
END OF DOCK
DOUGLAS COUNTY PROPERTY
CITY OF SUPERIOR PROPERTY
WL. 603.24 USG&GS DATUM
SEPTEMBER 20, 1947
Contractor to install 20' roadway from N. R.O.W. Line
20'
R.R. R.O.W.
EXISTING OUTLET HEADWALL
INV. EL. 600.39
INV. EL. 599.14
SCALE HOUSE
Sta B
Sta C
Sta D
EXISTING 2@3'-3"x5'-6" BOX SEWER
24" R.C.P. SEWER LINE TO BE INSTALLED UNDER CONTRACT
INV. EL. 600.61
EXISTING MANHOLE
24" R.C. PIPE IN PLACE NOT IN USE AT PRESENT
INV. EL. 599.55
EXISTING 4'-0"x 5'-6" SEWER NOW IN USE
PUMP HOUSE
1ST ST
GAS STORAGE
GAS STORAGE
2 ND ST.
66'
GAS STORAGE
H
SHED
GAR
Sta A
Sta B
Sta C
Sta D
AVE. C
EXISTING 27" R.C.P.
AVE. D
AVE. E
WINTER ST
HILL AVE.
BM
PROPERTY OF CITY OF SUPERIOR
PERMANENT BENCH MARK
ELEVATION 614.372
U.S.C. & G.S. - S.L.D.
1929
Sta A1
Sta A2
3rd St.
NOTE: CONTRACTOR TO CONNECT EXISTING BOX SEWER TO NEW BY-PASS STRUCTURE
SUPERIOR BAY
EXISTING 3'-6"x5'-6" BOX SEWER
NEW 60" BY-PASS LINE
NEW BY-PASS STRUCTURE
24" R.C. PIPE PROPOSED
EXISTING MH.
AVE D
8'
SCALE: 1" = 100
FILL
610.0
600.0
590.0
24" R.C.P.
S = .0013
SCALE: 1" = 100 HOR. 1" = 10' VERT.
NEW BY-PASS STRUCTURE
PLAN & PROFILE OF NEW 24" R.C.P.
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
These Plans and Specifications submitted in connection with an Application for a Federal grant for the construction of treatment works under the provisions of the Federal Water Pollution Control Act (33 U.S.C. 466 et seq.) and the regulations promulgated thereunder have been reviewed.
(Reviewing Engineer) (Date)
and are herewith APPROVED
(Regional Engineer) (Date)
Region V, Chicago, Illinois
EXAMINED and reported upon by the Section on Environmental Sanitation
O. J. MUEGGE
State Sanitary Engineer
APPROVED by the State Board of Health, as required by Wisconsin Statutes, subject to conditions set forth in the letter of approval
JUL 6 1956
CARL N. NEUPERT, M. D.
State Health Officer
Verification
REVISIONS
DATE DESCRIPTION BY
12/55 Added Details for Sewer F.L.
WATERFRONT AT DISPOSAL SITE
SUPERIOR, WIS.
HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
321 SEXTON BLDG.
MINNEAPOLIS 15, MINN.
DR. C.H.U. TR. CHU
CHKD. JBE APPD. JBE
DATE 9/17/48 SCALE 1" = 50'
400
11 of 71


9+42 Water Edge
MEAN YEARLY READING
WATER LEVEL OF LAKE SUPERIOR
Note:
Highest Recorded Reading Nov. 28, 1905 - 604.40
Lowest Recorded Reading Feb. 16, 1921 - 598.85
TEST HOLES
12.0 Water
5.0' Misc. Sand & Silt
5.0' Red Brown Sand
28.0' Red Brown Clay (Stiff)
4.0 Water
12.0 Red Brown Sand
26.0 Red Brown Clay
9.0 Water
2.0 Misc. Sand & Silt
13.0 Red Brown Sand
9.5 Red Brown Clay
6.0 Water
0.5 Misc. Sand & Silt
7.5 Fine Red Br. Sand
3.5 Coarse Red Br Sand
20.5 Red Brown Clay (Stiff)
Red Grey (Mottled) Clay Very Stiff
8.0 Water
3.5 Misc. Sand & Silt
8.5 Red Brown Sand
41.0 Red Brown Clay (Stiff)
3.0 Water
9.8 Misc. Sand + Silt
5.0 Red Brown Sand
Red Brown Clay (Stiff)
EXAMINED and reported upon by the Section on Environmental Sanitation
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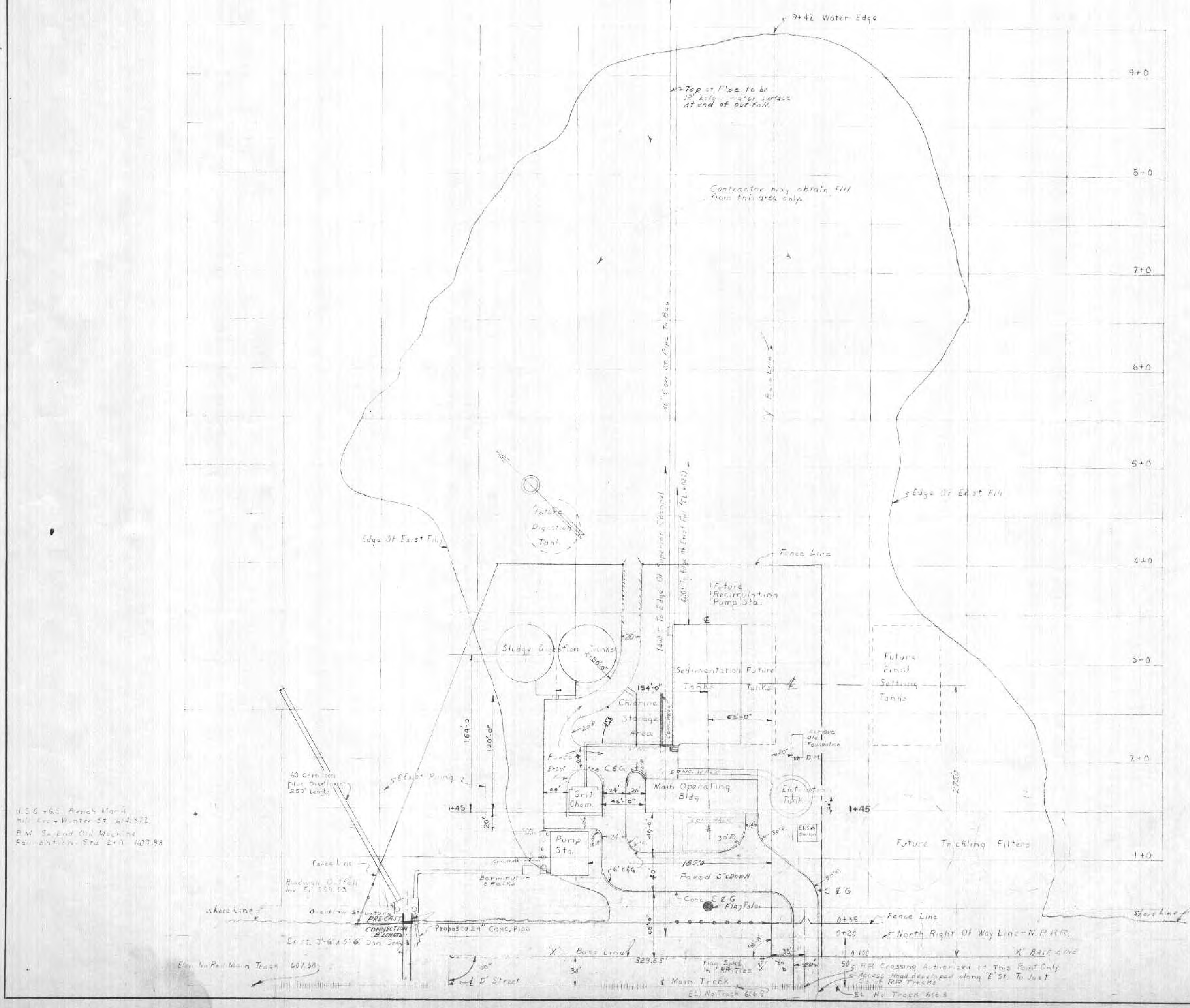
JUL 6 1956
CARL N. NEUPERT, M. D.
State Health Officer
Verification
BORING LOG [See Specs. page C-8]
LEGEND-
Existing Elevation 604 or 4.0
Established Grade 610.5
NOTE:
Posts shall be set not more than 10' C.C
Finished grade shall slope from building to drain.
Fill at waters edge shall be sloped 3 to 1 or greater
May Use Fill From This Area Only
Edge Of Exist Fill
Future Digestion Tank
12" Opening
330' FENCE
Future Recirculation Pump Sta.
Sludge Digestion Tanks
Sedimentation Tanks
Future Tanks
Future Final Settling Tanks
Chemical Storage Area
Main Operating Bldg.
Grit Chamb.
Pump Sta.
Elutriation Tank
Future Trickling Filters
Old Shore Line
425' CHAIN LINK FENCE
Base Line
North Right Of Way Line - N.P.R.R.
R.R. Crossing Authorized at This Point Only
Main Track
Test Hole No. 1
Pipe to rest on bottom of lake with proper protection of Bagged Concrete.
60" Corr. Steel Pipe 250' long
250' Length 60" Over Flow
Headwall Out Fall
Overflow Structure
Shore Line
400' FENCE
U.S.C. & G.S. Bench Mark
B.M. So. End Old Machine Foundation - Sta. 2+0 - 607.98
REVISIONS
DATE
DESCRIPTION
BY
GRADING AND FENCING PLAN
SUPERIOR WIS.
HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
300 LINCOLN BLDG.
MINNEAPOLIS 1, MINN.
DR.
TR.
CHKD.
APPD.
JOB NO.
400
SHEET NO.
12 OF 71
DATE
SCALE



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

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JUL 6 1956

CARL N. NEUPERT, M. D.
State Health Officer

Verification D. Noramwald

Note:
Curb & Gutter to be
6" H
18" W } Minn. Highway Dept. Plate 7131B
SLOPE-1% MIN. TO DRAIN PROPERLY
CONTRACTOR TO INSTALL 8' PRECAST CONNECTION, ON PILING, FROM PRESENT OUTFALL SEWER TO NEW BY-PASS STRUCTURE AND SEAL TO PREVENT LEAKAGE.

REVISIONS		
DATE	DESCRIPTION	BY
6-4-?	CHANGED CHAM. FOOTING	N.R.
8-13-62	REMOVED WASTE GAS BURNER ME-21?	E.W.

SEWAGE TREATMENT PLANT
GENERAL LAYOUT

SUPERIOR WIS.

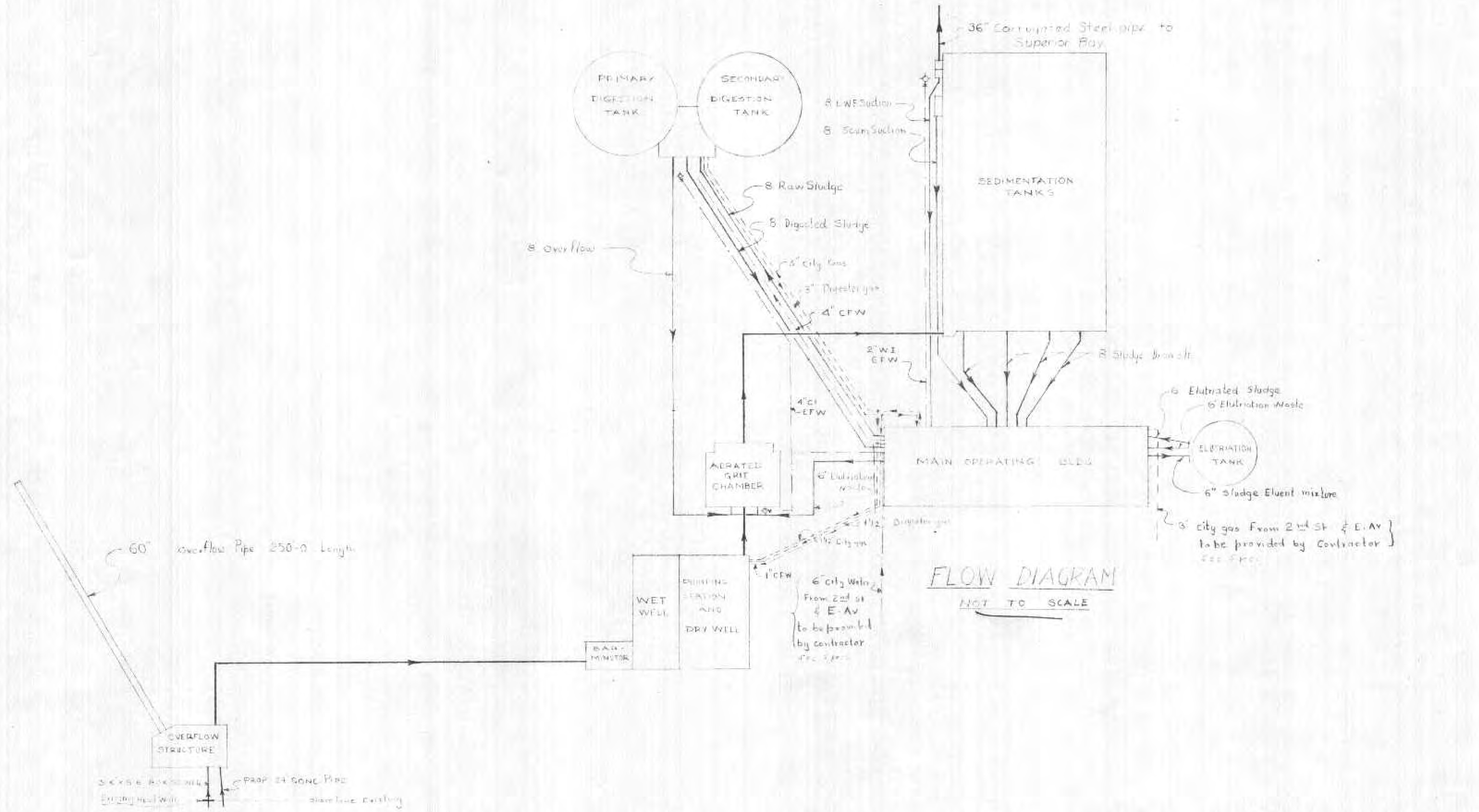
HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
300 LINCOLN BLDG.
MINNEAPOLIS 1, MINN.

DR. J.L. TR.
CHKD. APPD.
DATE: 2/12/56 SCALE: 1" =

JOB NO. 400
SHEET NO. 13 OF 71

HYDRAULIC PROFILE [FOR MAX FLOW]

SCALE 1"=10'-0" VERT; 1"=10'-0" HOR



FLOW DIAGRAM

NOT TO SCALE

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

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and are herewith APPROVED

_______________ (Regional Engineer) _______ (Date)

Region V, Chicago, Illinois

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CARL N. NEUPERT, M. D.
State Health Officer

JUL 6 1956

Verification D. Voramwald

REVISIONS		
DATE	DESCRIPTION	BY
[illegible]	[illegible]	J D

HYDRAULIC PROFILE & FLOW DIAGRAM
SEWAGE TREATMENT PLANT

SUPERIOR WIS

HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
300 LINCOLN BLDG.
MINNEAPOLIS 1, MINN.

DR.	TR.	CHKD.	APPD.	JOB NO.	SHEET NO.
	J D	J D	[illegible]	400	14 OF 71

DATE: [illegible] SCALE: As Noted

Note:- Contractor shall provide all gas and water piping inside plant property line in lump sum bid and the payment for gas & water piping outside plant property line to be done on unit bid basis.

PIPE LEGEND:

C.M.P.	denotes	Corrugated Metal Pipe
C.I.	"	Cast Iron Pipe
W.I.	"	Wrought Iron Pipe
R.L.	"	Rubber Lined Steel Pipe
E.F.W.	"	Effluent Flushing Water
C.F.W.	"	City Flushing Water
C.W.	"	City Water Supply Main

GENERAL NOTES:
24" and 36" Cast Iron pipe shall have bell and spigot ends with lead joints.
Other Cast Iron pipe and fittings shall have standardized mechanical joints.
Pipe lines shall slope at a constant rate between the elevations as shown on the drawings.

Revised 6-28-56
Wye drain added
E.F.W. 2" pipe changed
Sewage gas pipe to Fuel Press. Removed
M.S. 6/17

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
These Plans and Specifications submitted in connection with an Application for a Federal grant for the construction of treatment works under the provisions of the Federal Water Pollution Control Act (as amended) have been reviewed and the regulations promulgated thereunder have been reviewed.

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(Regional Engineer) (Date)
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JUL 6 1956
CARL N. NEUPERT, M. D.
State Health Officer
Verification D. Swanwald

SUPERIOR, WISCONSIN

SEWAGE TREATMENT PLANT

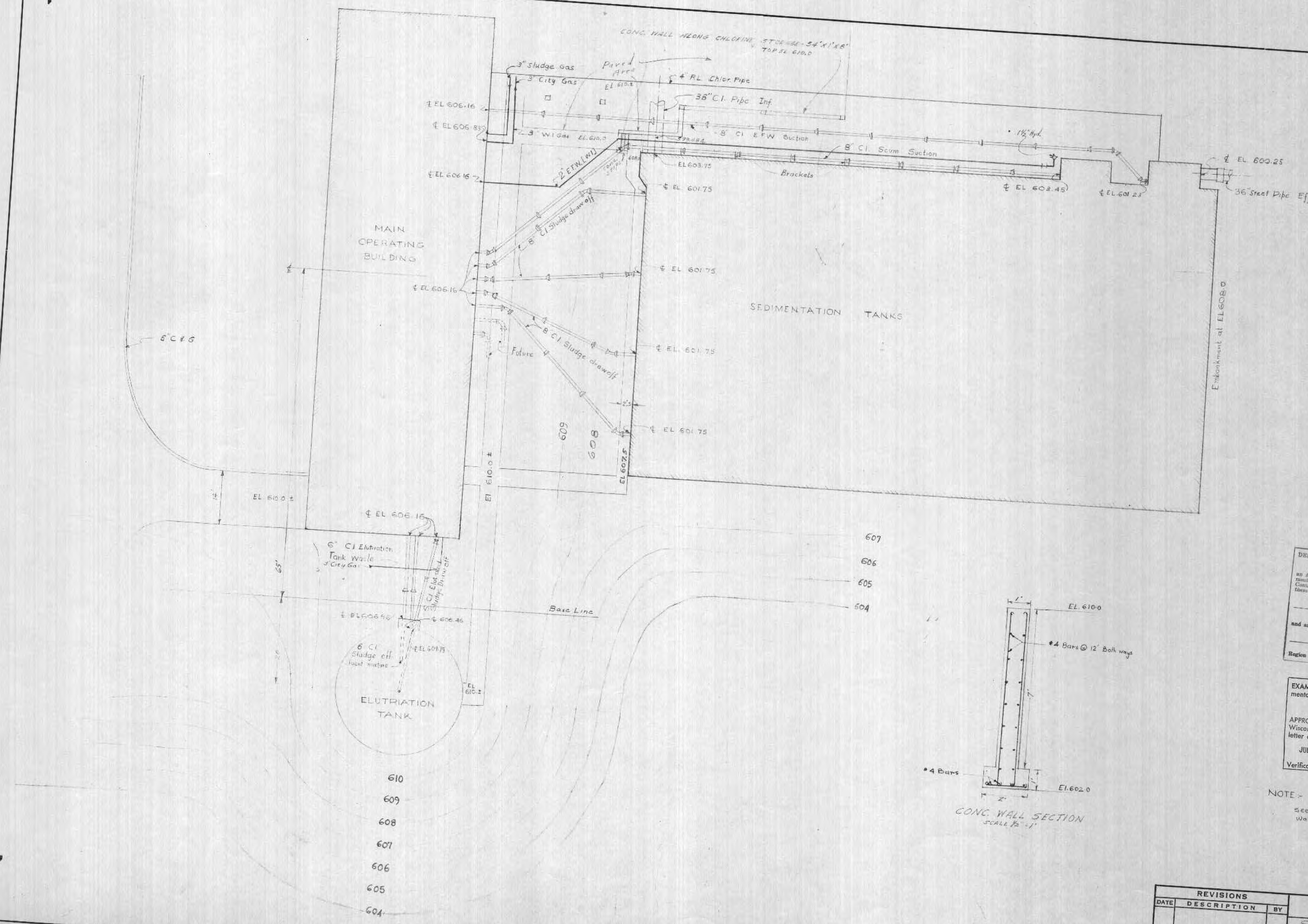
OUTSIDE PIPING

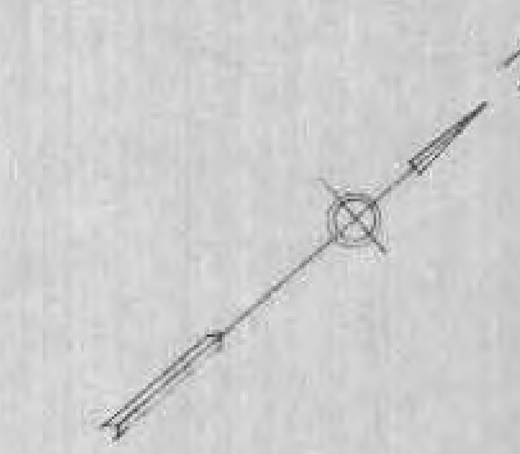
PLAN - I

SCALE, 1" = 10'-0"   FEB. 1956

METCALF & EDDY
ENGINEERS
BOSTON, MASS.

400 SHEET No 61 OF 71


CONC. WALL ALONG CHLORINE STORAGE - 54"x1'x8"
TOP EL 610.0
3" Sludge Gas
3" City Gas
Paved Area
EL 610.0
4" RL Chlor Pipe
38" C.I. Pipe Inf.
℄ EL 606.16
℄ EL 606.83
3" W.I. Gas EL 610.0
8" CI EFW Suction
1½" Hyd.
8" C.I. Scum Suction
Brackets
EL 603.75
℄ EL 606.16
2" E.F.W. (W.I.)
℄ EL 601.75
℄ EL 603.45
℄ EL 601.23
℄ EL 603.25
36" Steel Pipe Eff.
MAIN OPERATING BUILDING
8" C.I. Sludge drawoff
℄ EL 606.16
SEDIMENTATION TANKS
Embankment at EL 608.0
Future
℄ EL 601.75
6" C & G
609
608
EL 610.0 ±
EL 607.5
EL 610.0 ±
℄ EL 606.16
6" C.I. Elutriation Tank Waste
3" City Gas
C.I. Elutriation Sludge Draw-off
Base Line
℄ EL 606.46
℄ EL 606.46
6" C.I. Sludge eff.
℄ EL 604.75
ELUTRIATION TANK
EL 610.2
607
606
605
604
610
609
608
607
606
605
604
EL 610.0
#4 Bars @ 12" Both ways
#4 Bars
EL 602.0
CONC. WALL SECTION
SCALE ½" = 1'



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

(Date)

and are herewith APPROVED

Region V, Chicago, Illinois

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JUL 6 1956

CARL N. NEUPERT, M. D.
State Health Officer

Verification [signature]

NOTE:-
See note on Sh. 61 for gas and water piping

REVISIONS		
DATE	DESCRIPTION	BY

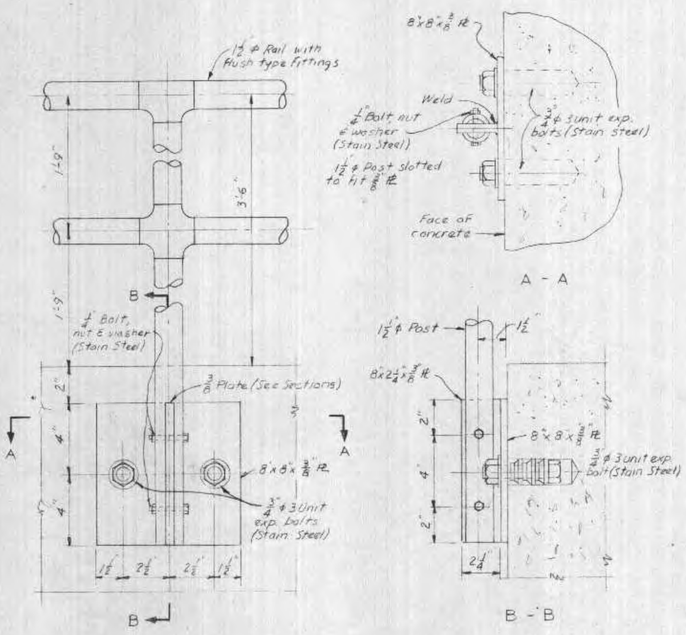
SUPERIOR WIS

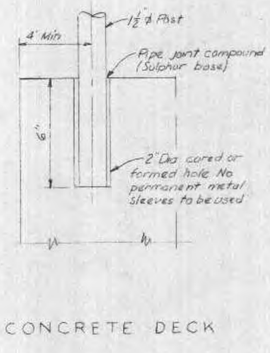
SEWAGE TREATMENT PLANT
OUTSIDE PIPING PLAN - 2

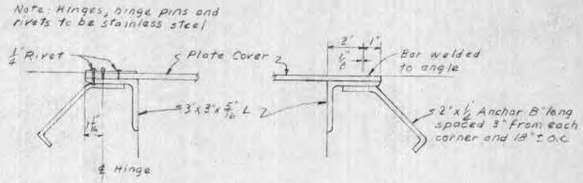
HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
300 LINCOLN BLDG.
MINNEAPOLIS 1, MINN.

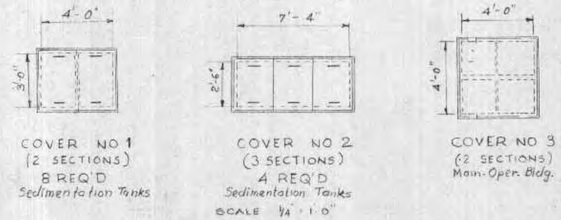
DR. | TR. J.D. | CHKD. | APPD.

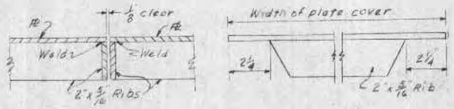
JOB NO. 400

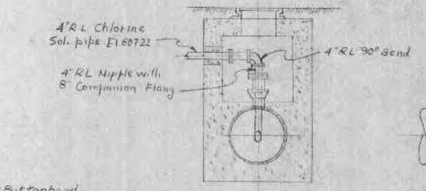


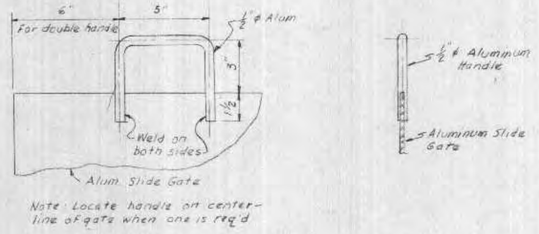


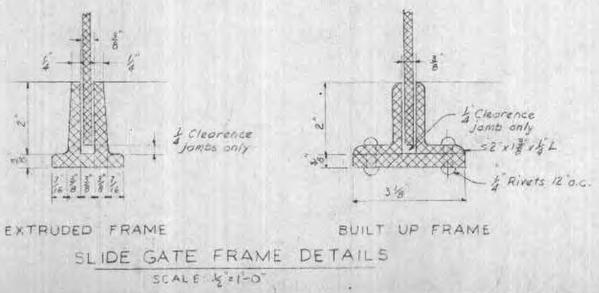


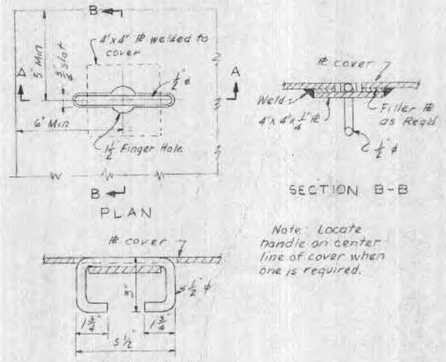


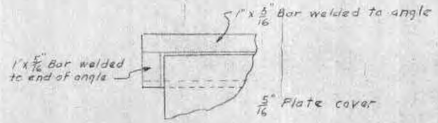


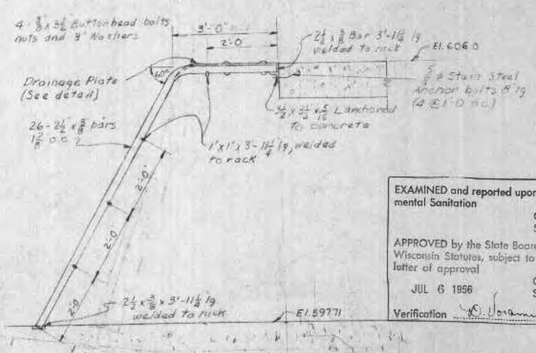












ALUMINUM SLIDE GATE AND FRAME SCHEDULE										
	No Read	Frame W	Frame D	Gate X	Gate Y	No. Handles	Location	Ribs No Read	Ribs Z
A	2	2'-0"	3'-0	2'-3½"	2'-2"	1	Entrance to Grit Chambers	None	—
B	2	2'-0"	4'-0"	2'-3½"	3'-2"	1	Exit from Grit Chambers	None	
C	1	4'-0	4'-0"	4'-3½"	3'-2"	2	Entrance to Bypass Rack	3	3'-11½"
D	1	4'-0"	5'-0 3/16	4'-3½"	3'-2"	2	Exit from Bypass Rack	4	3'-11½"
E	4	2'-0"	3'-11¼"	2'-3½"	2'-0"	1	Entrance to Sedimentation Tanks	None	

EXAMINED and reported upon by the Section on Environmental Sanitation
O. J. MUEGGE
State Sanitary Engineer
APPROVED by the State Board of Health as required by Wisconsin Statutes, subject to conditions set forth in the letter of approval
JUL 6 1956
CARL N. NEUPERT, M. D.
State Health Officer
Verification

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
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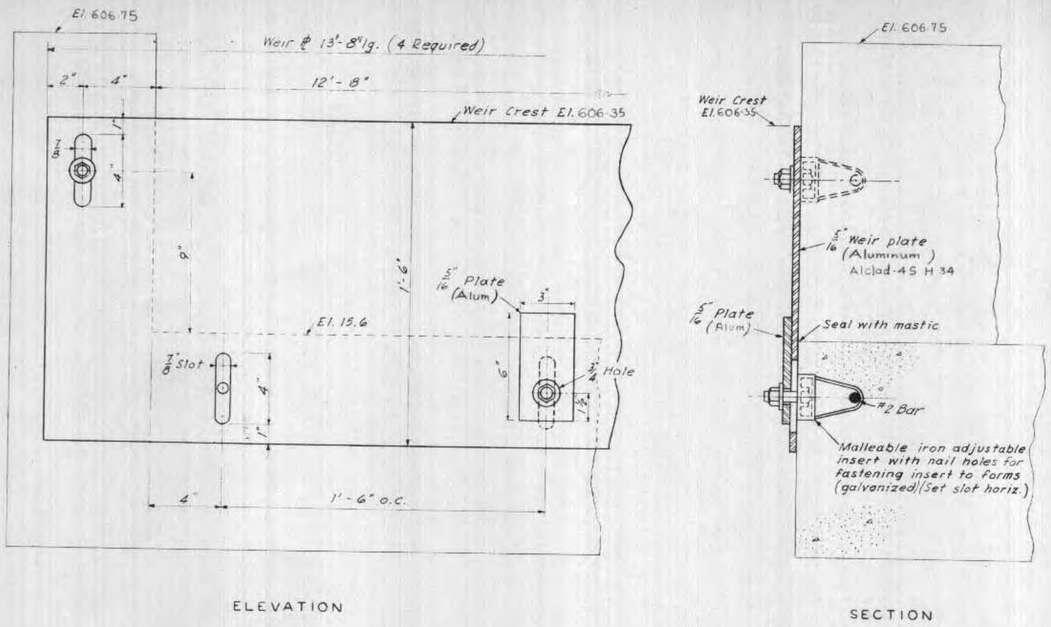
(Reviewing Engineer) (Date)
and are herewith APPROVED
(Regional Engineer, Chicago, Illinois) (Date)

REVISIONS		
DATE	DESCRIPTION	BY
7/27/56	Added cover Nos: 1, 2, 3, 4, 5, 6	J.D

MISCELLANEOUS DETAILS I
SEWAGE TREAT. PLANT
SUPERIOR WIS.
HITCHCOCK & ESTABROOK, INC.
CONSULTING ENGINEERS
200 LINCOLN BLDG.
MINNEAPOLIS 1, MINN.
DR. J.L. | TR. | CHKD. | APPD.
JOB NO. 400
DATE: 11/56 SCALE: As Shown
SHEET NO. 64 OF 71

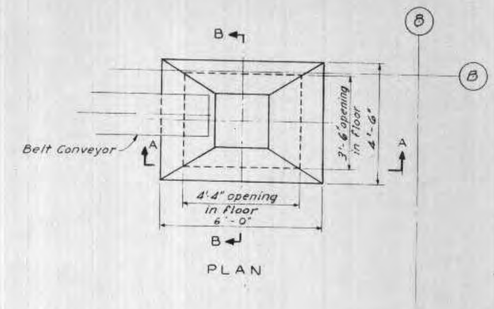


ELEVATION

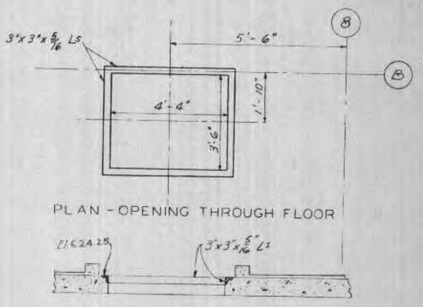
SECTION

INFLUENT WEIR - SEDIMENTATION TANKS

SCALE: 3" = 1'-0"

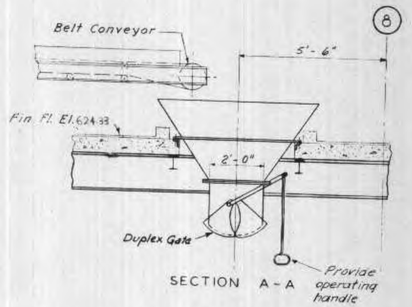


PLAN

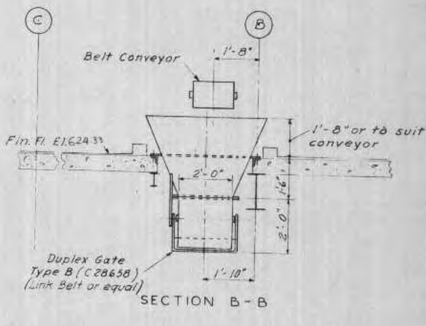


PLAN - OPENING THROUGH FLOOR

SECTION THROUGH FLOOR



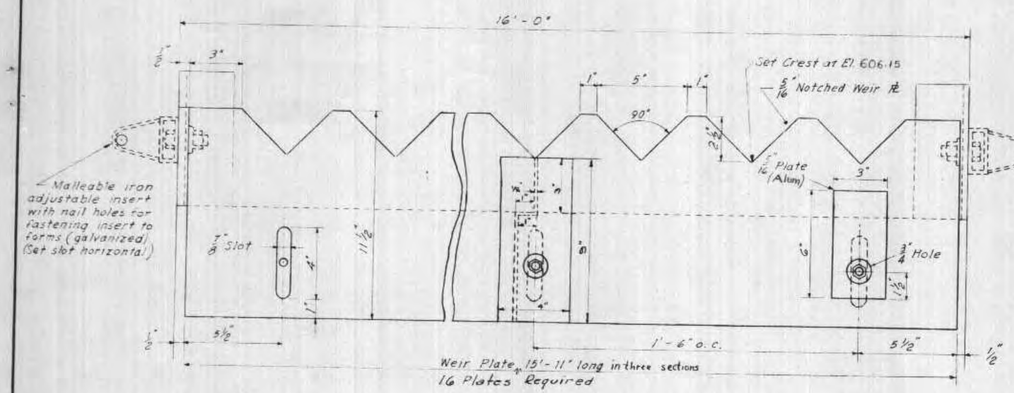
SECTION A-A



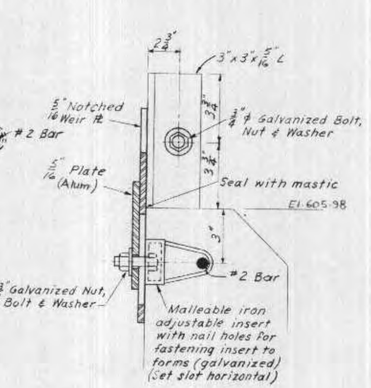
SECTION B-B

SLUDGE HOPPER AND GATE

SCALE: 3/8" = 1'-0"



ELEVATION

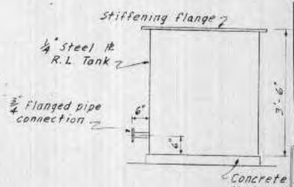


SECTION

EFFLUENT WEIR - SEDIMENTATION TANKS

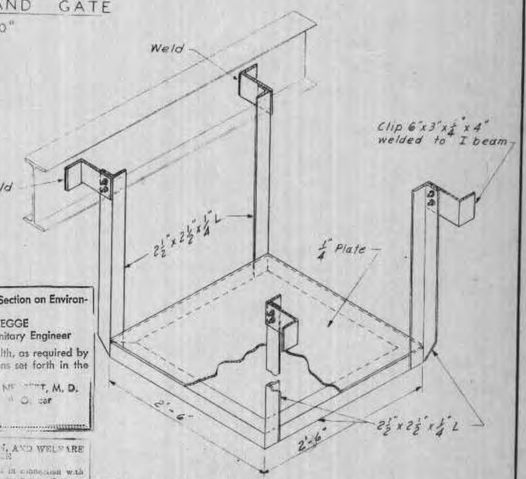
SCALE: 3" = 1'-0"

PLAN



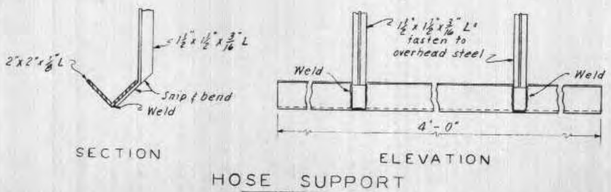
FERRIC CHLORIDE DISSOLVING TANK
2 REQUIRED

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



FERRIC CHLORIDE DIST. TANK SUPPORT

SCALE: 1" = 1'-0"

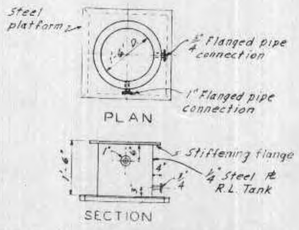


SECTION

ELEVATION

HOSE SUPPORT

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



PLAN

SECTION

FERRIC CHLORIDE DISTRIBUTION TANK

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

EXAMINED and reported upon by the Section on Environmental Sanitation

O. J. MUEGGE
State Sanitary Engineer

APPROVED by the State Board of Health, as required by Wisconsin Statutes, subject to conditions set forth in the letter of approval

JUL 6 1956 (Date)

CARL N. [illegible], M.D.
State [illegible] Officer

Verification

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

(Reviewing Engineer) (Date)

and are herewith APPROVED

Revised 6/12/56 (Date)

(Regional Engineer)
Region V, Chicago, Illinois

Note: Unless otherwise specified all material is galvanized steel

APPROVED

FOR METCALF & EDDY, ENGINEERS

DATE

DRAWN BY R.L.W.
TRACED BY R.L.W.
CHECKED BY H.B.A.

SUPERIOR WIS

SEWAGE TREATMENT PLANT

MISCELLANEOUS DETAILS-2

SCALE, AS SHOWN

METCALF & EDDY
ENGINEERS
BOSTON, MASS.

400 SHEET 65 OF 71

DESIGN INFORMATION

AVERAGE DRY WEATHER FLOW	5.0 MGD
MAX. HYDRAULIC CAPACITY - SECONDARY	15.0 MGD
MAX HYDRAULIC CAPACITY - RETENTION TANK	50.0 MGD
B.O.D. LOADING - AVERAGE	7,500 LBS / DAY
B.O.D. CONCENTRATION - AVERAGE	180 MG / L
S.S. LOADING - AVERAGE	8,500 LBS /DAY
S.S. CONCENTRATION - AVERAGE	200 MG/L
PHOSPHORUS AS "P"	10 MG/L
POPULATION EQUIVALENT	44,000
RETENTION TANK	30 MIN. DETENTION (MINIMUM)
GRIT BASINS	100 MESH RETENTION
PRIMARY TANKS	665 GAL. / SQ. FT. / DAY
AERATION TANKS	50 LBS / 1,000 CU. FT
FINAL TANKS	650 GAL / SQ. FT. / DAY
CHLORINE CONTACT TANKS	15 MIN. DETENTION (MINIMUM)
ANAEROBIC DIGESTERS	30 DAY DETENTION
AIR	2,300 CU. FT. / LB. B.O.D.

INDEX TO DRAWINGS

STRUCTURAL

HEATING & VENTILATION

ELECTRICAL

LOCATION PLAN

REVIEWED AND APPROVED BY THE DIV. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04, WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.
THOMAS G. FRANCOIS
ADMINISTRATOR
APPROVAL NO. 72 355
DATE: FEB 4 '74

DNR JAN 3 1974

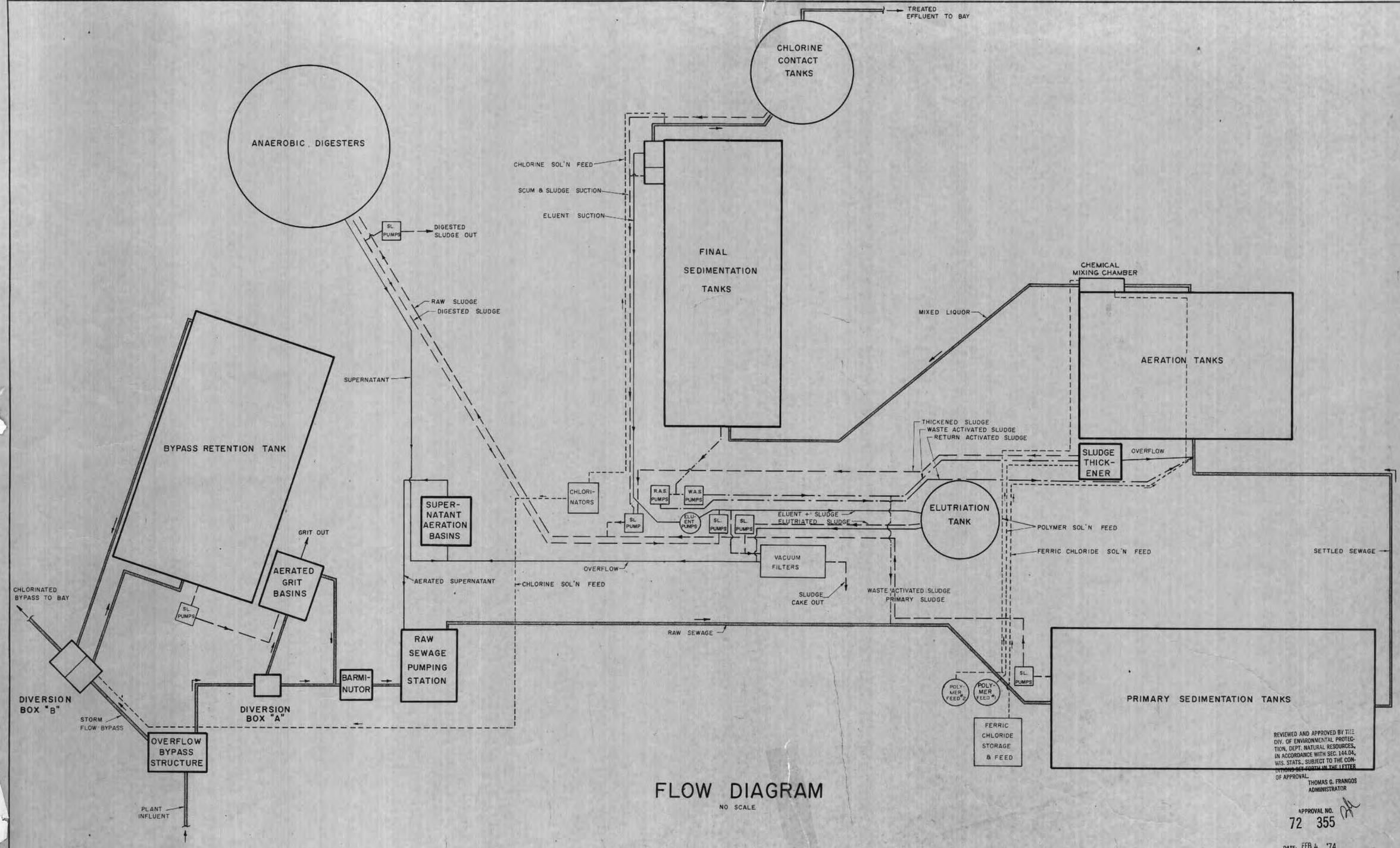
SURVEY	
DRAWN	
DESIGN	
APPROVED	

REVISIONS

BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 COMM. 6886A

LOCATION PLAN
AND INDEX



FLOW DIAGRAM

NO SCALE

REVIEWED AND APPROVED BY THE DIV. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04, WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.

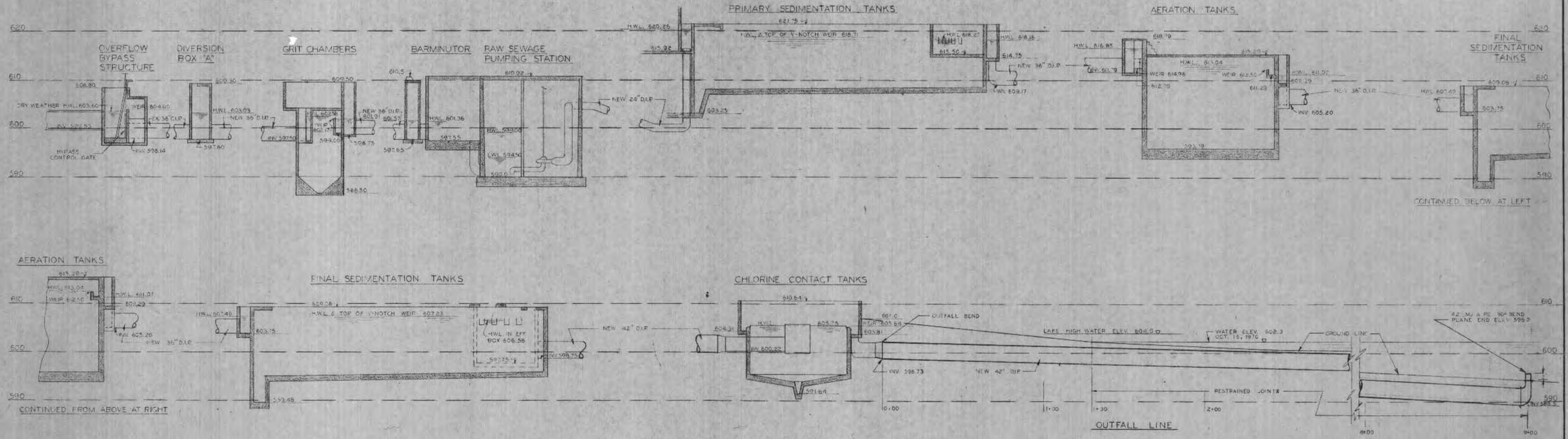
THOMAS G. FRANGOS
ADMINISTRATOR

APPROVAL NO. 72 355

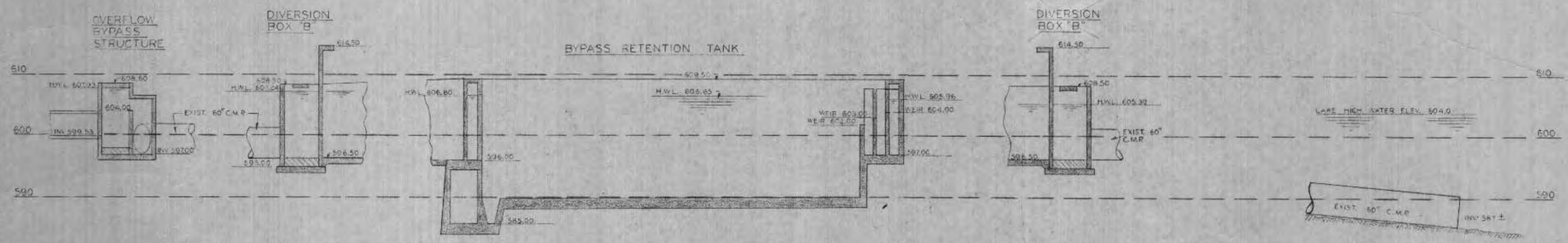
DATE: FEB 4 '74

DNR JAN 3 1974

SURVEY / DRAWN / DESIGN / APPROV.	REVISIONS Poly-Feed 12/18/73 E.T.	BONESTROO, ROSENE, ANDERLIK & ASSOC., INC. ST. PAUL, MINNESOTA	SUPERIOR, WISCONSIN DATE: FEBRUARY 2, 1971 COMM. 6888 A	FLOW DIAGRAM



MAIN TREATMENT PLANT SEQUENCE
AT MAXIMUM FLOW



WET WEATHER BYPASS SEQUENCE
AT MAXIMUM FLOW & LAKE HIGH WATER ELEVATION —
ALL H.W.L'S APPROX 2.0' LOWER AT NORMAL LAKE WATER ELEVATION

HYDRAULIC PROFILES
HORIZ 1" = 20'
VERT 1" = 10'

REVIEWED AND APPROVED BY THE DIV. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04, WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.
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DNR JAN 3 1974

SURVEY		REVISIONS
DRAWN		
DESIGN		
APPROV'D		

BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 COMM 6888A

HYDRAULIC PROFILES

SOIL BORING LOG
BORING NUMBERS
Elevation
Fill, Sludge
Sand
Sand little brown wet
Fat Clay red brown
Silt brown wet Grave
Fat Clay
Silty Sand, brown
Fill mostly sand & debris
This boring not taken
Boring Scale 1" = 20' Vertical
▼ Denotes Water Table - Jan. 1970
SOIL NOTES:
1. Each symbol for soil is labeled only once in log. Recurrence of symbol is for same type of soil.
2. Soil borings shown here were made by Lakehead Testing Laboratory, Inc. Duluth, Minnesota, during January 1970.
3. Soil borings are shown for information only and no warranty is given on varying conditions. The contractor shall be responsible for determining and investigating soil conditions prior to bidding.
SUPERIOR BAY
SUPERIOR BAY
Base Line 'N'
Base Line 'W'
Base Line 'E'
Base Line 'S'
Existing
Digester
Digester Control Building
Bituminous Surfaced Area
Chlorine Storage Facility Structure
Existing Primary Settling Tanks
6' Chain Link Fence
Main Control Building
Elutriation Tank
Grit Removal Tanks
Pump Bldg.
Barscreen Building
Existing Bituminous Surface & Concrete Curb & Gutter
Railroad Locomotive
Existing Switch Tracks
Excess Soil Material Stockpiles Available for fill material
NOTE:
Grid lines are on 100' square pattern. Grid lines hereon are same on this existing site plan and on the proposed site plan.
NOTE
Elevations shown are located at decimal point unless otherwise indicated by an arrow.
Scale 1" = 50'
Grid North
Magnetic North
REVIEWED AND APPROVED BY THE DIV. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04, WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.
THOMAS G. FRANGOS
ADMINISTRATOR
APPROVAL NO.
72 355
DATE: FEB 4 '74
DNR JAN 8 1974
SURVEY
DRAWN
DESIGN
APPROV'D
REVISIONS
BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA
SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971
COMM. 6888 A
EXISTING SITE LAYOUT

Boring Scale 1" = 20' Vertical
▼ Denotes Water Table - Jan 1970

SOIL NOTES
1. Each symbol for soil is labeled only once in log. Recurrence of symbol is for same type of soil.
2. Soil borings shown here were made by Lakehead Testing Laboratory, Inc., Duluth, Minnesota, during January 1970.
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NOTE:
Grid lines are on 100' square pattern. Grid lines hereon are same on this existing site plan and on the proposed site plan.

NOTE
Elevations shown are located at aiming point unless otherwise indicated by an arrow.

SURVEY	
DRAWN	
DESIGN	
APPROV'D	

REVISIONS

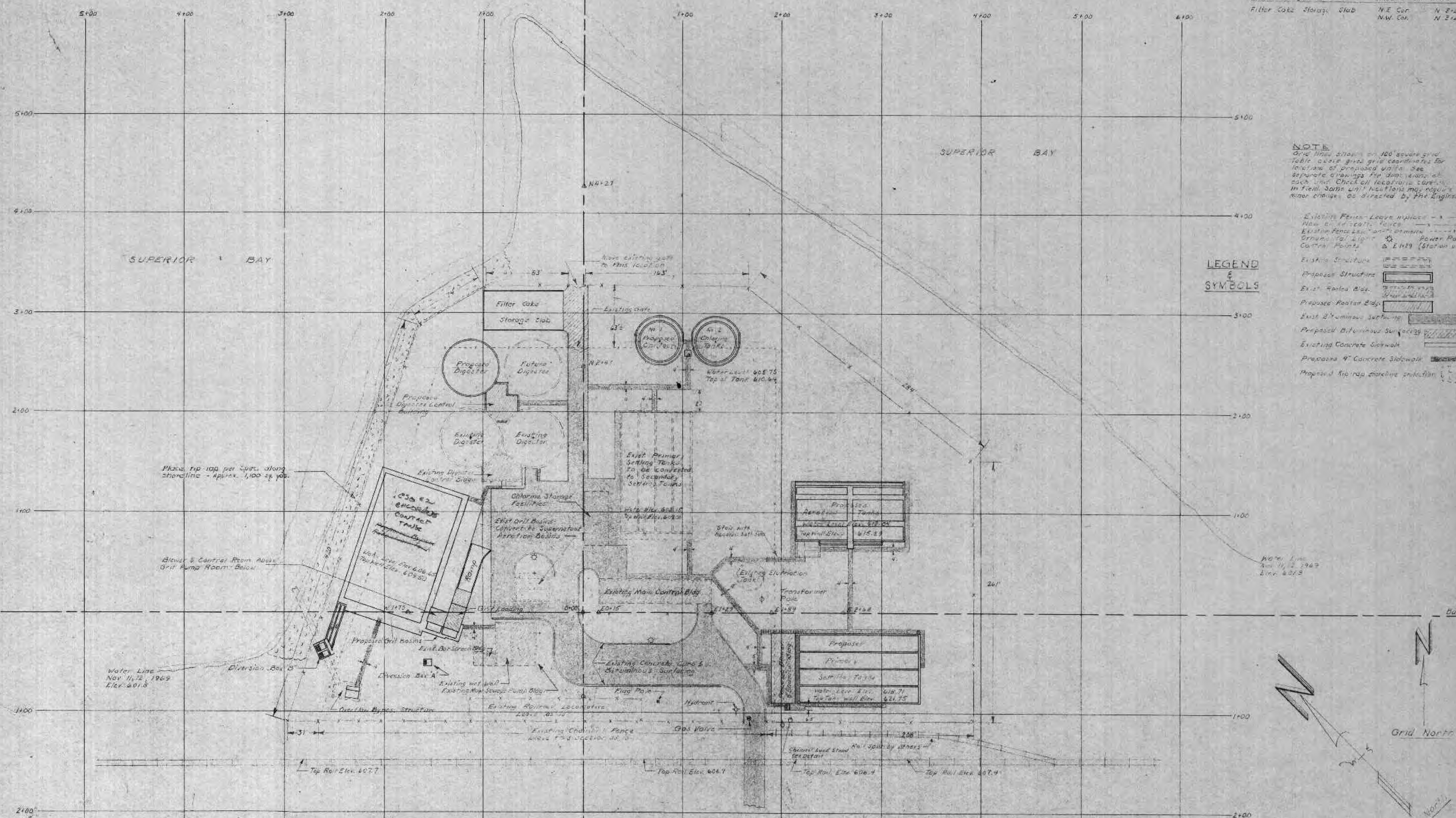
BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 COMM: 6888A

EXISTING SITE LAYOUT

UNIT STRUCTURE LOCATION COORDINATES

UNIT	POINT	COORDINATES
Primary Settling Tanks	N.E. Cor	S0+20, E3+39
	S.E. Cor	S0+93, E3+39
Aeration Tanks	N.E. Cor	N1+32, E3+25
	N.W. Cor	N1+32, E2+14
Digester	Center	N2+44, W1+13
Chlorine Tank No. 1	Center	N2+71, E0+76
Chlorine Tank No. 2	Center	N2+71, E1+32
Bypass Retention Tank	N.W. Cor	N1+45, W2+01
	N.E. Cor	N1+16, W1+15
Diversion Box "A"	Locate in Field	
Diversion Box "B"	Locate in Field	
Filter Cake Storage Slab	N.E. Cor	N 3+22, W 0+20
	N.W. Cor	N 3+22, W 1+00



LEGEND & SYMBOLS

NOTE
Grid lines shown on 100' square grid. Table above gives grid coordinates for location of proposed units. See separate drawings for dimensions of each unit. Check all locations carefully in field. Some unit locations may require minor changes as directed by the Engineer.

- Existing Fence - Leave in place
- New or relocated fence
- Existing Fence Location - to be removed
- Ornamental Light — Power Pole
- Control Points — △ E 1+29 (Station on baseline)
- Existing Structure
- Proposed Structure
- Exist. Roofed Bldg.
- Proposed Roofed Bldg.
- Exist. Bituminous Surfacing
- Proposed Bituminous Surfacing
- Existing Concrete Sidewalk
- Proposed 4" Concrete Sidewalk
- Proposed Rip-rap shoreline protection

SOD & SEED
Turf shall be re-established by sodding all slopes greater than 6:1 except rip-rap area & seeding all other disturbed area. Estimated area to be sodded, 3,300 yd²

FENCE NOTES
1. Part of existing fence to remain as shown on the sheet.
2. Part of existing fence to be relocated as shown. Approximately 1085 lin. ft. more or less plus one (1) gate. By contractor.
3. The contractor shall furnish and install the necessary new fencing to fill out the remainder as shown (Approx. 440')

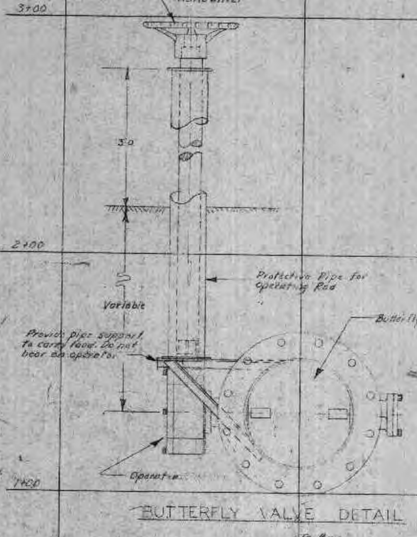
BENCHMARK
Top of operating nut on fire hydrant. Elev. 610.87

NOTE
Spot elevations shown are at location of decimal point unless otherwise shown by arrow location.
For sidewalk & sidewalk step details see Structural Sheets

SCALE 1" = 50'

NOTE
For purposes of clarity of description all references to north on plans shall refer to GRID NORTH.

SURVEY / DRAWN / DESIGN / APPROV'D	REVISIONS	BONESTROO, ROSENE, ANDERLIK & ASSOC., INC. ST. PAUL, MINNESOTA	SUPERIOR, WISCONSIN DATE: FEBRUARY 2, 1971 COMM. 6888A	PROPOSED SITE LAYOUT	SHEET 6/84



BUTTERFLY VALVE DETAIL

SPECIFIC CONSTRUCTION NOTES

NOTE: Following notes pertain to items indicated thus ⑤→

1. Cut off & plug exist 36" CIP. Install 8" DIP as shown & grout in to a watertight line. Elev. @ 603.0
2. Cut into exist. wall, install wall sleeve & 8" DIP & joints up to exist. pipe. Grout with Embeco to make watertight.
3. Cut in 8" (cross) & install new drain lines. All backwater valves with cleanout & other changes as shown.
4. Cut into exist. 2" line & exist. tee.
5. Cut off exist. 24" pipe & plug.
6. Cut off 8" [illegible] exist. [illegible] line.
7. Cut into exist. 2" line. F&I 2" PVC Chlorine solution line as shown.
8. F&I 2" Cu. N.P.W. Line
9. F&I 8" DIP - See Plan
10. Exist 6" CIP Elutriation tank waste. Leave as is
11. Exist 1½" W.I. Sewage Gas
12. Exist 1½" W.I. City Gas
13. Exist 1" W.I. N.P.W. - Contractor to Replace This Line with 1" Cu.
14. Exist 4" CIP E.F.W.
15. Exist 2" CIP E.F.W.
16. Exist 3" W.I. City Gas
17. Exist 3" W.I. Sewage Gas
18. Exist 4" CIP N.P.W.
19. Exist 8" CIP Raw Sludge Line
20. Exist 8" CIP Digested Sludge
21. F&I 2" New Gas Line
22. F&I 1½" New Gas Line
23. F&I 1" New Gas Line

GENERAL CONSTRUCTION NOTES

1. Contractor shall be responsible for checking all unit plans for proper pipe elevations.
2. All existing lines shown as per "as-built" plans available. Some variations may exist and the contractor should allow for some changes.
3. All new gravity flow lines shall be installed at plan elevations. The contractor shall be responsible for moving any conflicting pressure line to clear gravity line. All pressure lines requiring move shall be dipped to avoid airlock.
4. Upon completion of all new structures, General Contractor shall grade around all new structures as shown & directed by Engineer. All material shall be taken from this site. Various soil materials are available.

PLAN ABBREVIATIONS

Furnish and Install	F&I
Non-potable Plant Water	N.P.W.
Cast Iron Pipe	C.I.P.
Ductile Iron Pipe	D.I.P.
Fiberglass Reinforced Pipe	F.R.P.
Polyvinylchloride Pipe	P.V.C.
Copper Pipe	Cu.P.
Corrugated Metal Pipe	CMP
Gate Valve	G.V.
Butterfly Valve	B.V.
Return Activated Sludge	R.A.S.
Waste Activated Sludge	W.A.S.
Reinforced Concrete Pipe	R.C.P.
Pipe Invert Elevation	Inv. Elev.
Steel Pipe	S.P.
Effluent Flushing Water	E.F.W.
Yard Hydrant	Hyd
Wrought Iron Pipe	W.I.
Clean Out	C.O.
Backwater Valve with Cleanout	B.V./C.O.

PLAN SYMBOLS

Valve or Gate	⋈, ⊗
Valve with Handwheel	w/H.W.
Proposed Contour with elevation	613
New Pipe to be installed	═══
Existing Pipe	- - -
New Structure - with, without roof	▨
Existing Structure - with, without roof	▭

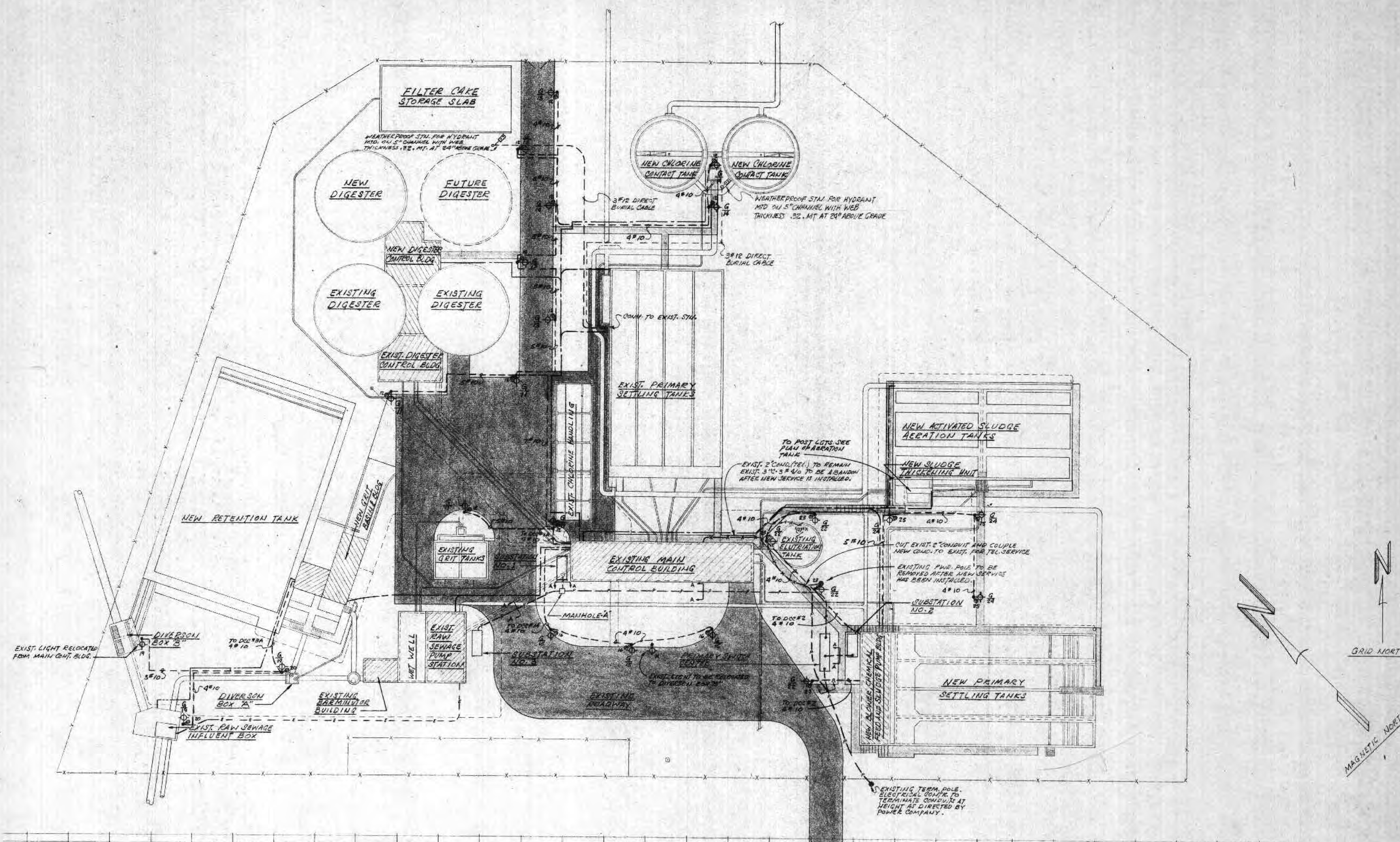
SURVEY		REVISIONS	
DRAWN		4/13/71 Corrections	
DESIGN		8/25/71 Revisions	
APPROVED			

BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR , WISCONSIN
DATE: FEBRUARY 2, 1971 COMM. 6888A

FIELD PIPING & GRADING

SHEET 7/84


FILTER CAKE STORAGE SLAB
NEW DIGESTER
FUTURE DIGESTER
NEW DIGESTER CONTROL BLDG.
EXISTING DIGESTER
EXISTING DIGESTER
EXIST. DIGESTER CONTROL BLDG.
NEW CHLORINE CONTACT TANK
NEW CHLORINE CONTACT TANK
WEATHERPROOF STN. FOR HYDRANT MTD. ON 5" CHANNEL WITH WEB THICKNESS .32. MT. AT 24" ABOVE GRADE
3#12 DIRECT BURIAL CABLE
CONN. TO EXIST. STN.
EXIST. PRIMARY SETTLING TANKS
EXIST. CHLORINE HANDLING
NEW RETENTION TANK
NEW GRIT BAFFLE BLDG.
EXISTING GRIT TANKS
EXISTING MAIN CONTROL BUILDING
MANHOLE "A"
NEW ACTIVATED SLUDGE AERATION TANKS
NEW SLUDGE THICKENING UNIT
TO POST LGTS. SEE PLAN OF AERATION TANK
EXIST. 2"COND.(TEL) TO REMAIN
EXIST. 3"C.-3#4/0 TO BE ABANDON AFTER NEW SERVICE IS INSTALLED.
EXISTING ELUTRIATION TANK
CUT EXIST. 2" CONDUIT AND COUPLE NEW COND. TO EXIST. FOR TEL. SERVICE
EXISTING PWR. POLE TO BE REMOVED AFTER NEW SERVICE HAS BEEN INSTALLED.
SUBSTATION NO. 2
NEW PRIMARY SETTLING TANKS
NEW BLOWER, CHEMICAL FEED AND SLUDGE PUMP BLDG.
EXISTING ROADWAY
PRIMARY SWITCH CENTER
SUBSTATION NO. 3
WET WELL
EXIST. RAW SEWAGE PUMP STATION
EXISTING BARMINUTOR BUILDING
DIVERSION BOX "B"
DIVERSION BOX "A"
EXIST. LIGHT RELOCATED FROM MAIN CONT. BLDG.
EXIST. RAW SEWAGE INFLUENT BOX
EXISTING TERM. POLE. ELECTRICAL CONTR. TO TERMINATE CONDUITS AT HEIGHT AS DIRECTED BY POWER COMPANY.
N
GRID NORTH
MAGNETIC NORTH

NOTE:

ALL CONDUCTORS FOR POST LIGHTS SHALL BE DIRECT BURIAL CABLE.

——— ON THIS SITE PLAN THIS SYMBOL INDICATES ROUTING LOCATION OF SUPERVISORY CONTROL AND INTERCOM. REFER TO EACH BUILDING FLOOR PLAN FOR CONDUIT & CONDUCTOR SIZES.

REFER TO SHEETS #66 AND 83 FOR DUCT AND PRIMARY SWITCH DETAILS.

- - - - INDICATES DIRECT BURIAL CABLE FOR OUTSIDE LIGHTING.
—P—P— INDICATES PRIMARY SERVICE DUCT (POWER AND OR TEL SERVICE)
—·—·— INDICATES UNDERGROUND BUBBLER LINE. REFER TO FLOOR PLANS.
—E—E— INDICATES UNDERGROUND CONDUIT FROM DCC#3 TO INFLUENT BOX.
—X—X— INDICATES EXISTING CONDUIT.

SITE PLAN SCALE: 1" = 30'-0"

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA

DATE REG. NO. 4713

ERICKSEN ELLISON AND ASSOC. INC.
ST. PAUL, MINNESOTA

SURVEY		REVISIONS 8/17/71 T.T.
DRAWN		
DESIGN		
APPROV'D		

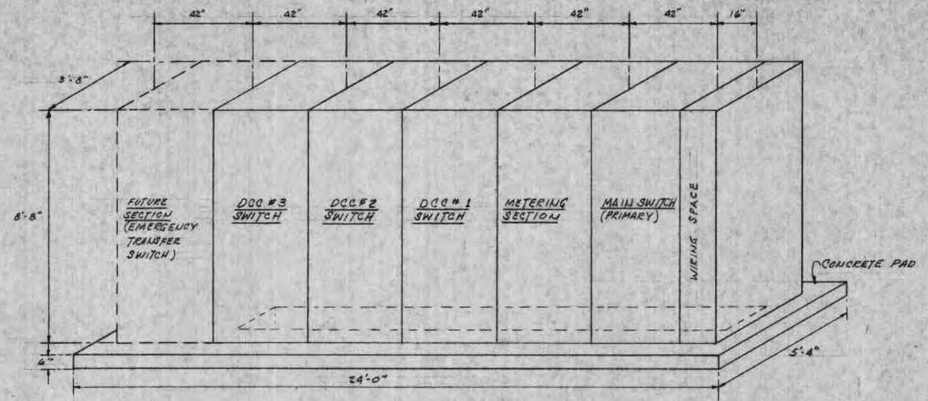
BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 COMM. 6888A

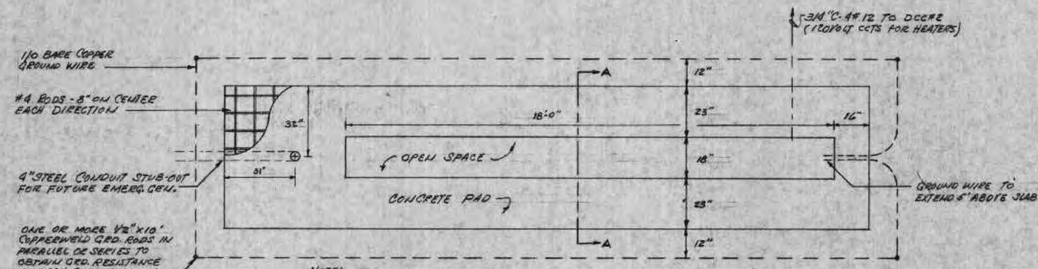
SITE PLAN

SHEET 65/84

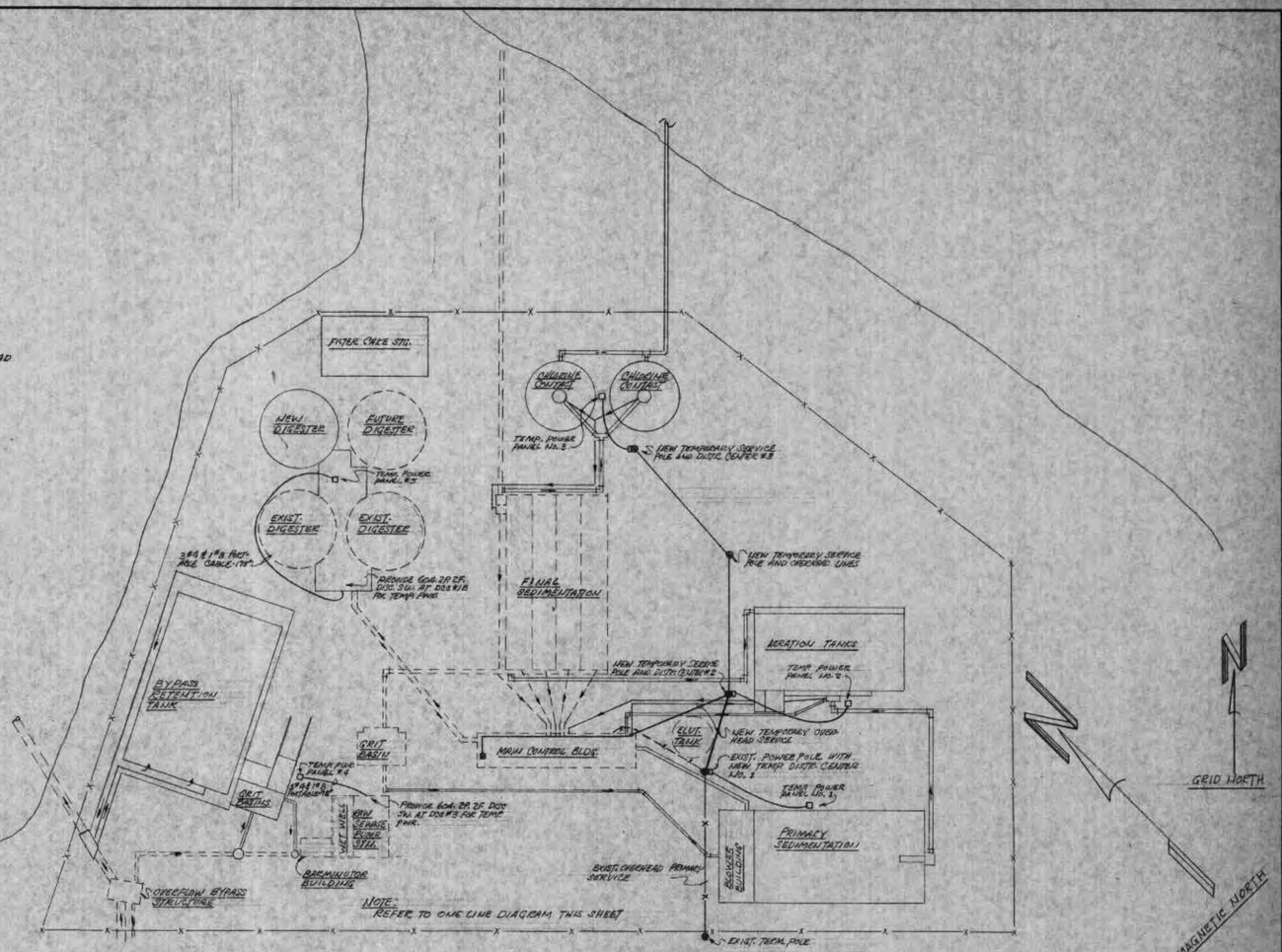
921



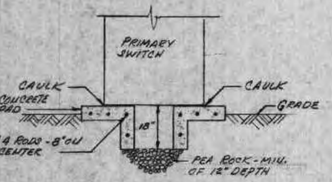
FRONT ELEVATION OF PRIMARY SWITCH CENTER SCALE: 3/8" = 1'-0"



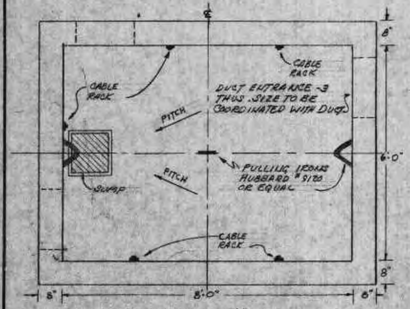
PRIMARY SWITCH CENTER CONCRETE PAD DETAIL SCALE: 3/8" = 1'-0"



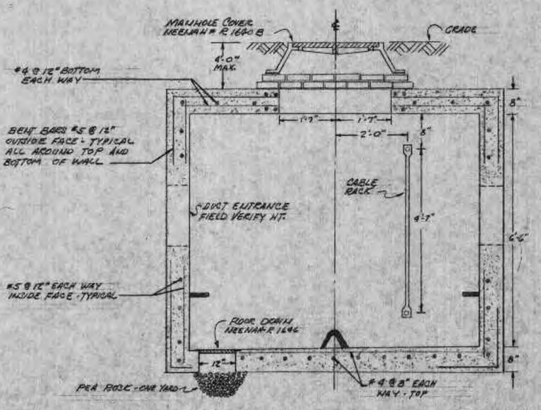
TEMPORARY SERVICE – SUPERIOR PLANT LAYOUT SCALE: 1" = 50'



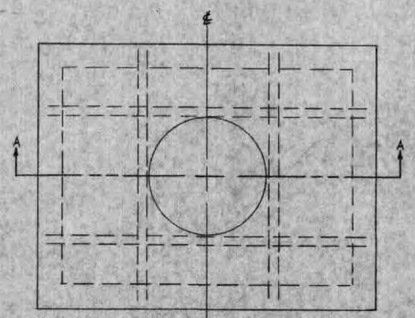
SECTION A'-A' SCALE: 3/8" = 1'-0"



PLAN OF MANHOLE "A" SCALE: ½" = 1'-0"

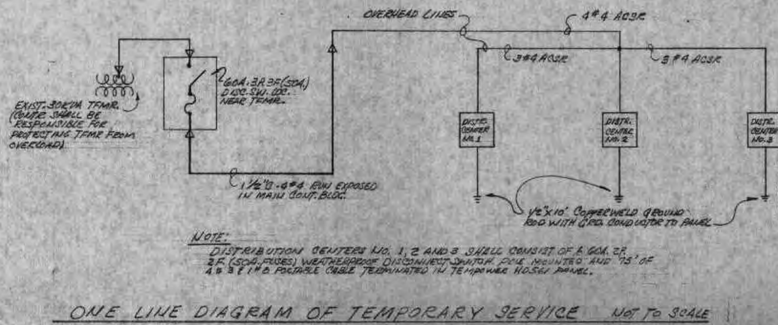


SECTION – MANHOLE "A" SCALE: ½" = 1'-0"



ADDED REINFORCEMENT 2 #5 TOP AND 2 #5 BOTTOM. SEE SECTION A-A FOR ADDITIONAL REBAR

TOP VIEW SCALE: ½" = 1'-0"



NOTE: DISTRIBUTION CENTERS NO. 1, 2 AND 3 SHALL CONSIST OF A 60A. 2P. 2F. (SDA. FUSES) WEATHERPROOF DISCONNECT SWITCH, FUSE MOUNTED AND 75' OF 4 #8 T #8 PORTABLE CABLE TERMINATED IN TEMPORARY HOSED PANEL.

ONE LINE DIAGRAM OF TEMPORARY SERVICE NOT TO SCALE

REVIEWED AND APPROVED BY THE WIS. DEPT. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04 WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.

THOMAS G. FRANGOS
ADMINISTRATOR

APPROVAL NO. 72 355

DATE: FEB 4 '74

DNR JAN 8 1974

ERICKSEN ELLISON AND ASSOC. INC.
ST. PAUL, MINNESOTA

		REVISIONS
SURVEY		
DRAWN		
DESIGN		
APPROVED		

BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 CONTR. 6888A

TEMPORARY SERVICE

SHEET 66/84

921

MOTOR, APPLIANCE AND EQUIPMENT SCHEDULE

NUMBER	EQUIPMENT	SIZE	VOLT & Ø	LOCA.	CONTROL	CONT. LOCA.	STARTER SIZE	STARTER LOCA.	DISC SIZE & TYPE
71	UNIT HEATER #6	1/6	120-1	BOILER BLDG. FIRST	STAT "	BLOWER BLDG.	NONE	-	MS
72	UNIT HEATER #7	1/6	120-1	BLOWER BLDG. FIRST	STAT "	BLOWER BLDG	NONE	-	MS
73	UNIT HEATER #8	1/6	120-1	BLOWER BLDG. SECOND	STAT "	BLOWER BLDG.	NONE	-	MS
74	UNIT HEATER #9	1/6	120-1	BLOWER BLDG. SECOND	STAT "	BLOWER BLDG.	NONE	-	MS
75	UNIT HEATER #10	1/6	120-1	BLOWER BLDG. SECOND	STAT "	BLOWER BLDG.	NONE	-	MS
76	EXH. FAN E-5	1/4	120-1	BLOWER BLDG. SECOND	MS & P (35)	BLOWER BLDG.	NONE	-	MS
77	HTG. PUMP P-2	1/4	120-1	BLOWER BLDG. FIRST	STAT "	BLOWER BLDG.	NONE	-	MS
78	HTG. PUMP P-3	1/6	120-1	BLOWER BLDG. FIRST	STAT "	BLOWER BLDG.	NONE	-	MS
79	HTG. PUMP P-4	1-1/2	460-3	BLOWER BLDG.	START STOP	DCC#2	0	DCC#2	-
80	EXIST. RAW SLUDGE PUMP #1 (17)	7-1/2	460-3	CONTROL BLDG.	EXIST. (21) START STOP & P	-	1	-	-
81	EXIST. RAW SLUDGE PUMP #2 (17)	7-1/2	460-3	CONTROL BLDG.	EXIST. (21)	-	1	-	-
82	EXIST. SCUM PUMP	7-1/2	460-3	CONTROL BLDG.	TIMER (23)	DCC#1	EXIST.	DCC#1	-
83	EXIST. BLOWER #1 (17)	3	460-3	CONTROL BLDG.	EXIST. P.B. (22)	AT MTR.	EXIST. 0	DCC#1	-
84	EXIST. BLOWER #2 (17)	3	460-3	CONTROL BLDG.	EXIST. P.B. (22)	AT MTR.	EXIST. 0	DCC#1	-
85	EXIST. BLOWER #3 (17)	3	460-3	CONTROL BLDG.	EXIST. P.B. (22)	AT MTR.	EXIST. 0	DCC#1	-
86	EXIST. PLANT FLUSHING WATER PUMP #1 (17)	15	460-3	CONTROL BLDG.	EXIST. DUATROL AND ALT. (22)	AT MTR.	EXIST.	DCC#1	-
87	EXIST. PLANT FLUSHING WATER PUMP #2 (17)	15	460-3	CONTROL BLDG.	EXIST. DUATROL AND ALT. (22)	AT MTR.	EXIST.	DCC#1	-
88	EXIST. HOT WATER CIRCULATOR	1/6	120-1	CONTROL BLDG.	EXIST. MS & P (22)	AT UNIT	NONE	-	-
89	EXIST. HOT WATER CIRCULATOR	1/6	120-1	CONTROL BLDG.	EXIST. MS & P (22)	AT UNIT	NONE	-	-
90	EXIST. AIR COMP. #1	1-1/2	460-3	CONTROL BLDG.	EXIST. PRESS SW (22)	AT UNIT	EXIST.	DCC#1	-
91	EXIST. AIR COMP. #2	1-1/2	460-3	CONTROL BLDG.	EXIST. PRESS SW (22)	AT UNIT	EXIST.	DCC#1	-
92	EXIST. SLUDGE DEWATERING PUMP #1	3	460-3	CONTROL BLDG.	EXIST. P. B. (22)	SLUDGE FILTER ROOM	EXIST.	DCC#1	-
93	EXIST. SLUDGE DEWATERING PUMP #2	3	460-3	CONTROL BLDG.	EXIST. P. B. (22)	SLUDGE FILTER ROOM	EXIST.	DCC#1	-
94	EXIST. SLUDGE DEWATERING PUMP #3	3	460-3	CONTROL BLDG.	EXIST P. B. (22)	SLUDGE FILTER ROOM	EXIST.	DCC#1	-
95	EXIST. SLUDGE DEWATERING PUMP #4	3	460-3	CONTROL BLDG.	EXIST. P. B. (22)	SLUDGE FILTER ROOM	EXIST.	DCC#1	-
96	EXIST. OVERHEAD DOOR	1/2	120-1	CONTROL BLDG.	EXIST. (22)	SLUDGE FILTER ROOM	-	-	-
97	EXIST. PIPE SPACE VENT.	1/4	120-1	CONTROL BLDG.	EXIST. (22)	CONTROL	NONE	-	-
98	EXIST. UNIT HEATER #1 (7)	1/20	460-3	CONTROL BLDG.	EXIST. STAT (22)	HALL	NONE	-	-
99	EXIST. UNIT HEATER #2 (7)	1/20	460-3	CONTROL BLDG.	EXIST. STAT (22)	PUMP ROOM	NONE	-	-
100	EXIST. UNIT HEATER #3 (7)	1/20	460-3	CONTROL BLDG.	EXIST. STAT (22)	PUMP ROOM	NONE	-	-
101	EXIST. UNIT HEATER #4 (7)	1/20	460-3	CONTROL BLDG.	EXIST. STAT (22)	PUMP ROOM	NONE	-	-
102	EXIST. SUMP PUMP	1/3	120-1	CONTROL BLDG.	EXIST. FLOAT SW. (22)	AT UNIT	NONE	-	-

MOTOR, APPLIANCE AND EQUIPMENT SCHEDULE

NUMBER	EQUIPMENT	SIZE	VOLT & Ø	LOCA.	CONTROL	CONT. LOCA.	STARTER SIZE	STARTER LOCA.	DISC SIZE & TYPE
36	BARMINUTOR (17)	3	460-3	BARMINUTOR BLDG.	BUBBLER (18)	BARMINUTOR BLDG.	0	BARMINUTOR BLDG.	30A-3P-NF (EXP. PROOF)
37	RETURN ACTIVATED SLUDGE PUMP #1(17)	30	460-3	MAIN BLDG.	FLOW (19)	DCC#1A	3(34)	DCC#1A	-
38	RETURN ACTIVATED SLUDGE PUMP #2(17)	30	460-3	MAIN BLDG.	FLOW (19)	DCC#1A	3(34)	DCC#1A	-
39	WASTE ACTIVATED SLUDGE PUMP #1(17)	3	460-3	MAIN BLDG.	ORP (TIMER) (19)	DCC#1	0	DCC#1	-
40	WASTE ACTIVATED SLUDGE PUMP #2(17)	15	460-3	MAIN BLDG.	TIMER (19)	DCC#1	2	DCC#1	-
41	CHLORINE INJECTOR PUMP (17)	3	460-3	MAIN BLDG.	START STOP & P	DCC#1	0	DCC#1	-
42	EXIST. CHLORINE INJECTOR PUMP #2 (17)	10	460-3	MAIN BLDG.	INTERLOCK WITH NEW CHLORINATOR	DCC#1A	EXIST.	DCC#1	EXIST.
43	EXH. FAN E-6	1/8	120-1	BLOWER BLDG.	MS & P (35)	DCC#2	NONE	-	TOGGLE SW
44	POLYMER FEEDER(17)	1/2	460-3	BLOWER BLDG.	SEE SPECS	AT UNIT	0	AT UNIT	-
45	POLYMERFEEDER (17)	1/4	460-3	BLOWER BLDG.	SEE SPECS	AT UNIT	0	AT UNIT	-
46	FERRIC CHLORIDE PUMP (17)	3/4	460-3	BLOWER BLDG.	FLOW METER(19)	DCC#2	SEE SHT. 72	DCC#2	-
47	POLYMER FEEDER (17) PUMP #1	1/3	460-3	BLOWER BLDG.	INTERLOCK WITH MTR. #39 & 40	DCC#2	0	DCC #2	TOGGLE SW
48	PRIMARY SLUDGE PUMP (17)	7-1/2	460-3	BLOWER BLDG.	TIMER (19)	DCC#2	1	DCC#2	
49	PRIMARY SLUDGE PUMP (17)	7-1/2	460-3	BLOWER BLDG.	TIMER (19)	DCC#2	1	DCC#2	
50	BLOWER (17)	125	460-3	BLOWER BLDG.	FLOW METER (32) (19)	DCC#2	5(29)	DCC#2	-
51	BLOWER (17)	125	460-3	BLOWER BLDG.	FLOW METER (32) (19)	DCC#2	5(29)	DCC#2	-
52	BLOWER (17)	125	460-3	BLOWER BLDG.	FLOW METER (32) (19)	DCC#2	5(29)	DCC#2	-
53	BLOWER (17)	125	460-3	BLOWER BLDG.	FLOW METER (32) (19)	DCC#2	5(29)	DCC#2	-
54	DUAL SCRAPER DR. (17)	3/4	460-3	PRIMARY TANK	START STOP & P (20)	DCC#2	0	DCC#2	30A-3P-NF (WP)
55	DUAL SCRAPER DR. (17)	3/4	460-3	PRIMARY TANK	START STOP & P (20)	DCC#2	0	DCC#2	30A-3P-NF (WP)
56	PRIMARY TANK (17) CROSS COLLECTOR	1	460-3	PRIMARY TANK	INTERLOCK (20) WITH MTR. #54	DCC#2	0	DCC#2	30A-3P-NF (WP)
57	PRIMARY TANK (17) CROSS COLLECTOR	1	460-3	PRIMARY TANK	INTERLOCK (20) WITH MTR. #55	DCC#2	0	DCC#2	30A-3P-NF (WP)
58	SUMP PUMP	1/2	208-1	BLOWER BLDG.	FLOAT SW. (9)	AT SUMP	0	DCC#2	30A-2P-NF
59	SUPPLY FAN	1-1/2	460-3	DIGESTER BLDG.	START STOP & P (33)	DCC#1C	0	DCC#1C	-
60	EXH. FAN E-4	1/3	120-1	DIGESTER BLDG.	INTERLOCK WITH MTR. #59	DCC#1C	NONE	-	MS & P
61	HEATING PUMP P-1	1/3	120-1	DIGESTER BLDG.	INTERLOCK WITH MTR. #59	DCC#1C	NONE	-	MS & P
62	UNIT HEATER #2	1/8	120-1	GRIT BLDG.	ELECTRIC STAT	PUMP ROOM	NONE	-	MS
63	UNIT HEATER #3	1/8	120-1	GRIT BLDG.	ELECTRIC STAT	GRIT DEWATERING RM.	NONE	-	MS
64	UNIT HEATER #4	1/40	120-1	GRIT BLDG.	ELECTRIC STAT	BLOWER ROOM	NONE	-	MS
65	UNIT HEATER #5	1/2	208-3	GRIT BLDG.	ELECTRIC STAT	GARAGE LOADING	0	GARAGE LOADING	30A-3P-NF
66	EXH. FAN E-2	1/8	120-1	GRIT BLDG.	MS & P (35)	DCC#3A	NONE	-	TOGGLE SW (30)
67	EHX. FAN E-3	1/20	120-1	GRIT BLDG.	MS & P (35)	DCC#3	NONE	-	TOGGLE SW (30)
68	FERRIC CHLORIDE AIR COMP. (17)	15	460-3	BLOWER BLDG.	START STOP & P	DCC#2	2	DCC#2	-
69	GAS COMPRESSOR HEATER (17)	6KW	460-3	DIGESTER TANK	BY MFGR. (11)	AT UNIT	NONE	-	30A-3P-NF (WP)
70	BOILER	-	120-1	BLOWER BLDG.	STAT"	BLOWER BLDG.	NONE	-	MS

MOTOR, APPLIANCE AND EQUIPMENT SCHEDULE

NUMBER	EQUIPMENT	SIZE	VOLT & Ø	LOCA.	CONTROL	CONT. LOCA.	STARTER SIZE	STARTER LOCA.	DISC SIZE & TYPE
1	BRIDGE DRIVE (17)	3/4	460-3	RET. TANK	BUBBLER (1)	DCC#3A	BY MFGR.	RET. TANK	30A-3P-3F (WP)
2	HOIST DRUM	3/4	460-3	RET. TANK	BY MFGR (2)	ON BRIDGE	BY MFGR.	RET. TANK	30A-3P-3F (WP)
3	HELITHICKNER #1 (17)	1	460-3	RET. TANK	INTERLOCK (20) WITH MTR#1(3)	DCC#3A	0	DCC#3A	30A-3P-3F (WP)
4	HELITHICKNER #2 (17)	1	460-3	RET. TANK	INTERLOCK (20) WITH MTR#1(3)	DCC#3A	0	DCC#3A	30A-3P-3F (WP)
5	CABLE REEL	1/2	460-3	RET. TANK	BY OTHERS (4)	RET. TANK	BY MFGR.	RET. TANK	-
6	RET. SLUDGE PUMP #1 (17)	10	460-3	RET. TUNNEL	TIMER	DCC#3A	1	DCC#3A	30A-3P-NF
7	RET. SLUDGE PUMP #2 (17)	10	460-3	RET. TUNNEL	TIMER	DCC#3A	1	DCC#3A	30A-3P-NF
8	SUMP PUMP	1	208-1	RET. TUNNEL	FLOAT SW (6) (9)	RET. TUNNEL	0	DCC#3A	30A-2P-NF
9	GRIT PUMP #1 (17)	20	460-3	GRIT BLDG.	START STOP &P (5)	GRIT DEWATERING	2	DCC#3A	-
10	GRIT PUMP #2(17)	20	460-3	GRIT BLDG.	START STOP & P (5)	GRIT DEWATERING	2	DCC#3A	-
11	BLOWER #1 (17)	10	460-3	GRIT BLDG.	START STOP & P	DCC#3A	1	DCC#3A	-
12	BLOWER #2 (17)	10	460-3	GRIT BLDG.	START STOP & P	DCC#3A	1	DCC#3A	-
13	CLASSIFIER (17)	1/2	460-3	GRIT BLDG.	START STOP & P (5)	GRIT DEWATERING	0	DCC#3A	-
14	CLASSIFIER (17)	1/2	460-3	GRIT BLDG.	START STOP & P (5)	GRIT DEWATERING	0	DCC#3A	-
15	GRIT HOPPER GATE	1	460-3	GRIT BLDG.	START STOP & P (7)	GRIT LOADING	0	DCC#3A	-
16	GRIT HOPPER VIBRATOR	1/4	460-3	GRIT BLDG.	START STOP & P (7)	GRIT LOADING	0	DCC#3A	-
17	OVERHEAD DOOR	1/3	120-1	GRIT BLDG.	BY MFGR. (8)	GRIT LOADING	NONE	-	MS
18	SUMP PUMP	1/2	208-1	GRIT BLDG.	FLOAT SW (6) (9)	AT PUMP	0	DCC#3A	30A-2P-NF
19	SEWAGE PUMP #1(28)	50	460-3	PUMP BLDG.	BUBBLER (10) (29)	DCC#3	3(34)	DCC#3	-
20	SEWAGE PUMP #2(28)	50	460-3	PUMP BLDG.	BUBBLER (29)	DCC#3	3(34)	DCC#3	-
21	SEWAGE PUMP #3(28)	50	460-3	PUMP BLDG.	BUBBLER (29)	DCC#3	3(34)	DCC#3	-
22	SEWAGE PUMP #4(28)	60	460-3	PUMP BLDG.	BUBBLER (29)	DCC#3	4(34)	DCC#3	-
23	SLUDGE RECIRCULATING PUMP #1 (17)	5	460-3	DIGESTER BLDG.	STAT"	BLR. CONT. PANEL	BY MFGR.	BLR. CONT. PANEL	-
24	SLUDGE RECIRCULATING PUMP #2 (17)	5	460-3	DIGESTER BLDG.	STAT"	BLR. CONT. PANEL	BY MFGR.	BLR. CONT. PANEL	-
25	SUMP PUMP	1/2	208-1	DIGESTER BLDG.	FLOAT SW. (9) (14)	DIGESTER BLDG	0	DCC 1C	-
26	SLUDGE TRANSFER PUMP (17)	3	460-3	DIGESTER BLDG.	START STOP & P (33)	DIGESTER BLDG	0	DCC 1C	-
27	GAS COMPRESSOR (17)	3KW 7-1/2	460-3	DIGESTER TANK	BY MFGR. (11)	AT UNIT	1	DCC 1C	2-30A-3P-NF
28	BOILER RECIR. PUMP	3	460-3	DIGESTER BLDG.	BY MFGR. (12) (14)	AT UNIT	0	BOILER CONT. PANEL	-
29	BOILER	-	120-1	DIGESTER BLDG.	BY MFGR. (13) (14)	AT UNIT	-	-	TOGGLE SW.
30	CHLORINE CONTACT SCRAPER DRIVE	1/2	460-3	CHLORINE TANK	START STOP & P (15)	DCC#1	0	DCC#1	30A-3P-NF (WP)
31	CHLORINE CONTACT SCRAPER DRIVE	1/2	460-3	CHLORINE TANK	START STOP & P (15)	DCC#1	0	DCC#1	30A-3P-NF (WP)
32	THICKENER DRIVE(17)	1	460-3	AERATION TANK	INTERLOCK WITH MTR #39 & 40	DCC#1	0	DCC#1	30A-3P-NF (WP)
33	MIXER THICKENER(17)	1/3	120-1	AERATION TANK	INTERLOCK WITH MTR #32	DCC#1	0	DCC#1	MS
34	RET. EXH. FAN E-1	1/3	120-1	RET. TUNNEL	MS&P (35)	RET. TUNNEL	NONE	-	TOGGLE SW
35	UNIT HEATER	1/4	120-1	RET. TUNNEL	ELEC. STAT."	RET. TUNNEL	NONE	-	MS

REVIEWED AND APPROVED BY THE DIV. OF ENVIRONMENTAL PROTECTION, DEPT. NATURAL RESOURCES, IN ACCORDANCE WITH SEC. 144.04, WIS. STATS., SUBJECT TO THE CONDITIONS SET FORTH IN THE LETTER OF APPROVAL.

THOMAS G. FRANGOS
ADMINISTRATOR

APPROVAL NO.
72 355

DATE: FEB 4 '74

DNR JAN 3 1974

ERICKSEN ELLISON AND ASSOC INC
ST PAUL, MINNESOTA

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BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: FEBRUARY 2, 1971 COMM. 6888A

MOTOR SCHEDULE

SHEET 79/84

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