.
REMOVE EXIST. GRIT REMOVAL CHAIN CONVEYOR
CHAIN GUARD
EXIST. GRATING
EXIST. AIR DIFFUSER MECHANISM (DIFFUSERS NOT SHOWN)
EXISTING GRIT WORKS
EXISTING HANDRAIL
EXIST. 36" INFLUENT
2" VENT
8'-0"
13'-0"
NOTE: NEW & EXISTING HOSE BIBS ARE NOT SHOWN
PLAN
3/8" = 1'-0"
1½" PREMOLDED JT. FILLER
CATCH BASIN (CD PIPE NOT SHOWN)
GRIT CLASSIFIER
3/4" NP UP TO CLASSIFIER SPRAY
CLEANOUT
SLOPE UNIFORMLY
NEW FD-1 RIM ELEV. 639.25
NEW 4" DRAIN CONNECT TO EXIST. 4" DRAIN
4" CIF ORGANIC RETURN CONNECT TO 4" DRAIN
AS REQ'D BY EQUIP. MFR.
22'-0"
B x F CI WALL PIPE ℄ ELEV. 633.00 BREAK HOLE IN WALL DRY PACK W/NON-SHRINK GROUT
PIPE SUPPORT (BY CLASSIFIER MFR)
EXIST. 4" CI DRAIN
EXIST. HANDRAIL
℄ ELEV 636.50
3/4" SA (SAMPLE PUMP NOT SHOWN)
4" CIF GRIT ℄ ELEV. 633.00
PS-2
PIPE SUPPORT
42" HANDRAIL
2½" ϕ HANDRAIL POST EXTENSION
4" CIF DEWATERING LINE ℄ ELEV. 630.25
BREAK HOLE IN EXIST. SLAB DRY PACK W/ NON-SHRINK GROUT
4" F x F CI
℄ SUCTION
PIPE WALL SUPPORT PS-2
4" CIF GRIT
WEIR CREST ELEV. 622.00
MAX. W.S. ELEV. 622.9
45° F x F CI ELBOW
EFFLUENT WEIR SEE DETAIL
SECTION
3/8" = 1'-0"
12'-0"
℄ JIB CRANE MAST
INSERT. SIZE AS REQ'D BY MFR.
5'-0" SQ.
ELEV. 639.50
8-#5 EQ SPACED E.W. TOP & BOTTOM 3" CLR. BOTT. 2" CLR. TOP
3" CLR (TYP)
7'-0" SQ. EXCEPT AS SHOWN
NOTE: CURB, GUTTER, & CATCH BASIN NOT SHOWN.
SECTION
3/8" = 1'-0"
6 SETS OF #4 TIES PLACED AS SHOWN. 2" CLR. ALL AROUND
16 - #7 VERT. BARS. BEND 1'-0" INTO BOTTOM OF FOOTING
5'-0"
EXIST. AIR DIFFUSER MECH. TO REMAIN (DIFFUSERS NOT SHOWN)
EXIST. 3" AIR TO REMAIN
EXIST. 6" DEWATERING LINE TO REMAIN
EXIST. HOIST MECHANISM TO REMAIN
EXIST. GRATING TO REMAIN
EXIST. HANDRAIL TO REMAIN
EXIST. 4" GRIT CONVEYOR MECH. TO BE REMOVED
EXIST. DRAIN PIPE TO BE REMOVED UPSTREAM OF EXIST. 45° BEND
16'±
EXIST. 45° BEND TO BE REMOVED ELEV. 636
EXIST. 4" DRAIN TO REMAIN
EXIST. GATE TO REMAIN
EXIST. 36" INFLUENT PIPE TO REMAIN
EXIST. 12" CONC. SLAB TO BE REMOVED
EXIST. GRIT REMOVAL MECHANISM & HOPPER TO BE REMOVED
PARTIAL PLAN
(SHOWING EXISTING TO REMAIN OR BE REMOVED)
3/8" = 1'-0"
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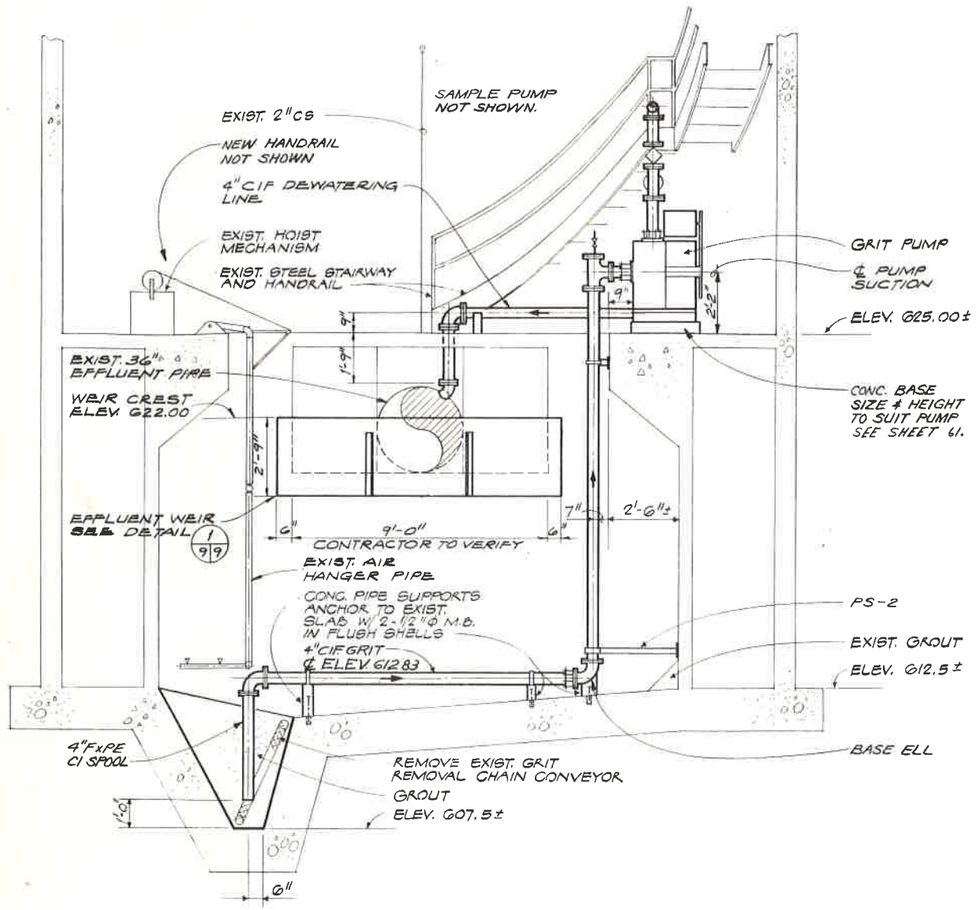
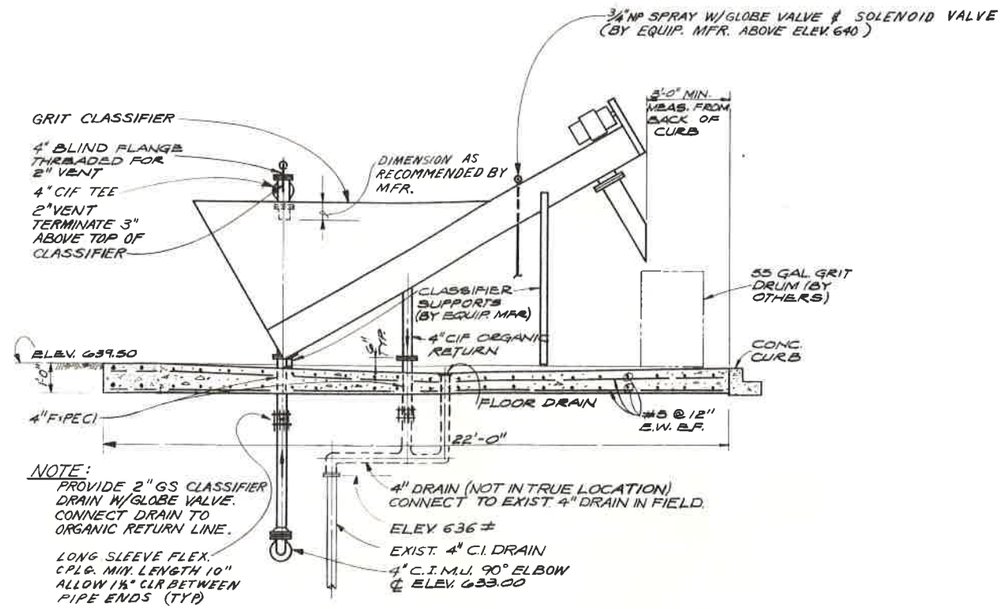
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS
CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING GRIT WORKS - PLAN AND SECTION
DES JG
DR WLC
CK GKG
DRAWING C 70



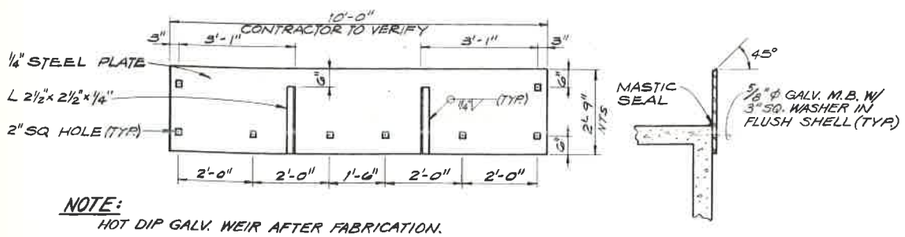
SECTION D/8|9

3/8" = 1'-0"



SECTION E/8|9

3/8" = 1'-0"



NOTE:
HOT DIP GALV. WEIR AFTER FABRICATION.

EFFLUENT WEIR DETAIL 1/8|9

1/2" = 1'-0"

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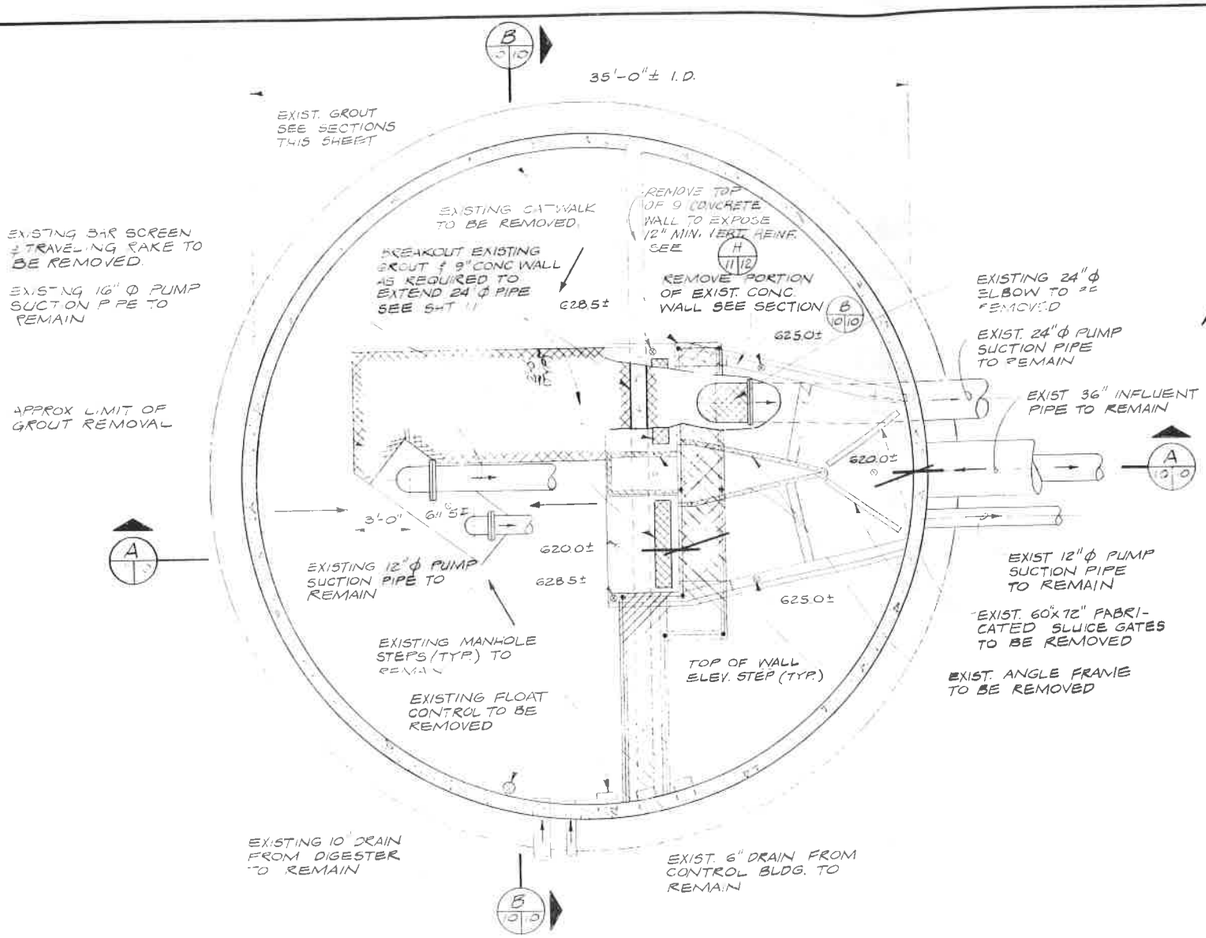
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING GRIT WORKS - SECTIONS AND DETAILS REMOVAL PLAN AND SECTIONS

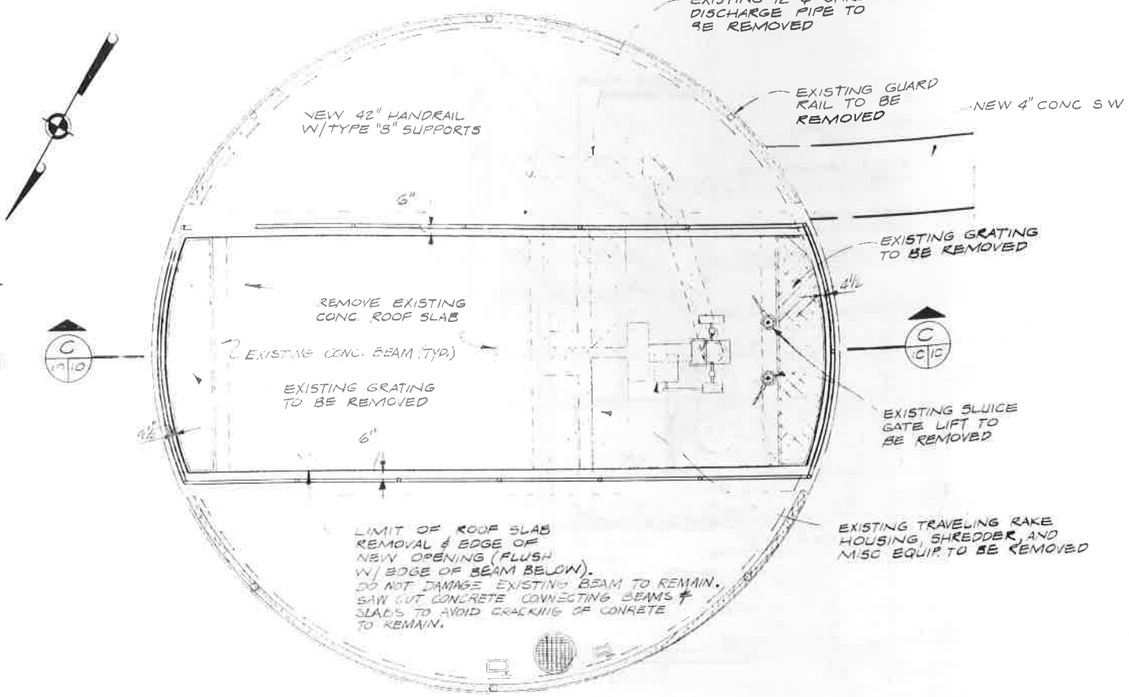
DES. JGG	SHEET 9
DR. Mc	OF 11
CK. GRG	DATE: JAN. 1973
RN 87039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



PLAN (BELOW ELEV. 6320)

(SHOWING EXIST. EQUIP. TO REMAIN OR BE REMOVED)

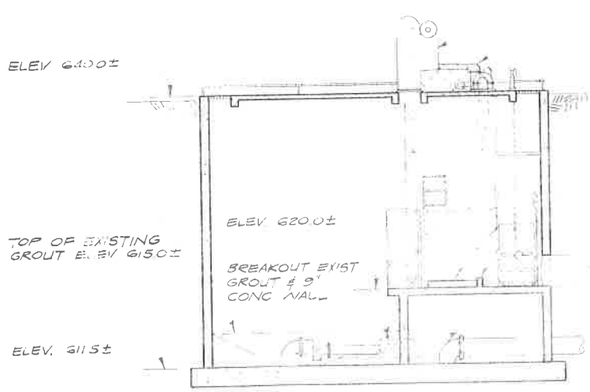
1/4" = 1'-0"



ROOF PLAN

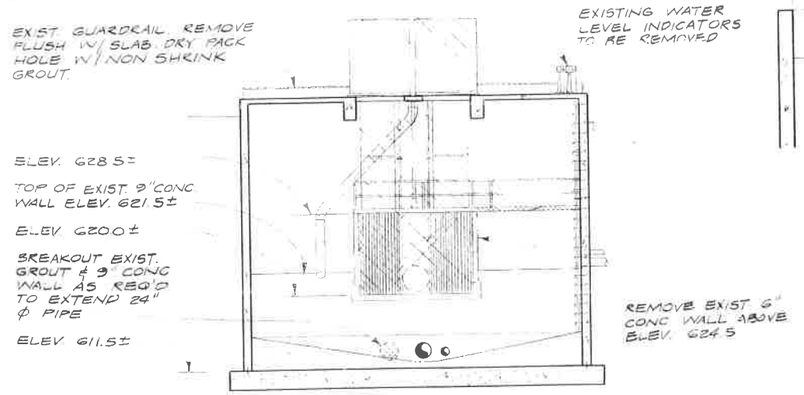
(SHOWING EXIST. EQUIP. TO REMAIN OR BE REMOVED AND NEW HANDRAIL)

1/4" = 1'-0"



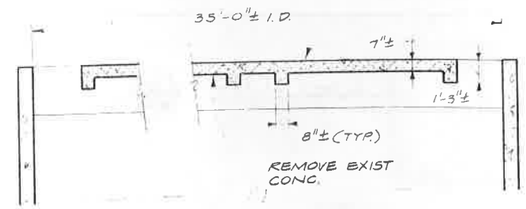
SECTION A

1/8" = 1'-0"



SECTION B

1/8" = 1'-0"



ROOF SLAB REMOVAL SECTION C

1/4" = 1'-0"

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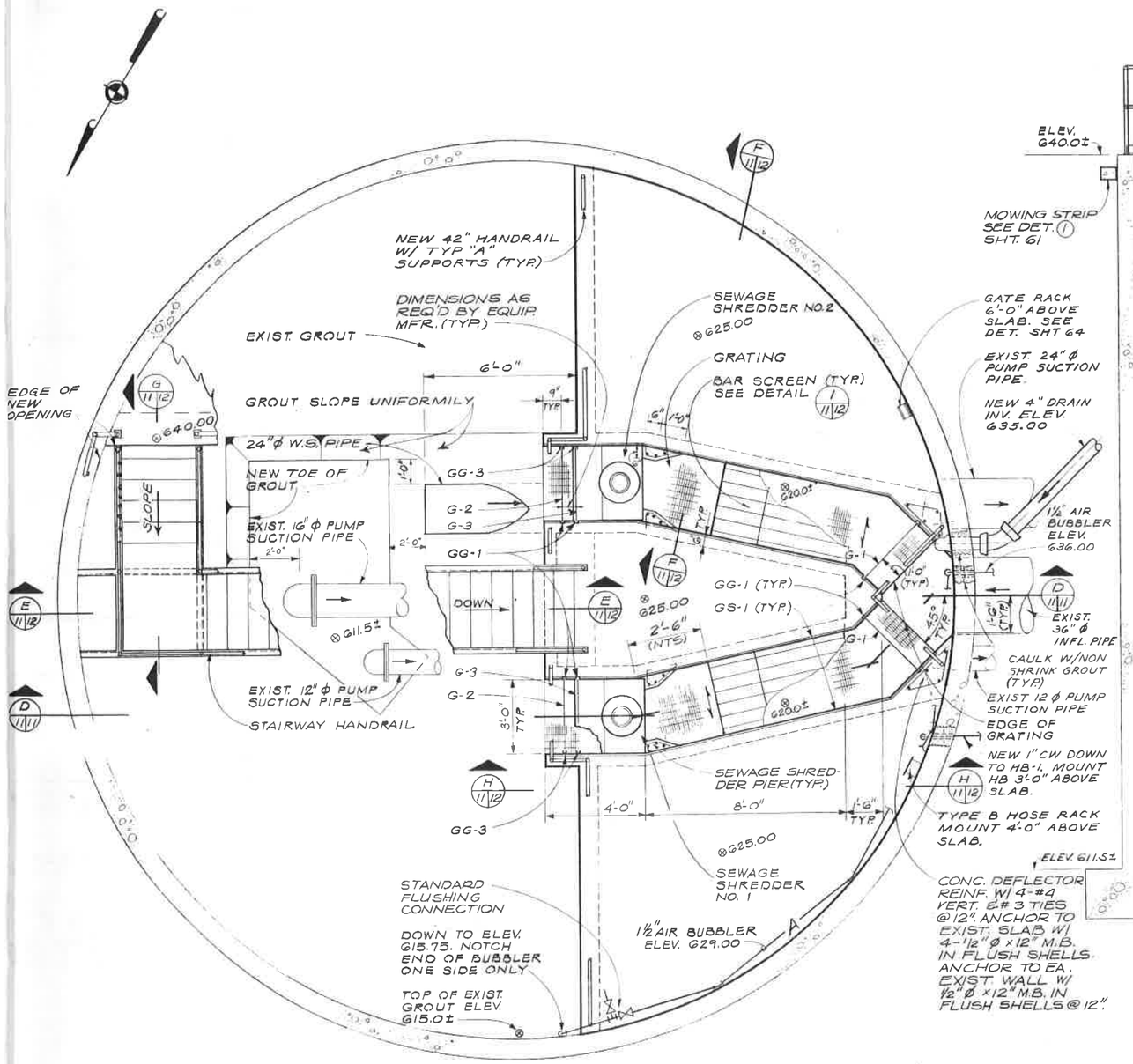
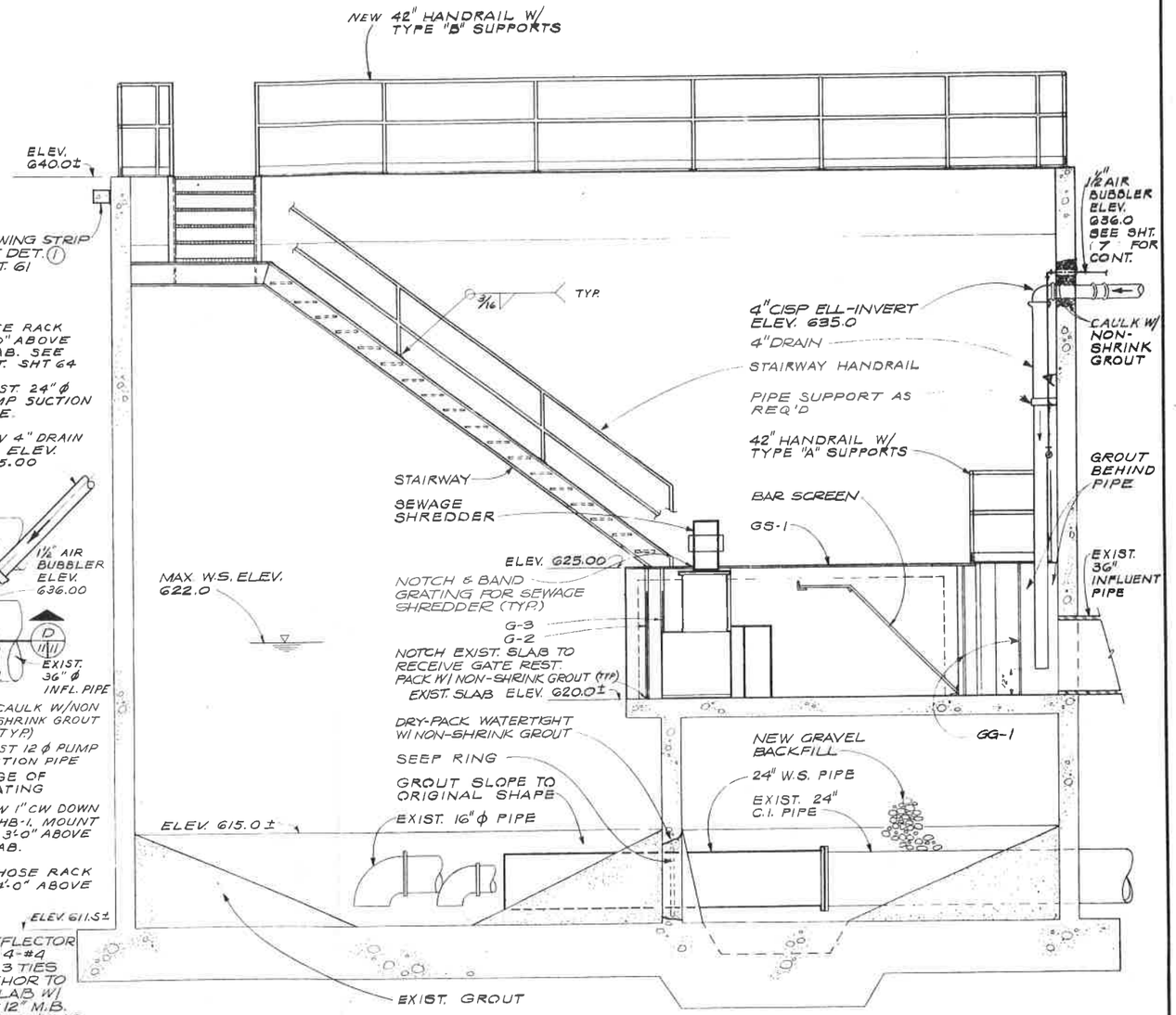
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING PLANT PUMP-STATION WET WELL -

DES JGG
DR RGB
CK RGJ
RN S7039.1
DRAWING NO. C 7039-1



PLAN (BELOW ELEV. 637.5)
3/8" = 1'-0"



SECTION D 11/11
3/8" = 1'-0"

NOTE:
ROOF SLAB LIVE LOAD CAPACITY 65 PSF

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
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ENGINEERS PLANNERS ECONOMISTS

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CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING PLANT PUMP-STATION WET WELL - PLAN AND SECTION

DES JGG | DR WTM | CK GRG | RN 57039.1 | DRAWING NO. C 7039-1
SHEET 11 OF 78 | DATE: JAN. 1973 | SCALE: AS SHOWN

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
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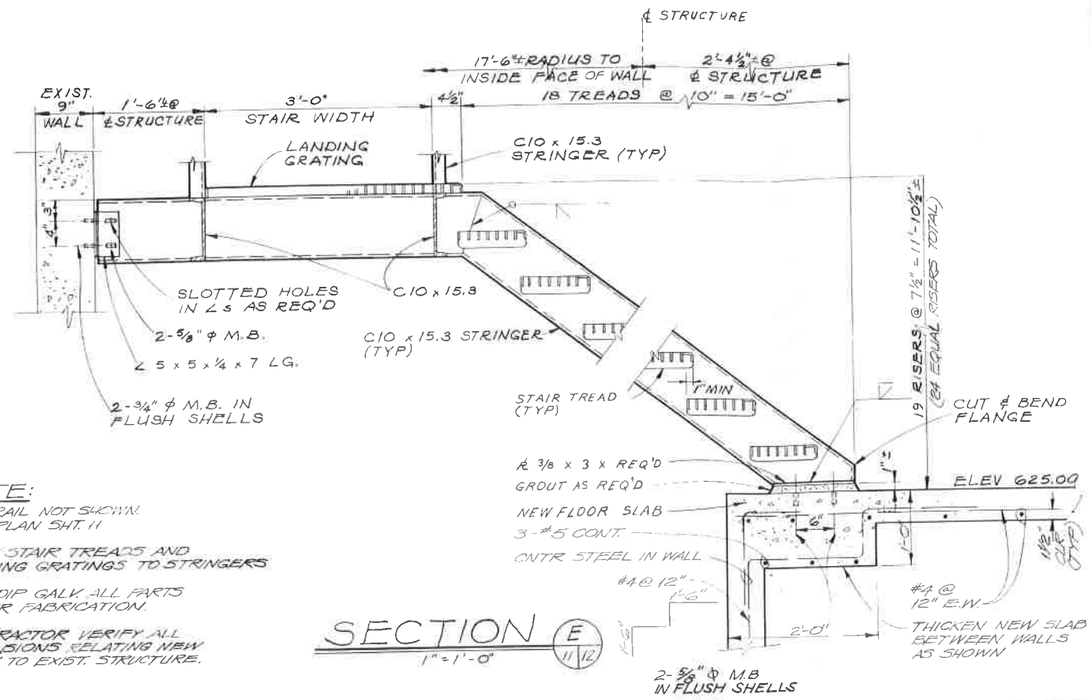
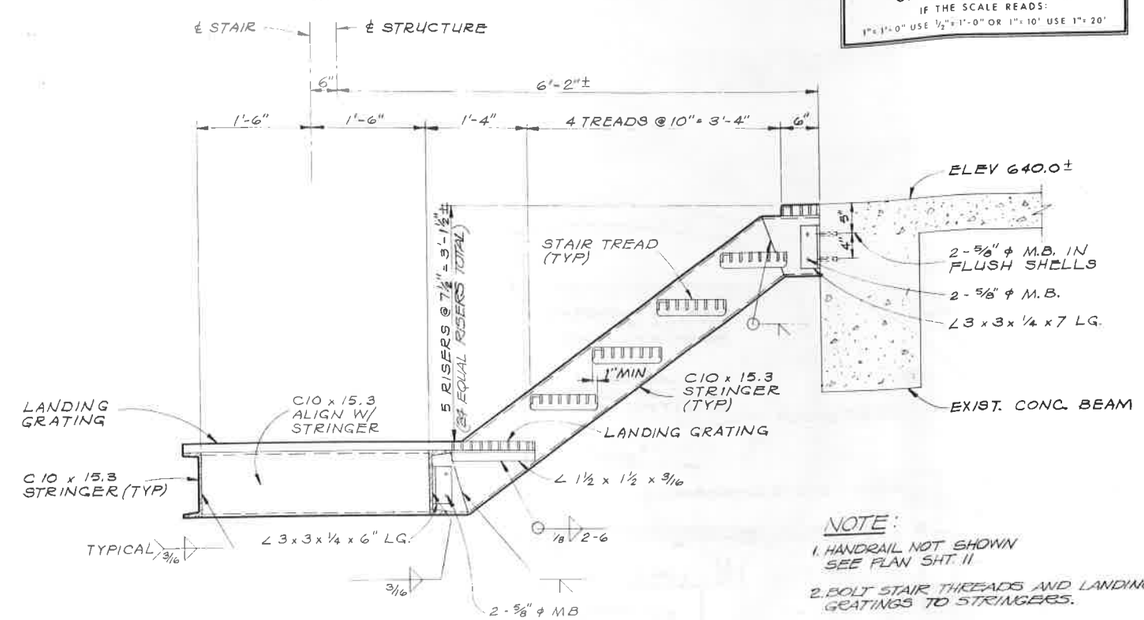


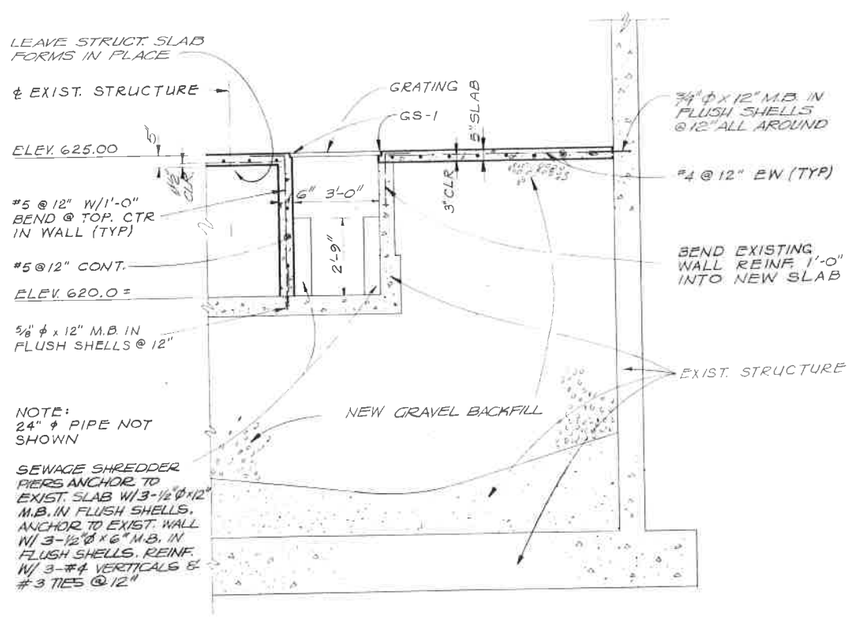
NOTE:
1. HANDRAIL NOT SHOWN. SEE PLAN SHT. 11
2. BOLT STAIR TREADS AND LANDING GRATINGS TO STRINGERS
3. HOT-DIP GALV. ALL PARTS AFTER FABRICATION.
4. CONTRACTOR VERIFY ALL DIMENSIONS RELATING NEW WORK TO EXIST. STRUCTURE.

SECTION E 11/12
1" = 1'-0"

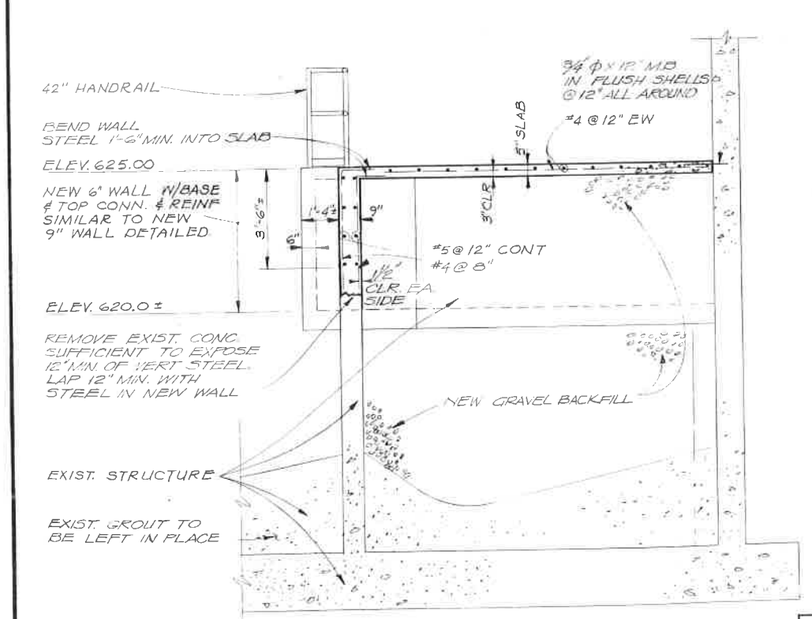


NOTE:
1. HANDRAIL NOT SHOWN SEE PLAN SHT. 11
2. BOLT STAIR THREADS AND LANDING GRATINGS TO STRINGERS.
3. HOT-DIP GALV. ALL PARTS AFTER FABRICATION.
4. CONTRACTOR VERIFY ALL DIMENSIONS RELATING NEW WORK TO EXISTING STRUCTURE

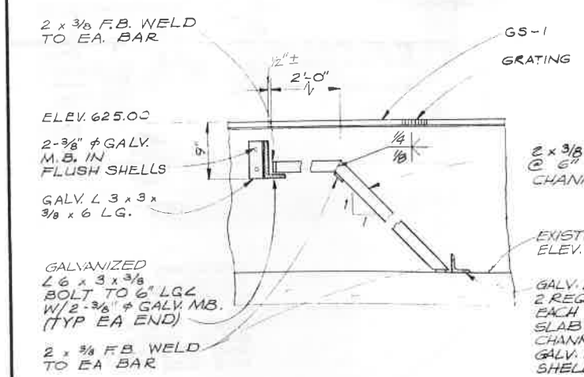
SECTION G 11/12
1" = 1'-0"



SECTION F 11/12
3/8" = 1'-0"



SECTION H 11/12
3/8" = 1'-0"



NOTE: HOT DIP GALV. BAR SCREEN AFTER FABRICATION

BAR SCREEN DETAIL 1 11/12
N.T.S.

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ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING PLANT PUMP-STATION WET WELL - SECTIONS AND DETAILS

DES. JPE/JKG
DR. CDS
CK. JFD/GRB
PM 7039.1
DRAWING NO. C 7039-1

D TO ONE-HALF
AL SCALE
READS:
1"= 10' USE 1"= 20'

640.0±

M.B. IN SHELLS

M.B.

¼ x 7 LG.

CONC. BEAM

S AND LANDING
GERS.

ORTS
.

Y ALL DIMENSIO
TO
E

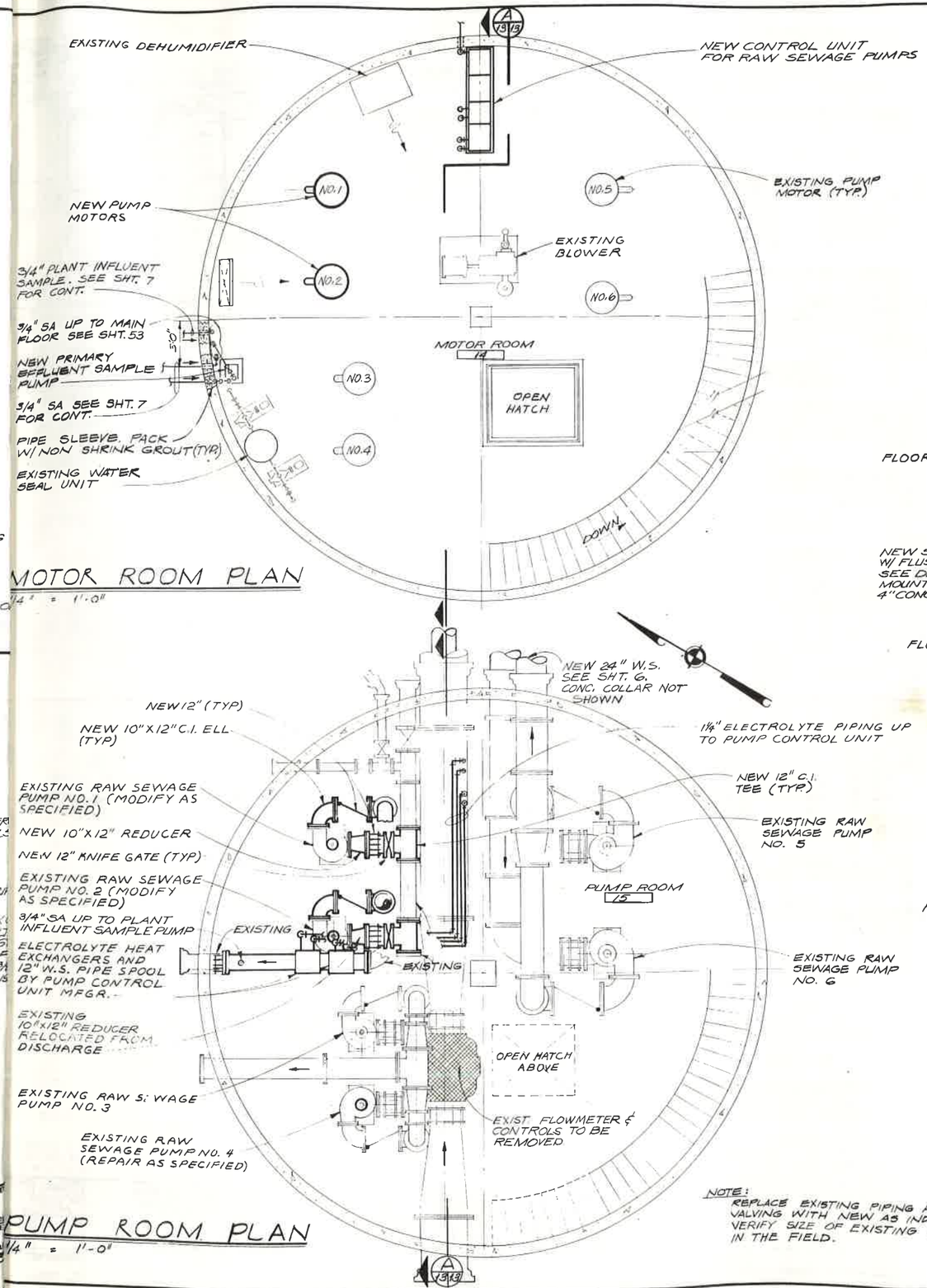
-1

TING

x 3/8 FB.
6" OC & 3' FR
CHANNEL WALLS

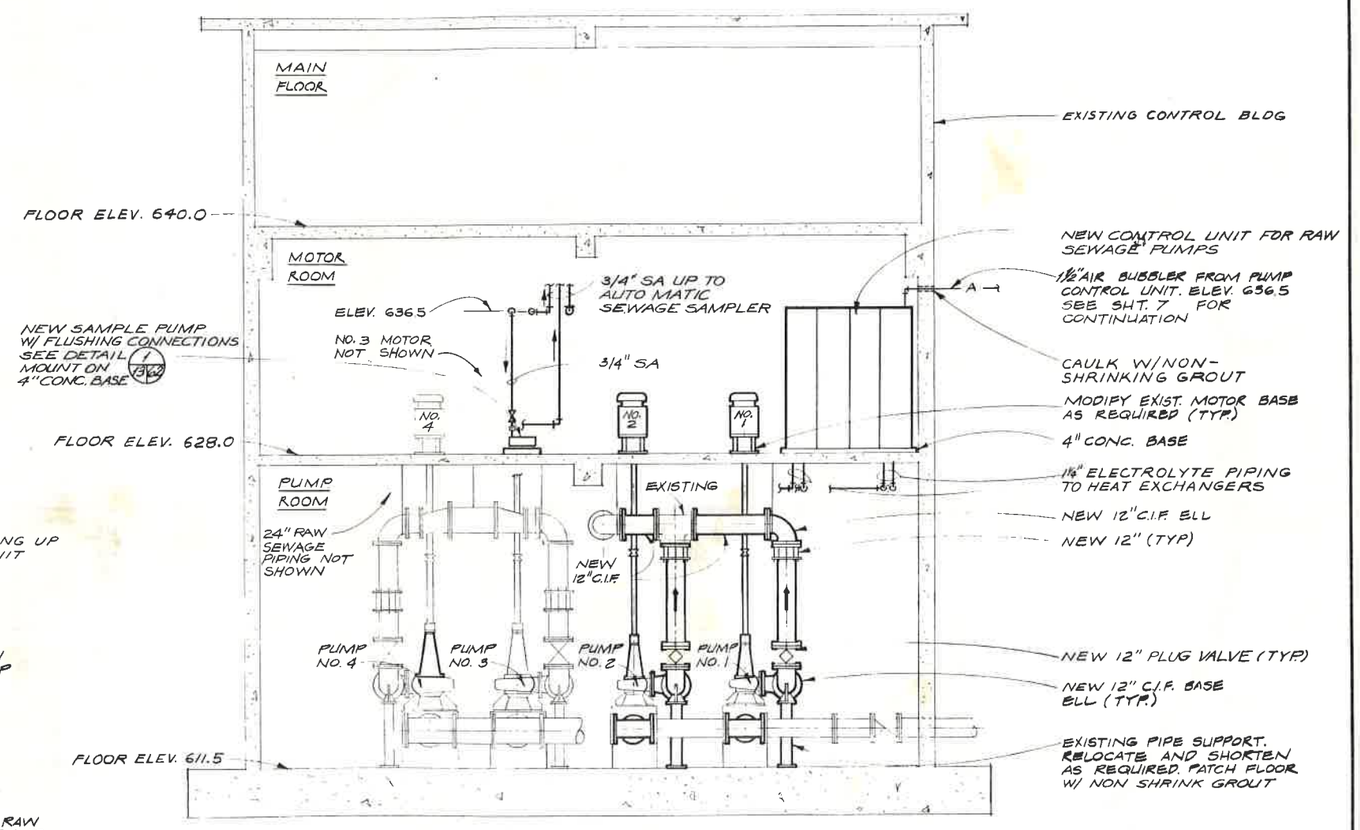
EXISTING SLAB
ELEV. 620.0 (VERI

GALV. L 3x3x3/8 x
REQUIRED. BOLT
EACH L TO EXIS
SLAB @ EDGE OF
CHANNEL W/ 2-3/
GALV. M.B. IN FLUS
SHELLS.



MOTOR ROOM PLAN

1/4" = 1'-0"



SECTION A 13/13

1/4" = 1'-0"

PUMP ROOM PLAN

1/4" = 1'-0"

NOTE:
REPLACE EXISTING PIPING AND VALVING WITH NEW AS INDICATED. VERIFY SIZE OF EXISTING PIPING IN THE FIELD.

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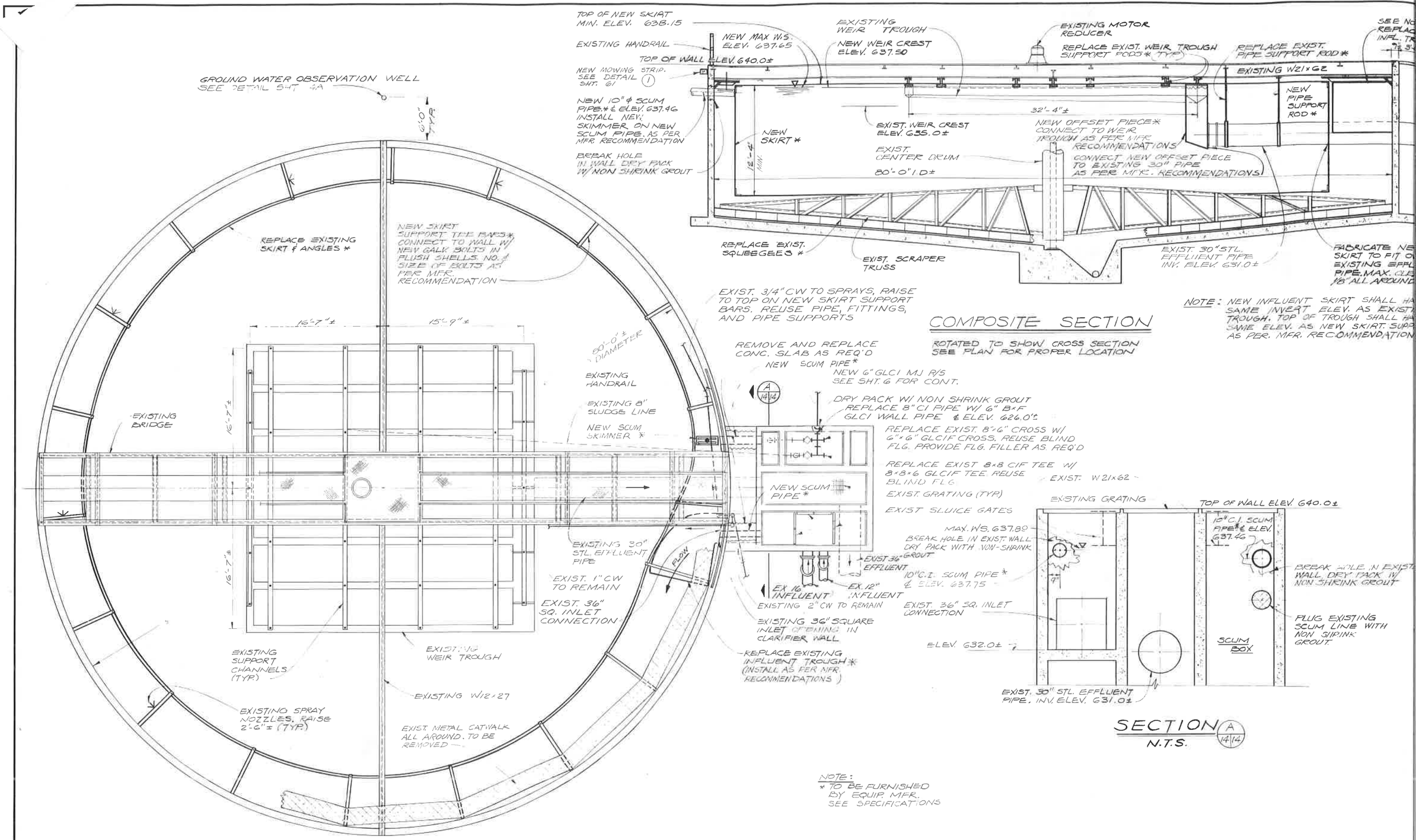
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING PLANT PUMP STATION - PLAN AND SECTION

DES. PFW	SHEET 13
DR. BCC	OF 33
CK. GRG	DATE: JAN. 1973
PROJ. 37038.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	

DES. PFW/KGH	SHEET
DR. BCC	OF 33
CK. GFD/GRG	DATE: JAN.
PROJ. 37038.1	SCALE: AS S
DRAWING NO. C 7039-1	



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1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

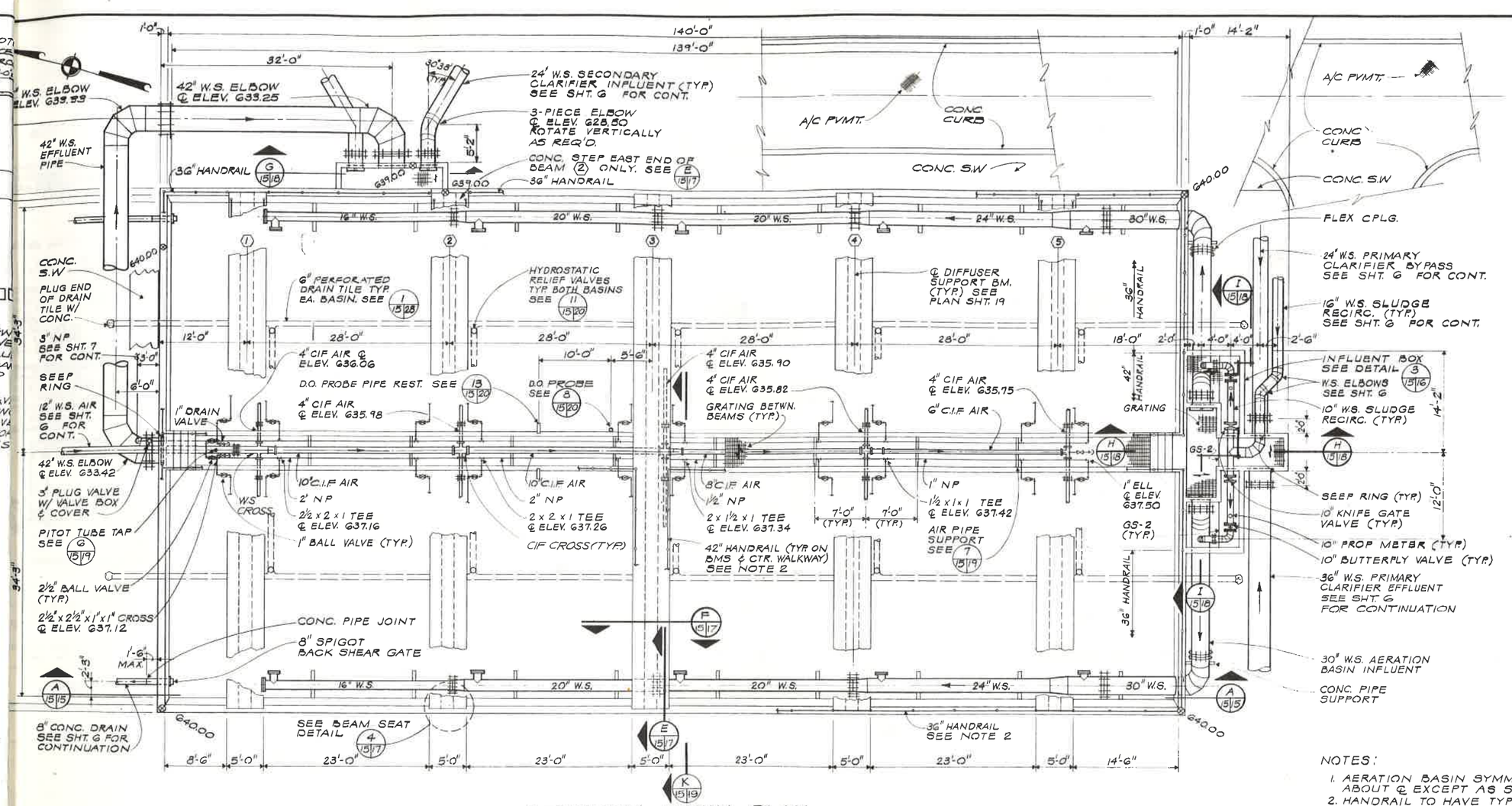
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING PRIMARY CLARIFIER - PLAN

DES JGG
DR JRP
CK GRG
RN 87039.1
DRAWING C 703

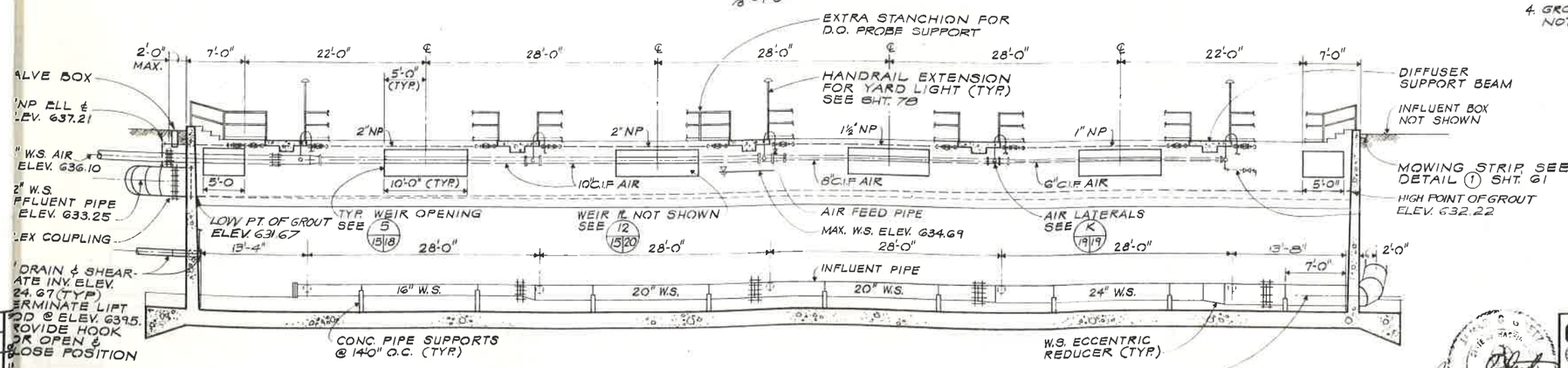


AERATION BASIN PLAN

1/8" = 1'-0"

NOTES:

1. AERATION BASIN SYMMETRICAL ABOUT ℄ EXCEPT AS SHOWN OTHERWISE.
2. HANDRAIL TO HAVE TYPE "A" SUPPORTS ON WALLS AND TYPE "B" SUPPORTS ON BEAMS.
3. HB-2's NOT SHOWN. SEE SHT. 7
4. GROUNDWATER OBSERVATION WELLS NOT SHOWN. SEE SHT 3.



SECTION A 15/15

1/8" = 1'-0"

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD — CLAIR A. HILL & ASSOCIATES

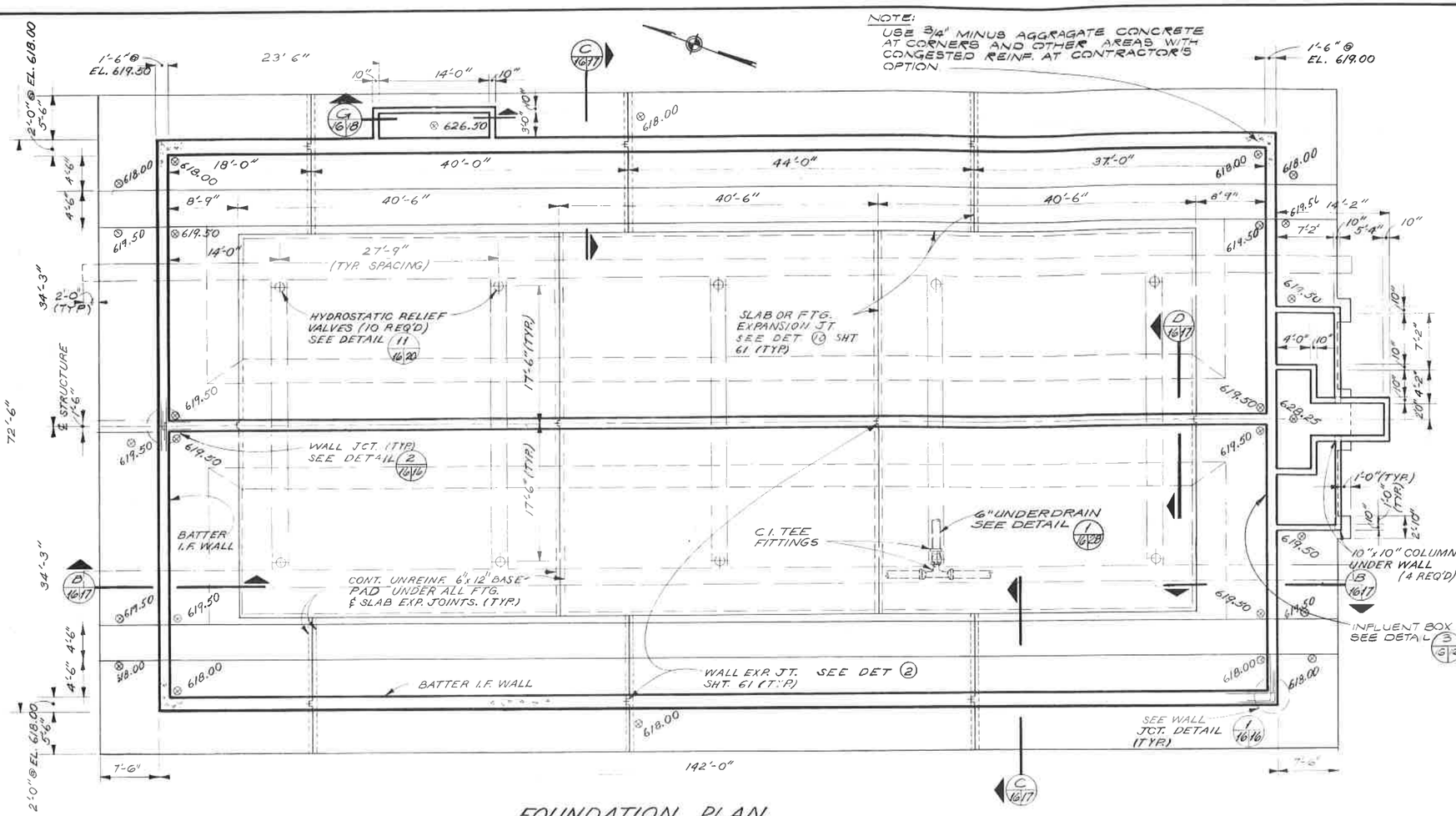
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

AERATION BASIN - PLAN AND SECTION

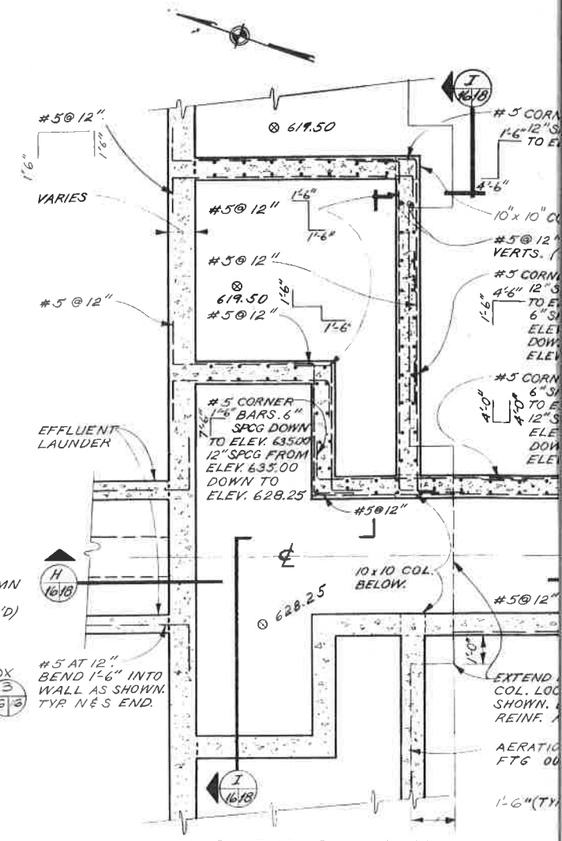
DES. JGG	SHEET 15
DR. WB	OF 21
CK. GRG	DATE: JAN. 1973
PN 27039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	

NOTE:
USE 3/4" MINUS AGGREGATE CONCRETE AT CORNERS AND OTHER AREAS WITH CONGESTED REINF. AT CONTRACTOR'S OPTION

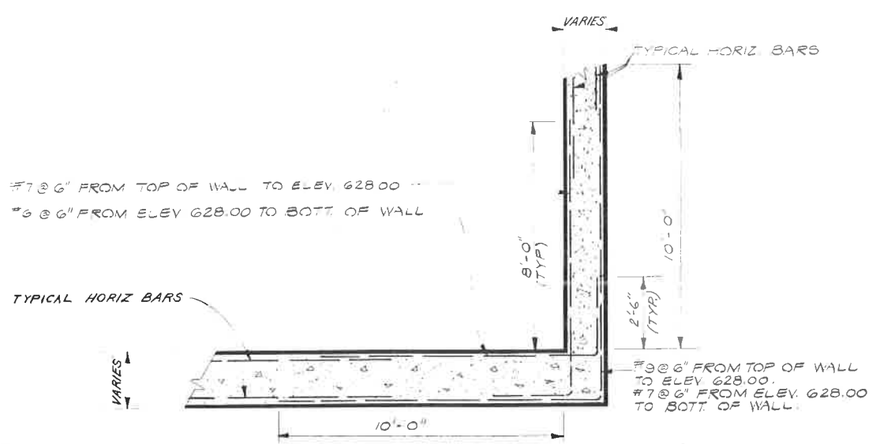
NOTES:
1. SEE GENERAL STRUCTURAL NOTES & DETAILS SHT. 61
2. REINF. IS SYMM. ABOUT ℄.



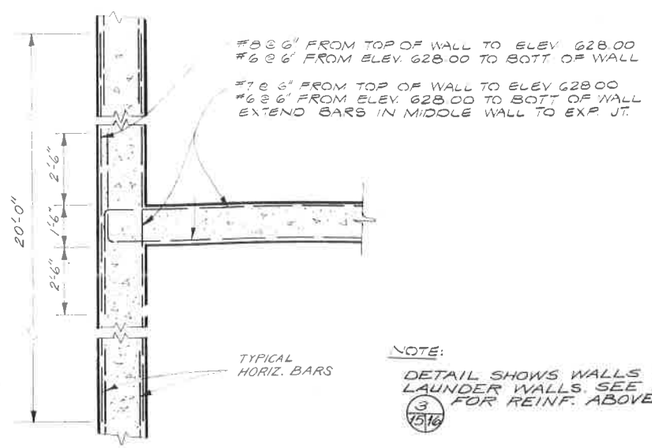
FOUNDATION PLAN
1/8" = 1'-0"



INFLUENT BOX PLAN
DETAIL 3
3/8" = 1'-0" (3 / 1 / 16)



WALL JUNCTION DETAIL 1
3/8" = 1'-0" (1 / 16/16)



NOTE:
DETAIL SHOWS WALLS BELOW LAUNDER WALLS. SEE DETAIL 3 (3/16) FOR REINF. ABOVE

WALL JUNCTION DETAIL 2
3/8" = 1'-0" (2 / 16/16)

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
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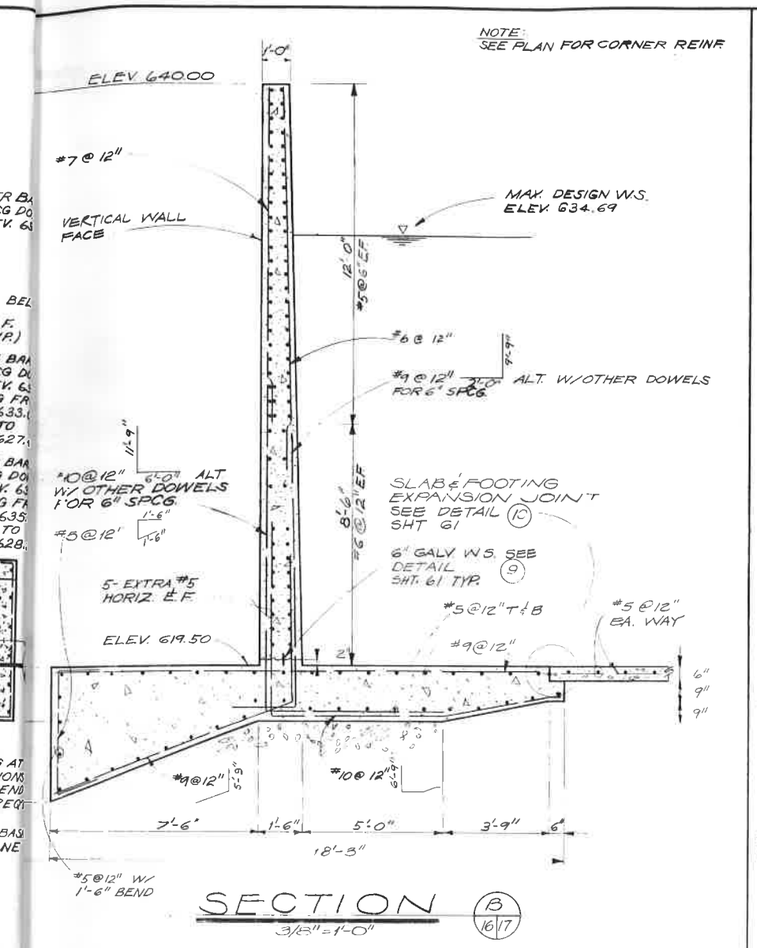
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

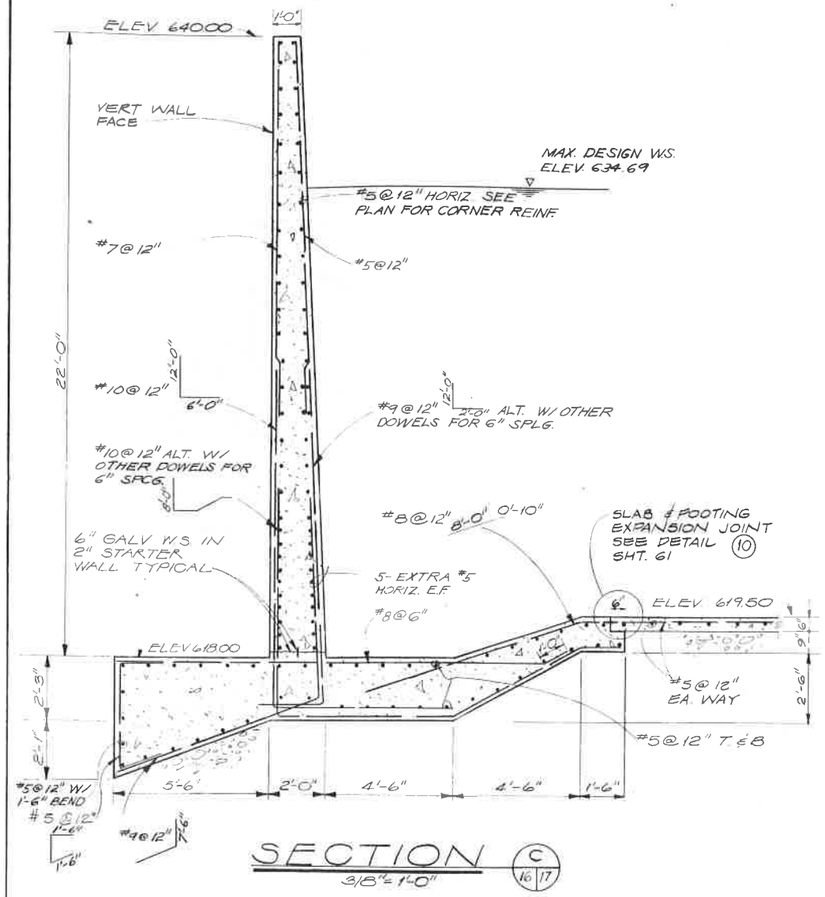
CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
AERATION BASIN - STRUCTURAL - FOUNDATION PLAN

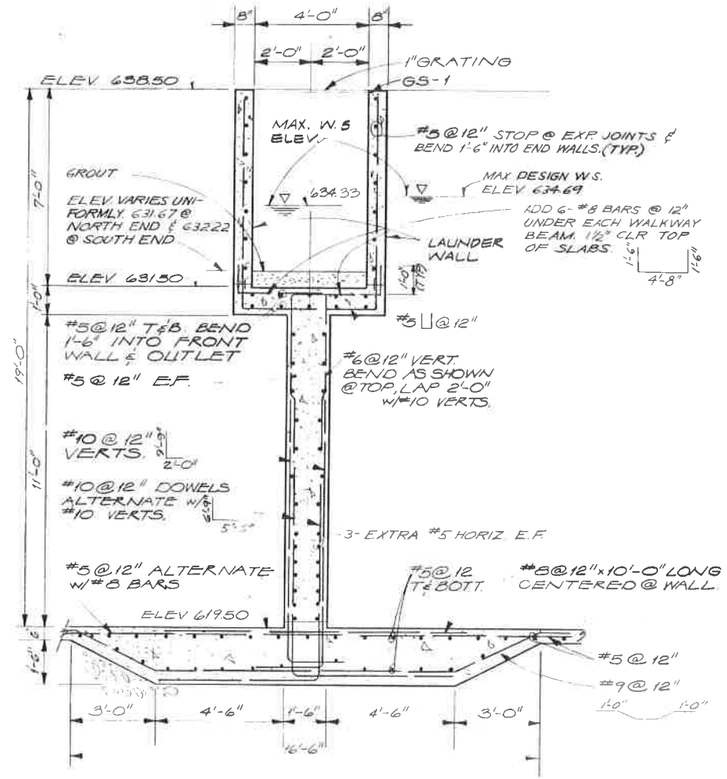
DES. DR. CK. RN 8103 DWG C



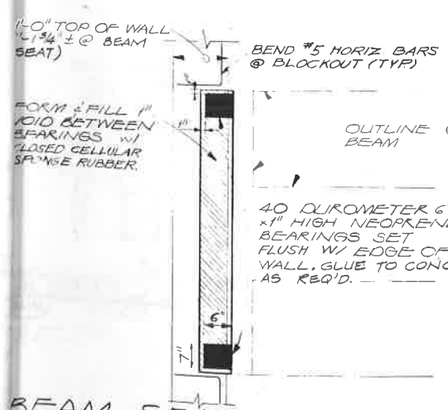
SECTION B 16/17
3/8" = 1'-0"



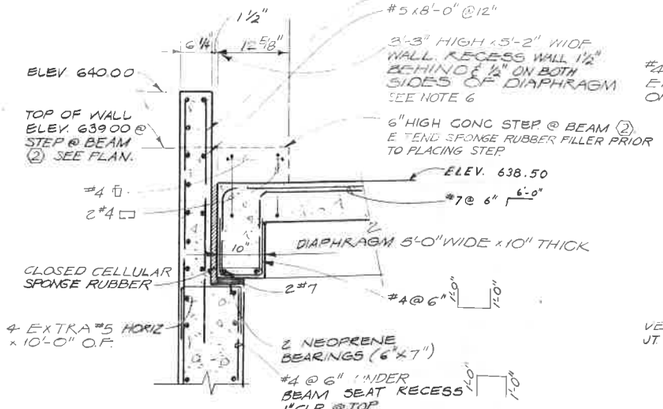
SECTION C 16/17
3/8" = 1'-0"



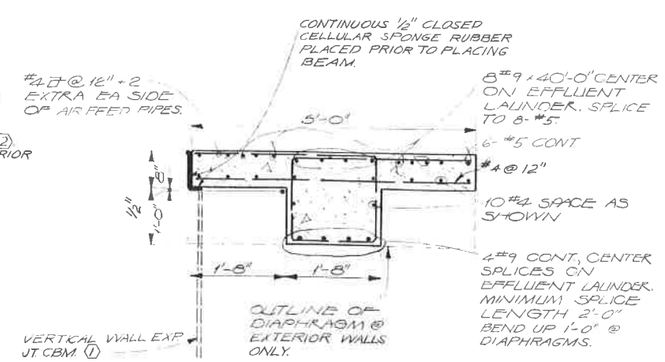
SECTION D 16/17
3/8" = 1'-0"



BEAM SEAT DETAIL 4 15/17
3/4" = 1'-0"



TYP. SECTION AT EXTERIOR WALL
SECTION E 15/17
3/4" = 1'-0"



SECTION F 15/17
3/4" = 1'-0"

DIFFUSER SUPPORT BEAM NOTES:

1. BLOCKOUT 8" LAUNDER WALLS FOR BEAMS & EXTEND WALL REINF. CONTINUOUS THRU BEAMS.
2. PROVIDE PVC PIPE SLEEVES THRU BEAM WEB FOR NON POTABLE WATER PIPING.
3. DISCONTINUE LAUNDER WALL REINF. @ BEAM # 1 FLANGE (IN SIDE TO VERT. EXPANSION JOINT) & INSTALL SPONGE RUBBER @ FLANGE TO WALL CONTACT.
4. COMPLETE FULL HT. BACKFILL AROUND BASIN WALLS PRIOR TO INSTALLATION OF BEAMS.
5. CONSTRUCT DIAPHRAGMS AT EA END OF BEAMS ON NEOPRENE PADS.
6. RECESS 1½" BEHIND & ½" AROUND SIDES OF BEAM DIAPHRAGM. PLACE CLOSED CELLULAR SPONGE RUBBER ALL AROUND & UNDER BEAM PRIOR TO PLACING CONCRETE.
7. CAST CONCRETE STEP (TYP. EAST END OF BEAM #2) AFTER BEARINGS ARE INSTALLED & BEAM FORMS REMOVED.

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
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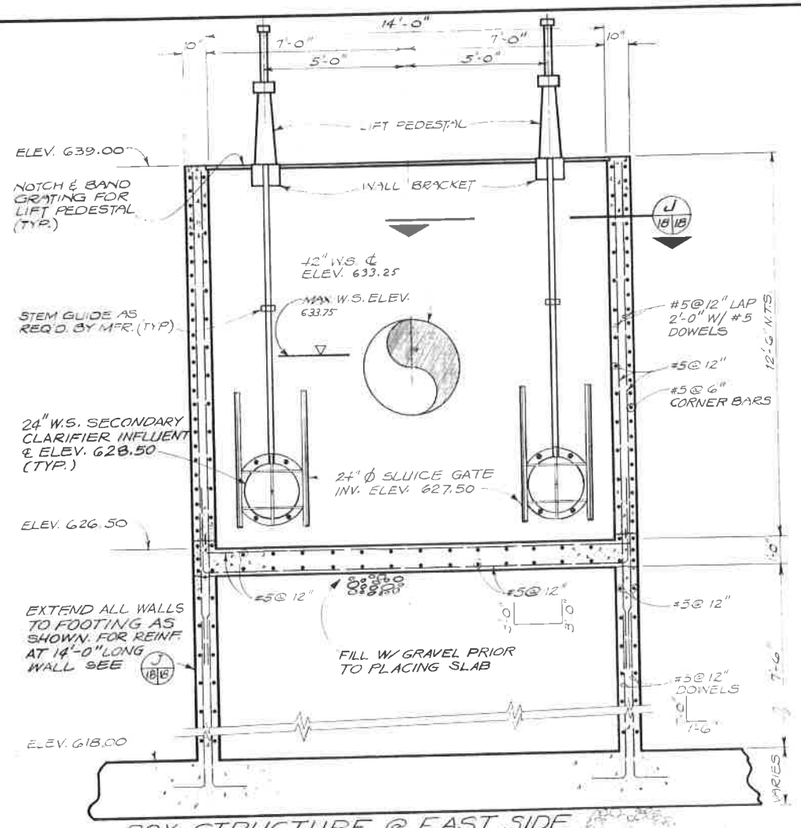
BRADLEY P. ERICKSON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
AERATION BASIN - STRUCTURAL - SECTIONS

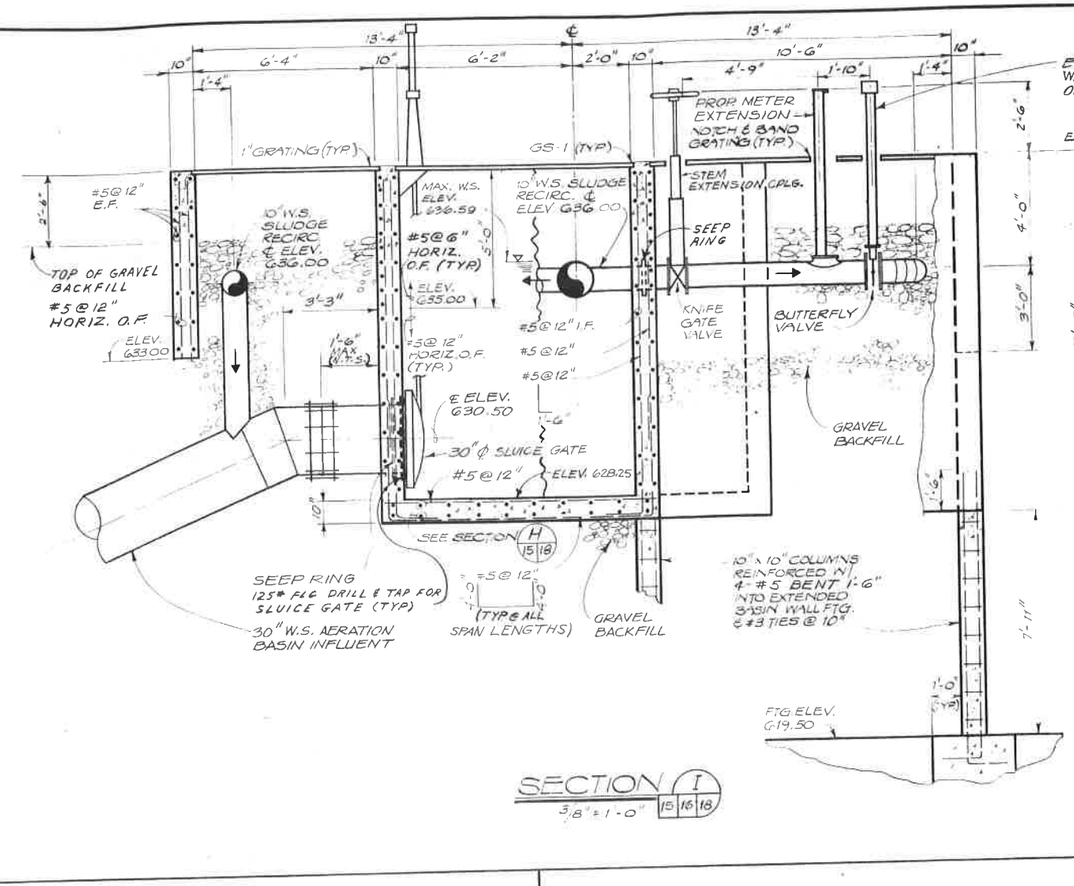
DES. LLA	SHEET 17
DR. RC	OF 78
CK. GFD	DATE: JAN. 1973
RN 87039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



BOX STRUCTURE @ EAST SIDE OF AERATION BASIN

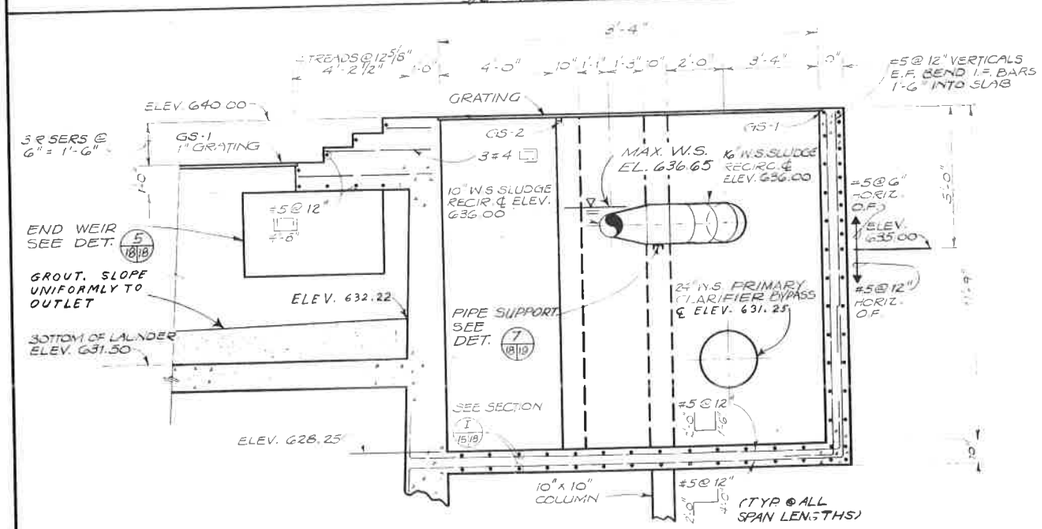
SECTION G 15 16 18

3/8" = 1'-0"



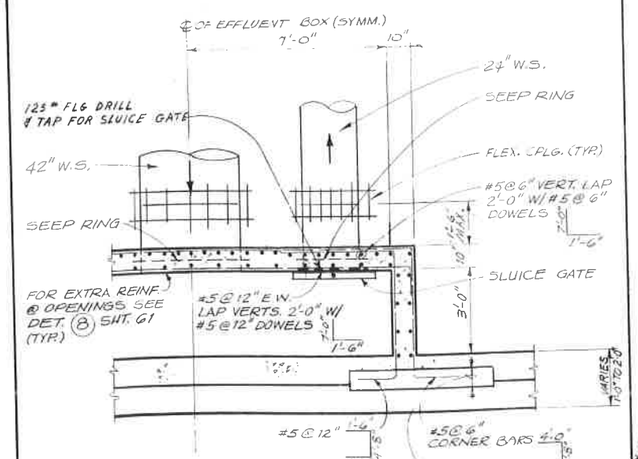
SECTION I 15 16 18

3/8" = 1'-0"



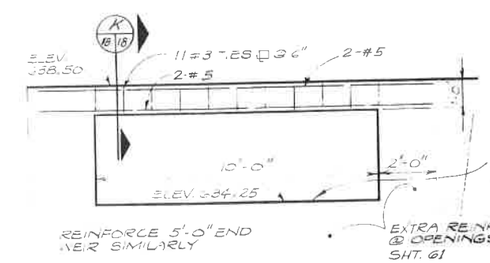
SECTION H 15 16 18

3/8" = 1'-0"



SECTION J 18 18

3/8" = 1'-0"



INTERIOR WEIR TYPICAL OPENING

DETAIL 5 15 18 18

3/8" = 1'-0"

SECTION

3/4" = 1'-0"

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CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

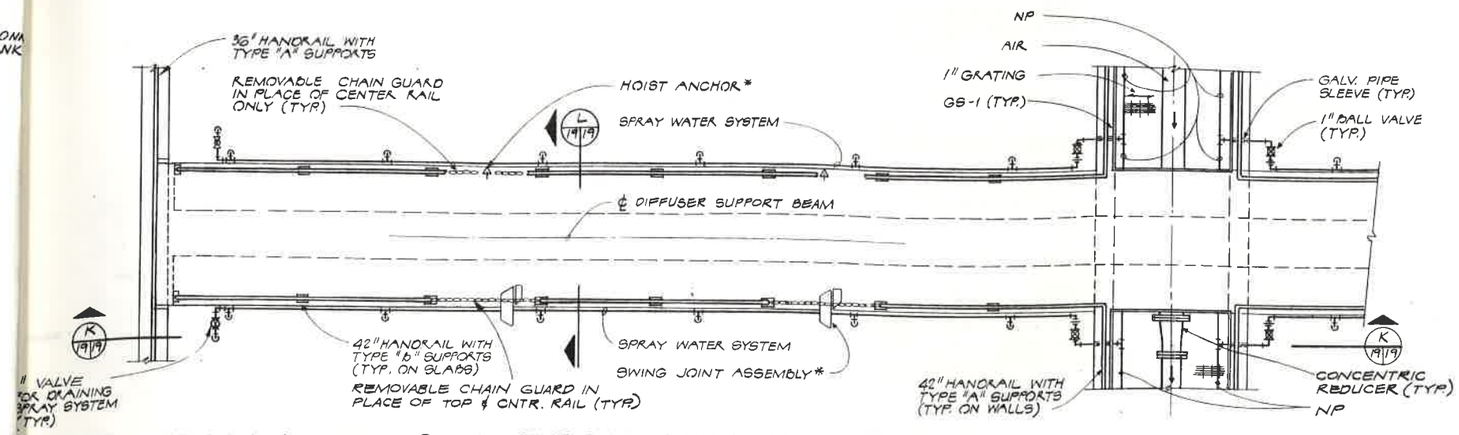
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

AERATION BASIN - STRUCTURAL - DETAILS

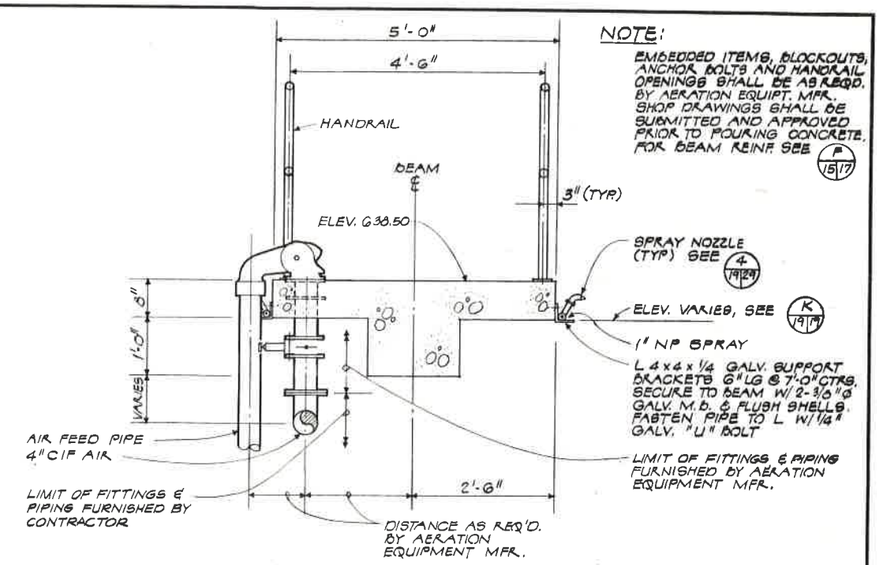
DES. JKF-11
DR. MLL
CK. GPD
AV. 87039
DRAWN C



NOTE: SUPPORT BEAM HANDRAIL POSTS SHALL BE OPPOSITE EACH OTHER

PLAN - TYPICAL DIFFUSER SUPPORT BEAM

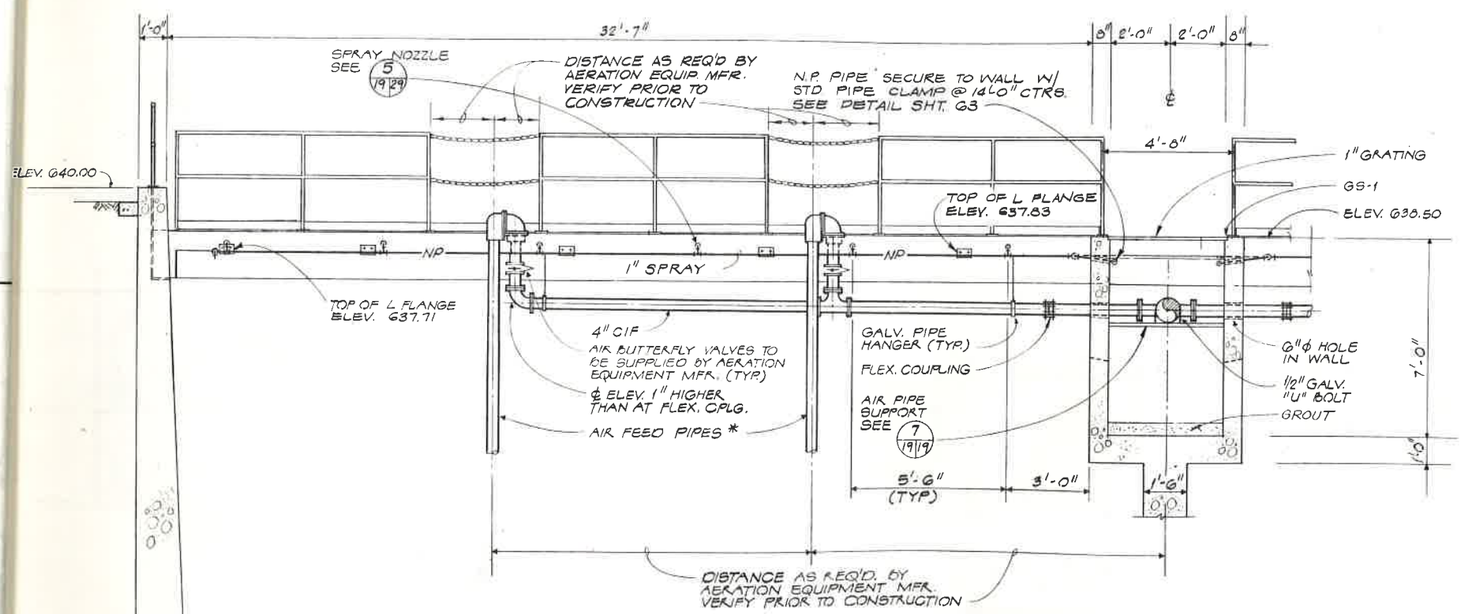
3/8" = 1'-0" (3 REQ'D AS SHOWN - 3 REQ'D OPPOSITE HAND)



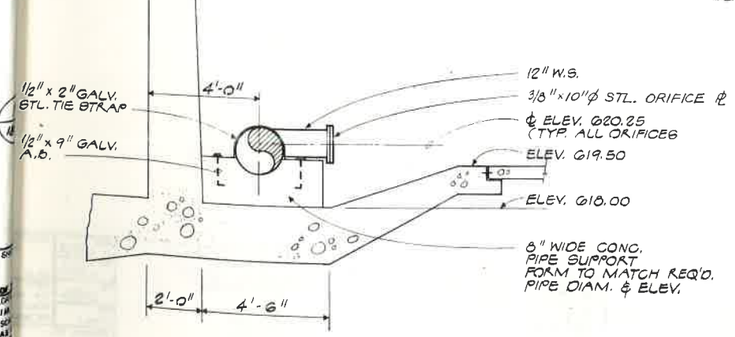
NOTE:
EMBEDDED ITEMS, BLOCKOUTS, ANCHOR BOLTS AND HANDRAIL OPENINGS SHALL BE AS REQ'D. BY AERATION EQUIPT. MFR. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED PRIOR TO POURING CONCRETE. FOR BEAM REINF. SEE P/15/17

SECTION L/19/19

3/4" = 1'-0"

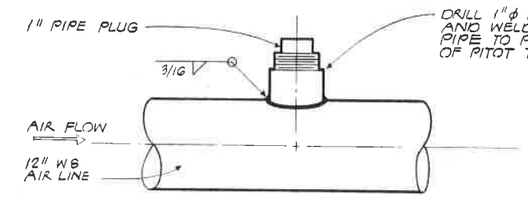


NOTE:
* FURNISHED BY AERATION EQUIP. MFR.



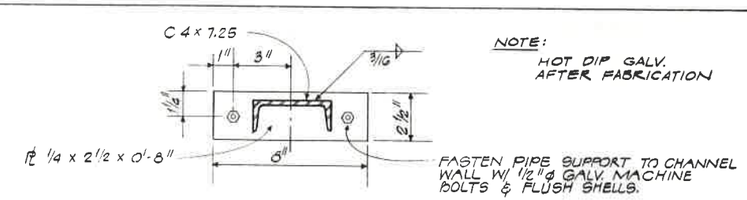
SECTION K/19/19

3/8" = 1'-0"



PITOT TUBE TAP DETAIL 6/15/19

NTS 1 REQ'D.



NOTE:
HOT DIP GALV. AFTER FABRICATION

AIR PIPE SUPPORT CHANNEL END SECTION DETAIL 7/15/19/19

3" = 1'-0"

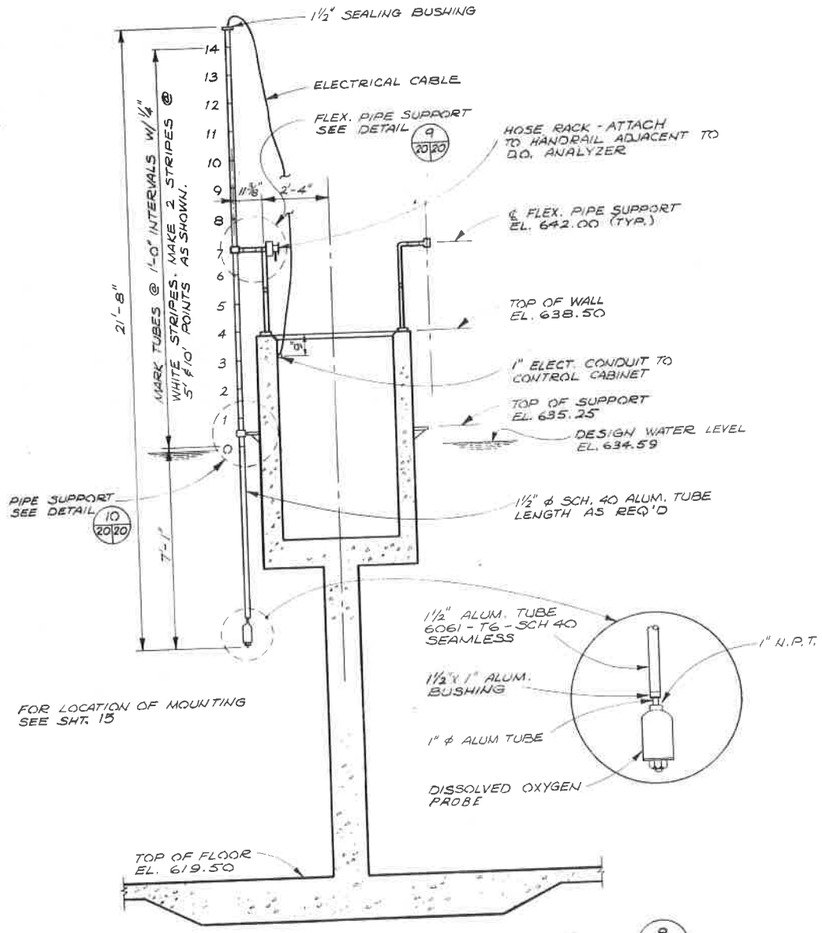
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

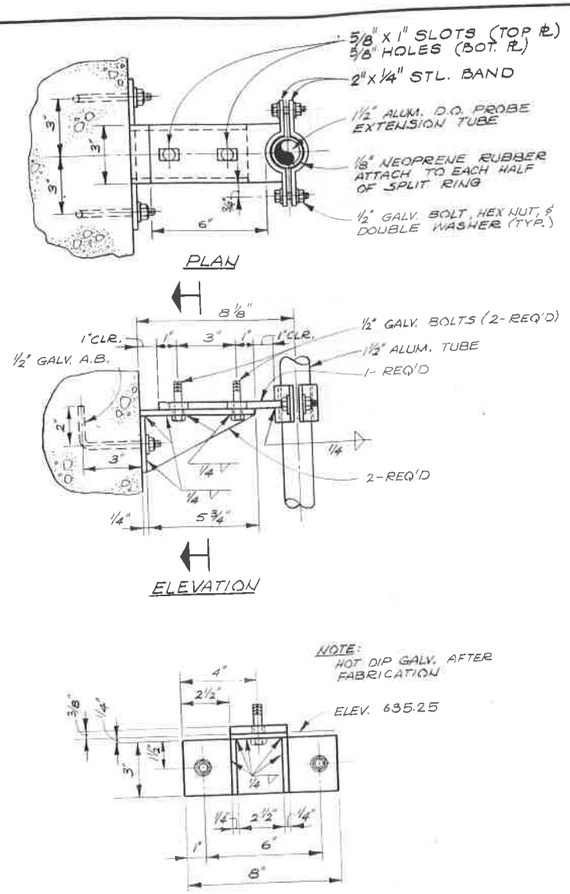
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
AERATION BASIN - MECHANICAL - SECTIONS

DES JGG
DR Orf
CK GRG
JN 37039.1
DRAWING NO. C 7039-1
SHEET 19 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN



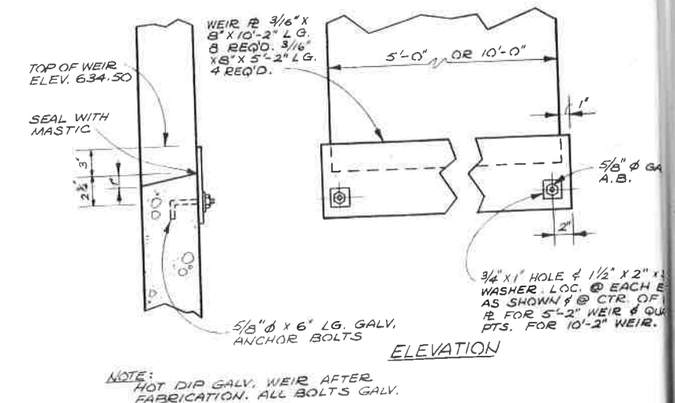
DISSOLVED OXYGEN PROBE DETAIL (8/15/20)

3/8" = 1'-0"



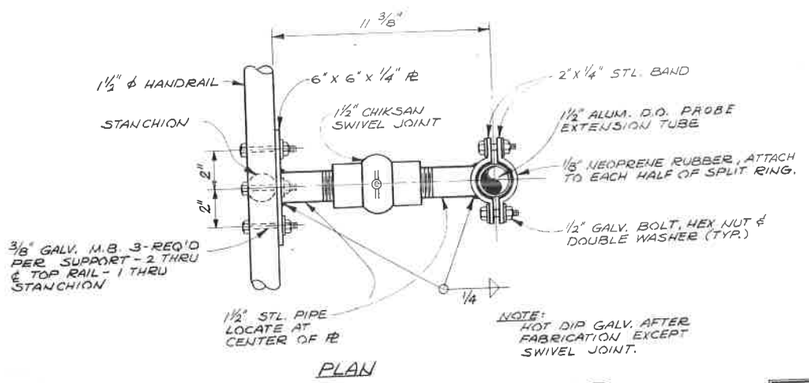
PIPE SUPPORT DETAIL (10/20/20)

3" = 1'-0"



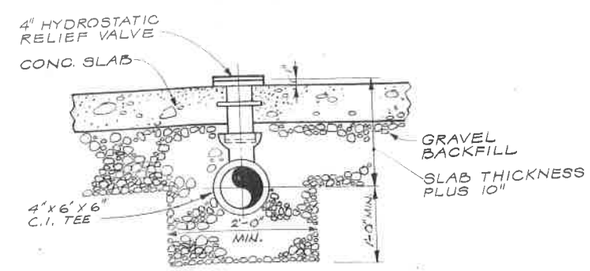
EFFLUENT WEIR DETAIL (12/15/20)

1½" = 1'-0"



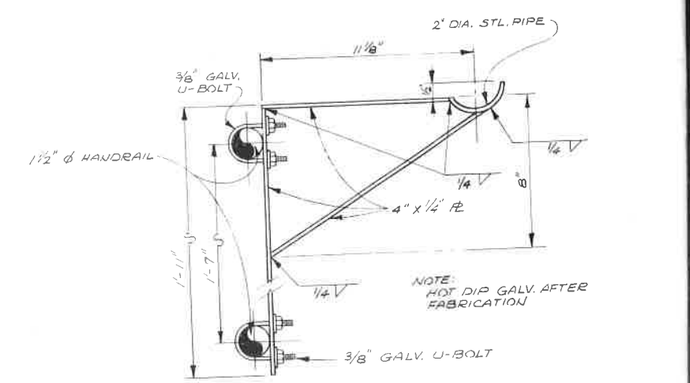
FLEX. PIPE SUPPORT DETAIL (9/20/20)

3" = 1'-0" (2 REQ'D)



HYDROSTATIC RELIEF VALVE DETAIL (11/15/16/28/20)

1" = 1'-0"



PIPE REST DETAIL (13/15/20)

3" = 1'-0" (2-REQ'D)

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IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

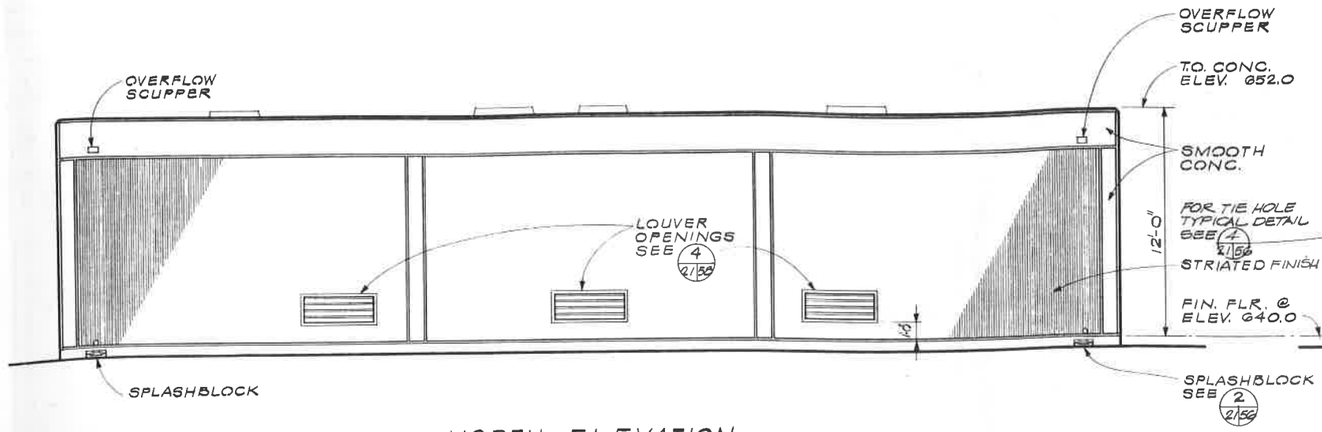
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A HILL & ASSOCIATES

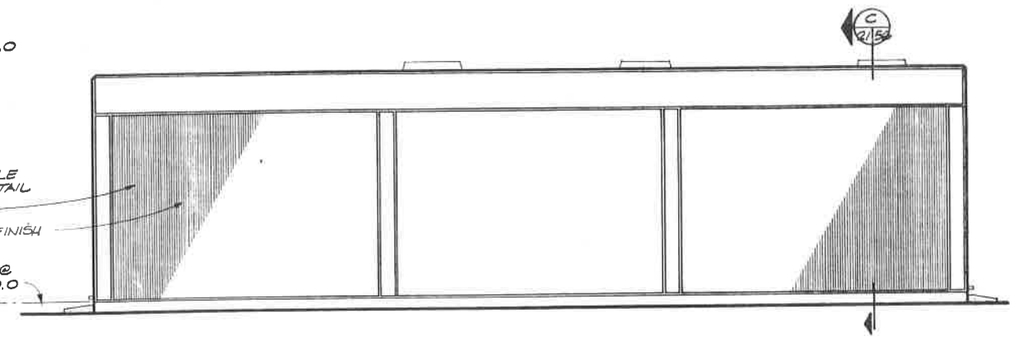
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

AERATION BASIN - MECHANICAL - DETAILS

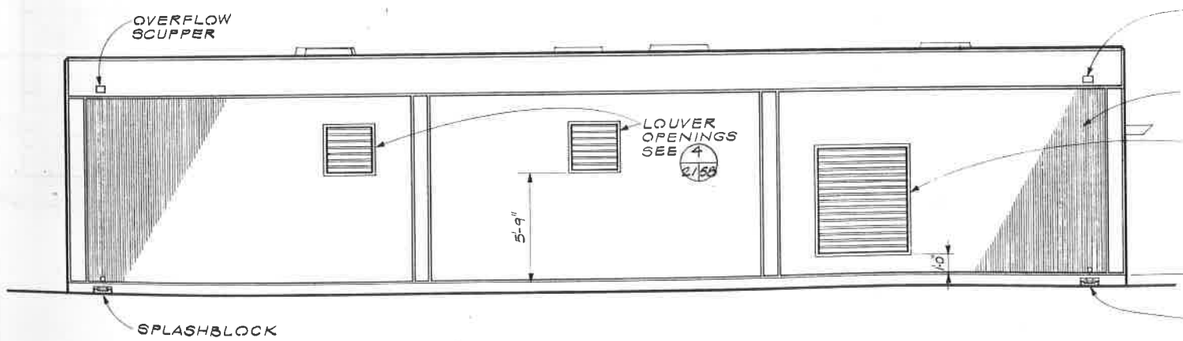
DES JG
DR LS
CK GR
No 87039.1
DRAWING C 70



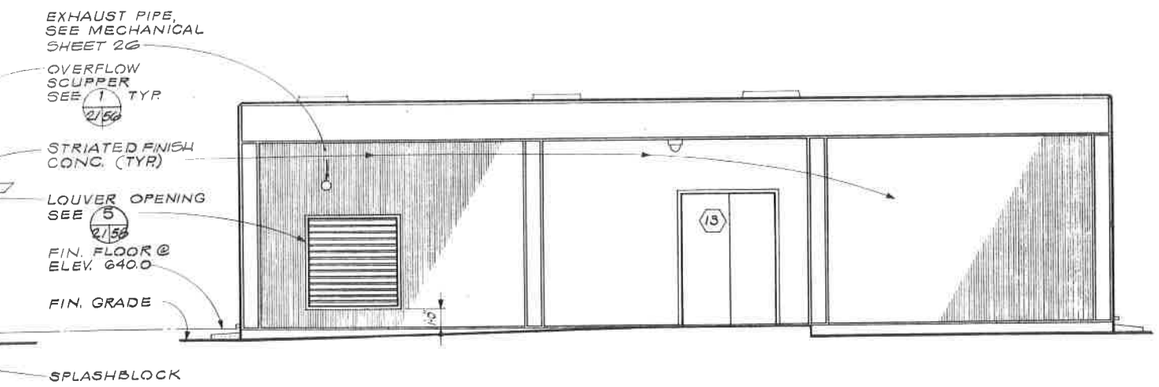
NORTH ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"



SOUTH ELEVATION
1/4" = 1'-0"



EAST ELEVATION
1/4" = 1'-0"

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

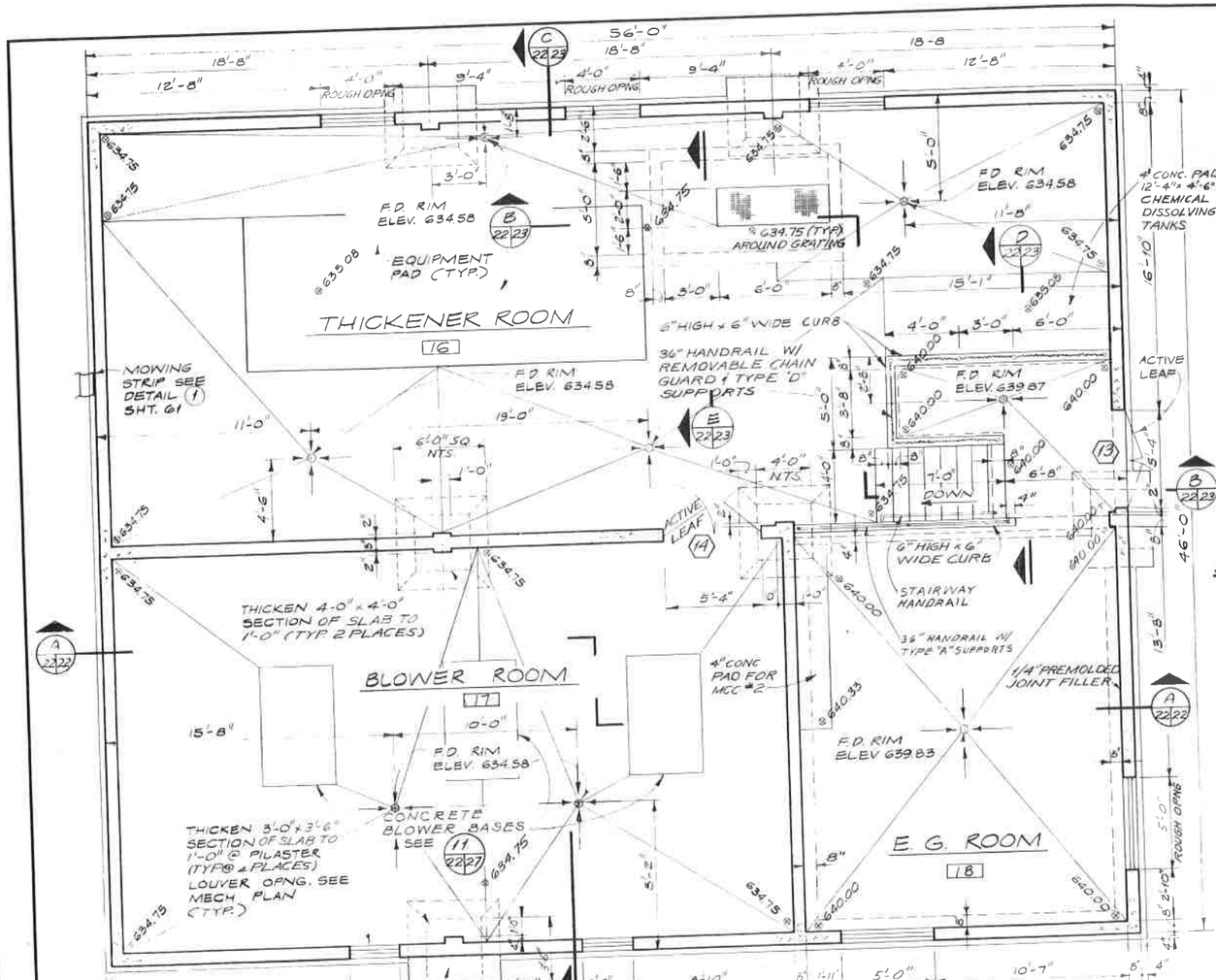
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
BLOWER BUILDING - ARCHITECTURAL - ELEVATIONS

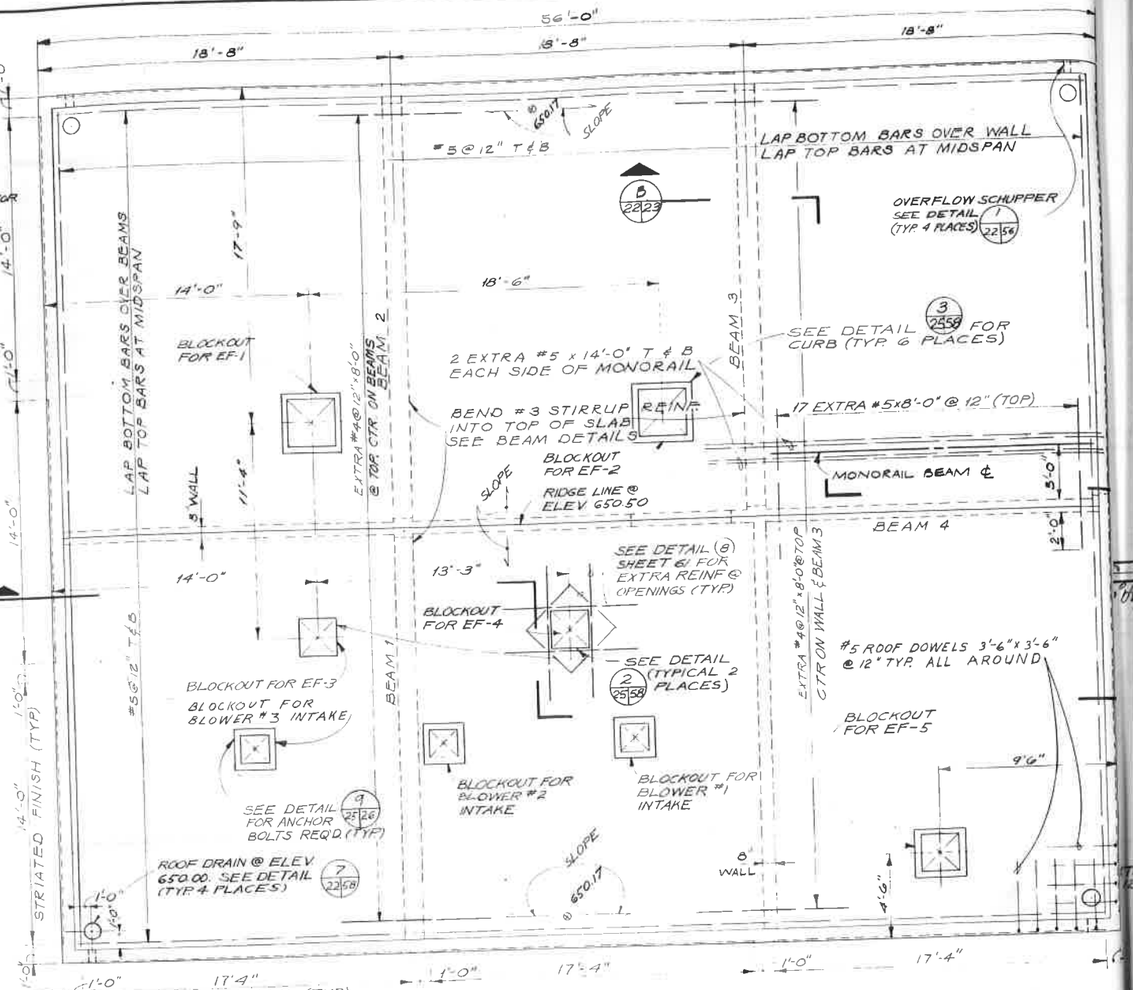
DES JMV
DR WaB
CK HCT
RN 57039.1
SHEET 21 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1

DES JGG
DR LSS
CK GRG
RN 57039.1
DRAWING NO. C 7039-1



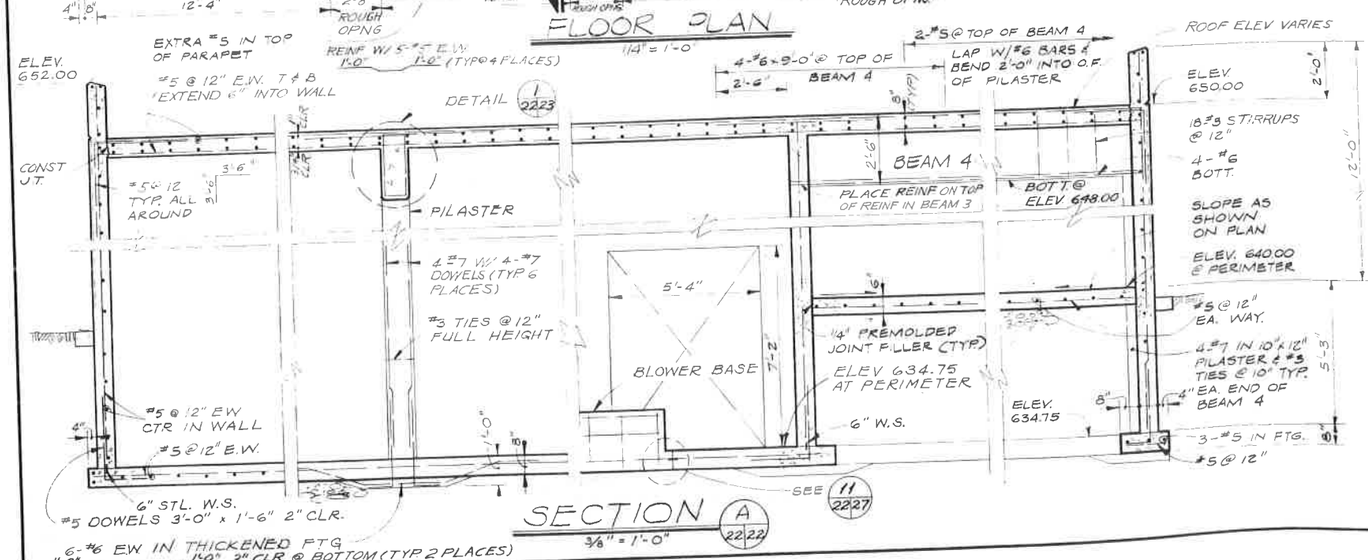
FLOOR PLAN

1/4" = 1'-0"



ROOF FRAMING PLAN

1/4" = 1'-0"



SECTION A 22/22

3/8" = 1'-0"

GENERAL NOTE

SEE SHT. G1 FOR GENERAL STRUCTURAL NOTES.

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE

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1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

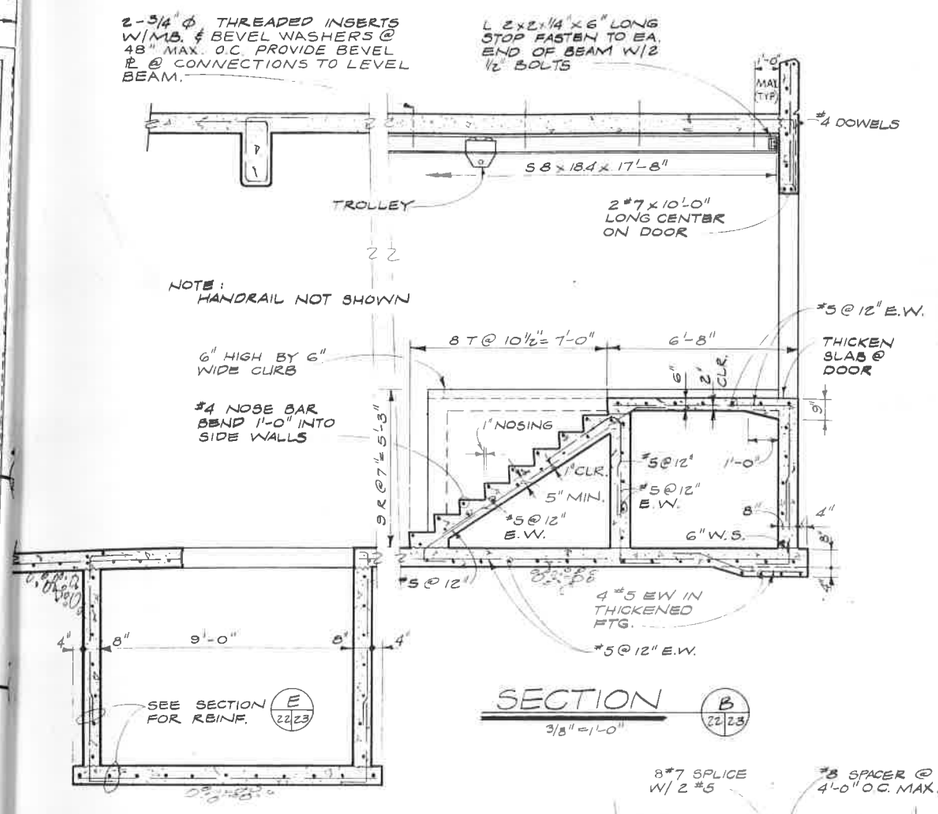
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

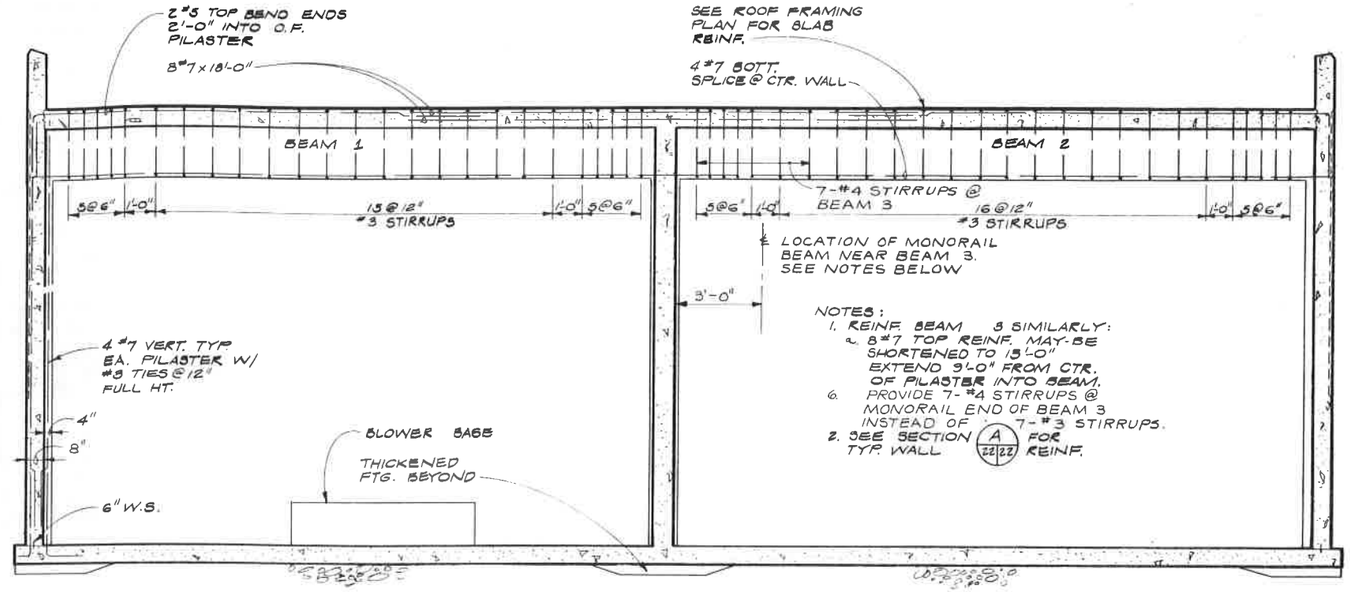
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

BLOWER BUILDING - STRUCTURAL - PLAN

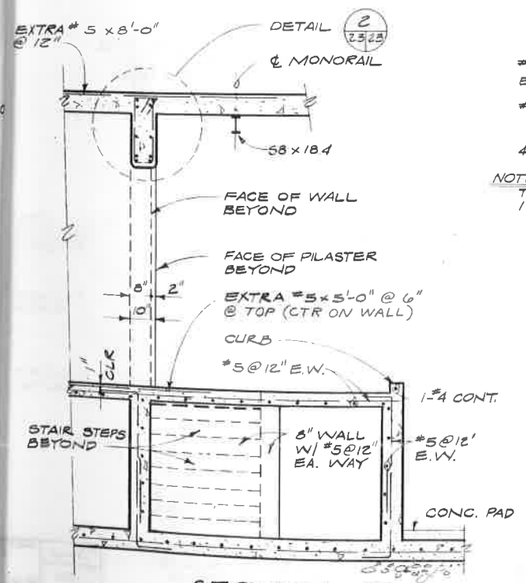
DES. GHD
DR. EE
CK. GFD
PM 27039.1
DRAWING C 70



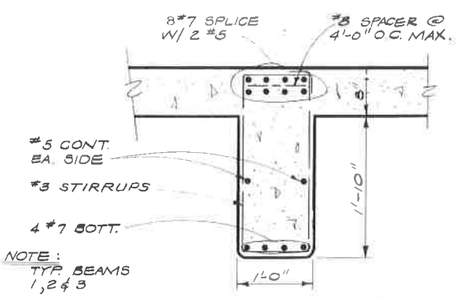
SECTION B 22/23
3/8" = 1'-0"



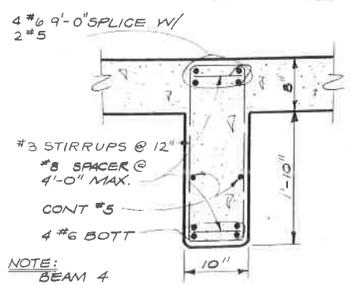
SECTION C 22/23
3/8" = 1'-0"



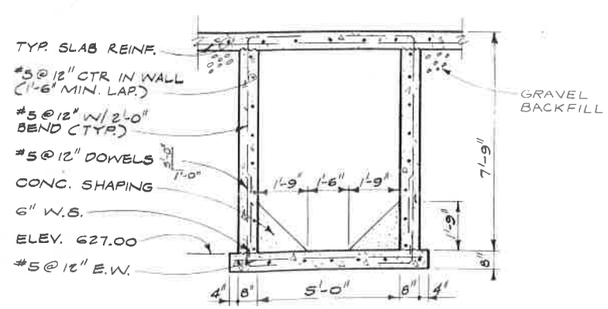
SECTION D 22/23
3/8" = 1'-0"



DETAIL 1 22/23
1" = 1'-0"



DETAIL 2 23/23
1" = 1'-0"



SECTION E 22/23
3/8" = 1'-0"

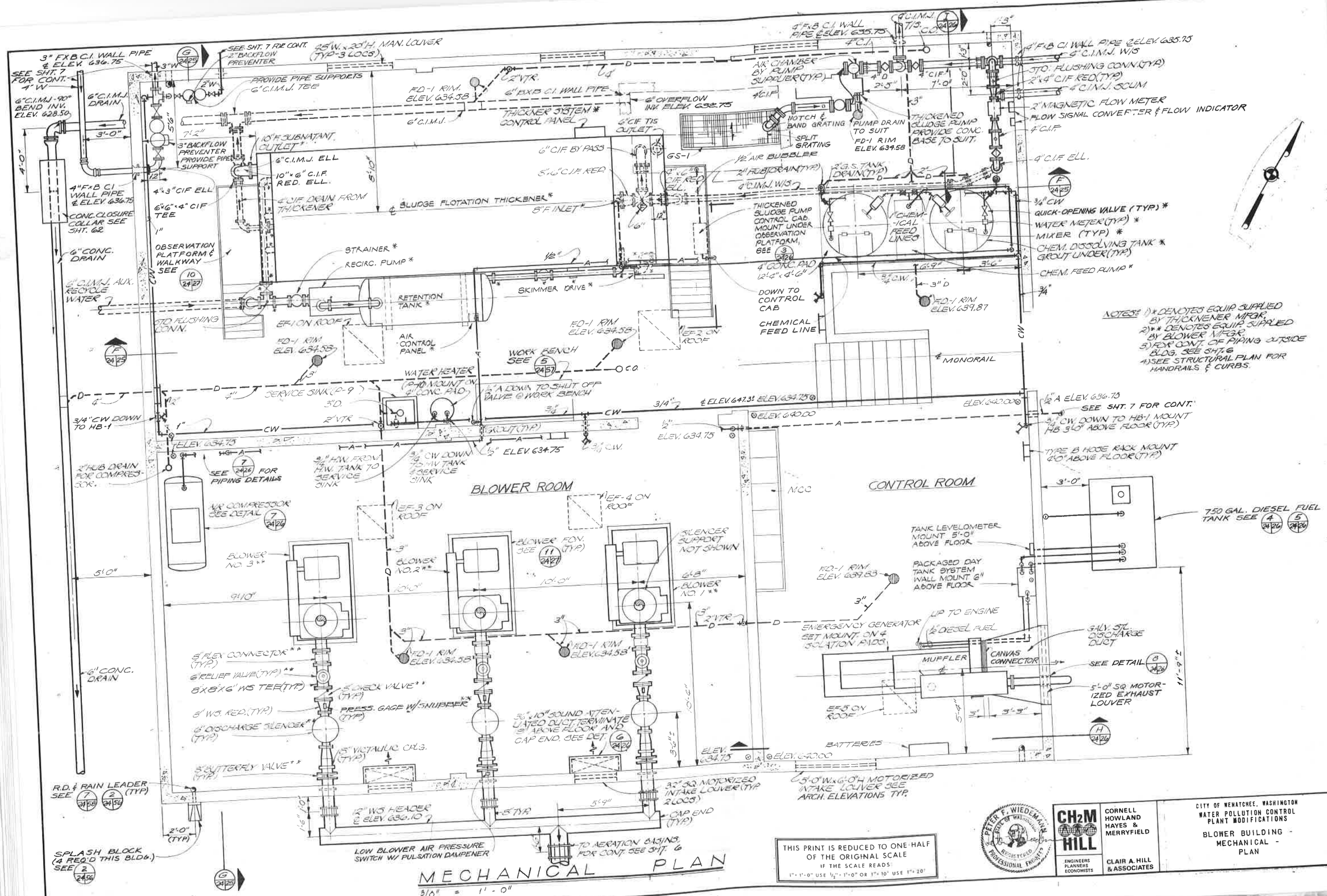
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

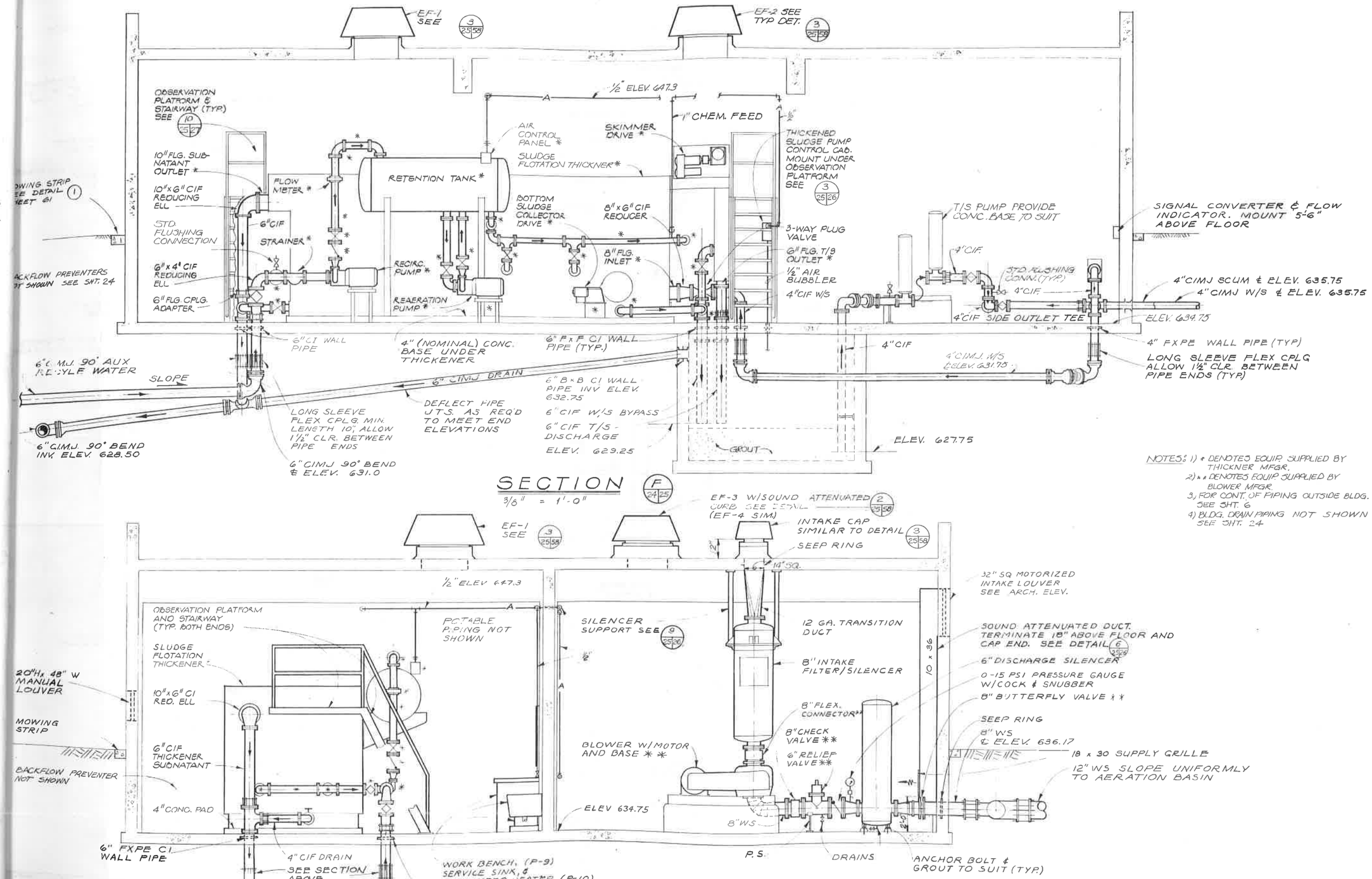
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
BLOWER BUILDING - STRUCTURAL - SECTIONS

DES BPE | DR RGB | CK GFD | RN 37039.1 | DRAWING NO. C 7039-1
SHEET 23 OF 78 | DATE JAN. 1973 | SCALE: AS SHOWN



MECHANICAL PLAN

3/8" = 1'-0"



SECTION F 24/25

3/8" = 1'-0"

NOTES: 1) * DENOTES EQUIP. SUPPLIED BY THICKNER MFGR.
2) ** DENOTES EQUIP SUPPLIED BY BLOWER MFGR.
3) FOR CONT. OF PIPING OUTSIDE BLDG. SEE SHT. 6
4) BLDG. DRAIN PIPING NOT SHOWN SEE SHT. 24

SECTION G 24/25

3/8" = 1'-0"

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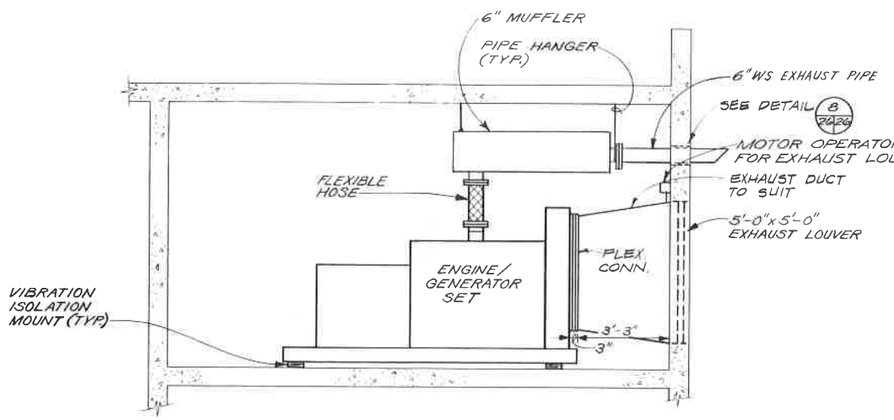
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

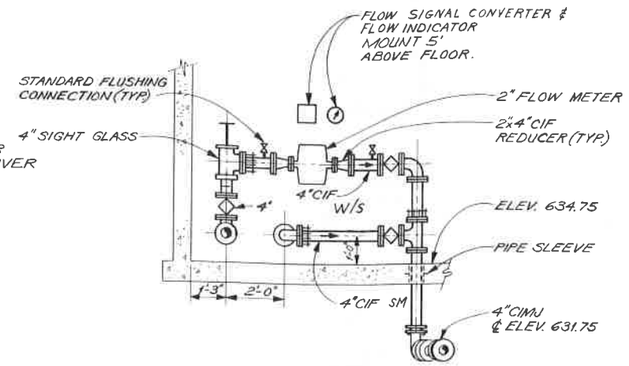
BLOWER BUILDING - MECHANICAL - SECTIONS

DES. PFW	SHEET 25
DR. BCC	OF 11
CK. GRG	DATE: JAN. 1973
RN 57039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



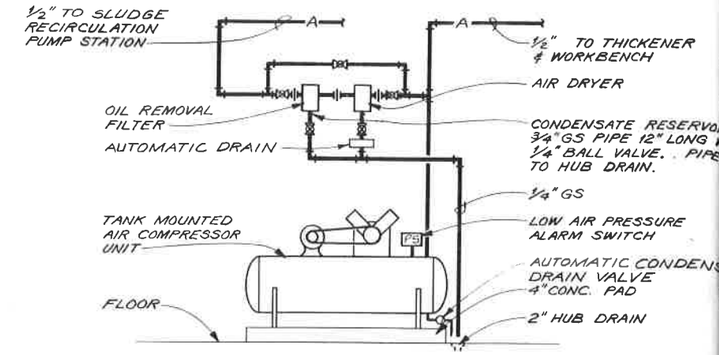
SECTION H 24 26

3/8" = 1'-0"



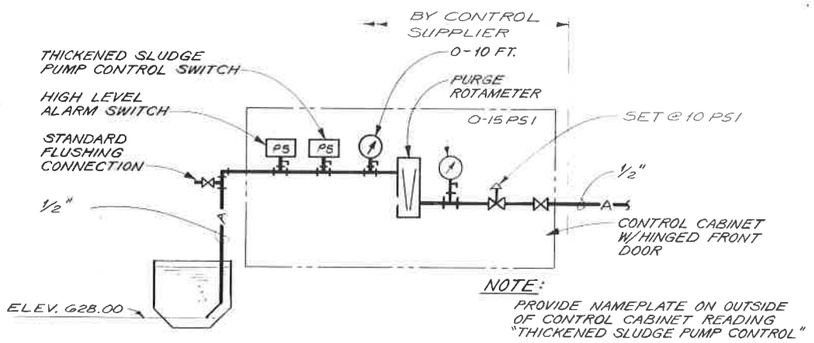
SECTION I 24 26

3/8" = 1'-0"



AIR COMPRESSOR DETAIL 7 24 26

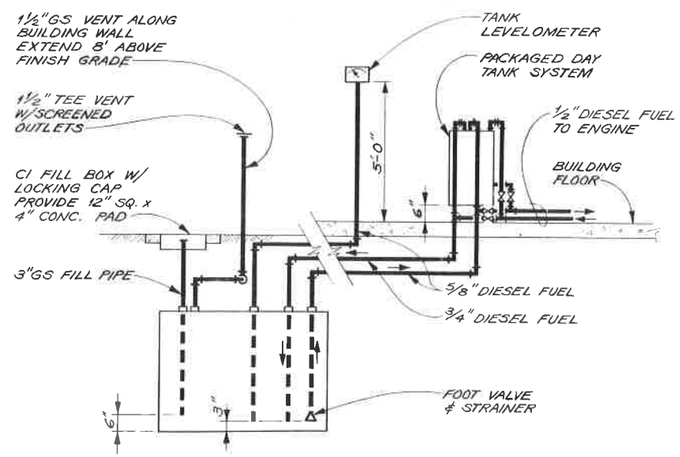
NTS



NOTE:
PROVIDE NAMEPLATE ON OUTSIDE OF CONTROL CABINET READING "THICKENED SLUDGE PUMP CONTROL"

THICKENED SLUDGE PUMP CONTROL 3 24 25 26

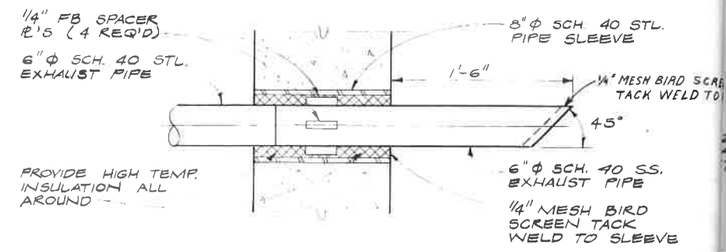
NTS



DIESEL FUEL TANK

SCHEMATIC 5 24 26

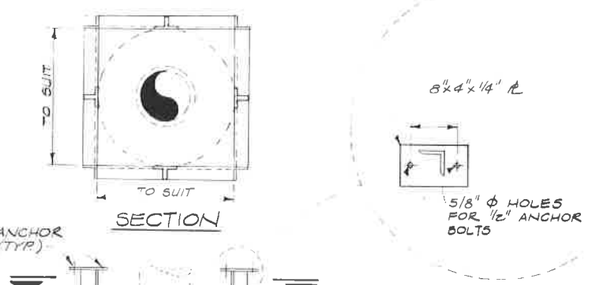
NTS



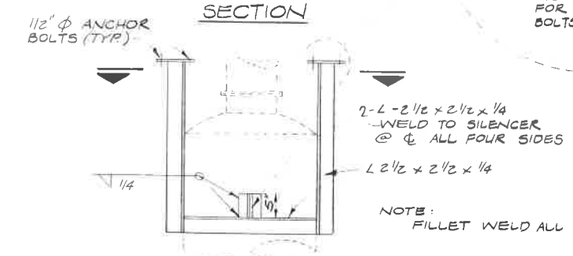
EXHAUST PIPE EXIT

DETAIL 8 24 26

NTS



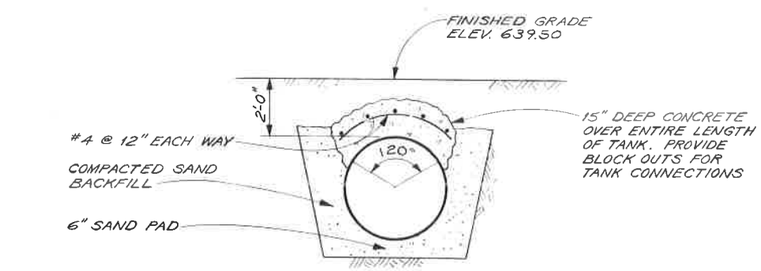
SECTION



NOTE:
FILLET WELD ALL JTS.

SILENCER SUPPORT DETAIL 9 25 26

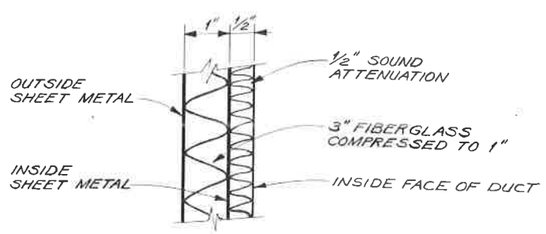
NTS



DIESEL FUEL TANK

DETAIL 4 24 26

NTS



DETAIL 6 24 25 26

NTS

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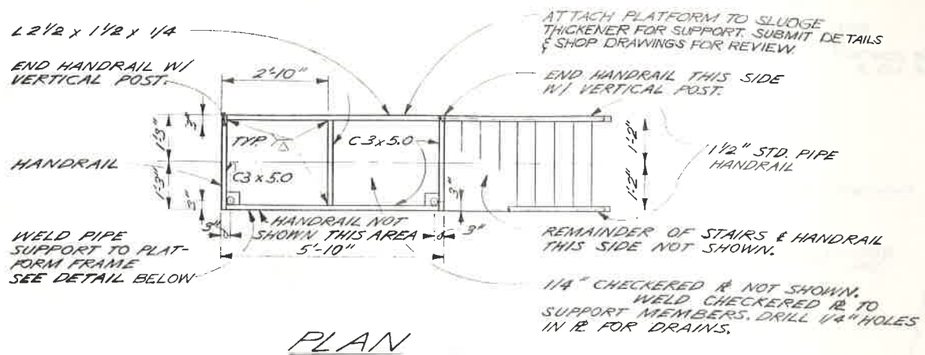
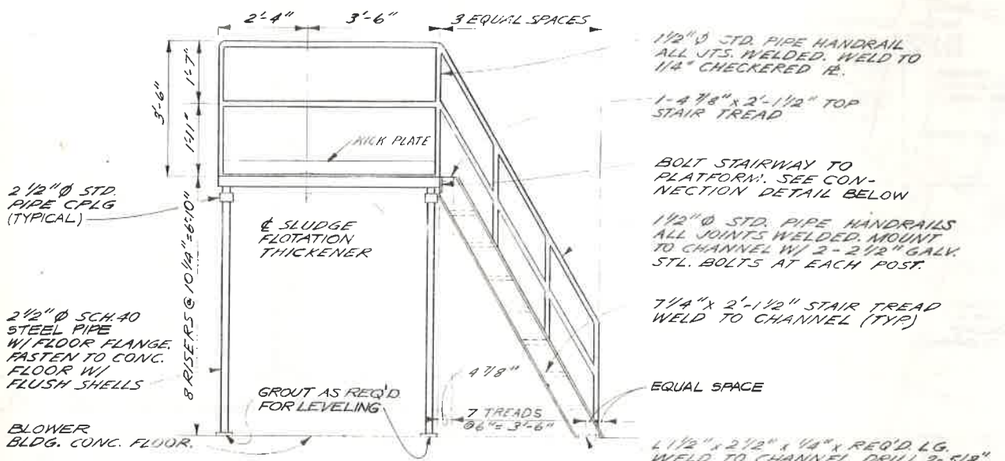
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL ENGINEERS PLANNERS ECONOMISTS	CORNELL HOWLAND HAYES & MERRYFIELD CLAIR A HILL & ASSOCIATES	CITY OF WENATCHEE, WASHINGTON WATER POLLUTION CONTROL PLANT MODIFICATIONS BLOWER BUILDING - MECHANICAL - SECTIONS AND DETAILS	DES PFW DR RAH CK SRG RN 7039.1 DRAWING NO C 7039-



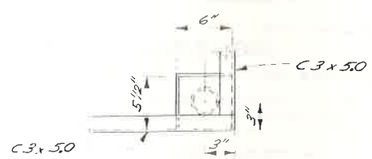
PLAN
1/2" = 1'-0"



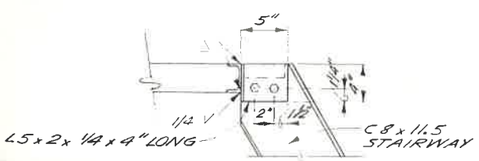
NOTES:
1. MAKE ONE OBSERVATION PLATFORM & STAIRWAY, AS SHOWN, FOR SUBNATANT OUTLET END OF THICKENER.
2. MAKE ONE OBSERVATION PLATFORM, SIMILAR TO THAT SHOWN, FOR SLUDGE DISCHARGE END OF THICKENER.
3. PAINT OBSERVATION PLATFORM, SUPPORTS & HANDRAIL AS PER SPECIFICATIONS

SIDE ELEVATION
1/2" = 1'-0"

PLAN

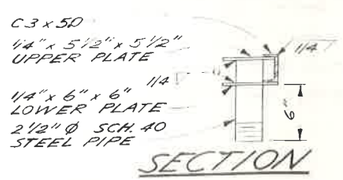


PLAN



ELEVATION

CONNECTION DETAIL
1 1/2" = 1'-0"

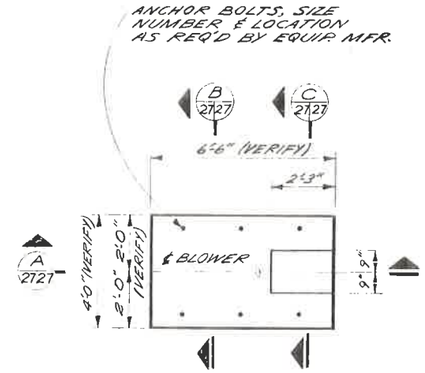


SECTION

PLATFORM PIPE SUPPORT DETAIL
1 1/2" = 1'-0"

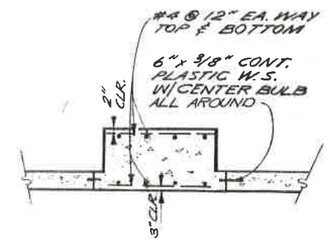
OBSERVATION PLATFORM & STAIRWAY (10) 24 25 27

NOTE:
ALL DIMENSIONS SHALL BE AS REQ'D TO SUIT BLOWER. VERIFY W/ EQUIP. MFR.

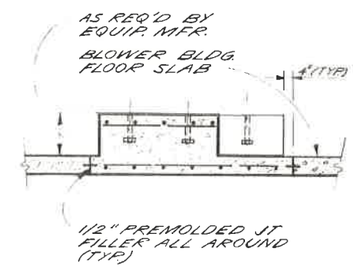


PLAN

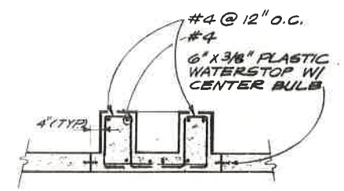
A.B. NOT SHOWN THIS VIEW



SECTION (B) 27 27



SECTION (A) 27 27



NOTE:
A.B. NOT SHOWN THIS VIEW.

SECTION (C) 27 27

BLOWER FOUNDATION DETAIL (11) 22 24 27
3/8" = 1'-0"

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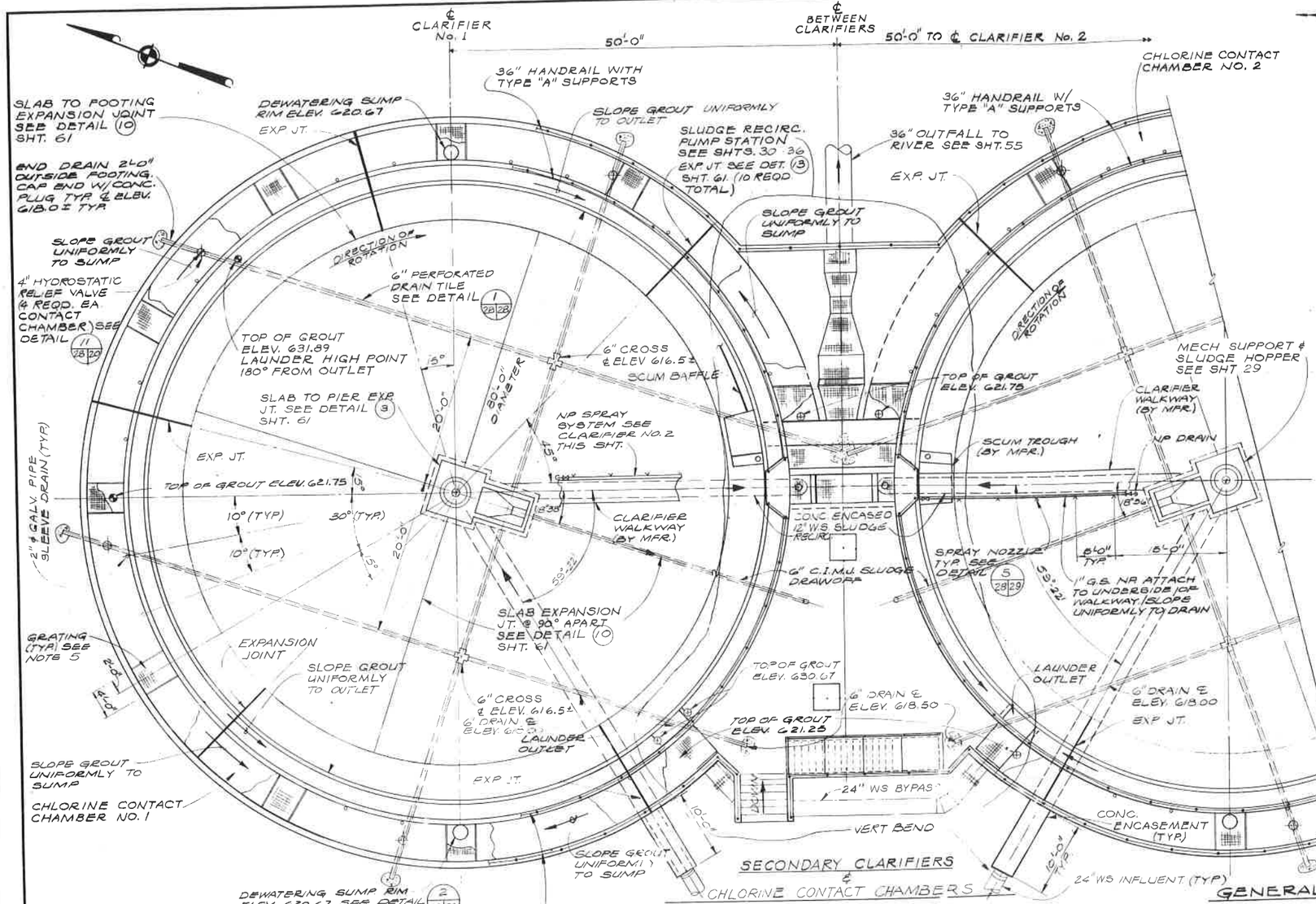
CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
BLOWER BUILDING - MECHANICAL - DETAILS

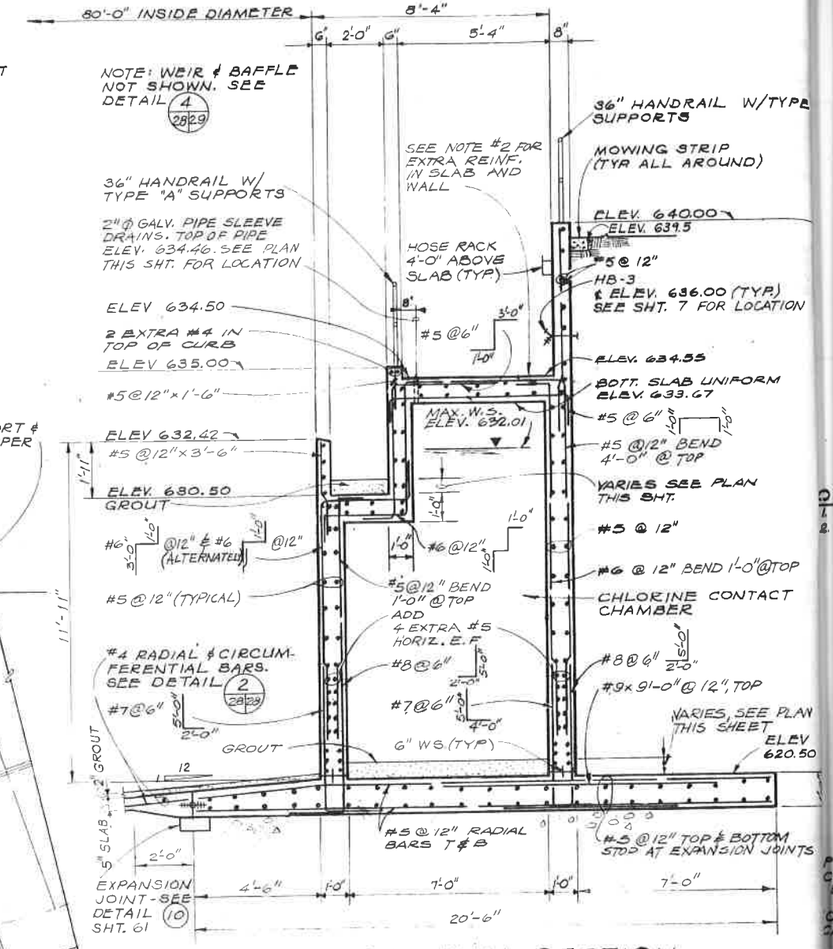
DES PFW
DR BRB
CK GRG
PIN 37039.1
SHEET 27 OF 28
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1



SECONDARY CLARIFIERS & CHLORINE CONTACT CHAMBERS

PLAN

1/8" = 1'-0"



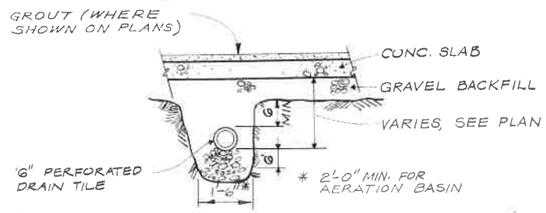
TYPICAL WALL SECTION

3/8" = 1'-0"

GENERAL NOTES

1. SEE SHT. 61 FOR GENERAL STRUCTURAL NOTES.
2. PROVIDE EXTRA REINF. IN CHLORINE CONTACT CHAMBERS TOP SLAB AND 12" LAUNDER WALL @ EA. SIDE OF 2'-0" WIDE GRATING OPNGS AS FOLLOWS:

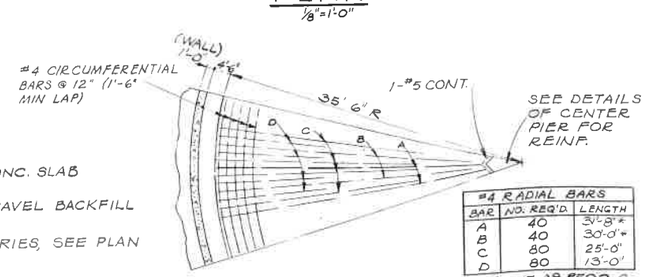
   12 EXTRA BARS @ EA. OF 8 OPNGS IN EA. CLARIFIER
   - ADD 2-EXTRA #7 ? BOTT OF SLAB
   - ADD 2-EXTRA #7 3'-0" @ TOP OF SLAB. BEND INTO EXTERIOR FACE OF LAUNDER WALL & EXTERIOR CONTACT CHAMBER WALL.
   - ADD 2 #7 @ I.F. OF LAUNDER & EXT. CONTACT CHAMBER WALL & EXTEND INTO TOP OF SLAB
3. GROUND WATER OBSERVATION WELLS NOT SHOWN. SEE SHT. 3
4. SEE DETAIL (13) ON SHT 61 FOR WATERSTOP SPLICES @ TYP. EXP. JT.
5. GRATING SUPPORTS SHALL BE GS-1 SEE SHT. 64 FOR DETAIL.
6. PLUMBING AND MISC PIPING NOT SHOWN SEE SHTS 6,7 & 33



TYPICAL UNDERDRAIN SYSTEM

DETAIL (1)

N.T.S. 15 | 13 28 29 28



#4 RADIAL BARS		
BAR	NO. REQ'D.	LENGTH
A	40	35'-8"*
B	40	30'-0"*
C	80	25'-0"
D	80	13'-0"

* CUT AS REQD. @ CENTER PIER

CLARIFIER SLAB REINFORCING

DETAIL (2)

NTS

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1" × 1'-0" USE 1/2" × 1'-0" OR 1" × 10' USE 1" = 20'

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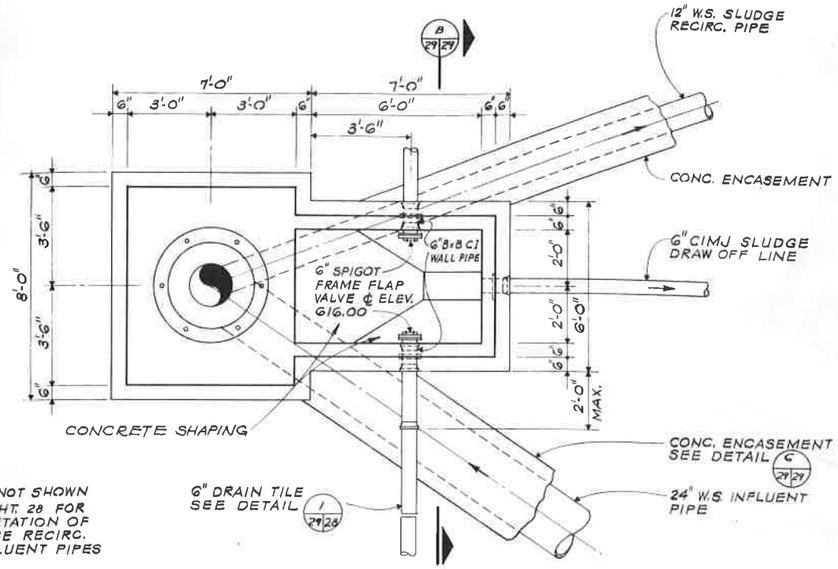
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

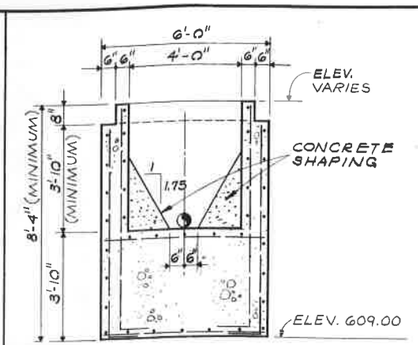
SECONDARY CLARIFIERS AND CHLORINE CONTACT CHAMBERS - PLAN AND SECTION

DES JGG
DR BCC
CK GRG
FN 37039.1
DRAWING NO. C 7039-1

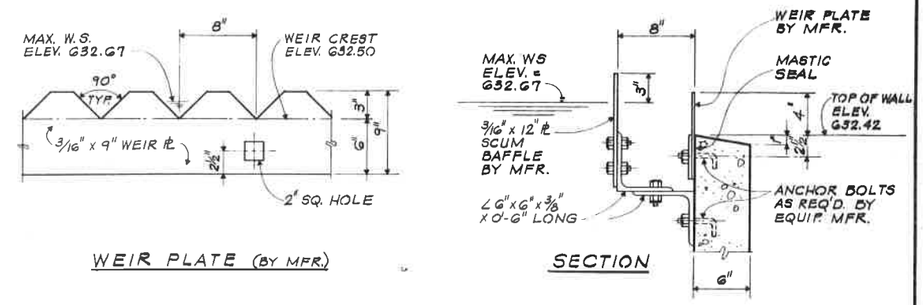


NOTE:
1. SLAB NOT SHOWN
2. SEE SHT. 28 FOR ORIENTATION OF SLUDGE RECIRC. & INFLUENT PIPES

PLAN
3/8" = 1'-0"



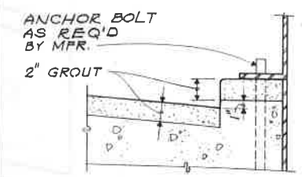
SECTION B 29/29
3/8" = 1'-0"



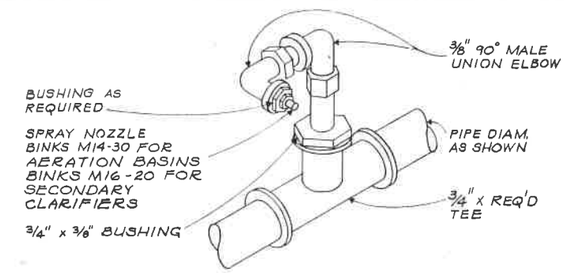
WEIR PLATE (BY MFR.)

SECTION

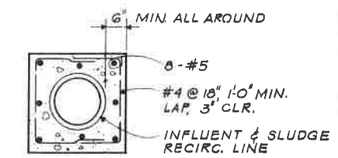
BAFFLE & WEIR PLATE DETAIL 4 28/29
1-1/2" = 1'-0"



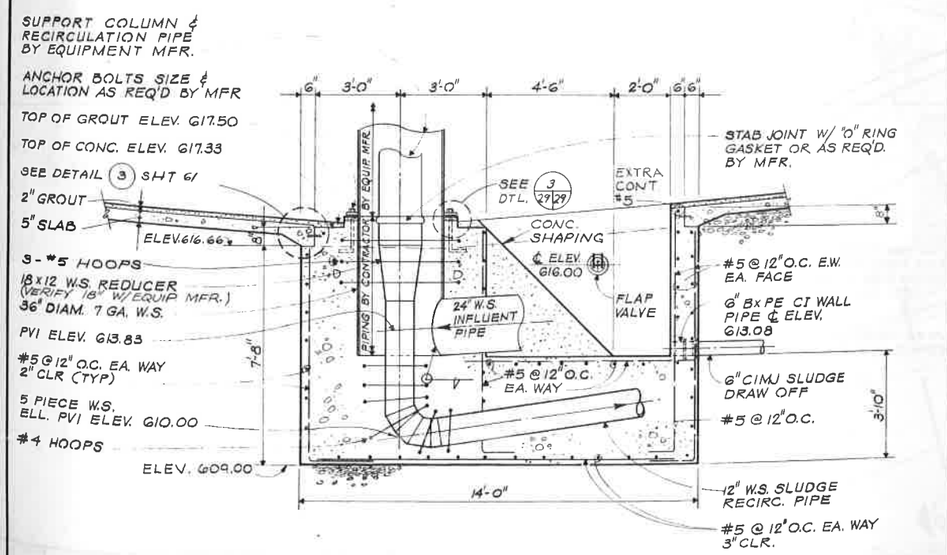
DETAIL 3 29/29
1½" = 1'-0"



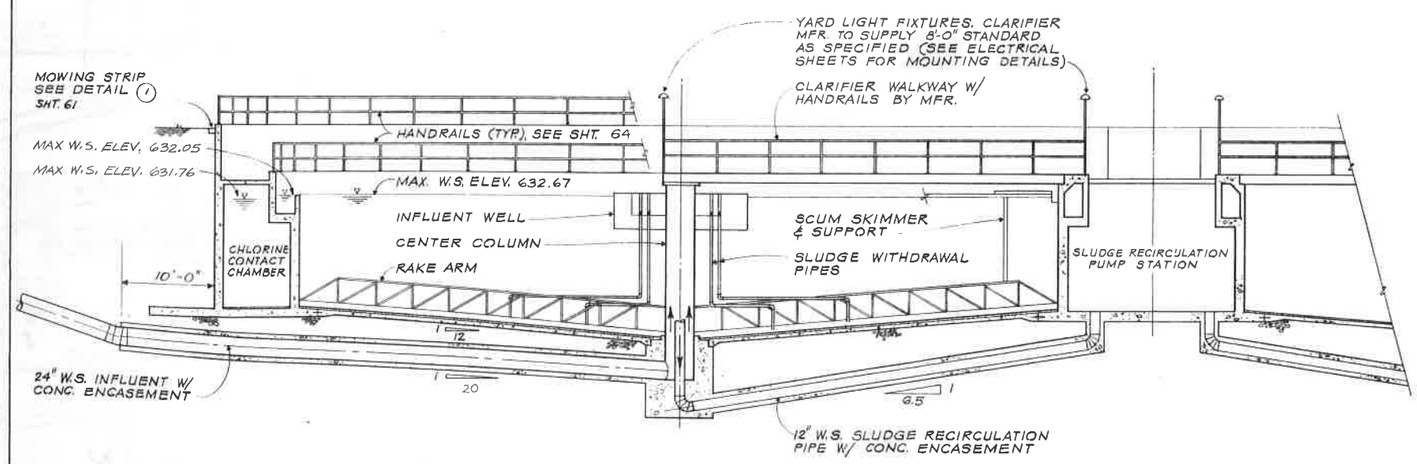
SPRAY NOZZLE DETAIL 5 19/28/29
N.T.S.



PIPE ENCASEMENT DTL. 6 29/29
N.T.S.



COMPOSITE SECTION
MECHANISM SUPPORT & SLUDGE HOPPER
3/8" = 1'-0"



COMPOSITE TRANSVERSE SECTION
1/8" = 1'-0"

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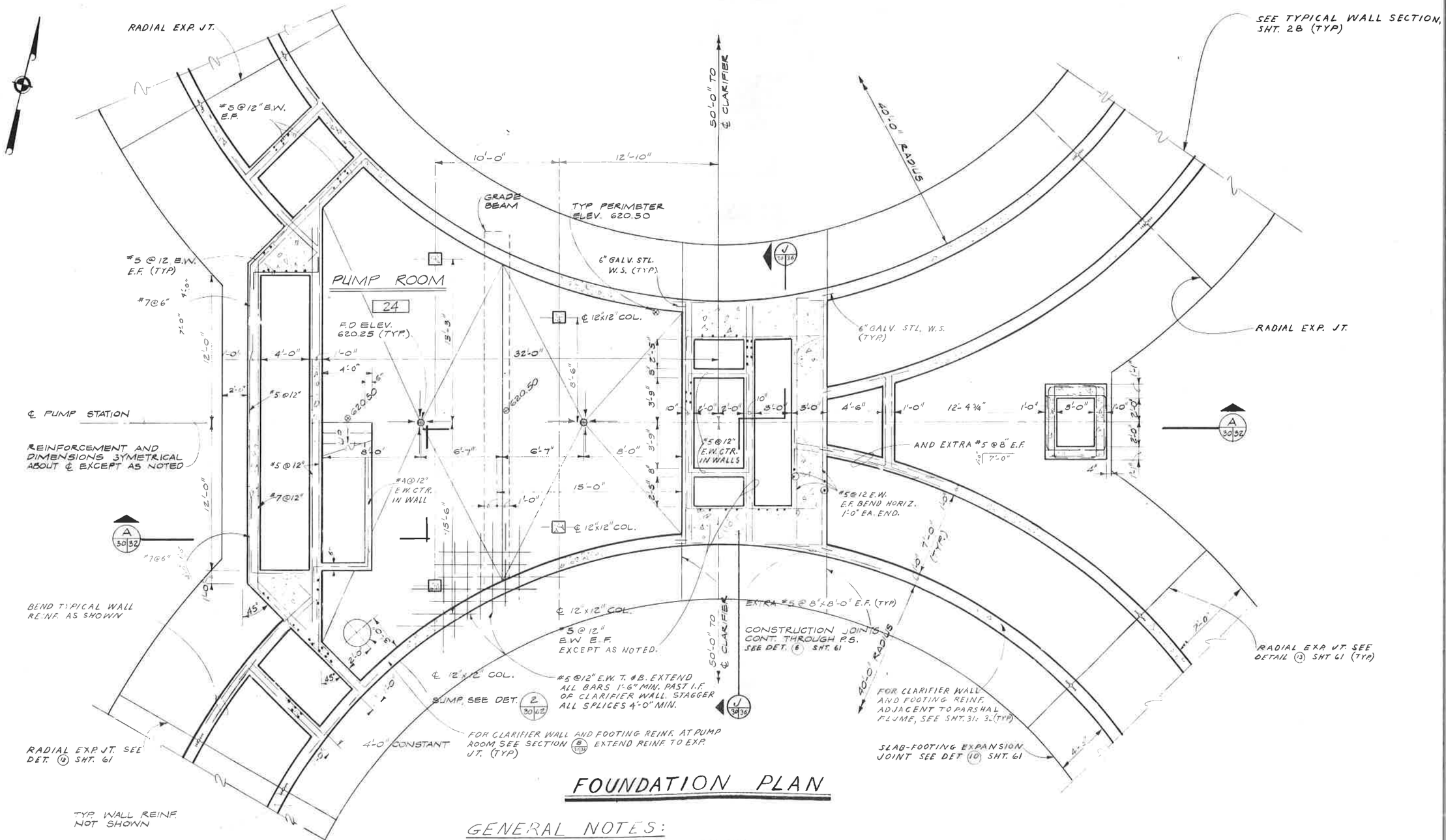
WATER POLLUTION CONTROL PLANT MODIFICATIONS
SECONDARY CLARIFIERS AND CHLORINE CONTACT CHAMBERS - SECTIONS AND DETAILS

DES JGG | DR | CK GRG | SHEET 29 | OF 78 | DATE JAN. 1973 | SCALE: AS SHOWN | CONTRACT NO. C 7039-1



FOUNDATION PLAN

GENERAL NOTES:

1. SEE SHT. 61 FOR GENERAL STRUCTURAL NOTES & DETAILS
2. SEE SECTIONS, FOR EXTRA SLAB REINF. AT GRADE BEAM & FOR DOWEL REINF.

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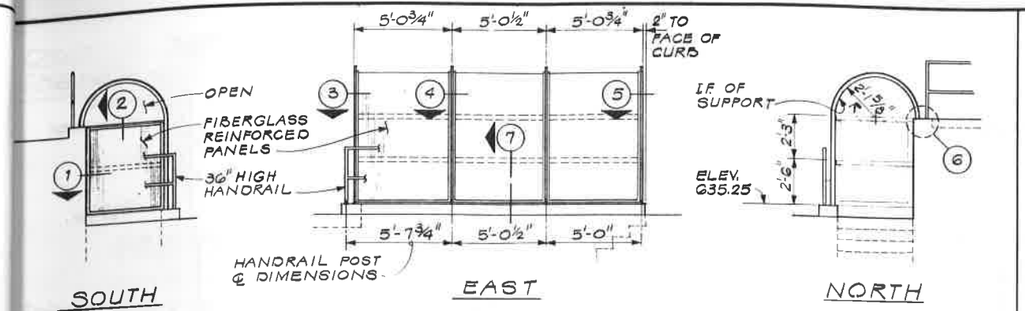
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

SLUDGE RECIRCULATION PUMP STATION - STRUCTURAL - FOUNDATION PLAN

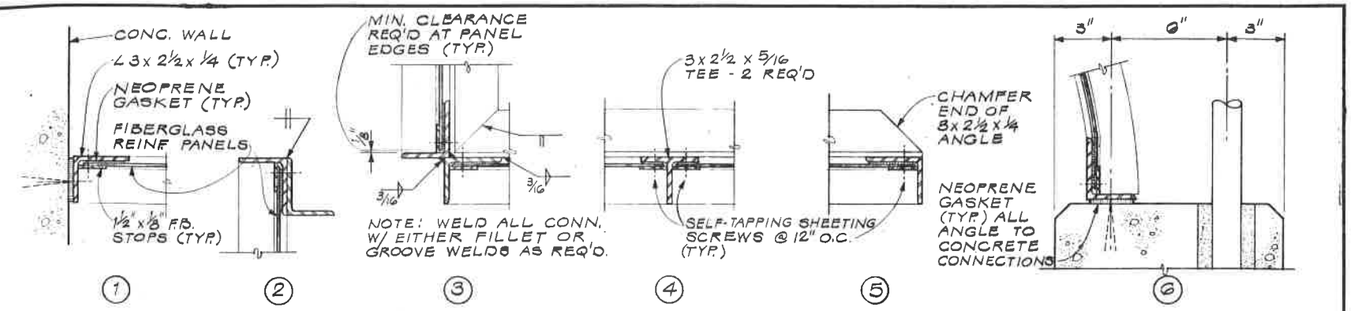
DES
DR
CK
FN
STD
DWG
C



STAIRWELL COVER ELEVATIONS

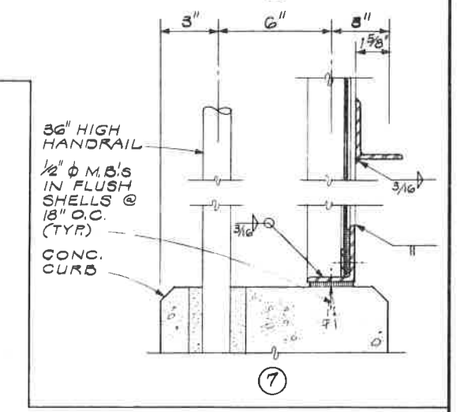
1/4" = 1'-0"

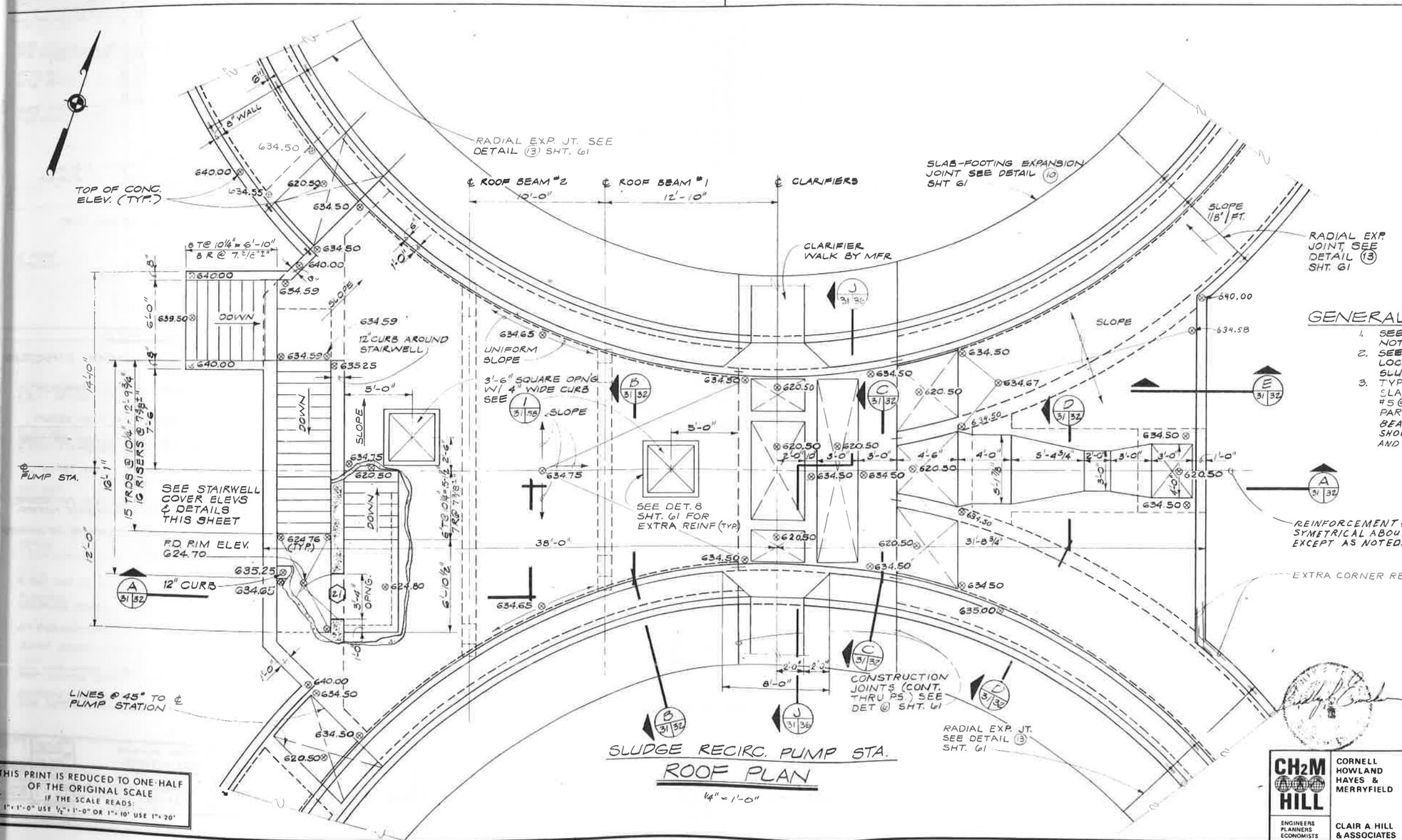
NOTE: SEE SHT. 34 FOR PLAN OF STAIRWELL COVER



STAIRWELL COVER DETAILS

3" = 1'-0"





SLUDGE RECIRC. PUMP STA. ROOF PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHT. 61 FOR GENERAL STRUCTURAL NOTES.
2. SEE MECH. ROOF PLAN, SHT. 34 FOR LOCATION OF GRATING, HANDRAIL, AND SLUICE GATE LIFTS.
3. TYPICAL REINF. IN ROOF SLAB OF PS. & IN SLAB ADJACENT TO PARSHAL FLUME IS #5 @ 12" E.W. TOP & BOTT. PLACE REINF. PARALLEL AND PERPENDICULAR TO ROOF BEAMS. PROVIDE ADDITIONAL REINF. AS SHOWN. SPLICE BOTT. REINF. AT SUPPORTS AND TOP REINF. AT ℄ SPANS.

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS: 1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

DES.	BPE
DR.	RGB
CK.	GFD
RN.	27039.1
DRAWING NO.	C 7039-

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

SLUDGE RECIRCULATION PUMP STATION - STRUCTURAL - ROOF PLAN

DES.	BPE
DR.	RGB
CK.	GFD
RN.	27039.1
DRAWING NO.	C 7039-1
SHEET	31
OF	78
DATE	JAN. 1973
SCALE	AS SHOWN

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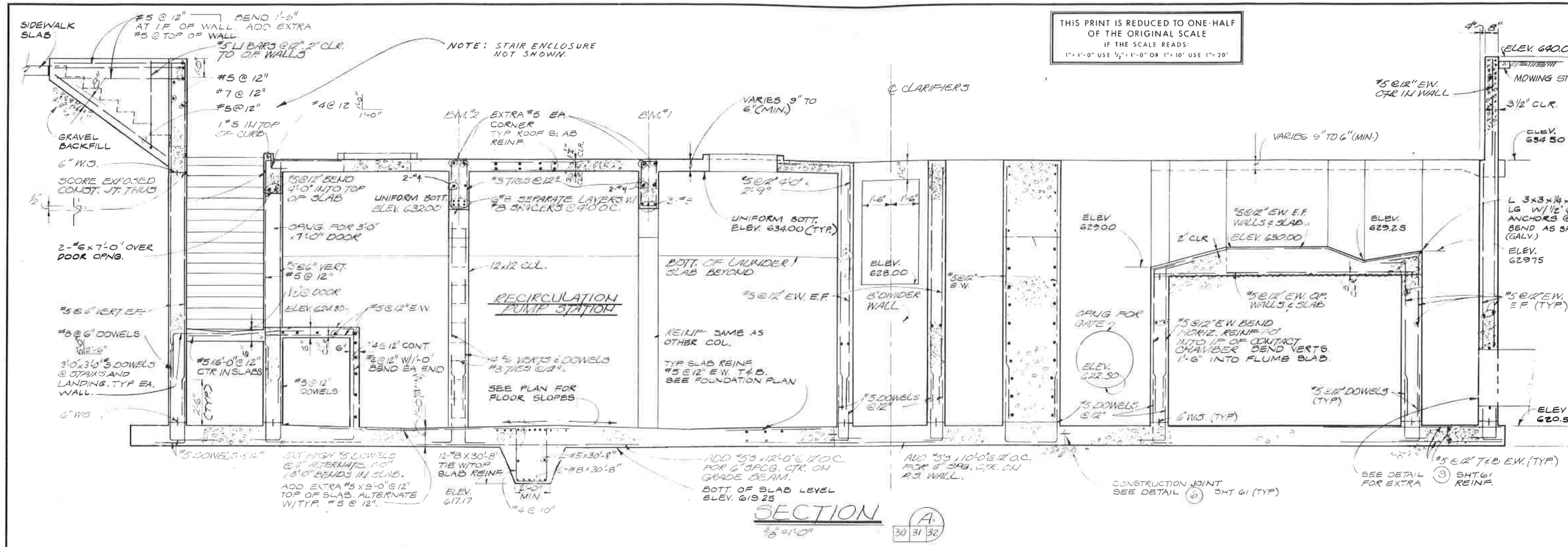
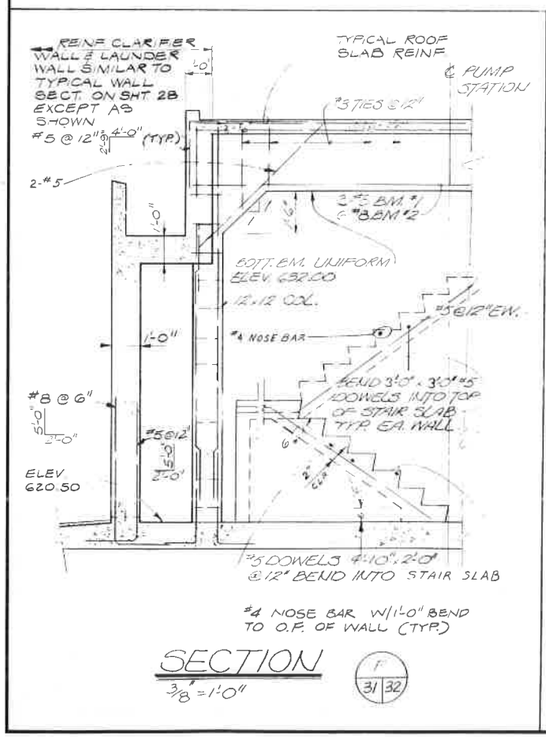
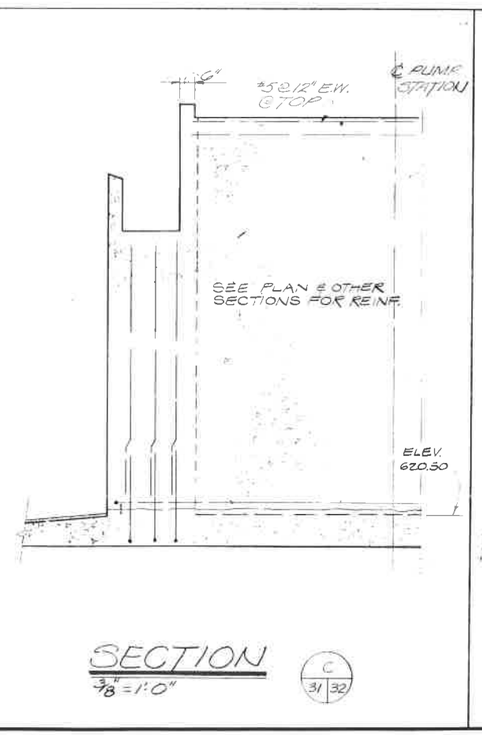
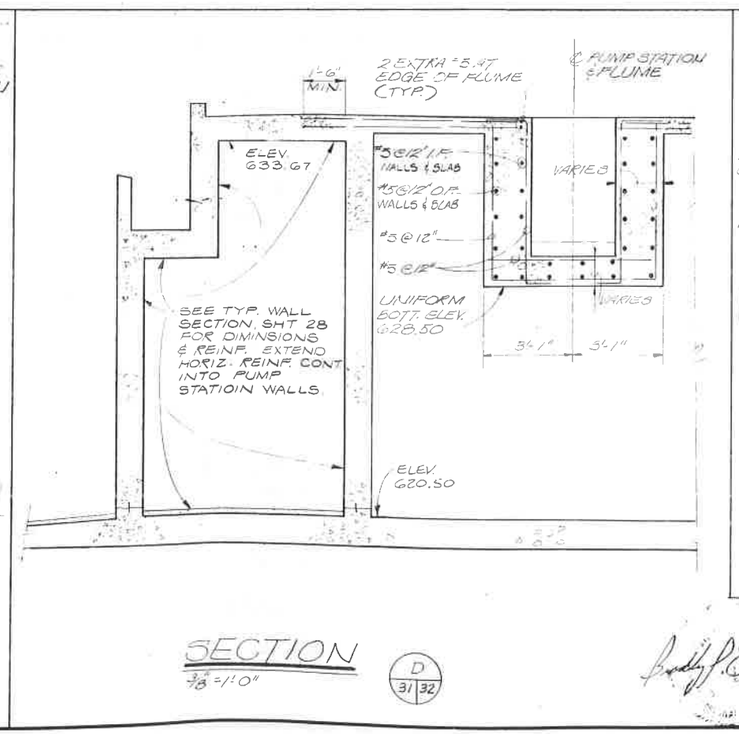
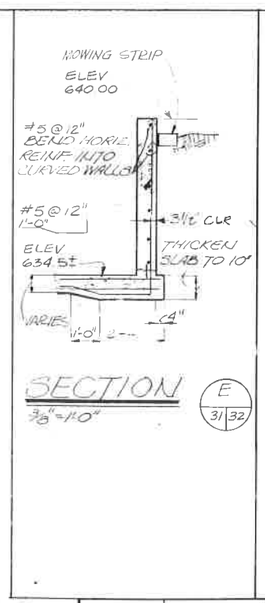










GENERAL NOTES:

1. SEE SHT 61 FOR GENERAL STRU NOTES & DETAILS.
2. SEE FDN PLAN FOR TYP. FLOO SLAB REINF.
3. SEE ROOF PLAN FOR TYP. REIN
4. CLARIFIER CONTACT CHAMBER SECT SEE SHT 28 FOR TYP. WALL REINF.
5. TYP. DOWEL HEIGHT 2'-6" ABOVE TOP OF SLAB UNLESS OTHERWISE NOTED.
6. PLACE VERT. REINF. OUTSIDE OF H TYP. ALL WALLS UNLESS OTHERWISE NOT
7. PROVIDE ¾" CHAMFER SCORING AT C CONST. JOINTS.

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

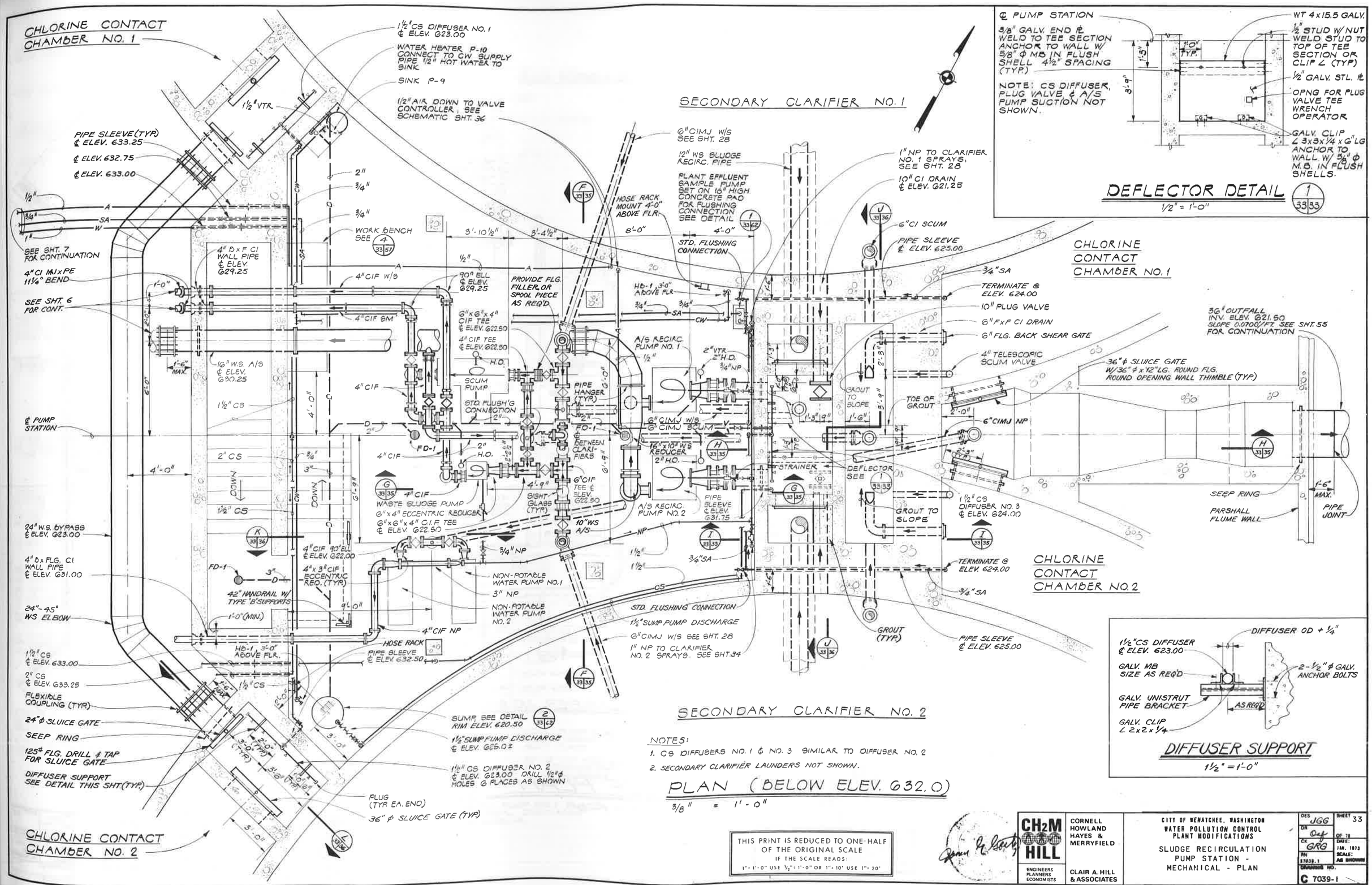
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

SLUDGE RECIRCULATION PUMP STATION - STRUCTURAL - SECTIONS

DES BFE
DR WLC
CK GFD
FIN
8T039.1
DRAWING
C 703



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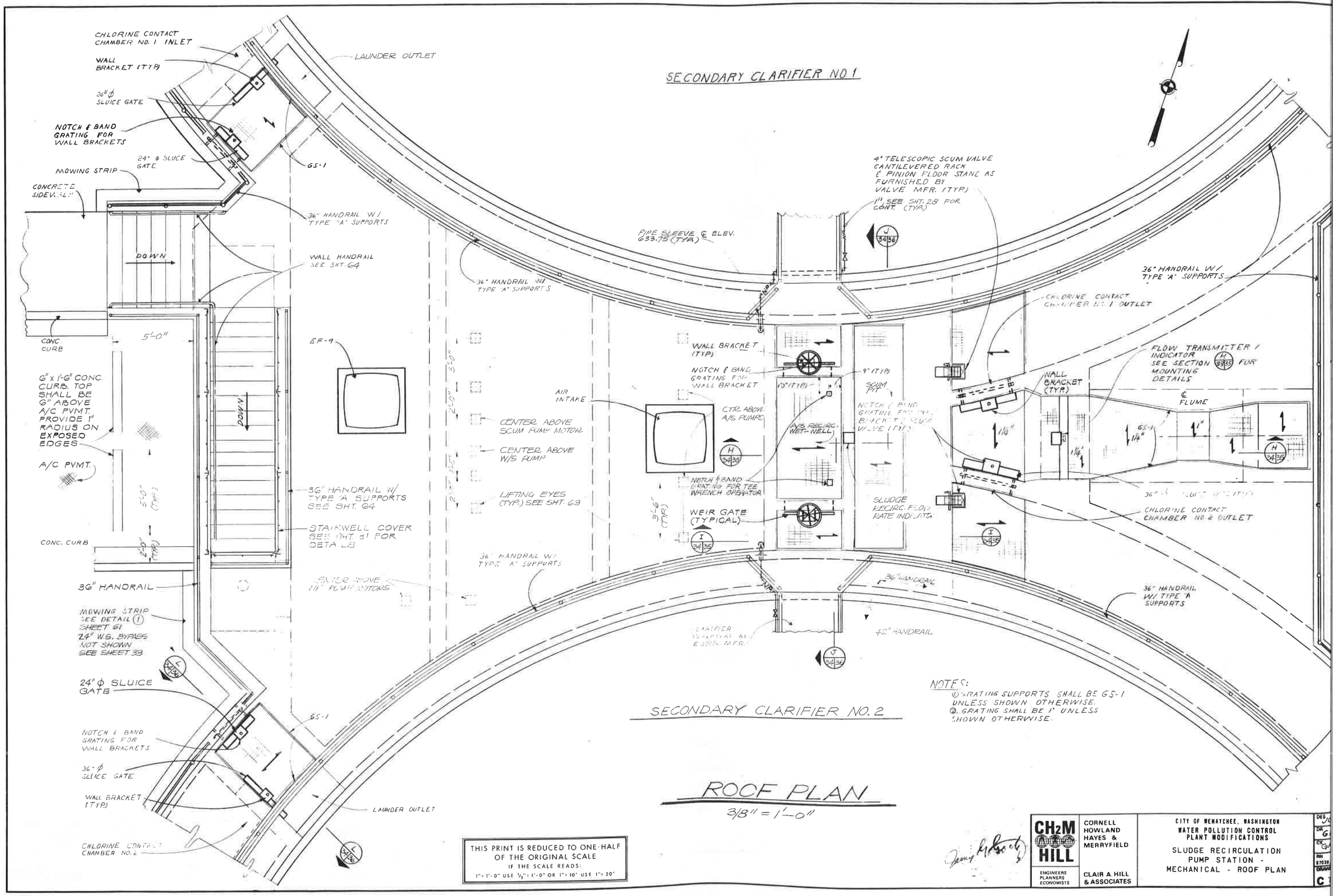
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
SLUDGE RECIRCULATION PUMP STATION - MECHANICAL - PLAN

DES JGG | DR Cef | CK GRG | IN 17039.1 | SHEET 33 OF 78 | DATE JAN. 1973 | SCALE AS SHOWN | DRAWING NO. C 7039-1



NOTES:
1. GRATING SUPPORTS SHALL BE GS-1 UNLESS SHOWN OTHERWISE.
2. GRATING SHALL BE 1" UNLESS SHOWN OTHERWISE.

ROOF PLAN

3/8" = 1'-0"

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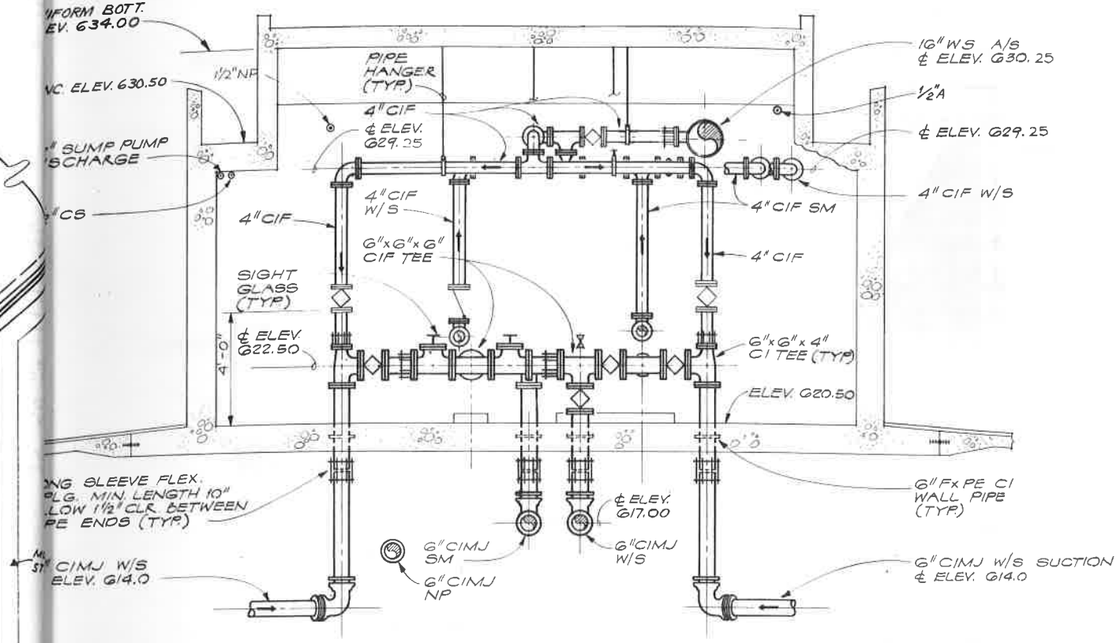
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

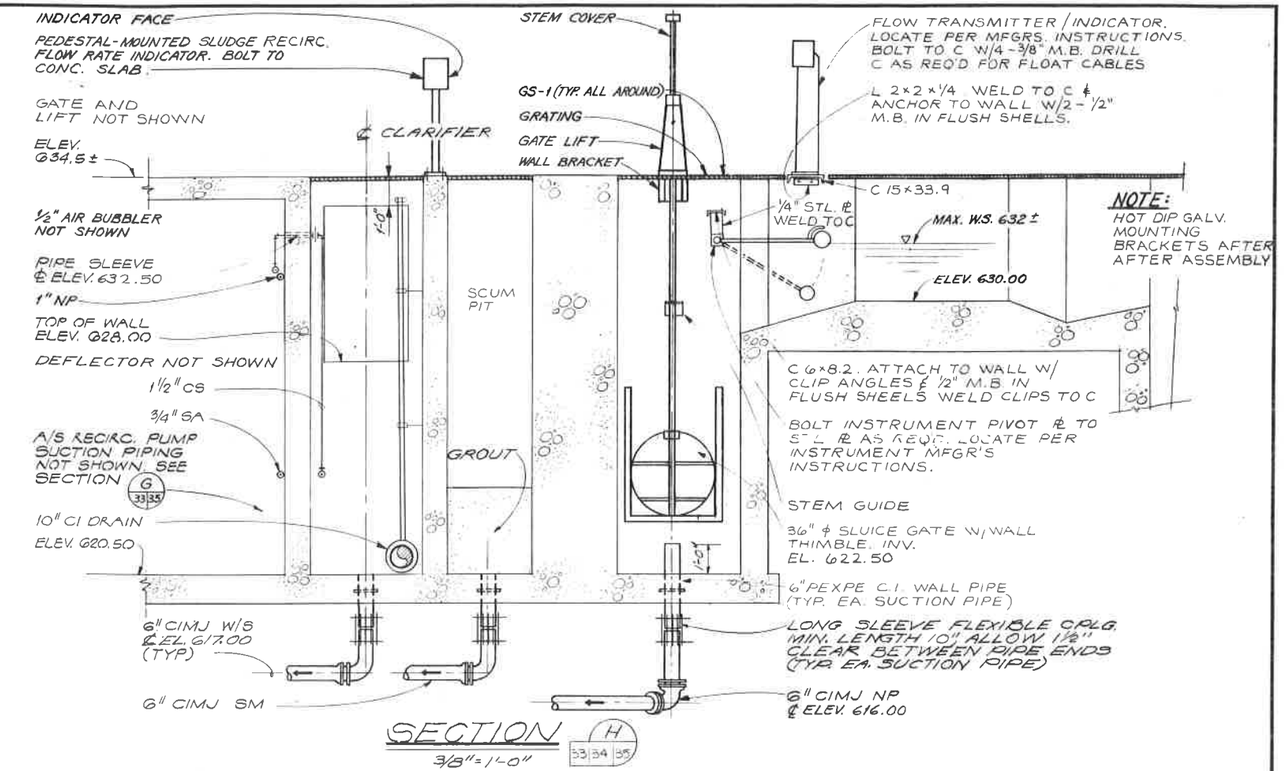
SLUDGE RECIRCULATION PUMP STATION - MECHANICAL - ROOF PLAN

DES. J/C
DR. G
CK. G
RN 87039
DRAWING C



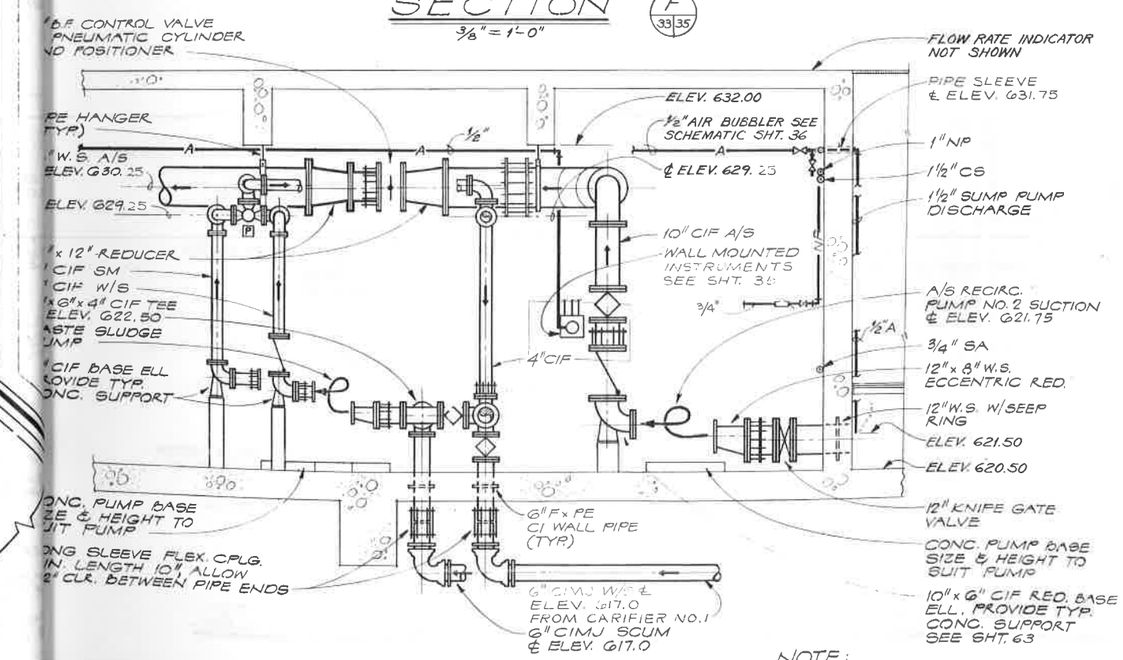
SECTION F (33|35)

3/8" = 1'-0"



SECTION H (33|34|35)

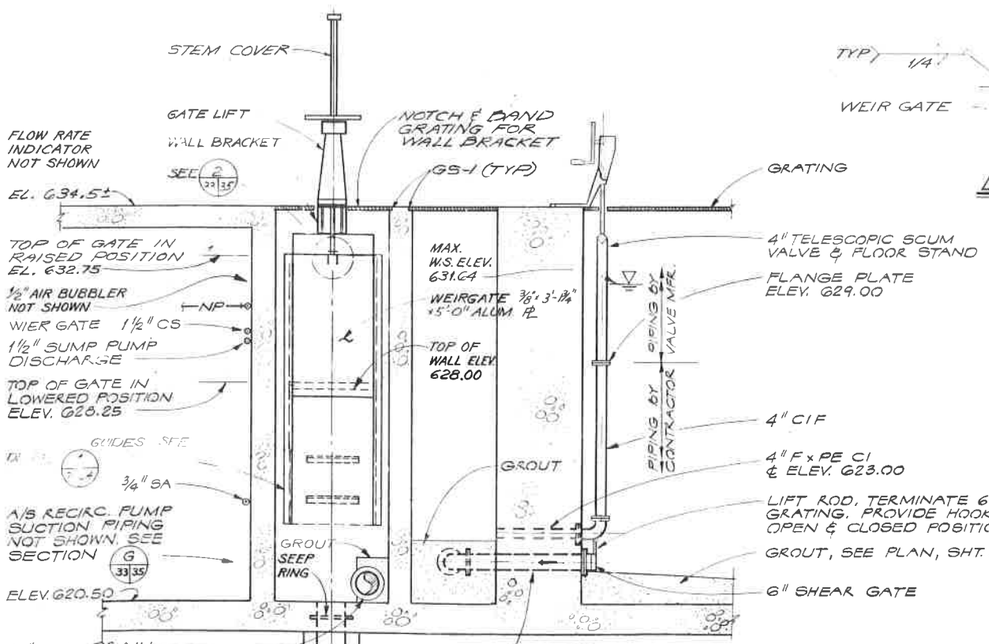
3/8" = 1'-0"



NOTE:
A/S RECIRC. PUMP NO. 1 SUCTION AND VERTICAL DISCHARGE PIPING SIMILAR.

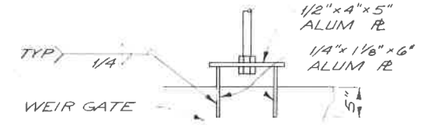
SECTION G (33|35)

3/8" = 1'-0"



SECTION I (33|34|35)

3/8" = 1'-0"



DETAIL 2 (35|35)

NTS

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DES	JGG
DR	GEN
CK	GRG
RN	87039.1
DRAWING NO.	C 7039-

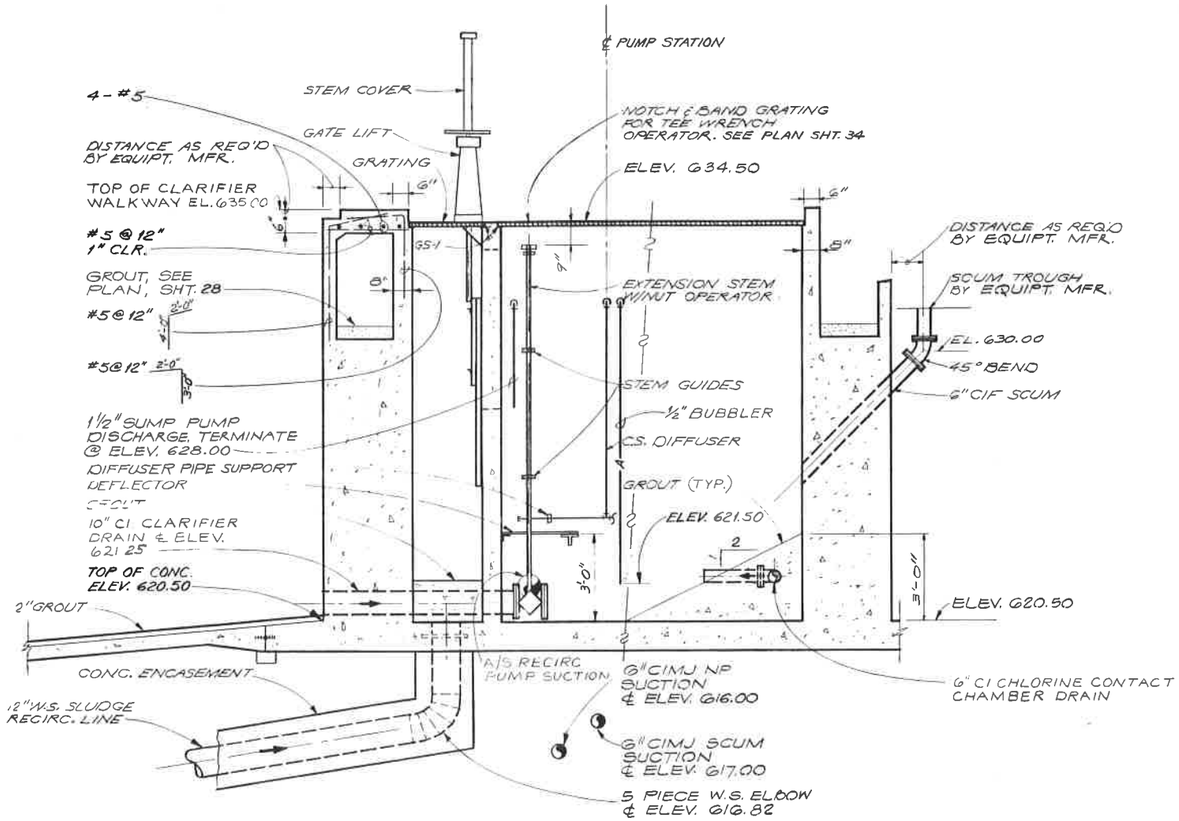
CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD — CLAIR A. HILL & ASSOCIATES

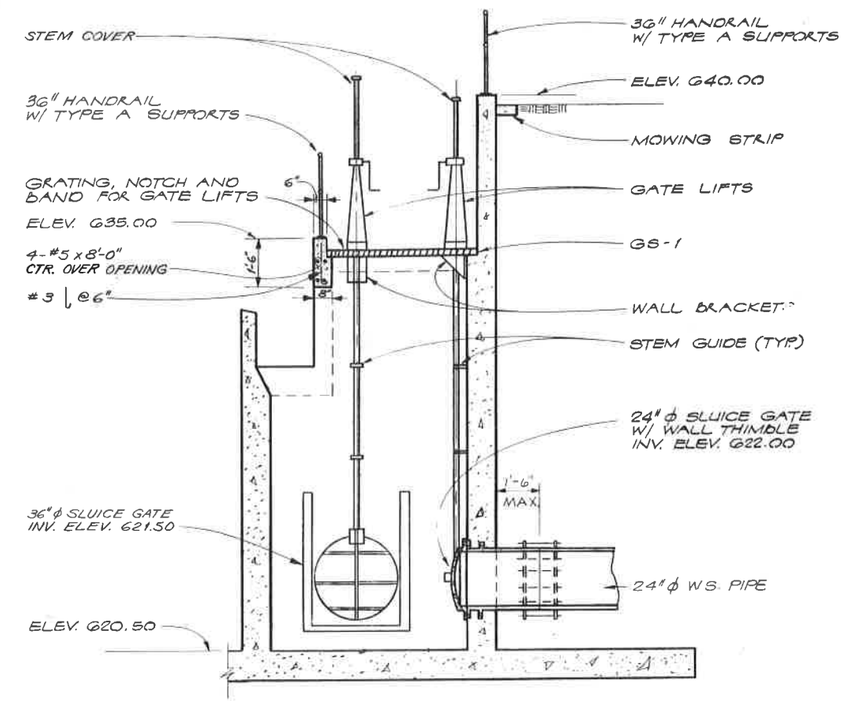
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

SLUDGE RECIRCULATION PUMP STATION - MECHANICAL - SECTIONS

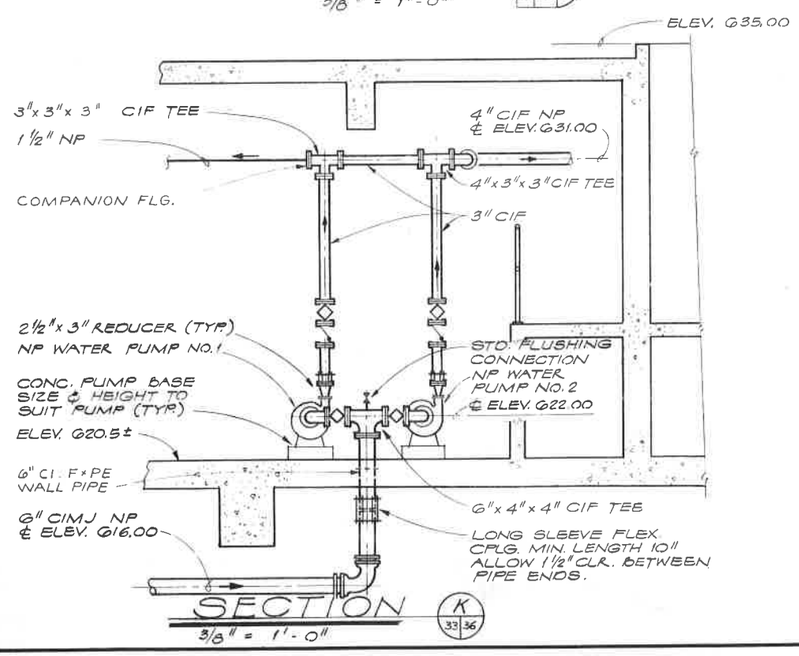
DES	JGG
DR	OAF
CK	GRG
RN	87039.1
DRAWING NO.	C 7039-1
SHEET	35
OF	38
DATE	JAN. 1973
SCALE	AS SHOWN



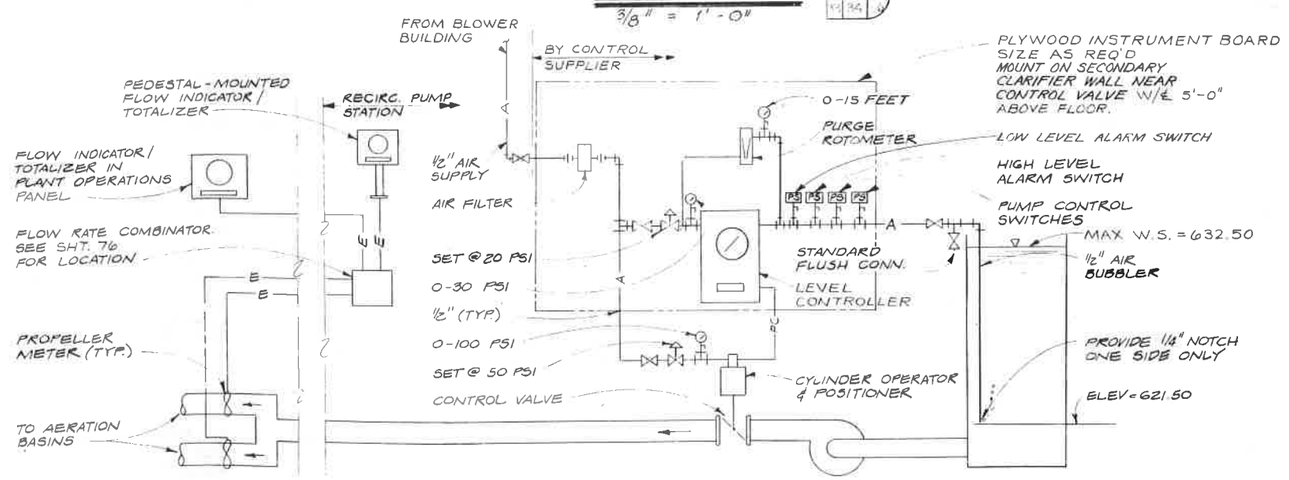
SECTION J (33 | 34 | 36)
3/8" = 1'-0"



SECTION L (33 | 34 | 36)
3/8" = 1'-0"



SECTION K (33 | 36)
3/8" = 1'-0"



ACTIVATED SLUDGE RECIRCULATION FLOW & CONTROL SCHEMATIC

N.T.S.

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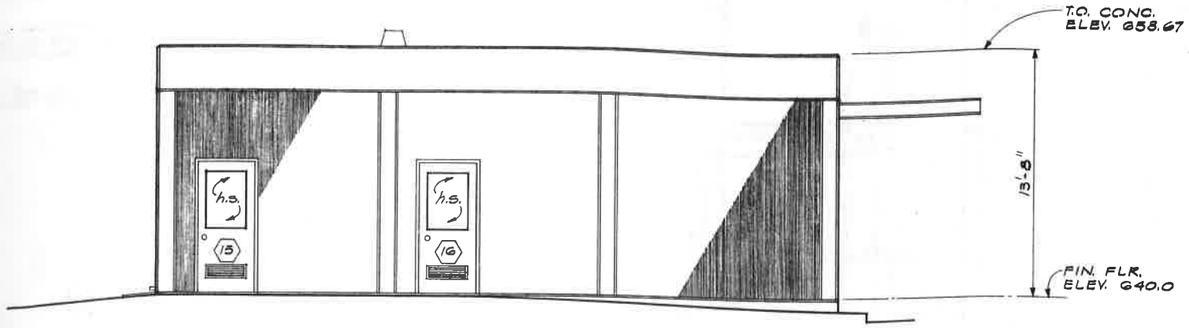
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A HILL & ASSOCIATES

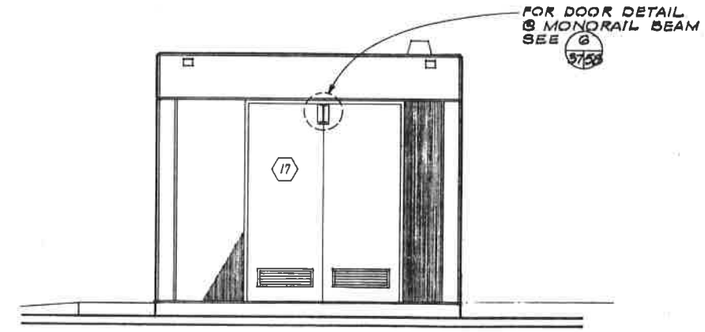
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

SLUDGE RECIRCULATION PUMP STATION - MECHANICAL - SECTIONS AND DETAILS

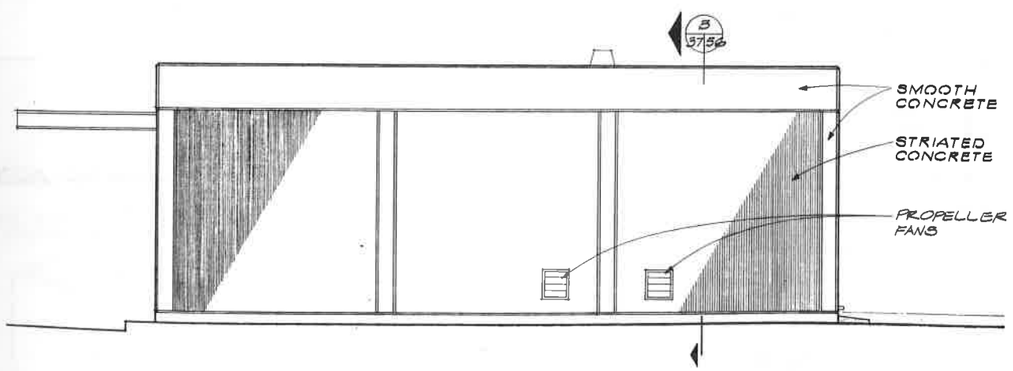
DES. JGG/PPP
DR. RGB
CK. GRG
RN 87038.1
DRAWING NO. C 7039



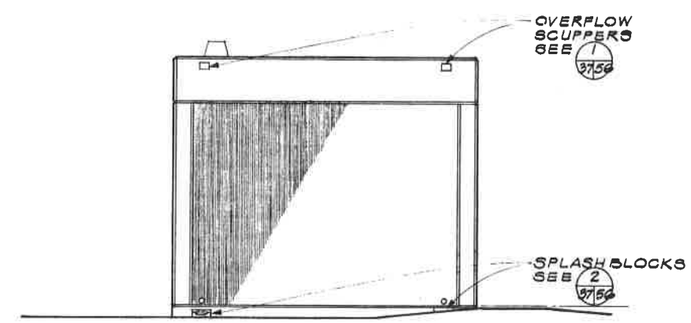
NORTH ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"



SOUTH ELEVATION
1/4" = 1'-0"



EAST ELEVATION
1/4" = 1'-0"

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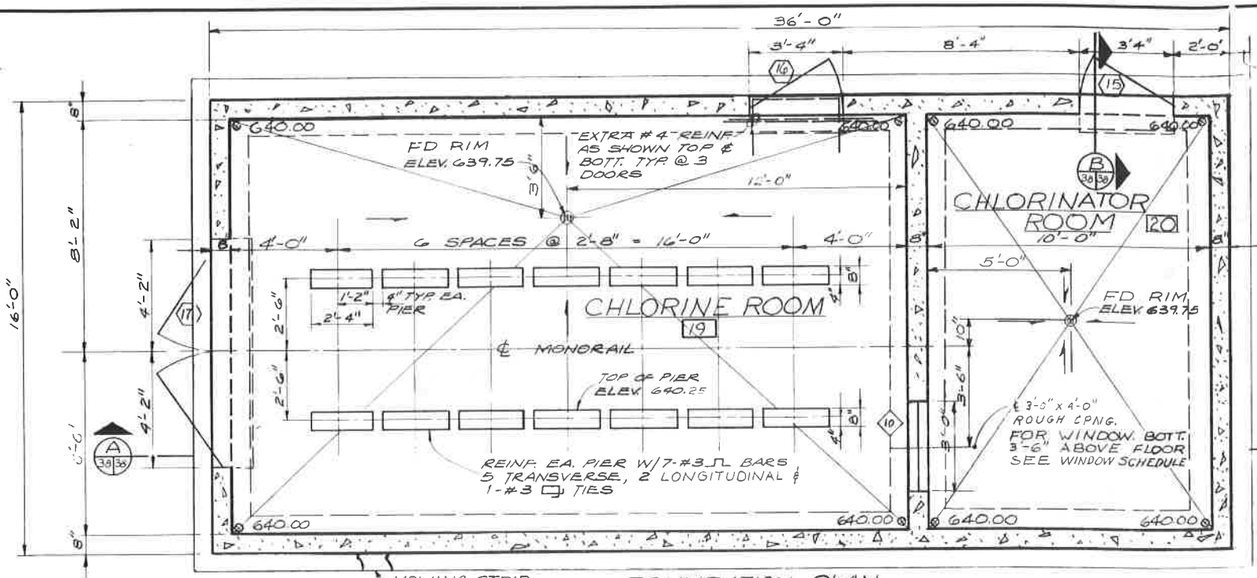
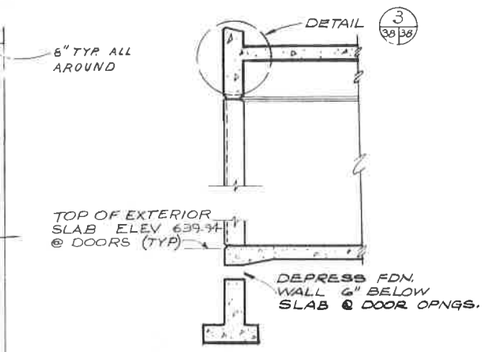
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
CHLORINE BUILDING - ARCHITECTURAL - ELEVATIONS

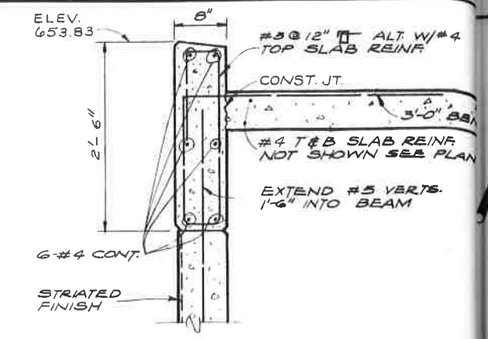
DES JMY
DR HLB
CK HCT
RN 87039.1
SHEET 37
JAN. 1973
DRAWING NO. C 7039-1



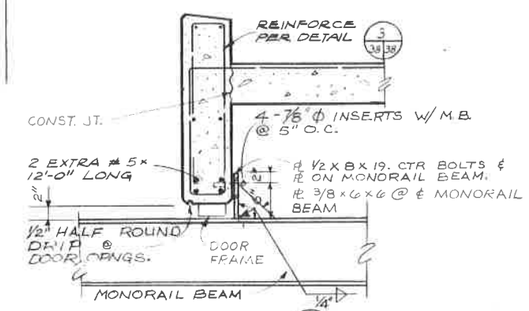
FOUNDATION PLAN
3/8" = 1'-0"



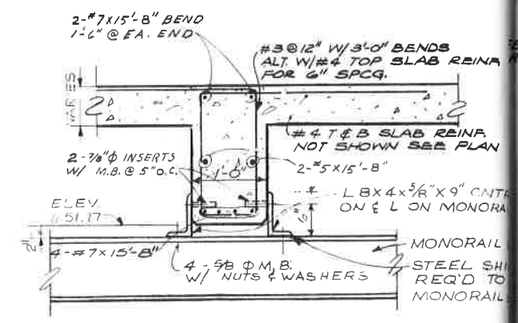
SECTION B 38 38
3/8" = 1'-0"



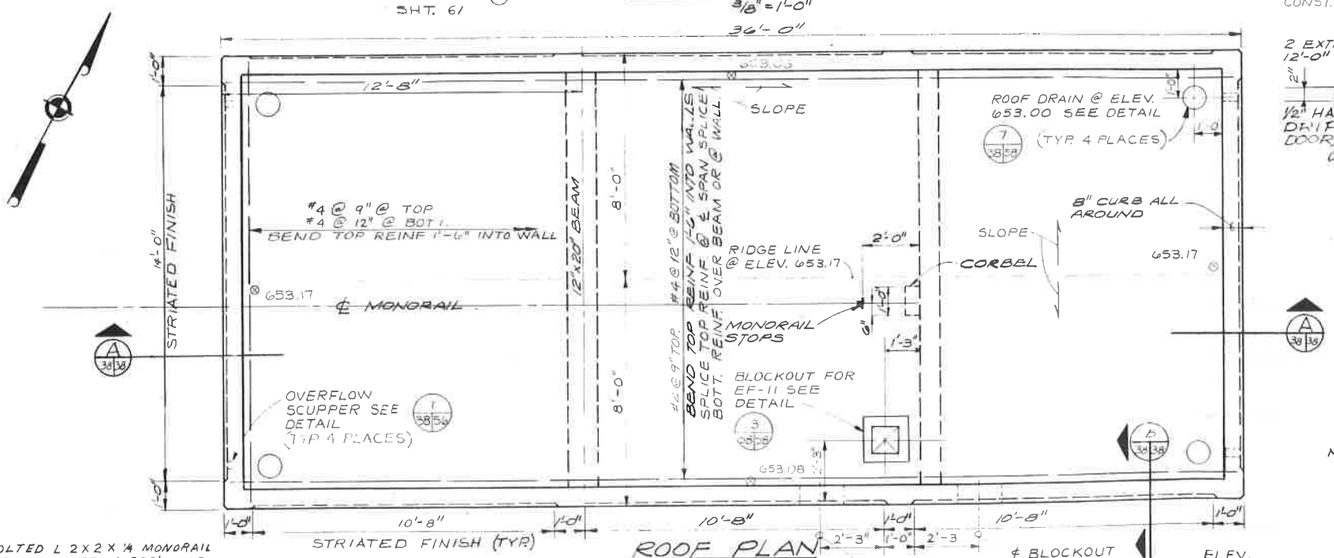
DETAIL 3 38 38
1" = 1'-0"



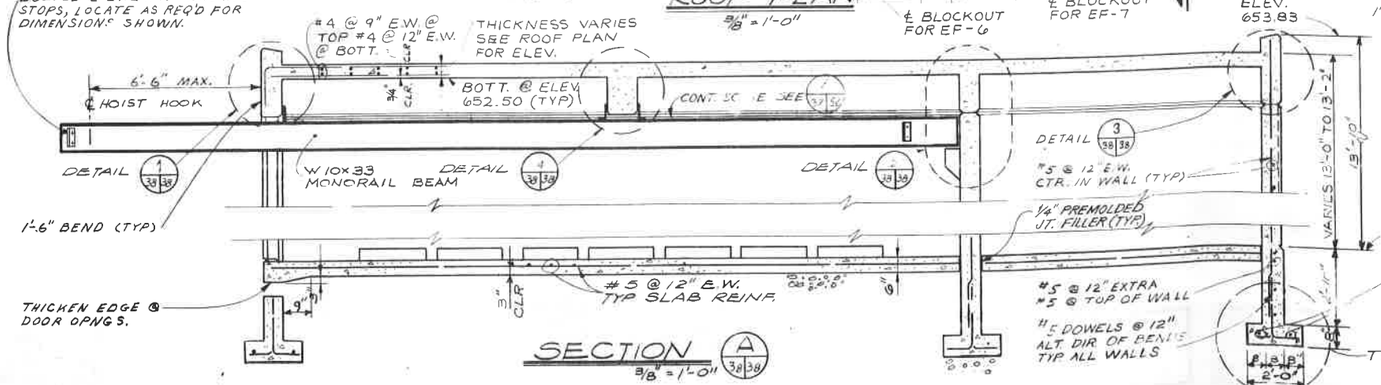
DETAIL 1 38 38
1" = 1'-0"



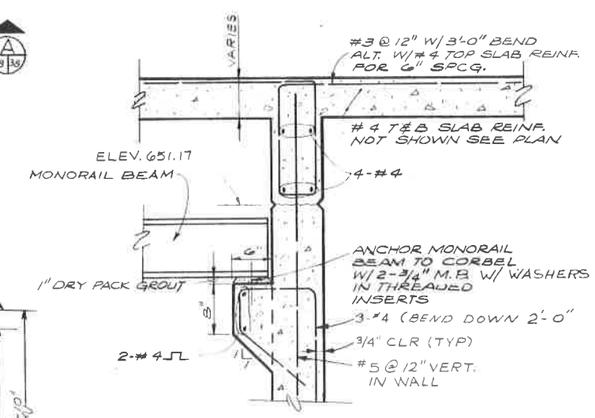
DETAIL 4 38 38
1" = 1'-0"



ROOF PLAN
3/8" = 1'-0"



SECTION A 38 38
3/8" = 1'-0"



DETAIL 2 38 38
1" = 1'-0"

GENERAL NOTE

SEE SHT. 1 FOR GENERAL STRUCTURAL NOTES.

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ENGINEERS PLANNERS ECONOMISTS

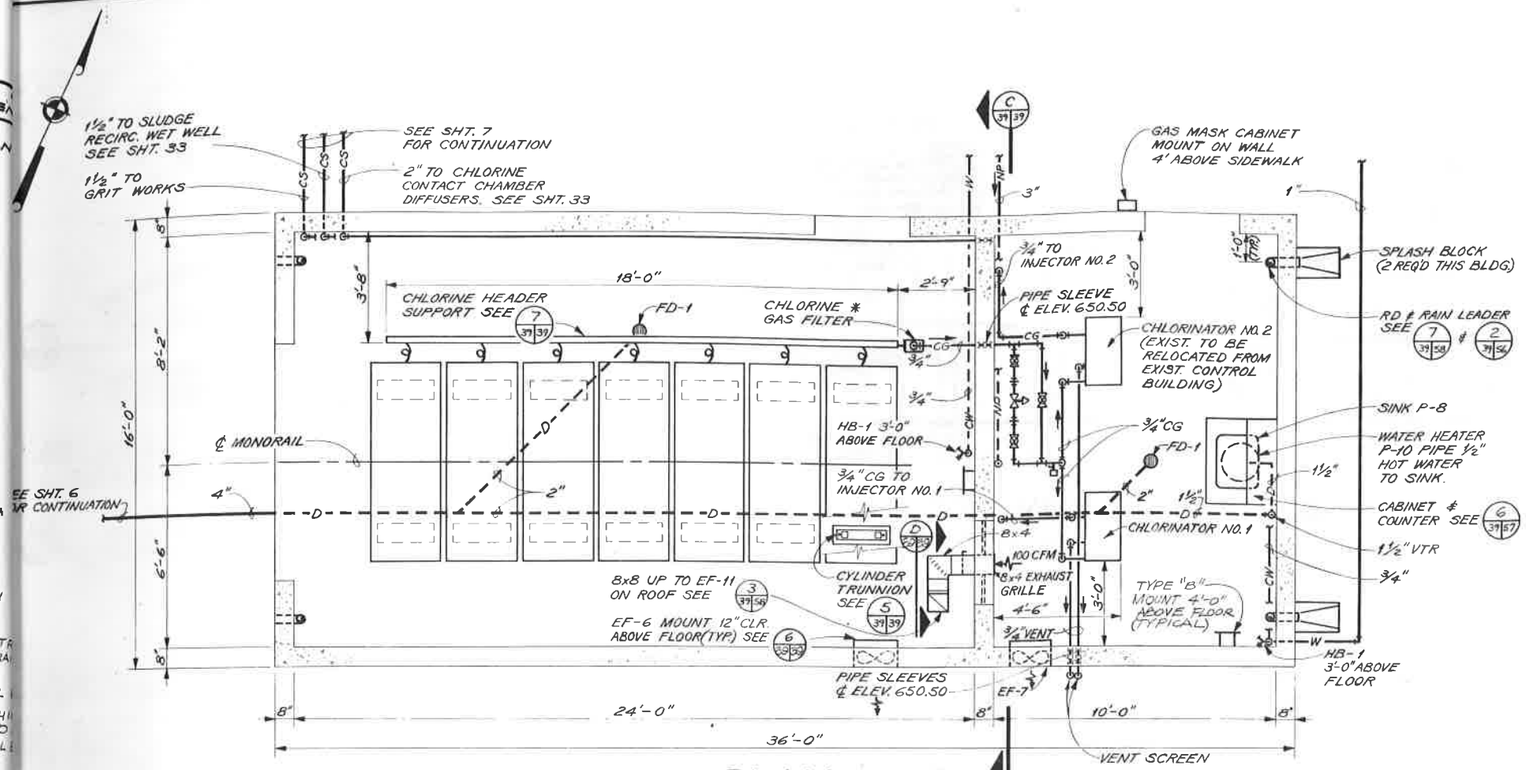
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

CHLORINE BUILDING - STRUCTURAL - PLAN AND SECTIONS

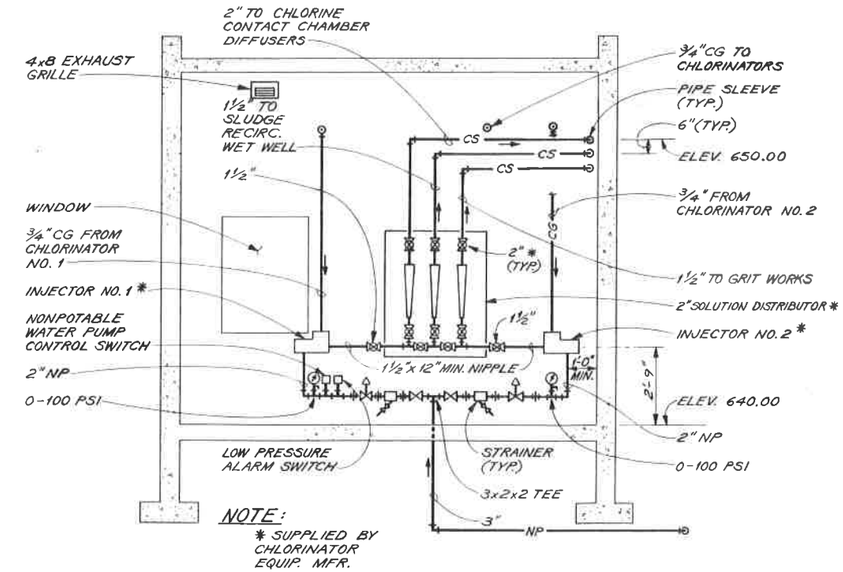
DES. BPC
DR. DNB
CK. GFD
PM 87038.1
DRAWING C 703



PLAN

3/8" = 1'-0"

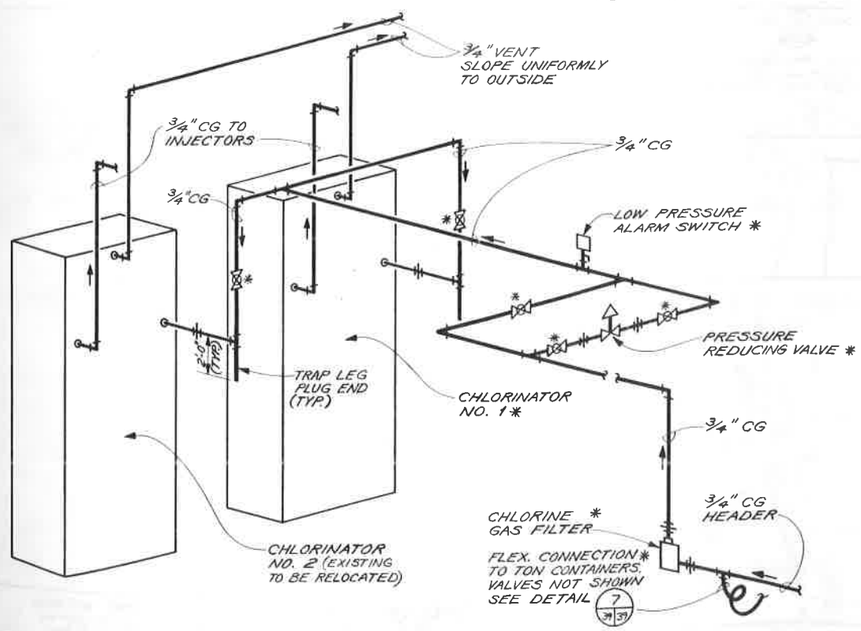
NOTE: * SUPPLIED BY CHLORINATOR EQUIP. MFR.



NOTE:
* SUPPLIED BY CHLORINATOR EQUIP. MFR.

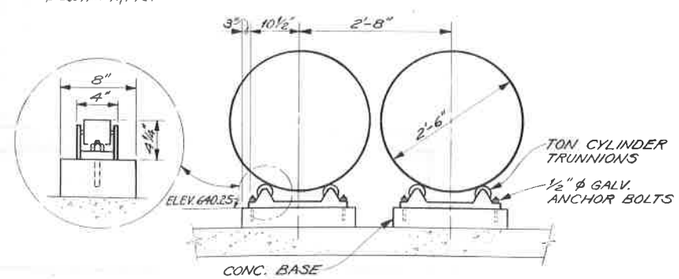
SECTION C/39

3/8" = 1'-0"



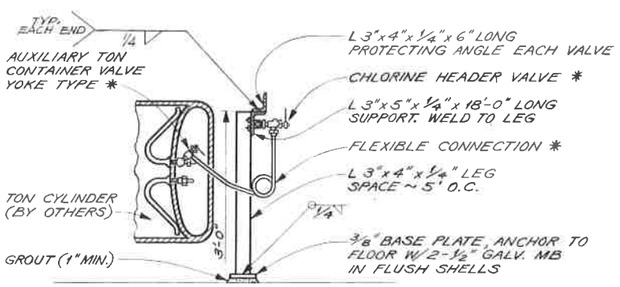
CHLORINE PIPING SCHEMATIC

NTS



CYLINDER SUPPORT DETAIL 5/39

3/4" = 1'-0"

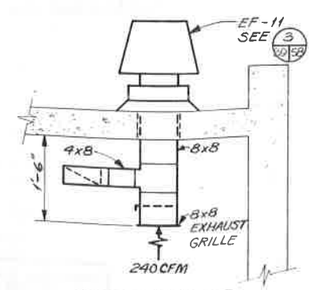


NOTES:
1. HOT DIP GALVANIZE SUPPORT STRUCTURE AFTER FABRICATION.
2. * SUPPLIED BY CHLORINATOR EQUIP. MFR.

CHLORINE HEADER SUPPORT & CONTAINER CONNECTION

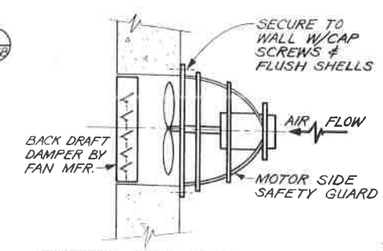
DETAIL 7/39

NTS



SECTION D/39

3/4" = 1'-0"



TYPICAL PROPELLER FAN DETAIL 6/39

NTS

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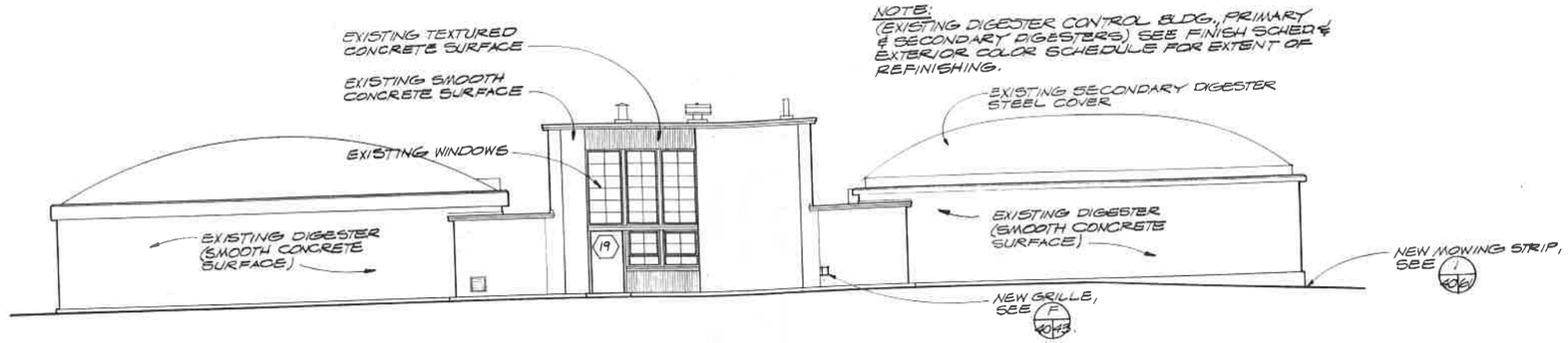
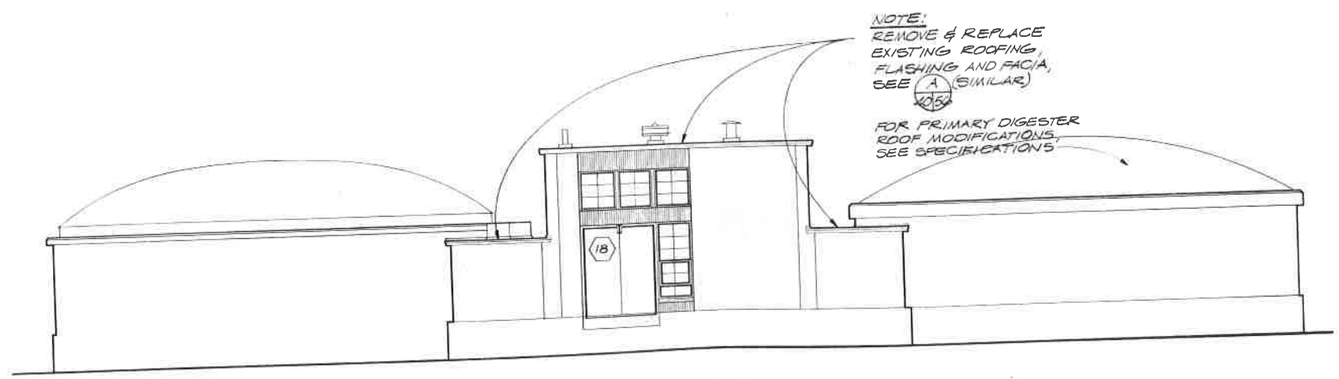
CH2M HILL — ENGINEERS PLANNERS ECONOMISTS	CORNELL HOWLAND HAYES & MERRYFIELD — CLAIR A. HILL & ASSOCIATES	CITY OF WENATCHEE, WASHINGTON — WATER POLLUTION CONTROL PLANT MODIFICATIONS — CHLORINE BUILDING - MECHANICAL - PLAN AND DETAILS	DES. JGG; DR. RAH; CK. GRG; RN 51038-1; DRAWING NO. C 7039-1; SHEET 39 OF 12; DATE JAN. 1973; SCALE: AS SHOWN



SOUTH ELEVATION

1/8" = 1'-0"



NORTH ELEVATION

1/8" = 1'-0"

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

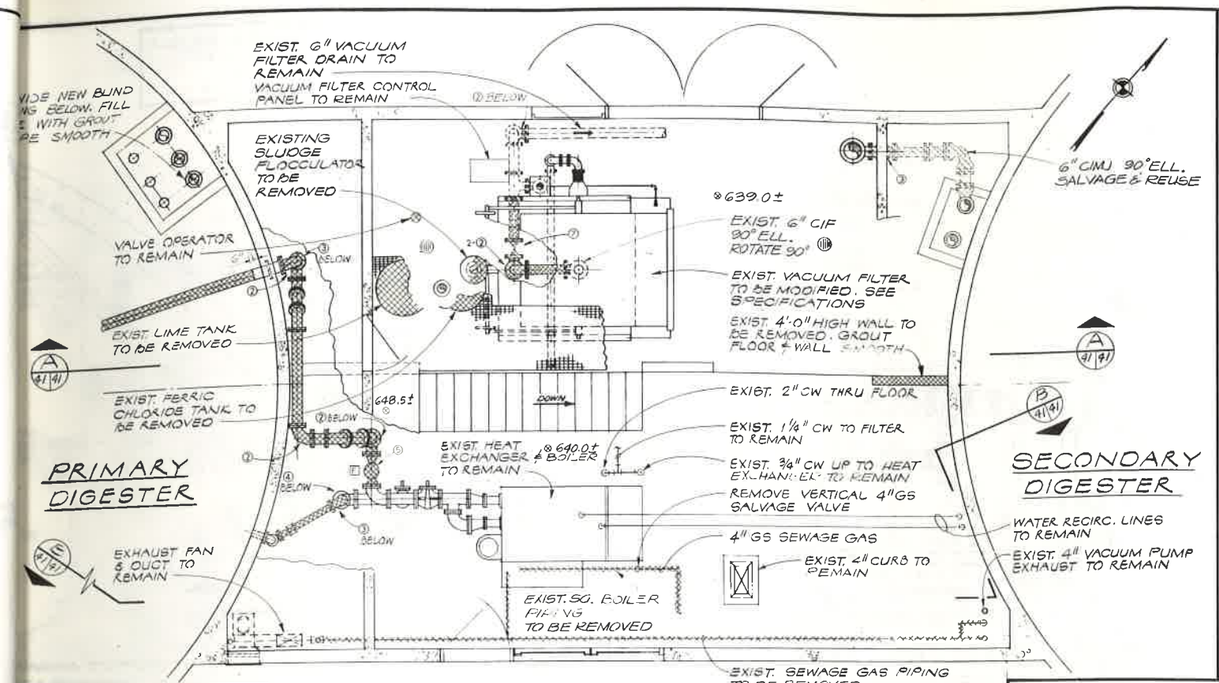
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - ARCHITECTURAL - ELEVATIONS

DES. CHK
DR.
CK.
RN 81032
GROUP C

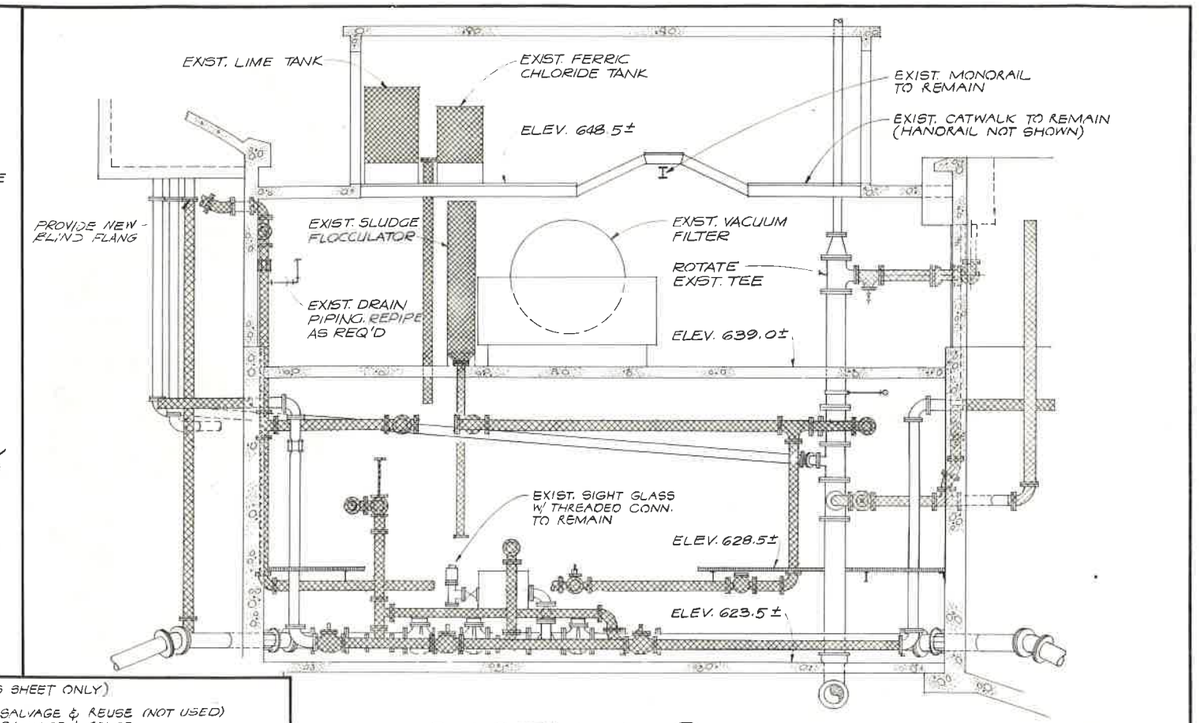


OF VALVES & FTGS. SHOWN THIS VIEW TO BE SALVAGED & REUSED

- 6" CIF MULTIPORT PLUG VALVE
- 6" CIF 90° ELBOWS
- 6" CIF TEES
- 6" CIF PLUG VALVE
- 6" FLG GATE VALVE

MAIN LEVEL PLAN

(SHOWING EXIST. PIPING & EQUIPMENT TO REMAIN OR BE REMOVED)
1/4" = 1'-0"



SECTION (A 41/41)

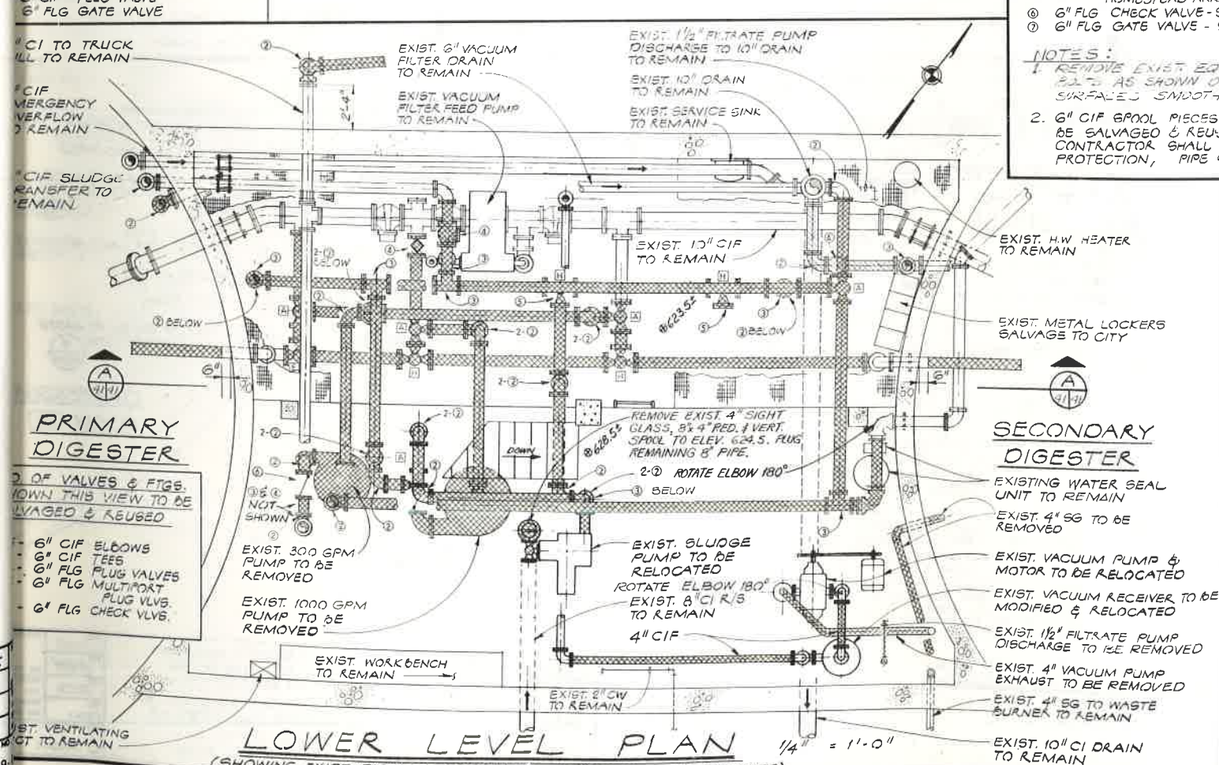
(SHOWING EXIST. PIPING & EQUIPMENT TO REMAIN OR BE REMOVED)
1/4" = 1'-0"

LEGEND (FOR THIS SHEET ONLY)

1. 6" CIF 45° ELBOW - SALVAGE & REUSE (NOT USED)
2. 6" CIF 90° ELBOW - SALVAGE & REUSE
3. 6" CIF TEE - SALVAGE & REUSE
4. 6" FLG PLUG VALVE - SALVAGE & REUSE
5. 6" FLG MULTIPORT PLUG VALVE. LETTER DENOTES HOMESTEAD ARRANGEMENT - SALVAGE & REUSE
6. 6" FLG CHECK VALVE - SALVAGE & REUSE
7. 6" FLG GATE VALVE - SALVAGE & REUSE

NOTES:

1. REMOVE EXIST. EQUIPMENT, ERECTION PADS, & SALVAGE BOLTS AS SHOWN OR AS REQ'D. GROUT REMAINING SURFACES SMOOTH
2. 6" CIF GROOL PIECES SHOWN TO BE REMOVED MAY BE SALVAGED & REUSED AT CONTRACTOR'S OPTION. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST PROTECTION, PIPE SUPPORTS, & NEW GASKETS.

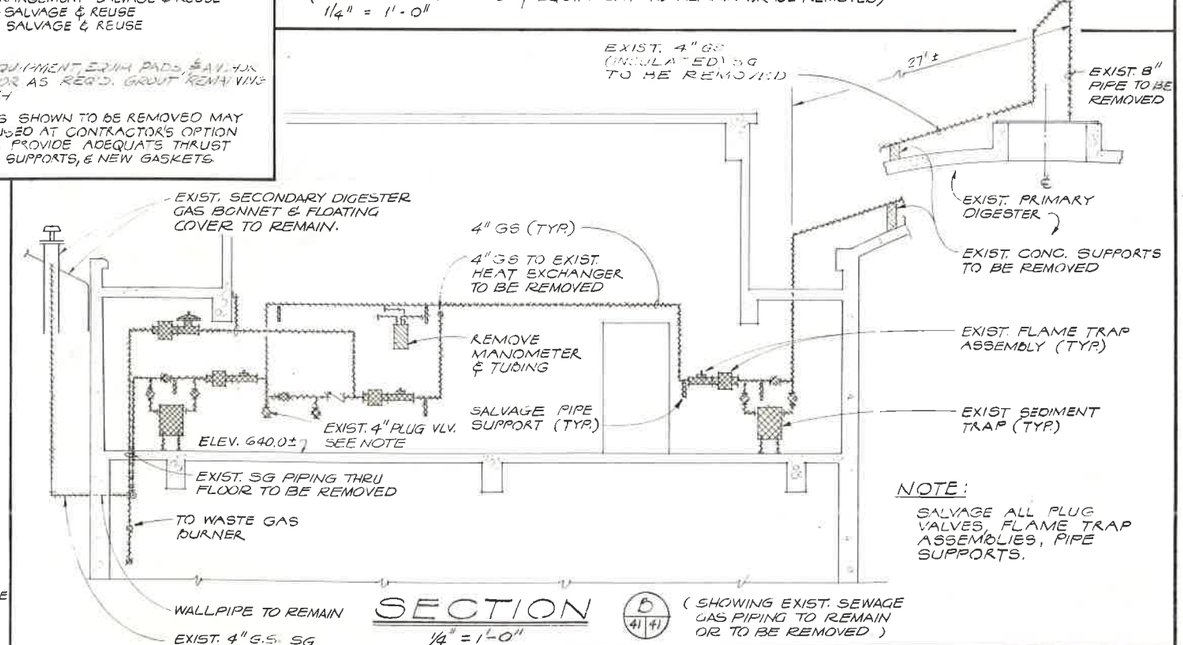


OF VALVES & FTGS. SHOWN THIS VIEW TO BE SALVAGED & REUSED

- 6" CIF ELBOWS
- 6" CIF TEES
- 6" FLG PLUG VALVES
- 6" FLG MULTIPORT PLUG VLVS.
- 6" FLG CHECK VLVS.

LOWER LEVEL PLAN

(SHOWING EXIST. PIPING & EQUIPMENT TO REMAIN OR BE REMOVED)
1/4" = 1'-0"



NOTE:

SALVAGE ALL PLUG VALVES, FLAME TRAP ASSEMBLIES, PIPE SUPPORTS.

SECTION (B 41/41)

1/4" = 1'-0"

(SHOWING EXIST. SEWAGE GAS PIPING TO REMAIN OR TO BE REMOVED)

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

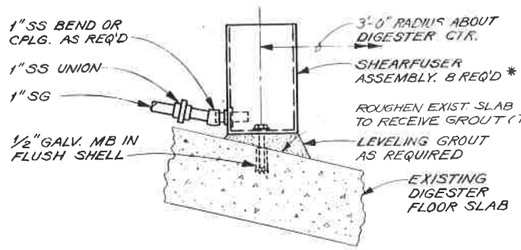
CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - REMOVAL PLAN AND SECTIONS

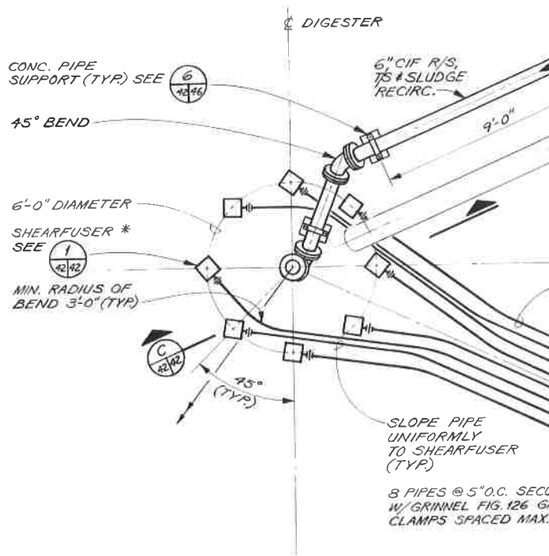
DES	
DR	
CK	
RN	
DRAWING NO.	C 7039-1
SHEET	4.1
OF	11
DATE	JAN. 1973
SCALE	AS SHOWN

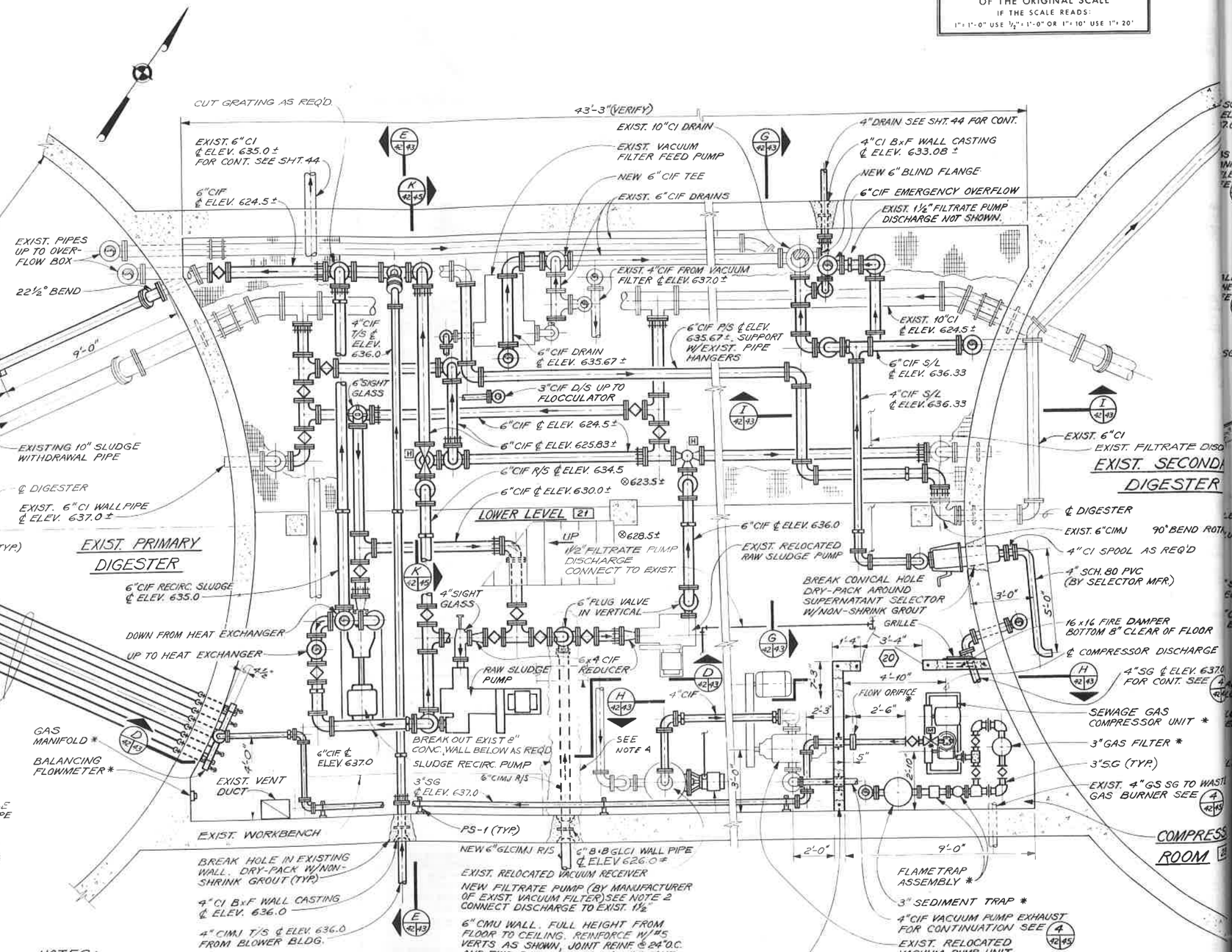
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1"=1'-0" USE ½"=1'-0" OR 1"=10' USE 1"=20'



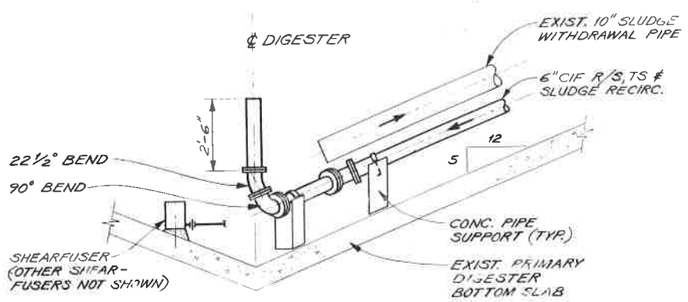
TYPICAL "SHEARFUSER" INSTALLATION

DETAIL 1 (42/42)
NTS





LOWER LEVEL PLAN
⅜" = 1'-0"



SECTION C (42/42)
⅜" = 1'-0"

NOTES:

1. * DENOTES ITEMS PROVIDED BY DIGESTER MIXING EQUIPMENT SUPPLIER.
2. PROVIDE MOUNTING FLANGE ON EXIST. VACUUM RECEIVER FOR NEW FILTRATE PUMP IN ACCORDANCE WITH PUMP MANUFACTURER'S INSTRUCTIONS.
3. UTILIZE EXIST. PIPE SUPPORTS WHERE POSSIBLE PROVIDE NEW SUPPORTS AS SHOWN AND AS DIRECTED
4. REMOVE EXIST CONC. SLAB AS REQ'D. TO INSTALL NEW R/S PIPE. PATCH W/ NEW CONC FINISH SURFACE FLUSH W/ EXIST FLR.

Hans H. Seibald

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

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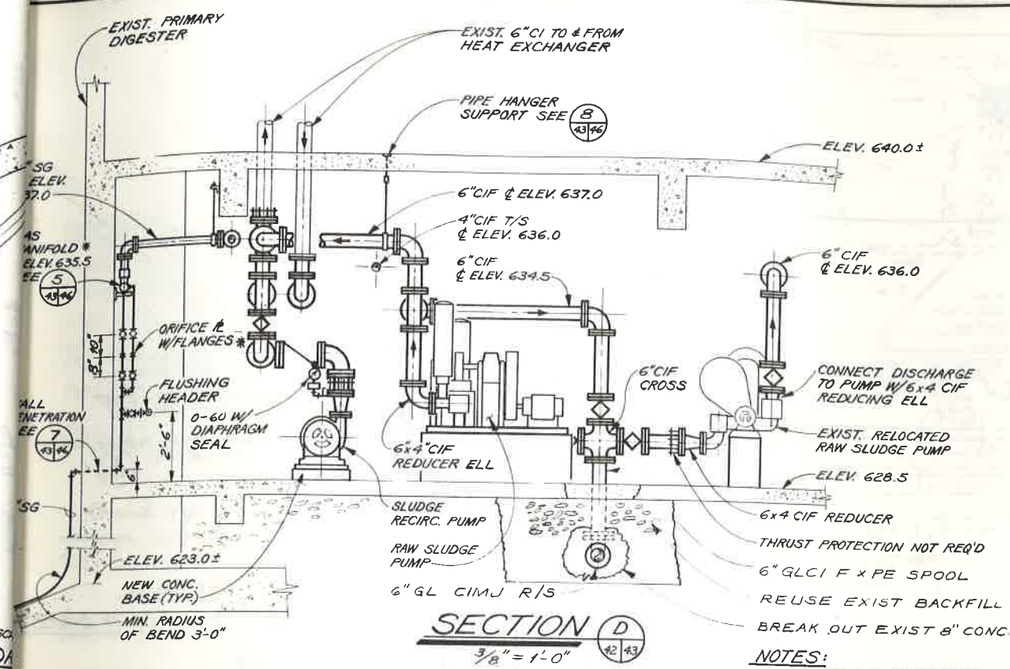
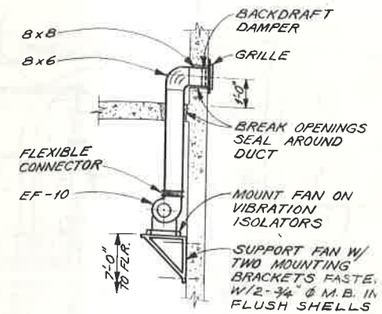
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - LOWER LEVEL PLAN

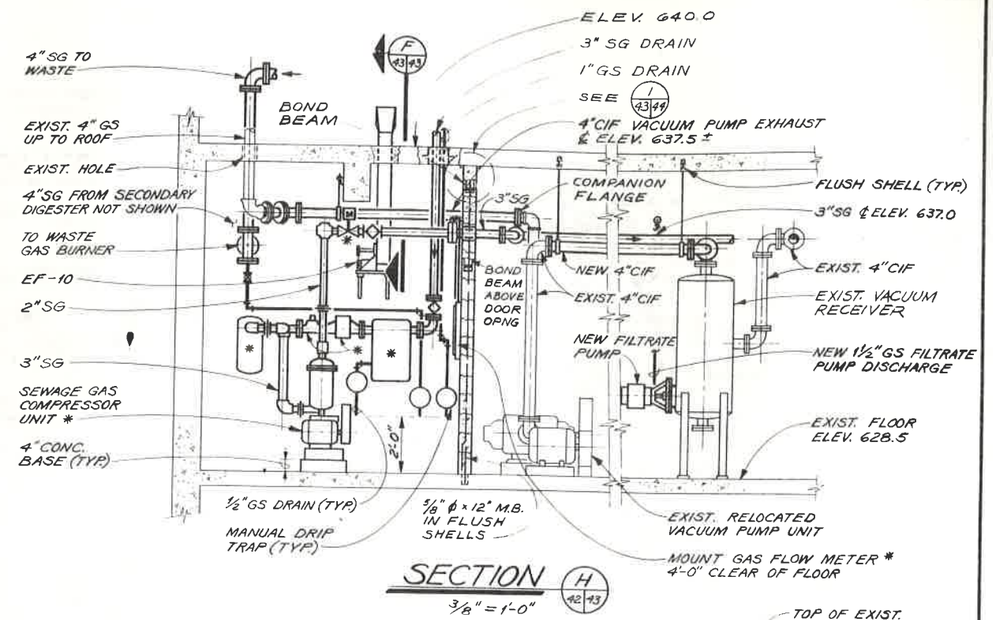
DES. HHS
DR. RAH
CK. GRG
Rev. 27039.1
DRAWING NO. C 7039



SECTION D 42/43
3/8" = 1'-0"

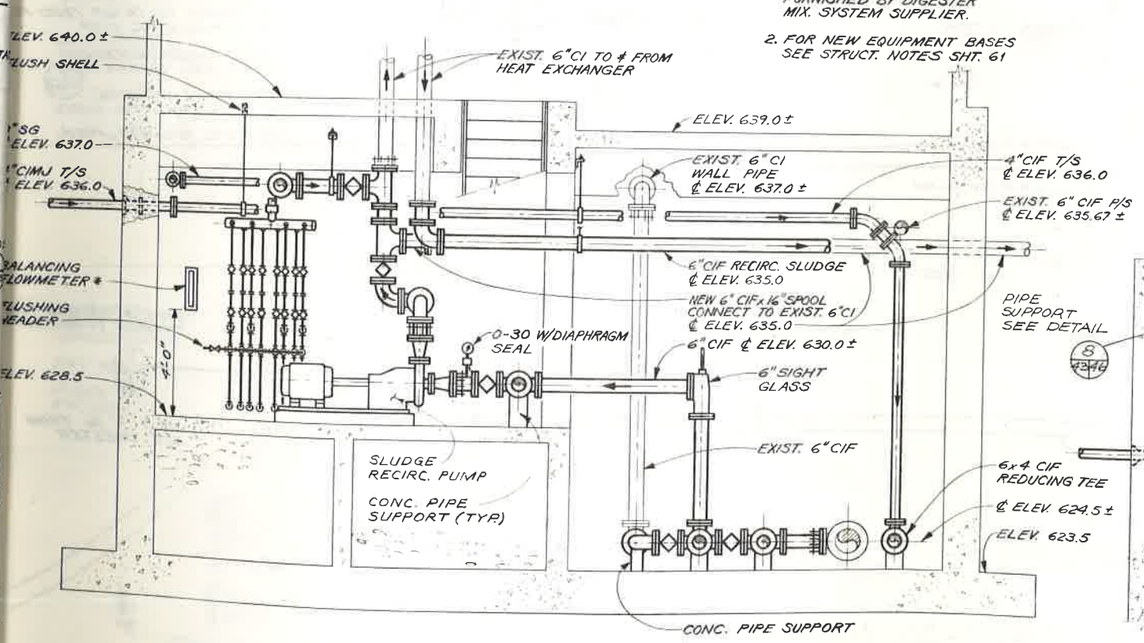


SECTION F 40/43/43
3/8" = 1'-0"

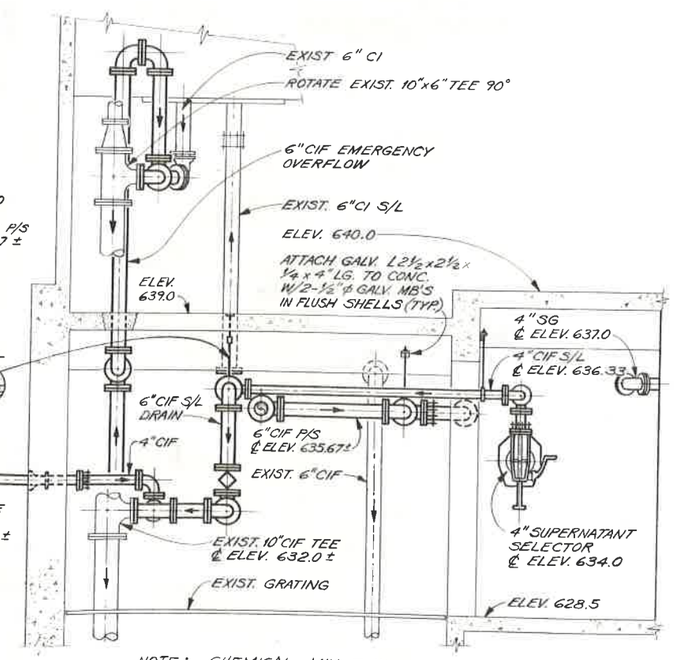


SECTION H 42/43
3/8" = 1'-0"

NOTES:
1. * DENOTES EQUIPMENT FURNISHED BY DIGESTER MIX. SYSTEM SUPPLIER.
2. FOR NEW EQUIPMENT BASES SEE STRUCT. NOTES SHT. 61

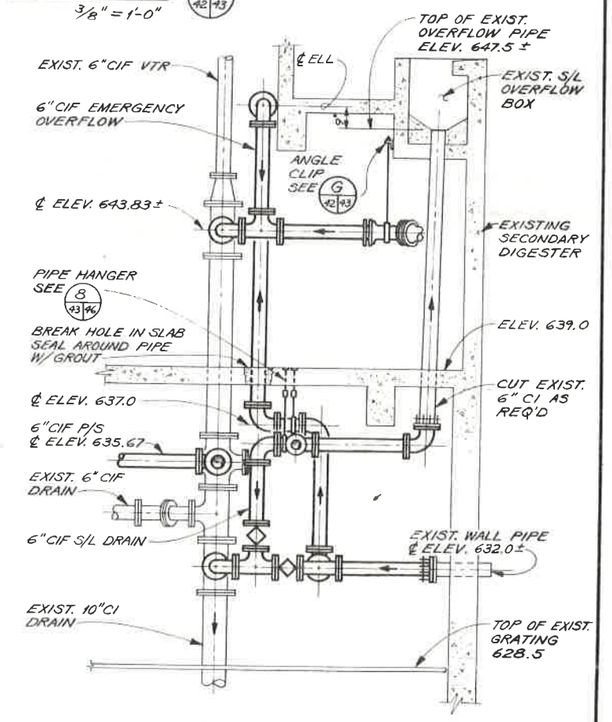


SECTION E 42/43
3/8" = 1'-0"



NOTE: CHEMICAL MIX TANKS NOT SHOWN

SECTION G 42/44/43
3/8" = 1'-0"



SECTION I 42/43
3/8" = 1'-0"

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
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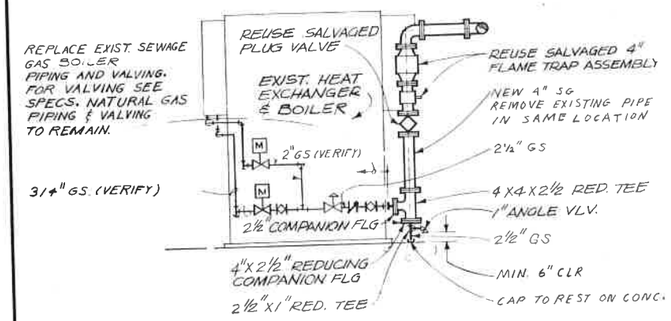
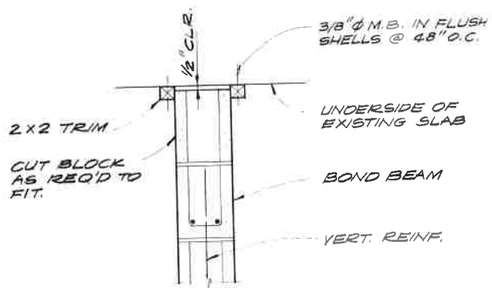
Hans H. Eibald

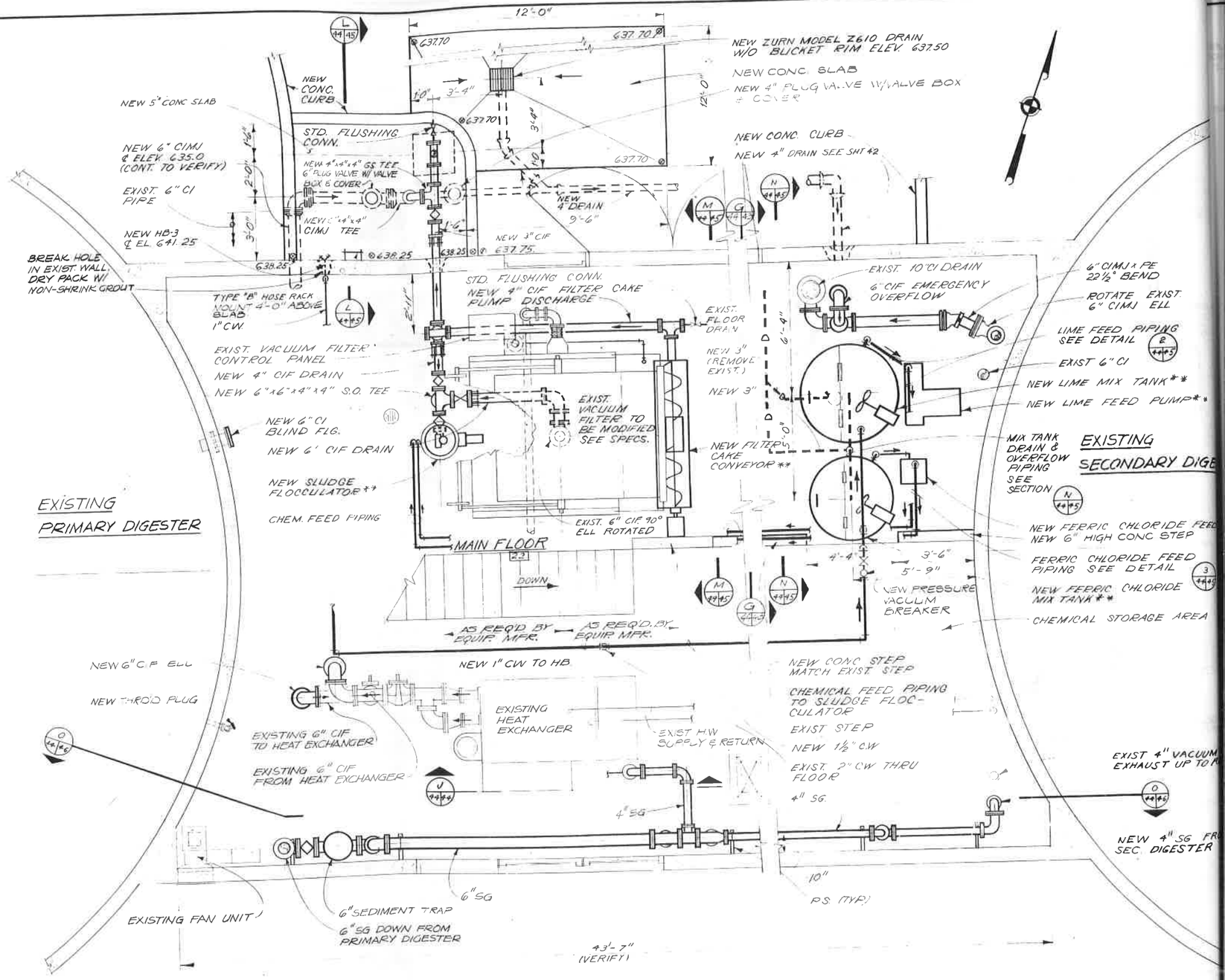
CH2M HILL — ENGINEERS PLANNERS ECONOMISTS	CORNELL HOWLAND HAYES & MERRYFIELD — CLAIR A HILL & ASSOCIATES	CITY OF WENATCHEE, WASHINGTON WATER POLLUTION CONTROL PLANT MODIFICATIONS MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - LOWER LEVEL SECTIONS	DES. HHS DR. RAH CK. GRG RN 37039.1 DRAWING NO. C 7039-1 SHEET 43 OF 78 DATE: JAN. 1973 SCALE: AS SHOWN



SECTION (J)
3/8" = 1'-0"



DETAIL (I)
1½" = 1'-0"



MAIN LEVEL PLAN (BELOW ELEVATION 646.0)
3/8" = 1'-0"

NOTE:
** INDICATES EQUIPMENT SUPPLIED BY MFR OF EXISTING VACULIM FILTER

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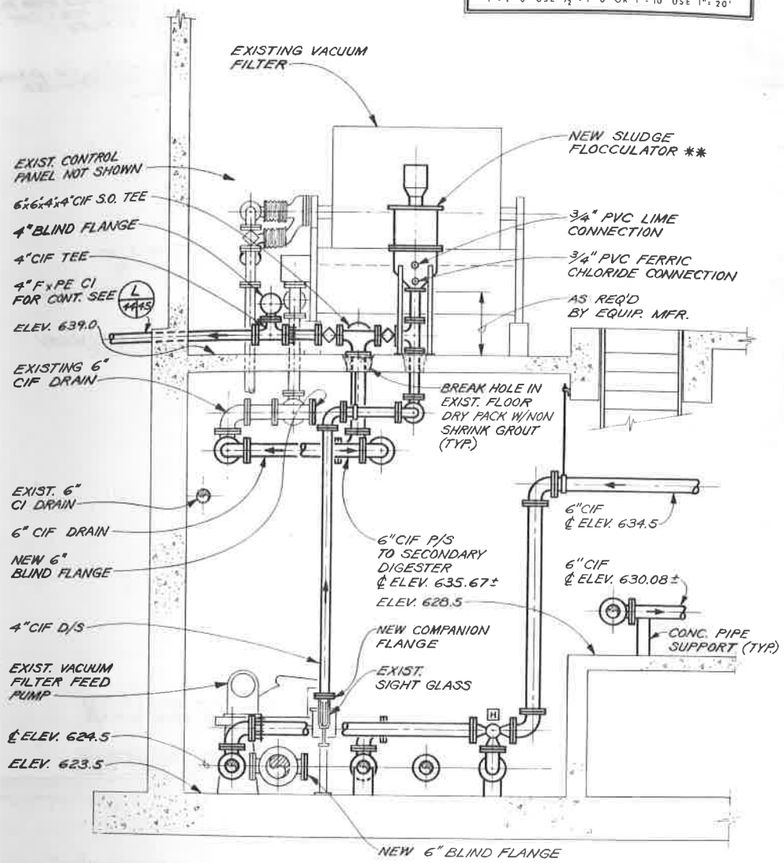
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

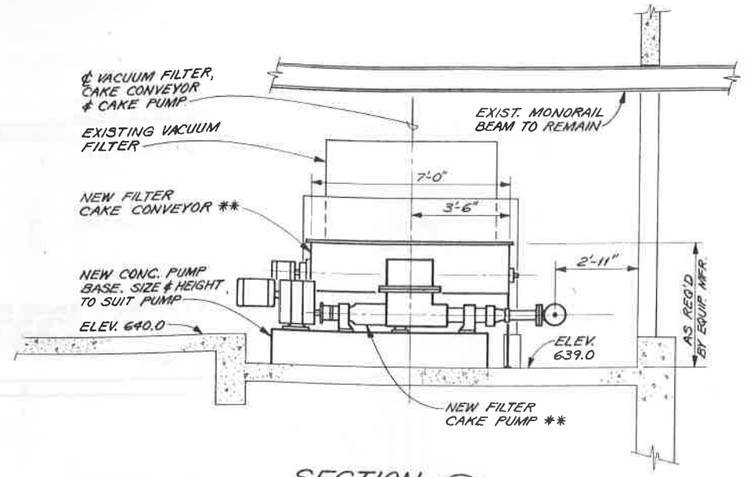
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - UPPER LEVEL PLAN

DES. GG
DR. GDG
CK. GRG
RN 37038.1
DRAWING C 70

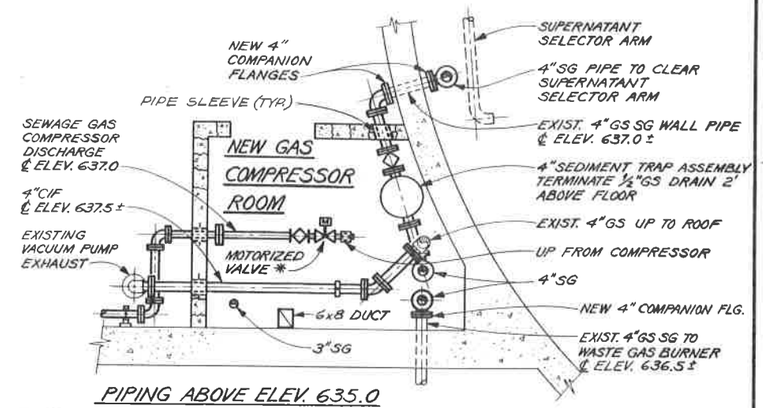
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'



SECTION K 42/45
3/8" = 1'-0"

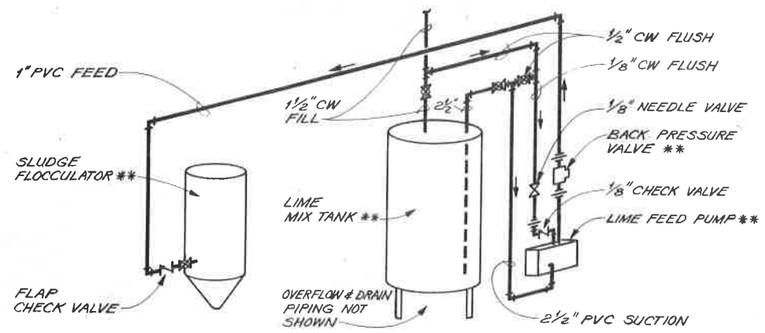


SECTION M 44/45
3/8" = 1'-0"



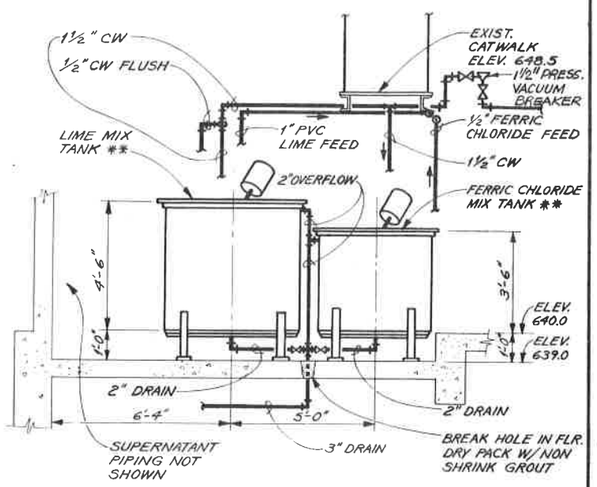
PIPING ABOVE ELEV. 635.0

PLAN 4 42/45
3/8" = 1'-0"



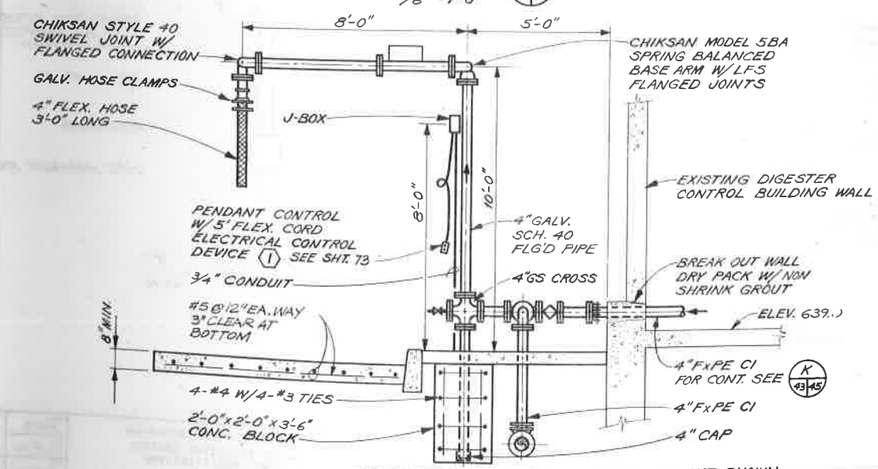
LIME FEED PIPING SCHEMATIC

DETAIL 2 44/45
NTS

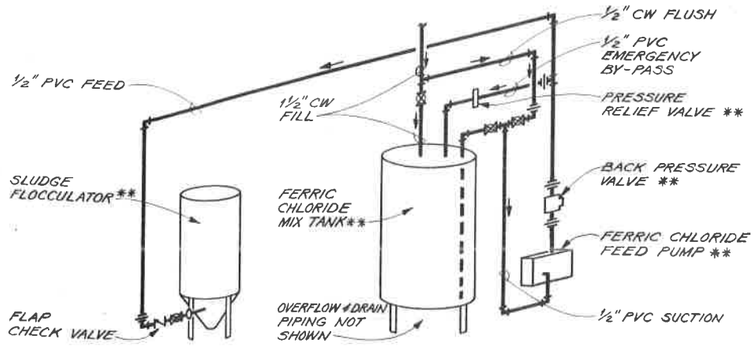


NOTE:
CHEMICAL FEED PUMPS & DETAILED PIPING NOT SHOWN. SEE 2 44/45 & 3 44/45

SECTION N 44/45
3/8" = 1'-0"



SECTION L 44/45
3/8" = 1'-0"

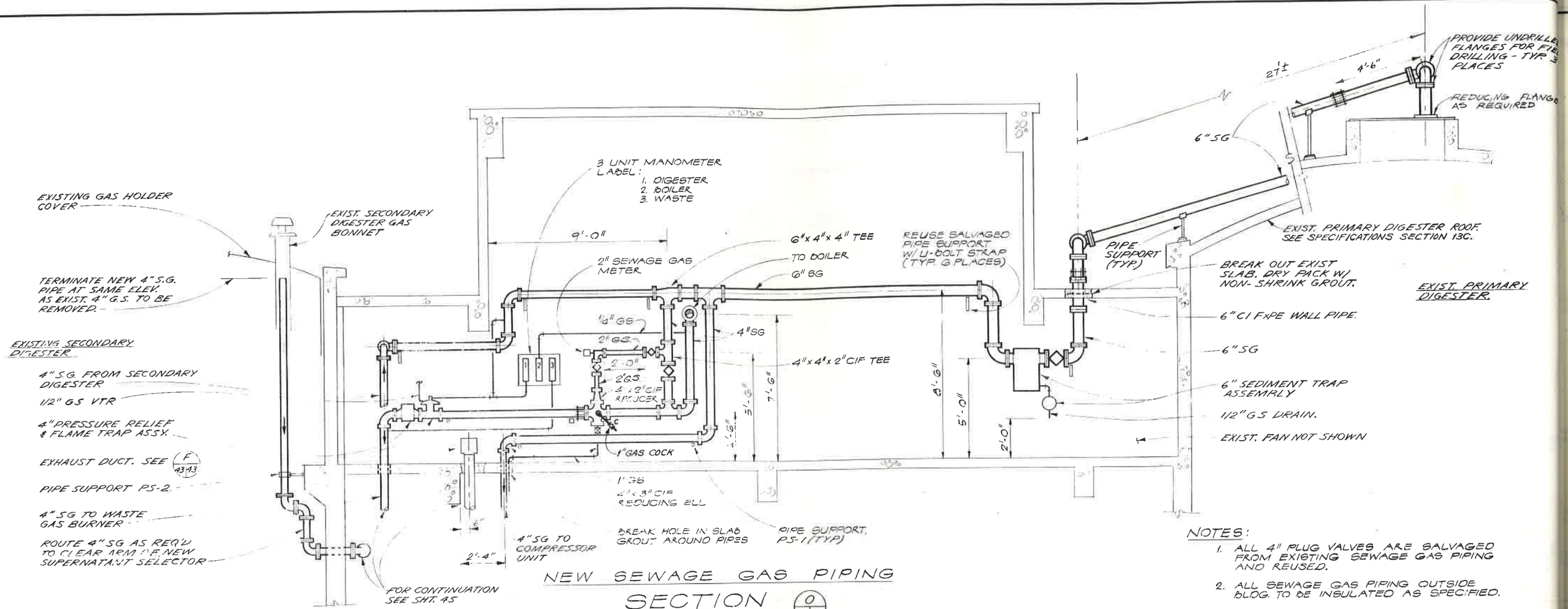


FERRIC CHLORIDE FEED PIPING SCHEMATIC

DETAIL 3 44/45
NTS

GENERAL NOTES:
** TO BE SUPPLIED BY MFR. OF EXIST. VACUUM FILTER.

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS	CORNELL HOWLAND HAYES & MERRYFIELD — CLAIR A. HILL & ASSOCIATES	CITY OF WENATCHEE, WASHINGTON WATER POLLUTION CONTROL PLANT MODIFICATIONS MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - UPPER LEVEL SECTIONS & DETAILS	DES JGG DR RAH CK GRG RN 87039.1 DRAWING NO. C 7039-1 SHEET 45 OF 78 DATE: JAN. 1973 SCALE: AS SHOWN



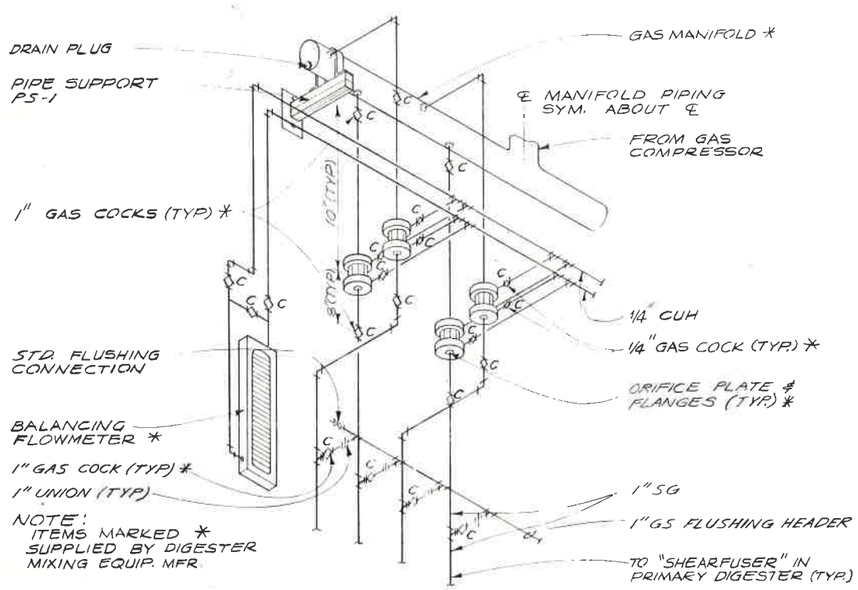
NEW SEWAGE GAS PIPING

SECTION (0 / 44/46)

3/8" = 1'-0"

NOTES:

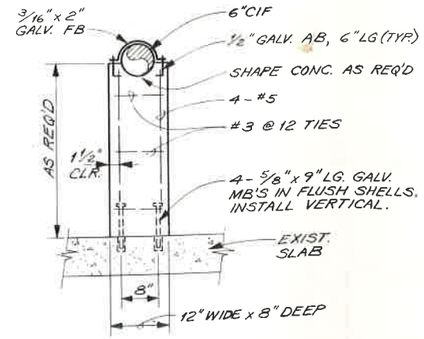
1. ALL 4" PLUG VALVES ARE SALVAGED FROM EXISTING SEWAGE GAS PIPING AND REUSED.
2. ALL SEWAGE GAS PIPING OUTSIDE BLDG. TO BE INSULATED AS SPECIFIED.



NOTE:
ITEMS MARKED * SUPPLIED BY DIGESTER MIXING EQUIP. MFR.

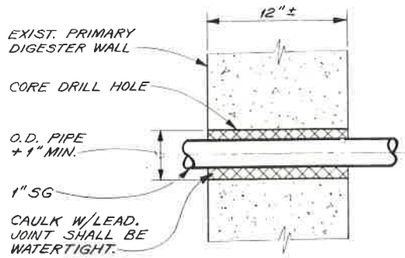
GAS MANIFOLD PIPING SCHEMATIC (5 / 43/46)

N.T.S.



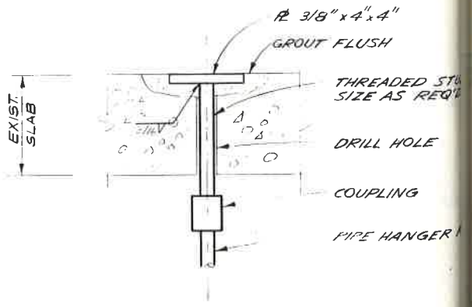
CONC. PIPE SUPPORT (6 / 42/46)

NTS



DETAIL (7 / 43/46)

NTS



DETAIL (8 / 43/46)

NTS

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IF THE SCALE READS: 1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

Hans H. Seibold

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

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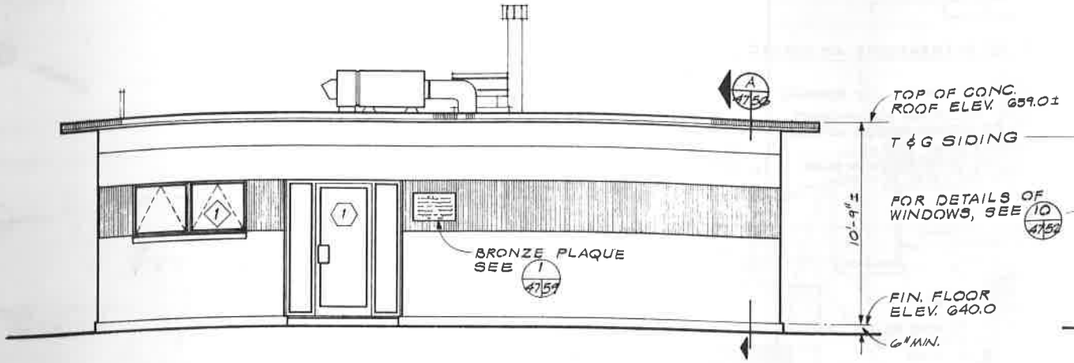
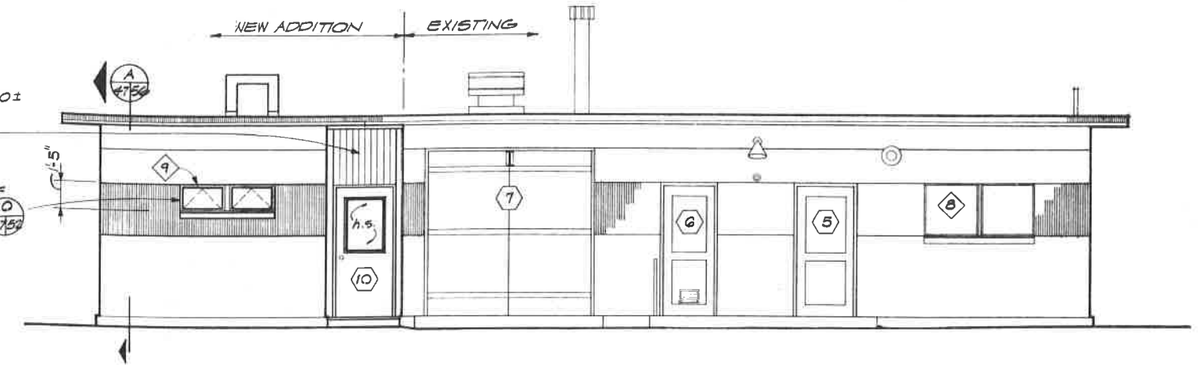
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING DIGESTERS AND DIGESTER CONTROL BUILDING - SECTIONS AND DETAILS

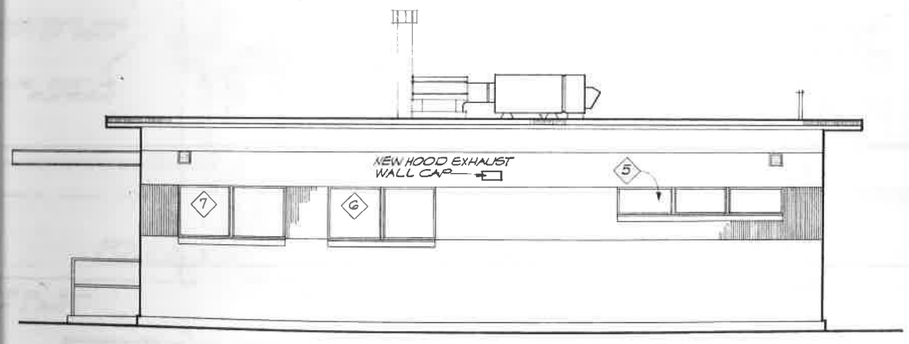
DES. RHS
DR. GEN
CK. GRG
RN 37038.1
DRAWING C 7039



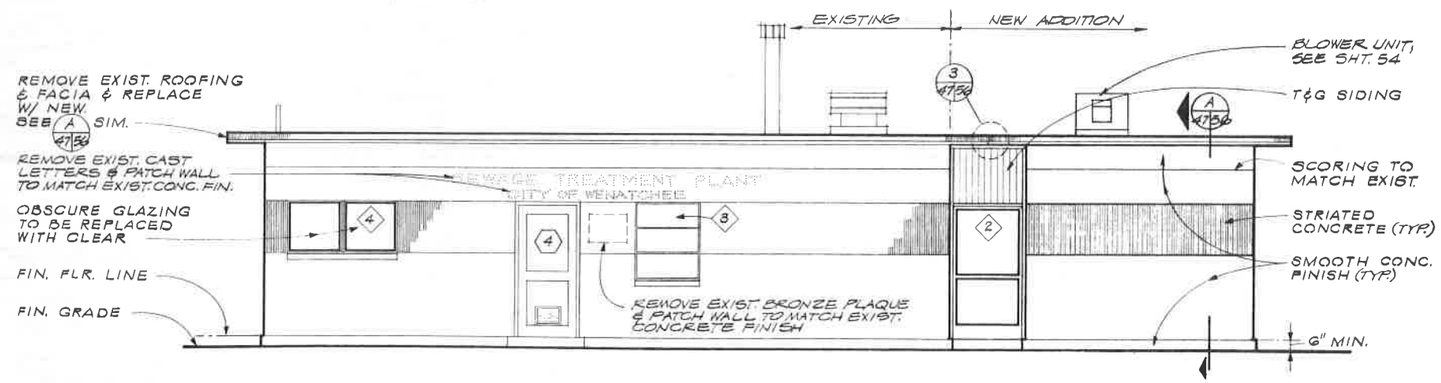
SOUTH ELEVATION (NEW ELEVATION)
1/4" = 1'-0"



EAST ELEVATION
1/4" = 1'-0"



NORTH ELEVATION (EXISTING ELEVATION)
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"

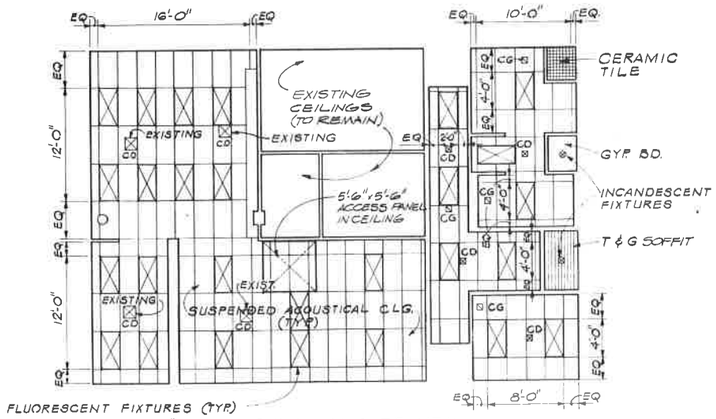
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING - ARCHITECTURAL - ELEVATIONS

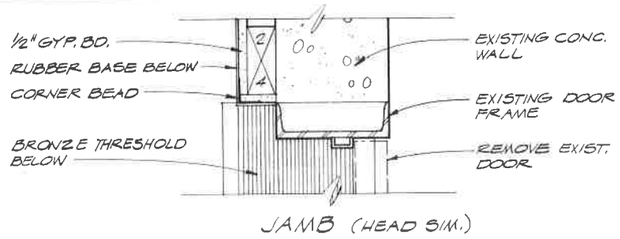
DES JMY	SHEET 47
DR GLB	OF 78
CK HCT	DATE: JAN. 1973
RN 57039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



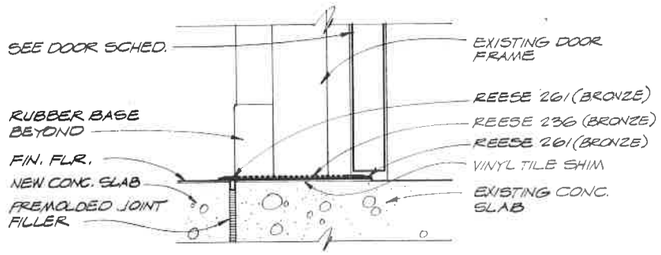
NOTE: PROVIDE 2" BATT INSULATION OVER NEW SUSPENDED ACOUSTICAL CLG. (TYP.)

REFLECTED CEILING PLAN

1/8" = 1'-0"



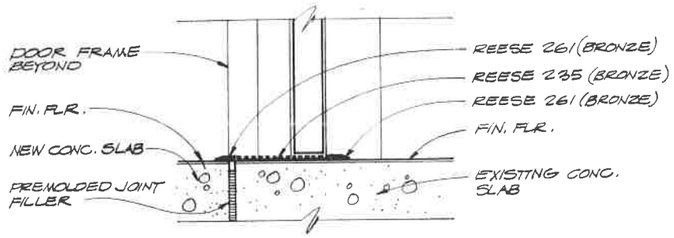
JAMB (HEAD SIM.)



SILL

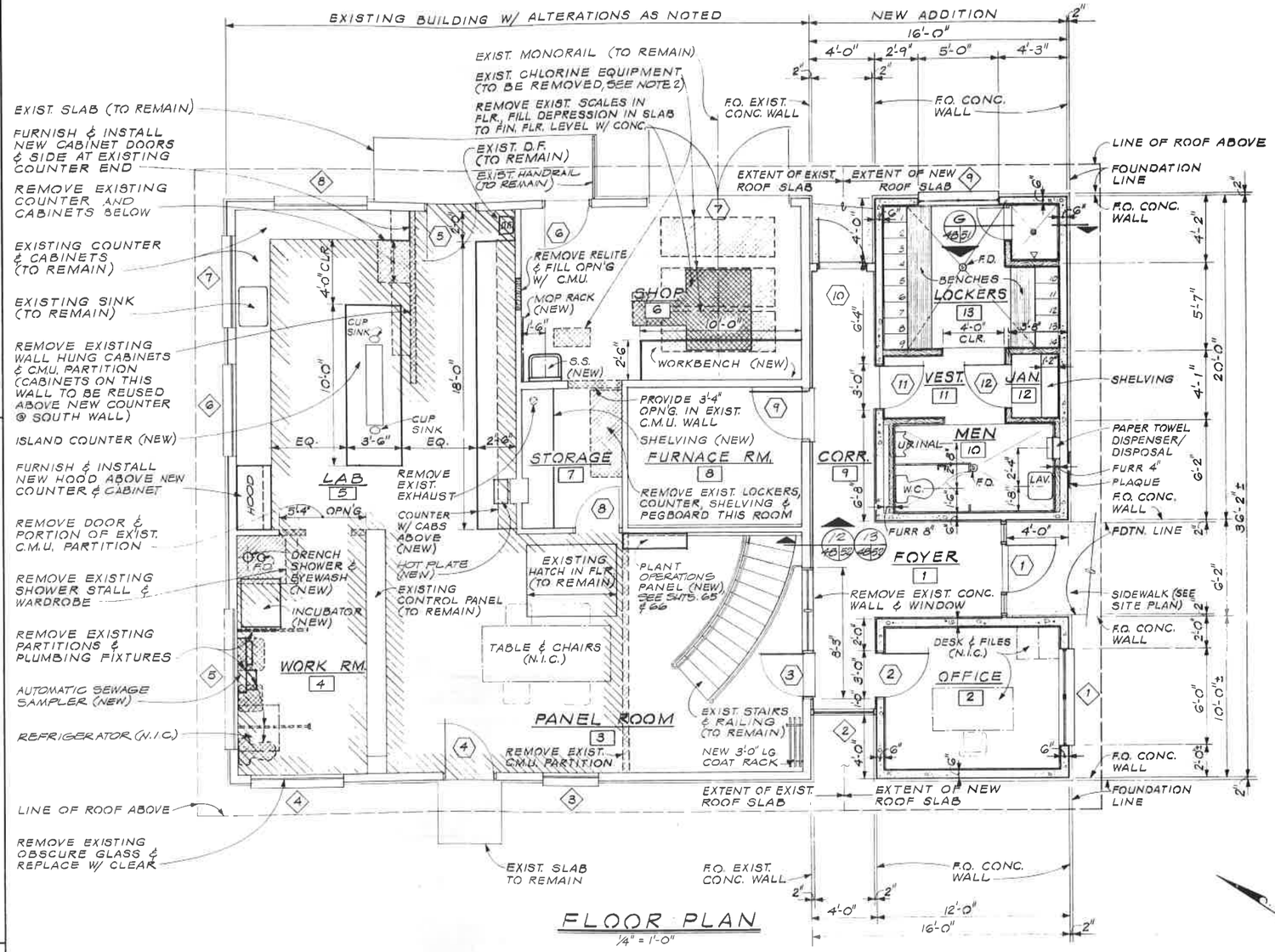
DETAIL 2 (59/48)

3" = 1'-0"



DETAIL 1 (59/48)

3" = 1'-0"



FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

1. [hatched] REMOVE ENTIRE EXISTING V.A. TILE FLR. COVERING & 4" RUBBER BASE IN THESE ROOMS & PREPARE SURFACES FOR NEW TILE & BASE. REMOVE EXISTING ACOUSTICAL TILE & SUSPENSION SYSTEM. PROVIDE NEW CEILING AS SHOWN.
2. RELOCATE EXISTING CHLORINATOR IN NEW CHLORINE BUILDING, SEE SHT. 39.

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

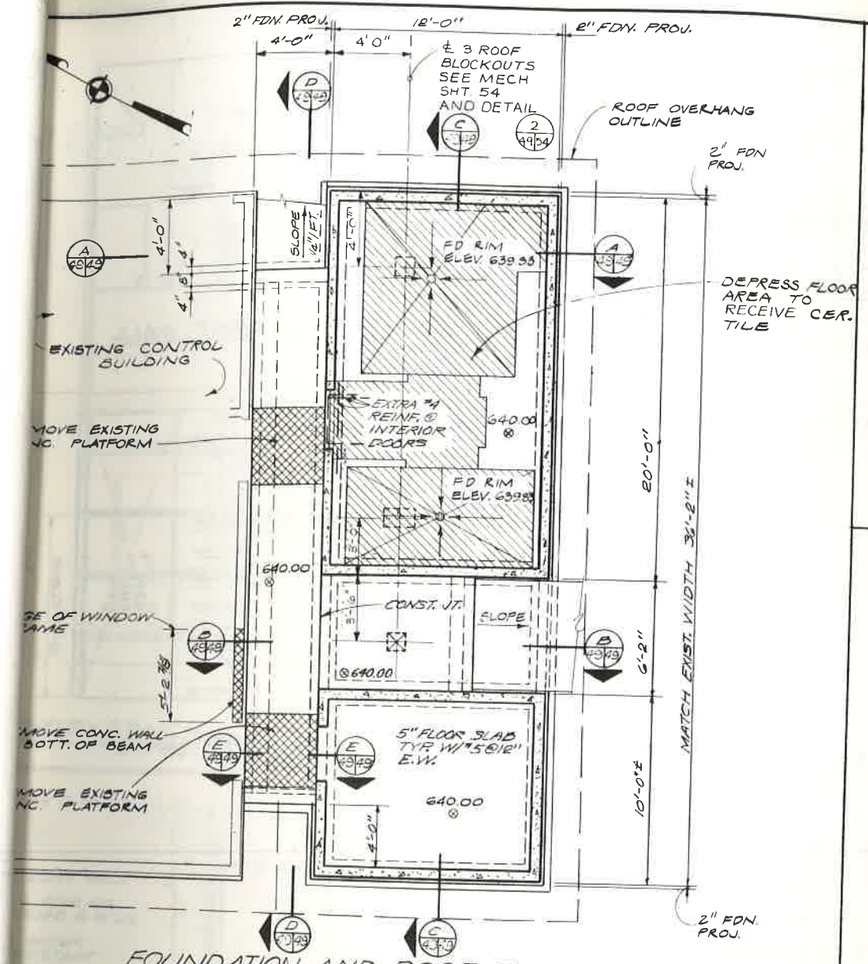
David Peterson

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

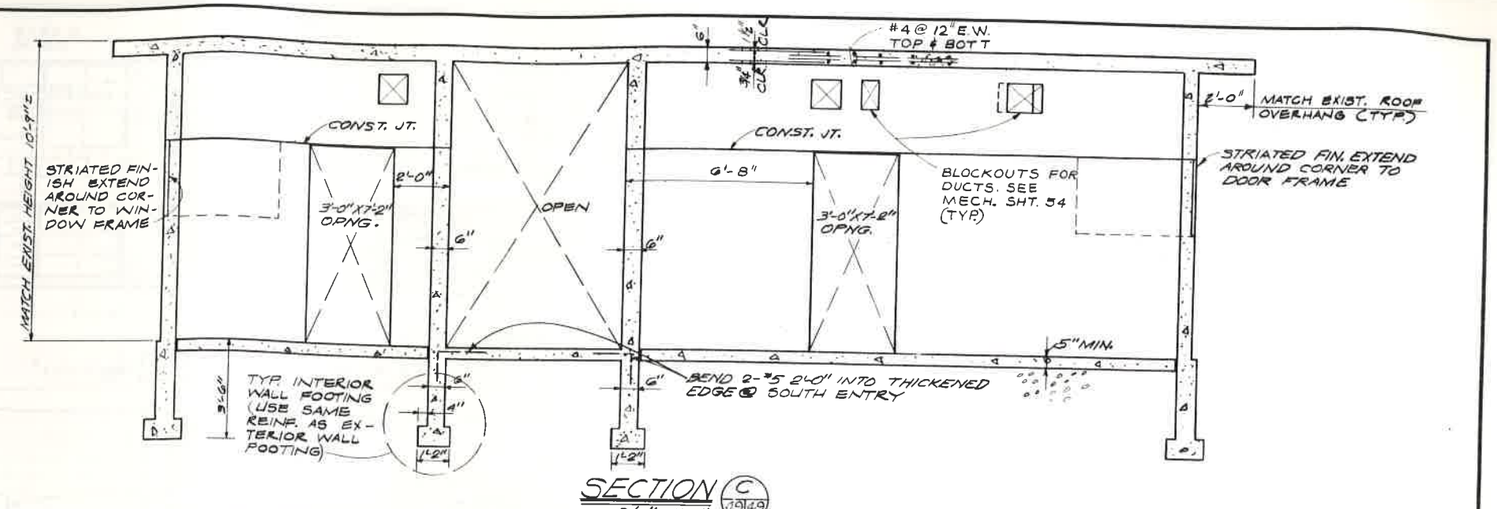
CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING - ARCHITECTURAL - FLOOR PLAN

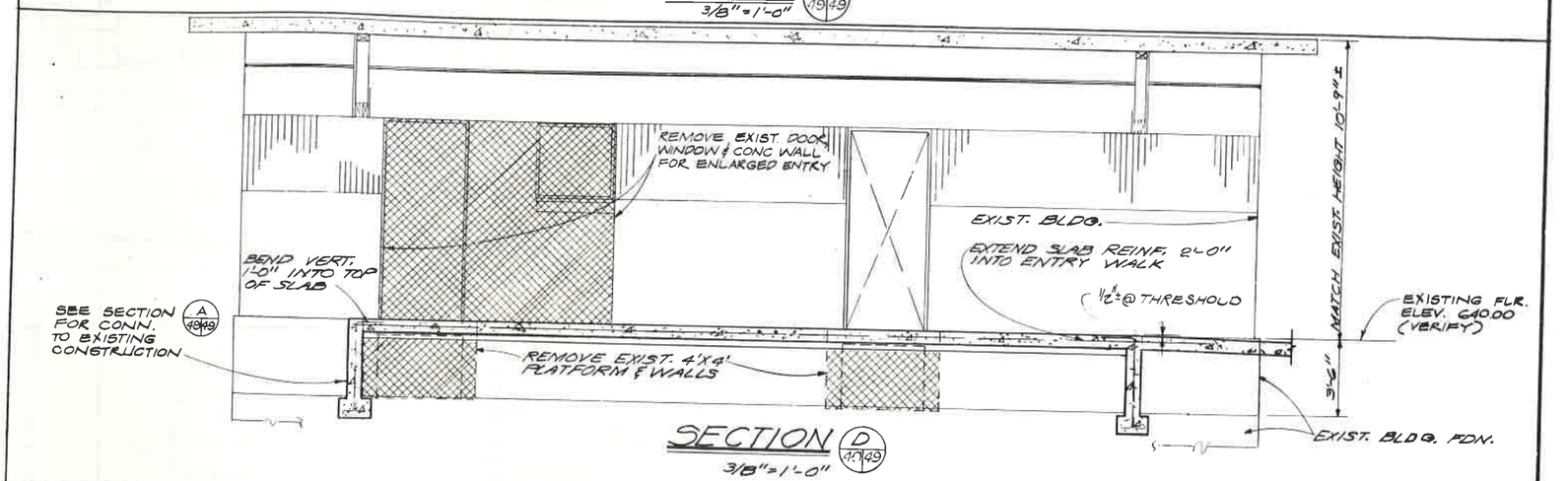
DES
DR
CK
PN 87039.
DRAWING C 7



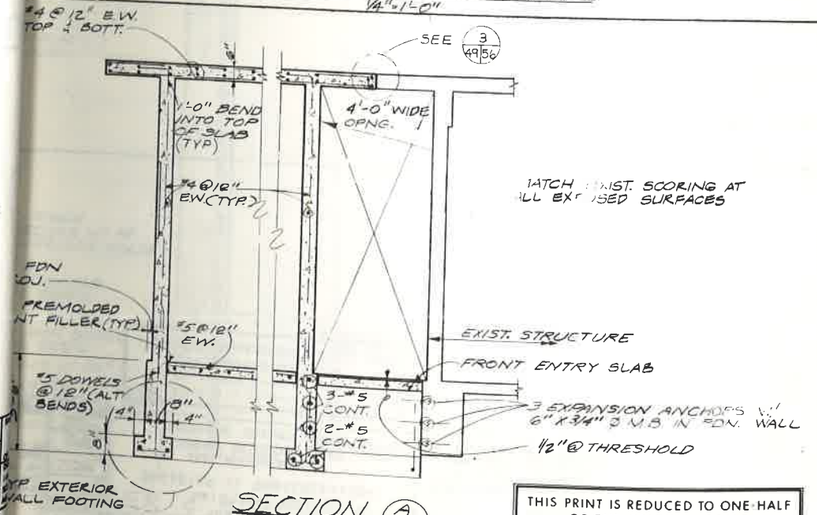
FOUNDATION AND ROOF PLAN
1/4" = 1'-0"



SECTION C 49/49
3/8" = 1'-0"

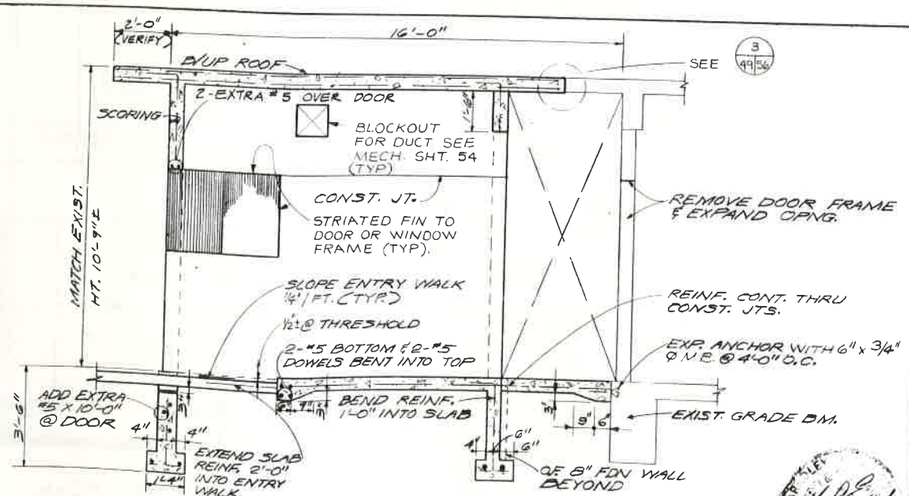


SECTION D 49/49
3/8" = 1'-0"

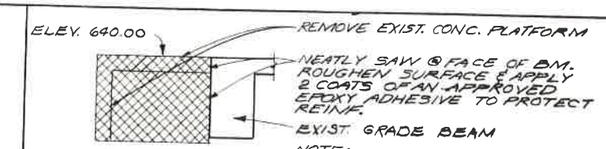


SECTION A 49/49
3/8" = 1'-0"

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'



SECTION B 49/49
3/8" = 1'-0"



NOTE:
SEE SECTION B 49/49 FOR NEW CONST.

SECTION E 49/49
3/8" = 1'-0"

GENERAL NOTES:

1. SEE SHT. 61 FOR GENERAL STRUCTURAL NOTES.
2. REINFORCE ALL FTGS., FDN & UPPER WALLS, ROOF & FLOOR SLABS AS NOTED IN SECTION A 49/49

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

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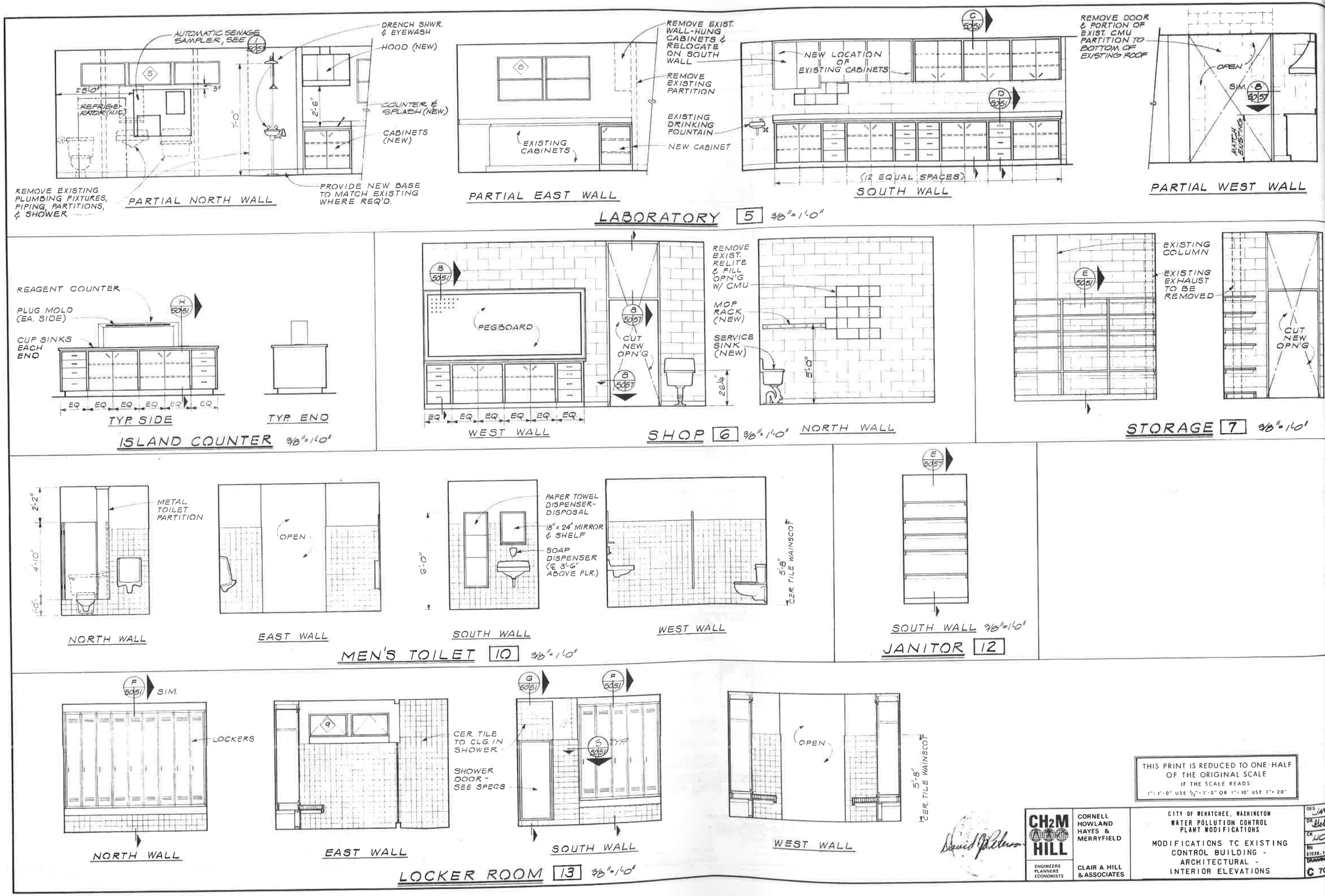
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING - STRUCTURAL - PLAN AND SECTIONS

DES. RPE | DR. KDW | CK. LD | RN 57039.1 | DRAWING NO. C 7039-1
SHEET 49 OF 71 | DATE JAN. 1973 | SCALE: AS SHOWN

DES JAY | DR JLB | CK HCT | RN 57039.1 | DRAWING NO. C 7039-1



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IF THE SCALE READS:
1"=1'-0" USE ½"=1'-0" OR 1"=10' USE 1"=20'

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ENGINEERS PLANNERS ECONOMISTS

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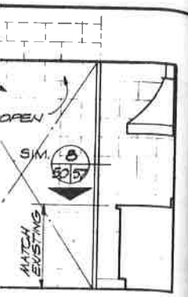
CLAIR A. HILL & ASSOCIATES

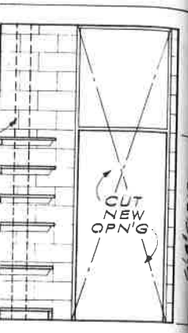
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

MODIFICATIONS TO EXISTING CONTROL BUILDING - ARCHITECTURAL - INTERIOR ELEVATIONS

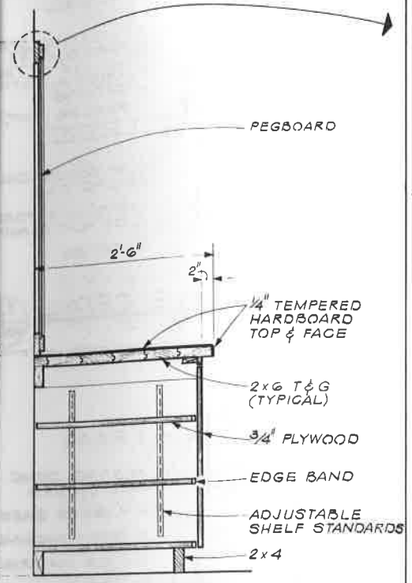
DES JMY
DR HLB
CK HCT
RH 8703B.1
DRAWING NO. C 7039



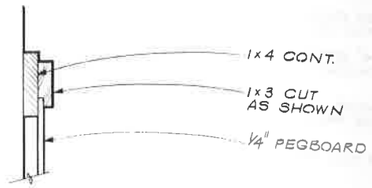
WEST WALL



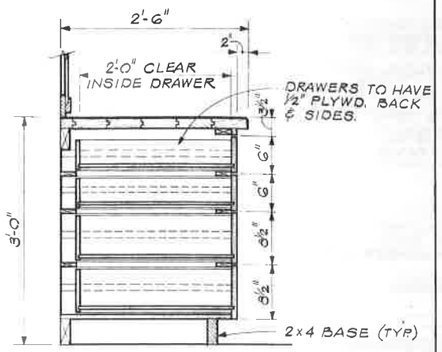
7 3/8"=1'-0'



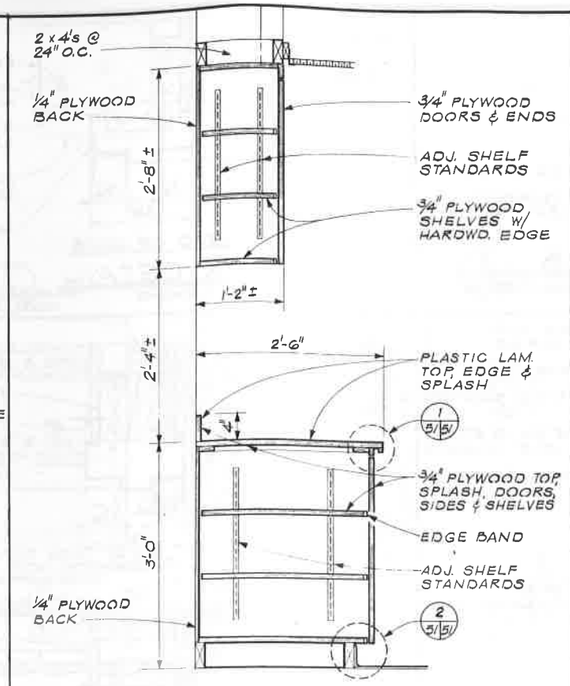
WORKBENCH SECTION (A 57/51)
1" = 1'-0"



PEGBD. DETAIL
3" = 1'-0"

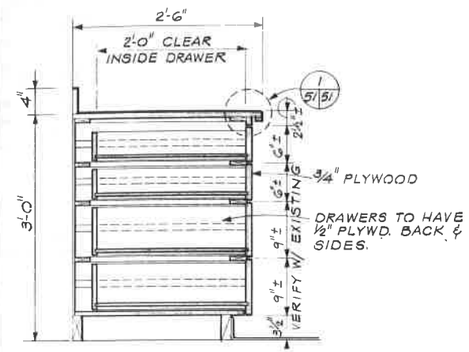


WORKBENCH DRWR. SECT. (B 50,57/51)
1" = 1'-0"

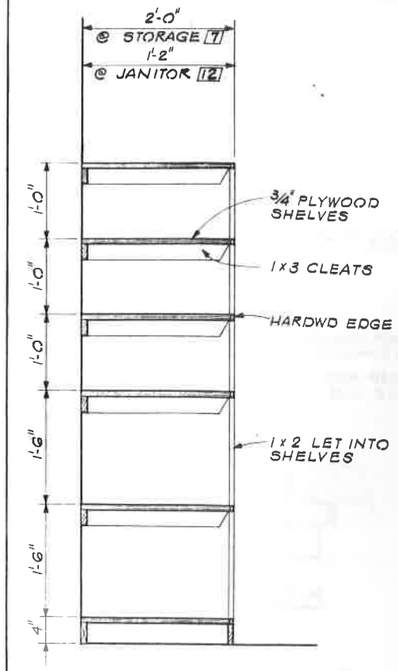


TYPICAL CABINET SECTION (C 50/51)

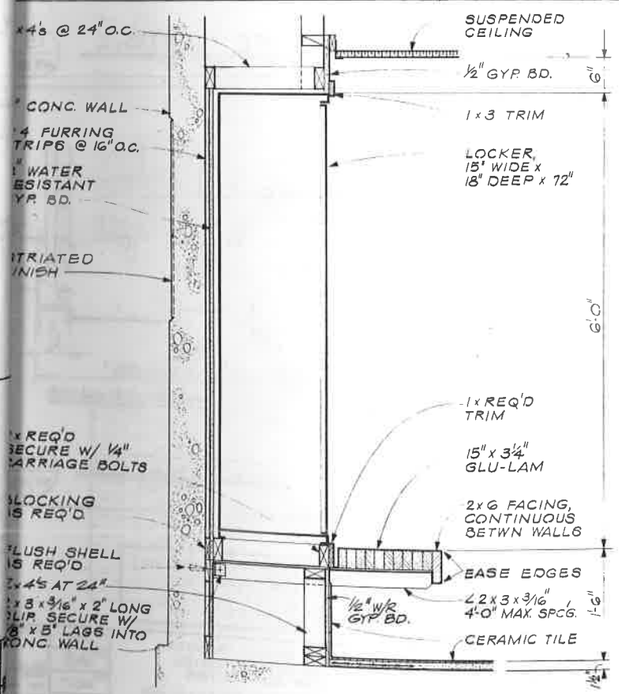
NOTE:
ALL CONTROL BUILDING CABINET DIMENSIONS ARE APPROXIMATE ONLY & DETAILS AND DIMENSIONS SHOULD BE FIELD CHECKED PRIOR TO STARTING FABRICATION, IN ORDER TO MATCH EXISTING.



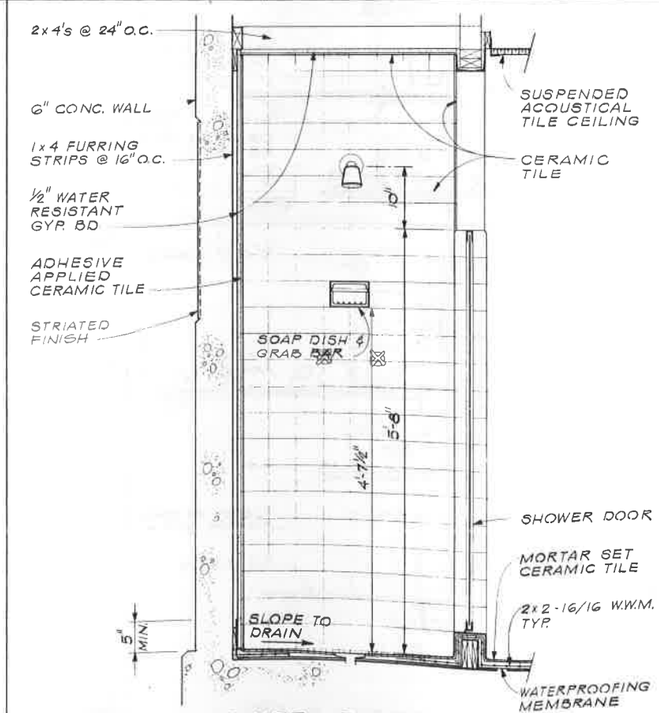
BASE CABINET W/ DRAWERS (D 50,57/51)



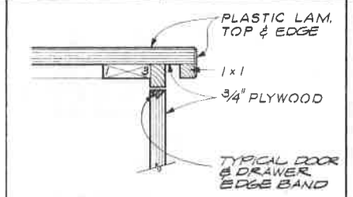
SHELVING SECTION (E 50/51)
1" = 1'-0"



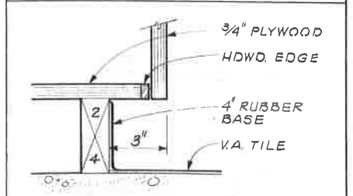
LOCKER & BENCH SECTION (F 50/51)
1" = 1'-0"



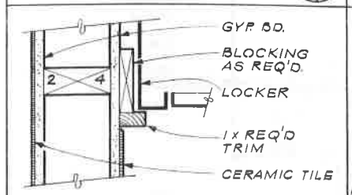
SHOWER SECTION (G 48/51)
1" = 1'-0"



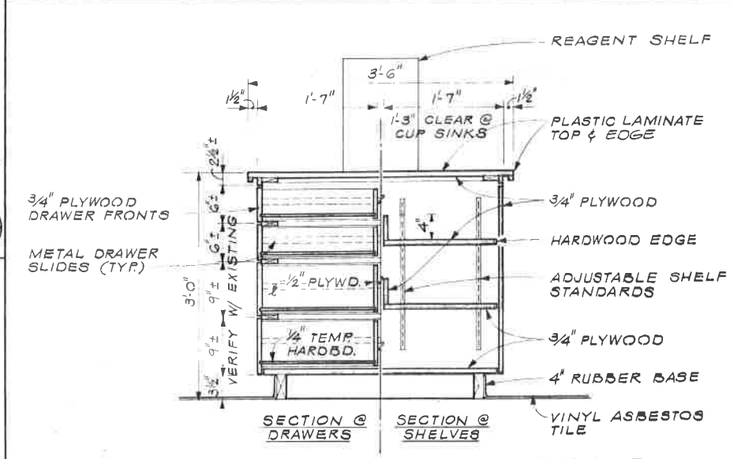
TYP. COUNTER EDGE (1 51/57/51)
3" = 1'-0"



TYP. CABINET BASE (2 51/51)
3" = 1'-0"



DETAIL @ LOCKERS (3 50/51)
3" = 1'-0"



ISLAND COUNTER SECTION (H 50/51)
1" = 1'-0"

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IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

TO ONE-HALF
SCALE
ADS:
10' USE 1" = 20'

ASHINGTON
CONTROL
TIONS
EXISTING
DING -
AL -
ATIONS

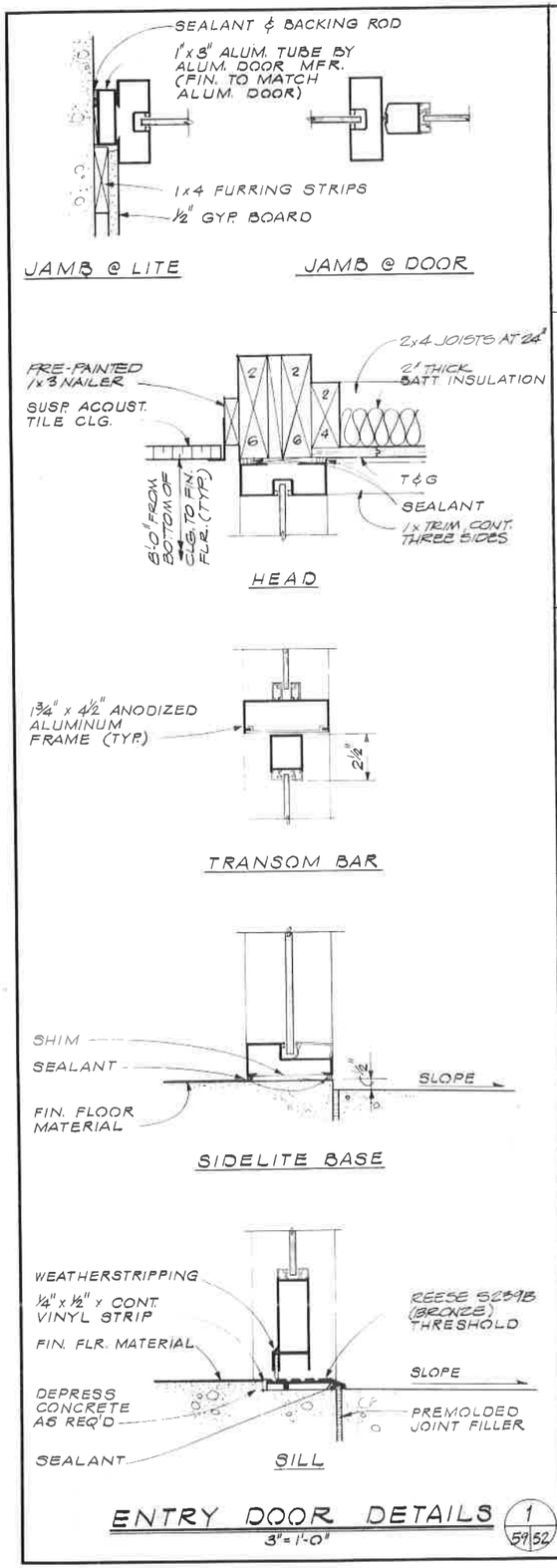
DES JAY	
DR HLB	
CK HCT	
RN 57039.1	
DRAWING NO. C 7039-	

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

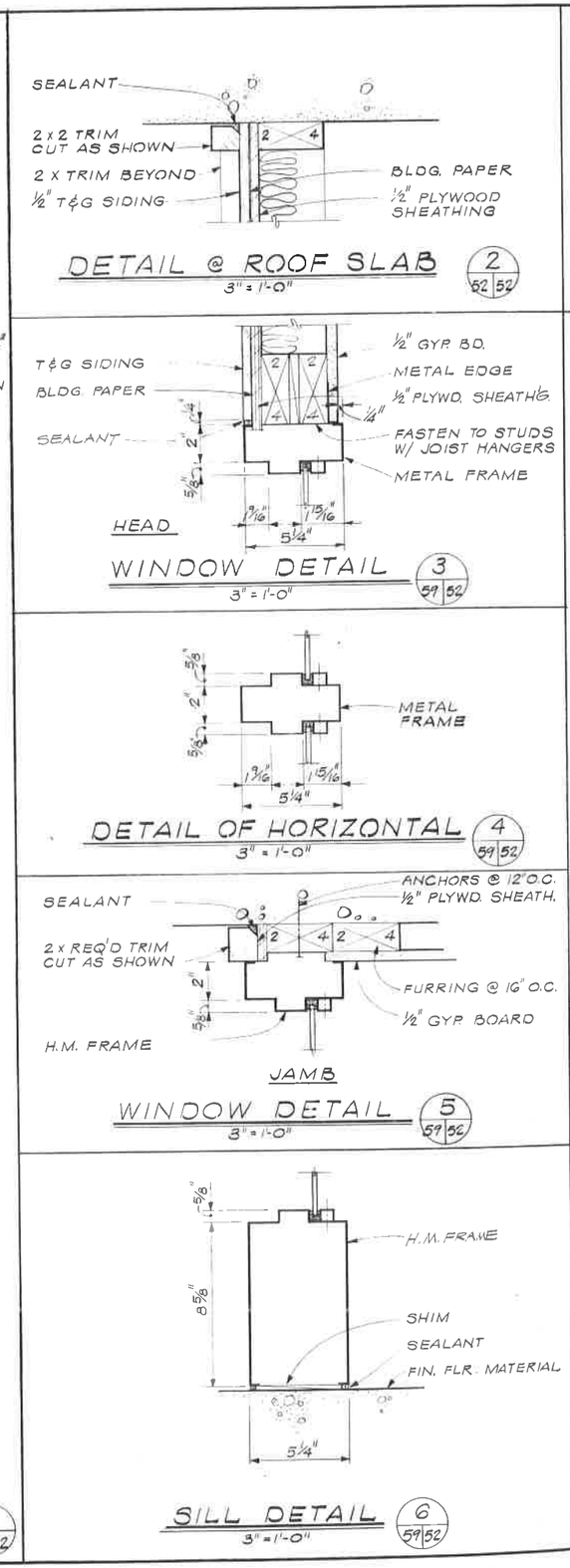
CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

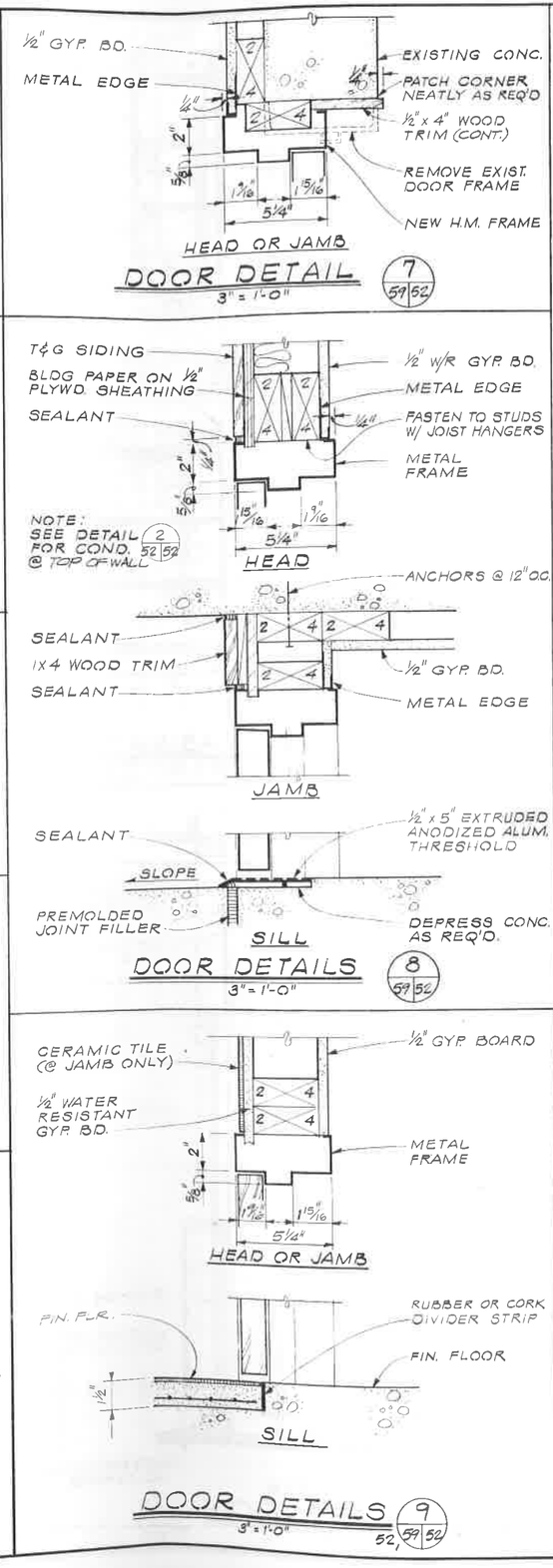
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING-ARCHITECTURAL - CABINET, COUNTER AND MISCELLANEOUS DETAILS

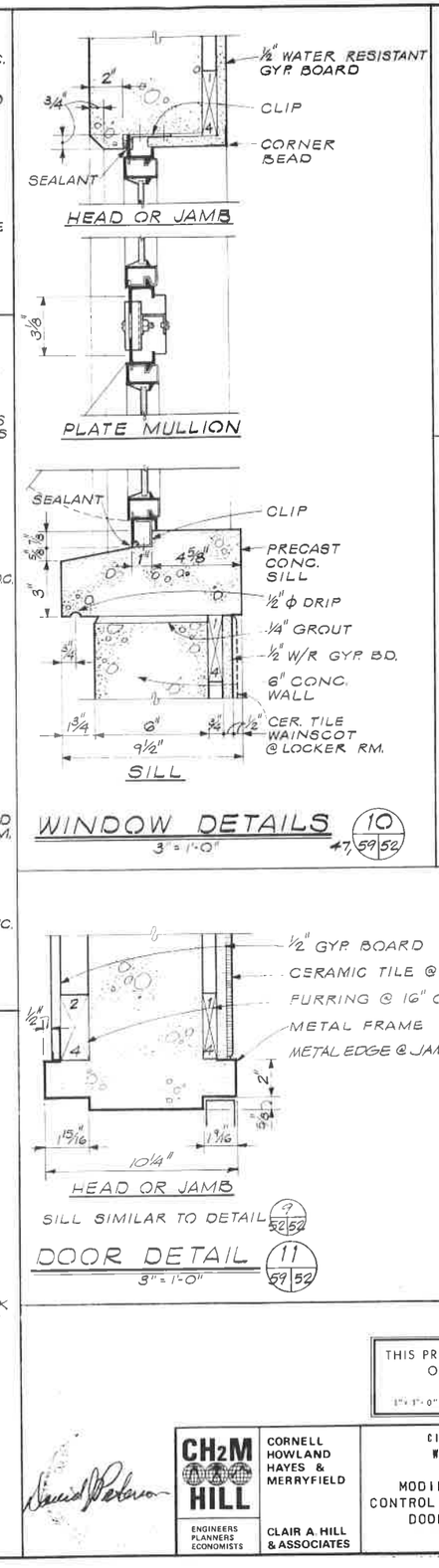
DES JAY	SHEET 51
DR HLB	OF 78
CK HCT	DATE: JAN. 1973
RN 57039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	

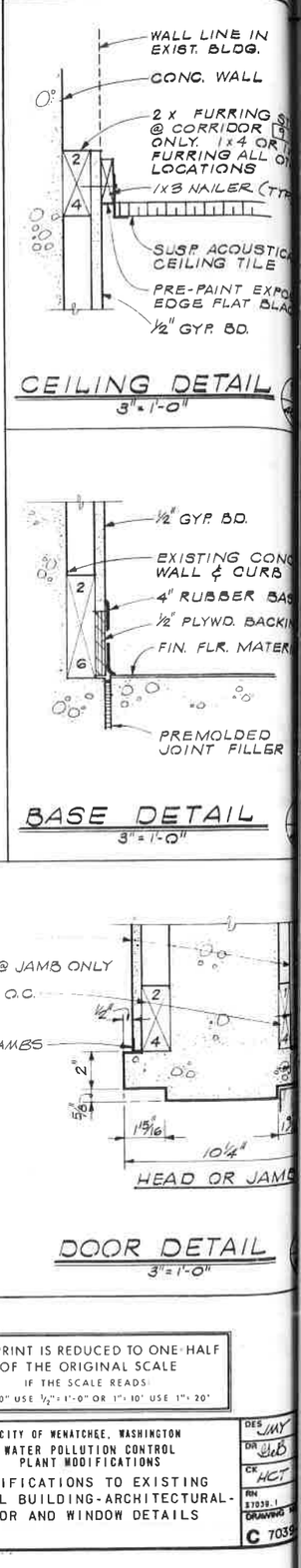


ENTRY DOOR DETAILS (1 / 59 52)
3" = 1'-0"









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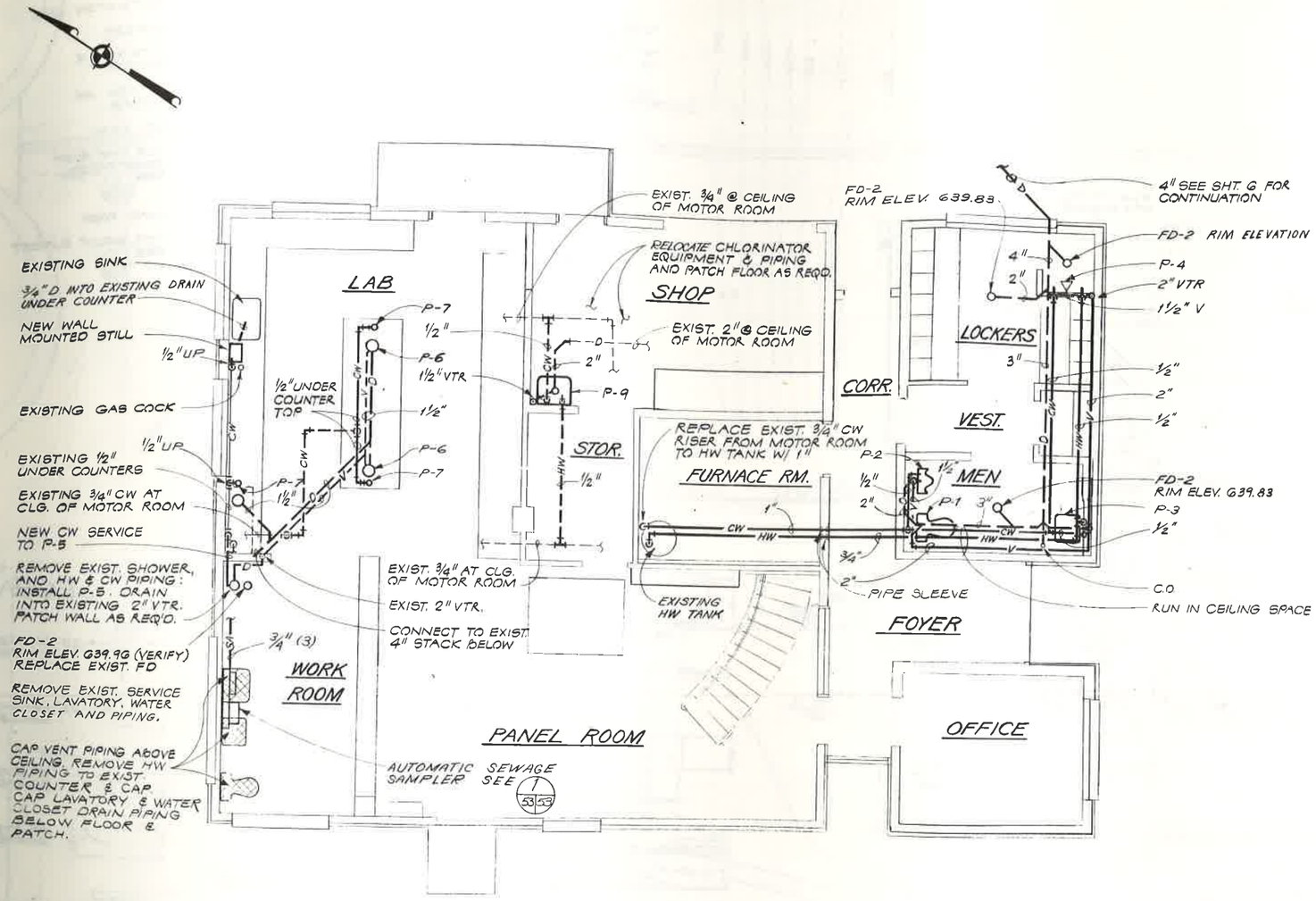
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING-ARCHITECTURAL-DOOR AND WINDOW DETAILS

DES. JMY
DR. JLB
CK. HCT
RN 87039-1
DRAWING C 703

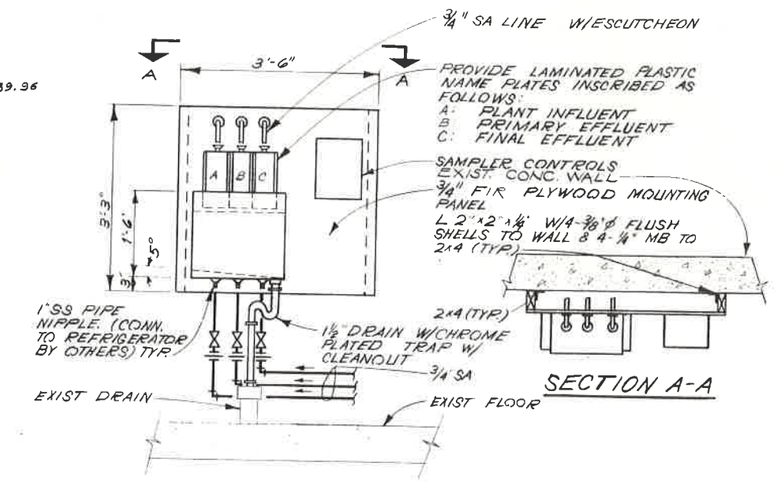


PLUMBING FIXTURE SCHEDULE

ITEM	DESCRIPTION	DRAIN	VENT	HW	CW
P-1	WATER CLOSET	4	2	—	1/2
P-2	URINAL	2	1 1/2	—	3/4
P-3	LAVATORY	1 1/2	1 1/2	1/2	1/2
P-4	SHOWER	2	1 1/2	1/2	1/2
P-5	DRENCH SHOWER/EYE WASH	1 1/2	1 1/2	—	1
P-6	LAB CUP SINK	1 1/2	1 1/2	—	—
P-7	WATER COCK	—	—	—	1/2
P-8	SINK	1 1/2	1 1/2	1 1/2	1 1/2
P-9	SERVICE SINK	3	1 1/2	1/2	1/2
P-10	HW TANK	—	—	3/4	3/4

PLUMBING PLAN

1/4" = 1'-0"



SECTION A-A

AUTOMATIC SEWAGE SAMPLER DETAIL

3/4" = 1'

1 / 50 53 53

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS
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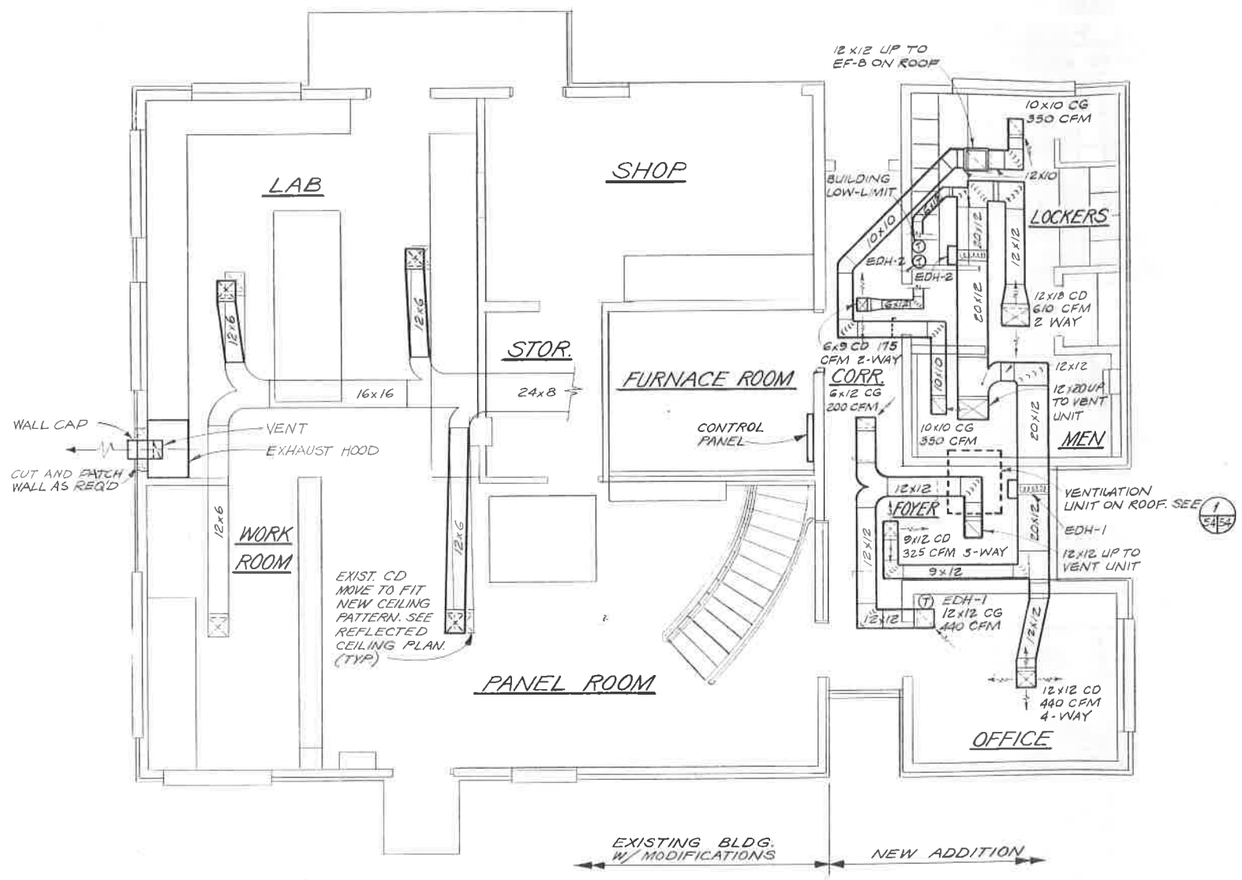
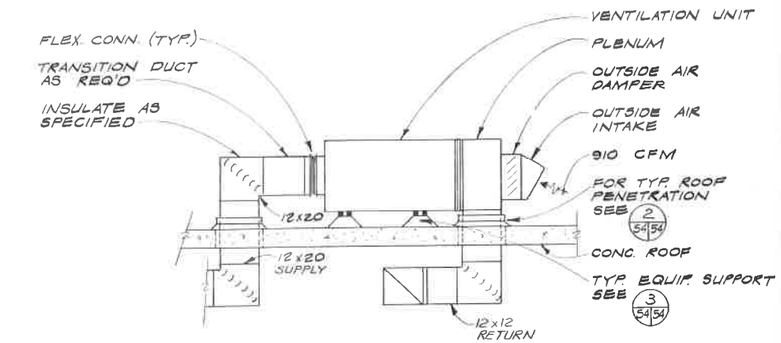
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING - MECHANICAL - PLUMBING PLAN

DES PFW
DR RAH
CK HCR
RN 57039.1
DRAWING NO. C 7039-1
SHEET 53
OF 71
DATE JAN. 1973
SCALE: AS SHOWN



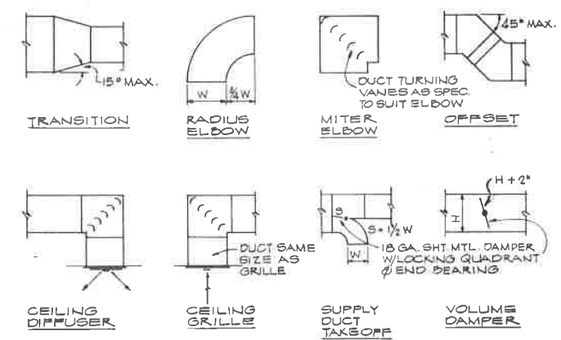
HEATING & VENTILATION PLAN

1/4" = 1'-0"



DETAIL 1/54/54

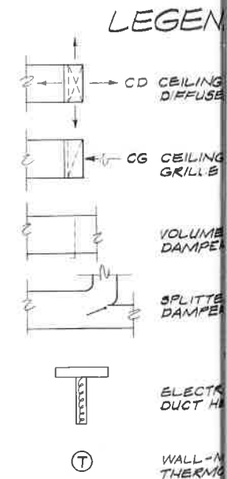
1/2" = 1'-0"

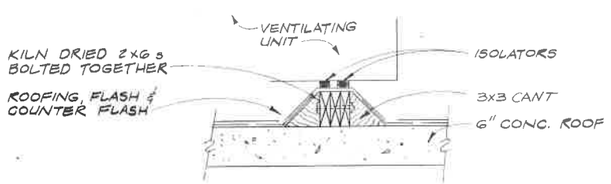


TYPICAL DUCT CONSTRUCTION DETAIL N.T.S

GENERAL DUCTWORK NOTES:

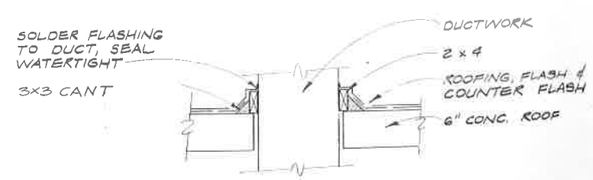
1. CEILING DIFFUSERS & GRILLES ARE TO BE LOCATED IN THE PANELS BETWEEN THE T-BAR GRIDS IN ALL SUSPENDED CEILING SYSTEMS. LOCATE DIFFUSERS & GRILLES AS INDICATED ON REFLECTED CEILING PLAN.
2. PROVIDE SPLITTER DAMPER AT EACH SUPPLY DUCT TAKE-OFF IN ACCORDANCE WITH TYPICAL DUCT CONSTRUCTION DETAILS ABOVE.
3. PROVIDE VOLUME DAMPERS FOR EACH GRILLE AT EACH RETURN CONNECTION AND ANY OTHER LOCATIONS INDICATED ON THE DRAWINGS IN ACCORDANCE WITH TYPICAL DUCT CONSTRUCTION DETAILS ABOVE. DAMPERS TO BE INSTALLED MINIMUM 5'-0" FROM GRILLE EXCEPT AS REQUIRED.





EQUIPMENT SUPPORT DETAIL 3/54/54

N. T. S.



ROOF PENETRATION DETAIL 2/49/54/54

N.T.S.

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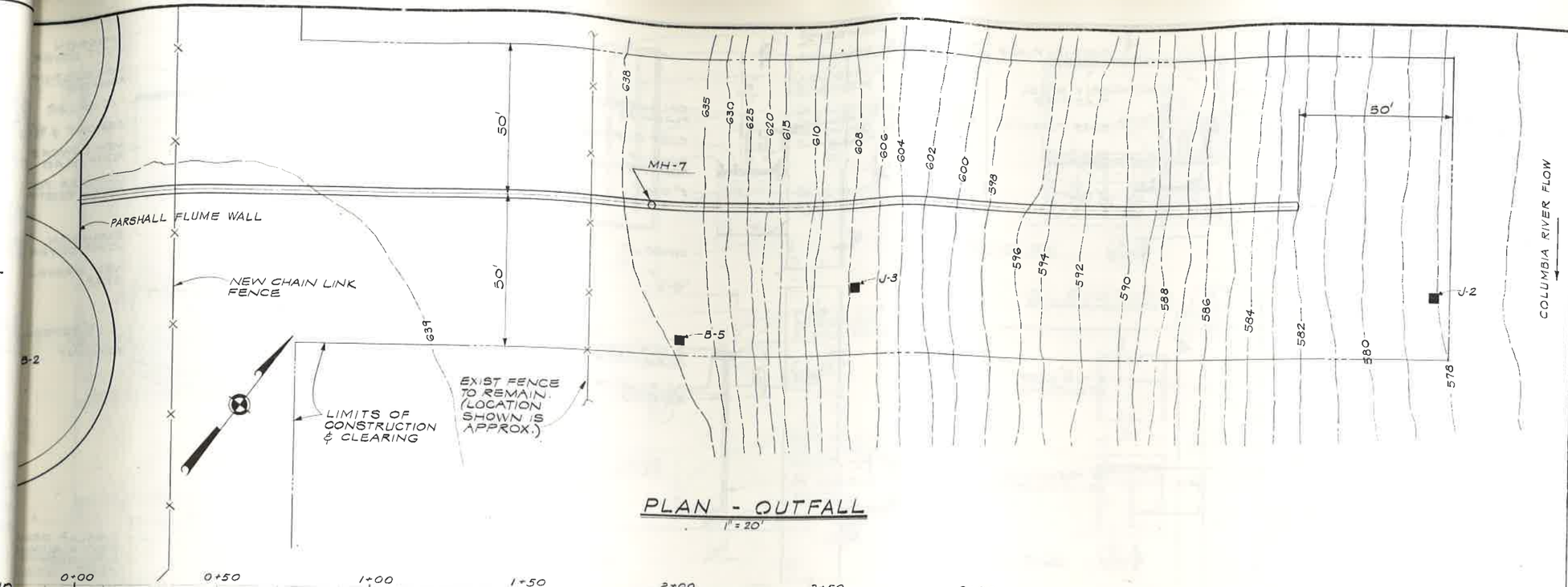
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
MODIFICATIONS TO EXISTING CONTROL BUILDING-MECHANICAL - HEATING AND VENTILATING

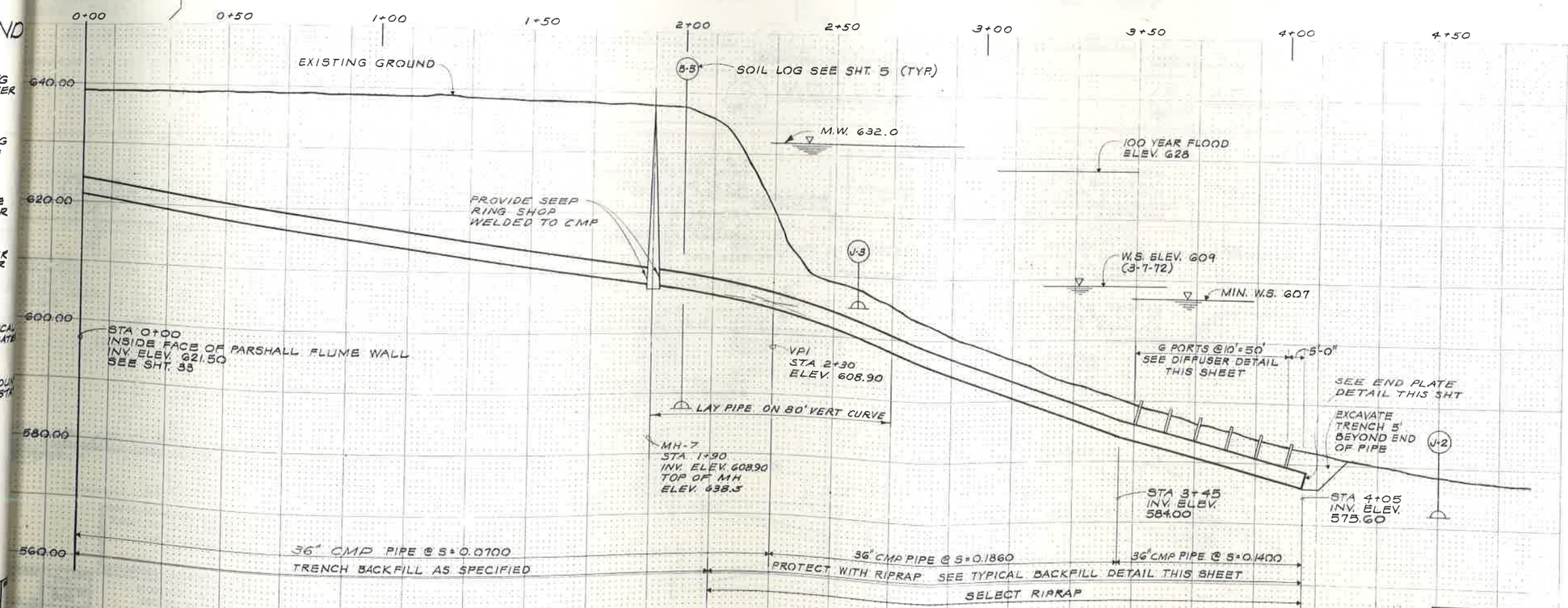
DES. FP
DR. EG
CK. HC
RN 57039
DRAWING C 7

NTILATION UNIT
BNUM
TSIDE AIR
MPER
TSIDE AIR
AKE
CFM
R TYP. ROOF
NETRATION
(2/S4/S4)
C. ROOF
EQUIP. SUPPORT
(3/S4/S4)



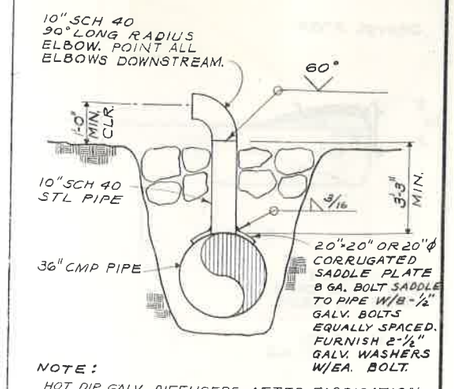
PLAN - OUTFALL

1" = 20'



PROFILE - OUTFALL

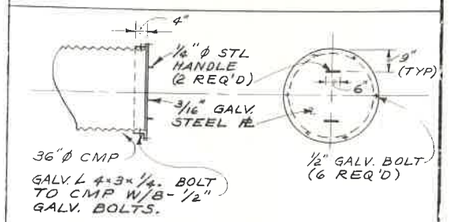
HORIZ. 1" = 20' VERT. 1" = 10'



NOTE:
HOT DIP GALV. DIFFUSERS AFTER FABRICATION

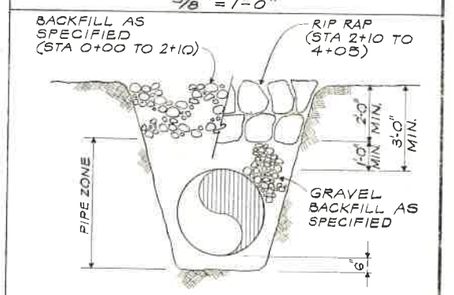
DIFFUSER DETAIL

3/8" = 1'-0"



END PLATE DETAIL

3/8" = 1'-0"



TYPICAL BACKFILL DETAIL

3/8" = 1'-0"

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IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

LEGEND

- CD CEILING DIFFUSER
- CG CEILING GRILLE
- VOLUME DAMPER
- SPLITTER DAMPER
- ELECTRICAL DUCT HEATER
- WALL-MOUNTED THERMOSTAT

DES	PFW
DR	RGB
CK	HCR
RN	S7039.1
DRAWING NO.	C 7039-1

CH2M HILL — ENGINEERS PLANNERS ECONOMISTS

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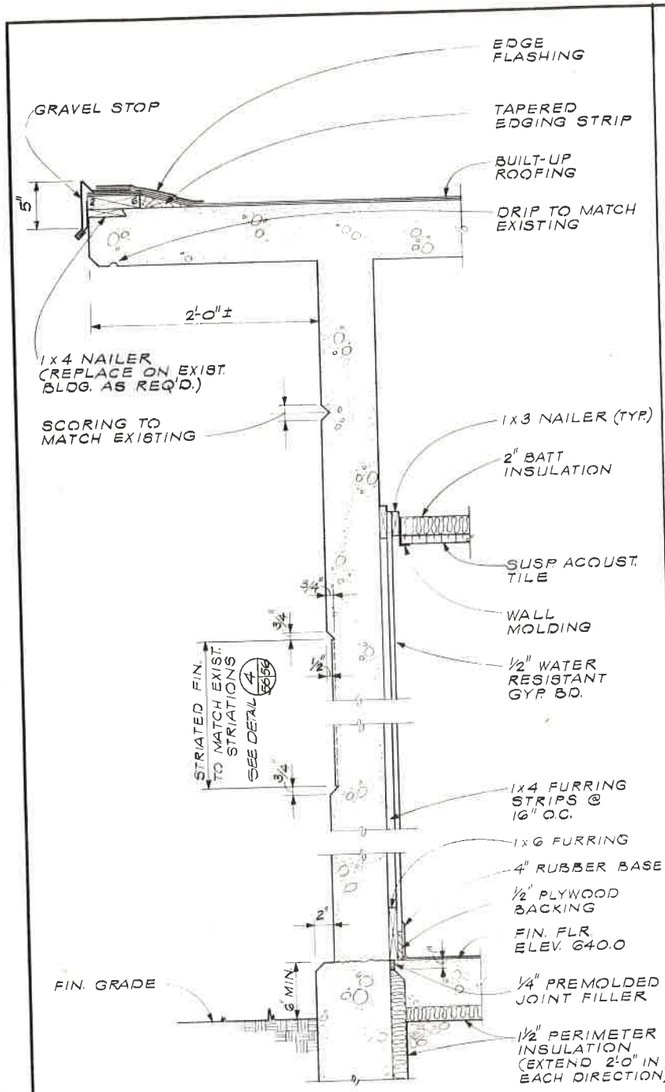
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

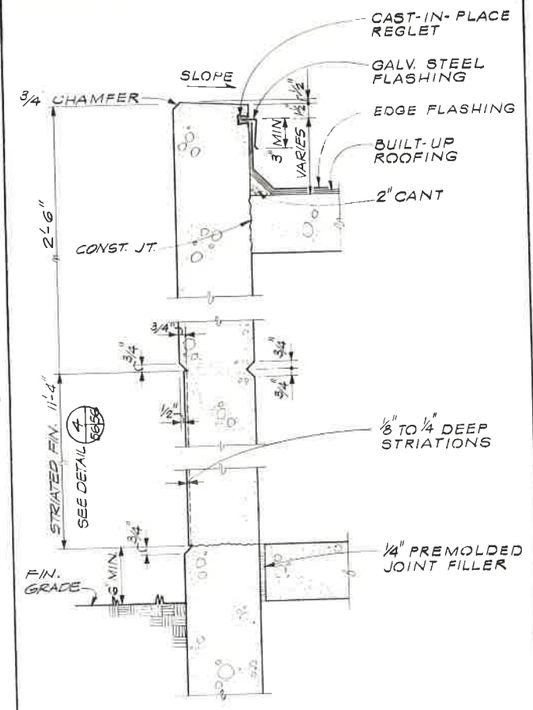
OUTFALL - PLAN AND DETAILS

DES	JGG
DR	
CK	RWL
RN	S7039.1
DRAWING NO.	C 7039-1
SHEET	55 OF 78
DATE	JAN. 1973
SCALE	AS SHOWN



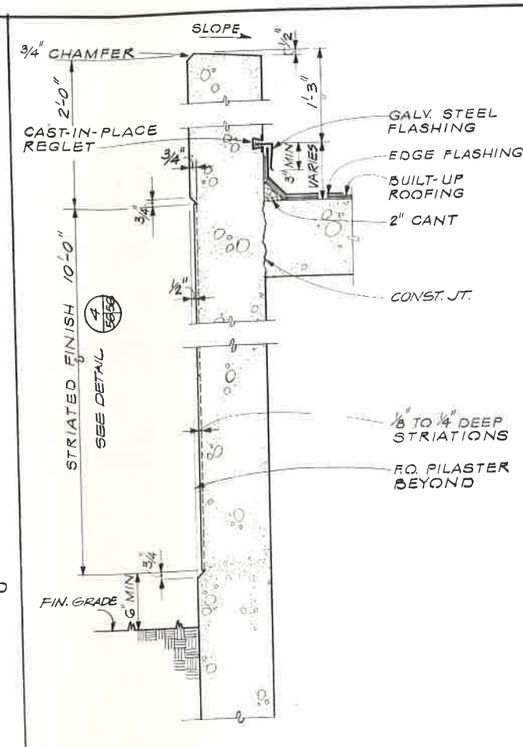
CONTROL BLDG.

SECTION A
1/2" = 1'-0" 40, 47/56



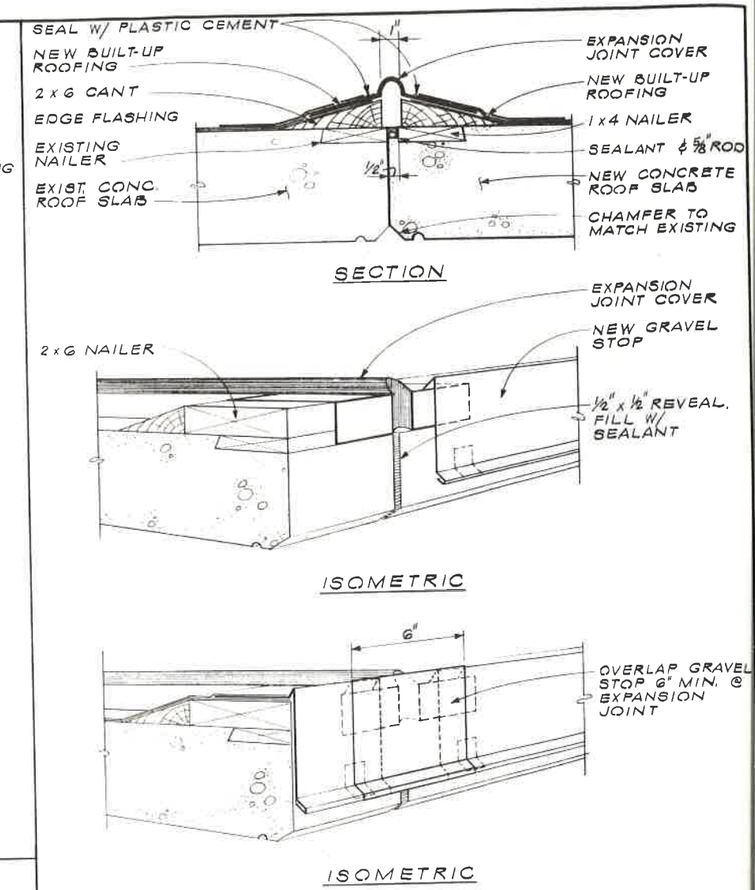
CHLORINE BLDG.

SECTION B
1/2" = 1'-0" 37/56

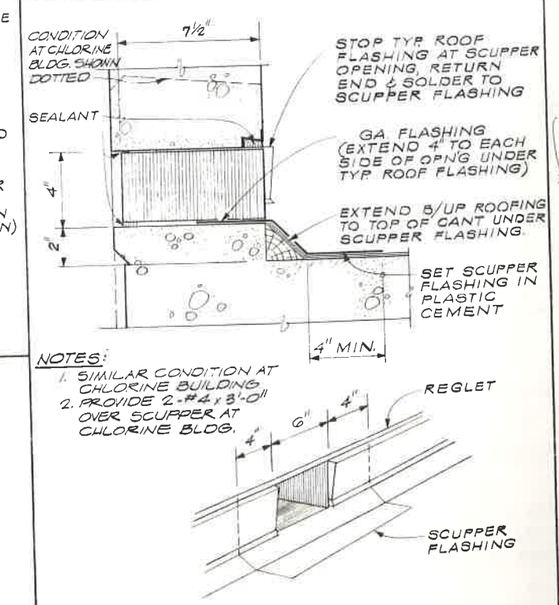


BLOWER BLDG.

SECTION C
1/2" = 1'-0" 21/56

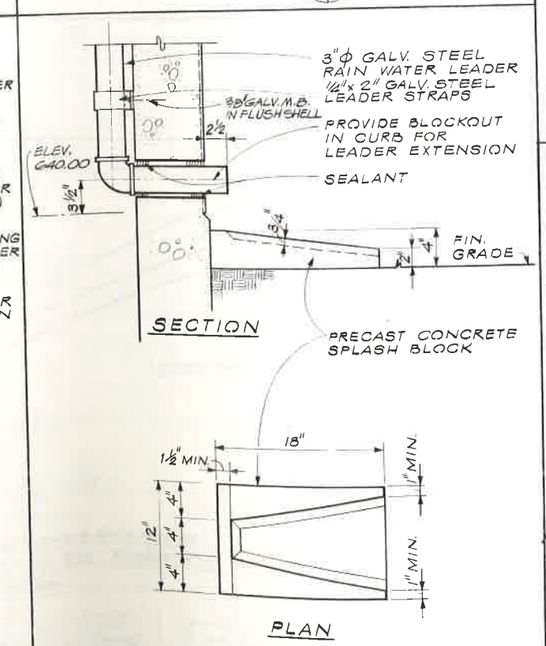


EXPANSION JOINT DETAILS 3
NO SCALE 47, 49/56

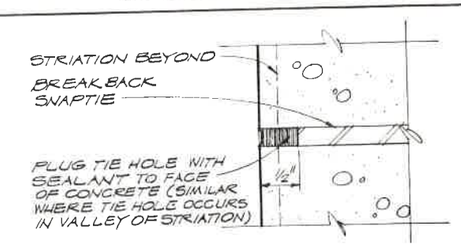


NOTES:
1. SIMILAR CONDITION AT CHLORINE BUILDING.
2. PROVIDE 2-#4 x 3'-0" OVER SCUPPER AT CHLORINE BLDG.

OVERFLOW SCUPPER 1
21, 37, 38/56



LEADER & SPLASH BLOCK 2
1/2" = 1'-0" 21, 22, 24, 37, 38, 39/56



TYP. TIE HOLE DETAIL AT STRIATED FINISH 4
FULL SCALE 21, 56/56

David Peterson

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IF THE SCALE READS:
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CLAIR A. HILL & ASSOCIATES

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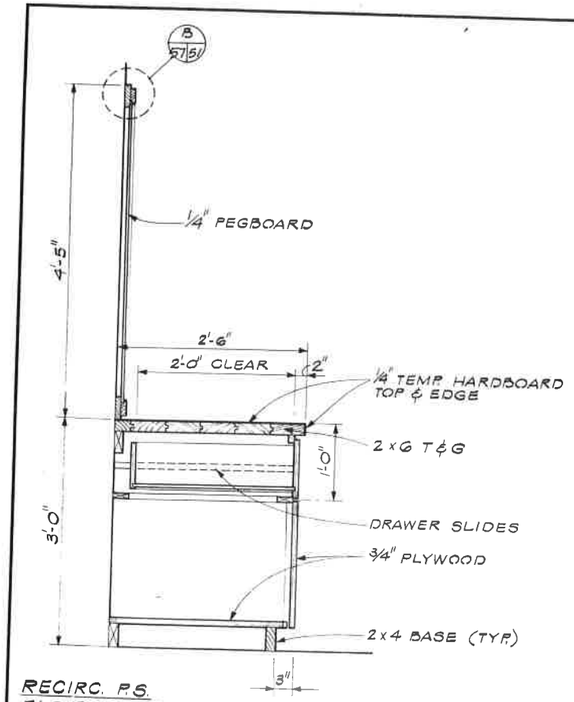
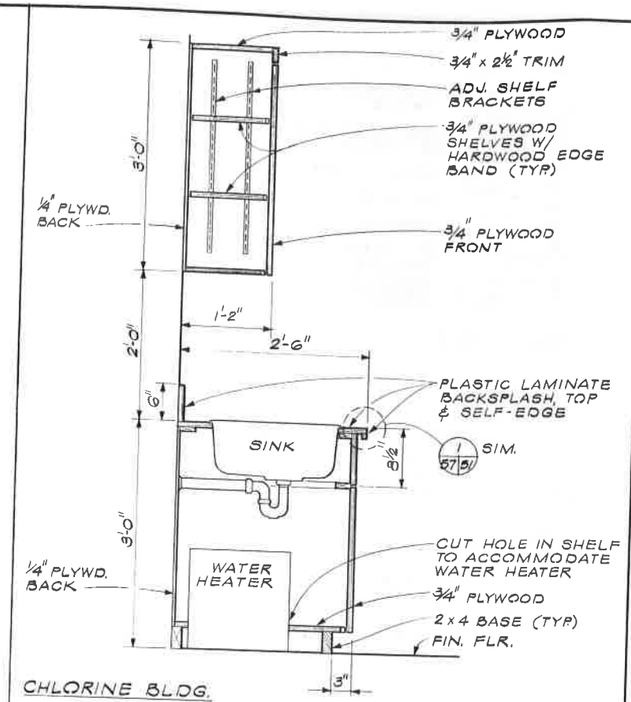
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - ARCHITECTURAL - SECTIONS AND DETAILS

DES JMY
DR RLB
CK HCT
AN 97039.1
SHEET OF
DATE JAN. 1
SCALE AS S
DRAWING NO. C 7039-1



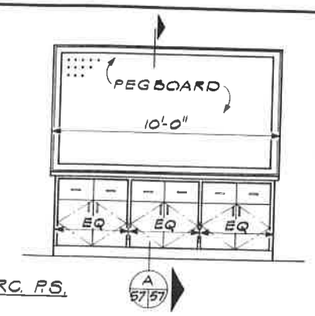
RECIRC. P.S.
BLOWER BLDG.

WORKBENCH SECTION (A 57/57)
1" = 1'-0"



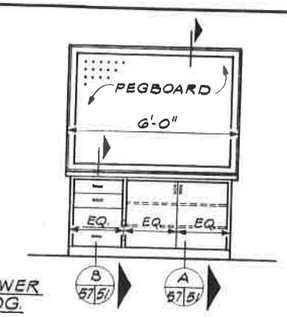
CHLORINE BLDG.

SECTION (B 57/57)
1" = 1'-0"



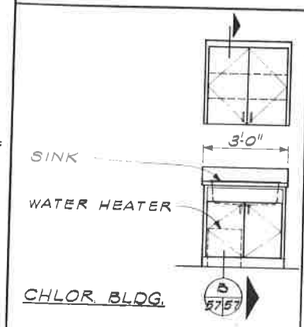
RECIRC. P.S.

ELEVATION (4 33/57)



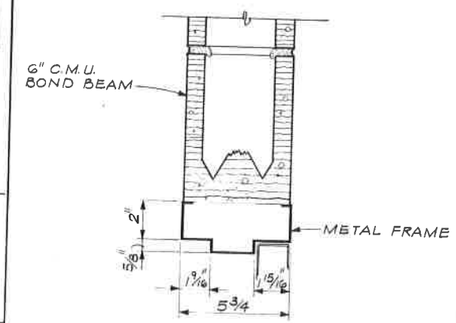
BLOWER BLDG.

ELEVATION (5 24/57)

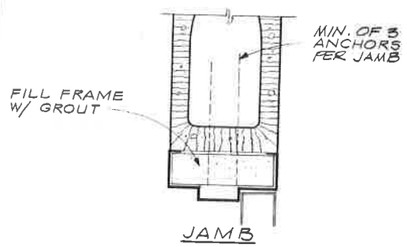


CHLOR. BLDG.

ELEVATION (6 39/57)

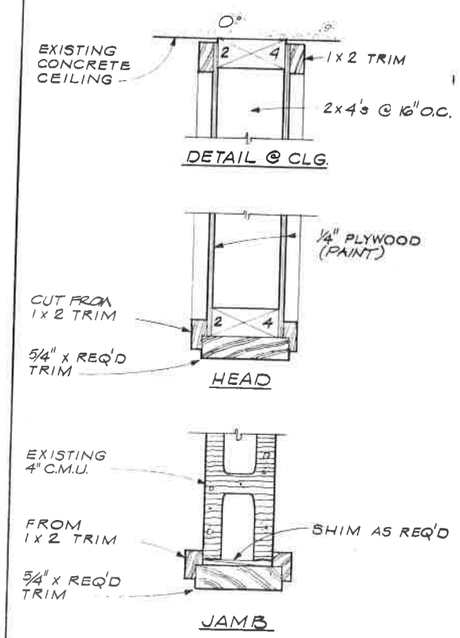


HEAD

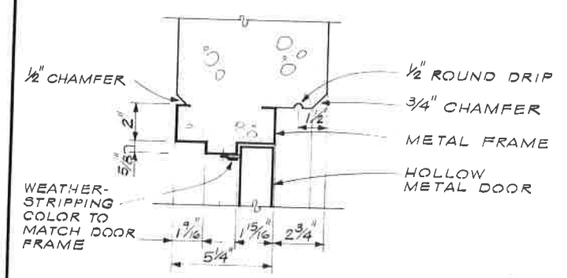


JAMB

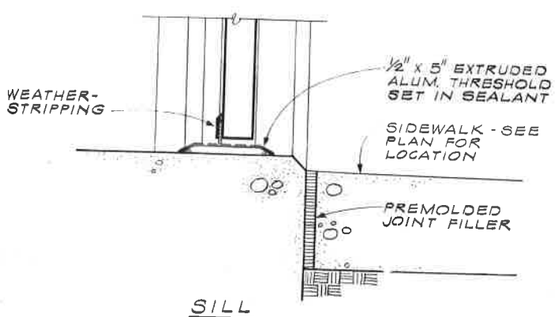
DETAIL (7 59/57)
3" = 1'-0"



DETAIL (8 50/57)
3" = 1'-0"

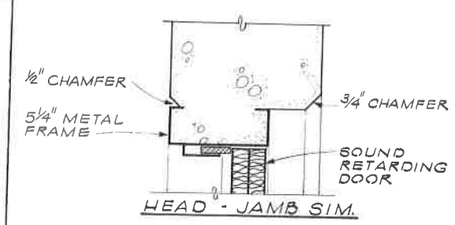


HEAD - JAMB SIM.

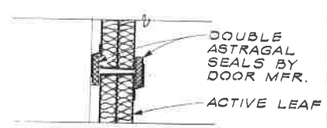


SILL

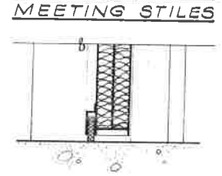
DETAIL (1 59/57)
3" = 1'-0"



HEAD - JAMB SIM.

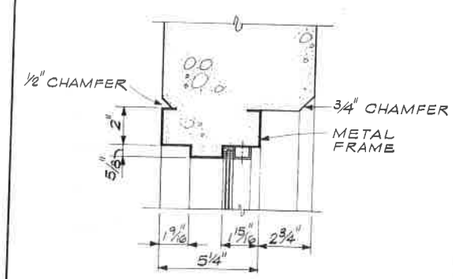


MEETING STILES

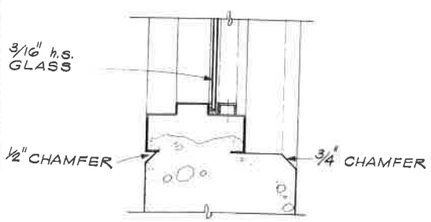


SILL

DETAIL (2 59/57)
3" = 1'-0"



HEAD - JAMB SIM.



SILL

CHLORINE BLDG. RELITE

DETAIL (3 59/57)
3" = 1'-0"

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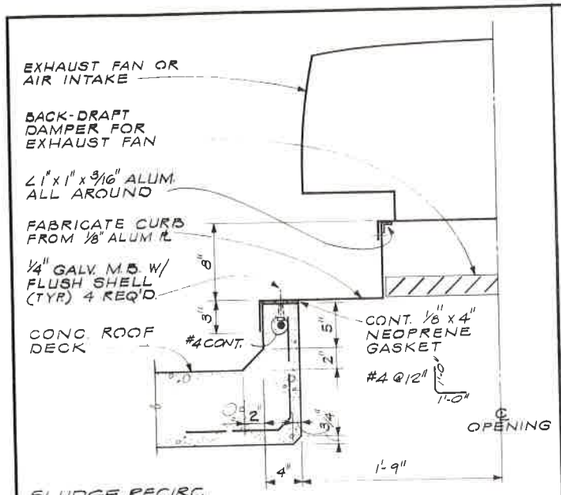
WATER POLLUTION CONTROL PLANT MODIFICATIONS

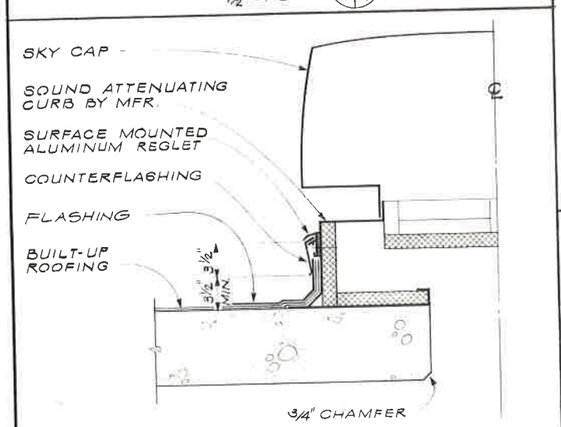
GENERAL DETAILS - ARCHITECTURAL - SECTIONS AND DETAILS

DES JMY	SHEET 57
DR DLB	OF 78
CK HCT	DATE: JAN. 1973
FN 27039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



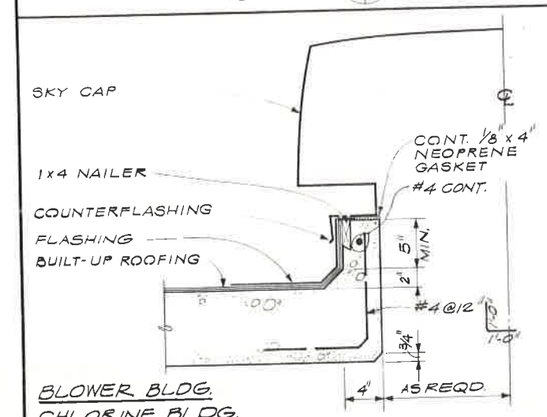
SLUDGE RECIRC. PUMP STATION

DETAIL 1
1/2" = 1'-0"
31/58



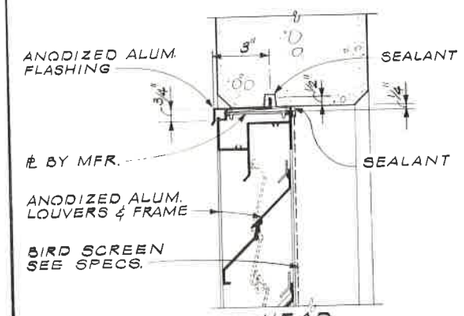
BLOWER BLDG.

DETAIL 2
1/2" = 1'-0"
25/58

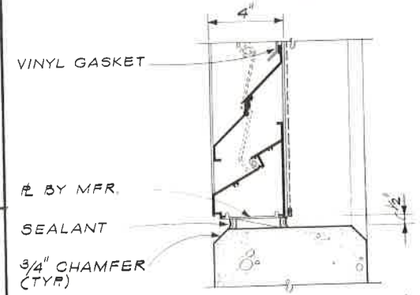


BLOWER BLDG.
CHLORINE BLDG.

DETAIL 3
1/2" = 1'-0"
25, 38/58

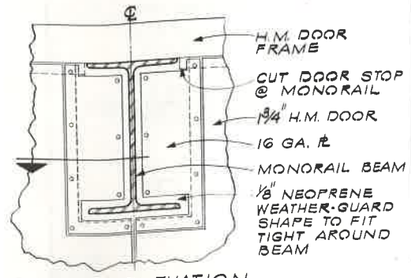


HEAD

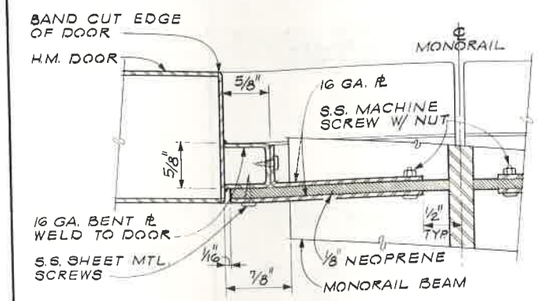


SILL (JAMB SIM.)

LOUVER DETAIL 4
3" = 1'-0"
21/58

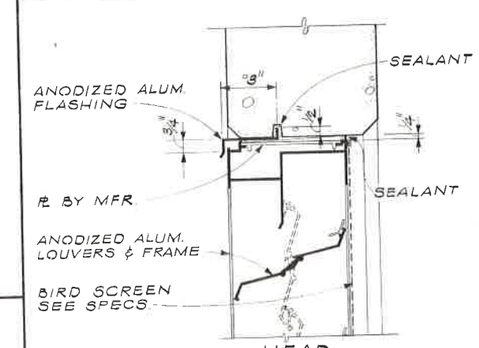


OUTSIDE ELEVATION

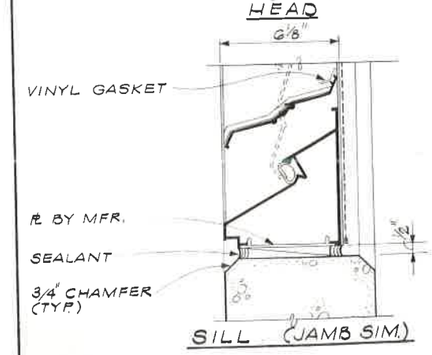


SECTION

DOOR DETAIL @ MONORAIL 6
N.T.S.
37, 59/58

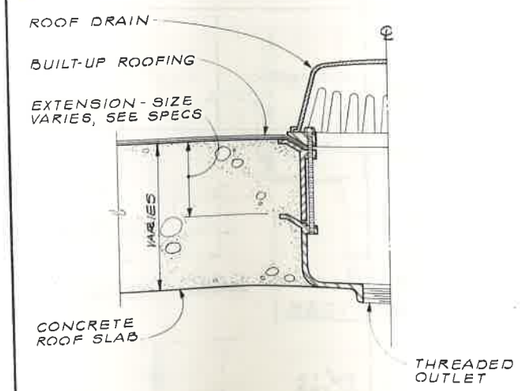


HEAD



SILL (JAMB SIM.)

LOUVER DETAIL 5
3" = 1'-0"
21/58



ROOF DRAIN DETAIL 7
3" = 1'-0"
23, 24, 38, 39/58

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David Peterson

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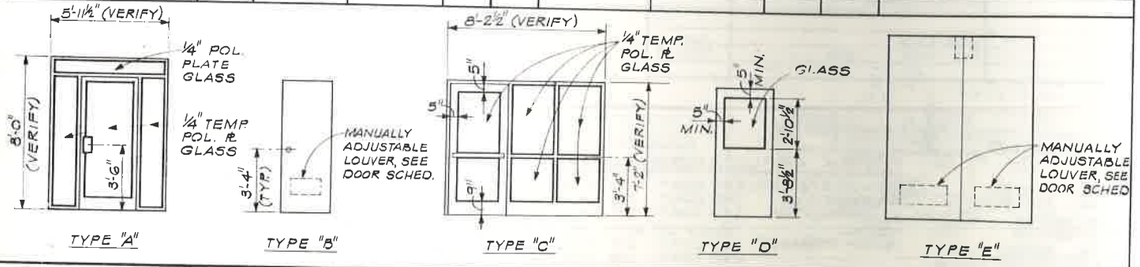
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - ARCHITECTURAL - DETAILS,

DES JMY
DR SLB
CK HCT
RN 27039.1
SHEET 5 OF 18
DATE: JAN. 1972
SCALE: AS SHOWN
DRAWING NO. C 7039-1

DOOR SCHEDULE

⬡	SIZE & LOCATION	TYPE	MATERIAL DOOR	MATERIAL FRAME	DETAIL NO.	SHEET NO.	GLASS	LOUVER MIN. FREE AREA	HDWE. SET NO.	COLOR	REMARKS
	CONTROL BLDG.										
1	(2) 3'-0" x 7'-0" x 1¾"	A	ALUM.	ALUM.	1	52	SEE ELEV. BELOW	–	1	P	SEE SPECS. & HARDWARE SCHED.
2	2'-8" x 7'-0" x 1⅜"	B	S.C. WOOD	METAL	14	52	–	–	2	L	
3	3'-0" x 7'-0" x 1¾"	C	H.M.	METAL	(1) 7	6&52	¼" TEMP. POL. PL	–	3	L	
4	3'-0" x 7'-0"	D	H.M.	METAL	–	–	EXISTING	–	–	L	EXISTING
5	3'-0" x 7'-0"	D	H.M.	METAL	–	–	EXISTING	–	–	L	EXISTING
6	2'-8" x 7'-0"	D	H.M.	METAL	–	–	EXISTING	–	–	L	EXISTING
7	(2) 4'-4" x 8'-10"	E	H.M.	METAL	–	–	–	–	–	L	EXISTING
8	2'-8" x 7'-0"	B	H.M.	METAL	–	–	–	–	–	L	EXISTING
9	3'-0" x 7'-0"	B	H.M.	METAL	2	48	–	–	–	L	EXISTING
10	3'-0" x 7'-0" x 1¾"	D	H.M.	METAL	8	52	3/16" h.s.	–	4	L	REMOVE EXIST. DOOR & PROVIDE 1½ HOUR LABELED DOOR
11	2'-8" x 7'-0" x 1⅜"	B	S.C. WOOD	METAL	11	52	–		4	L	
12	2'-8 x 7'-0" x 1⅜"	B	S.C. WOOD	METAL	9	52	–	–	5	L	UNDERCUT 1"
								–	2	L	
	BLOWER BLDG.										
13	(2) 2'-6" x 7'-0" x 1¾"	B	H.M.	METAL	1	57	–				
14	(2) 2'-6" x 7'-0" x 1¾"	B	H.M.	METAL	2	57	–	–	6	L	
								–	7	L	SOUND RETARDING DOOR
	CHLORINE BLDG.										
15	3'-0" x 7'-0" x 1¾"	D	H.M.	METAL	1	57	3/16" h.s.	1.5#	4	L	
16	3'-0" x 7'-0" x 1¾"	D	H.M.	METAL	1	57	3/16" h.s.	1.5#	4	L	
17	(2) 4'-0" x 11'-0" x 1¾"	E	H.M.	METAL	SIM. 1	57		1# PER LEAF	8	L	FOR MONORAIL OPN'G SEE 6/59
	DIGESTER BLDG.										
18	(2) 3'-9" x 9'-5"	E	H.M.	METAL	–	–	–	–	–	L	EXISTING
19	3'-6" x 6'-8"	B	H.M.	METAL	–	–	–	–	–	L	EXISTING
20	2'-8" x 7'-2" x 1¾"	B	H.M.	METAL	7	57	–	–	4	L	PROVIDE 1½ HR. LABEL DOOR & FRAME
	RECIRCULATION PUMP STATION										
21	3'-0" x 7'-0" x 1¾"	B	H.M.	METAL	SIM. 1	57	–	–	4	L	



HARDWARE SCHEDULE

HW-1
PUSH-PULL PLATES & REQ'D FIN. HDWE. BY DOOR MFR., SEE SPECS.

HW-2

1½ PR BUTTS	1279	4½ x 4½	US10B	HAGER
1 LOCK	440	MOCO	US10B	RUSSWIN
1 HOLDER	286		US10B	RUSSWIN

HW-3

1½ PR BUTTS	BB1191	4½ x 4½	US26D	HAGER
1 LATCH	410	MOCO	US10B	RUSSWIN
1 CLOSER	2810	FBL		RUSSWIN
PUSH-PULL	BARS	850½	28B	RUSSWIN

HW-4

1½ PR BUTTS	BB1191	4½ x 4½	US26D	HAGER
1 LOCK	440	MOCO	US26D	RUSSWIN
1 CLOSER	F2810	FBL		RUSSWIN
1 STOP	357½		US26D	RUSSWIN

HW-5

1½ PR BUTTS	BB1279	4½ x 4½ 8 x 16	US10B	HAGER
1 PUSH			US10B	RUSSWIN
1 PULL	745		US10B	RUSSWIN
1 CLOSER	2810	FBL	US10B	RUSSWIN
1 STOP	357¾		US10B	RUSSWIN

HW-6

3 PR BUTTS	BB1168	6 x 4½	US26D	HAGER
1 LOCK	452	MOCO	US26D	RUSSWIN
1 FLUSH BOLT	199-	12"	US26D	RUSSWIN
2 CLOSERS	P2810H	FBL		RUSSWIN
1 STRIKE	T98		US26D	RUSSWIN

HW-7

3 PR BUTTS	BB1168	6 x 4½	US26D	HAGER
1 LATCH	410	MOCO	US10B	RUSSWIN
1 FLUSH BOLT	199	12"	US26D	RUSSWIN
2 HOLDERS	286		US10B	RUSSWIN
1 STRIKE	C98		US26D	RUSSWIN

HW-8

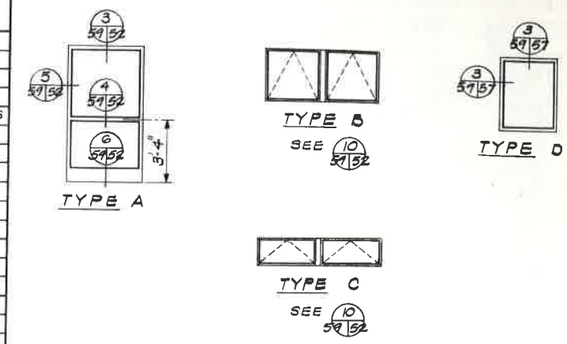
5 PR BUTTS	BB1168	6 x 4½	US26D	HAGER
1 CANE BOLT	243 x	5' ARM		BUILDERS BRASS
1 CANE BOLT	244 x			BUILDERS BRASS

NOTE:
FURNISH & INSTALL ALL ALUMINUM THRESHOLDS AS INDICATED ON DRAWINGS.

WINDOW SCHEDULE

◇	SIZE & BUILDING	TYPE	REMARKS
	CONTROL BUILDING		
1	6'-0" x 2'-9"	B	3/16" h.s.
2	4'-0" x 7'-2"	A	¼" TEMPERED PLATE GLASS
3	EXISTING		
4	EXISTING 5'-6" x 2'-9"	C	REMOVE EXISTING OBSCURE GLASS & REPLACE W/ 3/16" h.s.
5	EXISTING		
6	EXISTING		
7	EXISTING		
8	EXISTING		
9	5'-0" x 1'-5"	C	OBSCURE GLASS
	CHLORINE BUILDING		
10	3'-0" x 4'-0"	D	3/16" h.s.
	DIGESTER BUILDING		SEE EXTERIOR ELEVATIONS

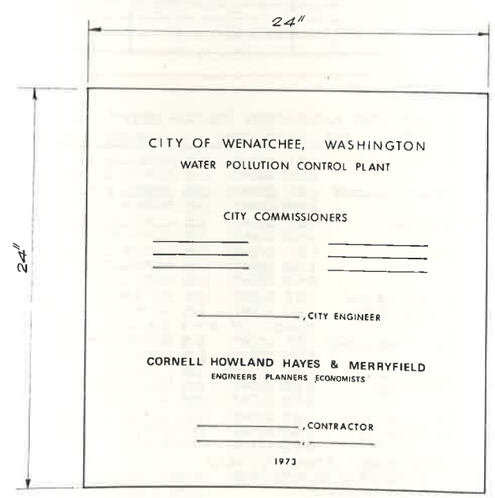
WINDOW TYPES



ROOM ACCESSORIES LIST

NOTE: ACCESSORIES TO BE "BOBRICK" OR APPROVED EQUAL.

PANEL ROOM		
COAT RACK	SEE SPECS	3'-0" LONG
SHOP		
MOP RACK	B-223	4'-0" LONG
MEN "10"		
MIRROR W/ SHELF	B-292	18" x 24"
SOAP DISPENSER	B-11	
SEAT COVER DISPENSER	B-301	
TISSUE DISP. & COAT HOOK	BY PART'N MFR.	
TOWEL DISP. & WASTE RECEP.	B-3944	
LOCKER ROOM "13"		
SOAP DISH & GRAB BAR	B-439	



BRONZE PLAQUE DETAIL 1/47 59
N.T.S.

THIS PRINT IS REDUCED TO ONE HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

David Peterson

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CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - ARCHITECTURAL - DOOR AND WINDOW SCHEDULE

DES. JMY
DR. JLB
CK. WCT
RN 57039.1
SHEET 59 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1

ROOM FINISH SCHEDULE

ROOM NO.	BUILDING & ROOM	FLOOR MATERIAL	FLOOR COLOR	BASE MATERIAL	BASE COLOR	WALLS MATERIAL	WALLS COLOR	WAINSCOT MATERIAL	WAINSCOT COLOR	CEILING MATERIAL	CEILING COLOR	DOOR FRAMES MATERIAL	DOOR FRAMES COLOR	CABINETS & SHELVES MATERIAL	CABINETS & SHELVES COLOR	REMARKS
	CONTROL BLDG.															STEEL WINDOW FRAMES - "Q"
1	FOYER	V.A. TILE	A	4" RUBBER	D	½" GYP. BD.	J	–	–	ACST. TILE	I	ALUM	P	–	–	
2	OFFICE	V.A. TILE	A	4" RUBBER	D	½" W/R GYP. BD.	J	–	–	ACST. TILE	I	METAL	L	–	–	
3	PANEL ROOM	V.A. TILE	A	4" RUBBER	D	CMU/CONC.	J	–	–	ACST. TILE	I	EXIST. METAL	L	–	–	EXIST. METAL HANDRAIL & METAL TRIM-"L"
4	WORK ROOM	V.A. TILE	A	4" RUBBER	D	CMU/CONC.	J	–	–	ACST. TILE	I	EXIST. METAL	L	–	–	
5	LABORATORY	V.A. TILE	A	4" RUBBER	D	CMU/CONC	J	–	–	ACST. TILE	I	EXIST. METAL	L	PLYWOOD	F	PLAS. LAM. COUNTER TOP & SPLASH - "F"
6	SHOP	CONC.	K	EXISTING	–	CMU/CONC	J	–	–	CONC.	J	EXIST. METAL	L	PLYWOOD	M	BENCH TOP & PEGBD. - "NO FINISH"
7	STORAGE	CONC.	K	EXISTING	–	CMU	J	–	–	CONC.	J	EXIST. MTL. (3)	L	PLYWOOD	J	(3) WOOD FRAME AT OPNG. TO SHOP- "J"
8	FURNACE ROOM	CONC.	K	EXISTING	–	CMU/CONC.	J	–	–	CONC.	J	EXIST. METAL	L	–	–	
9	CORRIDOR	V.A. TILE	A	4" RUBBER	D	½" GYP. BD.	J	–	–	ACST. TILE	I	METAL	L	–	–	FRAME AT DOOR (3) - "Q"
10	MEN	CER. TILE	B	CER. TILE	C	½" W/R GYP. BD.	J	CER. TILE	C	ACST. TILE	I	–	–	–	–	METAL TOILET PARTITION - "H"
11	VESTIBULE	CER. TILE	B	CER. TILE	C	½" W/R GYP. BD.	J	CER. TILE	C	ACST. TILE	I	METAL	L	–	–	
12	JANITOR	CONC.(SEAL)	E	4" RUBBER	D	½" GYP. BD. (1)	J	–	–	½" GYP. BD.	J	METAL	L	PLYWOOD	J	(1) ½" W/R GYP. BD. AT SOUTH WALL
13	LOCKER ROOM	CER. TILE	B	CER. TILE	C	½" W/R GYP. BD	J	CER. TILE	C	ACST. TILE (2)	I	–	–	–	–	(2) CER. TILE WALLS & CLG. AT SHOWER STALL
14	MOTOR ROOM	CONC.	K	EXISTING	–	CONC.	J	–	–	CONC.	J	–	–	–	–	EXIST. STAIR TREADS & RISERS-"K"
15	PUMP ROOM	CONC.	K	EXISTING	–	CONC.	J	–	–	CONC.	J	–	–	–	–	EXIST. STAIR TREADS & RISERS-"K"
	BLOWER BLDG.															
16	THICKENER ROOM	CONC. (SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	PLYWOOD	M	BENCH TOP & PEGBD - "NO FINISH"
17	BLOWER ROOM	CONC. (SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	–	–	
18	E.G. ROOM	CONC. (SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	–	–	
																STEEL WINDOW FRAME - "J"
	CHLORINE BLDG.															
19	CHLORINE ROOM	CONC. (SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	–	–	
20	CHLORINATOR ROOM	CONC. (SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	PLYWOOD	M	PLAS. LAM. COUNTER TOP & SPLASH-"G"
	DIGESTER BLDG.															
21	LOWER FLOOR	CONC.	K	–	–	CONC.	J	–	–	CONC.	J	METAL	L	–	–	
22	MAIN FLOOR	CONC.	K	–	–	CONC.	J	–	–	CONC.	J	EXIST. METAL	L	–	–	
23	COMPRESSOR ROOM	CONC.	K	–	–	CMU/CONC.	J	–	–	CONC.	J	METAL	L	–	–	
	RECIRCULATION PS.															
24	PUMP ROOM	CONC.(SEAL)	E	–	–	CONC.	J	–	–	CONC.	J	METAL	L	PLYWOOD	M	BENCH TOP & PEGBD. - "NO FINISH"
25	WET WELL (EXISTING)	CONC.	–	–	–	CONC.	–	–	–	CONC.	–	–	–	–	–	
26	GRIT WORKS (EXISTING)	CONC	N	–	–	CONC.	N	–	–	–	–	–	–	–	–	

COLOR LEGEND

A. #51850 ARMSTRONG EXCELON "FLEECE"
B. LP-95 PAMONA "BEACH TAN" (W/ NON-SLIP FIN AT SHWR. FLR.)
C. #763 PAMONA ENCORE "GOLD TEX" (PRE-GROUTED)
D. #597-P BURKE TOP SET
E. COLOR TO BE SELECTED FROM MFR'S STANDARDS
F. MATCH EXISTING
G. #949 FORMICA "WHITE"
H. #24 AMER. SAN. "CADET BLUE"
I. ARMSTRONG MINABOARD "CORTEGA"
J. DUTCH BOY COLOR GALLERY #43/17
K. DUTCH BOY 324 PORCH & FLR. ENAMEL "SANDY BEIGE"
L. DUTCH BOY COLOR GALLERY #46/22
M. DUTCH BOY COLOR GALLERY #N49/26
N. DUTCH BOY COLOR GALLERY #47/36
O. OLYMPIC SEMI-TRANSPARENT STAIN #700
P. FENTRON "ELOXAL" DARK GRAY
Q. DUTCH BOY COLOR GALLERY #50/59

EXTERIOR COLOR SCHEDULE

CONC., "SMOOTH" FINISH - "N"
CONC., "STRIATED" FINISH - "L"
T&G SIDING & SOFFIT - "O"
METAL FACIA - "L"
STEEL WINDOWS - "Q"
STEEL DOORS & FRAMES - SEE DOOR SCHEDULE
ALUMINUM ENTRY DOOR & WINDOWS - "P"
SPLASH BLOCKS, LEADERS - MATCH ADJACENT WALL
LOUVERS, PIPING, CONDUIT - TO BE SELECTED BY ENGINEER
STEEL HANDRAIL AT CONTROL BLDG. - "L"
MONORAIL AT CONTROL BLDG. - "L"
MONORAIL AT CHLORINE BLDG - "L"
CONTROL BLDG. ROOF EQUIPMENT, STACKS & HARDWARE (EXIST. & NEW) - "Q"
PRIMARY AND SECONDARY DIGESTER CONC. & STEEL ROOFS - "N"

NOTE: DB INDICATES "DUTCH BOY" IN FIN. APPLICATION SCHEDULES

FINISH APPLICATION (INTERIOR EXPOSED SURFACES)

CONC. / C.M.U.	1ST COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
	2ND COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
CONC. FLOORS	1ST COAT:	DB PORCH & FLOOR ENAMEL 300 SERIES
	2ND COAT:	DB PORCH & FLOOR ENAMEL 300 SERIES
GYP. BD.	1ST COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
	2ND COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
WOOD	1ST COAT:	DB WHITE LUSTRELAC PRIMER-SEALER 30P12
	2ND COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
	3RD COAT:	DB ACRYLIC SATIN FINISH ENAMEL 35W00
EXIST. METAL (PAINTED)	1ST COAT:	DB EXTERIOR UNDERCOAT 30P06
	2ND COAT:	DB MARINA HOUSE & TRIM 31P10
METAL (SHOP PRIMED)	TOUCH UP WITH DB ANTI-RUST PRIMER 059	
	1ST COAT:	DB EXTERIOR UNDERCOAT 30P06
	2ND COAT:	DB MARINA HOUSE & TRIM 31P10
SHELVING (PAINTED)	1ST COAT:	DB LUSTRELAC PRIMER SEALER 30P12
	2ND COAT:	DB NALTHETIC EGGSHELL ENAMEL 35P10
	3RD COAT:	DB NALTHETIC EGGSHELL ENAMEL 35P10
LOCKER RM. BENCHES	1ST COAT:	OLYMPIC CLEAR SEAL PRIME
	2ND COAT:	OLYMPIC CLEAR INTERIOR STAIN
	3RD COAT:	OLYMPIC CLEAR INTERIOR STAIN

WOOD CABINETWORK (NEW)
EXPOSED SURFACES: WHEN DOORS & DRAWERS ARE CLOSED ALL WOOD SURFACES TO RECEIVE ONE COAT PENETRATING STAIN, 2 COATS VARNISH. INCLUDE BOTH FACES & ALL EDGES OF DOORS & OPEN SHELVING (DB 23-00 SERIES, 37V21, 37V22)

CONCEALED SURFACES: WHEN DOORS & DRAWERS ARE CLOSED, ONE COAT DB URETHANE CLEAR SEALER, 70-62

BACKS & SIDES AGAINST FLRS. & WALLS: ONE HEAVY COAT DB URETHANE CLEAR SEALER, 70-62.

(NOTE: NO NEW CABINETWORK SURFACE TO BE LEFT UNFINISHED)

FINISH APPLICATION (EXTERIOR)

CONCRETE (NEW OR EXISTING - UNPAINTED)	1ST COAT:	DB EXTERIOR SURFACE CONDITIONER 30P19
	2ND COAT:	DB NALCRETE MASONRY VINYL 32W11
	3RD COAT:	DB NALCRETE MASONRY VINYL 32W11
METAL (SHOP PRIMED)	TOUCH UP WITH DB ANTI-RUST PRIMER 059	
	1ST COAT:	DB EXTERIOR UNDERCOAT 30P06
	2ND COAT:	DB MARINA HOUSE & TRIM 31P10
GALVANIZED STEEL	1ST COAT:	DB PRE-TREATMENT WASH PRIMER
	2ND COAT:	DB GALV. METAL PRIMER 069
	3RD COAT:	DB EXTERIOR UNDERCOAT 30P06
	4TH COAT:	DB MARINA HOUSE & TRIM 31P10
T&G SIDING & SOFFIT	1ST COAT:	BEFORE INSTALLATION
	2ND COAT:	AFTER INSTALLATION
CONCRETE (EXIST'G-PAINTED)	1ST COAT:	DB EXTERIOR SURFACE CONDITIONER 30P19
	2ND COAT:	DB NALCRETE MASONRY VINYL 32W11
	3RD COAT:	DB NALCRETE MASONRY VINYL 32W11

SECONDARY DIGESTER STEEL COVER: SEE GENERAL PAINT SPECIFICATIONS

NOTE

THE USE OF PROPRIETARY NAMES IN THE SCHEDULES IS NOT INTENDED TO INDICATE PREFERENCE FOR THE SPECIFIC MANUFACTURERS PRODUCTS, BUT RATHER TO ESTABLISH QUALITY & COLOR DESIRED. OTHER MANUFACTURERS' PRODUCTS MAY BE USED UPON APPROVAL BY THE ENGINEER.

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IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

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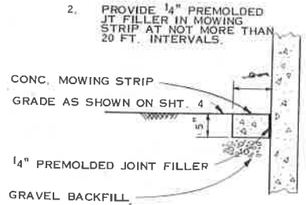
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - ARCHITECTURAL - ROOM FINISH SCHEDULE

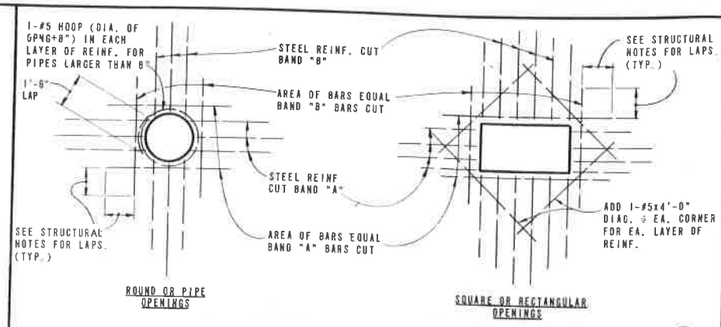
DES. JMY
DR. WLB
CK. HCT
RN 57039.1
DRAWING NO. C 7039-1
SHEET 60 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN

NOTES:

1. PROVIDE MOWING STRIP ADJACENT TO ALL EXISTING AND NEW VERTICAL WALLS W/O ADJOINING SIDEWALK OR PAVEMENT.
2. PROVIDE ¼" PREMOLDED JT FILLER IN MOWING STRIP AT NOT MORE THAN 20 FT. INTERVALS.



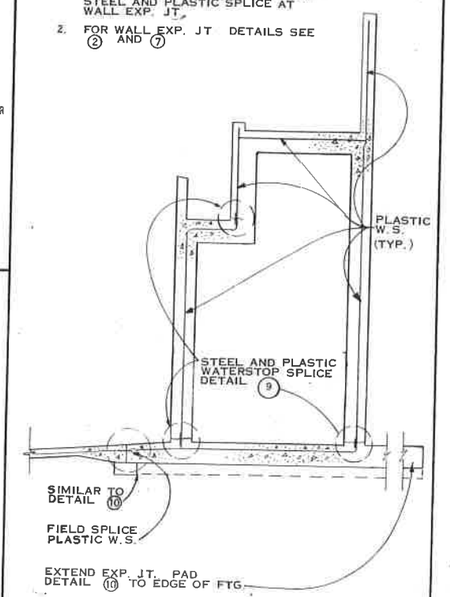
MOWING STRIP DETAIL (1)



REINFORCING DETAIL FOR OPENINGS IN CONCRETE WALLS & SLABS (8)

NOTE:

1. WHERE 6" GALV. STEEL W.S. ARE USED IN HORIZ. CONST. PROVIDE STEEL AND PLASTIC SPLICE AT WALL EXP. JT.
2. FOR WALL EXP. JT DETAILS SEE (2) AND (7)



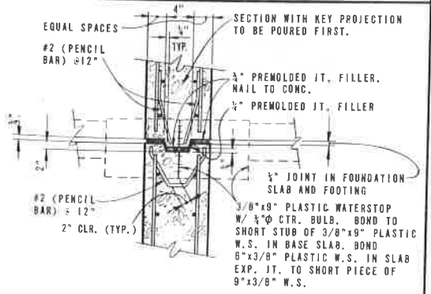
WATERSTOP SPLICES AT TYPICAL EXPANSION JOINT (13)

STRUCTURAL ABBREVIATIONS

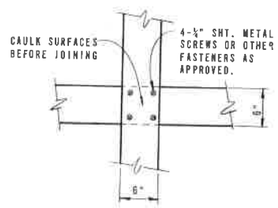
A.B.	ANCHOR BOLTS	EA.	EACH	MAX.	MAXIMUM	SPECS.	SPECIFICATIONS
ALT.	ALTERNATE	E.F.	EACH FACE	M.B.	MACHINE BOLTS	SQ.	SQUARE
ALUM.	ALUMINUM	EL., ELEV.	ELEVATION	MIN.	MINIMUM	STD.	STANDARD
B., BOT.	BOTTOM	E.W.	EACH WAY	N	NORTH	STL.	STEEL
BM.	BEAM	EXIST.	EXISTING	N.F.	NEAR FACE	STR.	STRAIGHT
C/C, C-C	CENTER TO CENTER	EXP. JT.	EXPANSION JOINT	N.T.S.	NOT TO SCALE	STRUCT.	STRUCTURES
C.I.		F.B.	FLAT BAR	O.C.	ON CENTERS	SYMM.	SYMMETRICAL
CONST. JT.	CONSTRUCTION JOINT	F.D.	FLOOR DRAIN	O.F.	OUTSIDE FACE	T.	TOP
℄	CENTER LINE	FDN.	FOUNDATION	O-O	OUT TO OUT	T.C.	TOP OF CONC.
CLR.	CLEARANCE	F.F.	FAR FACE	OPNG.	OPENING	TRANSV.	TRANSVERSE
COL.	COLUMN	FIN. GR.	FINISHED GRADE	R.C.	REINFORCED CONC.	T.W.	TOP OF WALL
CONC.	CONCRETE	FTG.	FOOTING	REINF.	REINFORCED	TYP.	TYPICAL
CONT.	CONTINUOUS	GALV.	HOT DIP GALVANIZED	S	SOUTH	VERT.	VERTICAL
CTR.	CENTER	HORIZ.	HORIZONTAL	SIM.	SIMILAR	W	WEST
DIA., ϕ	DIAMETER	I.F.	INSIDE FACE	SL.	SLOPE	W.S.	WATERSTOP OR WATER SURFACE
DWG.	DRAWING	LONGIT.	LONGITUDINAL			W.W.M.	WELDED WIRE MESH
E	EAST						

GENERAL STRUCTURAL NOTES

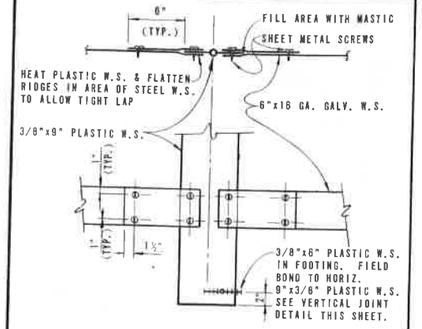
1. UNLESS OTHERWISE SHOWN CONC. WALLS & SLABS SHALL BE REINF. AS FOLLOWS: #4@12" E.W. CENTER OF 6" SECTIONS; #5@12" E.W. CENTER OF 8" SECTIONS; #4@12" E.W. E.F. OF 10" SECTIONS; #5@12" E.W. E.F. OF 12" SECTIONS. SINGLE MAT REINF. SHALL BE AT CENTER OF SECTION, UNLESS SHOWN OTHERWISE.
2. MIN. CLR. FOR REINF. BARS, UNLESS SHOWN OTHERWISE, SHALL BE 3" WHEN POURED ON GROUND; FOR SURFACES EXPOSED TO WATER OR WEATHER-1½" CLR. FOR #5 BAR AND SMALLER AND 2" CLR. FOR LARGER BARS; INTERIOR SLABS ¾" CLR., INTERIOR BEAMS 1½" CLR.
3. UNLESS OTHERWISE NOTED, ALL WALL REINF. BARS SHALL BE CONT. AROUND CORNERS AND THROUGH COL. OR PILASTERS. REINF. SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS, AS INDICATED ELSEWHERE ON THIS SHEET. VERT. WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS AND EXTENDED INTO THE TOP FACE OF ROOF SLABS AND LAPPED WITH TOP SLAB REINF. ALL REINF. BENDS & LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENT: #6 OR SMALLER LAP 30 DIA., BUT NOT LESS THAN 1'-6", WITH MIN. 20 DIA. BENDS WITH MIN. OF 1'-0"; #9 BEND 2'-0" LAP 3'-3"; #10 BEND 2'-8" LAP 4'-3"; #11 BEND 3'-3" LAP 5'-3".
4. SEE DETAIL THIS SHEET FOR TYPICAL REINFORCING AT OPENINGS.
5. CAST 2" HIGH STARTER WALLS, MONOLITHIC WITH FOUNDATION SLABS OR FOOTINGS, FOR ALL WATER HOLDING AND BELOW GRADE STRUCTURES.
6. PROVIDE MECHANICAL AND ELECTRICAL EQUIPMENT CONCRETE BASE PADS WITH #4 REINF. AT 12" MIN. E.W. ROUGHEN SLAB FOR BOND AND USE #4 MIN. SIZE DOWELS AT 12" ALL AROUND PERIMETER. SIZE PAD TO ALLOW ¾" CHAMFER PROJECTION AT EXPOSED EDGES. USE 1/2" ϕ H.B. IN FLUSH SHELLS FOR ATTACHMENT TO EXISTING SLABS.
7. RECESS PREMOLDED FILLER IN VERTICAL EXPANSION JOINTS AND FILL WITH ¾" SQUARE BEAD OF THIOKOL. AND BACKUP ROD. AT EXPOSED EXTERIOR SURFACES AND TOP OF WALL.



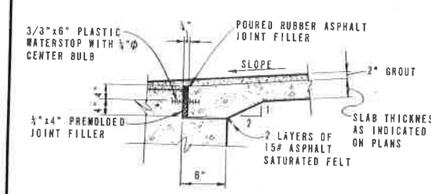
TYPICAL VERTICAL EXPANSION JOINT DETAIL (2)



TYPICAL METAL - METAL WATERSTOP JOINT DETAIL (5)



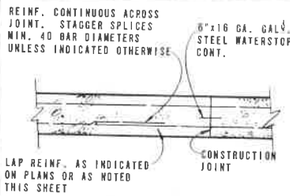
STEEL AND PLASTIC WATERSTOP SPLICE DETAIL (9)



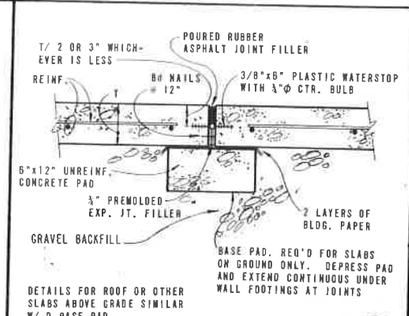
TYPICAL AT BASE SLAB INTERSECTION WITH CENTER PIER

NOTE:
JOINT AT CLARIFIER WALL TO SLAB, WHERE REQ'D SHALL BE SIMILAR, SEE TYPICAL CLARIFIER WALL SECTION.

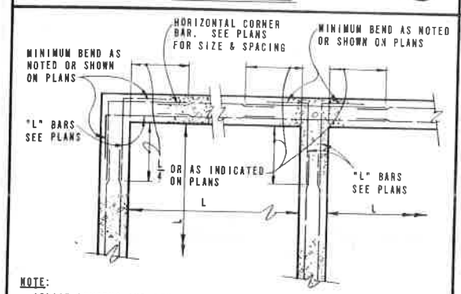
CLARIFIER CENTER PIER JOINT DETAIL (3)



TYPICAL WALL CONSTRUCTION JOINT DETAIL (6)



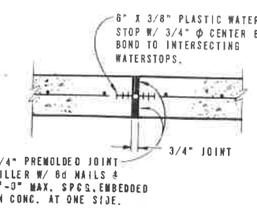
TYPICAL SLAB EXPANSION JOINT DETAIL FOR WATER HOLDING BASINS (10)



NOTE:
SPLICE LENGTHS AND BENDS SHALL BE AS INDICATED ON PLANS OR AS NOTED THIS SHEET..

L = LENGTH OF WALL PARALLEL TO BAR LENGTH IN QUESTION.

TYPICAL HORIZONTAL REINFORCING DETAILS AT WALL CORNERS AND INTERSECTIONS (4)



FOR WALLS LESS THAN 10" THICK.

VERTICAL WALL EXPANSION JOINT (7)

ARCHITECTURAL ABBREVIATIONS

ACST.	ACOUSTICAL	FLR.	FLOOR	PVC	POLYVINYL CHLORIDE
ADJ.	ADJUSTABLE	GA.	GAUGE	P.S.	PUMP STATION
ALUM.	ALUMINUM	GALV.	GALVANIZED	REQ'D.	REQUIRED
ANOD.	ANODIZED	GYP. BD.	GYPSUM BOARD	RM.	ROOM
CD	CEILING DIFFUSER	HARDWD.	HARDWOOD	SCHED.	SCHEDULE
CER.	CERAMIC	H.M.	HOLLOW METAL	S.C.	SOLID CORE
CG	CEILING GRILLE	h.s.	HEAVY SHEET	SHWR.	SHOWER
CLG.	CEILING	LAM.	LAMINATE	SIM.	SIMILAR
C.M.U.	CONCRETE MASONRY UNIT	LAV.	LAVATORY	SPC'G.	SPACING
CONC.	CONCRETE	LG.	LONG	SPECS.	SPECIFICATIONS
CONT.	CONTINUOUS	MAX.	MAXIMUM	S.S.	SERVICE SINK, STAINLESS STEEL
CORR.	CORRIDOR	M.B.	MACHINE BOLT		
DISP.	DISPENSER	MFR.	MANUFACTURER	SUSP.	SUSPENDED
D.F.	DRINKING FOUNTAIN	MIN.	MINIMUM	TEMP.	TEMPERED
ELEC.	ELECTRICAL	N.I.C.	NOT IN CONTRACT	T & G	TONGUE & GROOVED
ELEV.	ELEVATION	OPN'G.	OPENING	T.O.	TOP OF
EQ.	EQUAL	PEGBD.	PEGBOARD	TYP.	TYPICAL
EXIST.	EXISTING	℄	PLATE	V.A.	VINYL ASBESTOS
FIN.	FINISHED	PLAS.	PLASTIC	W.C.	WATER CLOSET
FDTN.	FOUNDATION	PLYWD.	PLYWOOD	W/R	WATER RESISTANT
F.O.	FACE OF			W.W.M.	WELDED WIRE MESH

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1"= 1'-0" USE ½"= 1'-0" OR 1"= 10' USE 1"= 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

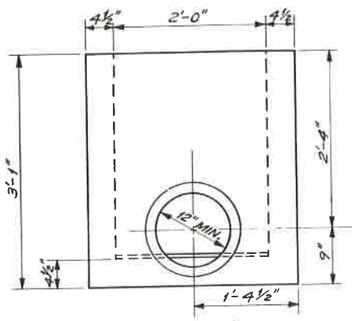
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

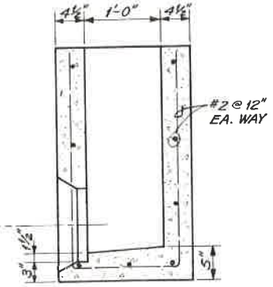
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

GENERAL DETAILS - STRUCTURAL - STANDARD DETAILS

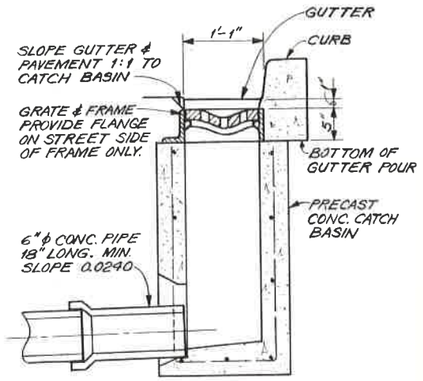
DES. HPE	SHEET 61
DR. RJK	OF 78
CK. GFD	DATE: JAN. 1973
RN 67039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



FRONT VIEW



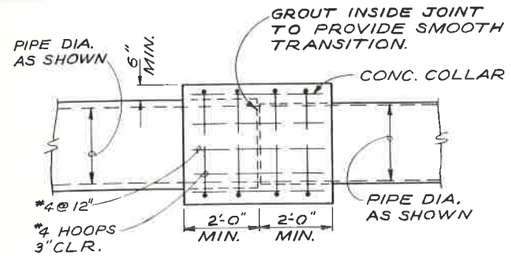
TRANSVERSE SECTION



COMPOSITE SECTION

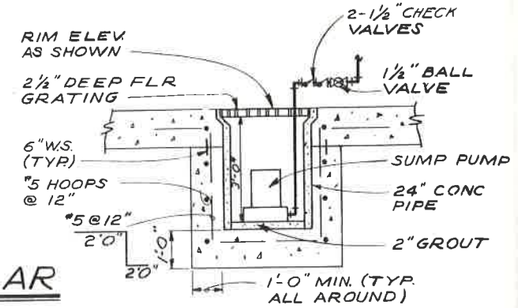
CATCH BASIN DETAIL

1" = 1'-0"



CONCRETE CLOSURE COLLAR

N.T.S.

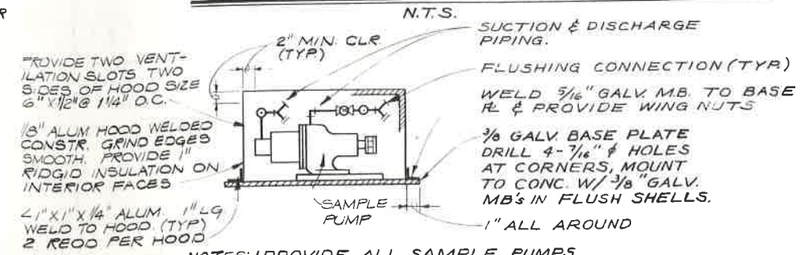


NOTE: SUMP PUMP REQ'D FOR SLUDGE RECIRC. PUMP STATION SUMP ONLY.

SUMP DETAIL

½" = 1'-0"

2 | 28 | 30 | 33 | 62

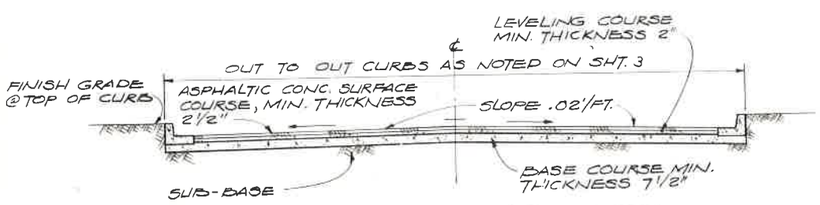


NOTES: 1. PROVIDE ALL SAMPLE PUMPS W/FLUSHING CONNECTIONS AS SHOWN.
2. PROVIDE HOOD FOR PLANT INFLUENT SAMPLE PUMP ONLY.
3. INSULATE ABOVE GROUND EXPOSED SAMPLE PIPING W/OWENS - CORNING FIBERGLASS 25 W/ALUM. JACKET.

SAMPLE PUMP DETAIL

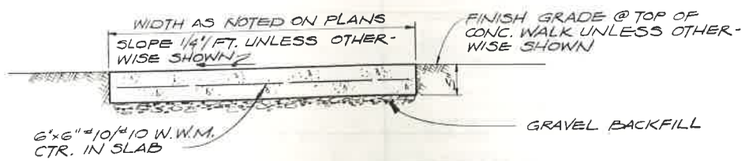
N.T.S.

1 | 8 | 13 | 33 | 62



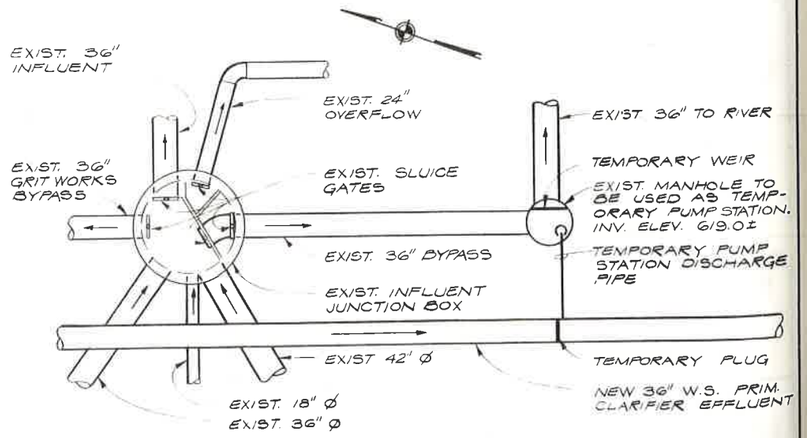
TYP. A/C PAVEMENT SECTION

¼" = 1'-0"



TYP. CONCRETE WALK DETAIL

1" = 1'-0"



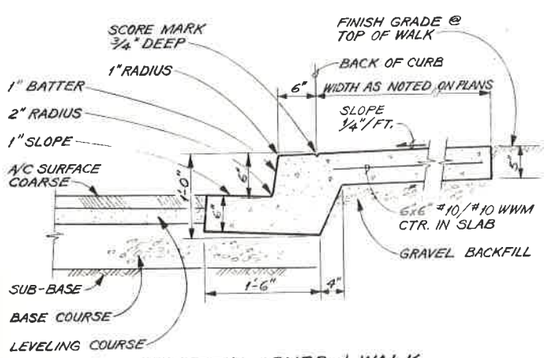
NOTE:
NEW CATCH BASINS & STORM DRAINS NOT SHOWN.

PLAN

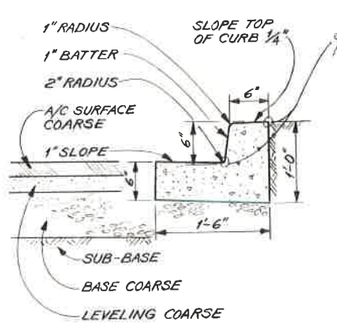
TEMPORARY PUMP STATION DETAIL

N.T.S.

3 | 6 | 62



INTEGRAL CURB & WALK



CURB

GRADE POINTS AS NOTED ON SHT. 4

NOTES:
1. PROVIDE ½" x 5" PREMOLDED EXPANSION JT. FILLER:
a. IN CURB AT EVERY POINT OF TANGENCY & ALONG CURB LINE AT SPACING NOT GREATER THAN 40'.
b. BETWEEN THE INTERSECTION OF TWO CONC. WALKS.
c. BETWEEN CONC. WALKS & ADJOINING STRUCTURES.
d. AT NOT MORE THAN 40' INTERVALS IN THE CONC. WALKS UNLESS OTHERWISE INDICATED.
2. DISCONTINUE W.W.M. AT EXPANSION JOINTS.
3. SLOPE PAVED PARKING & WORK AREAS AS INDICATED BY ELEVATIONS ON SHT. 4

CONCRETE CURB DETAILS

1" = 1'-0"

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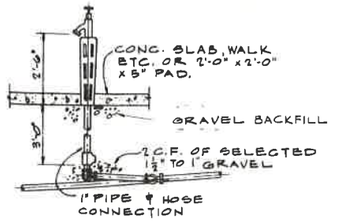
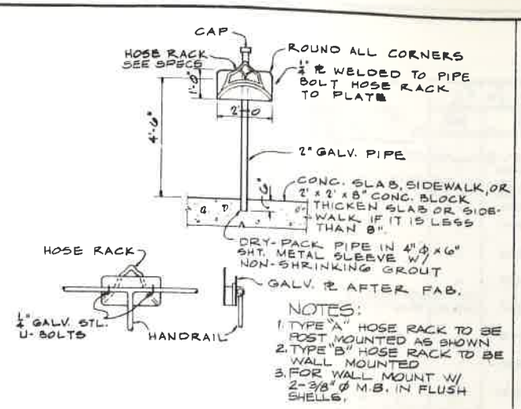
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - ROAD, SIDEWALK, AND DRAINAGE DETAILS

DES. KRG
DR. JRB
CK. GRG
RN 37039.1
SHEET 62
OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1



NON-FREEZE POST HYDRANT TYPE HB-2

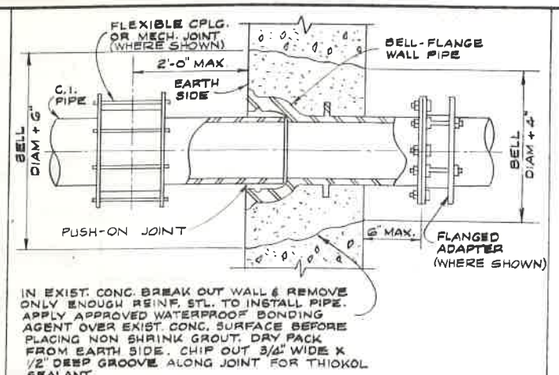
NTS



NOTES:
1. TYPE "A" HOSE RACK TO BE POST MOUNTED AS SHOWN
2. TYPE "B" HOSE RACK TO BE WALL MOUNTED
3. FOR WALL MOUNT W/ 2-3/8" Ø M.B. IN FLUSH SHELLS.

HOSE RACK

NTS

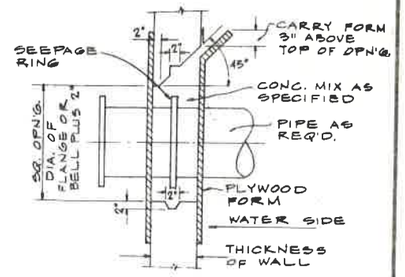


IN EXIST. CONC. BREAK OUT WALL & REMOVE ONLY ENOUGH REINF. STL. TO INSTALL PIPE. APPLY APPROVED WATERPROOF BONDING AGENT OVER EXIST. CONC. SURFACE BEFORE PLACING NON SHRINK GROUT. DRY PACK FROM EARTH SIDE. CHIP OUT 3/4" WIDE X 1/2" DEEP GROOVE ALONG JOINT FOR THIOKOL SEALANT

STANDARD WALL PIPE DETAIL

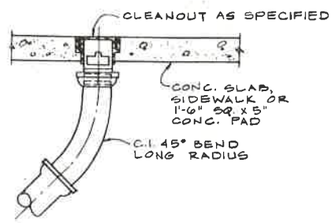
NTS

NOTE: PIPE BLOCKOUT NOT TO BE USED WITHOUT PERMISSION OF ENGR. UNLESS SPECIFICALLY INDICATED ON PLANS.



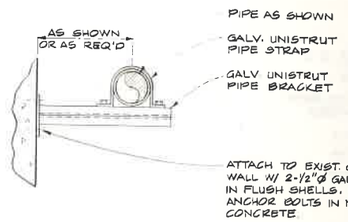
PIPE BLOCKOUT DETAIL

3/4" = 1'-0"



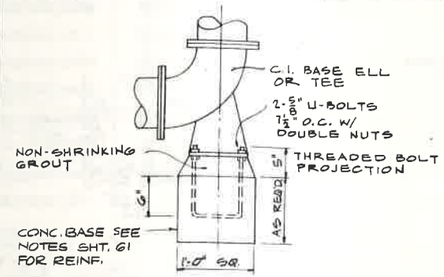
CLEANOUT DETAIL

NTS



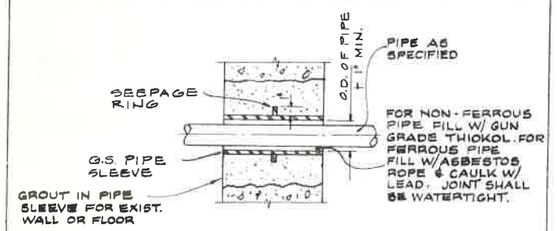
PIPE WALL SUPPORT (PS-1)

NTS



BASE ELBOW, TEE OR CROSS SUPPORT DETAIL

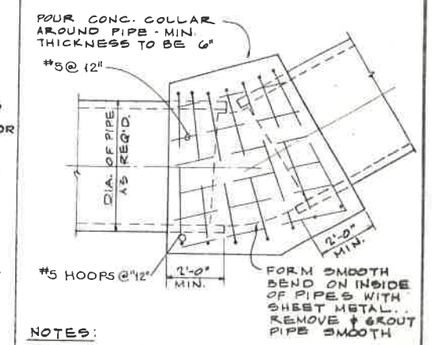
NTS



NOTE: PROVIDE SLEEVES THRU SLABS AND ABOVE-GROUND WALLS AND WHERE SHOWN ON PLANS.

PIPE SLEEVE DETAIL

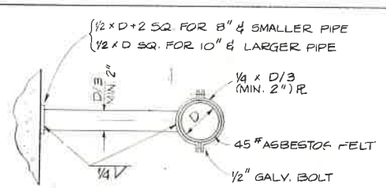
N.T.S.



NOTES:
1. PIPE SUPPLIERS SHOP BUILT ELBOWS W/RUBBER RING JTS. MAY BE USED.
2. FOR BOTH HORIZ. ANGLE CHANGES & VERT. ELEV. CHANGES.

FIELD FABRICATED ELBOW FOR CONC. PIPE

3/8" = 1'-0"

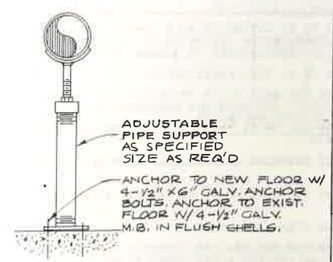


PLAN

NOTES:
1. ATTACH TO NEW WALLS WITH 4-1/2" x 6" GALVANIZED ANCHOR BOLTS
2. ATTACH TO EXIST. WALLS W/ 4-1/2" GALV. M.B. IN FLUSH SHELLS
3. HOT DIP GALVANIZE AFTER FABRICATION

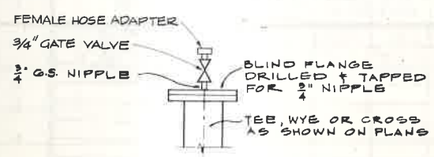
PIPE WALL SUPPORT (PS-2)

NTS



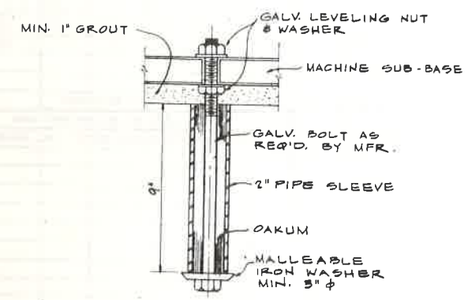
PIPE SUPPORT DETAIL

NTS



FLUSHING CONN. DETAIL

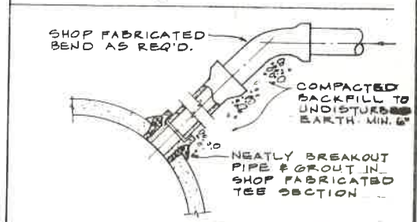
NTS



MACHINERY ANCHOR BOLT DETAIL

3" = 1'-0"

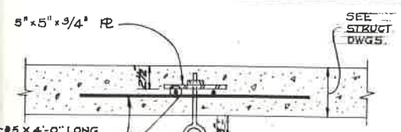
APPLIES TO ALL ITEMS OF EQUIP. WITH MOTORS 3 HP & OVER, UNLESS SHOWN OR SPECIFIED OTHERWISE.



FIELD FABRICATED TEE

8" BRANCH & UNDER

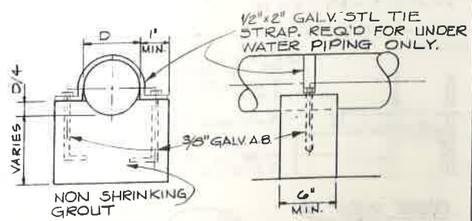
NTS



MAXIMUM LOAD RATING FOR LIFTING EYE 2000 LBS.

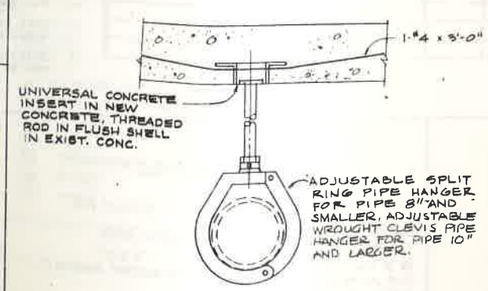
LIFTING EYE DETAIL

NTS



CONCRETE PIPE SUPPORT DETAIL

NTS



PIPE HANGER DETAIL

NTS

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WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - MECHANICAL - STANDARD DETAILS

DES. KGG	SHEET 63
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RN 37039.1	SCALE: AS SHOWN
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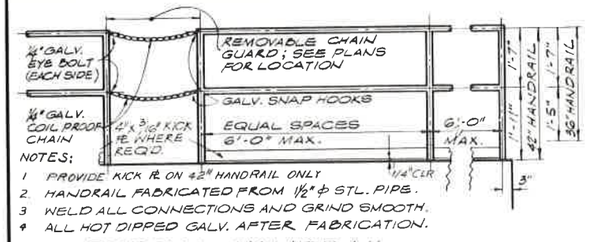
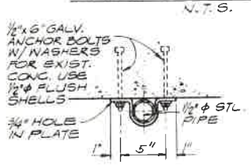


NOTES:

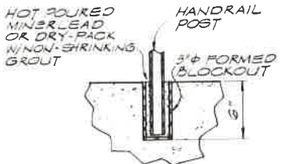
1. PROVIDE KICK PL ON 42" HANDRAIL ONLY
2. HANDRAIL FABRICATED FROM 1 1/2" ϕ STL. PIPE.
3. WELD ALL CONNECTIONS AND GRIND SMOOTH.
4. ALL HOT DIPPED GALV. AFTER FABRICATION.

TYPICAL HANDRAIL

N.T.S.

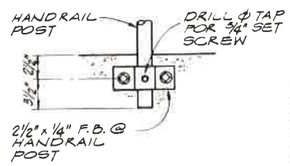


PLAN



SECTION

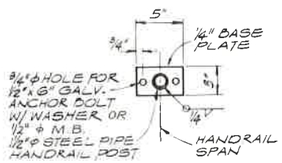
TYPE "A" SUPPORT



ELEVATION

TYPE "C" SUPPORT

N.T.S.

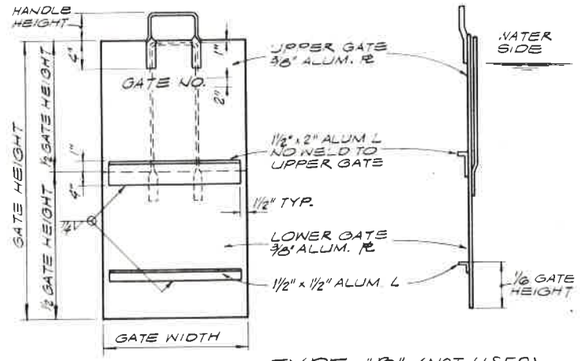


PLAN

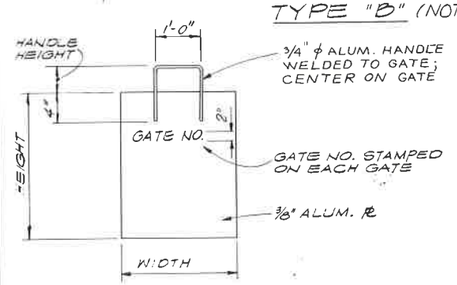
TYPE "B" SUPPORT

N.T.S.

S2-D-4



TYPE "B" (NOT USED)

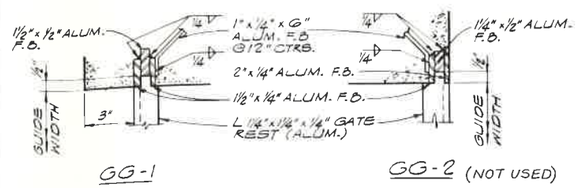


TYPE "A"

GATE DETAILS

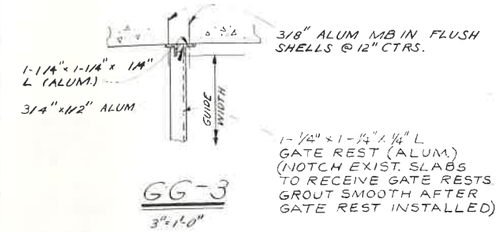
N.T.S.

S2-D-7



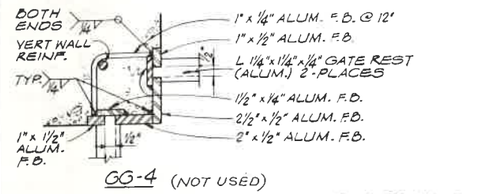
GG-1

GG-2 (NOT USED)



GG-3

3" = 1'-0"

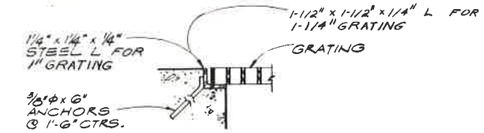


GG-4 (NOT USED)

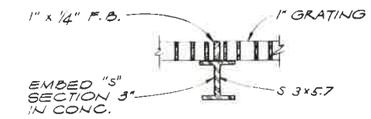
GATE GUIDE DETAILS

N.T.S.

S2-D-10



GS-1



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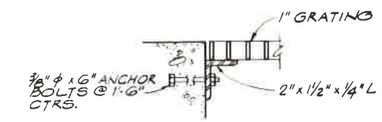


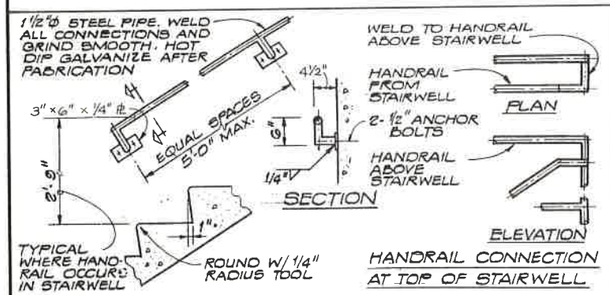
GS-3

NOTE:
HOT DIP GALV. AFTER FABRICATION.

GRATING SUPPORT DETAIL

N.T.S.

S2-D-11



HANDRAIL CONNECTION AT TOP OF STAIRWELL

WALL HANDRAIL DETAILS

NTS

S2-D-5

S2-D-8

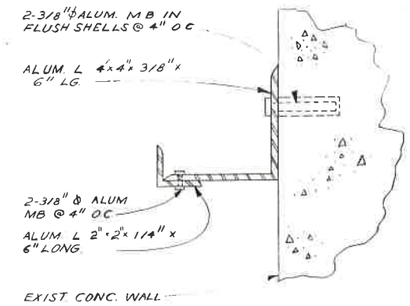
GATE AND GUIDE SCHEDULE * * *

GATE NO.	NO. GATES REQ'D.	GATE TYPE	GATE GUIDE TYPE	GUIDE HEIGHT	GUIDE WIDTH	GATE HEIGHT	GATE WIDTH	HANDLE HEIGHT	SPECIAL GRATING COVER SEE NOTE 12	LOCATION
1	1	A	GG-1	4'-10 3/4"	3'-0"	4'-0"	3'-3/4"	10"	Z	PLANT PUMP STA. WET WELL SHT. 11
2	1	A	GG-14GG-3	4'-10 3/4"	2'-10 3/4"	3'-0"	2'-11 1/2"	1'-4"	Z	PLANT PUMP STA. WET WELL SHT. 11
3*	2	A	GG-14GG-3	**	2-10 3/4"	**	2'-11 1/2"	**		PLANT PUMP STA. WET WELL SHT. 11
* GATE REST NOT REQUIRED										
** AS REQUIRED BY EQUIPMENT MFR.										
*** CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.										

S2-D-9

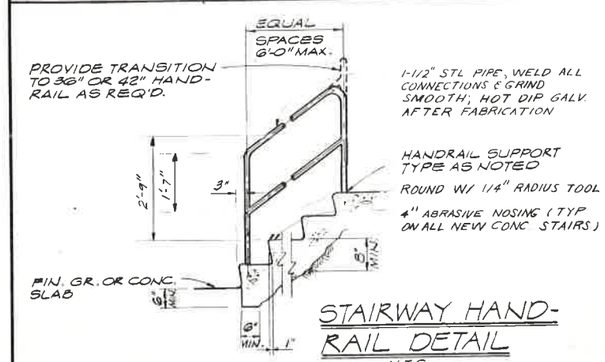
GATE, GATE GUIDE AND GRATING NOTES

1. ALL GUIDES, GATES, ANCHORS AND GATE RESTS TO BE ALUMINUM AS SPECIFIED.
2. GUIDES TO BE ASSEMBLED AS A COMPLETE UNIT. AFTER FABRICATION AND PRIOR TO SHIPMENT THEY SHALL BE CROSS-BRACED TO ASSURE TRUE ALIGNMENT.
3. GUIDES TO BE CONTINUOUS WELDED TO GATE RESTS.
4. ANCHORS FOR GATE RESTS TO BE SIMILAR TO THOSE FOR GUIDES. ANCHORS NOT REQUIRED FOR GATE RESTS IN EXISTING SLABS.
5. GATE GUIDES TO BE FLUSH WITH BOTTOM OF GRATING SUPPORTS.
6. GRATING EXTENDED CONTINUOUSLY OVER GUIDES AND GATES.
7. GRATING SUPPORTS TO BE NOTCHED AS REQUIRED AT GATES.
8. GRATING SPAN ↔
9. ALL GRATING AND GRATING SUPPORTS TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.
10. MAXIMUM WIDTH OF ANY GRATING SECTION = 2'-0"
11. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER BASED ON FIELD DIMENSIONS PRIOR TO FABRICATION.
12. SPECIAL GRATING OVER GATES ARE DESIGNATED BY ONE OF THE FOLLOWING GRATING WIDTHS:
    X = 6", Y = 8", Z = 12"



GATE RACK DETAIL

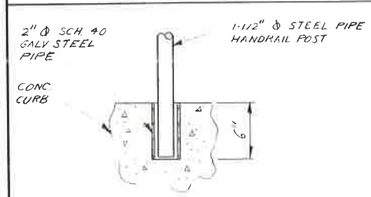
N.T.S.



STAIRWAY HANDRAIL DETAIL

N.T.S.

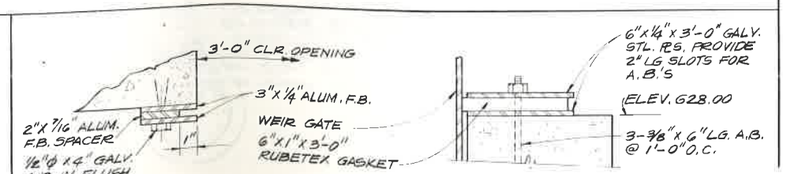
S2-D-6



TYPE "D"

HANDRAIL SUPPORT

1-1/2" = 1'-0"



PLAN

SIDE VIEW @ TOP OF WALL

WEIR GATE GUIDES DETAIL

N.T.S.

1/35/64

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

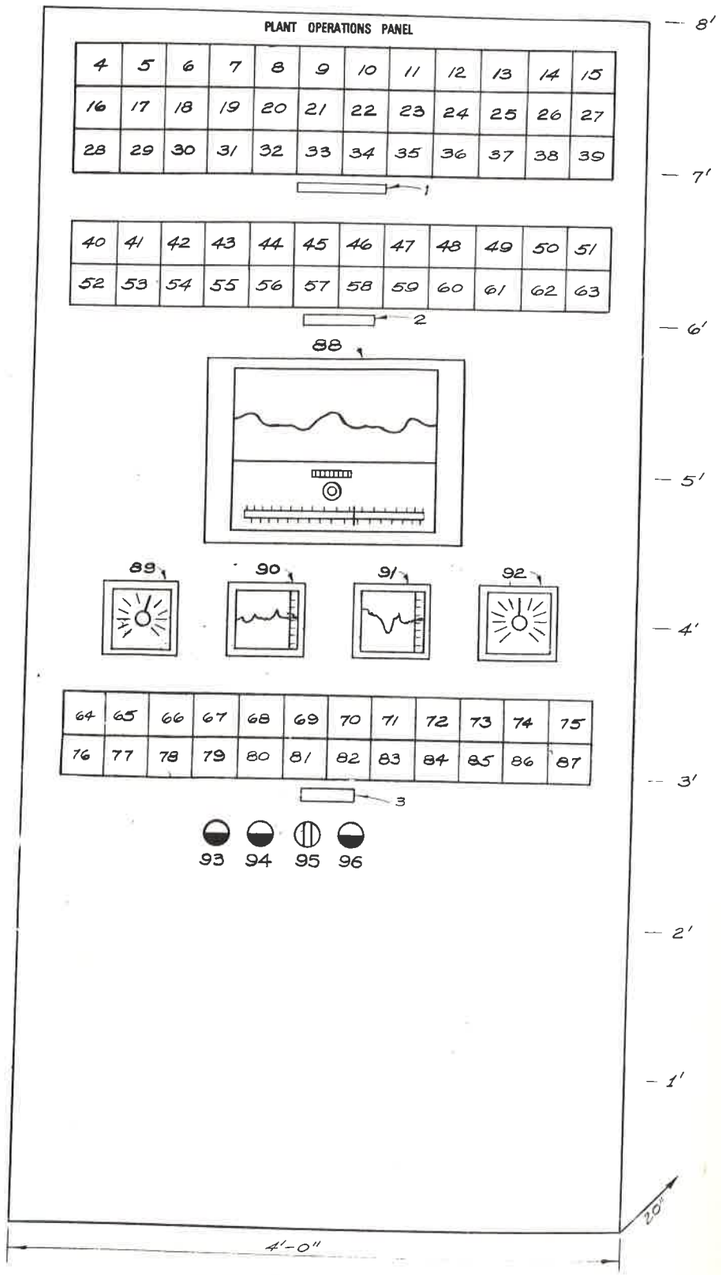
CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
GENERAL DETAILS - MECHANICAL - STANDARD DETAILS

DES JSG
DR DJ
CK GRG
RN 57039.1
SHEET 64 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1

BILLMAN STATIONERY & PRINTING CO. PORTLAND, ORE.



PLANT OPERATIONS PANEL

2" = 1'-0"

INSTRUMENT AND NAMEPLATE SCHEDULE		
ITEM	DESCRIPTION	INSCRIPTION
1	NAMEPLATE	(H) EQUIPMENT STATUS
2	NAMEPLATE	(H) MANUAL MODE
3	NAMEPLATE	(H) ALARMS
4	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SEWAGE SHREDDER NO. 1 [W]
5	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SEWAGE SHREDDER NO. 2 [W]
6	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) GRIT PUMP [W]
7	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) CLASSIFIER [W]
8	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 1 [W]
9	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 2 [W]
10	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 3 [W]
11	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 4 [W]
12	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 5 [W]
13	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SEWAGE PUMP NO. 6 [W]
14	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) PRIMARY CLARIFIER [W]
15	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) RAW SLUDGE PUMP NO. 1 [W]
16	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SLUDGE RECIRC. PUMP [W]
17	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) DIGESTER GAS MIXER [W]
18	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) BLOWER NO. 1 [W]
19	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) BLOWER NO. 2 [W]
20	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) BLOWER NO. 3 [W]
21	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SECONDARY CLARIFIER NO. 1 [W]
22	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SECONDARY CLARIFIER NO. 2 [W]
23	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) A/S RECIRC. PUMP NO. 1 [W]
24	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) A/S RECIRC. PUMP NO. 2 [W]
25	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) WASTE SLUDGE PUMP [W]
26	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) SCUM PUMP [W]
27	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) NON-POTABLE WATER PUMP NO. 1 [W]
28-31	BLANK	
32	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) NON-POTABLE WATER PUMP NO. 2 [W]

INSTRUMENT AND NAMEPLATE SCHEDULE		
ITEM	DESCRIPTION	INSCRIPTION
33	INDICATING LIGHT	(E) ON [R] (F) THICKENER [W]
34	INDICATING LIGHT	(A) ON [R] (B) OFF [G] (C) THICKENED SLUDGE PUMP [W]
35-39	BLANK	
40	INDICATING LIGHT	(D) GRIT PUMP [A]
41	INDICATING LIGHT	(D) GRIT CLASSIFIER [A]
42	INDICATING LIGHT	(D) RAW SLUDGE PUMP NO. 1 [A]
43	INDICATING LIGHT	(D) DIGESTER GAS MIXER [A]
44	INDICATING LIGHT	(D) BLOWER NO. 1 [A]
45	INDICATING LIGHT	(D) BLOWER NO. 2 [A]
46	INDICATING LIGHT	(D) BLOWER NO. 3 [A]
47	INDICATING LIGHT	(D) A/S RECIRC. PUMP NO. 1 [A]
48	INDICATING LIGHT	(D) A/S RECIRC. PUMP NO. 2 [A]
49	INDICATING LIGHT	(D) NON-POTABLE WATER PUMP NO. 1 [A]
50	INDICATING LIGHT	(D) NON-POTABLE WATER PUMP NO. 2 [A]
51	INDICATING LIGHT	(D) THICKENED SLUDGE PUMP [A]
53-63	BLANK	
64	INDICATING LIGHT	(D) PUMP STATION WET WELL HIGH/LOW LEVEL [A]
65	INDICATING LIGHT	(D) SPEED CONTROL UNIT FAILURE [A]
66	INDICATING LIGHT	(D) BASE PUMP FAILURE [A]
67	INDICATING LIGHT	(D) PUMP ROOM-HIGH LEVEL [A]
68	INDICATING LIGHT	(D) AERATION BASIN LOW AIR PRESSURE [A]
69	INDICATING LIGHT	(D) DISSOLVED OXYGEN CONTENT-HIGH/LOW [A]
70	INDICATING LIGHT	(D) SECONDARY CLARIFIER NO. 1 TORQUE OVERLOAD [A]
71	INDICATING LIGHT	(D) SECONDARY CLARIFIER NO. 2 TORQUE OVERLOAD [A]
72	INDICATING LIGHT	(D) NON-POTABLE WATER LOW PRESSURE [A]
73	INDICATING LIGHT	(D) AIR COMPRESSOR LOW PRESSURE [A]
74	INDICATING LIGHT	(D) CHLORINE GAS LOW PRESSURE [A]
75	INDICATING LIGHT	(D) THICKENED SLUDGE HIGH LEVEL [A]
76-80	BLANK	
81	INDICATING LIGHT	(D) SLUDGE PUMP STATION HIGH LEVEL [A]
82	INDICATING LIGHT	(D) A/S HIGH/LOW LEVEL [A]
83-87	BLANK	
88	STRIP CHART RECORDER/TOTALIZER	(G) PLANT FLOW
89	INDICATOR TOTALIZER	(G) A/S RECIRCULATION
90	STRIP CHART RECORDER/TOTALIZER	(G) DISSOLVED OXYGEN
91	STRIP CHART RECORDER/TOTALIZER	(G) CHLORINE USE
92	INDICATOR/TOTALIZER	(G) PRE-CHLORINATION
93	PUSHBUTTON	(H) SILENCE
94	PUSHBUTTON	(H) RESET
95	SELECTOR SWITCH	(H) DAY-NIGHT
96	PUSHBUTTON	(H) LAMP TEST
52	INDICATING LIGHT	(D) ENGINE GENERATOR [A]

INSCRIPTION LEGEND

LOCATIONS:

(A) (B) (C) — (D) — (E) (F)

(G) ON NAMEPLATE ON INSTRUMENT
(H) ON NAMEPLATE UNDER INSTRUMENT

COLORS:

[R] RED
[G] GREEN
[A] AMBER
[W] WHITE

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ENGINEERS PLANNERS ECONOMISTS

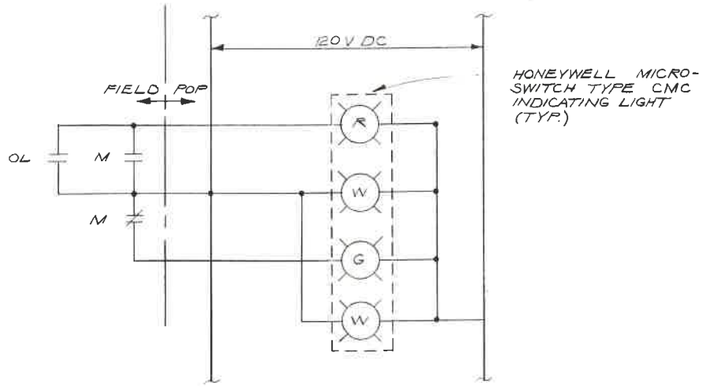
CORNELL HOWLAND HAYES & MERRYFIELD

CLAIR A. HILL & ASSOCIATES

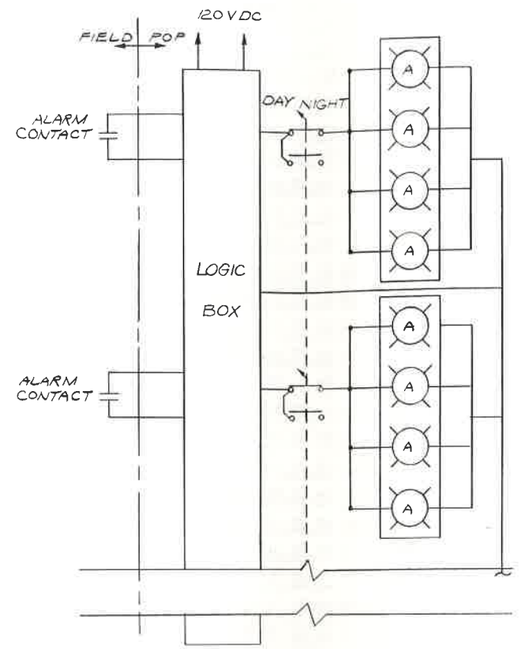
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL
PLANT MODIFICATIONS

INSTRUMENTATION AND CONTROL - PLANT OPERATIONS PANEL AND SCHEDULE

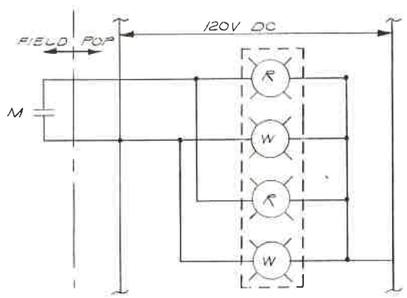
DES. GLB
DR. BCC
CK. WGE
RN. 87038.1
SHEET 65 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1



(TYPICAL FOR 26- EQUIPMENT STATUS INDICATION)



(TYPICAL FOR 14 ALARMS- SHOWN FOR 2)



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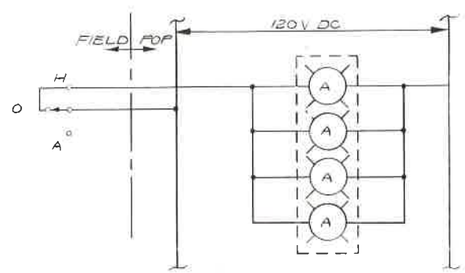

(TYPICAL FOR 3 - MANUAL MODE INDICATION)

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CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

INSTRUMENTATION AND CONTROL - WIRING DIAGRAMS

DES CLB
DR DLS
CK WGE
RN 87038.1
DRAWING NO. C 7039-1
SHEET 66 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN

PLAN AND ELEVATION

SYMBOL	DESCRIPTION
10	ELECTRICAL DEVICE - SEE DEVICE SCHEDULE SHT. 68
B	NAMEPLATE OR LEGEND PLATE -
[5-1] OR [E-6]	INDICATES RACEWAY AND CIRCUIT NUMBERS. FIRST NUMBER IS CIRCUIT NUMBER AND NUMBER AFTER DASH IS RACEWAY [E-6] INDICATES RACEWAY NO. 6 AND "E" INDICATES THAT THE RACEWAY IS EMPTY. SEE CIRCUIT AND RACEWAY SCHEDULES, SHEET 68
M.C.C-1	MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOWN
	BRANCH PANEL -
U.H-1	UNIT HEATER NO. 1 - SEE SCHEDULE SHEET 68
MP-1	MOUNTING PANEL FOR CONTACTORS AND STARTERS CONTROLLING ELECTRICAL EQUIPMENT
B	BELL
H	HORN OR HOWLER
30	DISCONNECT SWITCH SIZE INDICATED - 3 POLE UNLESS INDICATED OTHERWISE - NONFUSED
1	STARTER, MAGNETIC - NEMA SIZE SHOWN
J OR J WP	J - JUNCTION BOX; WP - WEATHERPROOF
PC	PHOTO CELL
10	WOUND-ROTOR MOTOR, H.P. INDICATED
5	MOTOR, SQUIRREL CAGE INDUCTION - HORSEPOWER INDICATED
S	SWITCH, SINGLE POLE, SINGLE THROW.
S3 OR S WP	SWITCH, 2 - DOUBLE POLE; 3 - THREE WAY; 4 - FOUR WAY; WP - WEATHERPROOF; K - KEY OPERATED; T - TIME SWITCH; D - DIMMER; P - PILOT LIGHT; M - MOTOR RATED SWITCH; L - 3 POSITIONS W/CENTER OFF
	DUPLEX CONVENIENCE RECEPTACLE
3 OR WP	CONVENIENCE RECEPTACLE - 1 - SINGLE; 3 - TRIPLE; WP - WEATHERPROOF; C - CLOCK HANGER
	FLOOR RECEPTACLE
30	RECEPTACLE - 120V, 1Φ, AMPERAGE AS INDICATED
	TELEPHONE RECEPTACLE (OUTLET BOX ONLY) FLUSH IN WALL
3KW	TERMINAL BOX OR CONNECTION POINT TO EQUIPMENT PROVIDED AND INSTALLED IN OTHER SECTIONS. LOAD MAY BE INDICATED FOR CLARITY
18"	GROUNDING STYLE PLUGMOLD, OUTLET SPACING AS INDICATED
	EXPOSED CONDUIT AND CONDUCTORS*
	CONCEALED CONDUIT AND CONDUCTORS*

* NOTE:
ALL UNMARKED CONDUIT RUNS CONSIST OF TWO NO. 12 TW CONDUCTORS IN ½" CONDUIT. RUNS MARKED WITH CROSS HATCHES INDICATE NUMBER OF NO. 12 TW WIRE. SIZE CONDUIT ACCORDING TO APPLICABLE CODE.

	CONDUIT, DOWN
	CONDUIT, UP
	CONDUIT, STUBBED AND CAPPED AS SHOWN
LA-12	HOME RUN FROM DEVICE TO LIGHTING PANEL "LA" CIRCUIT NO. 12
1	LIGHTING LUMINAIRE - SEE LUMINAIRE SCHEDULE
	FLUORESCENT LUMINAIRE - SEE LUMINAIRE SCHEDULE
4	WALL MOUNTED LUMINAIRE - SEE LUMINAIRE SCHEDULE
5	FLOODLIGHTS - AIM IN DIRECTION SHOWN - SEE LUMINAIRE SCHEDULE
	MOMENTARY PUSHBUTTONS-START STOP
T	PAD-MOUNTED TRANSFORMER

ONE LINE DIAGRAMS

SYMBOL	DESCRIPTION
	ALL CONDUCTORS OF A CIRCUIT.
400	CIRCUIT BREAKER, TRIP SHOWN, NUMBER OF POLES SHOWN IF OTHER THAN THREE POLE
480V - 120/220V; 15KVA, 3Φ	TRANSFORMER RATING SHOWN
Δ	Δ-3Φ DELTA CONNECTION.
Y	Y-3Φ GROUNDED WYE CONNECTION
	COMPONENT OUTLINE
100	SWITCH - CURRENT RATING AND NUMBER OF POLES INDICATED IF OTHER THAN THREE POLE
0-100 SW	VOLTMETER - DIRECT-CONNECT FULL SCALE RANGE SHOWN - 3Φ WITH SWITCH
P.T. SW B 0-600	VOLTMETER FULL SCALE RANGE SHOWN - PT'S (NUMBER INDICATED)
10	CAPACITOR - 3 KVAR INDICATED
10	FUSE - CURRENT RATING INDICATED
15 KW	RESISTANCE LOAD (RATING INDICATED)
	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES.
1	CONTACTOR WITH NEMA SIZE INDICATED

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMMETER	OL	OVERLOAD
B	BELL	PB	PUSHBUTTON SWITCH
CB	CIRCUIT BREAKER	PC	PHOTO CELL
C	CONDUIT	POP	PLANT OPERATIONS PANEL
CO	CONDUIT ONLY	PP	POWER PANEL
CPT	CONTROL POWER TRANSFORMER	PS	PRESSURE SWITCH
CR	CONTROL RELAY INDUSTRIAL	PT	POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER	SCP	SAMPLER CONTROL PANEL
CUH	CABINET UNIT HEATER	SCU	SPEED CONTROL UNIT
CVLS	CHECK VALVE LIMIT SWITCH	SS	SELECTOR SWITCH
DOA	DISSOLVED OXYGEN ANALYSER	SV	SOLENOID VALVE
DOS	DISSOLVED OXYGEN SENSOR	SW	SWITCH
EDH	ELECTRIC DUCT HEATER	TB	TERMINAL BLOCK OR BOARD
EF	EXHAUST FAN	TC	TIME CLOCK
ETM	ELAPSED TIME METER	TDR	TIME DELAY RELAY
FM	FLASHER MOTOR	TM	TIMING RELAY
FS	FLOAT SWITCH	TR	TIMER-REPEAT CYCLE
GND	GROUND	T	THERMOSTAT
GSR	GROUND SENSING RELAY	UH	UNIT HEATER
H	HORN OR HOWLER	V	VOLTMETER
HH	HANDHOLE	VFCP	VACUUM FILTER CONTROL PANEL
J	JUNCTION BOX	WP	WEATHERPROOF
LC	LIGHTING CONTACTOR		
LOS	LOCKOUT STOP PUSHBUTTON		
LP	LIGHTING PANEL		
LR	LATCHING RELAY		
LS	LIMIT SWITCH		
M	MAGNETIC CONTACTOR COIL		
MCC	MOTOR CONTROL CENTER		
MP	MOUNTING PANEL		
MSP	MOTOR STARTER PANEL BOARD		
NEC	NATIONAL ELECTRIC CODE		

ELECTRICAL ELEMENTARY DIAGRAMS

CONDUCTORS AND OTHER LINES

SYMBOL	DESCRIPTION
	POWER OR CONTROL WIRES
	CONNECTION
	NO CONNECTION
	MECHANICAL CONNECTION
	COMPONENT OUTLINE

LOAD DEVICES

SYMBOL	DESCRIPTION
CR	GENERAL LOAD SYMBOL - CR - CONTROL RELAY COIL; F - MAGNETIC CONTACT COIL, FORWARD; R - MAGNETIC CONTACT COIL, REVERSE; H - MAGNETIC CONTACT COIL, HIGH SPEED; L - MAGNETIC CONTACT COIL, LOW SPEED; R - MAGNETIC CONTACT COIL, RUN; S - MAGNETIC CONTACT COIL, START
	OTHER SYMBOLS SHOWN IN THE ABBREVIATIONS MAY BE USED ALSO.
A	INDICATING LIGHT - LETTER INDICATES COLOR: A - AMBER; B - BLUE; C - CLEAR; G - GREEN; R - RED; W - WHITE
M	MOTOR - NUMBER OF LEADS TO MOTOR SHOWN

CONTROL DEVICES

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER, 3 POLE
	CIRCUIT BREAKER, 1 POLE
	DISCONNECT SWITCH
OLS	OVERLOAD RELAY CONTACTS
	OVERLOAD HEATER
PS	PROCESS FUNCTION CONTACT, DEVICE ACTION SHOWN BY NOTE
CR	RELAY (OR CONTACTOR) CONTACT ON CR NORMALLY OPEN, CLOSES WHEN COIL IS ENERGIZED
CR	RELAY (OR CONTACTOR) CONTACT ON CR NORMALLY CLOSED, OPENS WHEN COIL IS ENERGIZED
START	PUSHBUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN, FUNCTION INDICATED
STOP	PUSHBUTTON MOMENTARY CONTACT NORMALLY CLOSED, FUNCTION INDICATED
START STOP	PUSHBUTTON SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK FUNCTION INDICATED.
H O A	SELECTOR SWITCH, THREE POSITION - HAND - OFF - AUTOMATIC.
TDR TO	TIME DELAY RELAY CONTACT NORMALLY OPEN CONTACT (TIME ACTION INDICATED)
TDR TC	TIME DELAY RELAY CONTACT NORMALLY CLOSED (TIME ACTION INDICATED)
	TC - TIME CLOSE; TO - TIME OPEN; INST. - INSTANTANEOUS
1 2	SELECTOR SWITCH - MAINTAINED CONTACT - CHART DEFINES OPERATION
120	VOLTAGE TRANSFORMER SEC. VOLTAGE SHOWN
	FUSE
M	STARTER COIL
S	START CONTACTOR
R	RUN CONTACTOR
Y	WYE CONTACTOR

POS. CKT.	ON	OFF
	X	O
2	O	X

POS. CKT.	HAND	OFF	AUTO
1	X	O	O
2	O	O	X

X CLOSED CONTACT
O OPEN CONTACT

NOTES:

1. THIS IS A STANDARD LEGEND SHEET, THEREFORE SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

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CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL - NOTES AND LEGEND

DES. CLB | DR. BCC | CK. WGE | RN 51039.1 | DRAWING NO. C 7039-1
SHEET 67 OF 78 | DATE: JAN. 1973 | SCALE: AS SHOWN

ELECTRICAL DEVICE SCHEDULE

DEVICE NO.	DEVICE TYPE	LOCATION	FUNCTION
1	MAINT. PUSH-BUTTON START-STOP	WHERE SHOWN	
2	FLOAT SWITCH	A/S SUMP PUMP WELL	SUMP PUMP CONTROL
3	H O A	WHERE SHOWN	
4	PUSH-BUTTON LOS RESET	WHERE SHOWN	
5	PRESSURE SWITCH	T/S PUMP CONTROL CABINET	T/S PUMP CONTROL
6	PRESSURE SWITCH	T/S PUMP CONTROL CABINET	WET WELL-HIGH LEVEL ALARM
7	PRESSURE SWITCH	BLOWER BLDG.	AIR COMPRESSOR CONTROL
8	PRESSURE SWITCH	BLOWER BLDG.	LOW PRESSURE ALARM
9	PRESSURE SWITCH	A/S RECIRC. PUMP CONTROL CABINET	A/S RECIRC. PUMP CONTROL
10	PRESSURE SWITCH	A/S RECIRC. PUMP CONTROL CABINET	A/S RECIRC. PUMP CONTROL
11	PRESSURE SWITCH	A/S RECIRC. PUMP CONTROL CABINET	HIGH LEVEL ALARM
12	PRESSURE SWITCH	CHLORINE BLDG.	PUMP CONTROL
13	PRESSURE SWITCH	CHLORINE BLDG.	N.P.W. PUMP-LOW PRESSURE ALARM
14	PRESSURE SWITCH	CHLORINE BLDG.	LOW PRESSURE ALARM-CHLORINATORS
15	HI-TEMP CUTOUT	DIGESTER GAS COMPRESSOR	HI-TEMP CUTOUT
16	LEVEL SWITCH *	A/S RECIRC. PUMP STATION	HIGH LEVEL ALARM
17	LEVEL SWITCH *	PUMP ROOM	HIGH LEVEL ALARM
18	MOMENTARY START-STOP	SLUDGE LOADING DOCK	SLUDGE RECIRC. PUMP CONTROL (PENDANT MOUNT, SEE SHT. 45)
19	PRESSURE SWITCH	BLOWER BLDG.	LOW PRESSURE ALARM
20	PRESSURE SWITCH	A/S RECIRC. PUMP CONTROL CABINET	LOW LEVEL ALARM

* MODEL LS-1800 LEVEL SWITCH AS MADE BY GEMS, A DIVISION OF DE LAVAL TURBINE.

EXTERIOR CIRCUIT SCHEDULE

NO.	CONDUCTORS NO.	CONDUCTORS SIZE	FROM	TO	VIA RACEWAY
1	9	500	TRANSFORMER	MCC 2	1
	3	# 1/0 GND			
2	3	# 350 MCM	MCC 2	EXISTING MCC1/E7	2
	1	# 1/0 GND			
3	6	# 350 MCM	MCC 2	EXISTING MCC1/P1	3
	2	# 1/0 GND			
4	6	# 12	MCC1/P15	SEWAGE SHREDDER NO. 1	4
5	6	# 12	MCC1/P5	SEWAGE SHREDDER NO. 2	5
6	6	# 12	PANEL "ELP"	PLANT PUMP STATION PUMP WELL LIGHTS	6
7	3	# 12	PANEL "LP"	OUTSIDE LIGHTS NORTH	7
8	10	# 12	MCC1/E10	EXISTING PRIMARY CLARIFIER	8
9	6	# 12	MCC1/P15	DIGESTER GAS COMPRESSOR	9
10	4	# 10	MCC1/P17	GRIT PUMP	10
	5	# 12			
11	4	# 12	MCC1/P14	GRIT HOIST	11
12	9	# 12	MCC1/P16	CLASSIFIER	12
13	3	# 12	PANEL "ELP"	GRIT WORKS LIGHTS AND OUTLET	13
14	3	# 12	PANEL "LP"	OUTSIDE LIGHTS AND OUTLETS-SOUTH	14
15	11	# 12	MCC2/C1	SEC. CLARIFIER NO. 1-DRIVE AND TORQUE OVERLOAD	15
16	11	# 12	MCC2/C2	SEC. CLARIFIER NO. 2-DRIVE AND TORQUE OVERLOAD	16
17	2	# 12	PANEL "B"	SEC. CLARIFIER NO. 1-LIGHTS AND OUTLETS	17
18	3	# 12	MCC1/ELP9	A/S RECIRC. PUMP STATION OUTSIDE LIGHTS AND OUTLETS	18
19	3	# 12	PANEL "B"	SEC. CLARIFIER NO. 2-LIGHTS AND OUTLETS	19
20	2	# 12	PANEL "F"	EFFLUENT FLOW TRANSMITTER INDICATOR	26
21	3	# 3	MCC2/B3	PANEL "C"	21
	1	# 8 GND			
22	2	# 12	COMBINATOR	A/S FLOWMETERS	23
23	2-50 CC	# 14	MCC2	P O P	28
24	2-40 CC	# 14	MCC1	P O P	29
25	11	# 12	MCC1/P27	RAW SLUDGE PUMP	32
26	5	# 12	PANEL "A" AND SCP	PLANT INFLUENT SAMPLE PUMP	

LIGHTING FIXTURE SCHEDULE

UNIT NO.	MANUFACTURER	CATALOG NO.	LAMPS	VOLTS	MOUNTING AND REMARKS
1	SMOOT-HOLMAN	221-44R-JA-S7	4-F40 C.W.	120	RECESSED-INVERTED "T" BAR
2	SMOOT-HOLMAN	221-24R-JA-S7	2-F40 C.W.	120	RECESSED-INVERTED "T" BAR
3	ART METAL	20-3502 AA	1-200W I.F.	120	RECESSED
4	HUBBELL	3923	1-150W I.F.	120	CEILING MOUNTED
5	ART METAL	3643	1-100W	120	CEILING MOUNTED
6	DAY-BRITE	R-41252-4	2-F40 C.W.	120	STEM MOUNTED 9' ABOVE FLOOR
7	KIM	300/PB-14/SA/TMV-30	1-175W MVDW	120	SEE DETAIL SHEET
8	KIM	300/SA	1-200W I.F.	120	SEE DETAIL SHEET
9	BENJAMIN	6553	1-500W	120	CEILING MOUNTED
10	BENJAMIN	V7644	1-300W I.F.	120	PENDENT MOUNTED
11	PRESCOLITE	1152	75W	120	WALL MOUNTED
12	ART METAL	9000	2-75W	120	WALL MOUNTED ABOVE SINK
13	BENJAMIN	7614-CX	1-300 W	120	CEILING MOUNTED
14	BENJAMIN	7536-BX	1-300 W	120	WALL MOUNTED 8' ABOVE FLOOR OF WET WELL
15	NATIONAL STEBER	S-333	1-150 W	120	WALL MOUNTED 8' ABOVE DOORWAY PLATFORM

NOTES:

1. ALL EXTERIOR CONDUIT UNDER GROUND SHALL BE SCHEDULE 40 PVC EXCEPT THE VERTICAL SECTIONS, INCLUDING THE 90 BEND, WHICH WILL BE EXPOSED ABOVE GRADE AND FOR 5'-0" OUTSIDE OF BUILDINGS AS PER SPECIFICATIONS, SHALL BE RIGID STEEL.

2. UNLESS SHOWN OTHERWISE ALL CONTROL OF INDICATING CIRCUITS TO THE ADMINISTRATION BUILDING SHALL BE ROUTED TO THE NEAREST MOTOR CONTROL CENTER MASTER TERMINAL COMPARTMENT TO BE CABLED AND RUN IN A SINGLE CONDUIT TO THE POP MASTER TERMINAL BOARD.

3. ALL SHIELDED CONDUCTORS SHALL BE RUN CONTINUOUSLY FROM TRANSMITTERS VIA MOTOR CONTROL CENTERS TO THE PLANT OPERATIONS PANEL. NO DISCONTINUITIES WILL BE ALLOWED IN MOTOR CONTROL CENTERS.

4. PROVIDE A PULLING WIRE IN THE EMPTY CONDUIT. CONDUCTORS PROVIDED AND INSTALLED UNDER OTHER SECTIONS.

ELECTRIC HEATER SCHEDULE

UNIT NO.	LOCATION	K W	VOLTS	Ø	MANUFACTURER	CATALOG NO.	MOUNTING AND REMARKS
UH-1	BLOWER BUILDING	7.5	480	3	CHROMALOX	LUH-07-08-T	WALL 8'-0" ABOVE FLOOR
UH-2	BLOWER BUILDING	7.5	480	3	CHROMALOX	LUH-07-08-T	WALL 8'-0" ABOVE FLOOR
UH-3	BLOWER BUILDING	10	480	3	CHROMALOX	LUH-10-15-T	WALL 9'-0" ABOVE FLOOR
UH-4	BLOWER BUILDING	10	480	3	CHROMALOX	LUH-10-15-T	WALL 9'-0" ABOVE FLOOR
UH-5	BLOWER BUILDING	10	480	3	CHROMALOX	LUH-10-15-T	WALL 9'-0" ABOVE FLOOR
UH-6	BLOWER BUILDING	10	480	3	CHROMALOX	LUH-10-VUC-S	CEILING
UH-7	CHLORINE BUILDING	7.5	208	3	CHROMALOX	LUH-07-02-T	WALL 8'-0" ABOVE FLOOR
UH-8	CHLORINE BUILDING	7.5	208	3	CHROMALOX	LUH-07-02-T	WALL 8'-0" ABOVE FLOOR
UH-9	CHLORINE BUILDING	7.5	208	3	CHROMALOX	LUH-07-02-T	WALL 8'-0" ABOVE FLOOR
UH-10	A/S RECIRC. PUMP ROOM	10	208	3	CHROMALOX	LUH-10-11-T	WALL 8'-0" ABOVE FLOOR
UH-11	A/S RECIRC. PUMP ROOM	10	208	3	CHROMALOX	LUH-10-11-T	WALL 8'-0" ABOVE FLOOR

RACEWAY SCHEDULE

NO.	SIZE	TYPE SEE NOTES 1 & 4
1	3-3 1/2"	PVC
2	3"	PVC
3	2-3"	PVC
4	3/4"	PVC
5	3/4"	PVC
6	3/4"	PVC
7	1/2"	PVC
8	EXIST.	
9	3/4"	PVC
10	3/4"	PVC
11	1/2"	PVC
12	3/4"	PVC
13	1/2"	PVC
14	1/2"	PVC
15	1"	PVC
16	1"	PVC
17	1/2"	PVC
18	1/2"	PVC
19	1/2"	PVC
20	1/2"	PVC
21	3/4"	PVC
22	1/2"	PVC
23	1/2"	PVC
24	1 1/2"	PVC
25	3/4	PVC
26	1/2"	PVC
27	1/2"	PVC
28	2-2 1/2"	PVC
29	3 1/2"	PVC
30	1 1/2"	PVC
31	1 1/2"	PVC
32	3/4"	PVC
33	3/4	PVC

THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

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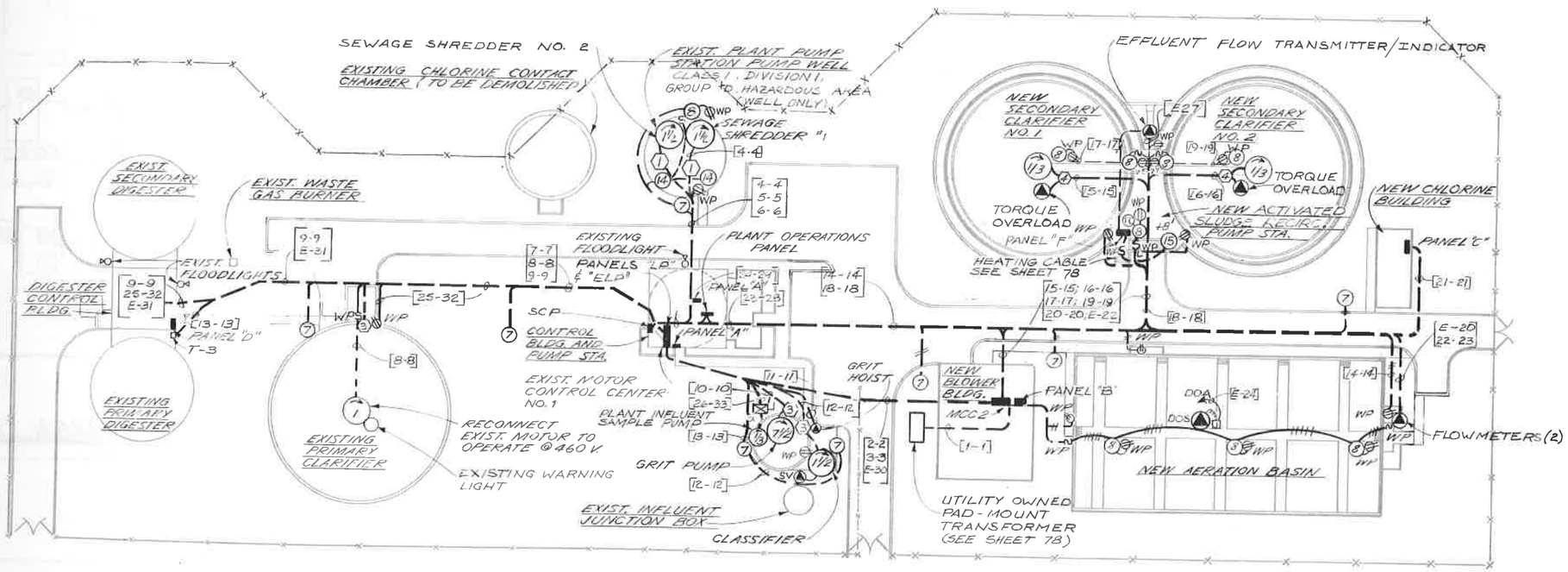
WATER POLLUTION CONTROL PLANT MODIFICATIONS

ELECTRICAL - SCHEDULES AND NOTES

DES CLB
DR BCC
CK WBE
IN 37039.1

SHEET 68 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN

DRAWING NO. C 7039-1



ELECTRICAL SITE PLAN

SCALE 1" = 30'

NOTES:

1. UTILIZE EXISTING CONDUIT WHERE POSSIBLE.
2. REMOVE EXISTING OUTSIDE LIGHTING WITH THE EXCEPTION OF THE FLOODLIGHTS SHOWN.
3. REFERENCE SHEETS FOR PIPING LAYOUT.

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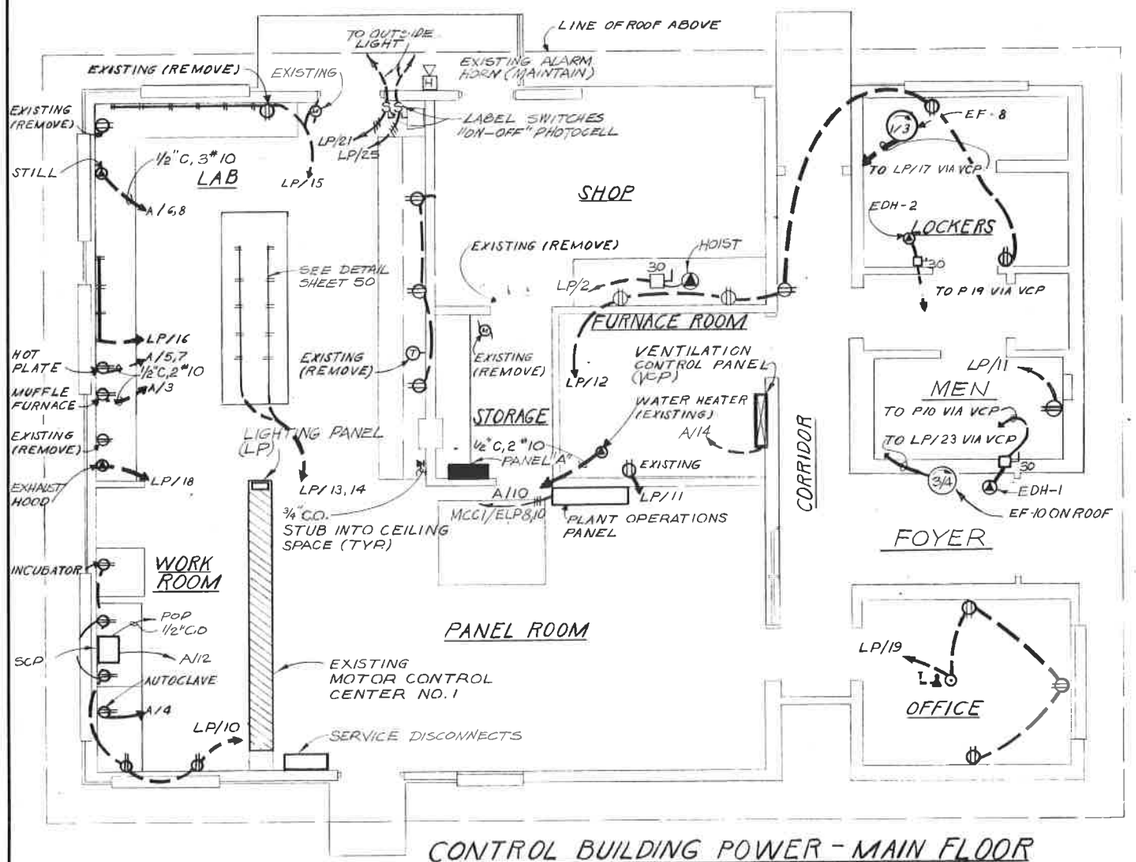
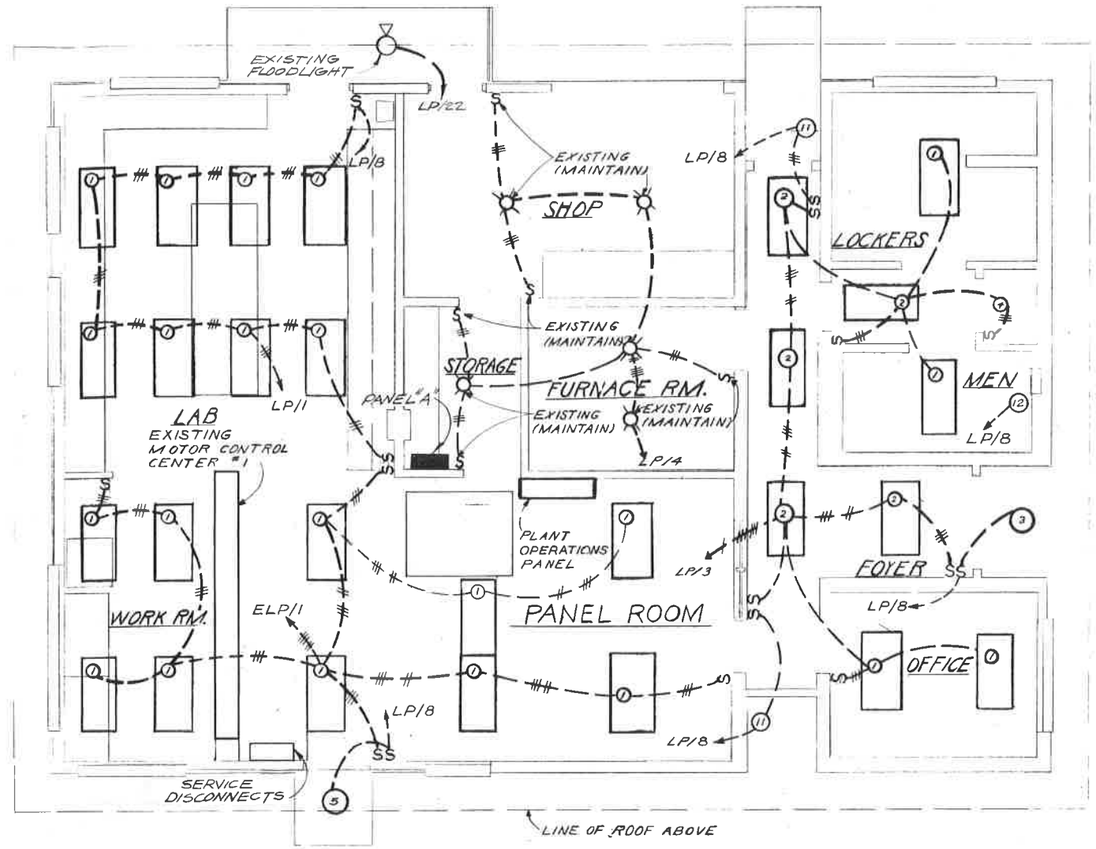
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL - SITE PLAN

DES. CLB	SHEET 69
DR. BRB	OF 78
CK. WGE	DATE: JAN. 1973
RN 7039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



CONTROL BUILDING POWER - MAIN FLOOR

1/4" = 1' 0"



CONTROL BUILDING LIGHTING - MAIN FLOOR

1/4" = 1' 0"

NOTES

1. REMOVE ALL SWITCHES, OUTLETS, THERMOSTATS, AND OTHER ELECTRICAL EQUIPMENT FROM THE WALLS THAT ARE TO BE REMOVED AND PLUG THE EXISTING CONDUIT RUNS THAT CANNOT BE REUSED. ALSO REMOVE ANY DEVICE THAT IS INDICATED IN THE DRAWING AND REMOUNT IF SO INDICATED.
2. REMOVE ALL LIGHT FIXTURES FROM THE MAIN FLOOR OF THE CONTROL BUILDING, EXCEPT AS INDICATED. REUSE EXISTING CIRCUITRY FOR NEW AND EXISTING LIGHTS WHERE POSSIBLE.
3. CONCEAL CONDUITS AS INDICATED, UNLESS APPROVED BY ENGINEER.
4. SEE ARCHITECTURAL SHEETS FOR DEFINITION OF NEW AND EXISTING BUILDING.

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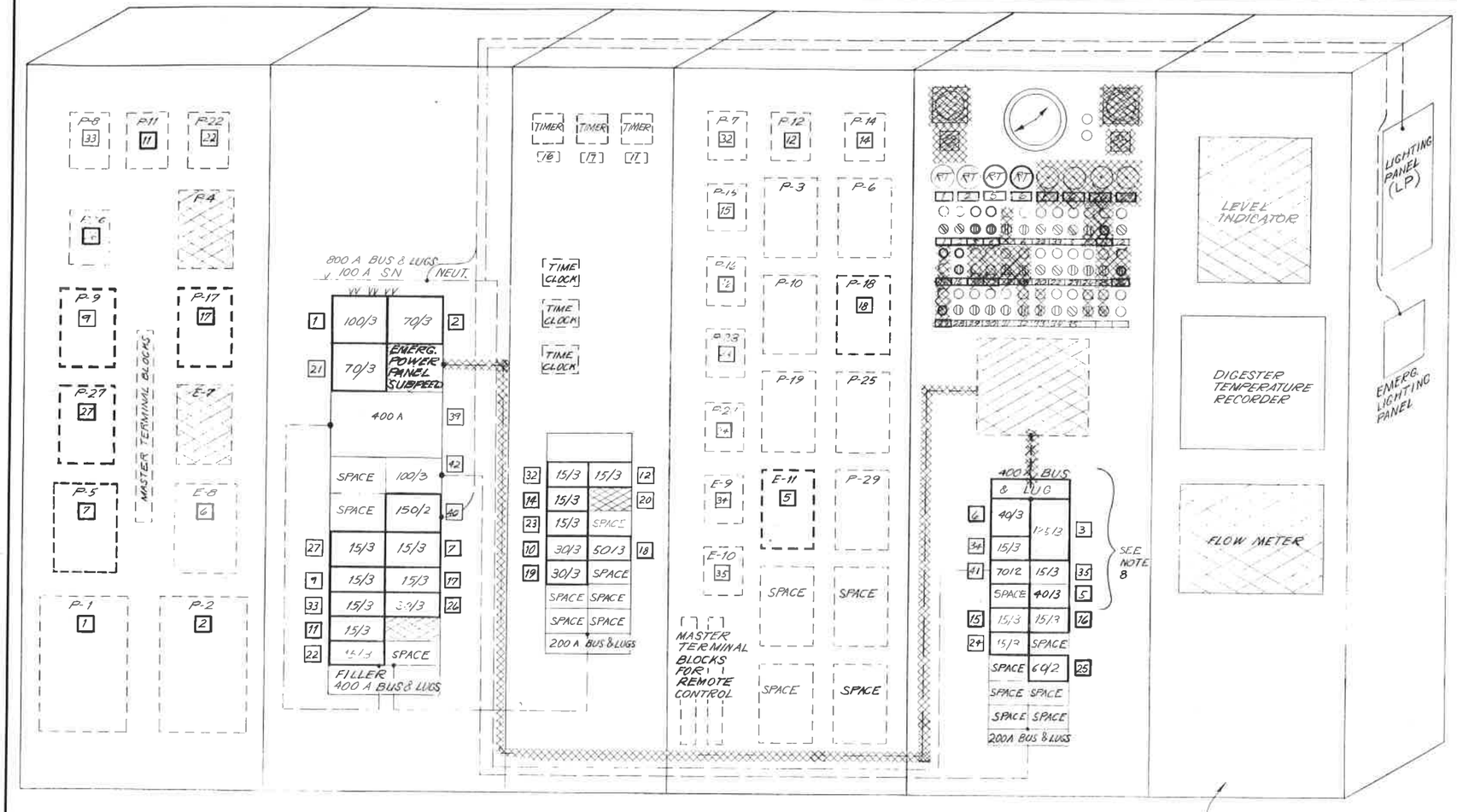
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL - EXISTING CONTROL BUILDING MODIFICATIONS AND ADDITION

DES CLB
DR GEN
CK WGE
PN 57039.1
DRAWING NO. C 7039-1
SHEET 70 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN



PROVIDE A NEW PANEL SECTION FINISH TO MATCH EXISTING

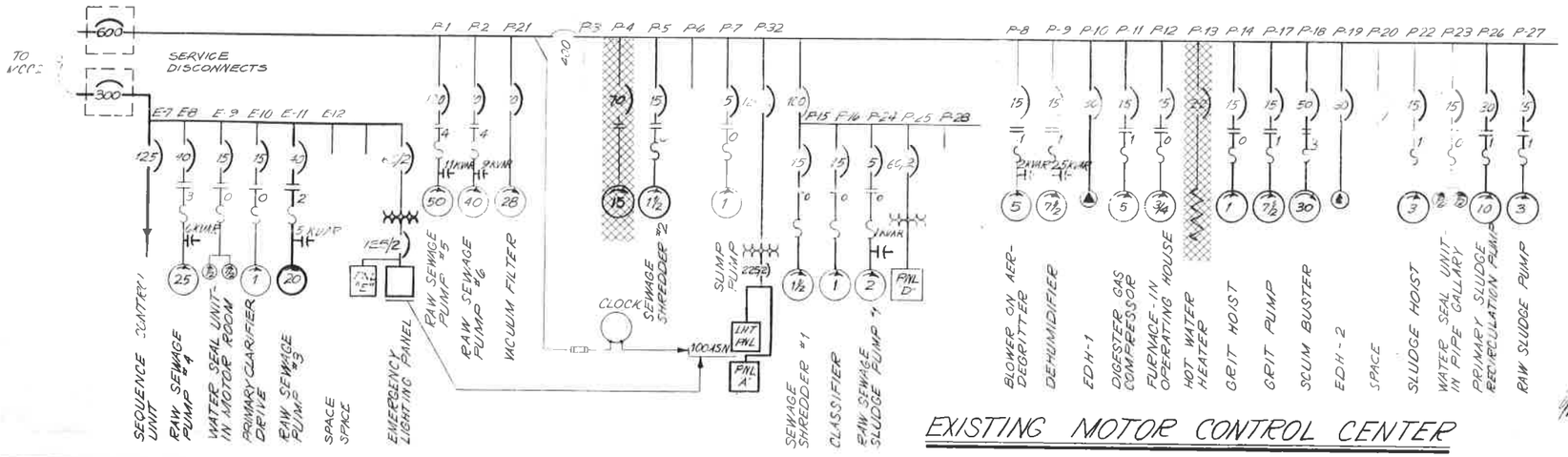
EXISTING MOTOR CONTROL CENTER MODIFICATIONS

N.T.S.

NOTES:

1. EXISTING MOTOR CONTROL CENTER IS TO BE CONVERTED FROM 240V TO 480V. MAINTAIN EXISTING EQUIPMENT EXCEPT AS SHOWN. CROSS HATCHED AREAS SHOW EQUIPMENT TO BE REMOVED OR ABANDONED. HEAVY LINES INDICATE EQUIPMENT TO BE ADDED OR CHANGED. CHANGE INDIVIDUAL MOTOR TERMINAL CONNECTIONS AS REQUIRED.
2. ADD CONTROL POWER TRANSFORMERS TO ALL EXISTING MOTOR CONTROL CIRCUITS TO MAINTAIN EXISTING CIRCUITS AT 220V, WITH THE EXCEPTIONS OF THE EXISTING LIFT PUMPS AND STORM PUMPS. CHANGE OVERLOADS AS REQUIRED BY REDUCTION OF MOTOR CURRENTS DUE TO INCREASED VOLTAGE. ADD THIRD OVERLOAD TO EXISTING STARTERS TO MEET NE CODE REQUIREMENTS.
3. INDICATING LIGHTS AND NAME PLATES TO BE CHANGED AS SHOWN.
4. REMOVE ALL EXISTING CAPACITORS AND INSTALL NEW CAPACITORS AS SHOWN.
5. CONDUIT AND CONDUCTORS TO THESE MOTOR MAY BE DAMAGED, OR DESTROYED DUE TO REMODELING. A CHECK SHALL BE MADE PRIOR TO THE TIME ANY NEW CONCRETE IS POURED, AND IF REQUIRED, NEW CONDUIT SHALL BE INSTALLED.
6. UTILIZE EXISTING CONDUIT WHERE POSSIBLE. REWIRE WITH NEW CONDUCTORS.
7. PROVIDE PLATES AND PLUGS AS REQUIRED OF A FINISH TO MATCH THE PANEL, EXCEPT AS SHOWN.
8. REPLACE EXISTING EMERGENCY POWER PANEL WITH SQUARE D TYPE HCN.
9. ALL EXTERNAL CONTROL WIRING TO MASTER TERMINAL BLOCKS.

NAMEPLATE NO.	DESIGNATION	CIRCUIT
1	RAW SEWAGE PUMP NO. 5	P-1
2	RAW SEWAGE PUMP NO. 6	P-2
	BLANK	P-3
	~~LIFT PUMP NO. 2 - 1,500 GPM~~	P-4
7	SEWAGE SHREDDER NO. 2	P-5
	BLANK	P-6
32	SUMP PUMP	P-7
33	BLOWER - ON AER - DEGRITTER	P-8
9	DEHUMIDIFIER	P-9
10	ELECTRIC DUCT HEATER NO. 1	P-10
11	DIGESTER GAS COMPRESSOR	P-11
12	FURNACE IN OPERATING HOUSE	P-12
13	~~HOT WATER HEATER~~	P-13
14	GRIT HOIST	P-14
15	SEWAGE SHREDDER NO. 1	P-15
16	CLASSIFIER	P-16
17	GRIT PUMP	P-17
18	SCUM BUSTER	P-18
19	~~ELECTRIC DUCT HEATER NO. 2~~	P-19
20	HEAT EXCHANGER	P-20
21	VACUUM FILTER	P-21
22	SLUDGE HOIST	P-22
23	WATER SEAL UNIT - IN PIPE GALLERY	P-23
24	RAW SEWAGE SLUDGE PUMP	P-24
25	PANEL "D" - DIGESTER BUILDING	P-25
26	PRIMARY SLUDGE RECIRCULATION PUMP	P-26
27	RAW SLUDGE PUMP	P-27
28	BLANK	P-28
29	BLANK	P-29
30	BLANK	P-30
31	BLANK	P-31
3	SEQUENCE CONTROL UNIT	E-7
6	RAW SEWAGE PUMP NO. 4	E-8
34	WATER SEAL UNIT - IN MOTOR	E-9
35	CLARIFIER DRIVE NO. 1	E-10
5	RAW SEWAGE PUMP NO. 3	E-11
37	SPACE	E-12
38	EMERGENCY POWER PANEL	
39	POWER PANEL	
40	LIGHTING PANEL	
41	EMERGENCY LIGHTING PANEL	
42	POWER PANEL SUB - FEED	
43	POWER	
44	EMERGENCY	
45	EMERGENCY GENERATOR	



EXISTING MOTOR CONTROL CENTER

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ELECTRICAL - EXISTING MOTOR CONTROL CENTER NO. 1 MODIFICATIONS

DES. CLB
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SHEET 71 OF 78
DATE: JAN. 1973
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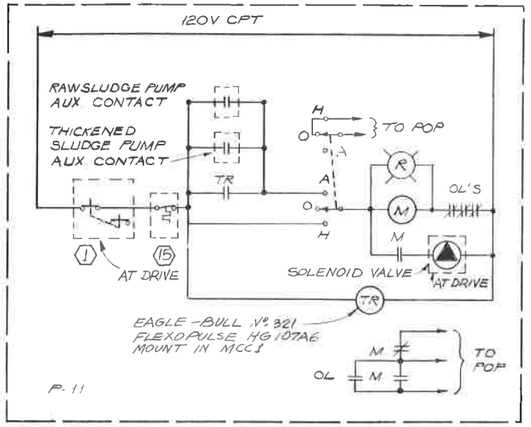
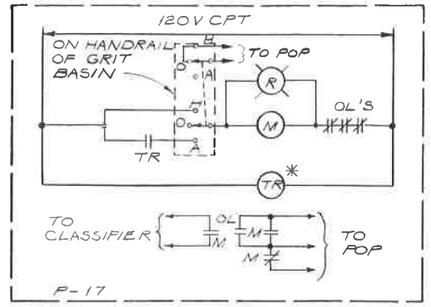
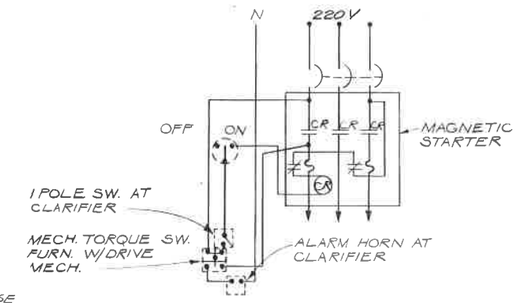


DIGESTER GAS COMPRSR.

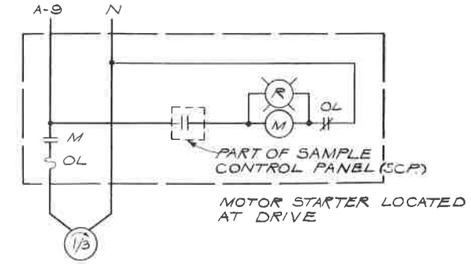


GRIT PUMP

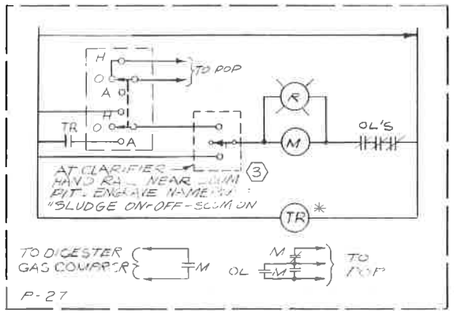
* EAGLE-BULL 321 FLEXOPULSE HG107AG MOUNT IN MCC1



EXISTING

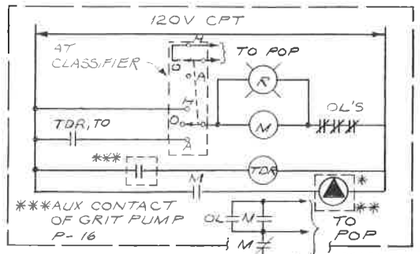


PLANT INFLUENT SAMPLE PUMP

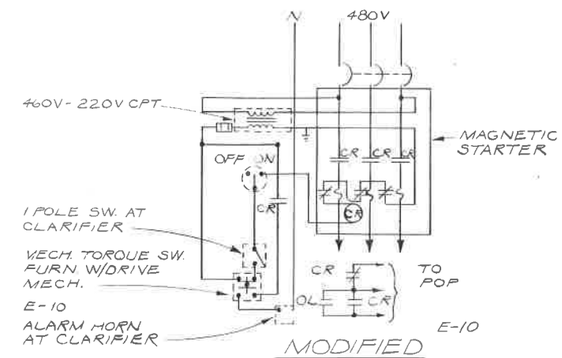


* EAGLE-BULL. Nº 321 FLEXOPULSE HG 106AG MOUNT IN MCC 1

RAW SLUDGE PUMP

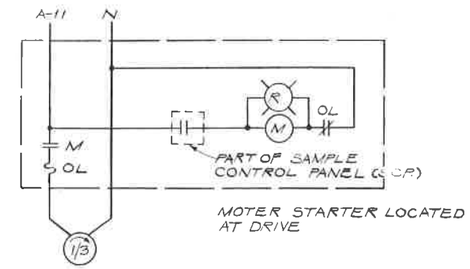


CLASSIFIER

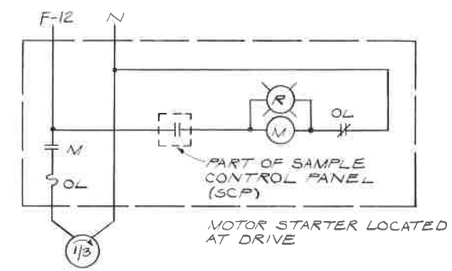


MODIFIED

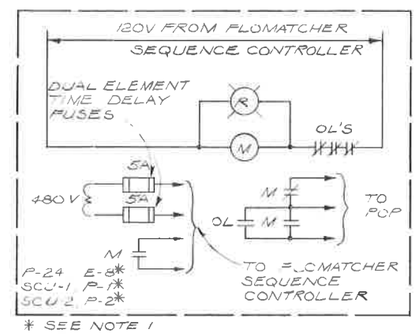
PRIMARY CLARIFIER DRIVE CONTROL



PRIMARY EFFLUENT SAMPLE PUMP

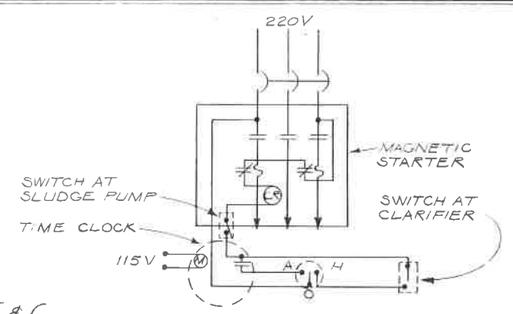


PLANT EFFLUENT SAMPLE PUMP



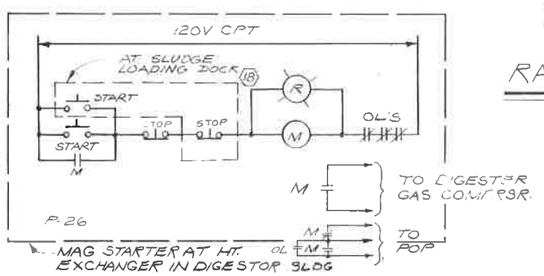
* SEE NOTE 1

RAW SEWAGE PUMP NOS. 1,2,3,4,5 & 6

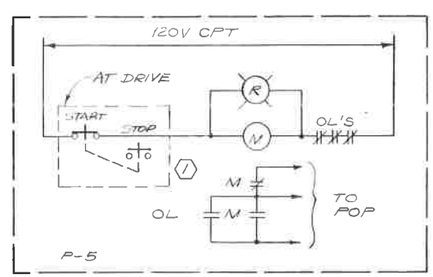


EXISTING

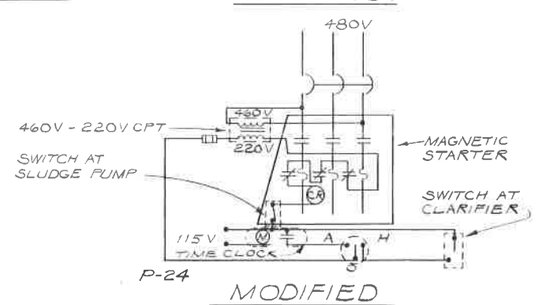
NOTE:
1. EXISTING RAW SEWAGE PUMP NOS. 4, 5 & 6 WILL REQUIRE NEW CONTROL CIRCUITS. OLD CIRCUITS ARE TO BE REMOVED.



PRIMARY SLUDGE RECIRC. PUMP



SEWAGE SHREDDERS



MODIFIED

SLUDGE PUMP CONTROL

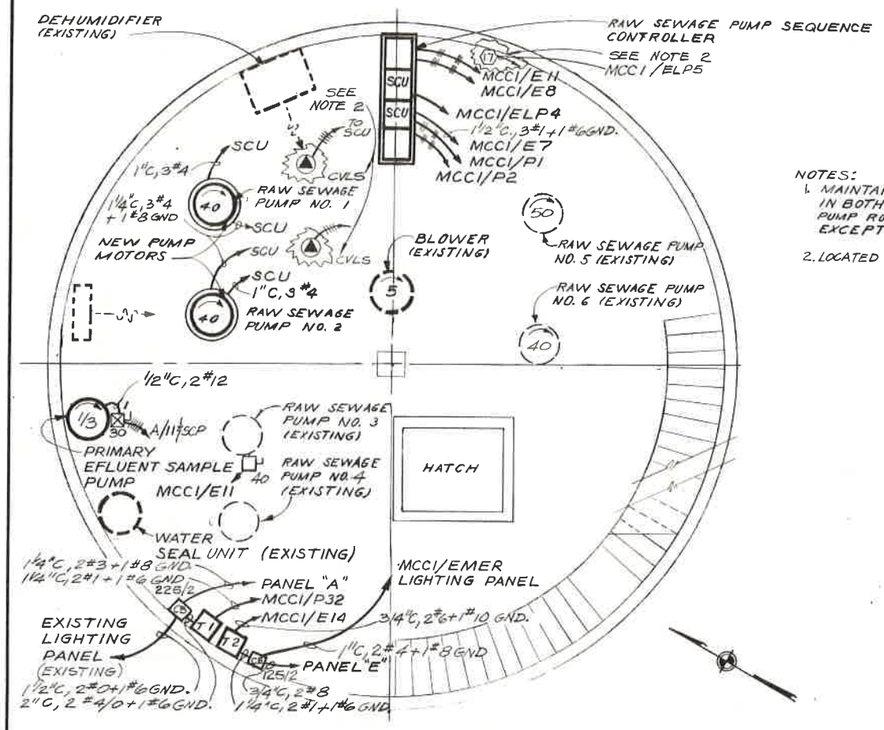
THIS PRINT IS REDUCED TO ONE-HALF OF THE ORIGINAL SCALE
IF THE SCALE READS:
1" = 1'-0" USE ½" = 1'-0" OR 1" = 10' USE 1" = 20'

CH2M HILL
ENGINEERS PLANNERS ECONOMISTS

CORNELL HOWLAND HAYES & MERRYFIELD
CLAIR A HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL -
EXISTING MOTOR CONTROL CENTER NO. 1 - CONTROL DIAGRAMS

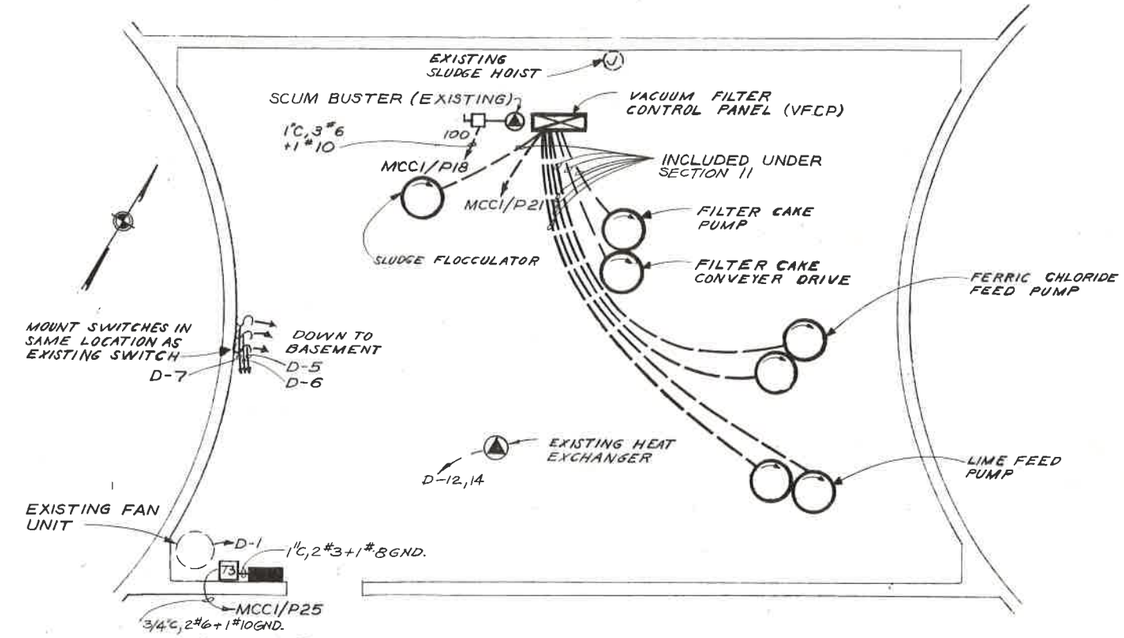
DES CLB
DR DLS
CK WGE
RN 7039.1
DRAWING NO. C 7039-1
SHEET 72 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN



CONTROL BUILDING MOTOR ROOM PLAN-POWER

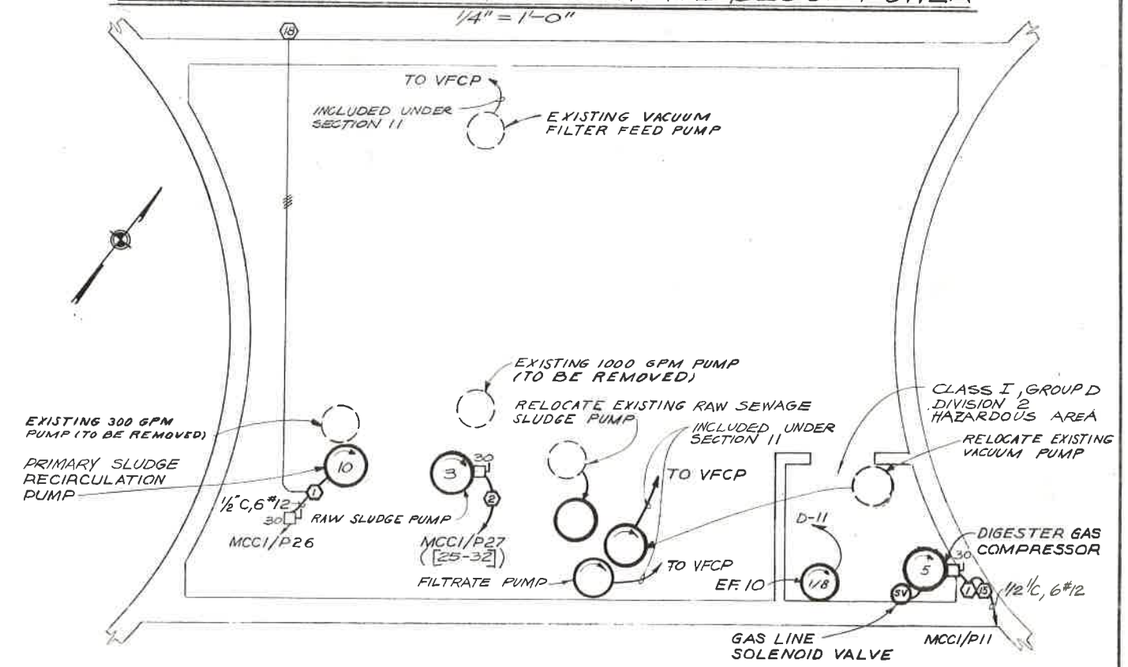
1/4" = 1'-0"

NOTES:
1. MAINTAIN EXISTING LIGHTING AND POWER IN BOTH THE MOTOR ROOM AND THE PUMP ROOM OF THE CONTROL BUILDING, EXCEPT AS SHOWN.
2. LOCATED IN PUMP ROOM, ON FLOOR BELOW



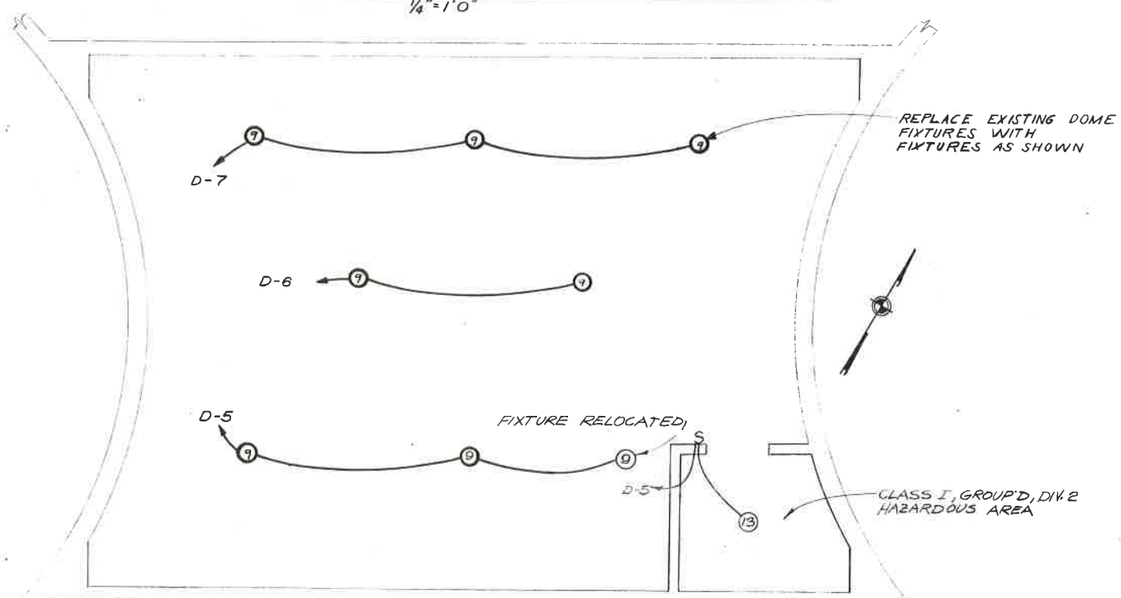
UPPER LEVEL DIGESTER CONTROL BLDG.-POWER

1/4" = 1'-0"



LOWER LEVEL -POWER

1/4" = 1'-0"



DIGESTER CONTROL BUILDING-LOWER LEVEL LIGHTS

1/4" = 1'-0"

NOTE:
EXISTING LIGHTING TO BE MAINTAINED, EXCEPT THOSE LIGHTS ON EXISTING CIRCUT L-8. REPLACE WITH NEW FIXTURES AS SHOWN.

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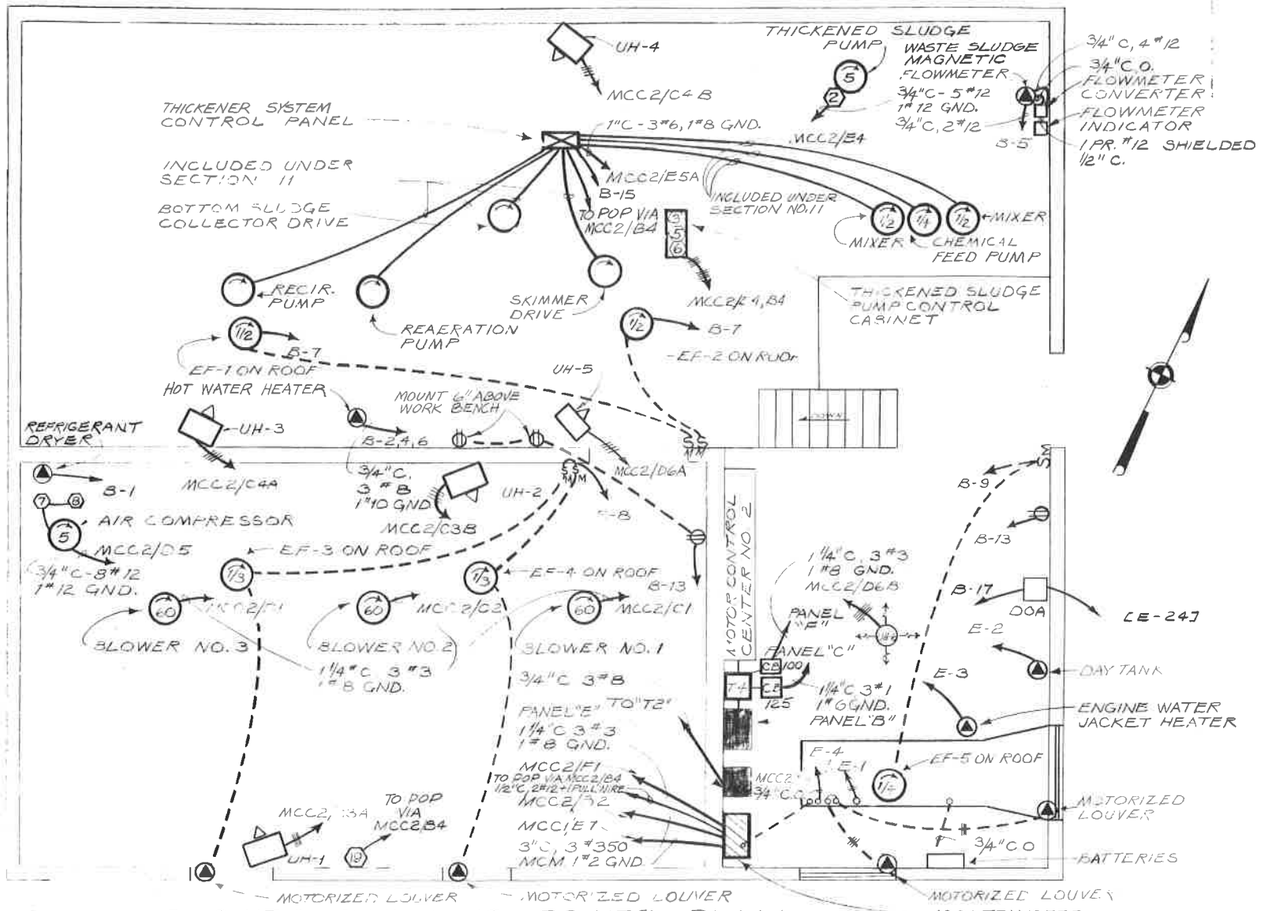
CLAIR A. HILL & ASSOCIATES

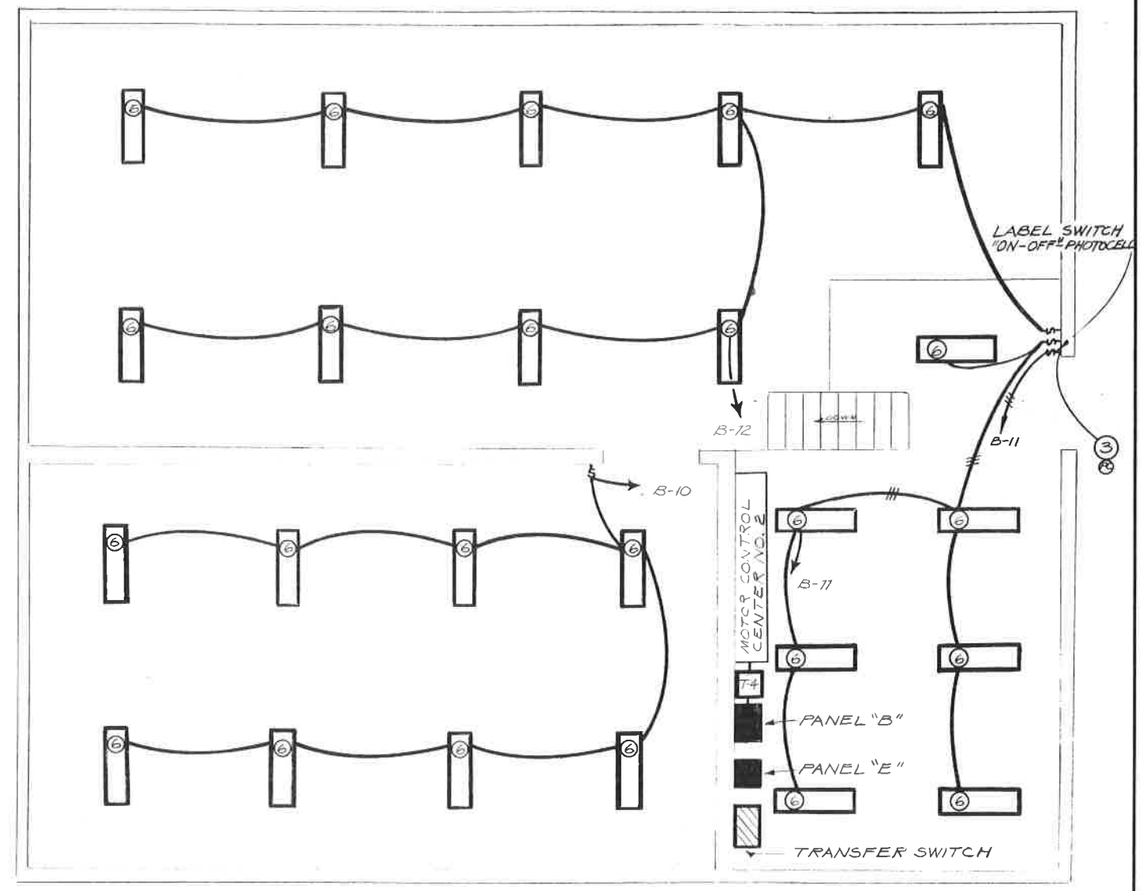
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL -
EXISTING DIGESTER CONTROL BUILDING & EXISTING PLANT PUMP STATION MODIFICATIONS

DES. CLB	SHEET 73
DR. GEN	OF 11
CK. WGE	DATE: JAN. 1973
RN 27039.1	SCALE: AS SHOWN
DRAWING NO. C 7039-1	



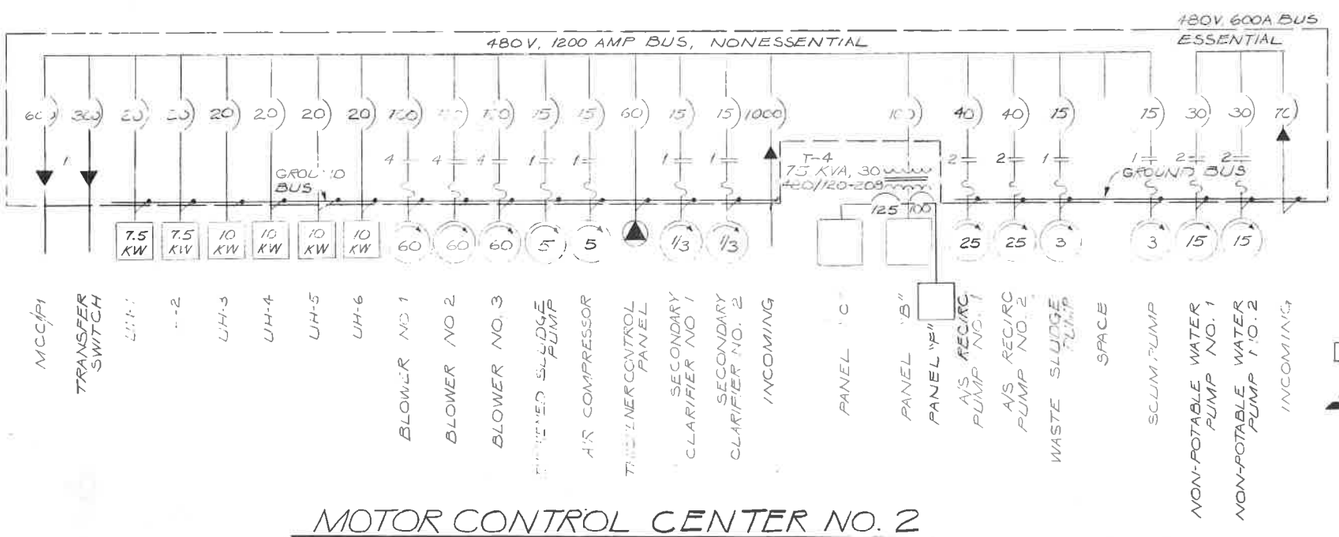
BLOWER BUILDING POWER PLAN

SCALE 1/4" = 1'-0"



BLOWER BUILDING LIGHTING PLAN

SCALE 1/4" = 1'-0"



MOTOR CONTROL CENTER NO. 2

A	B	C	D	E	F
UTILITY EQUIP.	CIRCUIT BRKR. TO EXIST. MCC1 (600A)	BLOWER NO 1	BLOWER NO. 3	SECONDARY CLARIFIER NO. 1	ESSENTIAL BUS MAIN BREAKER (70A)
				SECONDARY CLARIFIER NO 2	SEL. SW.
				WASTE SLUDGE PUMP	NP. WATER PUMP NO. 1
INCOMING MAIN BRKR. 1000 A	CIRCUIT BRKR. TO TRANS. SW. (300A)	BLOWER NO. 2	SEL. SW. & RELAYS	THICKENED SLUDGE PUMP	NP. WATER PUMP NO 2
			A/S RECIRC. PUMP NO 1		SPACE
			A/S RECIRC PUMP NO 2	SLUDGE THICKENER (60A) / SPACE	
	T-4 CIRCUIT BREAKER (100A)	UH-1 CKT. BRKR. (20A) / UH-2	AIR COMPRSR.	SCUM PUMP	
SPACE	TERMINAL BOARD	UH-3 CKT. BRKR. (20A) / UH-4 CKT. BRKR. (20A)	UH-5 CKT. BRKR. (20A) / UH-6 CKT. BRKR. (20A)	SPACE	

4" CONCRETE PAD

MOTOR CONTROL CENTER NO. 2

SCALE 3/4" = 1'0"

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IF THE SCALE READS:
1" = 8'-0" USE 1/2" = 1'-0" OR 1" = 10' USE 1" = 20'

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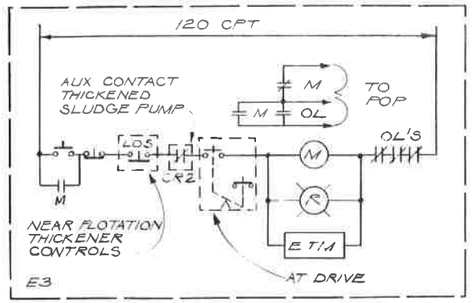
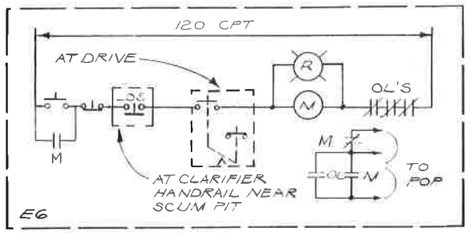
CLAIR A HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL - BLOWER BUILDING - MOTOR CONTROL CENTER NO. 2

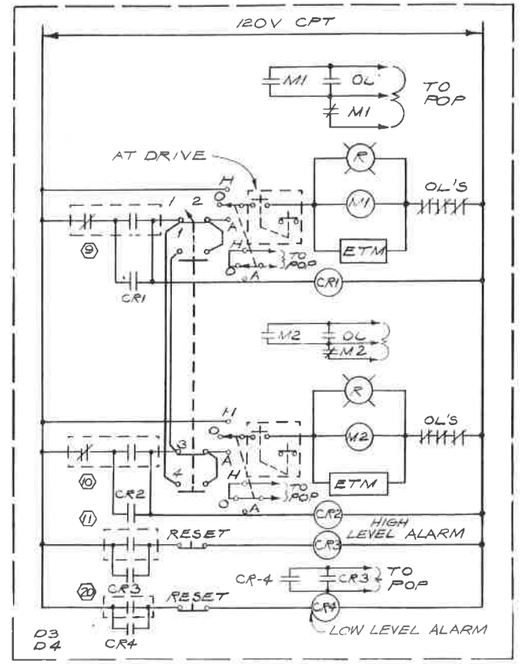
DES. CLB
DR. DLS
CK. WGE
DATE JAN. 1973
SCALE: AS SHOWN
SHEET 74 OF 78
C 7039-1



WASTE SLUDGE PUMP



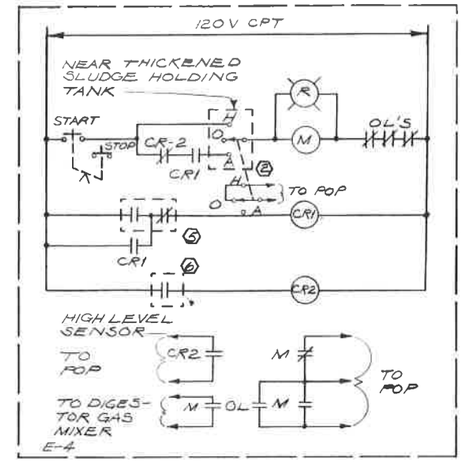
SCUM PUMP



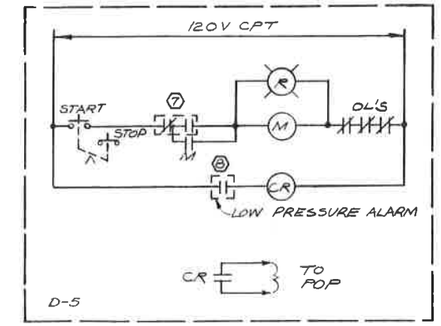
SELECTOR SWITCH

POS / CONT.	1	2
1/3	X	O
2/4	O	X

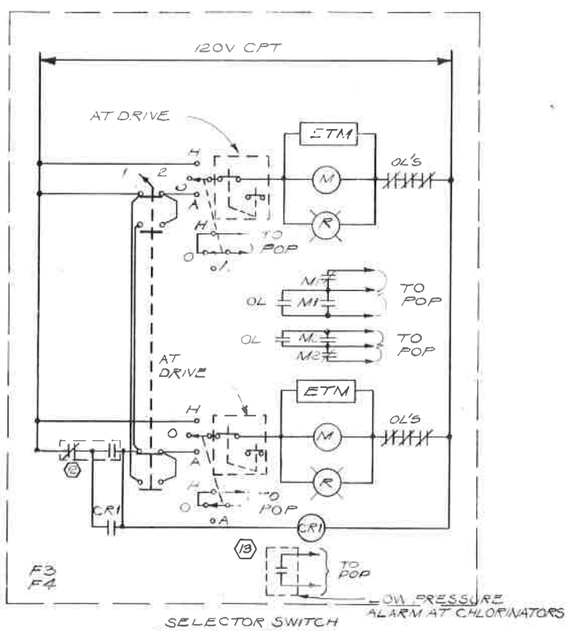
A/S RECIRCULATION PUMPS NO. 1 & 2



THICKENED SLUDGE PUMP



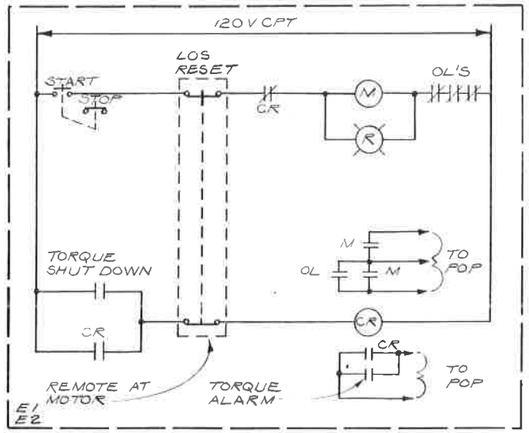
AIR COMPRESSOR



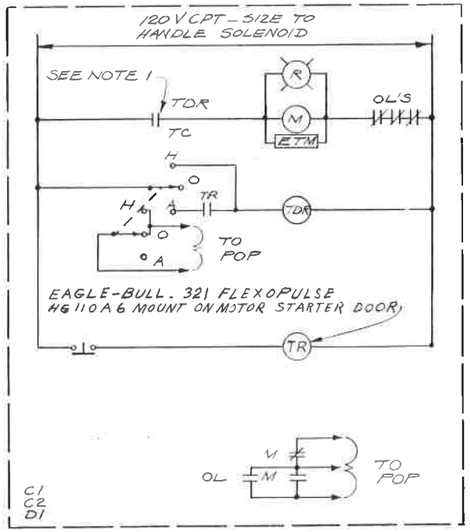
SELECTOR SWITCH

POS / CONT.	1	2
1	X	O
2	O	X

NON-POTABLE WATER PUMPS NO. 1 & 2



SECONDARY CLARIFIERS NO. 1 & 2



BLOWERS NO. 1, 2 & 3

NOTES:

1. TIME DELAY RELAY SETTINGS FOR THE BLOWER MOTORS ARE AS FOLLOWS:
   BLOWER NO. 1 – 5 SEC.
   BLOWER NO. 2 – 10 SEC.
   BLOWER NO. 3 – 15 SEC.

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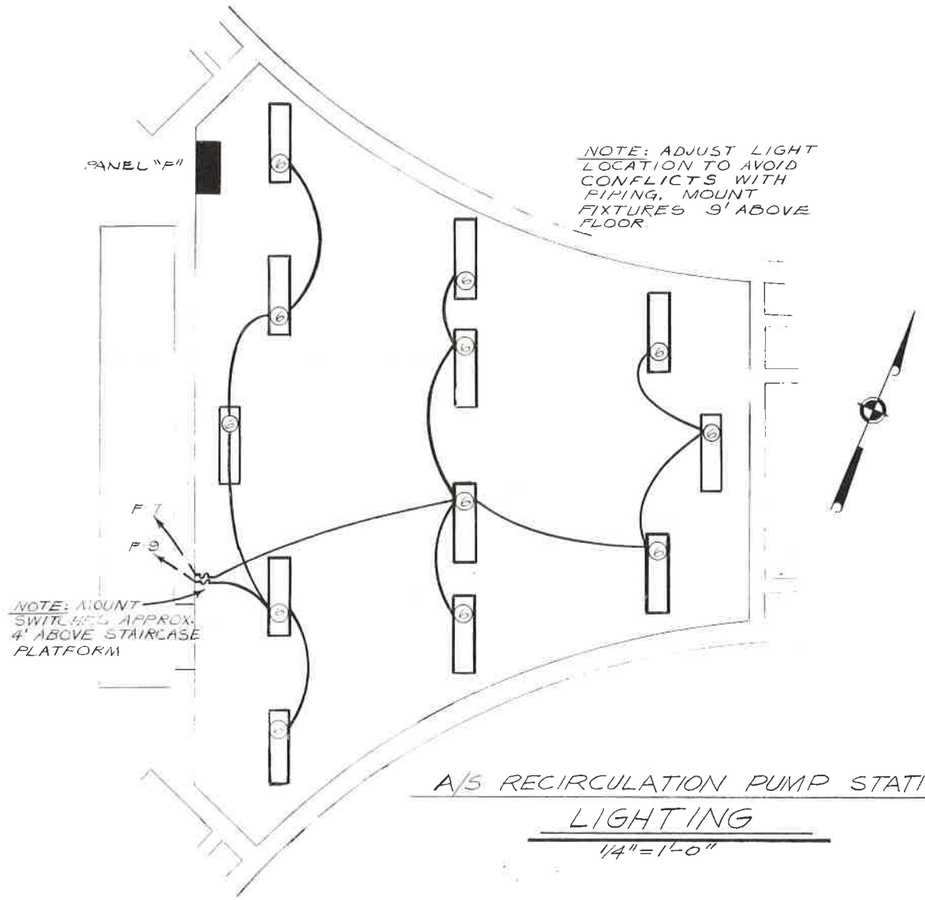
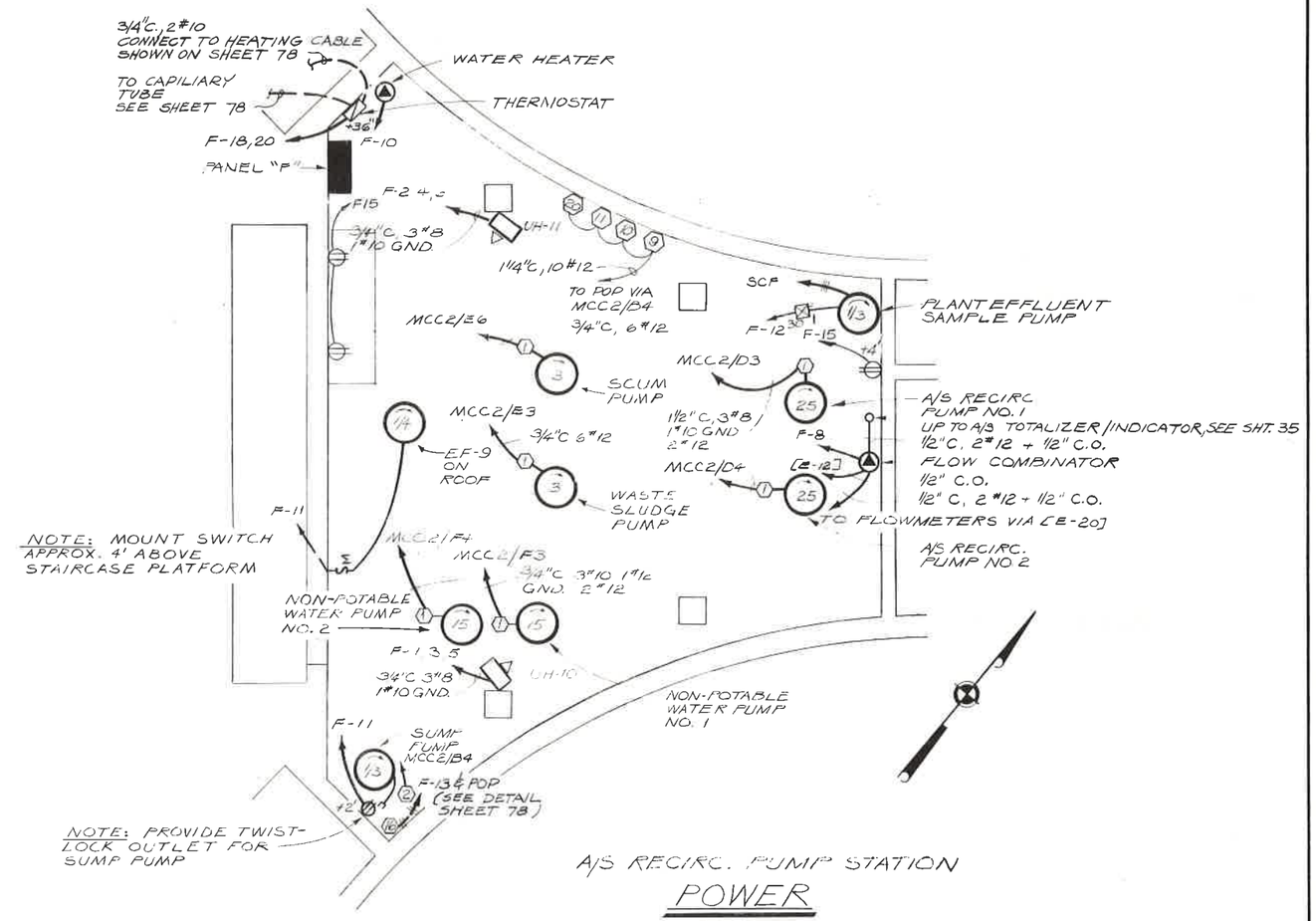
CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS

ELECTRICAL - BLOWER BUILDING - CONTROL DIAGRAMS

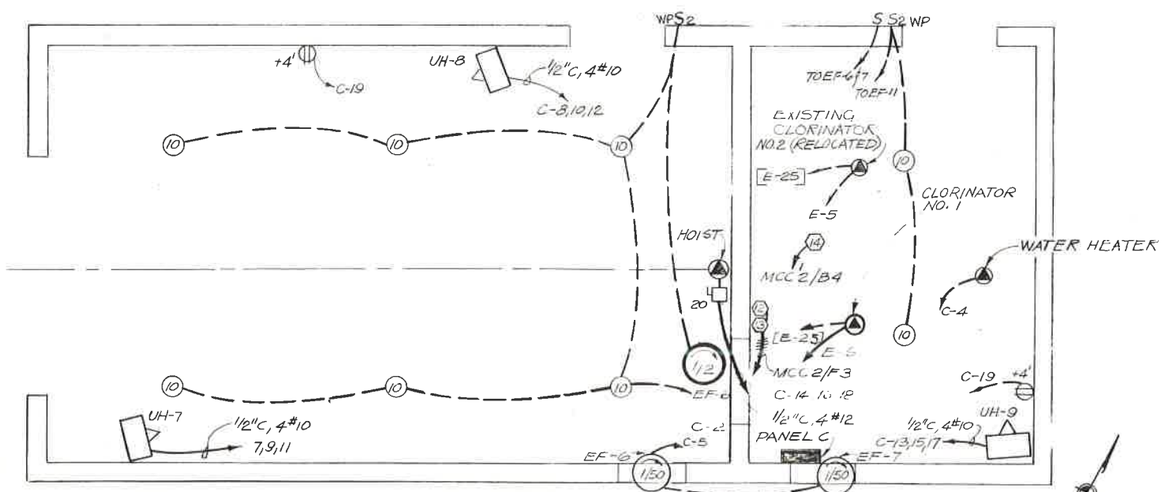
DES. CLB
DR. DLG
CK. WBE
RN 57039.1
SHEET 75 OF 78
DATE: JAN. 1973
SCALE: AS SHOWN
DRAWING NO. C 7039-1



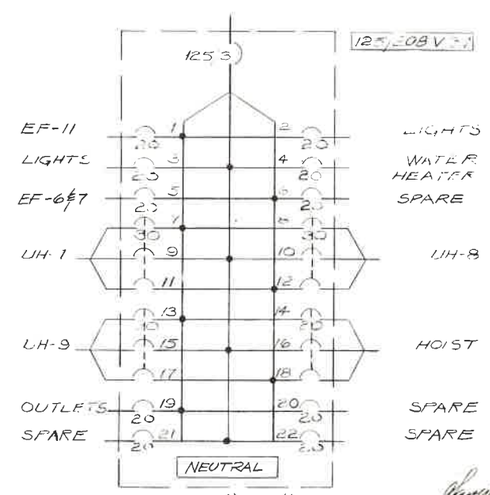
A/S RECIRCULATION PUMP STATION
LIGHTING
1/4"=1'-0"



A/S RECIRC. PUMP STATION
POWER
1/4 = 1'-0"



CHLORINE BUILDING
LIGHTING & POWER
3/8" = 1'-0"



PANEL "C"-225A
SQ. D TYPE NQO

NOTES:

1. 1/2" C.O. TO EFFLUENT FLOW TRANSMITTER AT A/S RECIRCULATION PUMP STATION.

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ENGINEERS PLANNERS ECONOMISTS

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CLAIR A. HILL & ASSOCIATES

CITY OF WENATCHEE, WASHINGTON
WATER POLLUTION CONTROL PLANT MODIFICATIONS
ELECTRICAL - SLUDGE RECIRCULATION PUMP STATION AND CHLORINE BUILDING

DES CLB	SHEET 76
DR BCC	OF 78
CK WGE	DATE JAN. 1973
PN 87039.1	SCALE AS SHOWN
DRAWING NO. C 7039-1	