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San Rafael, CA 94903
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MANAGEMENT TEAM
General Manager, Curtis Paxton
Plant Operations, Mel Liebmann
Collections/Safety/Maintenance, Greg Pease
Engineering, Michael P. Cortez
Administrative Services, Dale McDonald

DISTRICT BOARD
Megan Clark
Ronald Ford
Craig K. Murray
Gary E. Robards
Crystal J. Yezman

ADDENDUM NO. 1

Date: July 31, 2023
Project: **Biosolids Land Application Services**
Job No.: 21500-08

To: All Planholders and Prospective Bidders

The following changes and/or clarifications are hereby made to the Contract Documents and shall become a part of the Contract Documents dated July 2023.

1. Bid Opening: Refer to NOTICE INVITING SEALED BIDS, Paragraph 2, Page 1-1: Bid opening has been rescheduled for **Monday, August 7, 2023 at 11:00 AM**.
2. Volume 2 Bid Documents, Bid Schedule Page 2-7 Replace Bid Item No. 2 Paragraph 1
Item No. 2. Biosolids Land Application: This unit price proposal item shall be the cost per dry ton of biosolids removed from the sludge storage ponds and reused and shall include all labor, materials, equipment and environmental permitting and monitoring necessary to legally extract, dewater, analyze, load, transport, monitor, and beneficially reuse wastewater biosolids through land application. The quantity of biosolids removed from the sludge storage lagoons site is calculated for each day that biosolids are removed based on the total wet tons removed multiplied by the percent of dry solids in the representative daily sample of biosolids. The total quantity that the District anticipates will need to be removed annually is approximately 280 dry tons. The actual quantity of biosolids that can be land applied may vary and remaining biosolids would be disposed of under a separate bid item.
2. Volume 2 Bid Documents, Bid Schedule, Page 2-7 Replace Bid Item No. 2 Paragraph 3
Payment for wastewater biosolids removal shall be on a dry weight basis per standard English ton (2,000 lbs.) of wastewater biosolids removed from the sludge storage lagoons site and properly reused or disposed. Dry weight shall mean 100 percent solids and zero percent moisture. The Contractor shall be responsible for determining the total wet tonnage of wastewater biosolids loaded onto transport trucks and hauled ~~offsite~~ to District reuse/disposal and shall provide copies of the certified weight tickets identifying the total wet tonnage of the hauled material, as well as the actual gross and tare weights of each load removed from the sludge storage lagoons site. Weight tickets shall be issued by a NTEP (National Type Evaluation Program) certified vehicle scale. Use of approximate tare weights for trailers or the portable on-site truck scale will not be allowed as a basis for payment.
3. Volume 2 Bid Documents, Bid Schedule, Page 2-8 Replace Bid Item No. 4 Paragraph 1
Item 4: Biosolids Subsurface Injection: The dredged Class B biosolids that cannot be applied on APN 155-011-33, will be subsurface injected on the District's permitted 9-acre Dedicated Land Disposal or "DLD" area located adjacent to the sludge storage ponds. This unit price proposal item shall be the cost per dry ton of biosolids removed from the

sludge storage ponds and injected at the District's Designated Land Disposal (DLD) Site and shall include all labor, materials, equipment and environmental permitting and monitoring necessary to legally extract, dewater, analyze, load, transport, monitor, and disposal of biosolids. The quantity of biosolids removed from the sludge storage lagoons site is calculated for each day that biosolids are removed based on the total wet tons removed multiplied by the percent of dry solids in the representative daily sample of biosolids. The total quantity that the District anticipates will need to be disposed of through injection of equal methods annually is estimated at 100 dry tons.

4. Volume 2 Bid Documents, Bid Schedule, Page 2-8 Replace Bid Item No. 4 Paragraph 3 Payment for wastewater biosolids removal shall be on a dry weight basis per standard English ton (2,000 lbs.) of wastewater biosolids removed from the sludge storage lagoons site and properly reused or disposed. Dry weight shall mean 100 percent solids and zero percent moisture. The Contractor shall be responsible for determining the total wet tonnage of wastewater biosolids loaded onto transport trucks and hauled ~~offsite~~ to District reuse/disposal and shall provide copies of the certified weight tickets identifying the total wet tonnage of the hauled material, as well as the actual gross and tare weights of each load removed from the sludge storage lagoons site. Weight tickets shall be issued by a NTEP (National Type Evaluation Program) certified vehicle scale. Use of approximate tare weights for trailers or the portable on-site truck scale will not be allowed as a basis for payment.

Questions Received from Proposers/Bidders:

The following questions were submitted on or before 7/27/2023, questions that are received after the bid questions deadline may not be answered in addendum. LGVSD responses to the questions are in bold.

1. Page 28 - " Request the addition of the following language to Section 4. and the same language be incorporated into Section 7.1 of the General Terms and Conditions of the contract .
"Parties mutually agree that Liquidated Damages shall not apply to any delay resulting from or occurring, as a result of a Force Majeure event, or circumstance beyond the control of either party."
Response: No contract revisions required. Per General Conditions Section 7.2 – No Damage for Delay Beyond District and Contractor Control, Contractor shall not be liable for delays beyond the control of both the District and Contractor, such as acts of God (force majeure).
2. Page 33-34 - Request that Section 7.2 be amended to include the following language;
" a change in Federal, State, or local law or ordinance; orders or judgments of any Federal, State or local court, administrative agency or governmental body; change in permit conditions or requirements;"

Response: No contract revisions required. Per General Conditions Section 7.2 – No Damage for Delay Beyond District and Contractor Control, Contractor shall not be liable for delays beyond the control of both the District and Contractor, such as acts of other government entities.

3. Page 70- Request the additional language be added to Section 11.2.1.6

“District and Contractor agree in advance that if the District exercises its discretionary right to terminate for convenience, the District will pay Contractor for expenses incurred because of early termination. These expenses include, but are not limited to, recovery of capital costs, , demobilization, employee severance payments and costs to terminate subcontractors and equipment leases.”

Response: The suggested modification would require District legal counsel review and approval after award of a contract to the selected contractor.

4. Will the District agree in advance, to provide selected Contractor with Notice to Proceed on the work within 60 days from the Notification of Award? If not, will the District allow the Contractor to adjust its pricing based on the current market conditions at the time of NPT?

Response: The District intends to issue a Notice to Proceed shortly after award of contract (Notice of Award) by the District Board and submittal of necessary award forms such as signed agreement and bonds by the selected contractor.

5. Have the material specified in the Scope of Work been tested for PFAS / PFOA or other substances regulated by 40 CFR 503? If so, will the district share the results of these test with the selected contractors?

Response: The materials are Class B Biosolids. The materials specified in the scope of work are routinely tested per the District’s permit requirements, and information can be found in the annual biosolids reporting. There is no known regulatory requirement for the District to test its class B Biosolids for PFAS/PFOA. The District will share the results of these tests with the selected contractor.

6. Does the District have plans scheduled to test the materials specified in the Scope of Work for PFAS / PFOA or other substances regulated by 40 CFR 503 during the term of this contract?

Response: There is no known regulatory requirement for the District to test its class B Biosolids for PFAS/PFOA. Per Section 01100 Summary of Work, item 1.04 D.2, other substances to be tested for are defined in the District’s NOA, attached to the Bid Documents.

7. Summary of work 1.04 (A)f(2) mentions that contractor shall coordinate with the District on the timing of land application in relation to active farming activities. Would the nitrogen requirement (lbs of N/acre) of the field based on crop grown be provided by the

District? In other words, who would be responsible for the compliance of Monitoring & Reporting Program from SFBRWQCB?

Response: Contractor is responsible for compliance with the Monitoring and Reporting Program associated with the NOA, per Section 01100 Summary of Work, item 1.04 D.2.b.

8. Can you explain the summary of work (1.05), about the type of support required from contractor?

Response: Assume level of effort responding to up to two (2) requests for information or up to eight (8) hours for collaborating with the Research Project Team. Collaboration may include, but is not limited to:

- **Coordination of Contractor's planned work schedule and Research Project Team's sampling needs and schedule.**
- **Research Project Team may be onsite from time to time while Contractor is on site and "interview" the Contractor's operator for the purpose of informing Research Project needs.**
- **Request from Research Project Team for the Contractor to grab an extra sample (District to provide sampling containers) of the biosolids during extraction of the biosolids from the storage lagoons, as well as the biosolids cake product downstream of dewatering; Research Project Team may also request Contractor provide a sample of polymer being used in its dewatering process.**

9. Will district extend bid and questions due date? With the short time frame, more time will be needed.

Response: See Item 1 above for the rescheduled bid opening date and time.

10. Is there an alternate route to avoid the weight restricted bridge? Our equipment exceeds bridge weight restrictions.

Response: The bridge is rated for H-20 loading. Contractor shall deliver equipment components separately in order to stay below the rated capacity.

11. At the 7/24/23 site walk, an attendee requested a copy of the sludge storage lagoons as-built drawing which show the pond elevations, including liner elevation and pond bottom elevations.

Response: See Attachment 1 As-Built for sludge storage lagoon drawings.

12. At the 7/24/23 site walk, an attendee asked about means/methods to apply biosolids to the Dedicated Land Disposal (DLD) Site.

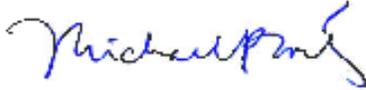
Response: The application of biosolids must meet conditions in the Notice of Availability (NOA) included in Volume 2 Bid Documents Appendix G Permits.

This addendum consists of seventeen (17) pages including this page and attachments. Acknowledge

receipt of this addendum in the space provided on page 2-5, Proposal Cover Page and Bid Schedule, of the Bid Forms, and by signing in the space provided below. **Submit original copy of this addendum cover page along with the bid. Failure to do so may disqualify the bidder.**

Las Gallinas Valley Sanitary District:

Bidder: _____



Michael P. Cortez, PE, District Engineer

(Authorized Signature)

(Date)



PROJECT LOCATION MAP

0 1000 2000 3000

SCALE IN FEET

NOTE
ALL ELEVATIONS ON THESE PLANS REFER TO USC & GS MEAN SEA LEVEL DATUM.

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

California Council
of **Civil Engineers**
& **Land Surveyors**

LAS GALLINAS VALLEY SANITARY DISTRICT
MARIN COUNTY, CALIFORNIA

PLANS

FOR THE CONSTRUCTION OF

SLUDGE STORAGE POND IMPROVEMENTS

DISTRICT BOARD

FRANK SOLOMON, JR. - PRESIDENT
DOUGLAS A. COLBERT - VICE PRESIDENT
LEON EDDINGS
BERNIE B. HEARE
SESTO F. LUCCHI

BARBARA J. REETZ - SECRETARY
PETER R. VINE - ENGINEER MANAGER

NUTE ENGINEERING
CIVIL AND SANITARY CONSULTANTS
SAN RAFAEL, CALIFORNIA

SUBMITTED BY

W. Edward Nute



APPROVED BY

[Signature]

ADOPTED BY DISTRICT BOARD

JUNE 12, 1991

Barbara J. Reetz
SECRETARY

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OF
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AS BUILT	SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS	
PROJECT LOCATION MAP	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by	Scale <i>AS SHOWN</i>
Des/Chkd by	Date <i>JUNE 1991</i>

INDEX TO PLANS

ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE
AGG.	AGGREGATE
ALUM.	ALUMINUM
c	CONDUIT
¢	CENTERLINE
C.B.	CATCH BASIN
C.C.	CENTER TO CENTER
CLR.	CLEAR OR CLEARANCE
C.O.	CLEANOUT
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
DBL.	DOUBLE
D.I.	DUCTILE IRON
DIA.	DIAMETER
DISCH.	DISCHARGE
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
EL.	ELEVATION
EQ.	EQUAL
E.W.	EACH WAY
EXIST., E., (E)	EXISTING
FAB.	FABRICATED
F.C.A.	FLEXIBLE COUPLING ADAPTER
F.F.	FINISH FLOOR
FLEX. FLG. CPLG.	FLEXIBLE FLANGED COUPLING
FT.	FEET
G	GAS
GA.	GAUGE (GAGE)
GALV.	GALVANIZED
G.I.	GALVANIZED IRON
GND.	GROUND
GRTG.	GRATING
HDPE	HIGH DENSITY POLYETHYLENE
HORIZ.	HORIZONTAL
HVY.	HEAVY
I.D.	INSIDE DIAMETER
INV.	INVERT
L.G.V.S.D.	LAS GALLINAS VALLEY SANITARY DISTRICT
L.R.	LONG RADIUS
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
M.J.	MECHANICAL JOINT
M.M.W.D.	MARIN MUNICIPAL WATER DISTRICT
N	NORTH
(N)	NEW ITEM AS INDICATED
NO.	NUMBER
N.T.S.	NOT TO SCALE
φ	DIAMETER
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPNG.	OPENING
PE	POLYETHYLENE
P.G. & E.	PACIFIC GAS & ELECTRIC
PRESS.	PRESSURE
PT.	POINT
PVC	POLYVINYL CHLORIDE
R.	RADIUS
R.C.P.	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RWD.	REDWOOD
SCH.	SCHEDULE
SDR	STANDARD DIMENSION RATIO
S.D.	STORM DRAIN
S.S.	STAINLESS STEEL
STL.	STEEL
TEMP.	TEMPORARY
TY.	TYPE
TYR.	TYPICAL
VERT.	VERTICAL
W.	WATER
W/	WITH
W.S.	WATER SURFACE

PIPING SCHEDULE

LINE NO.	DIAMETER ⁽¹⁾	MATERIAL	DESCRIPTION	PIPING NOTES
10b	24"	POLYETHYLENE (SDR = 21)	PLANT EFFLUENT	
10c	24"	WELDED STEEL CEMENT L/C	PLANT EFFLUENT	
11d	6"-12"	PVC C-900 (DR=25)	SEWERS AND DRAINS	
11e	24"-60"	ASP BONDED CORRUGATED	SEWERS AND DRAINS	
29a	10"	VCP	DIGESTER SUPERNATANT	
29b	10"	CAST IRON CEMENT LINED	DIGESTER SUPERNATANT	
29c	10"	PVC C-900 (DR=25)	DIGESTER SUPERNATANT	
38	1"-2"	PVC SCH 40	DOMESTIC WATER	(2)
39	1"-4"	PVC SCH 40	RECLAIMED WATER	
66a	12"	CAST IRON CEMENT LINED	POND TRANSFER	
66b	12"-24"	WELDED STEEL CEMENT L/C	POND TRANSFER	
66c	18"-24"	POLYETHYLENE (SDR = 21)	POND TRANSFER	
67a	18"	WELDED STEEL CEMENT L/C	POND EFFLUENT	
67b	18"	POLYETHYLENE (SDR = 21)	POND EFFLUENT	
68a	12"	CAST IRON CEMENT LINED	POND RETURN	
68b	12"	WELDED STEEL CEMENT L/C	POND RETURN	
69	24"	POLYETHYLENE (SDR = 21)	POND OVERFLOW	
70a	6"-12"	WELDED STEEL CEMENT L/C	IRRIGATION LINES	(3)
70b	4"-12"	PVC B & S CLASS 200	IRRIGATION LINES	
70c	1/2"-8"	PVC SCH 80 SOLVENT WELD	IRRIGATION LINES	
70d	4"-6"	CAST IRON CEMENT LINED	IRRIGATION LINES	
70e	3"	ALUMINUM CLASS 150	IRRIGATION LINES	
71	24"	WELDED STEEL CEMENT L/C	SCREEN INTAKE	
72	8"	CAST IRON CEMENT LINED	SCREEN BACKWASH	
73a	4"-8"	DUCTILE IRON CEMENT LINED	SUMP PUMP RETURN	
73b	8"-10"	POLYETHYLENE (SDR = 21)	SUMP PUMP RETURN	
73c	8"	WELDED STEEL CEMENT L/C	SUMP PUMP RETURN	
73d	2"	PVC SCH 40	SUMP PUMP RETURN	
74a	6"-8"	POLYETHYLENE (SDR = 17)	SLUDGE POND FILL	
74b	8"	WELDED STEEL	SLUDGE POND FILL	
74c	6"-8"	DUCTILE IRON CEMENT LINED	SLUDGE POND FILL	
75	6"-8"	POLYETHYLENE (SDR = 21)	SLUDGE POND OVERFLOW	
76	8"	POLYETHYLENE (SDR = 17)	SLUDGE POND RETURN	
77	6"	DUCTILE IRON CEMENT L/C	SLUDGE POND DRAW OFF	
78	6"	POLYETHYLENE (SDR = 21)	LEACHATE DRAIN	
79	6"	POLYETHYLENE (SDR = 21)	POND UNDERDRAIN	
80	3"-4"	PVC SCH 80 SOLVENT WELD	MMWD SLUDGE BLOWDOWN	

PIPING NOTES:

1. ALL PIPE DIAMETERS ARE INSIDE DIAMETERS, EXCEPT FOR POLYETHYLENE PIPES, DIAMETER IS OUTSIDE DIAMETER.
2. EXPOSED PIPES SHALL BE SCHEDULE 40 GALVANIZED IRON.
3. ALL FITTINGS SHALL BE CAST IRON WITH HARNESS RESTRAINT.
4. ALL DUCTILE IRON PIPE SHALL HAVE POLYETHYLENE WRAPPING.

LEGEND

	SECTION NO. SECTION DESIGNATION SHEET NO.
	DETAIL NO. DETAIL DESIGNATION SHEET NO.
	PIPELINE SIZE AND DESIGNATION (REFER TO PIPING SCHEDULE, THIS SHEET)
	EXISTING PIPELINE
	VALVE SIZE AND DESIGNATION (REFER TO VALVE SCHEDULE, SPEC'S SECTION 15050)
	PROPERTY LINE
	FENCE
	MANHOLE
	VALVE
	SOILS BORING NO. EB 9

SHEET NO.

TITLE

1. PROJECT LOCATION MAP
2. INDEX TO PLANS, PIPING SCHEDULE & ABBREVIATIONS
3. SITE PLAN
4. SLUDGE STORAGE PONDS EXISTING TOPOGRAPHY
5. SLUDGE STORAGE PONDS GRADING LAYOUT
6. SLUDGE STORAGE PONDS PIPING LAYOUT
7. SLUDGE STORAGE PONDS CROSS SECTIONS
8. SLUDGE STORAGE PONDS POND LINER DETAILS
9. SLUDGE STORAGE PONDS POND OUTLET BOX DETAILS
10. POND SUPERNATANT PUMP STATION SITE PLAN & DETAILS
11. POND SUPERNATANT PUMP STATION MECHANICAL PLANS & DETAILS
12. POND SUPERNATANT PUMP STATION STRUCTURAL PLANS, SECTIONS & DETAILS
13. DIGESTER SUPERNATANT PUMP STATION AND DIGESTED SLUDGE PUMP SITE PLAN AND PIPING LAYOUT
14. DIGESTER SUPERNATANT PUMP STATION SITE PLAN
15. DIGESTER SUPERNATANT PUMP STATION MECHANICAL PLANS, SECTIONS & DETAILS
16. DIGESTER SUPERNATANT PUMP STATION STRUCTURAL PLANS, SECTIONS & DETAILS
17. DIGESTED SLUDGE PUMP PLAN & SECTIONS
18. PUMP STATIONS MISCELLANEOUS DETAILS
19. DIVERSION BOX PIPING CONNECTIONS & DETAILS
20. BRIDGE PIPE CROSSING & DETAILS
21. TRANSFER BOX GATE & DETAILS
22. ELECTRICAL SITE PLAN
23. ELECTRICAL TREATMENT PLANT YARD WIRING LAYOUT
24. ELECTRICAL EFFLUENT PUMP STATION CONTROL PANEL MODIFICATIONS
25. ELECTRICAL POND SUPERNATANT PUMP STATION DECK PLAN & DETAILS
26. ELECTRICAL DIGESTER SUPERNATANT PUMP STATION DECK PLAN & DETAILS
27. ELECTRICAL SUPERNATANT PUMP STATIONS WIRING DIAGRAMS & DETAILS
28. ELECTRICAL DIGESTED SLUDGE PUMP SITE PLAN & WIRING DIAGRAMS
29. ELECTRICAL TREATMENT PLANT GRAPHIC PANEL MODIFICATIONS

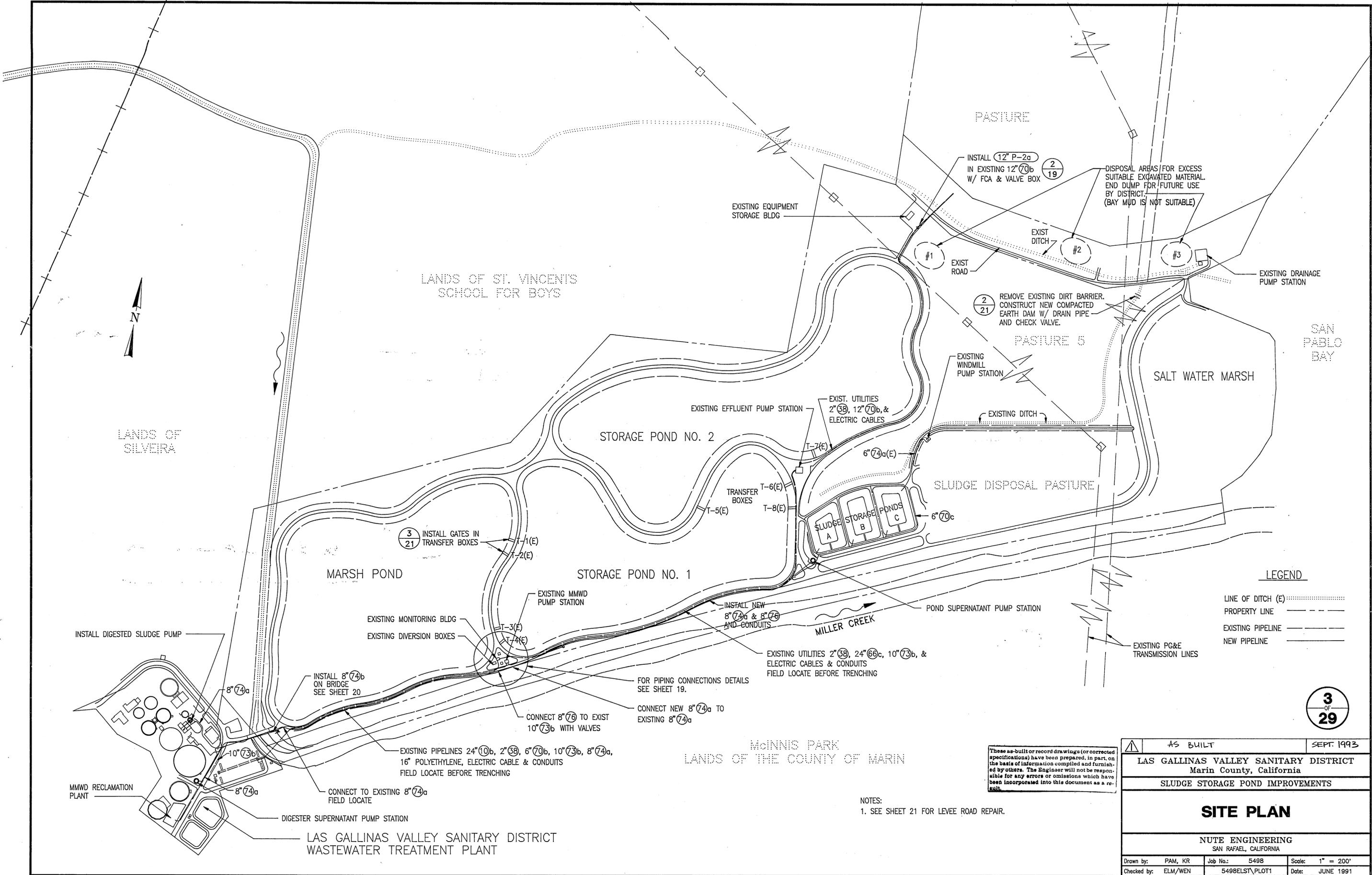
GENERAL NOTES

1. THE CONTRACTOR SHALL PHYSICALLY LOCATE AND UNCOVER (POTHOLE) ALL UTILITIES IN THE WORK AREA AHEAD OF THE TRENCHING OPERATION AS REQUIRED IN THE SPECIFICATIONS AND SHALL BE RESPONSIBLE FOR DAMAGE THERETO.
2. THESE DRAWINGS SHALL BE COORDINATED AND USED IN CONJUNCTION WITH FAVORABLY REVIEWED PIPE AND EQUIPMENT SHOP DRAWINGS.
3. SOILS BORINGS REFER TO SOILS INVESTIGATION REPORTS BY ASSOCIATED GEOTECHNICAL ENGINEERS AND HARDING LAWSON ASSOCIATES (SEE SPECS).
4. THE OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS AND INDIVIDUAL SERVICE LINES ARE NOT SPECIFICALLY INDICATED ON THE DRAWINGS BUT DO EXIST IN THE AREA. THE CONTRACTOR SHALL EXERCISE CAUTION WHILE WORKING NEAR OR UNDER ALL ELECTRIC LINES.
5. THE CONTRACTOR SHALL INSTALL SAFETY GUARDS ON ALL MOVING OR ROTATING EQUIPMENT FURNISHED WHETHER SHOWN ON THE PLANS OR NOT. ALL SAFETY GUARDS SHALL CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK.
7. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL IMPROVEMENTS WHICH ARE DAMAGED BY THE WORK.
8. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHERS.
9. ALL NUTS, BOLTS AND WASHERS SHALL BE STAINLESS STEEL.
10. ALL STAINLESS STEEL SHALL BE TYPE 316.
11. ALL UNDERGROUND METAL, INCLUDING STAINLESS STEEL, SHALL BE COATED AND WRAPPED (SEE SPECS).

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AS BUILT	SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS	
INDEX TO PLANS, PIPING SCHEDULE & ABBREVIATIONS	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by:	Job No.: 5498
Checked by: WEN	Scale: NO SCALE
	Date: 7/14/93



LEGEND

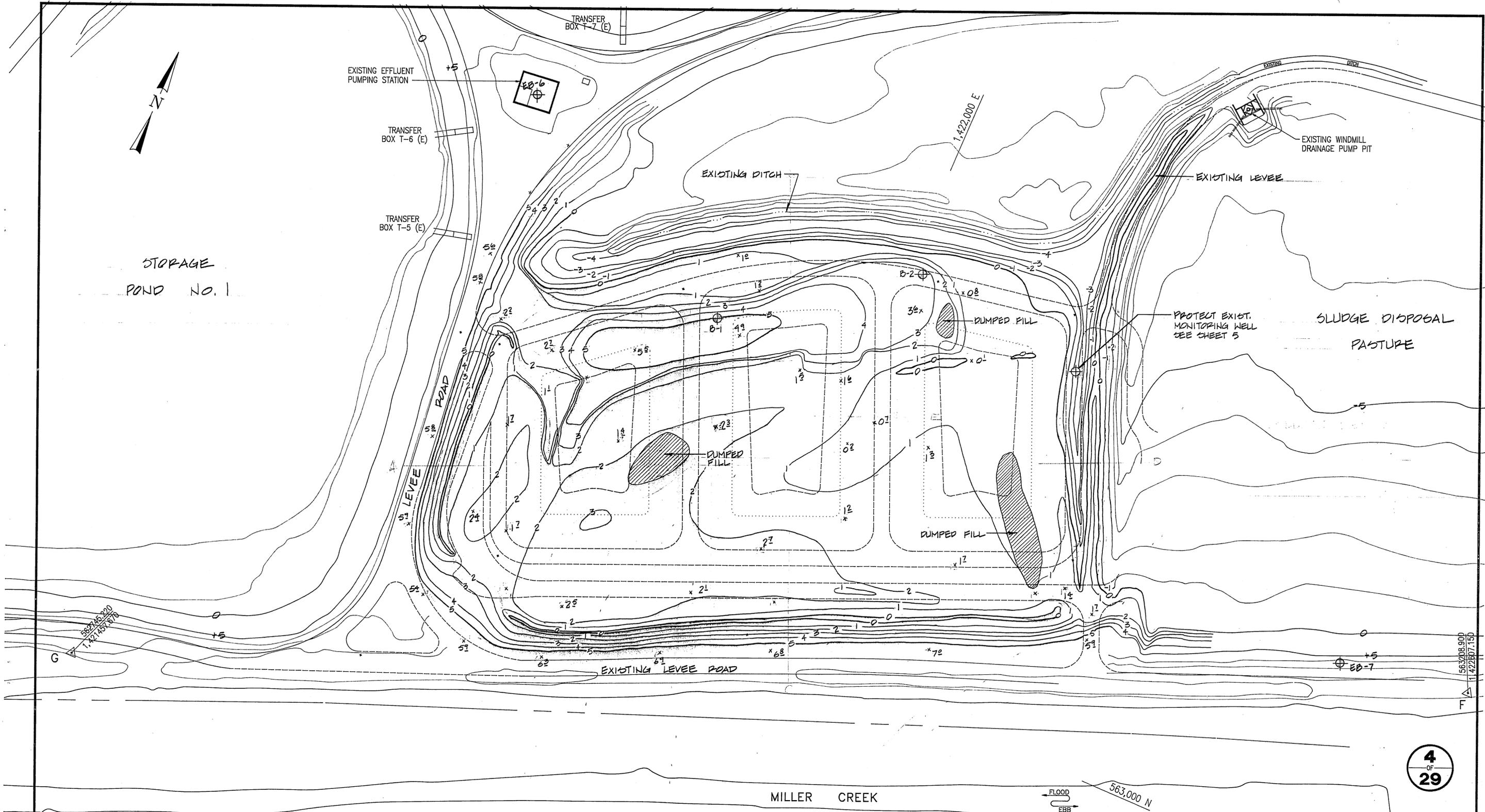
- LINE OF DITCH (E)
- PROPERTY LINE - - - - -
- EXISTING PIPELINE ————
- NEW PIPELINE ————
- EXISTING PG&E TRANSMISSION LINES

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These as-built or record drawings (or corrected specifications) have been prepared, in part, on the basis of information compiled and furnished by others. The Engineer will not be responsible for any errors or omissions which have been incorporated into this document as a result.

NOTES:
1. SEE SHEET 21 FOR LEVEE ROAD REPAIR.

AS BUILT		SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California		
SLUDGE STORAGE POND IMPROVEMENTS		
SITE PLAN		
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA		
Drawn by: PAM, KR	Job No.: 5498	Scale: 1" = 200'
Checked by: ELM/WEN	5498ELST\PLOT1	Date: JUNE 1991



4
OF
29

MILLER CREEK

FLOOD
EBB

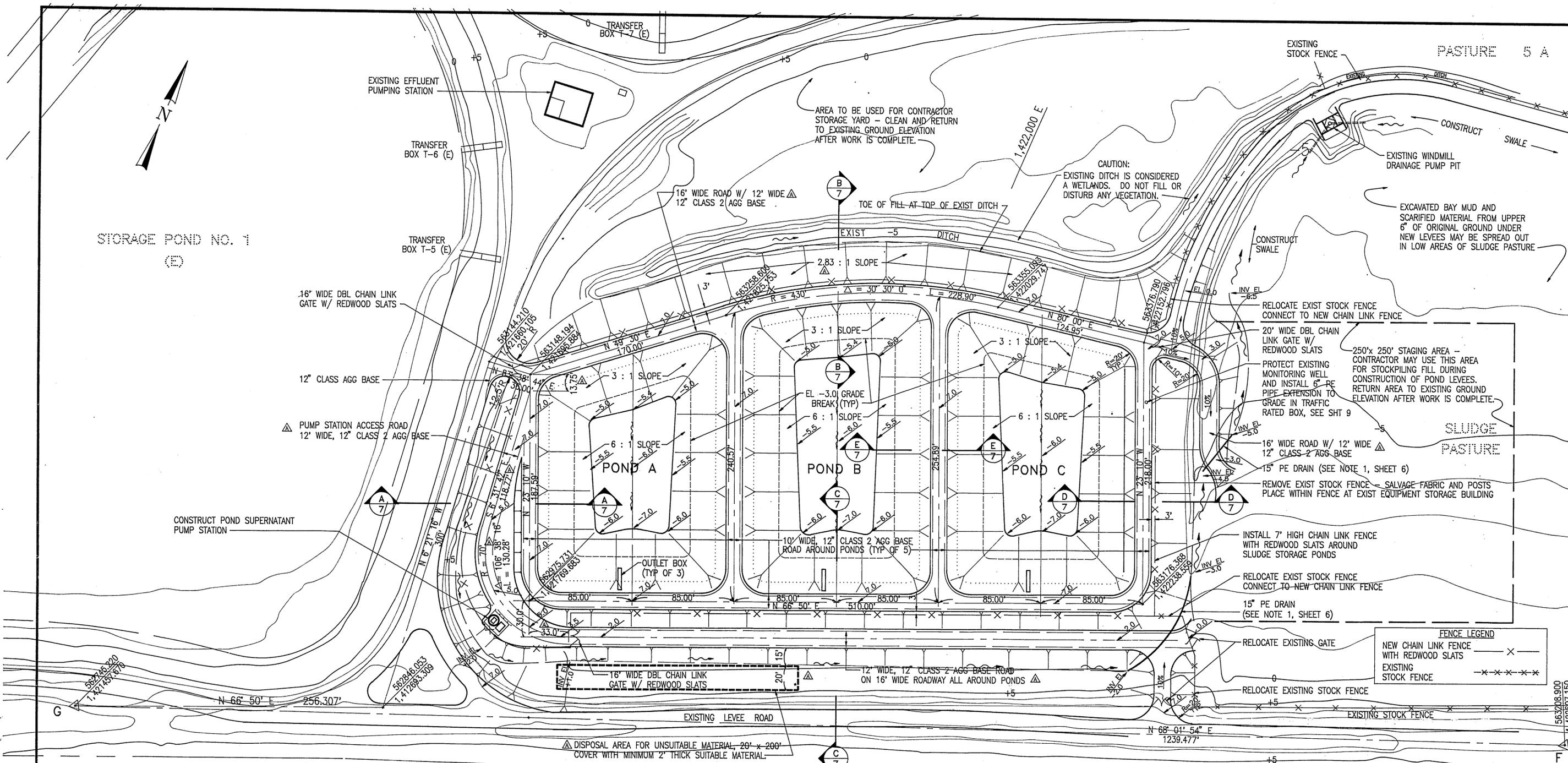
563,000 N

NOTES:
1. SEE SPECS FOR SOIL BORING LOGS

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LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California		
SLUDGE STORAGE POND IMPROVEMENTS		
SLUDGE STORAGE PONDS EXISTING TOPOGRAPHY		
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA		
Drawn by: PAM, KR	Job No.: 5498	Scale: 1" = 40'
Checked by: WEN	5498POND\ PLOT1	Date: JUNE 1991

AS BUILT SEPT 1993



STORAGE POND NO. 1
(E)

PASTURE 5 A

SLUDGE PASTURE

FENCE LEGEND
NEW CHAIN LINK FENCE WITH REDWOOD SLATS — X —
EXISTING STOCK FENCE — X — X — X — X —

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OF
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MILLER CREEK

NOTES:

1. ALL SLOPES SHALL BE 3 : 1 UNLESS OTHERWISE SHOWN
2. UNSUITABLE MATERIAL, OTHER THAN ORGANIC MATERIAL FROM UPPER 6" OF ORIGINAL GROUND, MAY EITHER BE DISPOSED OF BY BURYING IT ON-SITE AT THE LOCATION SHOWN OR BY DISPOSAL AT A LEGAL DISPOSAL SITE.
3. THE EXCAVATED BAY MUD AND SCARIFIED MATERIAL FROM THE UPPER 6" OF ORIGINAL GROUND UNDER NEW LEVEES WHICH IS SPREAD OUT IN LOW AREAS OF THE SLUDGE PASTURE SHALL BE GRADED SMOOTH TO A MAXIMUM 0.005 PERCENT GRADE TOWARD THE SWALE DRAINAGE DITCH USING LASER-GUIDED GRADING CONTROL.

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REVISD ROADWAY WIDTHS AROUND PONDS, ADDED DISPOSAL SITE, REVISED NOTES 2 AND 3 (ADD #1) 8/16/91

LAS GALLINAS VALLEY SANITARY DISTRICT, Marin County, California

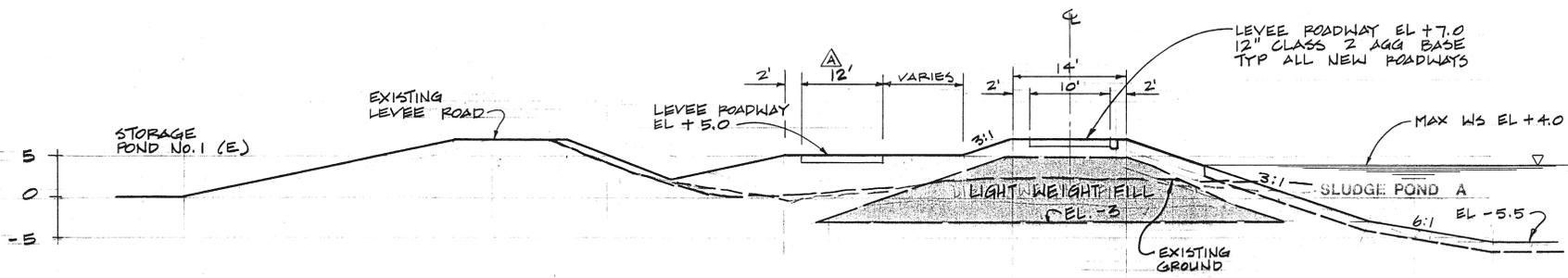
SLUDGE STORAGE POND IMPROVEMENTS

SLUDGE STORAGE PONDS GRADING LAYOUT

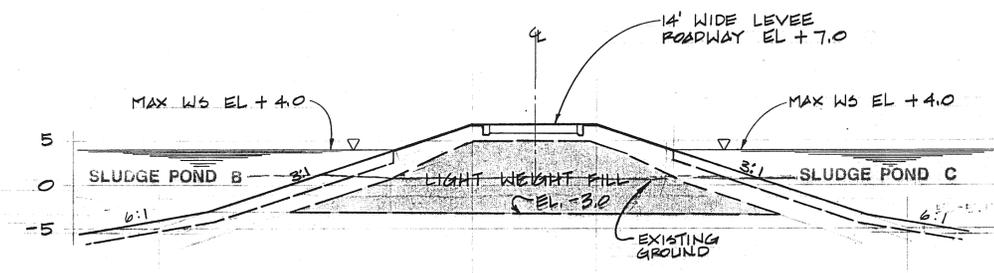
NUTE ENGINEERING
SAN RAFAEL, CALIFORNIA

Drawn by: PAM, KR Job No.: 5498 Scale: 1" = 40'
Checked by: WEN 5498POND\ PLOT1 Date: JUNE 1991

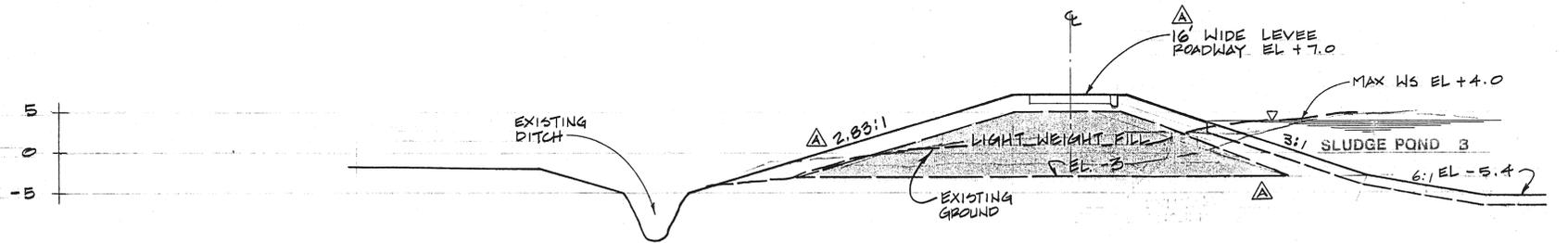
As BUILT SEPT 93



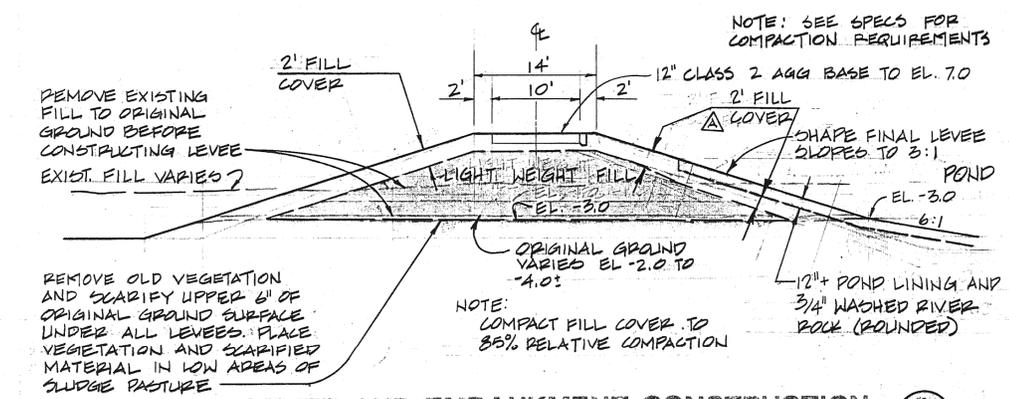
SECTION A
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



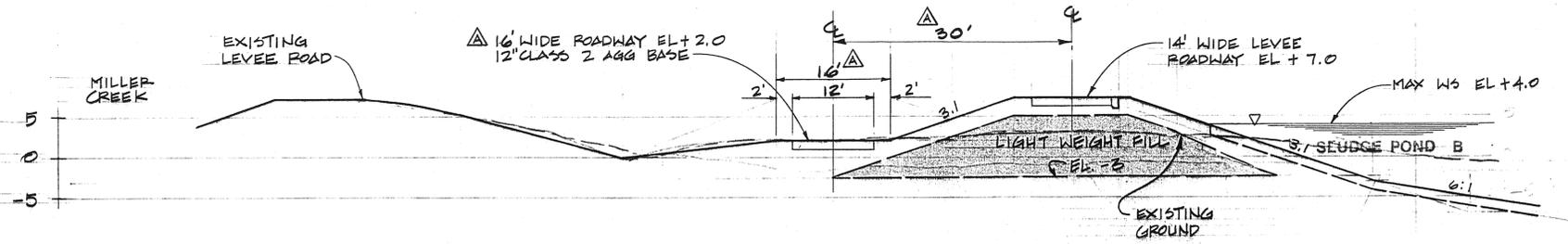
SECTION E
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



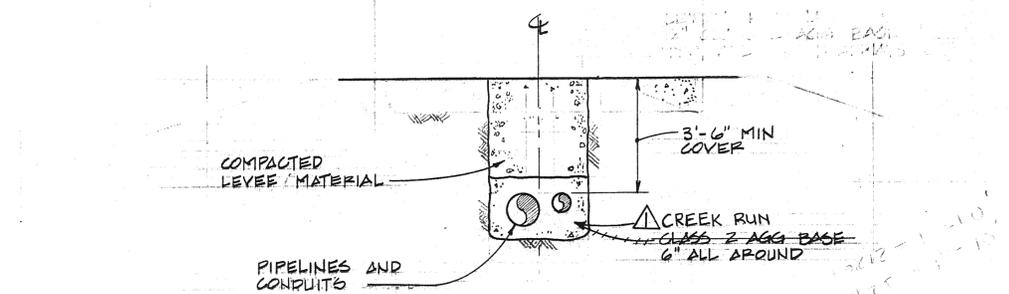
SECTION B
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



LEVEE AND EMBANKMENT CONSTRUCTION
SCALE: HORIZ: 1" = 10'
VERT: 1" = 10'

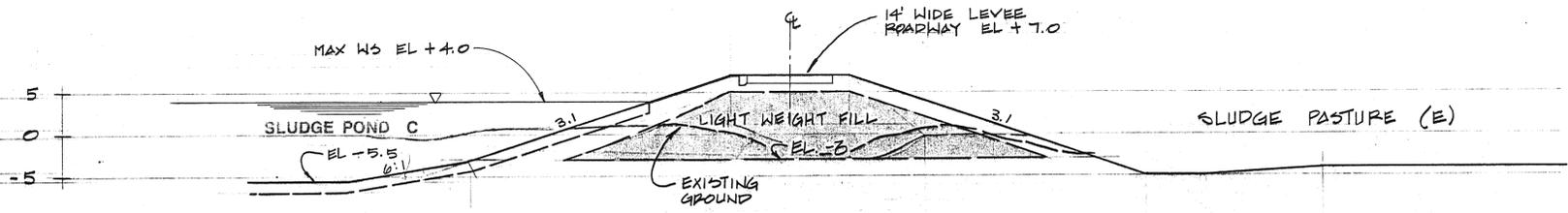


SECTION C
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



- NOTE:
1. PROVIDE 10' LONG COMPACTED CLAY (P₁ ≥ 20) PLUGS AROUND PIPE & IN TRENCH BACKFILL @ 100' INTERVALS
 2. ALL PIPES PENETRATING LEVEES & TO & FROM STRUCTURES SHALL BE BACKFILLED WITH COMPACTED CLAY (P₁ ≥ 20)

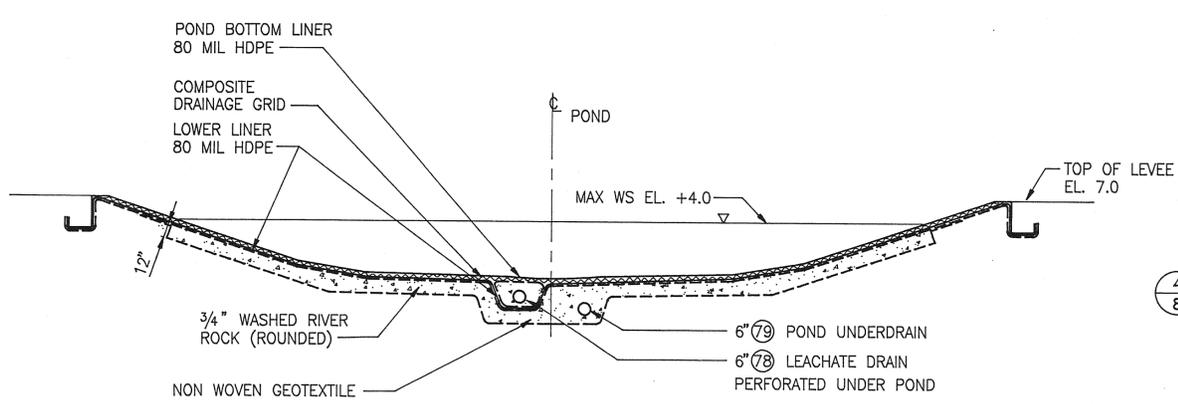
TYPICAL TRENCH SECTION
N.T.S.



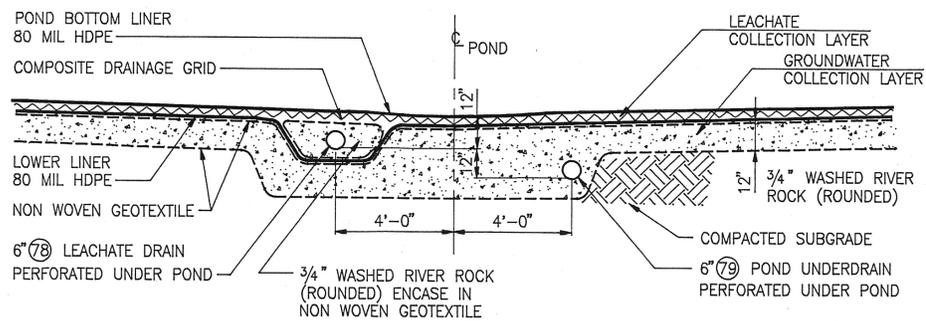
SECTION D
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

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OF
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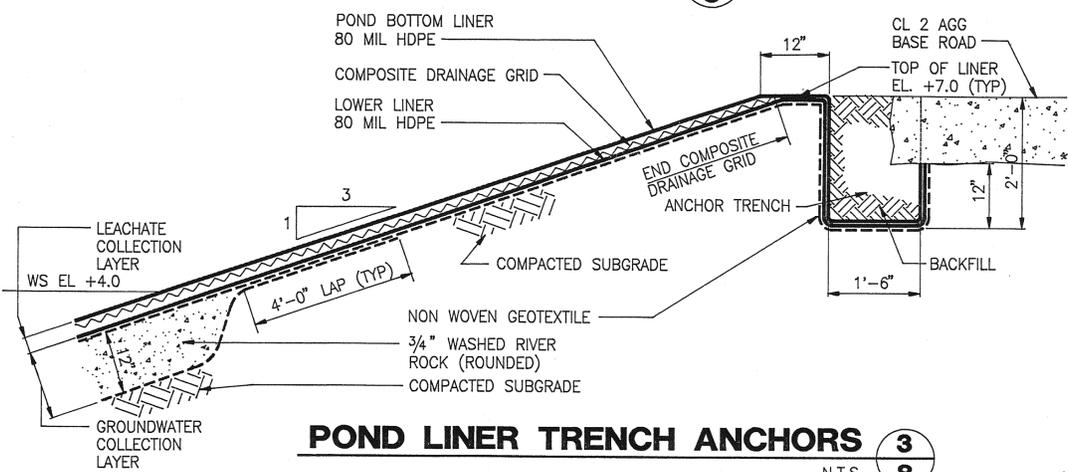
AS BUILT	SEPT. 1993	LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS			
SLUDGE STORAGE PONDS			
CROSS SECTIONS			
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA			
Drawn by: LE	Job No.: 5498	Scale: AS SHOWN	
Checked by: WEN		Date: JUNE 1991	



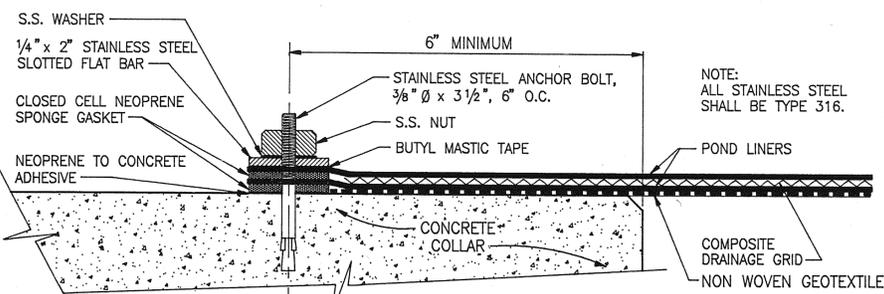
POND LINER DETAIL 1
N.T.S. 1/8



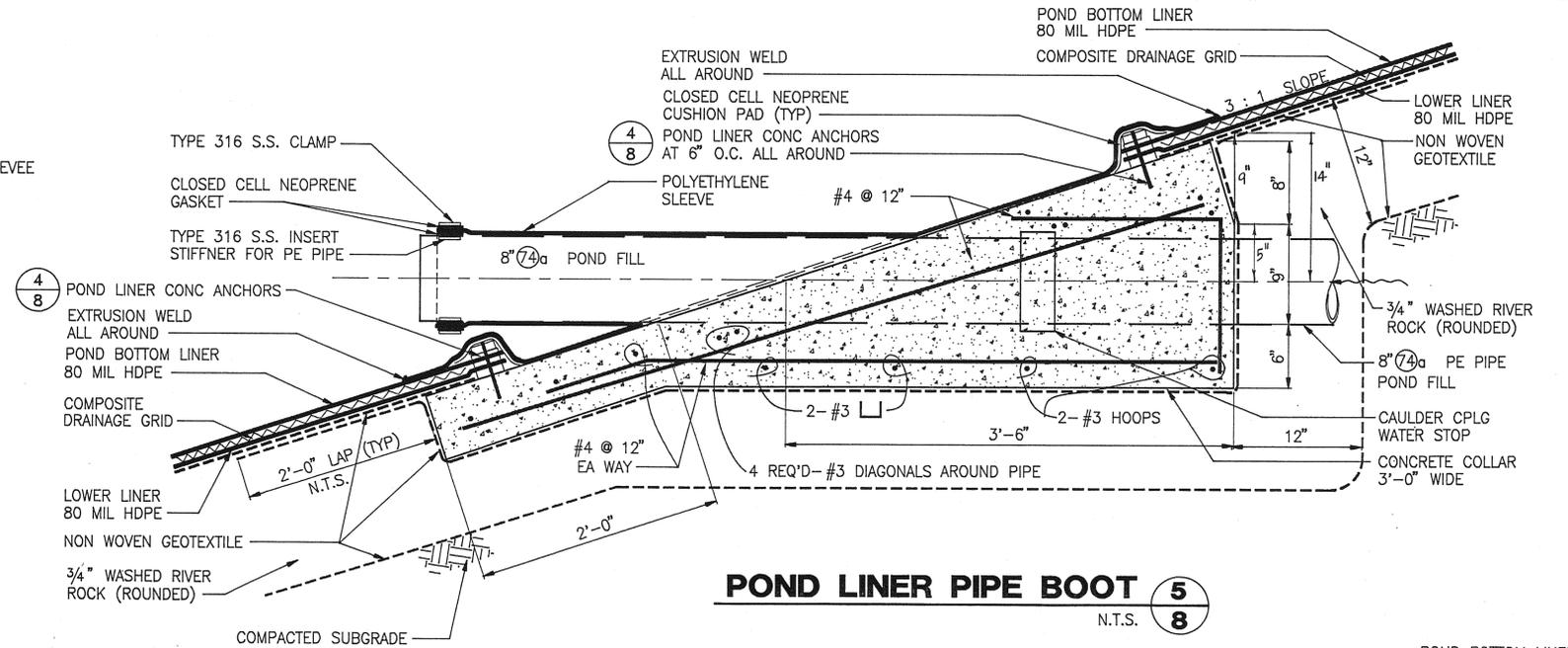
CENTER DRAIN 2
N.T.S. 2/8



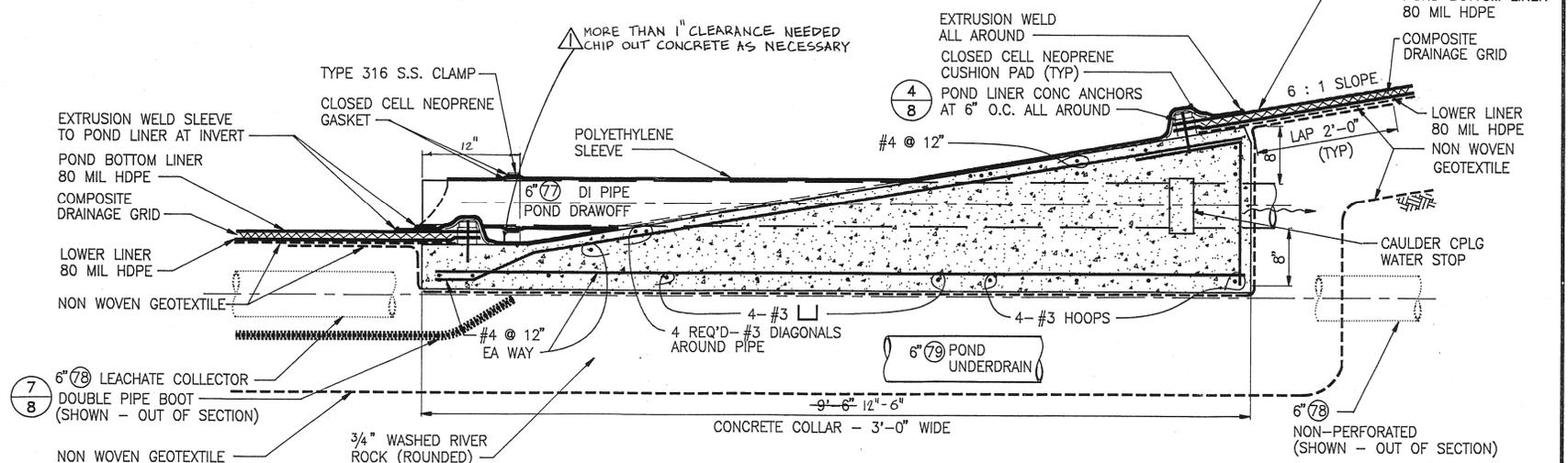
POND LINER TRENCH ANCHORS 3
N.T.S. 3/8



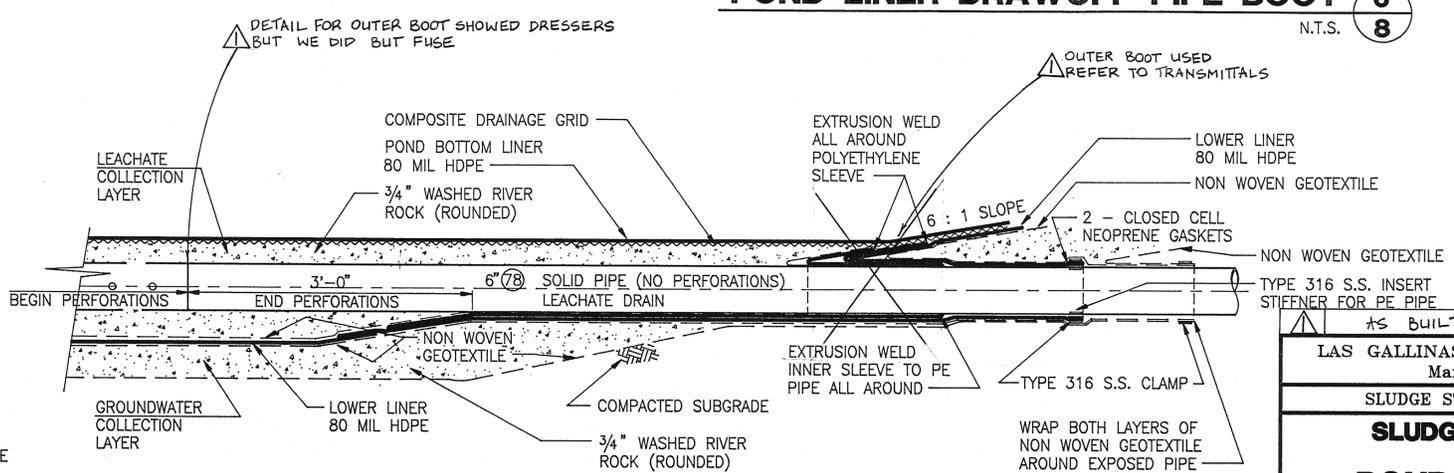
POND LINER CONCRETE ANCHORING 4
N.T.S. 4/8



POND LINER PIPE BOOT 5
N.T.S. 5/8



POND LINER DRAW-OFF PIPE BOOT 6
N.T.S. 6/8

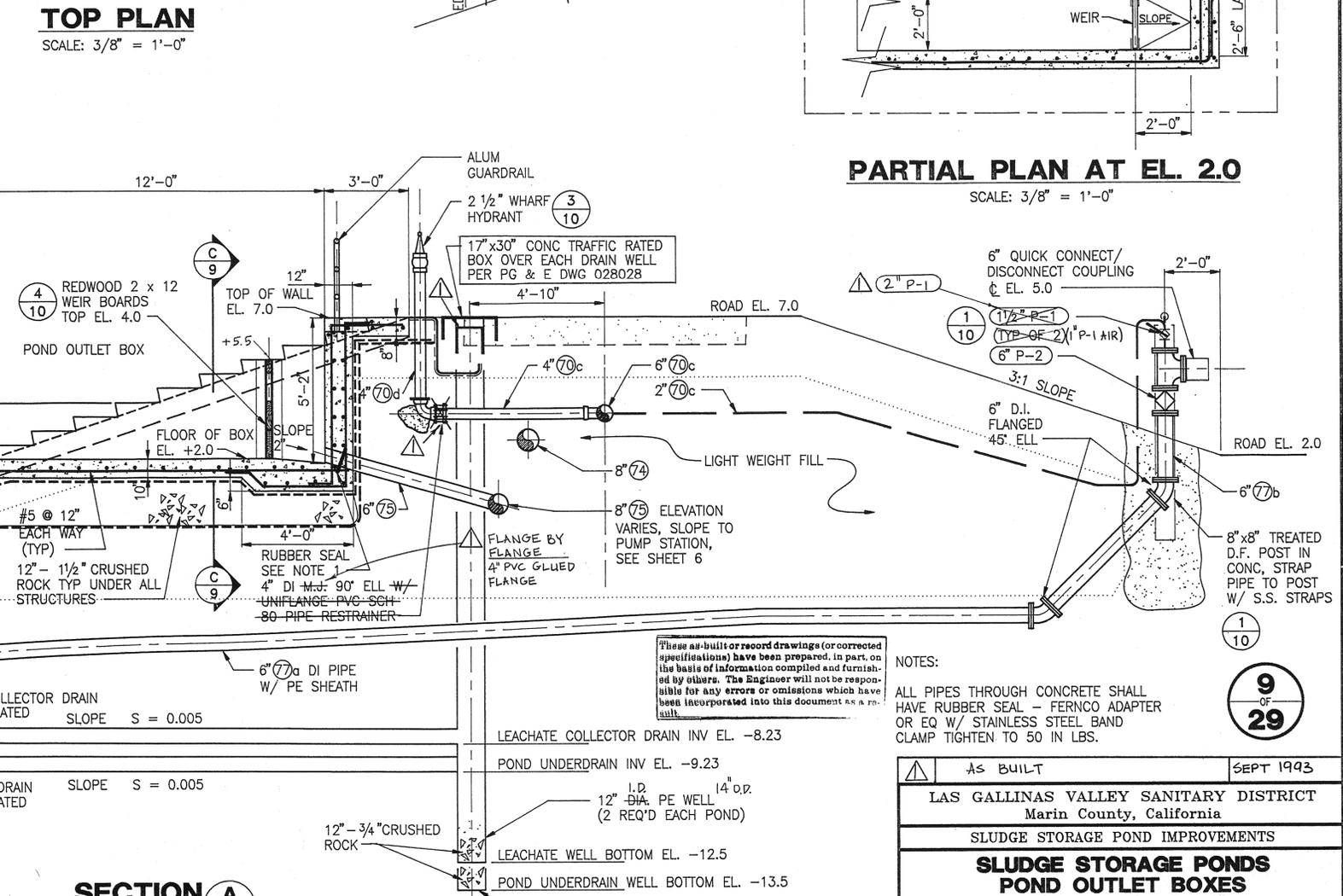
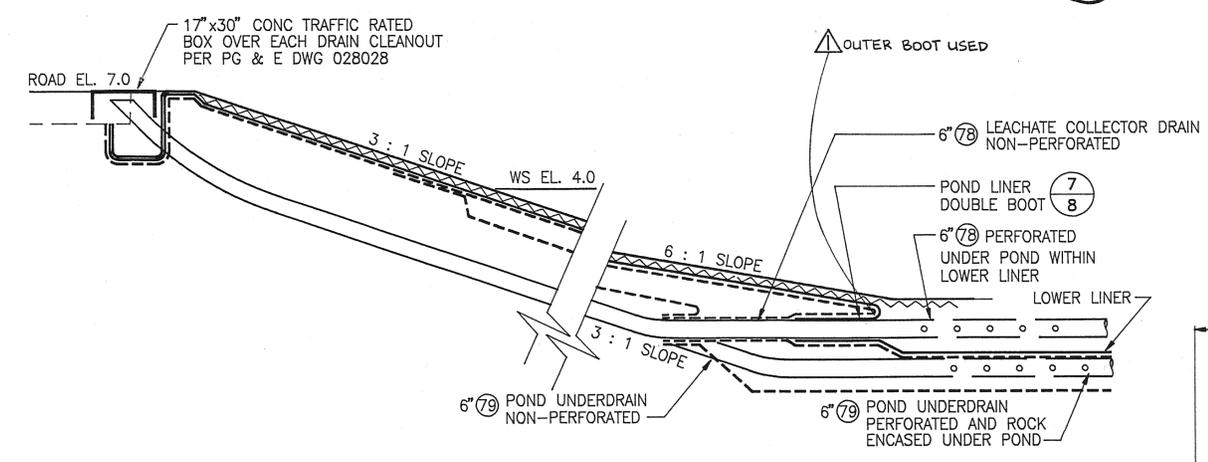
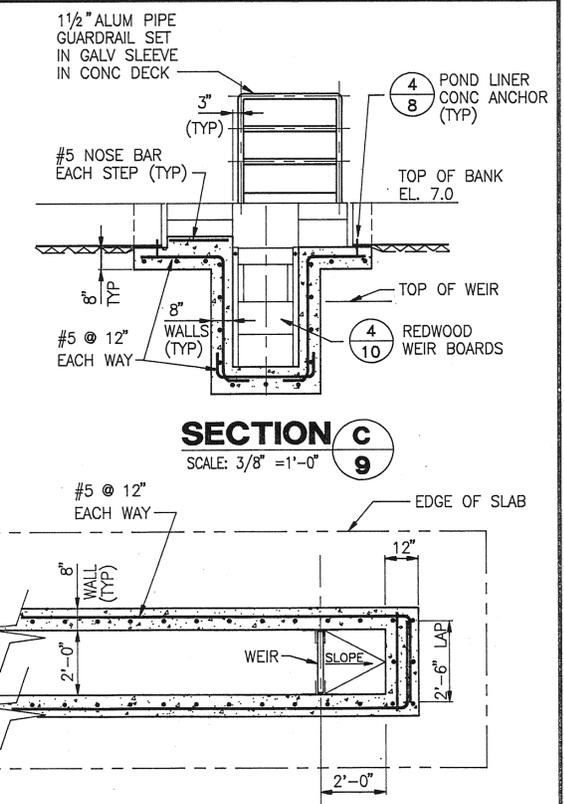
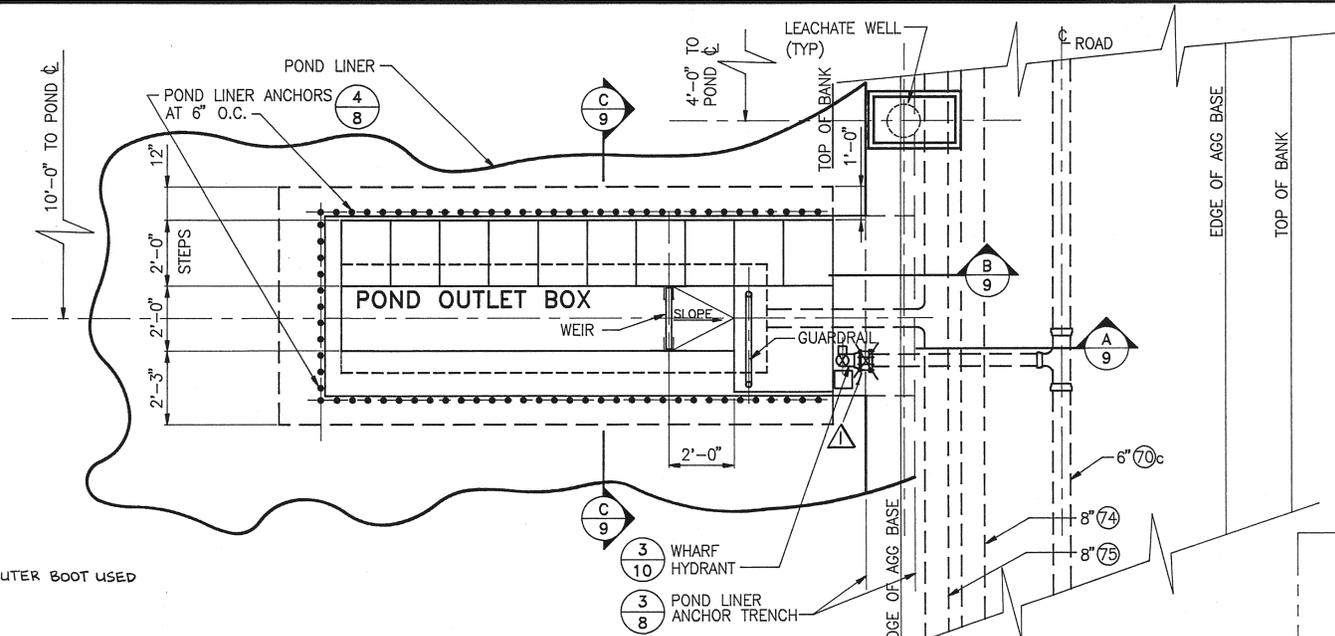
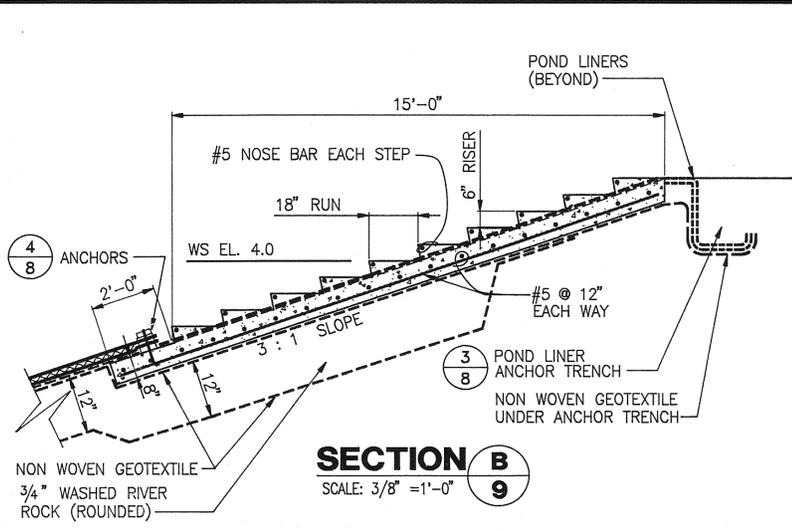


LEACHATE COLLECTOR DOUBLE PIPE BOOT 7
N.T.S. 7/8

These as-built or record drawings (or corrected specifications) have been prepared, in part, on the basis of information compiled and furnished by others. The Engineer will not be responsible for any errors or omissions which have been incorporated into this document as a result.

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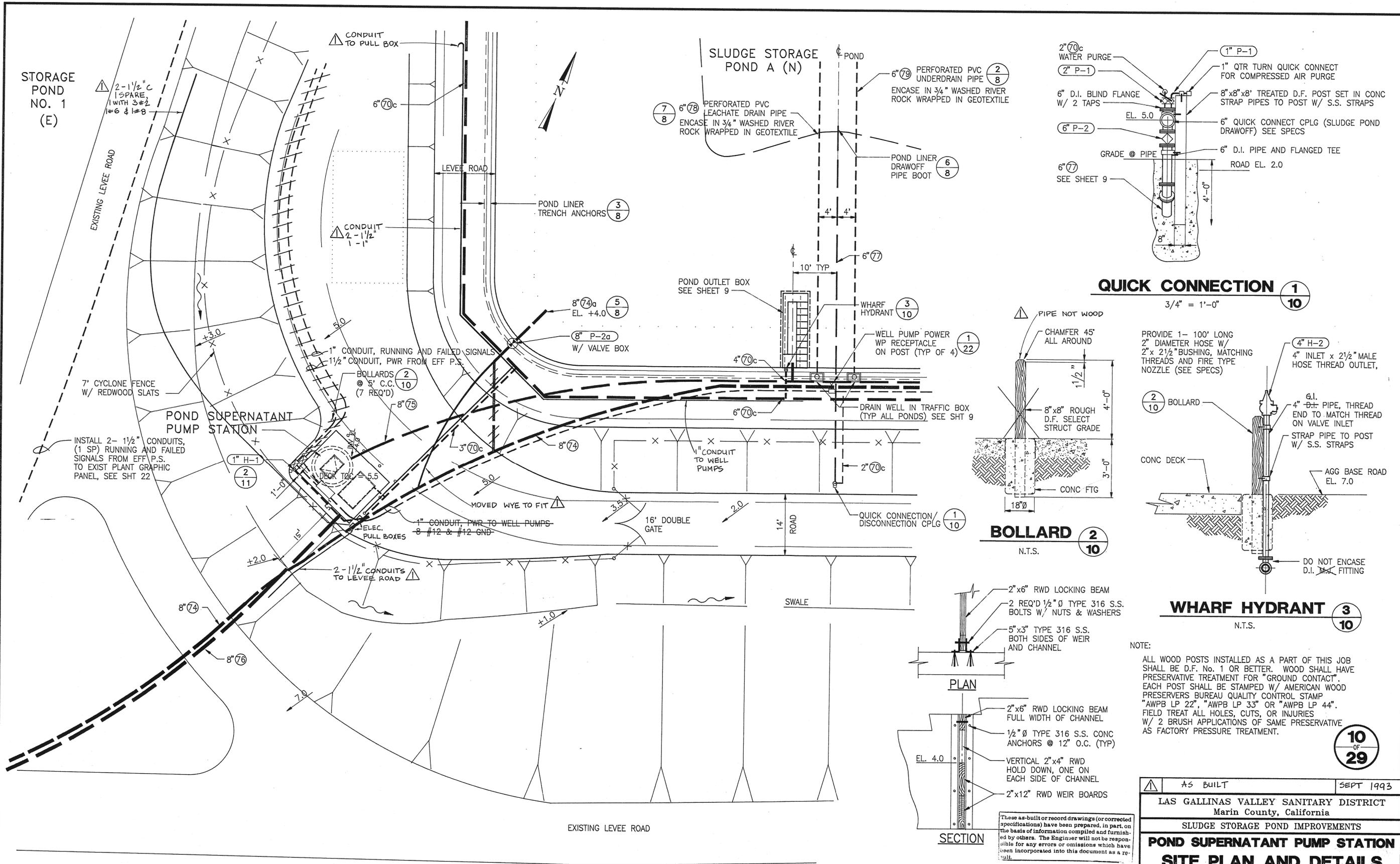
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LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California			
SLUDGE STORAGE POND IMPROVEMENTS			
SLUDGE STORAGE PONDS POND LINER POND LINER DETAILS			
NUN ENGINEERING SAN RAFAEL, CALIFORNIA			
Drawn by: PAM, KR	Job No.: 5498	Scale: AS SHOWN	
Checked by: WEN	5498DLS/PL072	Date: JUNE 1991	



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NOTES:
ALL PIPES THROUGH CONCRETE SHALL HAVE RUBBER SEAL - FERNCO ADAPTER OR EQ W/ STAINLESS STEEL BAND CLAMP TIGHTEN TO 50 IN LBS.

AS BUILT	SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS	
SLUDGE STORAGE POND POND OUTLET BOXES DETAILS	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: PAM, KR	Job No.: 5498
Checked by: WEN	Scale: AS SHOWN
	Date: JUNE 1991



SITE PLAN
SCALE: 1" = 10'

REDWOOD WEIR
3/4" = 1'-0"

QUICK CONNECTION

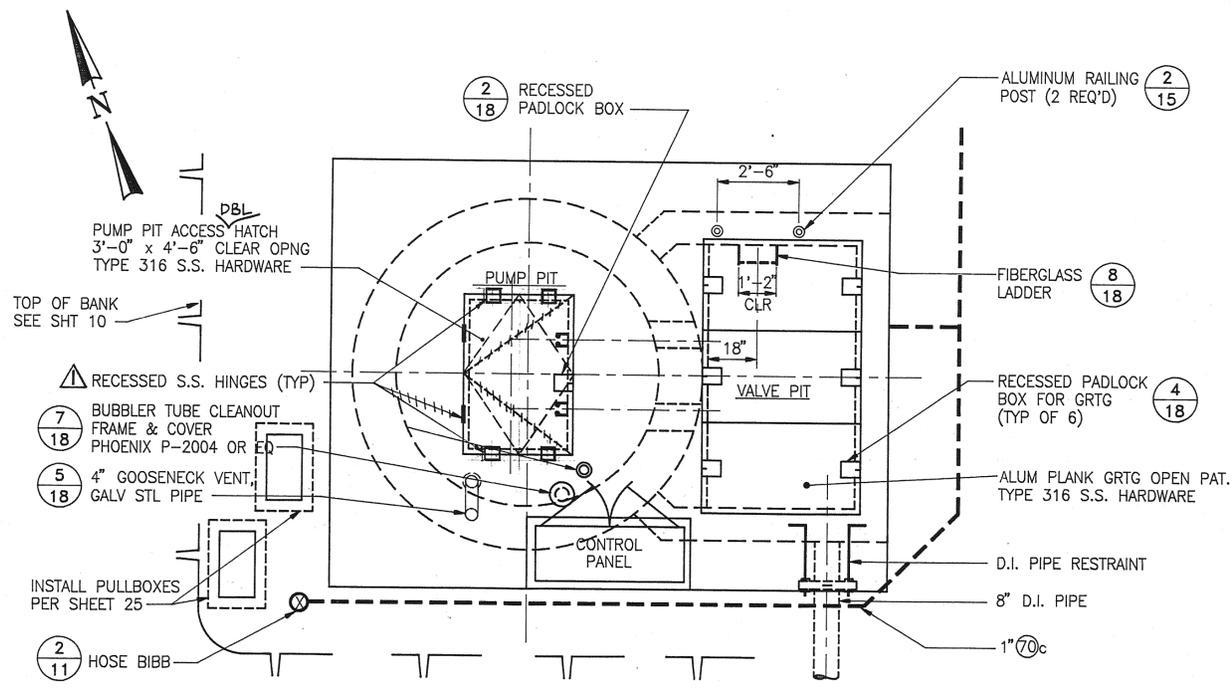
BOLLARD
N.T.S.

WHARF HYDRANT
N.T.S.

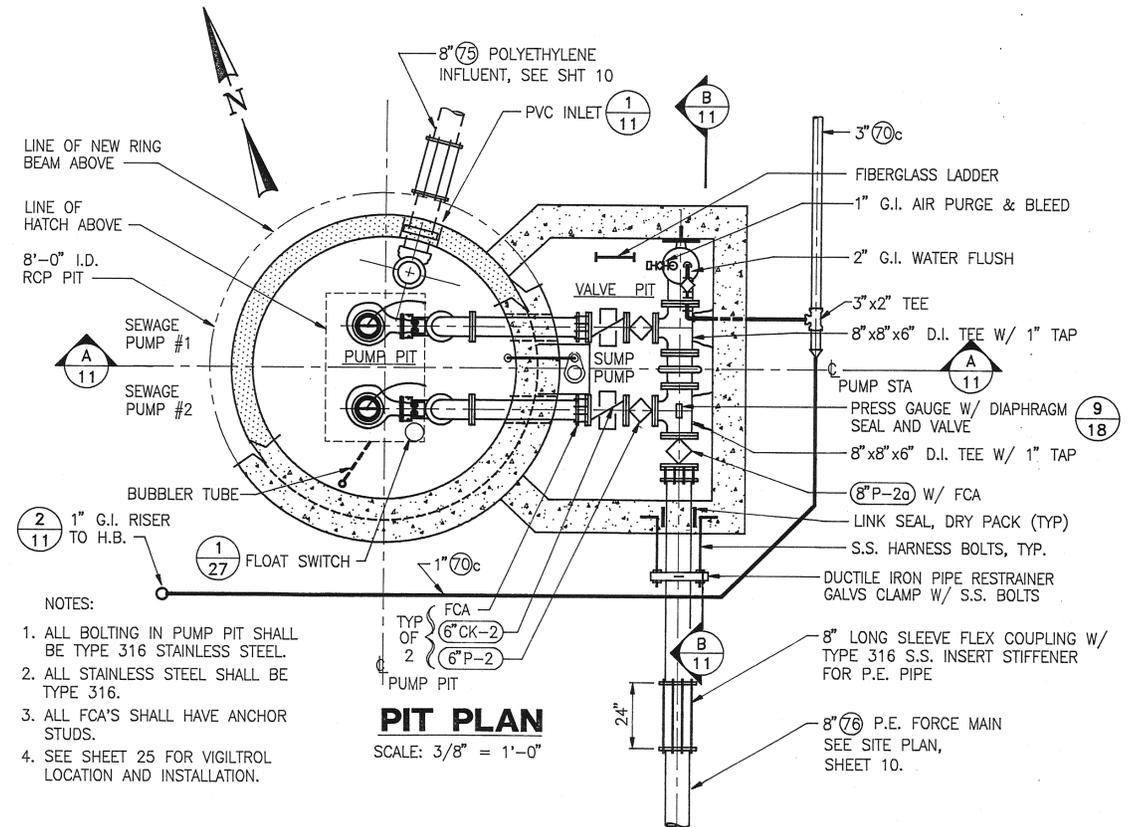
NOTE:
ALL WOOD POSTS INSTALLED AS A PART OF THIS JOB SHALL BE D.F. No. 1 OR BETTER. WOOD SHALL HAVE PRESERVATIVE TREATMENT FOR "GROUND CONTACT". EACH POST SHALL BE STAMPED W/ AMERICAN WOOD PRESERVERS BUREAU QUALITY CONTROL STAMP "AWPB LP 22", "AWPB LP 33" OR "AWPB LP 44". FIELD TREAT ALL HOLES, CUTS, OR INJURIES W/ 2 BRUSH APPLICATIONS OF SAME PRESERVATIVE AS FACTORY PRESSURE TREATMENT.

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AS BUILT	SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS	
POND SUPERNATANT PUMP STATION SITE PLAN AND DETAILS	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: PAM	Job No.: 5498
Checked by: WEN	5498PS-S-PL0T2
Scale: AS SHOWN	Date: JUNE 1991

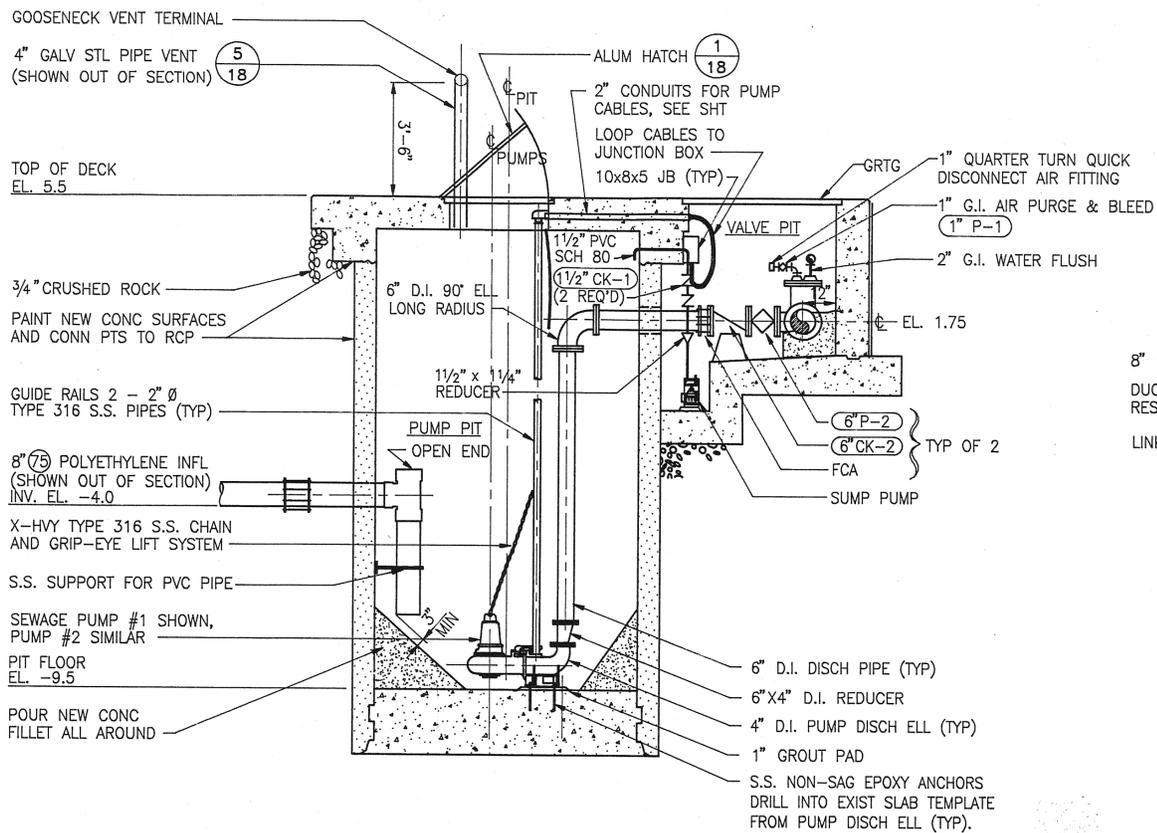


DECK PLAN
SCALE: 3/8" = 1'-0"

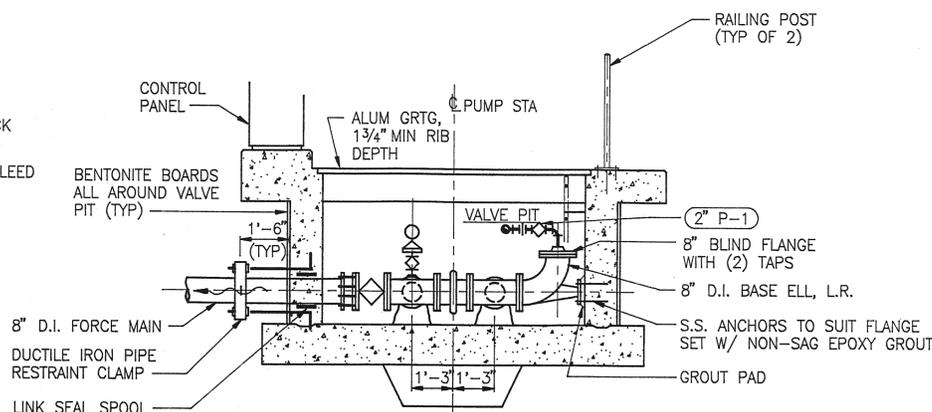


- NOTES:
1. ALL BOLTING IN PUMP PIT SHALL BE TYPE 316 STAINLESS STEEL.
 2. ALL STAINLESS STEEL SHALL BE TYPE 316.
 3. ALL FCA'S SHALL HAVE ANCHOR STUDS.
 4. SEE SHEET 25 FOR VIGILTROL LOCATION AND INSTALLATION.

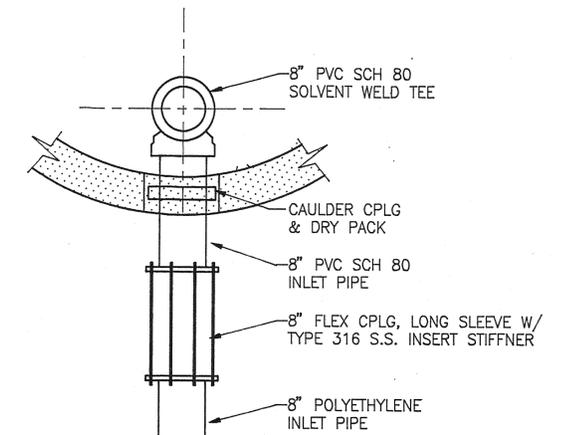
PIT PLAN
SCALE: 3/8" = 1'-0"



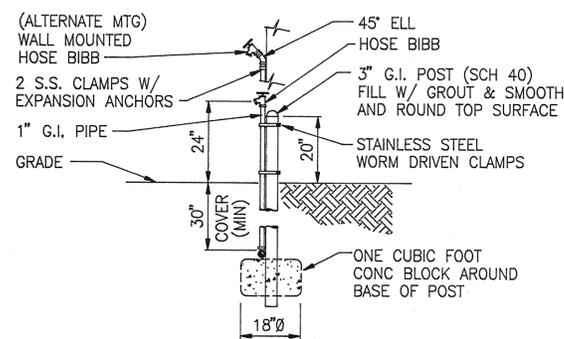
SECTION A
SCALE: 3/8" = 1'-0"



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



PVC INLET TEE
SCALE: 3/4" = 1'-0"

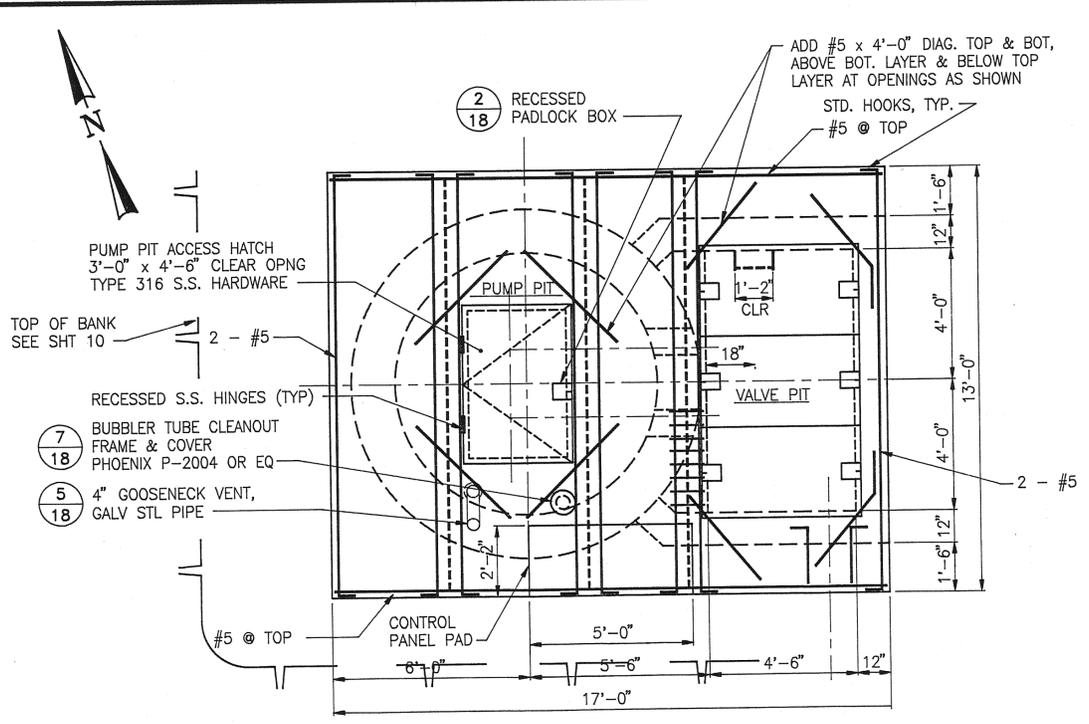


HOSE BIBB
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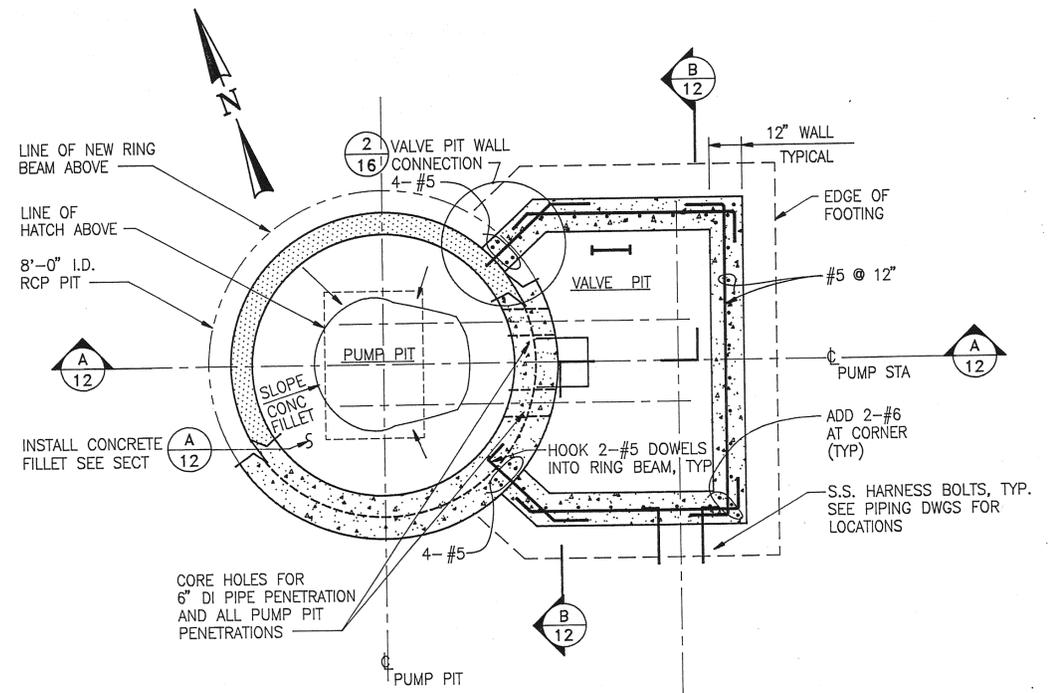
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OF
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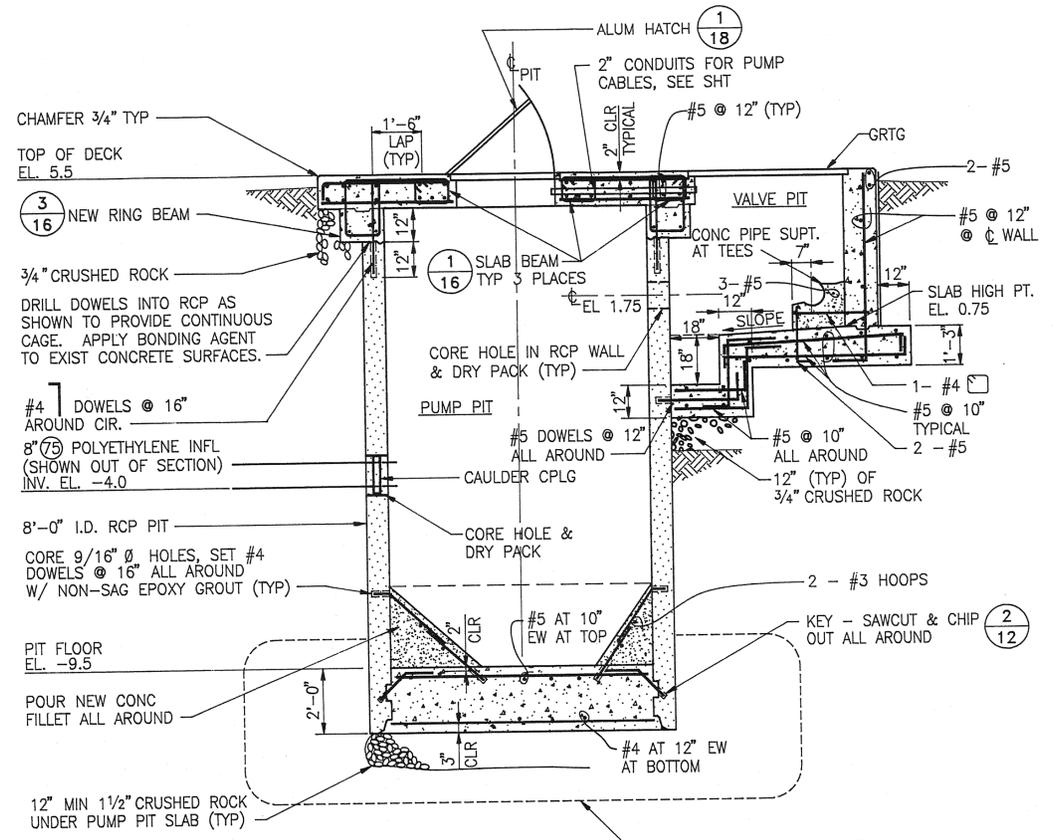
AS BUILT	SEPT 1993
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
SLUDGE STORAGE POND IMPROVEMENTS	
POND SUPERNATANT PUMP STATION MECHANICAL PLANS, SECTIONS & DETAILS	
NUNTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: PAM, KR	Job No.: 5498
Checked by: WEN	Scale: AS SHOWN
	Date: JUNE 1991



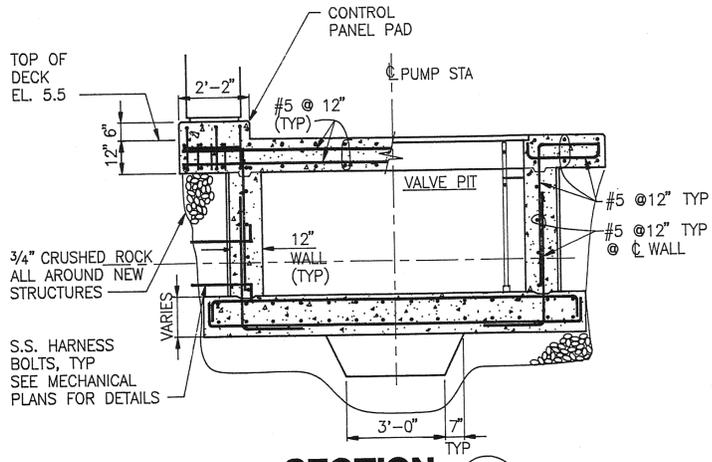
DECK PLAN
SCALE: 3/8" = 1'-0"



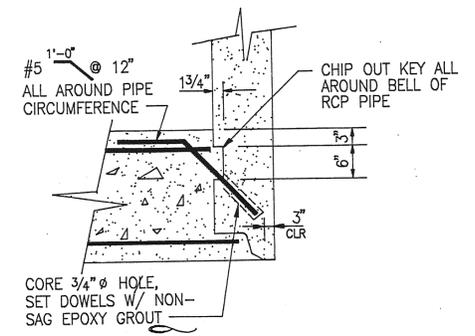
PIT PLAN
SCALE: 3/8" = 1'-0"



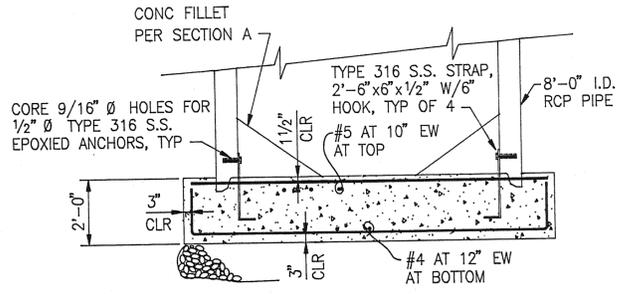
SECTION A
SCALE: 3/8" = 1'-0"



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



RCP KEY
SCALE: 3/4" = 1'-0"



PUMP PIT FLOOR ALT. #2
SCALE: 3/8" = 1'-0"

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AS BUILT		SEPT 1993	
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California			
SLUDGE STORAGE POND IMPROVEMENTS			
POND SUPERNATANT PUMP STATION STRUCTURAL PLANS, SECTIONS & DETAILS			
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA			
Drawn by: PAM, KR	Job No.: 549B	Scale: AS SHOWN	
Checked by: WEN	549BPS-2/PLOT1	Date: JUNE 1991	