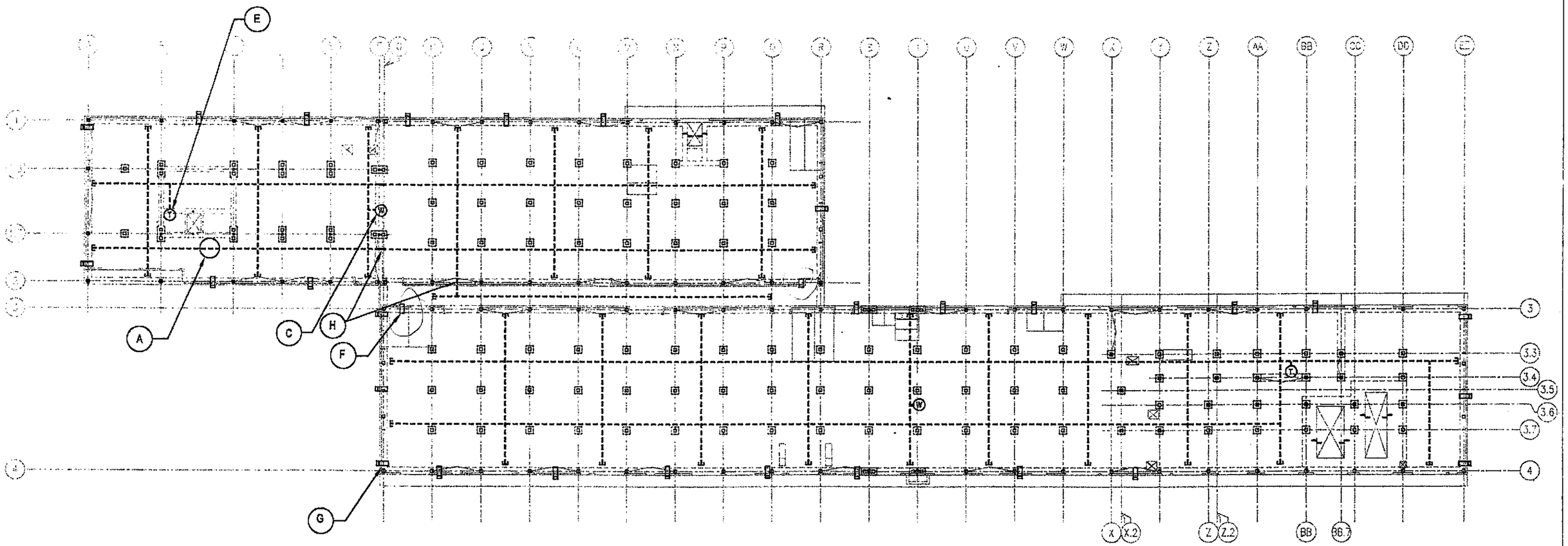

1 SUBFLOOR SOIL GAS VENT PIPING SCHEMATIC
SCALE: 1" = 20'-0"

LEGEND

- 4" DIAMETER SCHEDULE 40 SOLID PVC PIPE
- 4" DIAMETER SCHEDULE 40 PERFORATED PVC PIPE
- END CAP
- PERIMETER GRADE BEAM VENT
- INTERIOR GRADE BEAM VENT
- (W) WIND ASSISTED RISER; INSTALL IN DESIGNATED WALL (SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION)
- (T) UNDERSLAB SOIL GAS TEST PORT (SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION)
- (A) SEE DETAIL A, SHEET MT2.01

KEY PLAN

Michael Willis Architects
471 Ninth Street
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94607
tel: (510) 287-9710

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery Street, Suite 1300
San Francisco, California
(415) 955-3040

REGISTERED PROFESSIONAL ENGINEER — RONALD DUNCAN THOMPSON — No. PE 19,846 — CIVIL — STATE OF CALIFORNIA

AA#-SHT.DWG W.O.# 1=1 01-01-98 10:00AM

REFERENCES:
PLANS AA ....
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

NO.	REVISIONS	DATE	APP'D

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ PROJECT PLANNING DEPARTMENT

DRAWN GEL
DESIGNED DDT — PE 19,846 — REG. ENGINEER NO.
CHECKED DDT — PE 19,846 — REG. ENGINEER NO.
REVIEWED DDT — PE 19,846 — REG. ENGINEER NO.

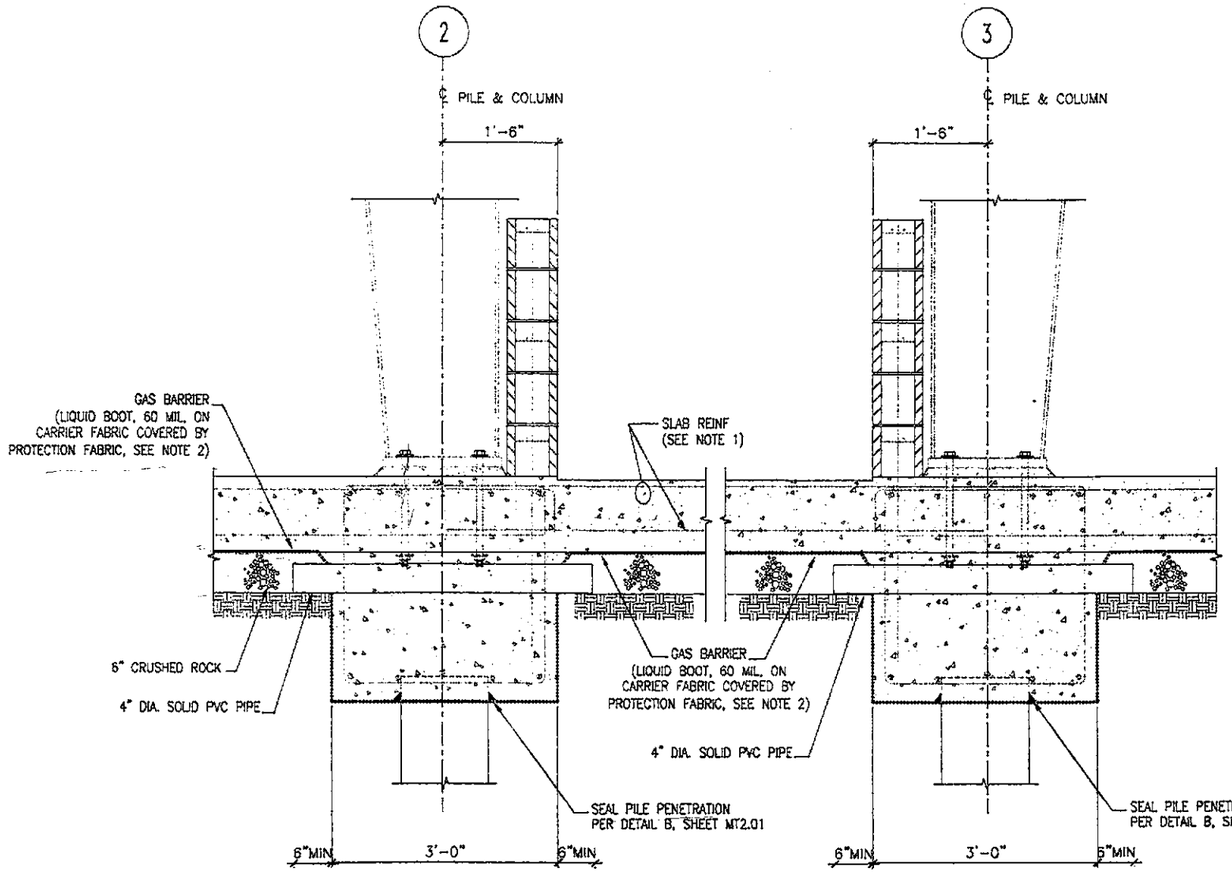
PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER ____ C 23287 REG. ENGINEER NO.
APPROVED ____ C 33213 REG. ENGINEER NO.
RECOMMENDED ____ C 43841 REG. ENGINEER NO.

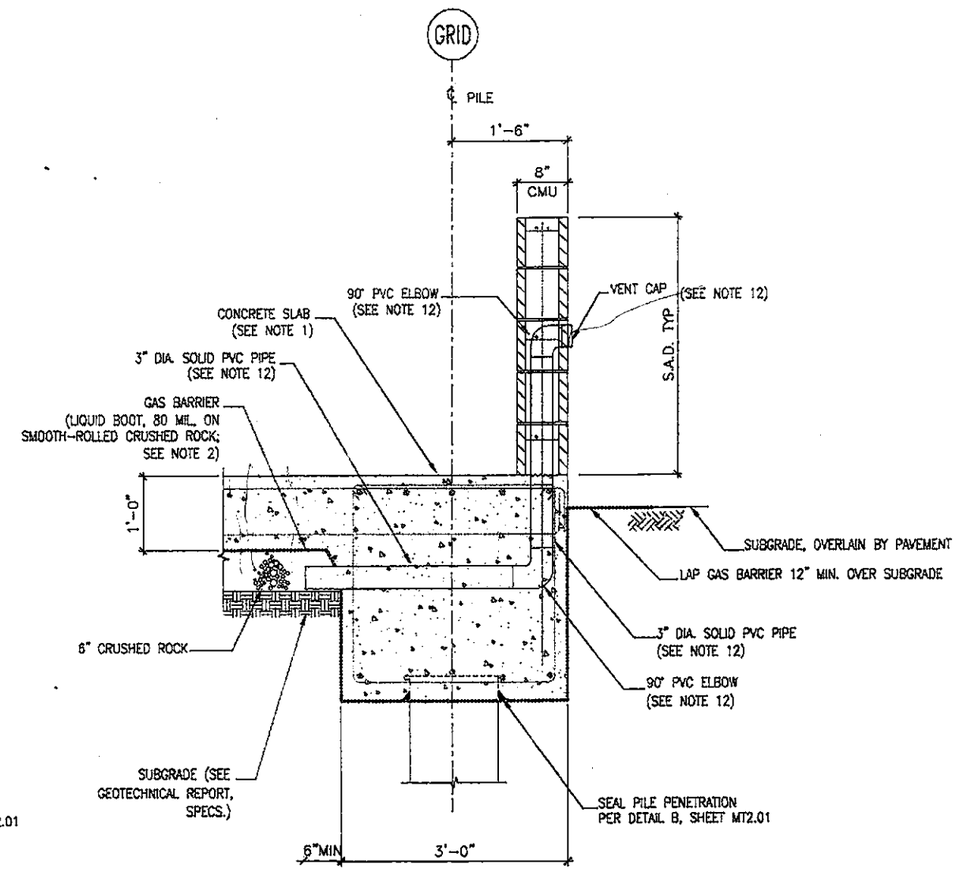
MARITIME & 7TH STREET SITE
PORT FIELD SUPPORT SERVICES COMPLEX
SOIL GAS MITIGATION SYSTEM - PLAN

DATE: 02-04-03
SCALE:
SHEET 1/8 OF 2 SHEETS
MT1.01 AA-3827

CAUTION: THIS PLAN MAY BE REDUCED 9 1" 4" ORIGINAL SCALE



F INTERIOR VENT THROUGH INTERIOR GRADE BEAM
SCALE: 1" = 1'-0"



G EXTERIOR VENT THROUGH PERIMETER GRADE BEAM
SCALE: 1" = 1'-0"

AA#-SHT.DWG W.O.#
1=1 01-01-98 10:00AM

REFERENCES:
PLANS AA ....
FIELD BOOKS

"PORT OF OAKLAND DATUM"
IS 3.20' BELOW MEAN SEA LEVEL

CAUTION:
CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED _____ FACILITIES DEPARTMENT
REVIEWED _____ CONSTRUCTION DEPARTMENT
REVIEWED _____ PROJECT PLANNING DEPARTMENT

DRAWN GEL
DESIGNED DDT PE 19,846 REG. ENGINEER NO.
CHECKED DDT PE 19,846 REG. ENGINEER NO.
REVIEWED DDT PE 19,846 REG. ENGINEER NO.

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER _____ C 23297 REG. ENGINEER NO.
APPROVED _____ C 33213 REG. ENGINEER NO.
RECOMMENDED _____ C 43841 REG. ENGINEER NO.

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Treadwell&Rollo
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555 Montgomery Street, Suite 1300
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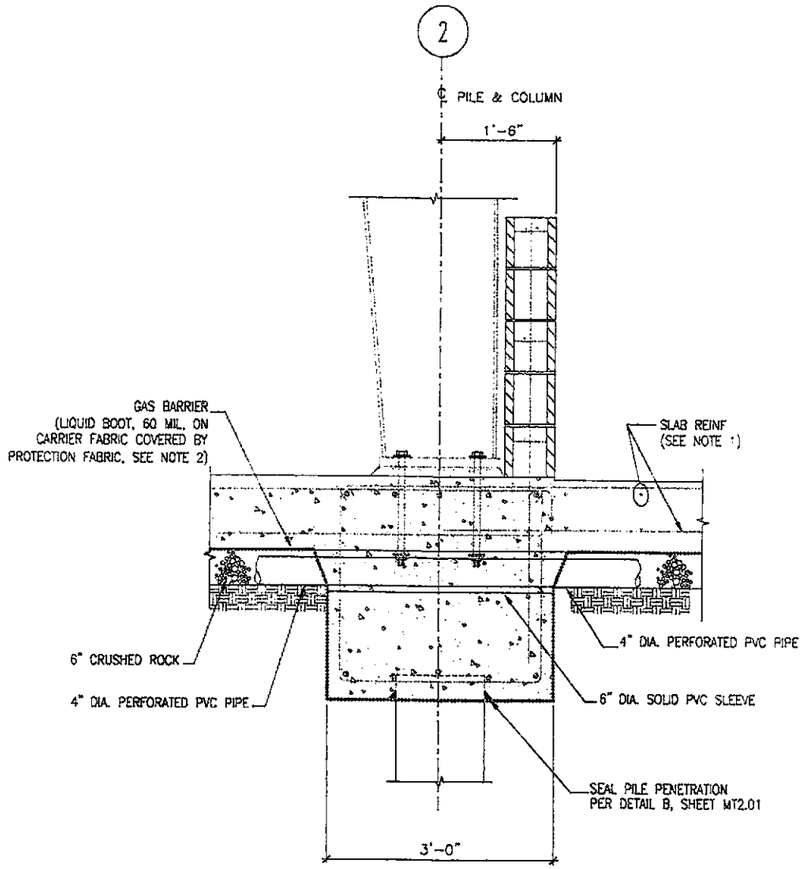
REGISTERED PROFESSIONAL ENGINEER
RICHARD DUNCAN TREADWELL
No. 19,846
CIVIL
9/30-5
STATE OF CALIFORNIA

MARITIME & 7TH STREET SITE

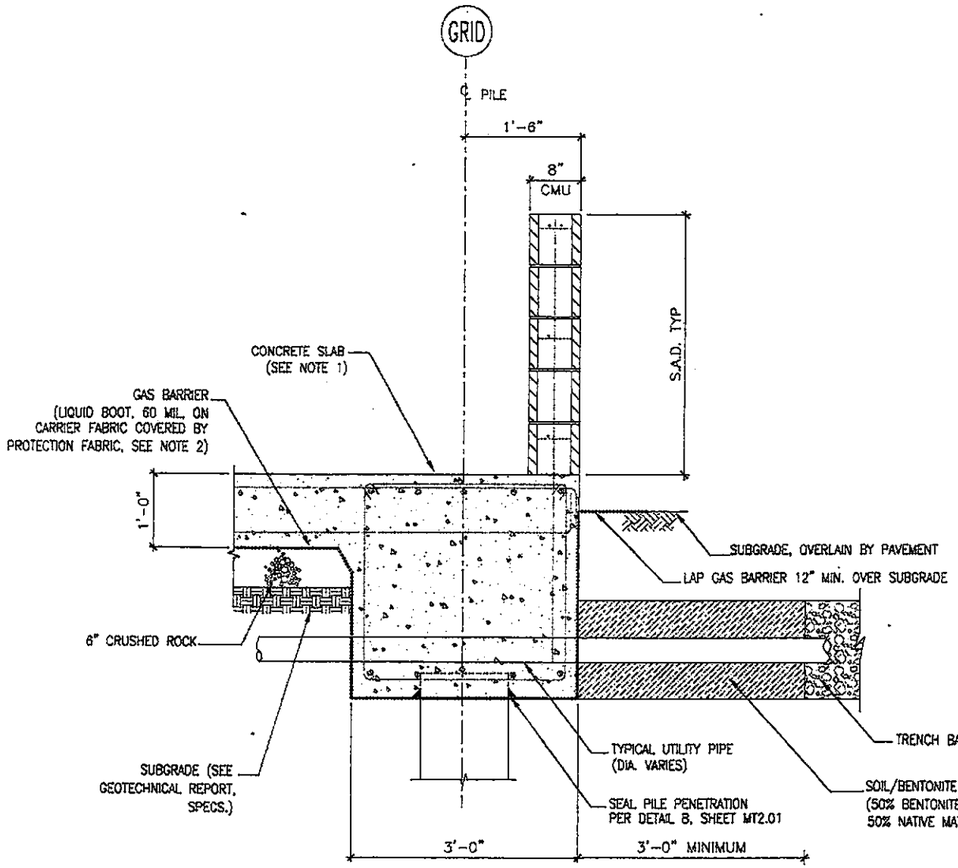
PORT FIELD SUPPORT
SERVICES COMPLEX

SOIL GAS MITIGATION SYSTEM - DETAILS

DATE 02-04-03
SCALE
SHEET 24 OF 203 SHEETS
MT2.02 AA-3827



H PIPING PENETRATION THROUGH INTERIOR GRADE BEAM
SCALE: 1" = 1'-0"



I TYPICAL UTILITY TRENCH CUTOFF @ PERIMETER GRADE BEAM
SCALE: 1" = 1'-0"

AA#-SHT.DWG W.O.#
1=1 01-01-98 10:00AM

REFERENCES:
PLANS AA ...
FIELD BOOKS

"PORT OF OAKLAND DATUM"
IS 3.20' BELOW MEAN SEA LEVEL

CAUTION:
CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED _____ FACILITIES DEPARTMENT
REVIEWED _____ CONSTRUCTION DEPARTMENT
REVIEWED _____ PROJECT PLANNING DEPARTMENT

DRAWN GEL
DESIGNED DDT PE 19,846 REG. ENGINEER NO.
CHECKED DDT PE 19,046 REG. ENGINEER NO.
REVIEWED DDT PE 19,848 REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER C 23297 REG. ENGINEER NO.
APPROVED C 33213 REG. ENGINEER NO.
RECOMMENDED C 43841 REG. ENGINEER NO.
H.L. FORSYTHE C 57326

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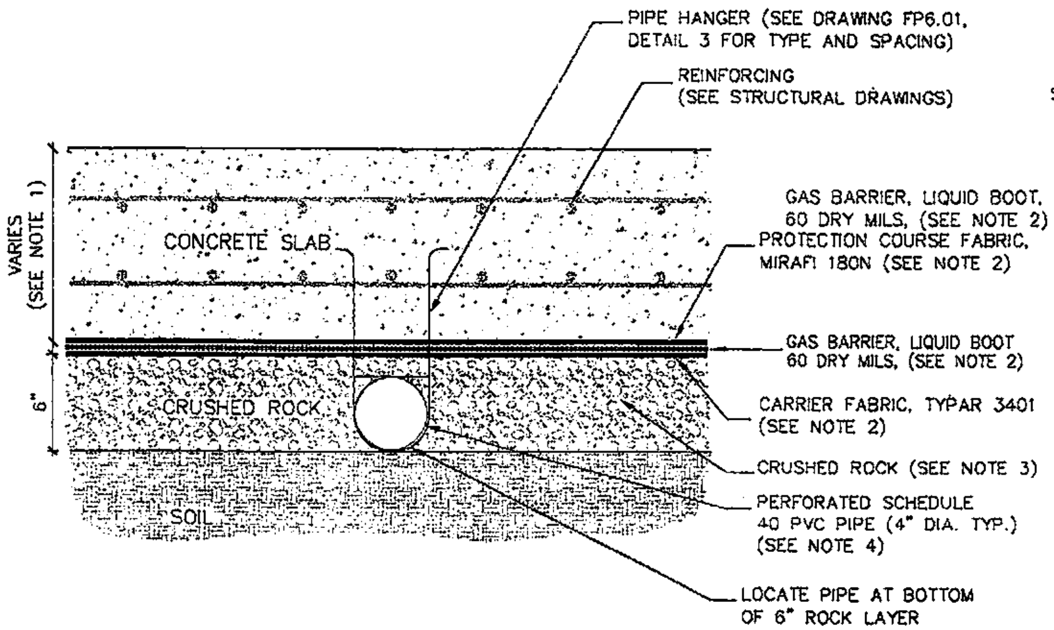
REGISTERED PROFESSIONAL ENGINEER DONALD DUNCAN TREADWELL STATE OF CALIFORNIA

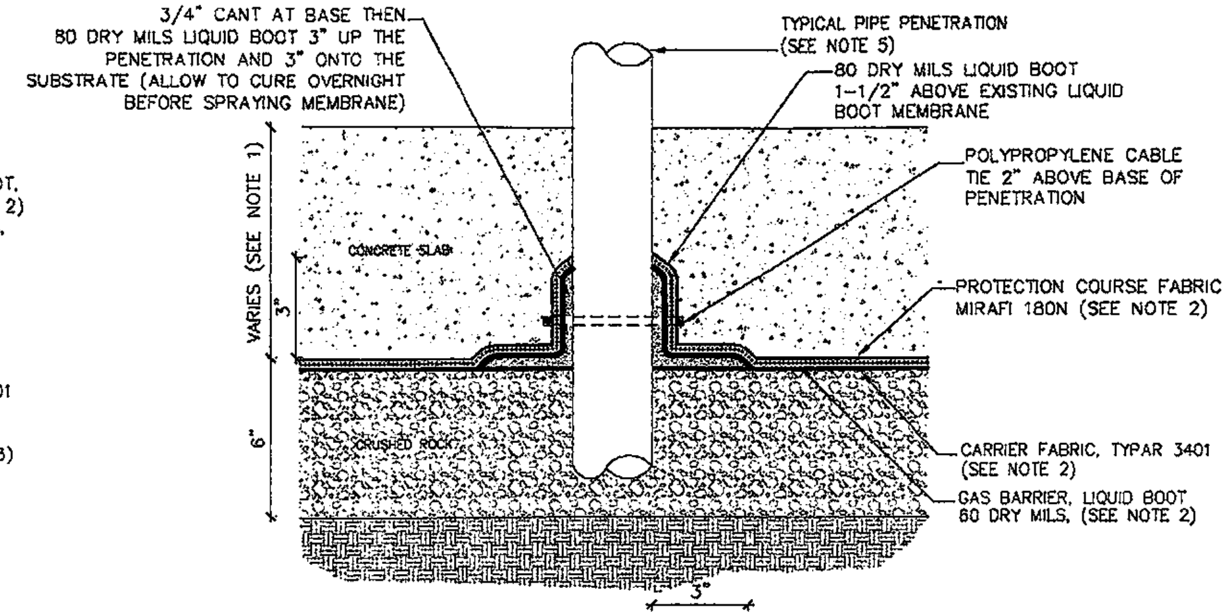
MARITIME & 7TH STREET SITE
PORT FIELD SUPPORT SERVICES COMPLEX
SOIL GAS MITIGATION SYSTEM - DETAILS

DATE: 02-04-03
SCALE:
SHEET: 22 OF 203 SHEETS
MT2.03 AA-3827

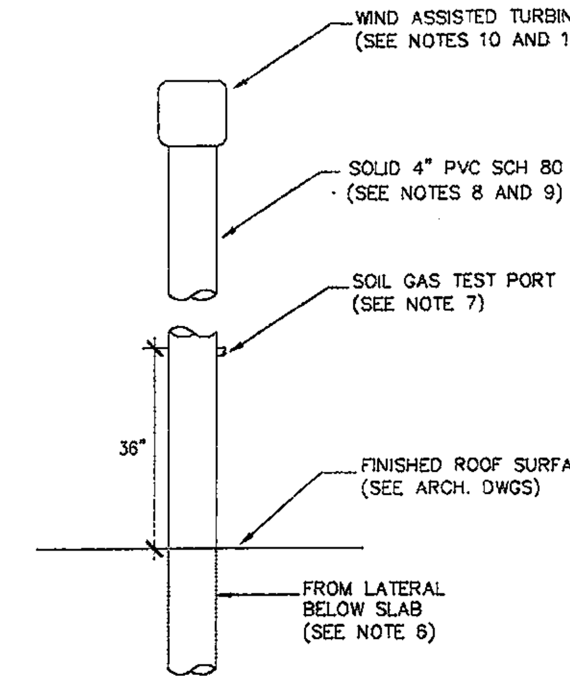
CAUTION: THIS PLAN MAY BE REDUCED 9 , 1" , 3/4" ORIGINAL SCALE



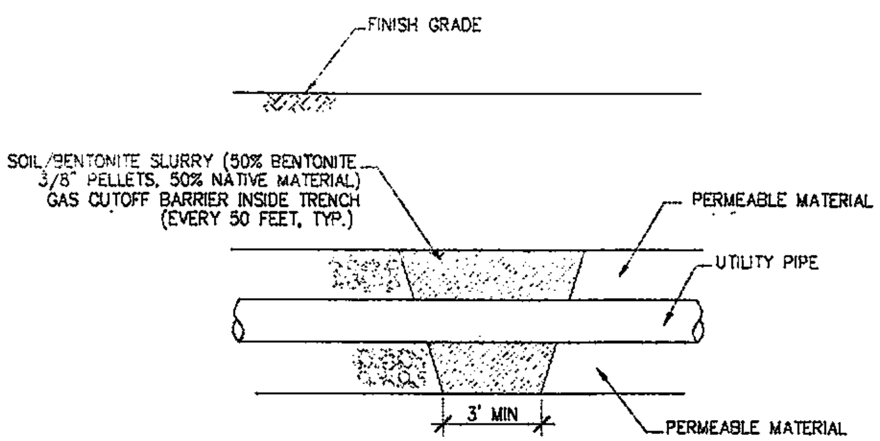
(A) SOIL GAS COLLECTION SYSTEM LATERAL
NOT TO SCALE



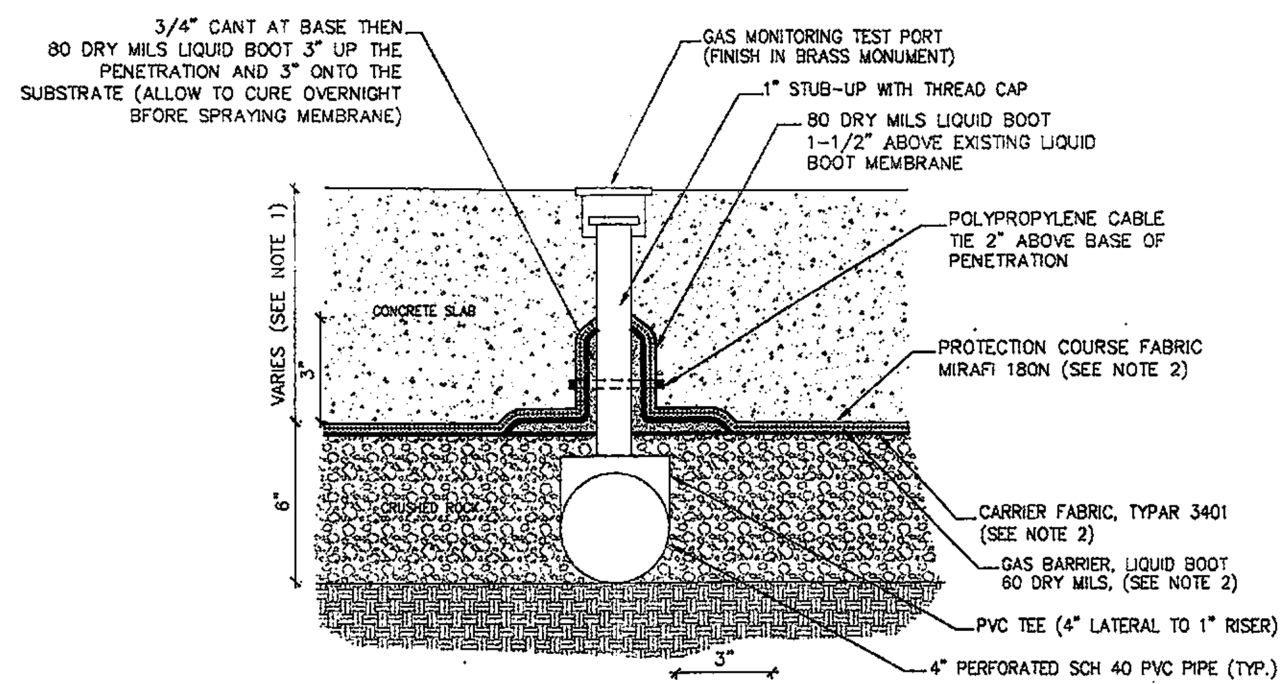
(B) TYPICAL SEALING OF ALL PENETRATIONS THROUGH CONCRETE SLAB
NOT TO SCALE



(C) RISER AND TURBINE AT ROOF
NOT TO SCALE



(D) UTILITY SOIL GAS CUT-OFF BARRIER IN UTILITY TRENCH
NOT TO SCALE



(E) SOIL GAS TEST PORT
NOT TO SCALE

NOTES:

1. ALL LOCATIONS AND DIMENSIONS OF BUILDING SLABS, FOOTINGS, AND GRADE BEAMS TO BE CONFIRMED WITH STRUCTURAL DETAILS.
2. THE LIQUID BOOT SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND QA/QC REQUIREMENTS, OUTLINED IN SECTIONS 07140 AND 07141 BY A MANUFACTURER APPROVED APPLICATOR. SLAB PENETRATIONS SHALL NOT BE IN CONTACT WITH AN ADJACENT PENETRATION THAT WOULD PREVENT PROPER SEALING OF THE PENETRATION CIRCUMFERENCE. PROTECTION COURSE FABRIC SHALL BE MIRAFI 180N NON-WOVEN GEOTEXTILE. CARRIER FABRIC SHALL BE TYPAR 3401, WITH THE HEAT-TREATED SIDE FACING THE LIQUID BOOT.
3. CRUSHED ROCK SHALL BE 1/4" X 3/4".
4. THE HORIZONTAL PIPE SHALL BE OF SCHEDULE 40 PVC, HANCOR SMOOTHWALL DRAIN PIPE, OR SIMILAR QUALITY PLASTIC PIPE. INDICATED SECTIONS OF HORIZONTAL PIPE SHALL BE PERFORATED WITH 5/8 INCH DIAMETER HOLES, THREE HOLES ACROSS THE UPPER ONE-THIRD OF THE PIPE, EVERY THREE INCHES ALONG THE PERFORATED SECTION; AN ADDITIONAL 5/8 INCH DIAMETER HOLE SHALL BE DRILLED ON THE UNDERSIDE OF THE PIPE AT LEAST EVERY 2 LINEAR FEET ALONG THE PERFORATED SECTION. TO ALLOW WATER, IF ANY, TO DRAIN FROM THE PIPE.
5. SLAB PENETRATION SHALL NOT BE IN CONTACT WITH ADJACENT PENETRATIONS OR STEEL COLUMNS TO ALLOW TROWEL GRADE LIQUID BOOT APPLICATION AROUND ENTIRE PENETRATION CIRCUMFERENCE.
6. THE VERTICAL RISER PIPE TO THE WIND TURBINE SHALL BE SUPPORTED AT THE PIPE CHASE WALLS AND LABELED AS "CONTAINS COMBUSTIBLE GAS; DO NOT BREAK OR CUT".
7. A TEST PORT SHALL BE INSTALLED TO SAMPLE AIR FROM THE COLLECTION PIPE 38 INCHES ABOVE ROOF LEVEL, WITH A VALVE ABOVE THE TEST PORT TO CLOSE OFF AIR INTAKE FROM THE WIND TURBINE DURING TESTING.
8. THE VERTICAL RISER PIPE TO THE WIND-ASSISTED TURBINE VENT SHALL BE 4 INCH DIAMETER SCHEDULE 80 PVC AND EXTEND TO AN ELEVATION 15 FEET ABOVE THE ROOF LEVEL.
9. PROVIDE 1-INCH DIAMETER ELECTRICAL CONDUIT TO RISER FOR POSSIBLE FUTURE POWER NEEDS TO A MECHANICAL VACUUM BLOWER. COORDINATE WITH ELECTRICAL DRAWINGS.
10. THE WIND-ASSISTED TURBINE VENT ON TOP OF THE 4 INCH PVC RISER SHALL BE 24 INCH DIA. GALVANIZED STEEL (McMASTER-CARR CAT# 1992K24) AND SHALL BE INDEPENDENTLY SUPPORTED FROM PVC RISER.
11. TURBINE SHALL BE ADAPTED TO FIT A 4 INCH PIPE.
12. PIPE PENETRATIONS THROUGH THE PERIMETER GRADE-BEAM SHALL BE OF SCHEDULE 80 PVC. THE VENT PIPE CAP SHALL KEEP OUT DEBRIS BUT ALLOW AIR TO ENTER THE PIPE; CONTRACTOR SHALL COORDINATE PLACEMENT OF PIPING INSIDE EXTERIOR WALL WITH ARCHITECT AND SUBMIT SAMPLE CAP TO ARCHITECT FOR APPROVAL. VENTS SHALL BE LOCATED A MINIMUM OF 36 INCHES AWAY FROM DOOR JAMS.

AA-SHT.DWG W.O.#
1=1 01-01-98 10:00AM

REFERENCES:
PLANS AA ...
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS — NO. | DATE | APP'D

REVIEWED — FACILITIES DEPARTMENT
REVIEWED — CONSTRUCTION DEPARTMENT
REVIEWED — PROJECT PLANNING DEPARTMENT

DRAWN GEL
DESIGNED DDT — PE 19,846 REG. ENGINEER NO.
CHECKED DDT — PE 19,846 REG. ENGINEER NO.
REVIEWED DDT — PE 19,846 REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER — C 23297
APPROVED — C 33213 REG. ENGINEER NO.
RECOMMENDED — C 43841 REG. ENGINEER NO.
M. Kousunslu C 57384 REG. ENGINEER NO.

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94607
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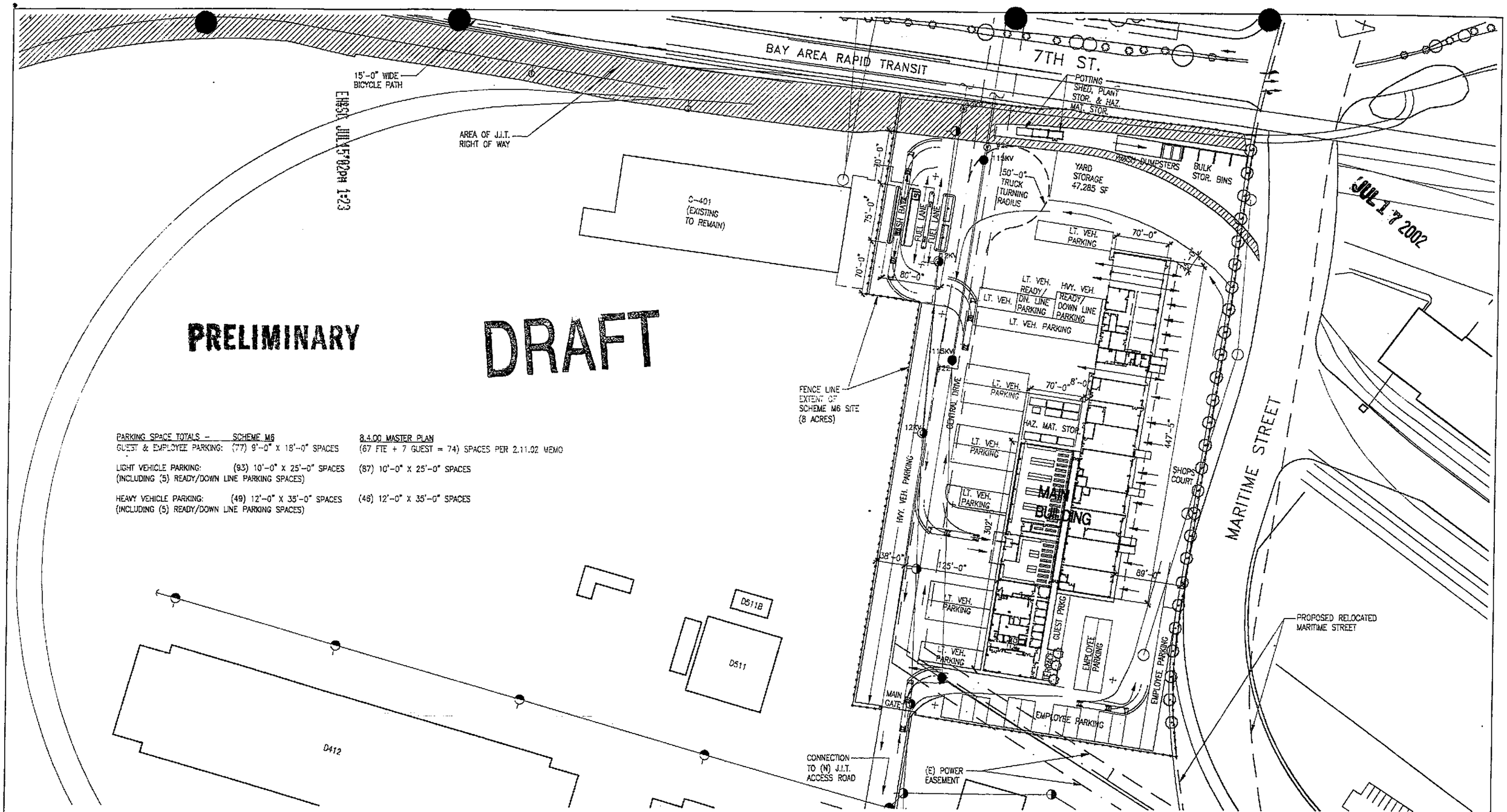
Treadwell&Rollo
Environmental and Geotechnical Consultants

MARITIME & 7TH STREET SITE
PORT FIELD SUPPORT SERVICES COMPLEX
SOIL GAS MITIGATION SYSTEM – DETAILS

DATE 02-04-03
SCALE
SHEET 20 OF 26 SHEETS
MT2.01 AA-3827

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE



PRELIMINARY **DRAFT**

PARKING SPACE TOTALS – SCHEME M6		8.4.00 MASTER PLAN
GUEST & EMPLOYEE PARKING:	(77) 9'-0" X 18'-0" SPACES	(67 FTE + 7 GUEST = 74) SPACES PER 2.11.02 MEMO
LIGHT VEHICLE PARKING: (INCLUDING (5) READY/DOWN LINE PARKING SPACES)	(93) 10'-0" X 25'-0" SPACES	(87) 10'-0" X 25'-0" SPACES
HEAVY VEHICLE PARKING: (INCLUDING (5) READY/DOWN LINE PARKING SPACES)	(49) 12'-0" X 35'-0" SPACES	(46) 12'-0" X 35'-0" SPACES

1 SITE PLAN - SCHEME M6
SCALE: 1" = 60'-0"

SITE AREA = 8 ACRES

Michael Willis Architects
245 First Street
Suite 200
San Francisco, CA 94105
tel (415) 957-2750

LICENSED ARCHITECT MICHAEL E. WILLIS No. C-16140 9-30-03 REGISTRATION DATE STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ PROJECT PLANNING DEPARTMENT

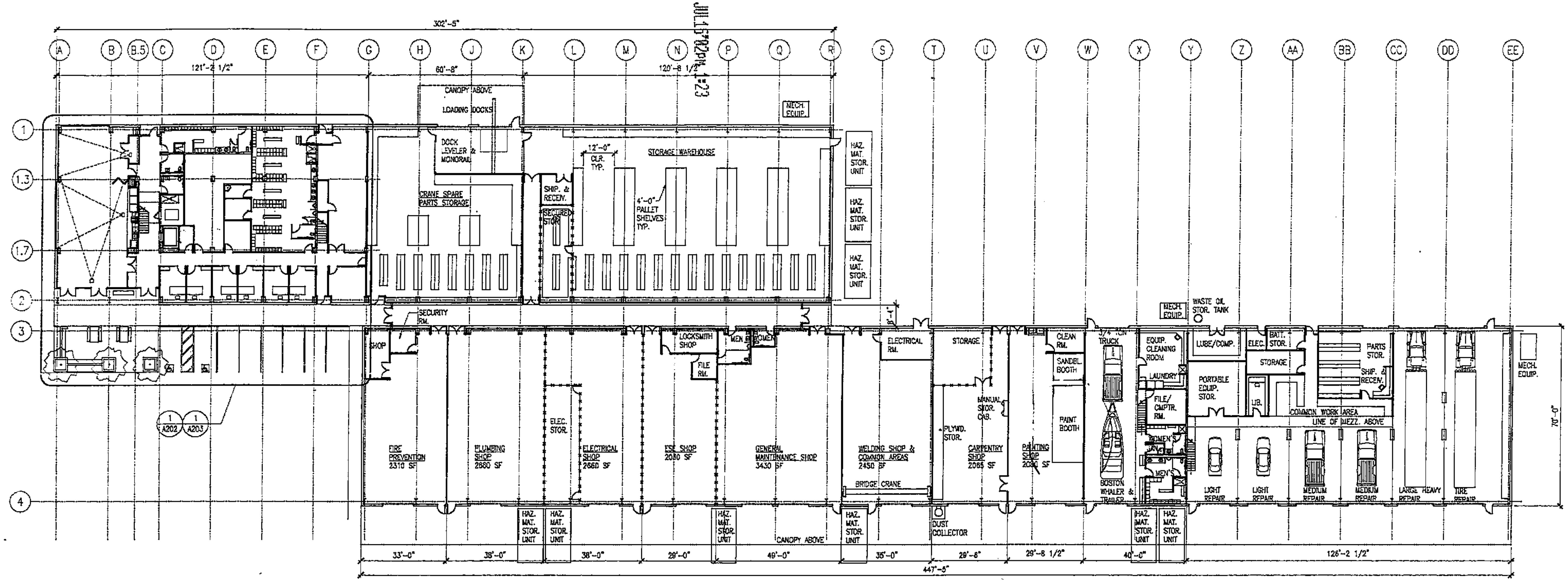
DRAWN MER
DESIGNED MWA
CHECKED CBL REG. ENGINEER NO.
REVIEWED ____ REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
APPROVED ____ REG. ENGINEER NO.
RECOMMENDED ____ REG. ENGINEER NO.

SCHEME M6
PORT FIELD SUPPORT SERVICES COMPLEX
SITE PLAN – SCHEME M6

DATE: 07-15-02
SCALE: 1"=60'-0"
SHEET: 1 OF 7 SHEETS
A100



PRELIMINARY

DRAFT

1 MAIN BUILDING FIRST FLOOR PLAN
SCALE: 1" = 20'-0"

AREA	MAY 3, 2002 MEMO	SCHEME M6
ADMINISTRATION	16,324 SF	16,975 SF
SHOPS	19,650 SF	19,685 SF
STORAGE WAREHOUSES	11,650 SF	12,688 SF
VEHICLE MAINT. & DIVER'S SHOP	11,500 SF	11,638 SF
TOTAL SF	59,124 SF	60,986 SF

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Suite 200
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LICENSED ARCHITECT MICHAEL E. WILLIS No. C-16140 9-30-03 STATE OF CALIFORNIA

REFERENCES:
PLANS AA
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS | NO. | DATE | APP'D

REVIEWED FACILITIES DEPARTMENT
REVIEWED CONSTRUCTION DEPARTMENT
REVIEWED PROJECT PLANNING DEPARTMENT

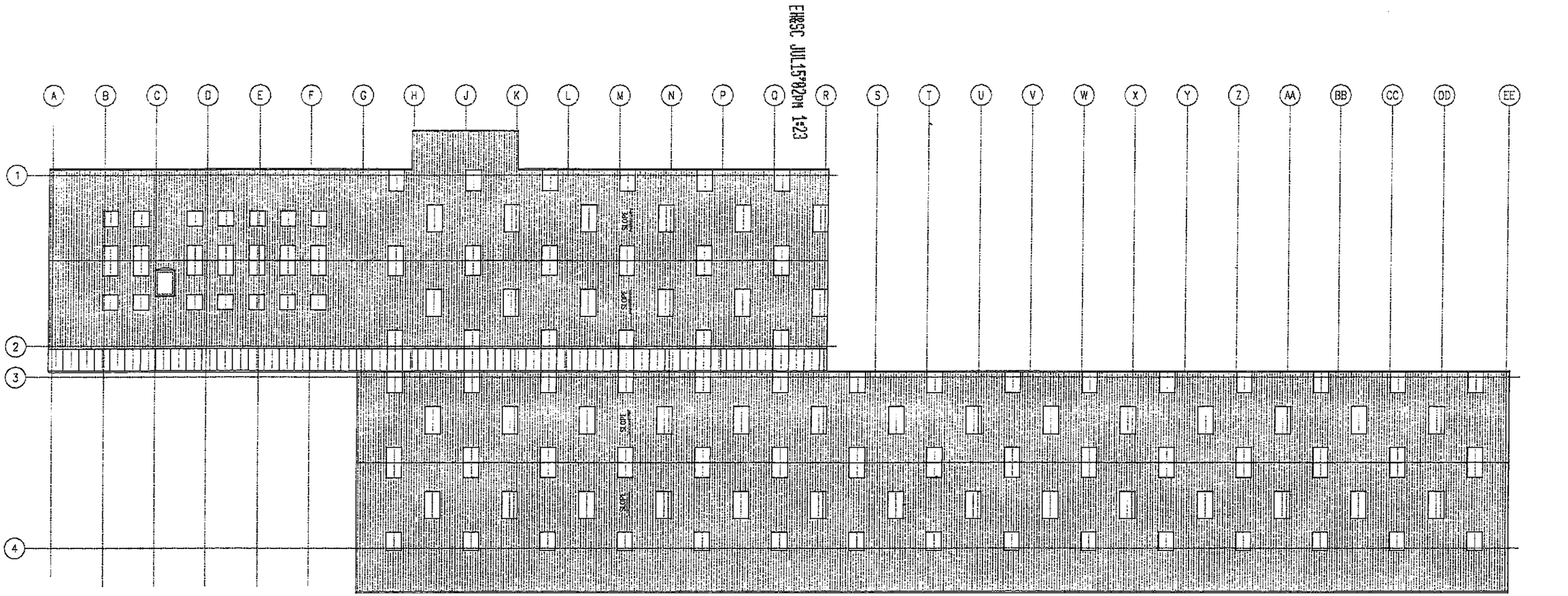
DRAWN MER
DESIGNED MWA
CHECKED CBL
REVIEWED

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
APPROVED
RECOMMENDED

SCHEME M6
PORT FIELD SUPPORT SERVICES COMPLEX
MAIN BUILDING FIRST FLOOR PLAN

DATE: 07-15-02
SCALE: 1"=20'-0"
SHEET: 2 OF 7 SHEETS
A200



PRELIMINARY

DRAFT

1 MAIN BUILDING ROOF PLAN
SCALE: 1" = 20'-0"

N

Michael Willis Architects
248 First Street
Suite 200
San Francisco, CA 94105
ph (415) 957-9750

LICENSED ARCHITECT
MICHAEL E. WILLIS
No. C-15146
9-30-03
RENEWAL DATE
STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ PROJECT PLANNING DEPARTMENT

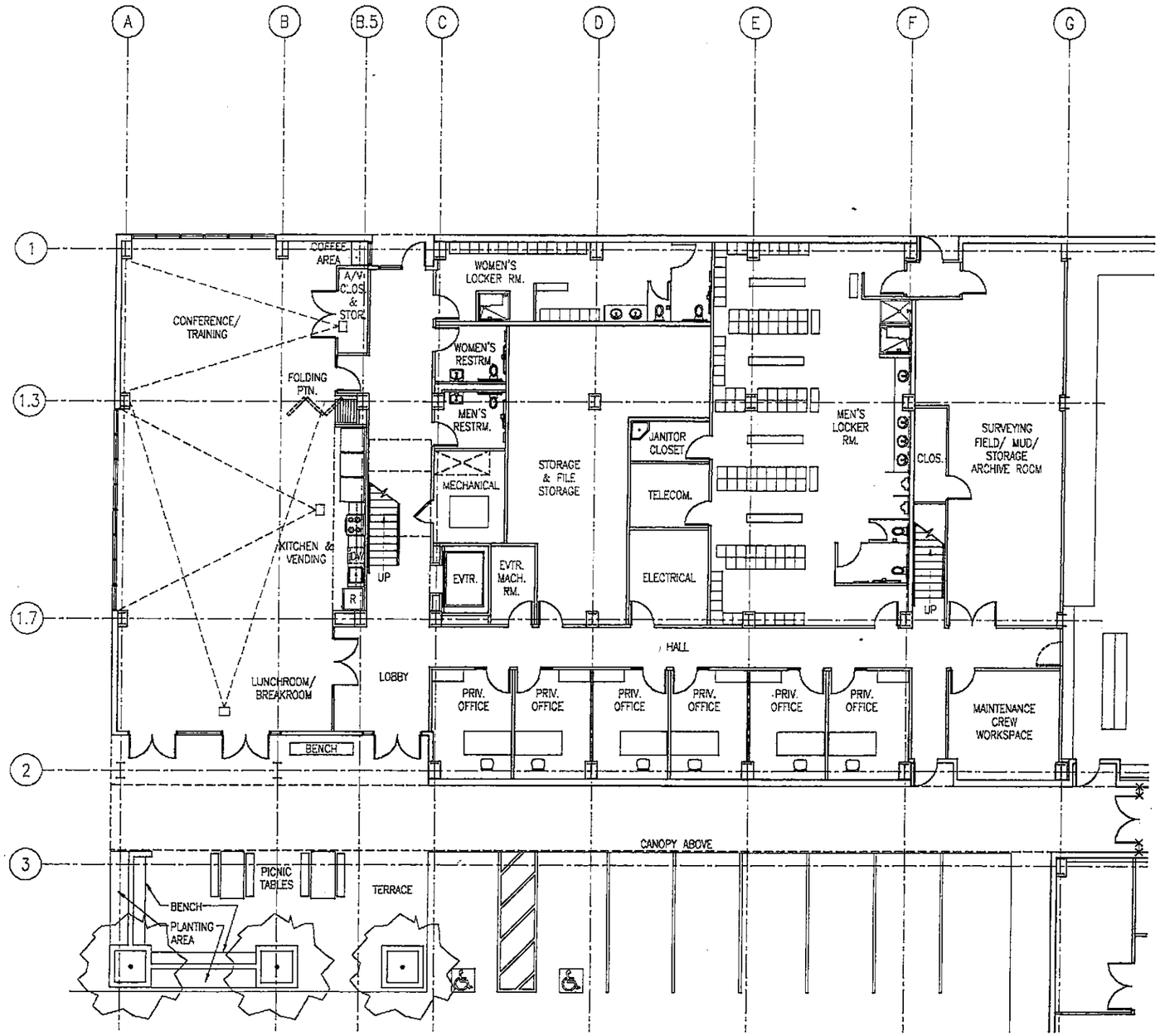
DRAWN MER
DESIGNED MWA
CHECKED CBL
REVIEWED ____ REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
REG. ENGINEER NO.
APPROVED ____ REG. ENGINEER NO.
RECOMMENDED ____ REG. ENGINEER NO.

SCHEME M6
PORT FIELD SUPPORT SERVICES COMPLEX
MAIN BUILDING ROOF PLAN

DATE: 07-15-02
SCALE: 1"=20'-0"
SHEET: 3 OF 7 SHEETS
A201



1 ADMINISTRATION FIRST FLOOR PLAN

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

DRAFT

PRELIMINARY

ERBSC JUL 15'02 2PM 1:23

Michael Willis Architects
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LICENSED ARCHITECT
MICHAEL B. WILLIS
No. C-15146
9-30-03
RENEWAL DATE
STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS

"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL.

CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED _____ FACILITIES DEPARTMENT

REVIEWED _____ CONSTRUCTION DEPARTMENT

REVIEWED _____ PROJECT PLANNING DEPARTMENT

DRAWN MER, TPS, BMR
DESIGNED MWA
REG. ENGINEER NO.
CHECKED CBL
REG. ENGINEER NO.
REVIEWED _____
REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
REG. ENGINEER NO.
APPROVED _____
REG. ENGINEER NO.
RECOMMENDED _____
REG. ENGINEER NO.

SCHEME M6

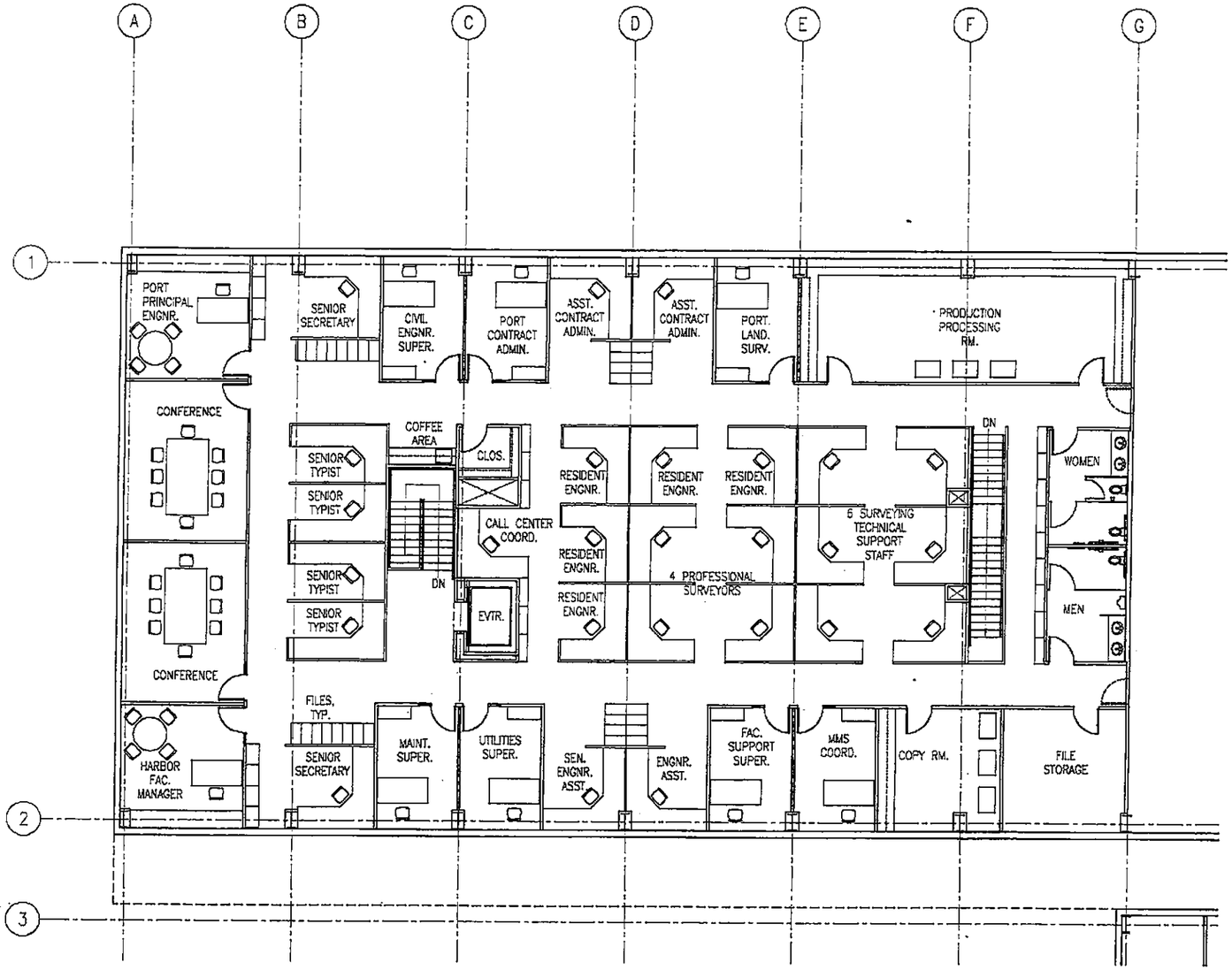
PORT FIELD SUPPORT SERVICES COMPLEX

ADMINISTRATION FIRST FLOOR PLAN

DATE: 07-15-02
SCALE: 1/8"=1'-0"
SHEET 4 OF 7 SHEETS

A202

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE



1 ADMINISTRATION SECOND FLOOR PLAN

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

Michael Willis Architects
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Suite 200
San Francisco, CA 94105
tel: (415) 957-3750

LICENSED ARCHITECT MICHAEL E. WILLIS No. C-15140 9-30-03 RENEWAL DATE STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS

"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL.

CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ PROJECT PLANNING DEPARTMENT

DRAWN MER, TPS, BMR
DESIGNED MWA
CHECKED CBL
REVIEWED

REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
APPROVED
RECOMMENDED
REG. ENGINEER NO.

SCHEME M8

PORT FIELD SUPPORT SERVICES COMPLEX

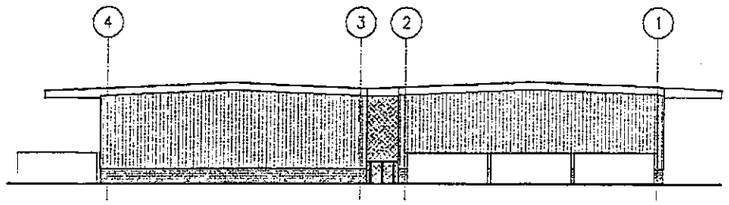
ADMINISTRATION SECOND FLOOR PLAN

DATE: 07-15-02
SCALE: 1/8"=1'-0"
SHEET: 5 OF 7 SHEETS

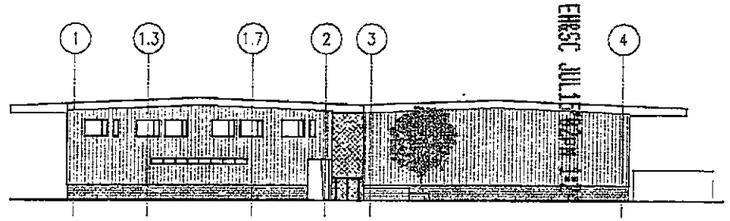
A203

PRELIMINARY

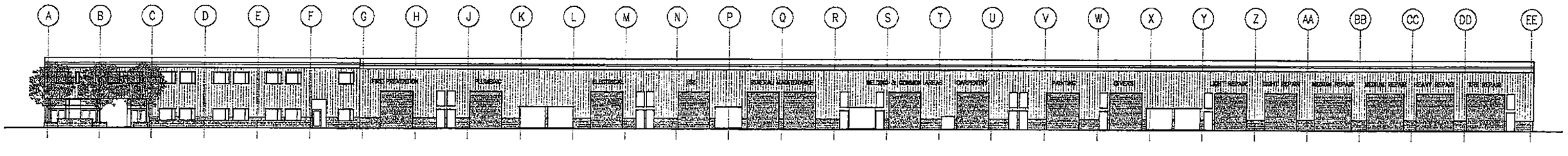
DRAFT



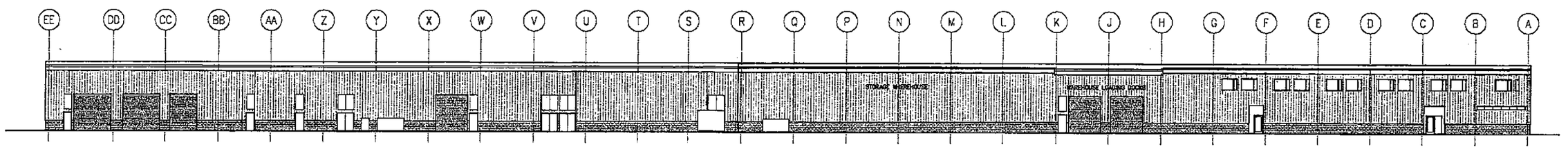
2 MAIN BUILDING NORTH ELEVATION
SCALE: 1" = 20'-0"



1 MAIN BUILDING SOUTH ELEVATION
SCALE: 1" = 20'-0"



3 MAIN BUILDING EAST ELEVATION
SCALE: 1" = 20'-0"



4 MAIN BUILDING WEST ELEVATION
SCALE: 1" = 20'-0"

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245 First Street
Suite 200
San Francisco, CA 94105
tel (415) 957-3750

LICENSED ARCHITECT
MICHAEL E. WILLIS
No. C-15148
9-30-03
RENEWAL DATE
STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
CAUTION: CHECK TRACING FOR LATEST REVISIONS

REVISIONS			
NO.		DATE	APP'D

REVIEWED ____ FACILITIES DEPARTMENT
REVIEWED ____ CONSTRUCTION DEPARTMENT
REVIEWED ____ PROJECT PLANNING DEPARTMENT

DRAWN MER, BMR
DESIGNED MWA
CHECKED CBL
REVIEWED
REG. ENGINEER NO.

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
REG. ENGINEER NO.
APPROVED
REG. ENGINEER NO.
RECOMMENDED
REG. ENGINEER NO.

SCHEME M6

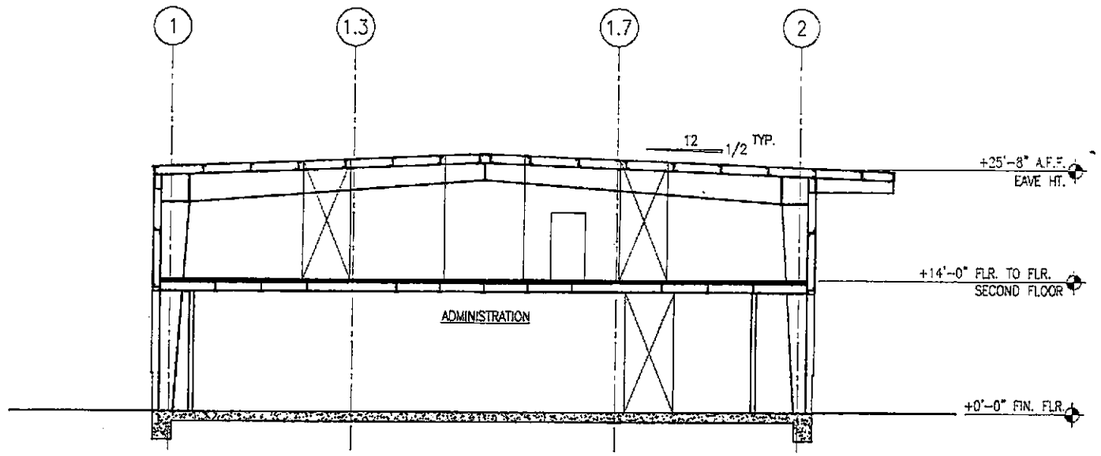
PORT FIELD SUPPORT SERVICES COMPLEX

MAIN BUILDING ELEVATIONS

DATE: 07-15-02
SCALE: 1"=20'-0"
SHEET: 6 OF 7 SHEETS

A300

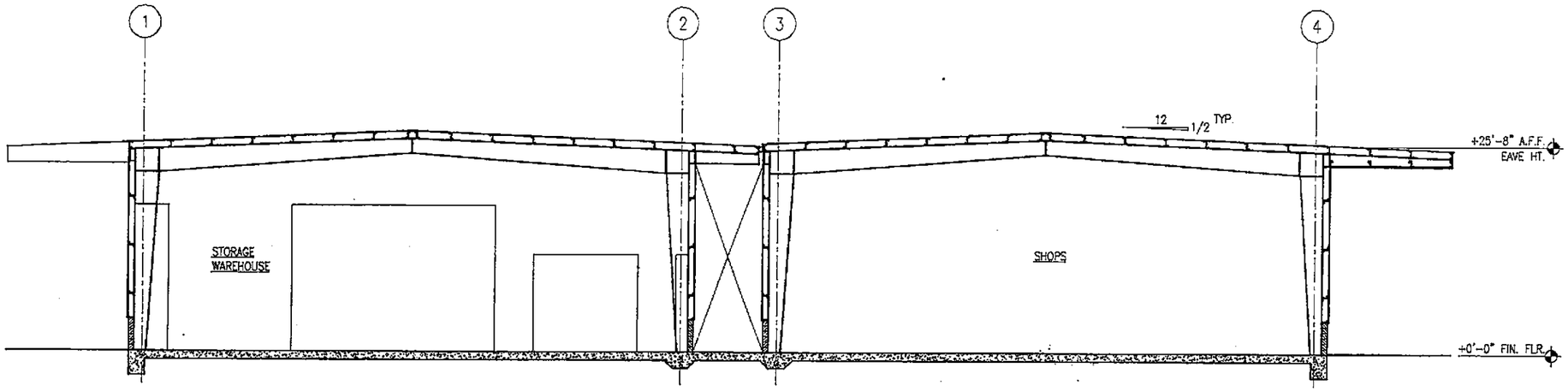
EH&SC JUL 15 '02 PM 1:24



1 TYPICAL SECTION THROUGH ADMINISTRATION LOOKING NORTH
SCALE: 1/8" = 1'-0"

PRELIMINARY

DRAFT



2 TYPICAL SECTION THROUGH MAIN BUILDING LOOKING NORTH
SCALE: 1/8" = 1'-0"

Michael Willis Architects
245 First Street
Suite 200
San Francisco, CA 94105
tel (415) 957-2750

LICENSED ARCHITECT
MICHAEL E. WILLIS
No. C-15140
9-30-03
RENEWAL DATE
STATE OF CALIFORNIA

REFERENCES:
PLANS AA ....
FIELD BOOKS
"PORT OF OAKLAND DATUM" IS 3.20' BELOW MEAN SEA LEVEL
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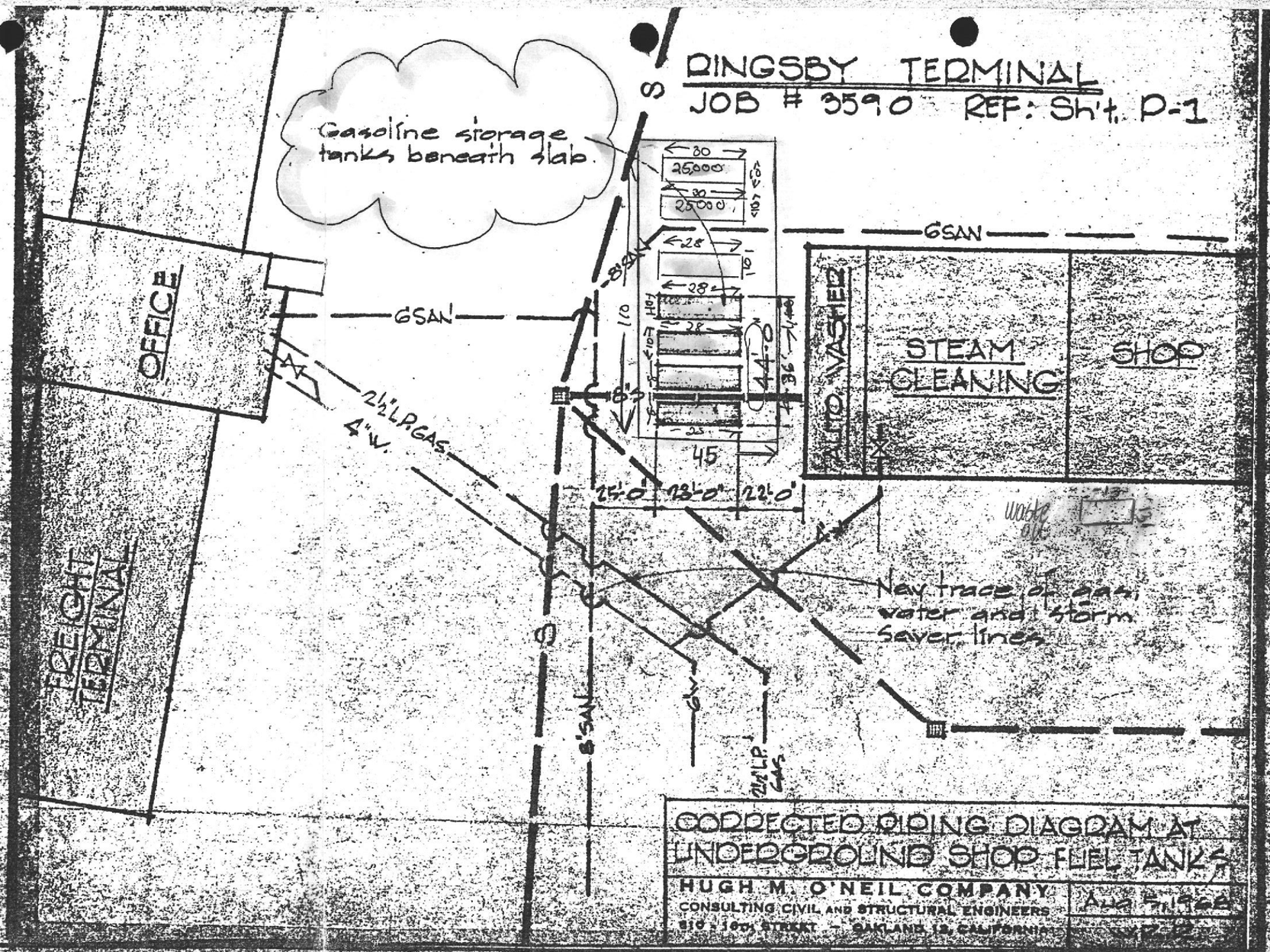
SCHEME M6
PORT FIELD SUPPORT SERVICES COMPLEX
MAIN BUILDING SECTIONS

DATE 07-15-02
SCALE: 1/8"=1'-0"
SHEET: 7 OF 7 SHEETS
A301

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

RINGSBY TERMINAL
JOB # 3590 REF: Sh't. P-1



CORRECTED PIPING DIAGRAM AT UNDERGROUND SHOP FUEL TANKS

HUGH M. O'NEIL COMPANY
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
610 - 16th STREET — OAKLAND 12, CALIFORNIA

RINGSBY FREIGHT TERMINAL
BLDGS. C-406 & C-407
SEVENTH ST. NEAR MARITIME
OAKLAND — CALIFORNIA

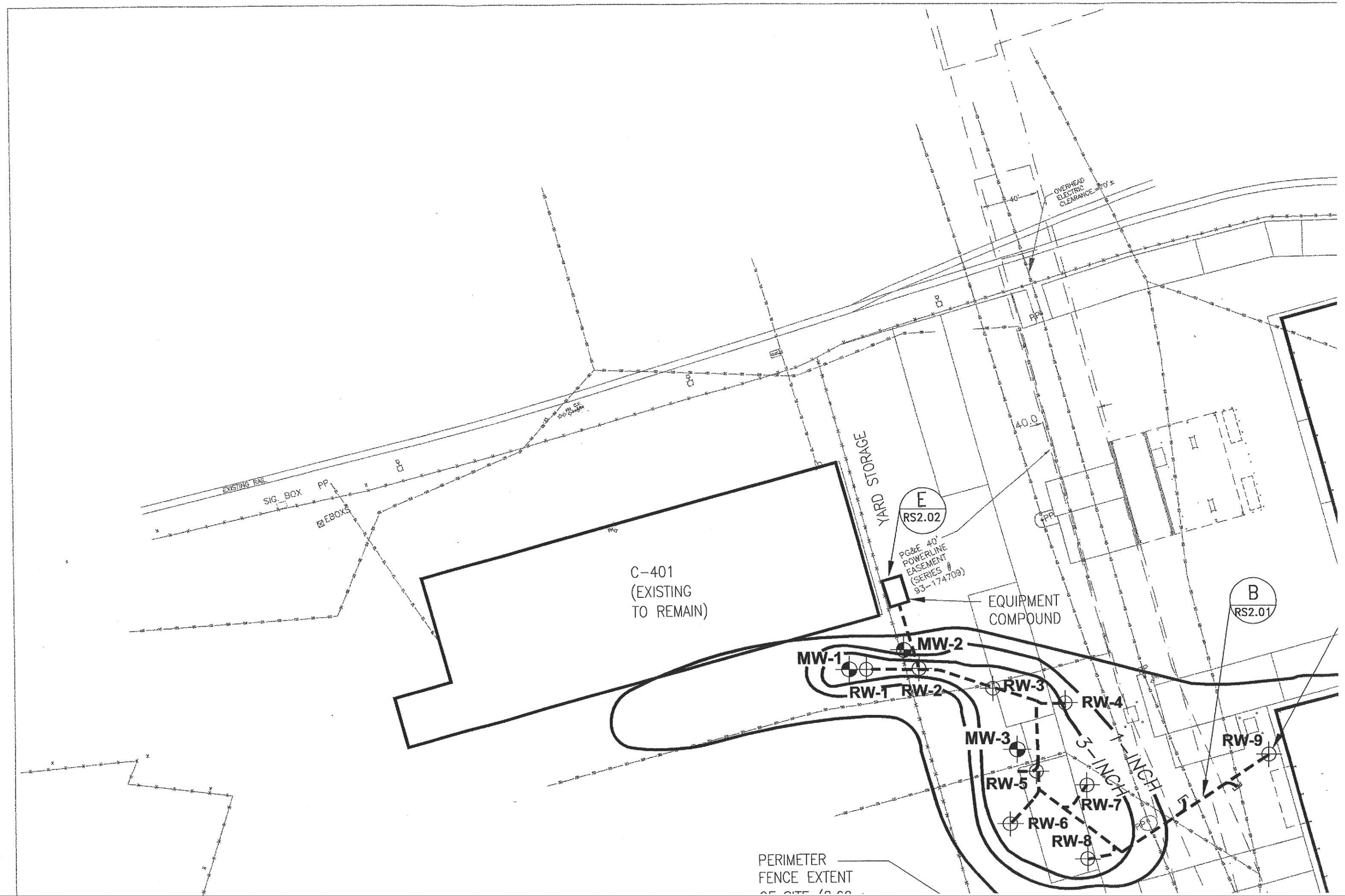
UNDERGROUND PIPING REVISION

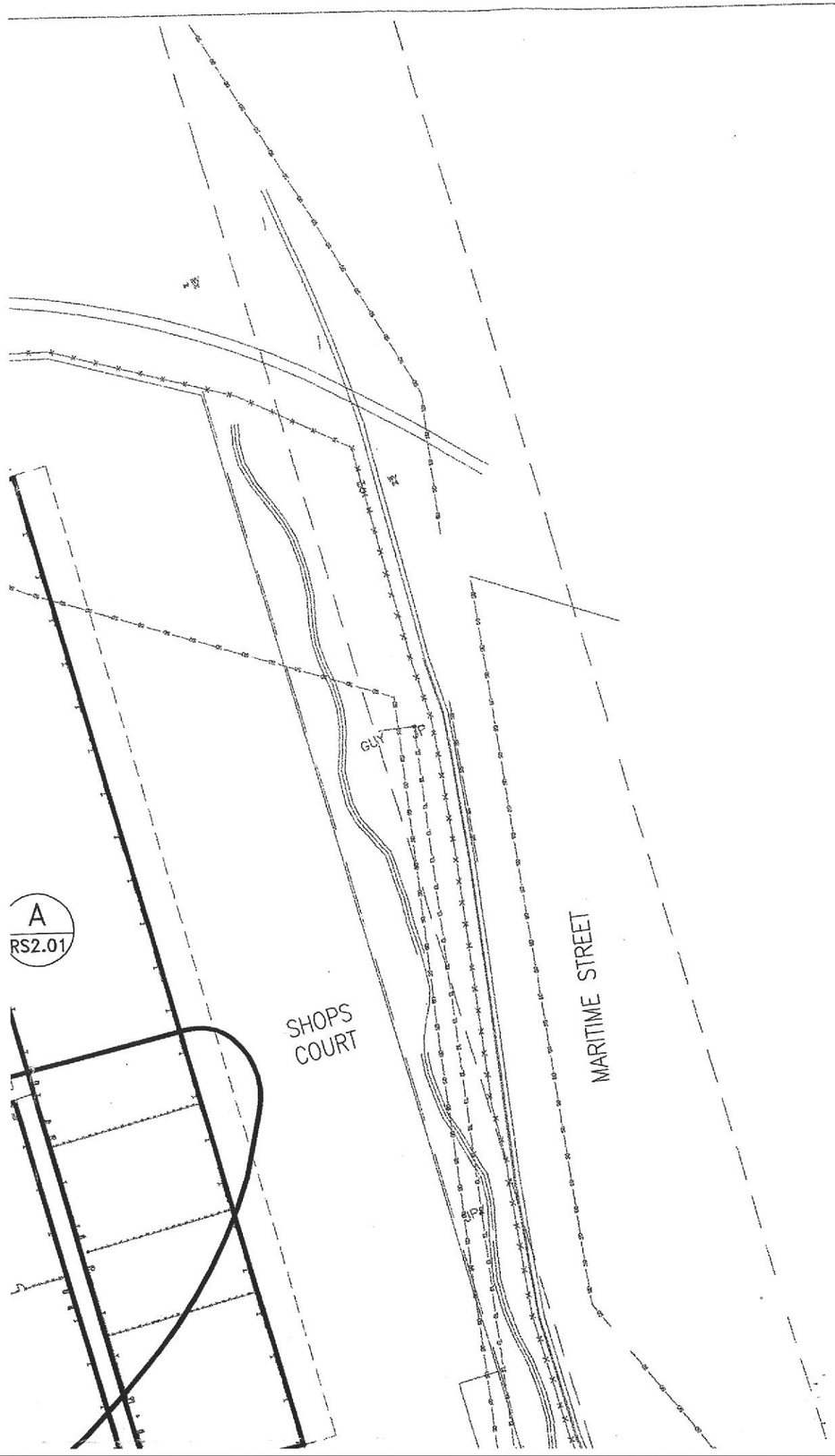
REVISION	DATE	BY
mbled on standard sheet	ALO	2-12-69
g. 2, 1968 to be voided d by Dwg of Aug 6, '68	WRR	8-5-68

HUGH M. O'NEIL COMPANY
CONSULTING CIVIL AND STRUCTURAL ENGINEERS
INDUSTRIAL PLANTS
COMMERCIAL BUILDINGS
FOUNDATION INVESTIGATIONS
SUPERVISION OF CONSTRUCTION
610 - 16TH STREET — OAKLAND 12, CALIFORNIA — PHONE 832-3505

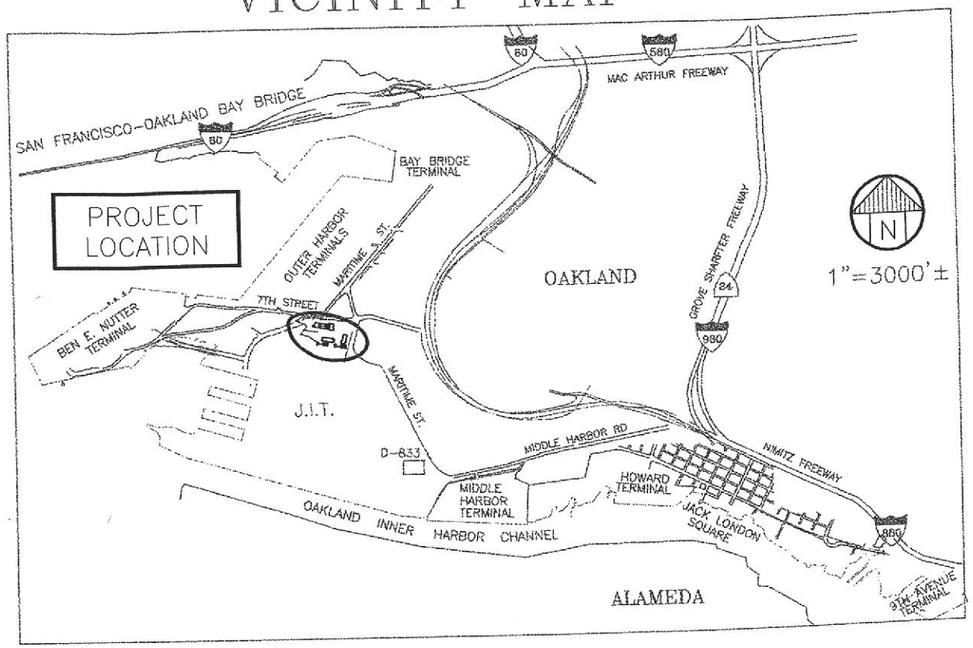
DATE 2-12-69
DRAWN BY ALO
CHECKED BY
CIVIL & STRUCTURAL ENGINEER
CALIF. REG. NO.

PROJECT NO. 3590
DWG. NO. P-1A


EXISTING RAIL
SIG. BOX
PP
EBOX
C-401
(EXISTING
TO REMAIN)
YARD STORAGE
E
RS2.02
PG&E 40'
POWERLINE
EASEMENT
(SERIES #
93-174709)
EQUIPMENT
COMPOUND
B
RS2.01
40'
OVERHEAD
ELECTRIC
CLEARANCE 30'±
40.0
MW-1
MW-2
MW-3
RW-1
RW-2
RW-3
RW-4
RW-5
RW-6
RW-7
RW-8
RW-9
3-INCH
4-INCH
PERIMETER
FENCE EXTENT

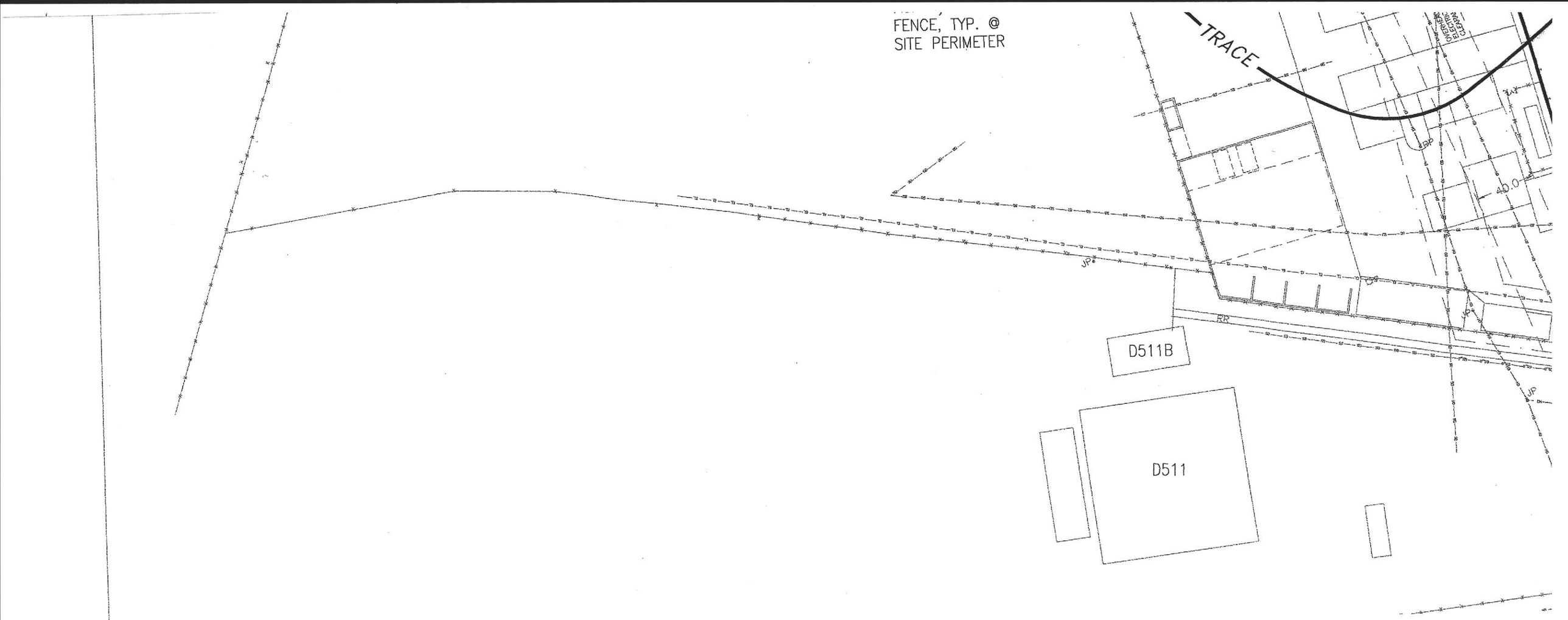


VICINITY MAP



LEGEND

- EXISTING MONITORING WELL
- PROPOSED RECOVERY WELL



REFERENCES:
PLANS AA ....
FIELD BOOKS

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REVISIONS			
NO.		DATE	APP'D
1	ADDED FREE PRODUCT RECOVERY SYSTEM		

REVIEWED _____ FACILITIES DEPARTMENT

REVIEWED _____ CONSTRUCTION DEPARTMENT

REVIEWED _____ PROJECT PLANNING DEPARTMENT

DRAWN JMV

DESIGNED BKM C 57489 REG. ENGINEER NO.

CHECKED BKM C 57489 REG. ENGINEER NO.

REVIEWED BKM C 57489 REG. ENGINEER NO.

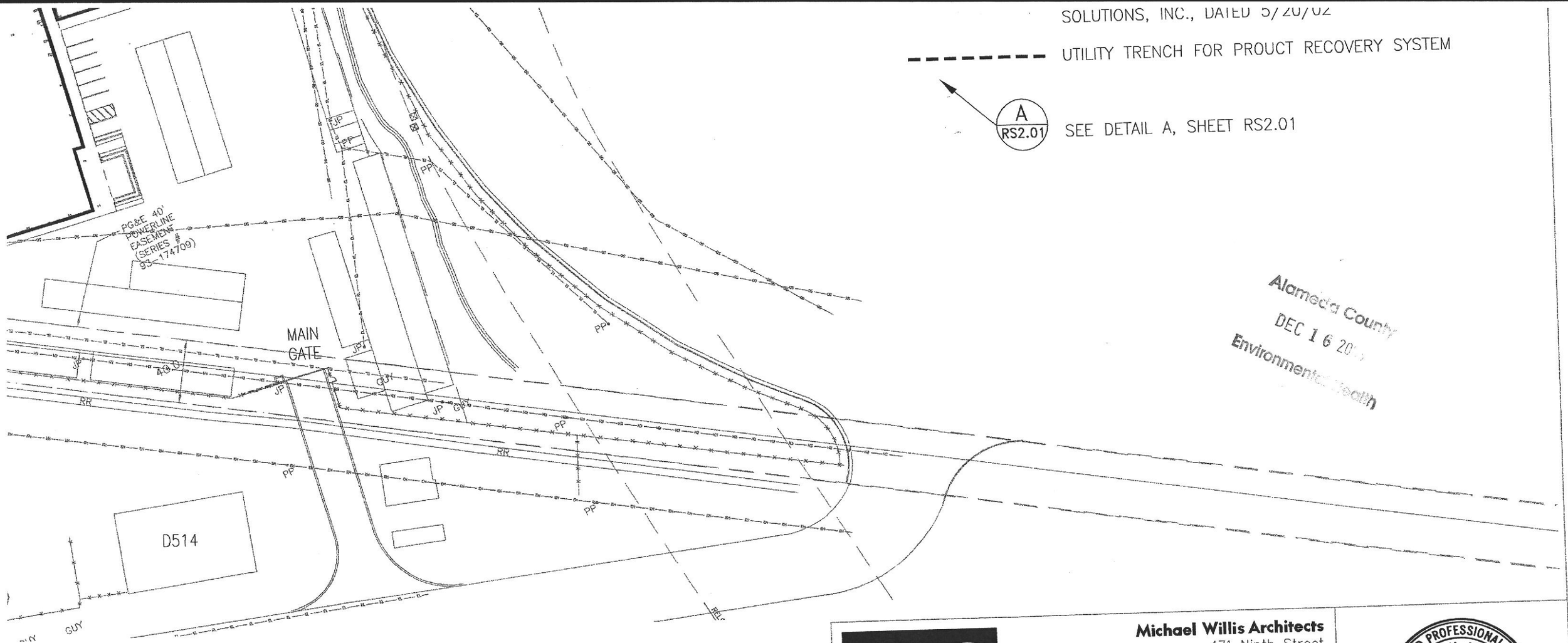
POF

CAUTION: THIS PLAN MAY BE REDUCED 0 1" 2" ORIGINAL SCALE

SOLUTIONS, INC., DATED 5/20/02

UTILITY TRENCH FOR PROUCT RECOVERY SYSTEM

A / RS2.01 SEE DETAIL A, SHEET RS2.01



0 60 120 Feet
Approximate scale

N

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94607
tel: (510) 287-9710

Treadwell&Rollo
Environmental and Geotechnical Consultants
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REGISTERED PROFESSIONAL ENGINEER
BRIAN K. MOORE
No. 57489
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

T OF OAKLAND

530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER _____ C 23297

APPROVED _____ REG. ENGINEER NO. C 33213

RECOMMENDED _____ REG. ENGINEER NO. C 43841

REG. ENGINEER NO.

MARITIME & 7TH STREET SITE

PORT FIELD SUPPORT SERVICES COMPLEX

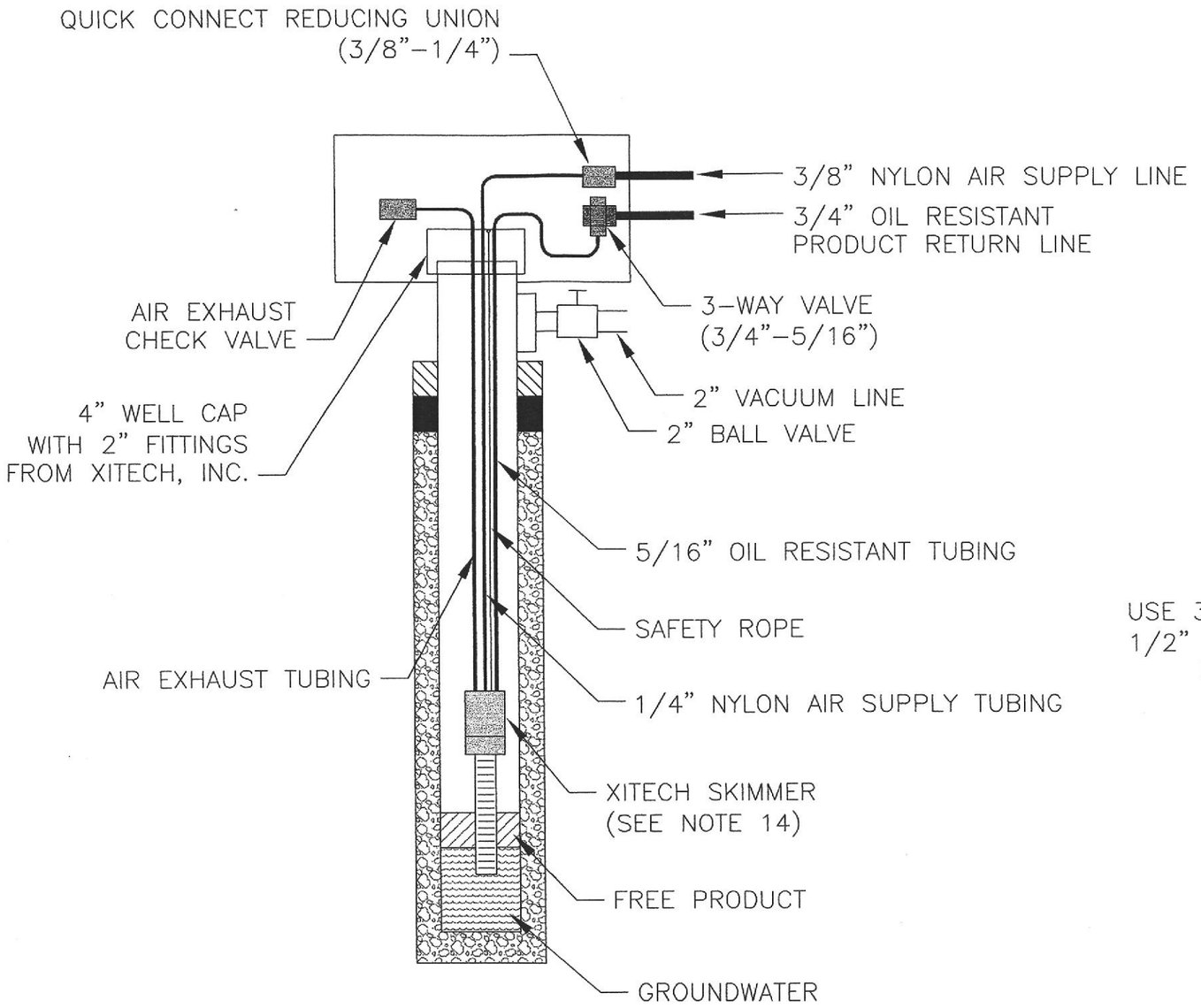
FREE PRODUCT RECOVERY SYSTEM SITE PLAN

DATE: 02/04/03

SCALE:

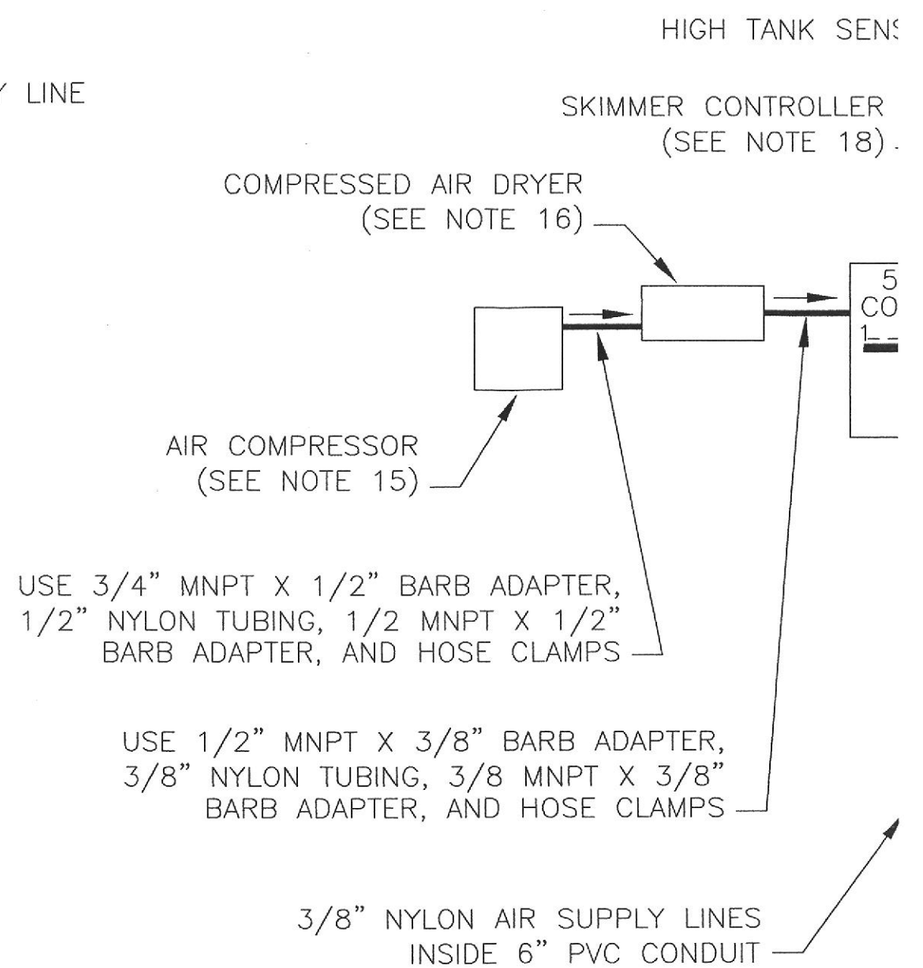
SHEET: 22-1 OF 203 SHEETS

RS1.01 | AA-3827



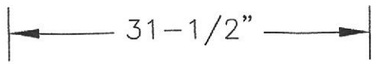
D RECOVERY WELL INSTRUMENTATION (TYP)

NOT TO SCALE

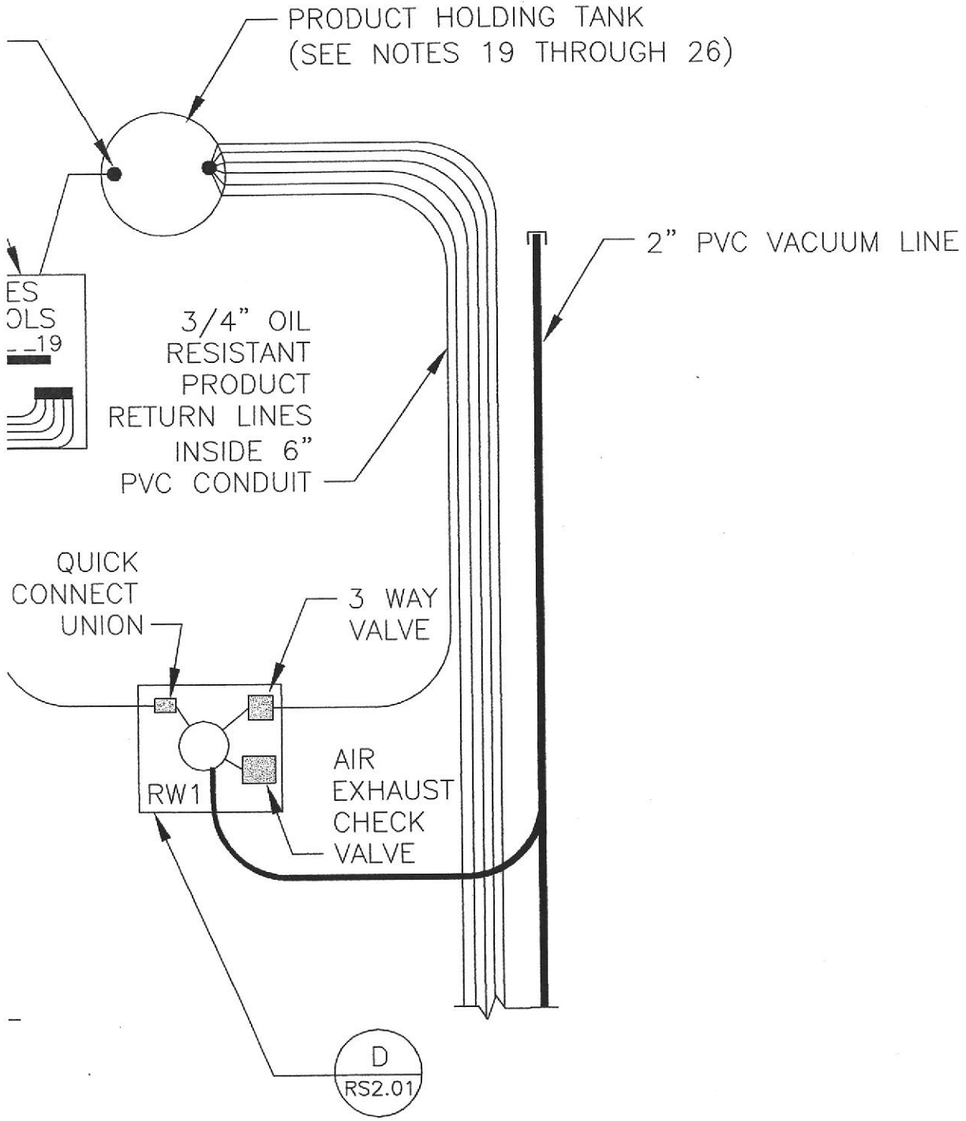


C PIPING ANI

NOT TO SCA



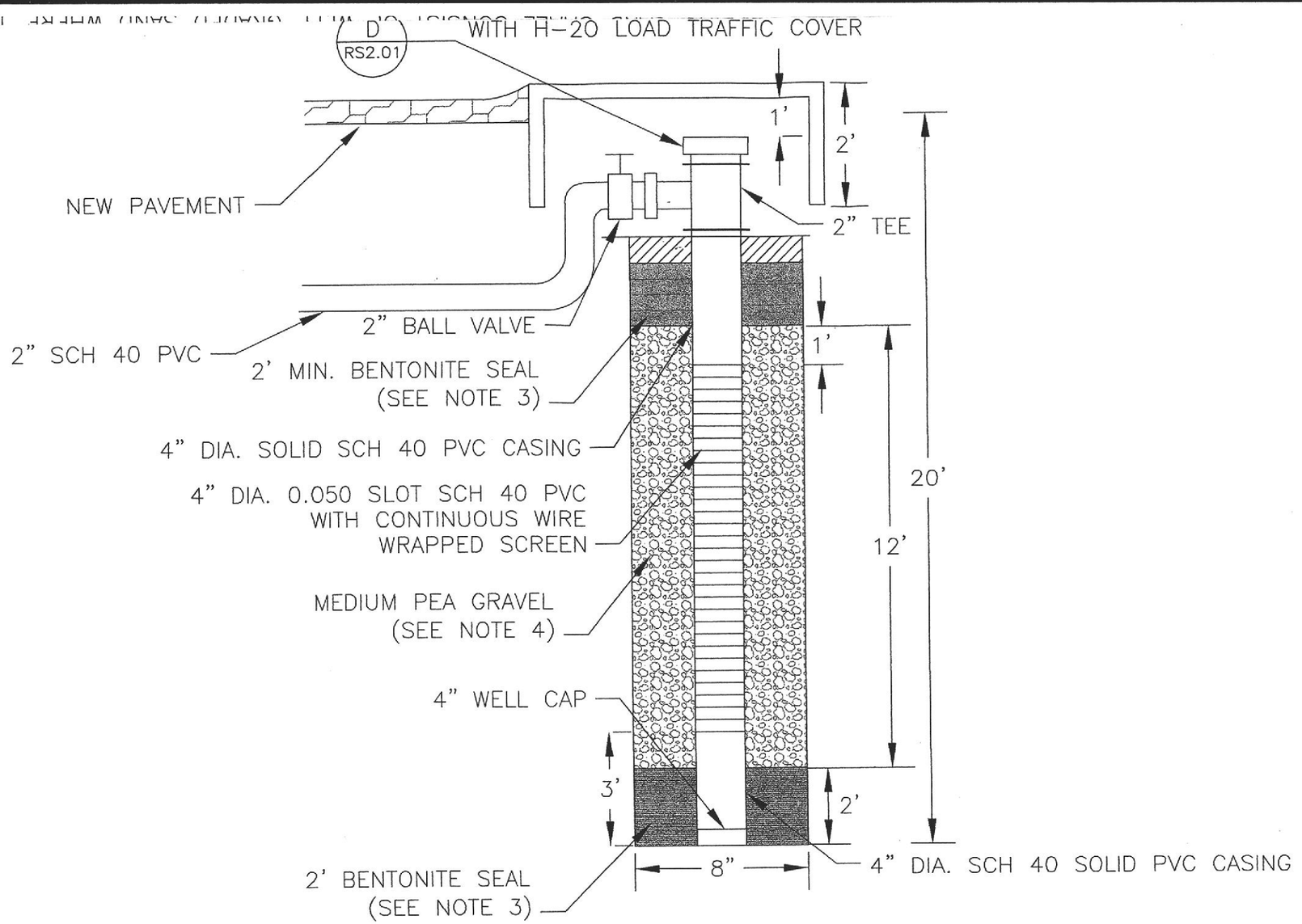
CHRISTY BOX R–8 PIT



NSTRUMENTATION

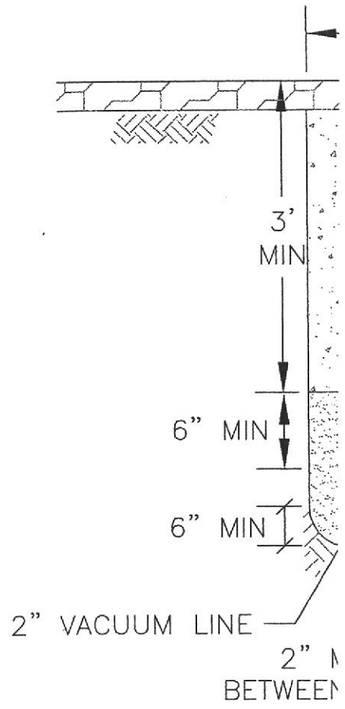
NOTES:

1. AN ALAMEDA COUNTY WATER DISTRICT WELL PERMIT APPLICATION MUST BE SUBMITTED AND APPROVED BY THE COUNTY PRIOR TO COMMENCING THE RECOVERY WELL INSTALLATION.
2. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. NO EXCAVATION OR DRILLING SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 24–HOURS IN ADVANCE. "UNDERGROUND SERVICE ALERT" POLICY PROCEDURE IS TO BE FOLLOWED.
3. BENTONITE SEALS SHALL BE COMPOSED OF COMMERCIALLY AVAILABLE PELLETS. BENTONITE SEALS PLACED ABOVE THE WATER TABLE SHALL BE HYDRATED IMMEDIATELY AFTER PLACEMENT.
4. PEA GRAVEL SHALL CONSIST OF INERT ROUNDED GRAVEL WHERE 100 PERCENT OF THE MATERIAL PASSES THE 1/2–INCH SCREEN AND 90 PERCENT IS RETAINED ON THE 1/4–INCH SCREEN.
5. ONLY SWEEPING BENDS, NO 90° JOINTS, SHALL BE USED FOR PVC CONDUIT USED FOR AIR SUPPLY AND PRODUCT RETURN LINES.
6. ALL POLYVINYL CHLORIDE PIPE (PVC) SHALL BE SCHEDULE 40. FITTINGS SHALL BE OF THE SAME MATERIAL AND SHALL BE OF THE SOLVENT–WELD TYPE.
7. BALL VALVES SHALL BE OF THE FULL PORT TYPE AND CONTAIN UNIONS ON BOTH ENDS SO THAT THE VALVE BODY CAN BE REMOVED FROM THE LINE WITHOUT BREAKING DOWN THE PIPING. THE UNIONS, IN TURN, SHALL BE SOLVENT–WELDED TO THE PVC PIPING. THE HANDLE SHALL BE EASILY REMOVABLE AND PARALLEL TO THE PIPING WHEN THE VALVE IS OPEN.
8. WHERE CHANGES IN SIZE OCCUR IN ANY AND ALL PIPING, REDUCING FITTINGS SHALL BE USED.
9. IN GENERAL, ALL PIPING CONNECTIONS TO EQUIPMENT SHALL BE PROVIDED WITH UNIONS. A SUFFICIENT NUMBER OF UNIONS SHALL BE USED TO ALLOW FOR THE DISMANTLING OF ALL PIPE, VALVES, AND EQUIPMENT.
10. DETECTABLE UTILITY MARKING TAPE SHALL BE BURIED 12 INCHES BELOW THE SURFACE DIRECTLY ABOVE THE CENTER CONDUIT.
11. SEE GEOTECHNICAL REPORT FOR COMPACTION REQUIREMENTS.
12. POUR SLAB AFTER REVIEW OF EXCAVATION AND COMPACTION AND WRITTEN ACCEPTANCE OF THE GEOTECHNICAL ENGINEER.
13. BEDDING SAND SHALL CONSIST OF WELL GRADED SAND WHERE 100



A RECOVERY WELL CONSTRUCTION (TYP)

NOT TO SCALE



B UTILITY TR

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FIELD BOOKS

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DRAWN JMV

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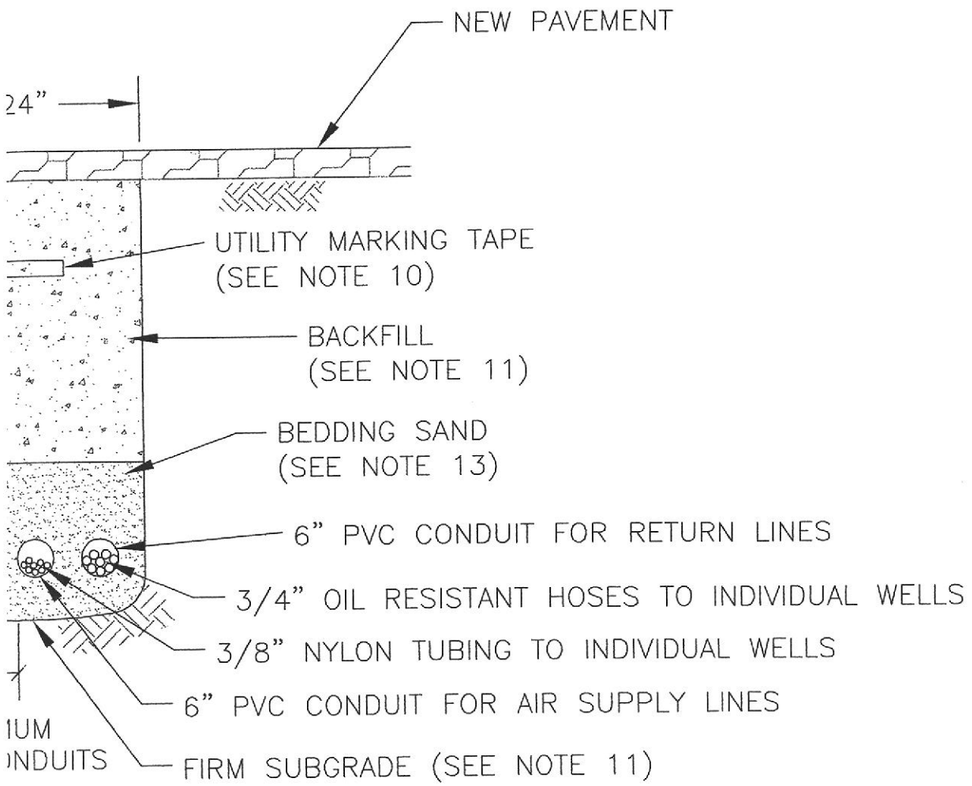

PERCENT PASSES THE NO. 200 SCREEN. A UTILITY SOIL GAS CUT-OFF BARRIER (MT2.01 DETAIL D) MUST BE INSTALLED EVERY 50 FEET ALONG THE UTILITY TRENCH.

14. XITECH MODEL ADJ 200 SKIMMER. PUMP INSTALLATION MUST BE COORDINATED WITH XITECH AND PORT REPRESENTATIVES.
15. INGERSOLL-RAND MODEL 2475N7.5 80 GALLON AIR COMPRESSOR, 7.5 HP, VERTICAL TANK.
16. INGERSOLL-RAND MODEL DS25 REFRIGERATED COMPRESSED AIR DRYER.
17. SEE SHEETS E2.01 AND E7.03 FOR ELECTRICAL REQUIREMENTS.
18. SKIMMER CONTROLLER WILL BE A XITECH MODEL 5000ES CONTROLLER.
19. THE TANK SHALL BE A 500-GALLON CONVAULT ABOVEGROUND STORAGE TANK OR EQUIVALENT.
20. THE CONTRACTOR MUST ADHERE TO THE VARIOUS CODES AND REGULATIONS APPLICABLE TO THIS SITE FOR THE STORAGE OF COMBUSTIBLE AND FLAMMABLE LIQUIDS. THE CODES AND REGULATIONS MAY ORIGINATE FROM LOCAL FIRE AUTHORITIES (E.G., FIRE MARSHALS), LOCAL BUILDING JURISDICTIONS (E.G. CITY OR COUNTY BUILDING OFFICIALS), STATE LAWS AND REGULATIONS (E.G., AIR RESOURCE BOARD), FEDERAL AGENCIES (E.G., ENVIRONMENTAL PROTECTION AGENCY), REGIONAL AND NATIONAL CODES (E.G., NATIONAL FIRE PROTECTION ASSOCIATION [NFPA] OR UNIFORM FIRE CODE [UFC]) OR OTHERS.
21. INSTALLATION OF THE TANK MUST BE PERFORMED BY PERSONNEL THAT HAVE KNOWLEDGE AND EXPERIENCE IN PROCEDURES INVOLVED WITH PROPER AND SAFE INSTALLATION OF ABOVEGROUND TANKS USED FOR THE STORAGE OF STABLE, FLAMMABLE AND COMBUSTIBLE LIQUIDS.

IUM
NDUITS

CH (TYP)

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94607
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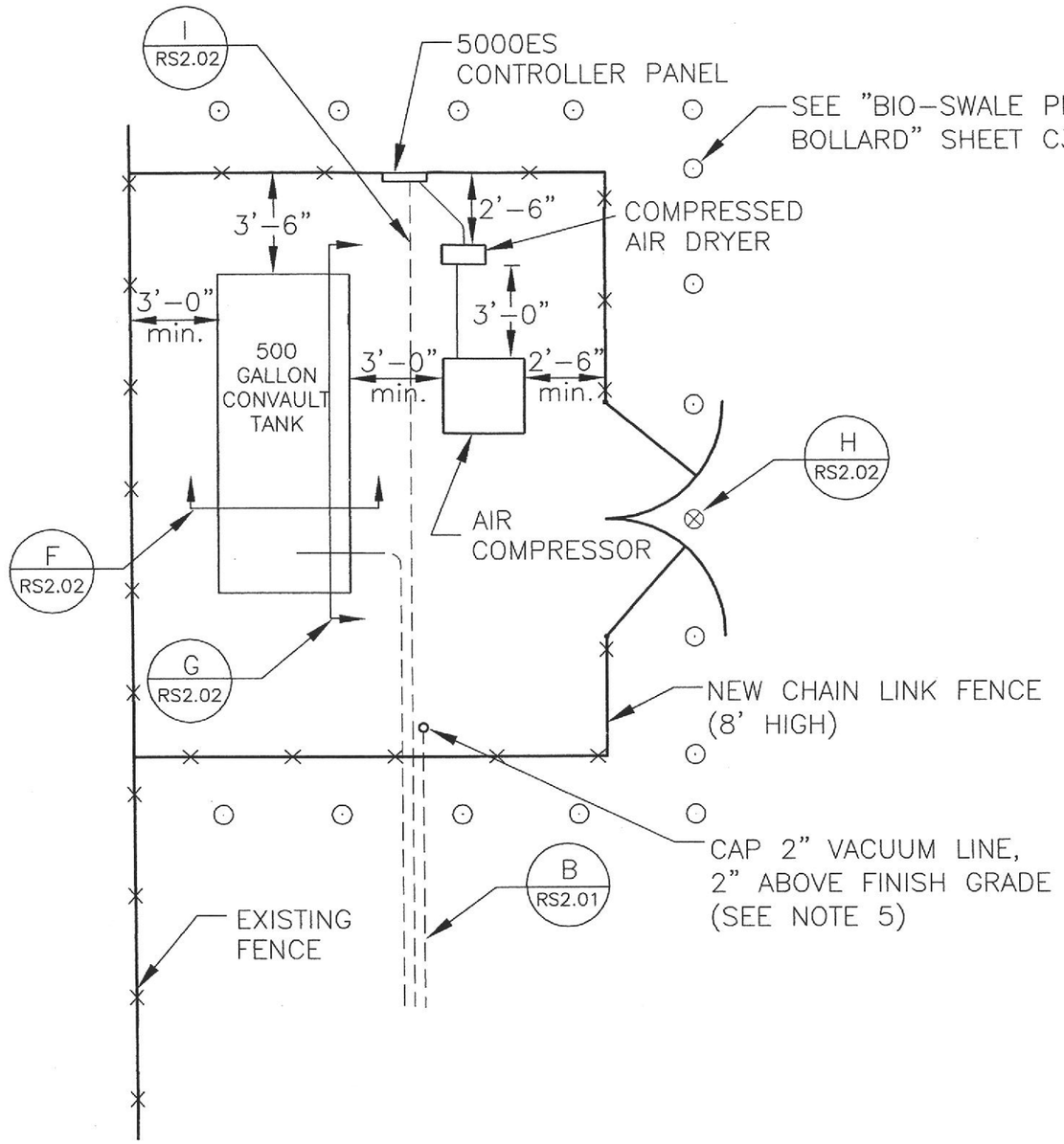
MARITIME & 7TH STREET SITE

PORT FIELD SUPPORT
SERVICES COMPLEX

FREE PRODUCT RECOVERY SYSTEM - DETAILS

DATE: 02/04/03
SCALE:
SHEET: 22-2 OF 203 SHEETS

RS2.01 AA-3827

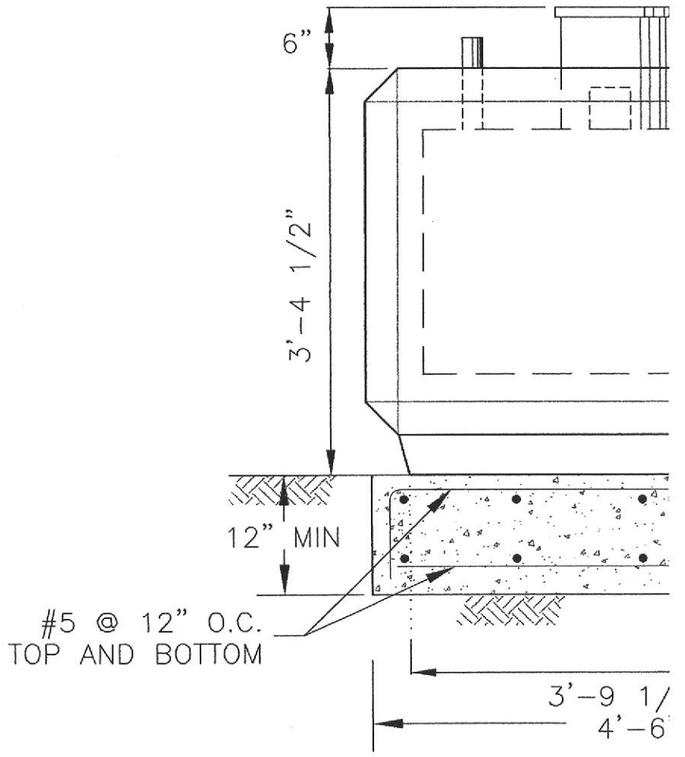


E EQUIPMENT COMPOUND

1 INCH = 5 FEET

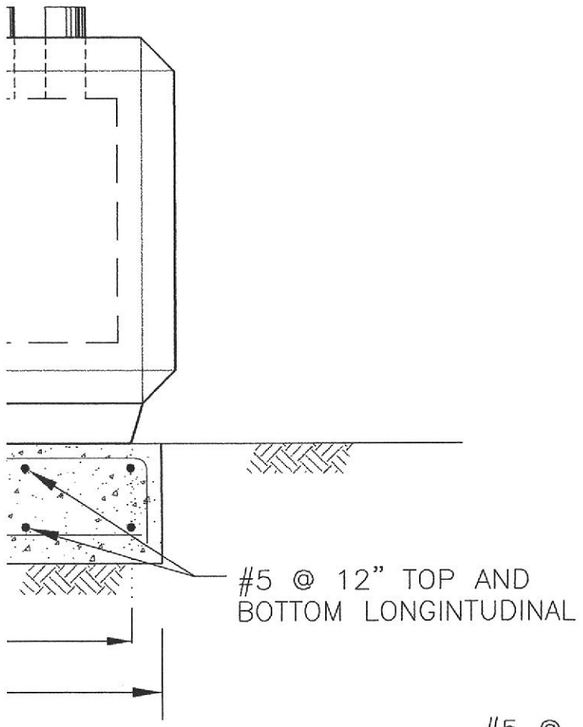
0 5 FEET

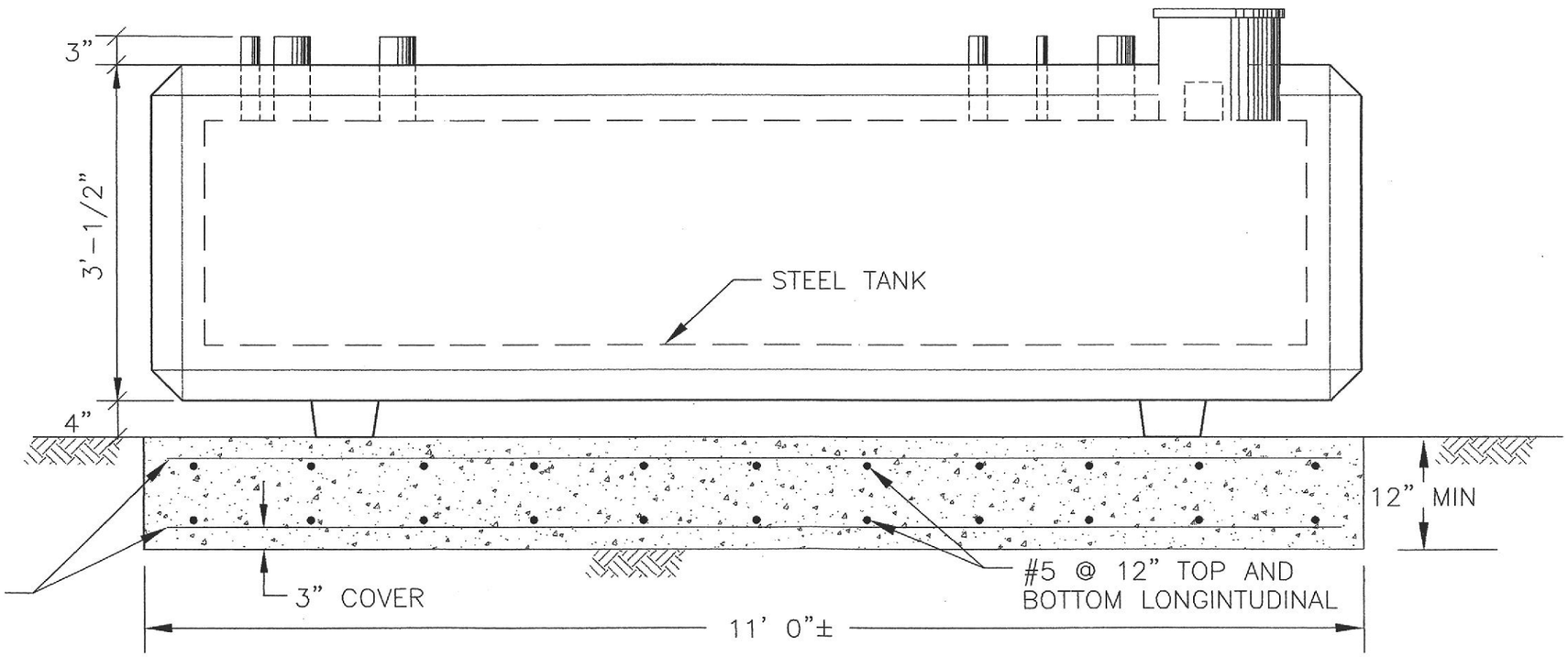
ORIGINAL SCALE



F STORAGE TANK AND FOUN

NOT TO SCALE





TION PAD – END VIEW

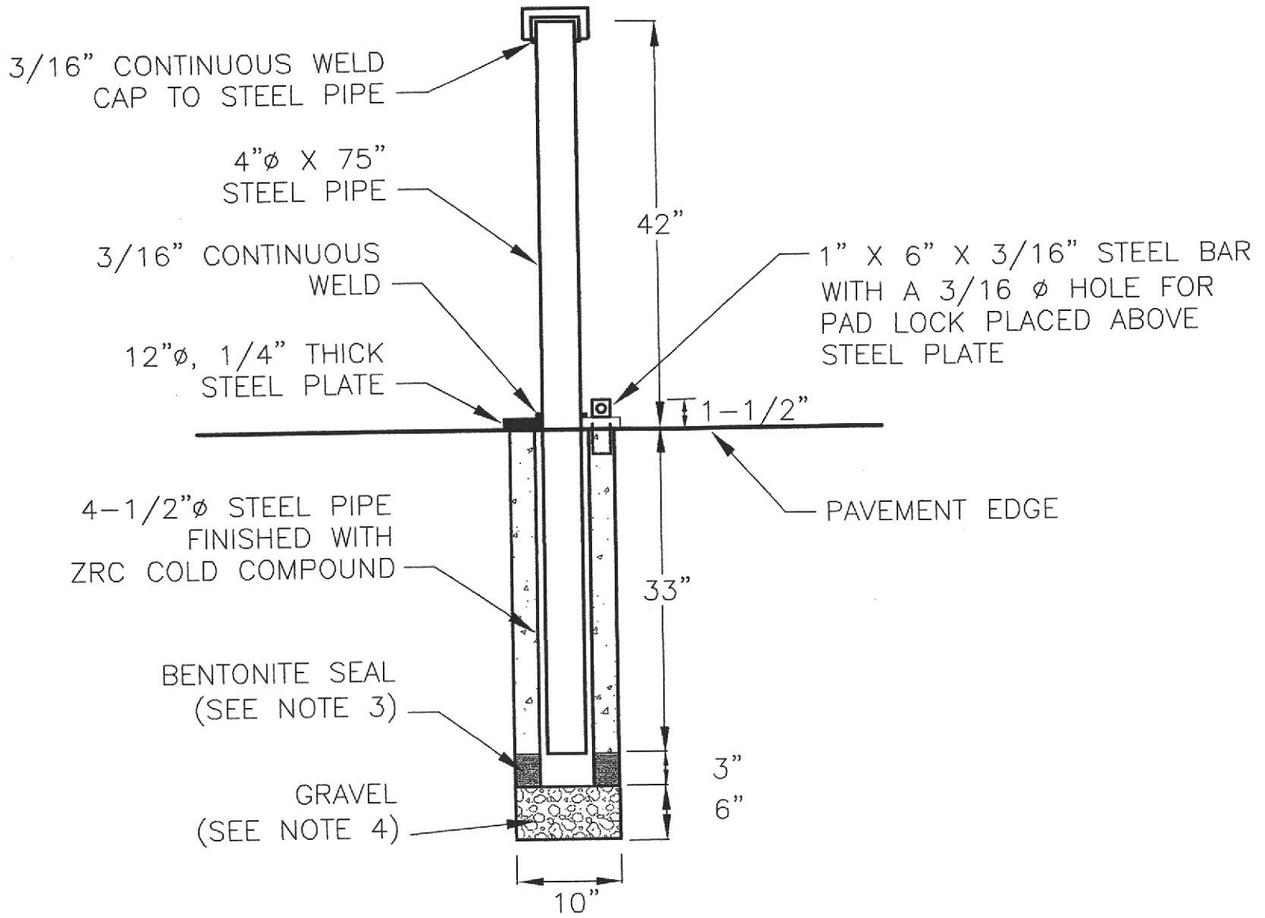
RUCTURAL SLAB BY KPA GROUP, 9/15/03

G

STORAGE TANK AND FOUNDATION PAD – SIDE VIEW

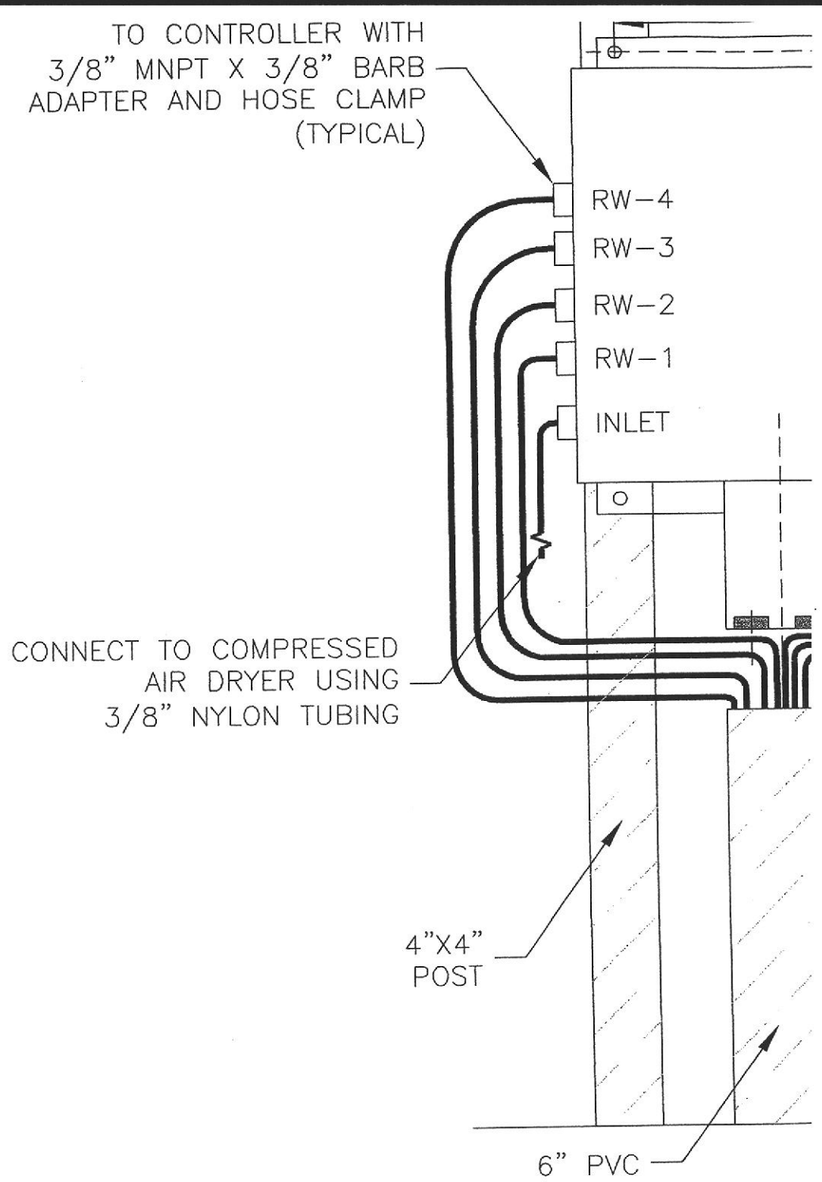
NOT TO SCALE

STRUCTURAL SLAB BY KPA GROUP, 9/15/03



H REMOVABLE BOLLARD DETAIL

NOT TO SCALE



I XITECH MODEL 5000ES C

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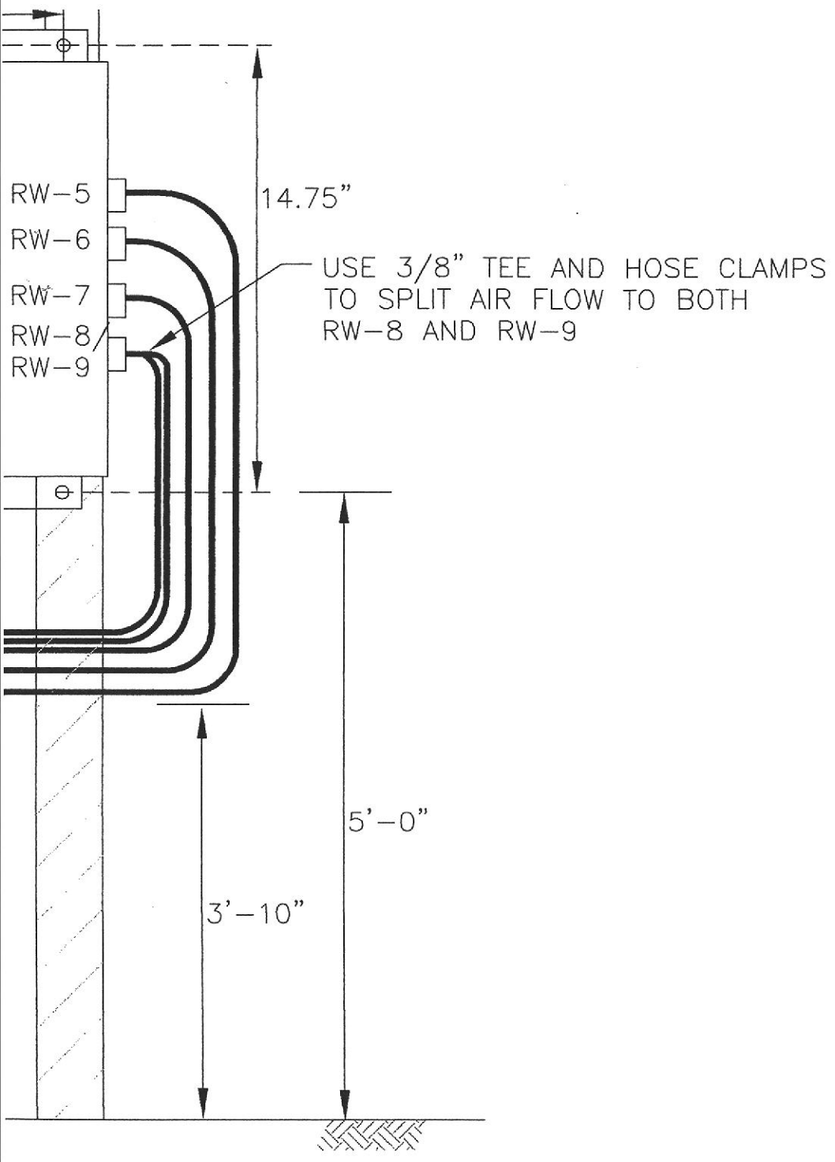

TROLLER PANEL

OF OAKLAND

530 WATER ST. OAKLAND, CALIFORNIA

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