SPECIAL NOTES:

1) ALL GRADING AND DRAINAGE IMPROVEMENTS SHALL BE COMPLETED IN ACCORDANCE WITH THE CURRENT, FOLLOWING LISTED CODES: THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WITH SUPPLEMENTS (GREENBOOK) ;AND THE "SAN DIEGO AREA REGIONAL STANDARD DRAWINGS", AS AMENDED BY THE SUPPLEMENTS; AND EARTHWORK SPECIFICATIONS ATTACHED TO THE "UPDATED SOILS REPORT".

2) ALL GRADING SHALL BE DONE UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER.

3) CUT AND FILL SLOPES SHALL BE TRIMMED TO FINISH GRADES TO PRODUCE A SMOOTH AND UNIFORM SURFACE OF CROSS SECTION. THE SLOPES OF EXCAVATIONS OR EMBANKMENTS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE ARCHITECT. FINISHED SLOPES SHALL BE LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS OR OTHER WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF SITE.

4) COMPACTION TESTS SHALL BE SUPPLIED FOR ALL TRENCH BACKFILL IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S REQUIREMENTS AND PROJECT SPECIFICATIONS.

5) ALL PIPELINES TO BE ABANDONED SHALL BE REMOVED AND REPLACED WITH PROPERLY COMPACTED SOILS UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT.

6) THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT EXISTING UTILITIES.

7) NEITHER THE OWNER, ARCHITECT NOR ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AMD HEALTH STANDARDS, LAWS AND REGULATIONS.

8) THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO PERFORMING DEMOLITION OPERATIONS. EXISTING UTILITY LOCATIONS ARE SHOWN PER RECORD DRAWINGS. ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY OR COMPLETENESS OF EXISTING UTILITIES. CONTRACTOR SHALL VERIFY LOCATION, SIZE, ETC., OF EXISTING UTILITIES A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO SCHEDULING WORK. CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED CONSTRUCTION.

9) THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS AND IF THOSE CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS, HE SHALL NOTIFY THE ARCHITECT PRIOR TO COMMENCING WORK ON THE PROJECT.

10) CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF EROSION CONTROL REQUIREMENTS AS DETAILED ON THESE PLANS AND IN THE STORM WATER POLLUTION PREVENTION PLAN TO BE PROVIDED BY THE CONTRACTOR FOR THE OWNERS APPROVAL.

11) MAXIMUM CUT OR FILL SLOPE RATIO SHALL BE 2:1.

12) A TWELVE INCH HIGH BY TWO FOOT WIDE BERM (90% COMPACTED) SHALL BE CONSTRUCTED ALONG THE TOP OF ALL SLOPES GREATER THAN SIX VERTICAL FEET IN HEIGHT. NO RUNOFF SHALL FLOW OVER THE TOP OF SLOPE.

13) ALL DISTURBED AREAS MUST BE REVEGETATED, SUBSTANTIALLY GERMINATED AND ESTABLISHED WITHIN 45 DAYS OF COMPLETION OF GRADING AND PRIOR TO REQUESTING FINAL INSPECTION.

14) IMPORT MATERIAL SHALL BE OBTAINED FROM, AND WASTE MATERIAL SHALL BE DEPOSITED AT A SITE APPROVED BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTES OR ADJACENT STREETS AS DIRECT RESULT OF THE OPERATION. CONTRACTOR SHALL OBTAIN HAUL ROUTE PERMIT FROM THE CITY OF OCEANSIDE FOR HAULING ON A PUBLIC STREET.

15) ALL RECOMMENDATIONS OF THE UPDATED GEOTECHNICAL REPORT SHALL BE IMPLEMENTED AS A PART OF THE GRADING, EARTH MOVING OPERATION, UTILITY INSTALLATION AND SURFACE IMPROVEMENTS.

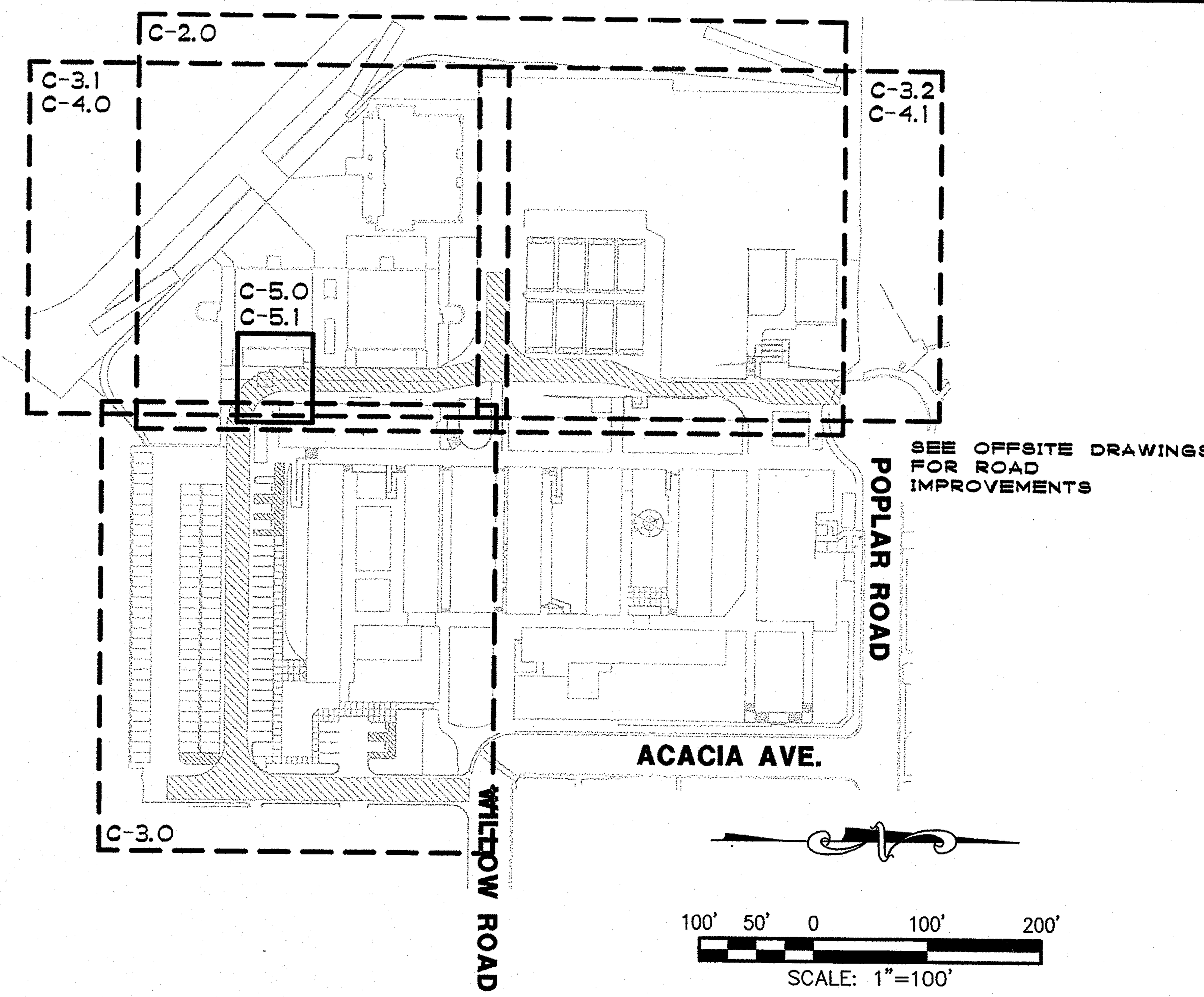
16) THE ARCHITECT SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OF GRADING OPERATIONS.

1
C-5.2

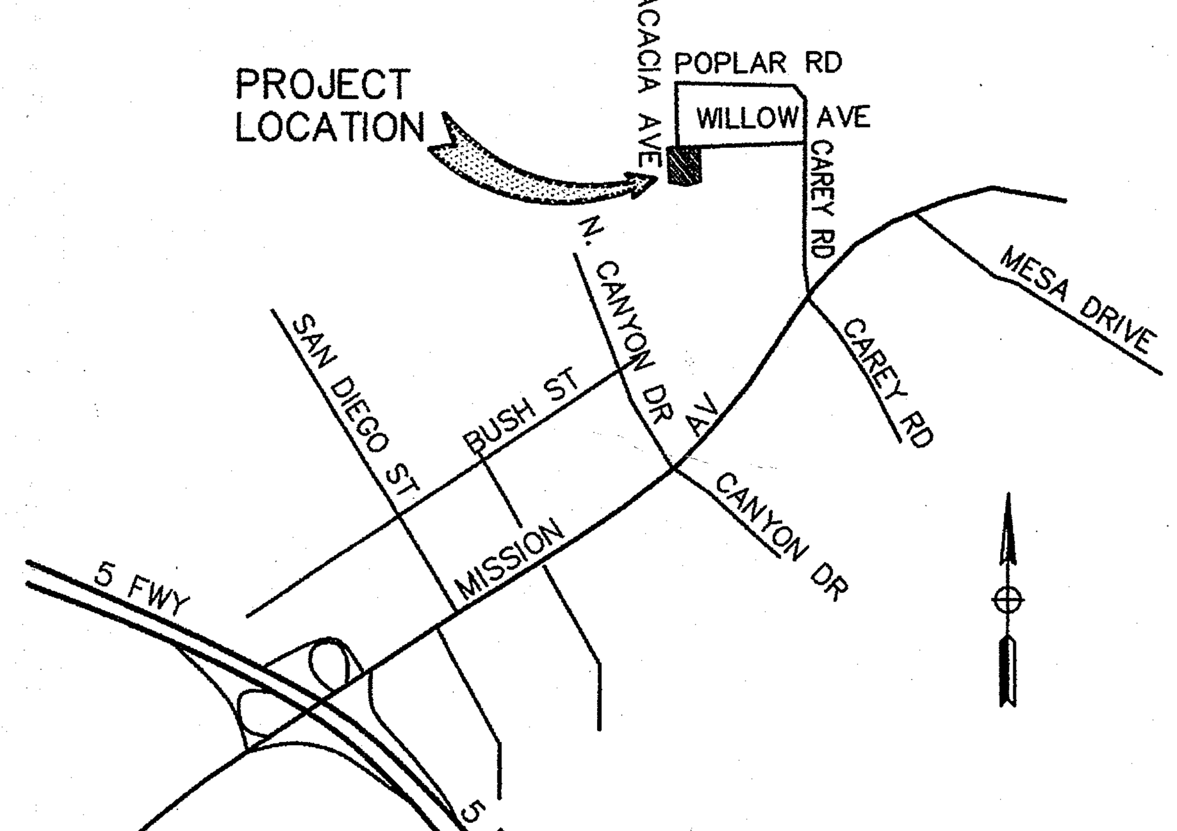
DETAIL OR SECTION DESIGNATION

REFERENCE SHEET NUMBER

DETAIL REFERENCE



KEY MAP



VICINITY MAP

NOT TO SCALE

Underground Service Alert

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1-800 422-4133

TWO WORKING DAYS BEFORE YOU DIG

PAVING NOTES:

1) UTILITY TRENCH BACKFILL SHALL BE COMPACTION TESTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL INFORM THE INSPECTOR OF UTILITY TRENCH BACKFILL COMPACTION TEST RESULTS., IN WRITING, PRIOR TO THE PLACEMENT OF BASE MATERIAL.

2) SUBBASE GRADE SHALL BE COMPACTED TO 95% TO A DEPTH OF 12" TESTED AND APPROVED FOR LINE AND GRADE BY SOILS ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIAL.

3) BASE MATERIAL SHALL BE CRUSHED AGGREGATE BASE MATERIAL ACCORDING TO SECTION 203-6.3.2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION (CLASS C2).

4) AGGREGATE BASE SHALL BE COMPACTED AS SPECIFIED ABOVE, TESTED, AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF ASPHALTIC CONCRETE.

5) PRIOR TO THE PLACEMENT OF ASPHALTIC CONCRETE A PRIME COAT MUST BE APPLIED TO ALL VERTICAL CONCRETE SURFACES THAT WILL BE IN CONTACT WITH ASPHALT. THE SURFACE OF THE CRUSHED AGGREGATE BASE SHALL BE COATED WITH 0.25 GAL./SQ.YD. OF MC-70, SC-70 OR MC-250 LIQUID ASPHALT PRIOR TO ASPHALT PLACEMENT.

6) ASPHALTIC CONCRETE SHALL CONFORM TO PART 4 SECTION 400-4.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, (TYPE III, CLASS C2, GRADE AR 4000).

7) PLACEMENT OF ASPHALTIC CONCRETE FOR ALL IMPROVEMENTS SHALL BE DONE IN ACCORDANCE TO SECTION 302-5.6.2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. TESTING SHALL BE DONE BY A PERSON TRAINED TO PERFORM ASPHALTIC CONCRETE COMPACTION TESTING.

8) A "SEAL COAT" SHALL BE APPLIED TO THE FINISHED SURFACE OF ALL ASPHALT PAVING AT A RATE OF 0.1 GAL./SQ.YD. THE SEAL COAT SHALL BE TYPE SS-1 OR TYPE SS-1H ASPHALTIC EMULSION WITH A 60-70 GRADE LIQUID ASPHALT.

SOILS ENGINEER CERTIFICATION

THIS GRADING PLAN HAS BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AS OUTLINED IN OUR SOILS REPORT FOR THIS PROJECT.

SOILS ENGINEER OF RECORD: ______________________
NAME SEAL

ENGINEERING GEOLOGIST OF RECORD: ______________________
NAME SEAL

CONSTRUCTION TESTING & ENGINEERING, INC
2414 VINEYARD AVENUE, SUITE G
ESCONDIDO, CA 92029

DECLARATION OF ENGINEER OF WORK

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY THE AGENCY IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THE PLANS COMPLY WITH AGENCY PROCEDURES AND OTHER APPLICABLE POLICIES AND ORDINANCES. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS.

Steven J. Barger (signature) 3/21/2005

STEVEN J. BARGER R.C.E. 34318 EXPIRES 09-30-05 DATE:

REGISTERED PROFESSIONAL ENGINEER — STEVEN J. BARGER — No. 34318 — EXPIRES 9-30-05 — CIVIL — STATE OF CALIFORNIA

POROUS PAVING NOTES:

1. POROUS PAVING SHALL CONFORM TO ALL OF THE REQUIREMENTS OF THE PAVING NOTES EXCEPT AS MODIFIED BY THESE POROUS PAVING NOTES.

2. ALL AGGREGATE FOR POROUS PAVING INCLUDING BASE MATERIAL SHALL CONSIST OF CLEAN WASHED ROCK. NO FINE MATERIALS SUCH AS DIRT, FILLER, SAND, CEMENT ARE ALLOWED. ALL SUCH MATERIALS MUST BE SCREENED OUT PRIOR TO THOROUGHLY WASHING THE ROCK.

3. POROUS PAVING SHALL CONFORM TO THE FOLLOWING POROSITY REQUIREMENTS: ASPHALT LAYER 20%, BASE LAYER 40%.

4. CONTRACTOR SHALL PROVIDE A TEST STRIP THE SIZE OF A SINGLE PARKING SPACE. THE ARCHITECT SHALL PERFORM WATER TESTING TO VERIFY THE SPECIFIED POROSITY. IF THE TEST PASSES, THE TEST STRIP MAY BE INCORPORATED INTO THE FINISHED PRODUCT.

5. THE SEAL COAT SHALL NOT BE APPLIED.

6. THE CONTRACTOR SHALL PROTECT THE POROUS PAVING FROM CONTAMINATION DURING THE WARRANTY PERIOD. MINIMUM WEEKLY STREET SWEEPING SHALL BE REQUIRED. THE ARCHITECT OR CONSTRUCTION MANAGER MAY MODIFY THE SWEEPING SCHEDULE OR ORDER POWER WASHING TO ENFORCE THESE PROVISIONS.

7. STANDARD POROUS ASPHALT MIX:

US STANDARD SIEVE SIZE	PERCENT PASSING
1/2 IN.	100%
3/8 IN.	95%
#4	35%
#8	15%
#16	10%
#30	2%

8. THE UNDERLYING STONE RECHARGE BED SHALL CONSIST OF A UNIFORMLY GRADED (IE SCREENED) 1.5 - 2.5 IN. CLEANED WASHED STONE MIX. DUSTY OR DIRTY STONES SHALL BE REJECTED. NATIVE MATERIALS PLACED BELOW THE STONE BED SHALL HAVE A SAND EQUIVALENT INDEX OF 25. COMPACTION SHALL BE 95% RC FOR THE UPPER 12 INCHES.

WORK TO BE DONE

IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS; THE CURRENT SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR IMPROVEMENT OF SUBDIVISION STREETS AND STANDARD REFERENCE DRAWINGS.

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2003 EDITION) INCLUDING REGIONAL SUPPLEMENT AMENDMENTS.
2. CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF TRAFFIC CONTROLS, FOR CONSTRUCTION AND MAINTENANCE WORK ZONES, 1996 EDITION.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, JULY 2002 EDITION.

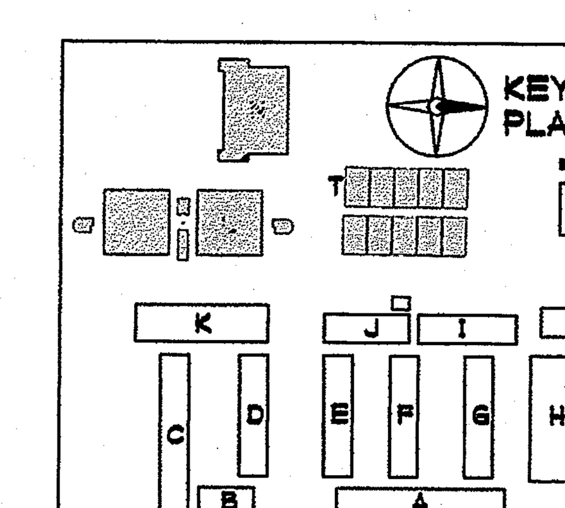
STANDARD DRAWINGS:

1. SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (SDRSD), MARCH 2000 EDITION.
2. STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, 2002 EDITION.
3. CITY OF OCEANSIDE STANDARD DRAWINGS CURRENT EDITION (OSD)

LEGEND:

DESCRIPTION	STD. DWGS	SYMBOL
CONSTRUCT 3" AC OVER 4" BASE (HARDCOURT)	PER SOILS ENGINEER	
CONSTRUCT 3" GRIND AND OVERLAY (PARKING)	PER SOILS ENGINEER	
CONSTRUCT 6" POROUS AC ON 12" BASE (PARKING)	PER SOILS ENGINEER	
CONSTRUCT PCC CONCRETE CURB AND CUTTER	SDRSD G-2 PER SOILS ENGINEER	
CONSTRUCT PCC CONCRETE CURB	SDRSD G-1 PER SOILS ENGINEER	
CONSTRUCT 4" PCC SIDEWALK	SDRSD G-7 PER SOILS ENGINEER	
CONCRETE WHEEL STOPS	PER ARCHITECTURAL DRAWINGS	
STRIPING AND SIGNING	PER ARCHITECTURAL DRAWINGS	
CONSTRUCT 3' PCC CROSS GUTTER	SDRSD G-12 PER SOILS ENGINEER	
CONSTRUCT PEDESTRIAN RAMP	SDRSD G-27. AND DETAIL SHEET C-5.2	
CONSTRUCT PCC DRIVEWAYS	G-14A PER SOILS ENGINEER	
2" X 10" REDWOOD HEADER		
BROOKS CATCH BASIN	DETAIL 2 SHEET C5.2	
STORM DRAIN PIPE SDR-35	SDRSD S-4C	(SIZE PER PLAN)
CUT SLOPE (2:1)		
FILL SLOPE (2:1)		
2" COPPER WATER LINE	OSD W-9	W
4" PVC C-900 FIRE SERVICE	SDRSD W-17, W-21	F
8" PVC C-900 FIRE LINE	SDRSD W-17, W-21	F
4" GATE VALVE	OSD W-6	GV
THRUST BLOCK	OSD W-4	
FIRE HYDRANT ASSEMBLY	OSD W-2	
POST INDICATOR VALVE AND FIRE DEPT. CONNECTION	OSD W-16	FDC PIV
BLIND FLANGE		
SEWER LATERAL SDR35	SDRSD S-13, S-14	S
SEWER CLEANOUT	SDRSD S-3, S-16	
SEWER MANHOLE	SDRSD S-17	
CONNECT TO EXIST. SEWER		
4" FORCE MAIN SCH 40 PVC	SDRSD S-4C	
REMOVE/REPLACE SEWER PUMP STATION	SHEET C5.0, C5.1	

CIVIL ENGINEERING DRAWING INDEX



CMD

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

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4-106494
AC FLS SS
DATE MAR 2 8 2005

LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 — Renewal — STATE OF CALIFORNIA

SHEET TITLE
GENERAL NOTES

C-1.0

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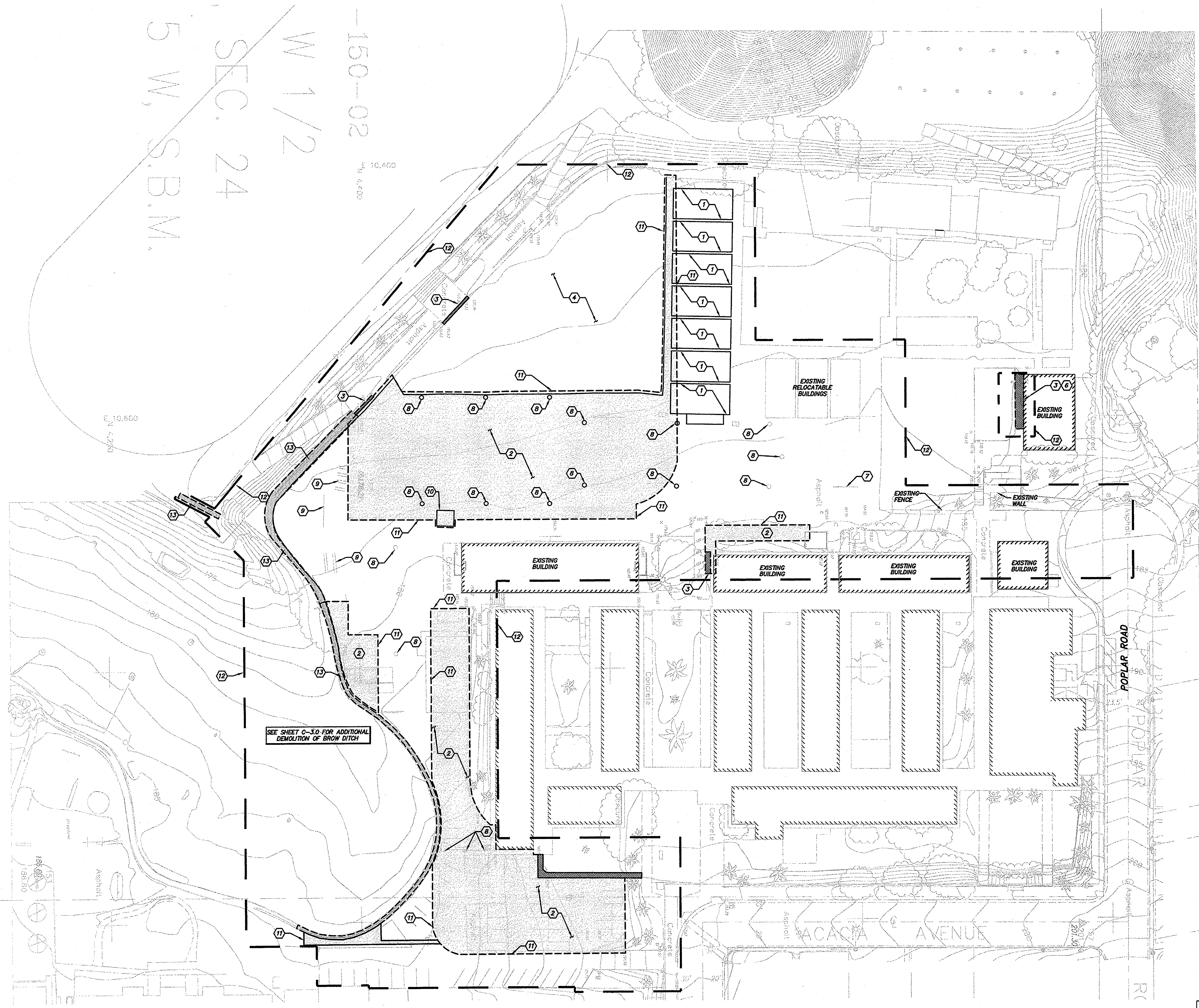

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.

BROW DITCH REMOVAL

ASPHALT REMOVAL

CONCRETE REMOVAL

SAWCUT

40' 20' 0 40' 80'

SCALE: 1"=40'

DEMOLITION NOTES:

1. REMOVE AND RELOCATE EXISTING RELOCATABLE BUILDINGS (DISCONNECT ALL UTILITIES) APPROXIMATELY 7 STRUCTURES SEE ARCHITECTURAL DRAWINGS. RECONNECT UTILITIES AS REQUIRED SEE ELECTRICAL DRAWINGS.
2. REMOVE EXISTING ASPHALT CONCRETE
3. SAWCUT CONCRETE
4. CLEAR AND GRUB
5. NOT USED
6. REMOVE CONCRETE
7. REMOVE WALL INCLUDING FOOTINGS
8. REMOVE STEEL POLES (APPROX 18) INCLUDING FOOTINGS
9. REMOVE PLAYGROUND EQUIPMENT INCLUDING FOOTINGS
10. REMOVE PUMP HOUSE WOOD STRUCTURE INCLUDING FOOTINGS SEE SHEET C-5.0 AND C-5.1 FOR LIFT STATION RELOCATION
11. SAWCUT ASPHALT CONCRETE
12. LIMIT OF WORK
13. REMOVE ASPHALT BROW DITCH

BENCHMARK:

Description: CITY OF OCEANSIDE BENCHMARK A2
BRASS DISK STAMPED "CITY OF OCEANSIDE"
Location: N'LY SIDE MISSION AVE. @ I-5 OVERPASS
150' +/- E'LY OF CENTERLINE OF I-5 @ BACK SIDEWALK
Record From: CITY OF OCEANSIDE
Elev: 144.71 Datum: M.S.L.

KEY PLAN

CMD

OUSD NO. 758-000

PROJECT NOS. 025

P. T. N. 73569-9

DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
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4-106494
AC YB FLS JA SS
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-28609 4/30/2007 renewal STATE OF CALIFORNIA

SHEET TITLE
DEMOLITION PLAN

C-2.0

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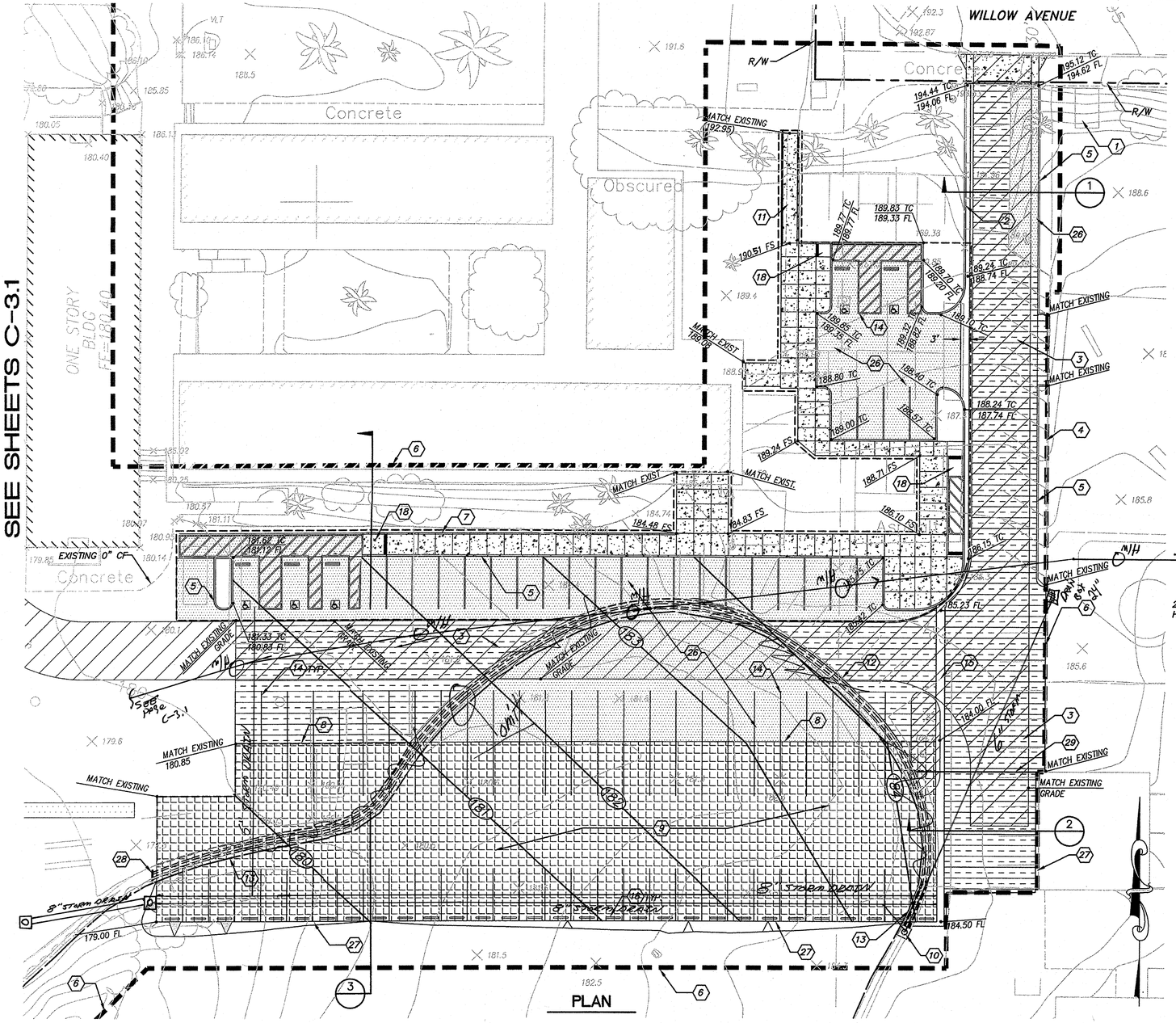
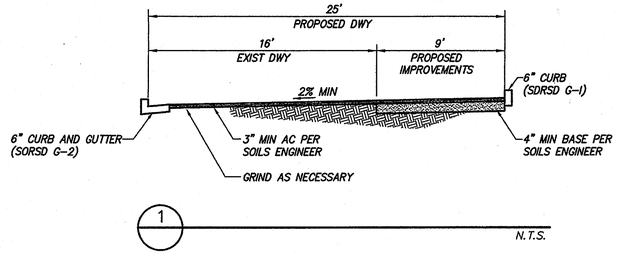
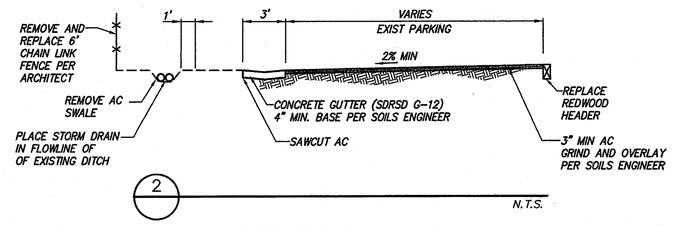
SEE SHEETS C-3.1

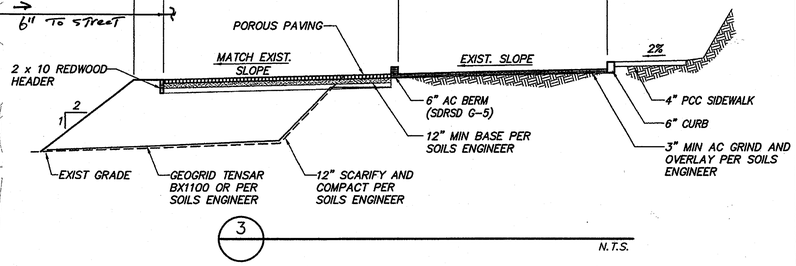


PLAN

SCALE: 1"=20'







LEGEND

- 1270.00 — FINISH FLOOR ELEVATION
- SIDEWALK ENTRY ELEVATIONS @ ALL EXTERIOR DOORWAY ENTRANCE/EXIT MATCH BUILDING FINISH FLOOR ELEVATION MINUS 0.02 FOOT (1/4-INCH)
- FIRE LANE
- ASPHALT PAVING
- NEW BUILDING
- GRIND AND OVERLAY
- POROUS AC

NOTE:

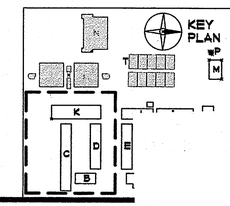
1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.

NOTE:
REFER TO ARCHITECTURAL PLANS FOR MORE DETAILED CONSTRUCTION INFORMATION OF SURFACE IMPROVEMENTS:
(HARDCOURT, STAIRS, RAMPS, HANDRAILING, ETC.)

SEE LANDSCAPE DRAWINGS

CONSTRUCTION NOTES:

1. PROTECT CONCRETE STAIRS
2. 6" CURB & GUTTER (SDRSD G-2)
3. 3" MIN AC GRIND AND OVERLAY PER SOILS ENGINEER
4. PROTECT EXISTING FENCE
5. 6" CURB (SDRSD G-1)
6. LIMIT OF WORK
7. 4" PCC SIDEWALK (SDRSD G-7) SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL NOTES AND DETAILS
8. 6" AC BERM (SDRSD G-5)
9. CONSTRUCT 6" POROUS AC ON 12" BASE (PARKING)
10. TYPE F CATCH BASIN (SDRSD D-7)
11. FOR HANDRAILING AND RAMP SEE ARCHITECTURAL DRAWINGS
12. 11-8" PVC PIPES (SCH 40) TYPE C ROCK (SDRSD S-4)
13. LANDFILL LIMIT
14. FOR STRIPING AND SIGNING, SEE ARCHITECTURAL DRAWINGS
15. 3' CONCRETE CROSS GUTTER (SDRSD G-12)
16. CONCRETE WHEEL STOPS, SEE ARCHITECTURAL DRAWINGS
18. CONSTRUCT PEDESTRIAN RAMP PER ARCHITECTURAL DRAWINGS
19. CONSTRUCT PCC DRIVEWAYS
26. CONSTRUCT 3" AC OVER 4" BASE
27. 2" X 10" REDWOOD HEADER
28. CONSTRUCT STRAIGHT HEADWALL (SDRSD D-30)
29. REMOVE AND REPLACE ROOF DRAIN AS NECESSARY



GROTH ARCHITECTS, INC.
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CMD

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
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4-106494
AC VG FLS SS
DATE MAR 2 8 2005

LICENSED ARCHITECT
JOHN SCOTT GROTH
C-28609
4/30/2007
Renewal
STATE OF CALIFORNIA

SHEET TITLE
GRADING AND DRAINAGE PLAN

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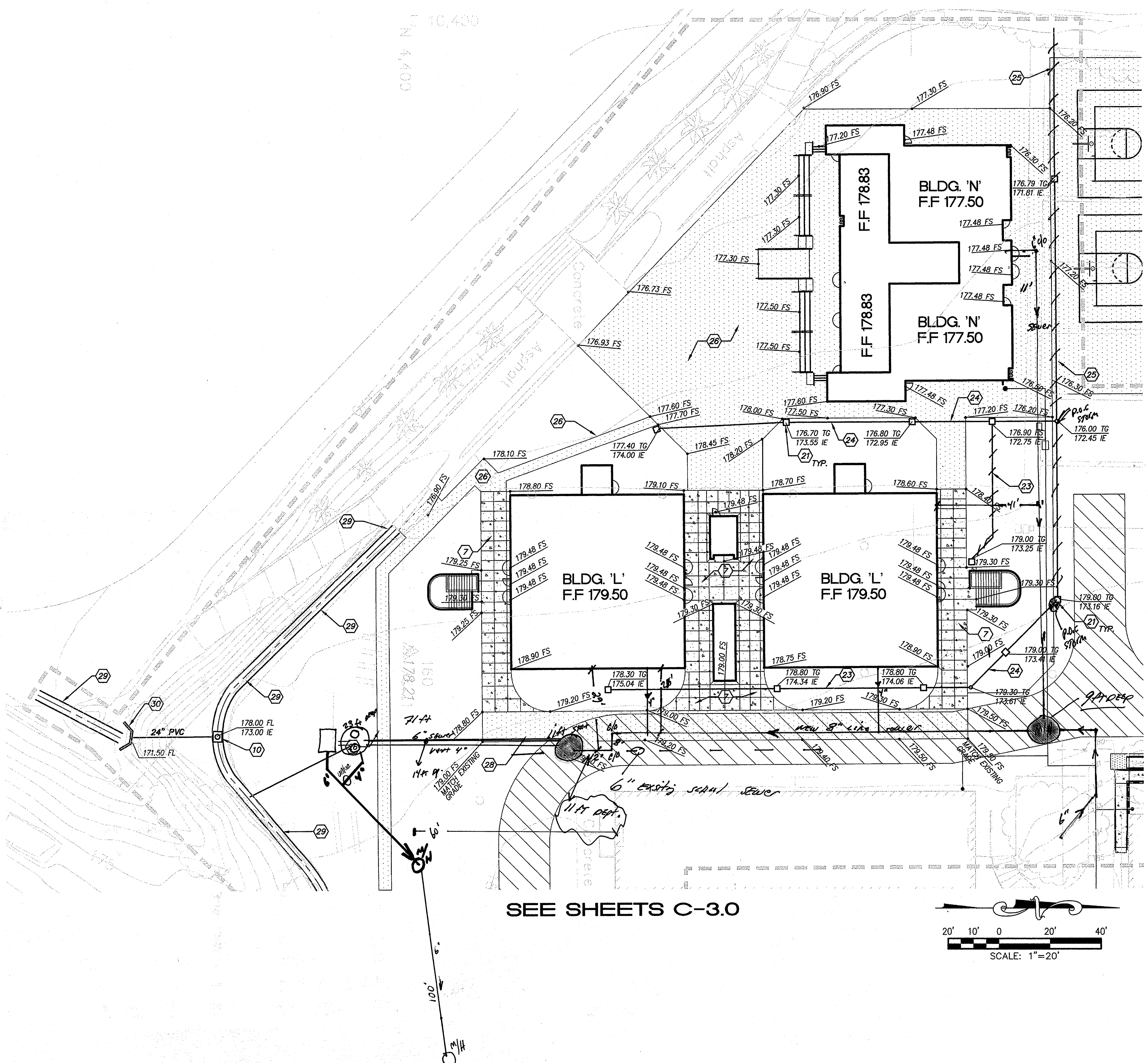


CONSTRUCTION NOTES:

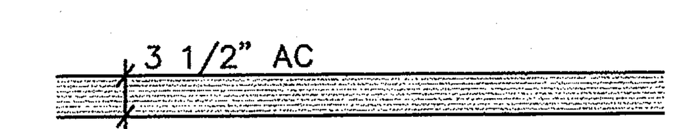
- (7) 4" PCC SIDEWALK (SDRSD G-7) SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL NOTES AND DETAILS
- (10) TYPE F CATCH BASIN (SDRSD D-7)
- (21) BROOKS MODEL 1212 CATCH BASIN SEE DETAIL 2 ON SHEET C-5.2
- (23) 6" PVC (SDR 35) PIPE W/ROCK ENCASEMENT TYPE C
- (24) 8" PVC (SDR 35) PIPE W/ROCK ENCASEMENT TYPE C
- (25) 12" PVC (SDR 35) PIPE W/ROCK ENCASEMENT TYPE C
- (26) CONSTRUCT 3" AC OVER 4" BASE (HARDCOURT)
- (28) CONSTRUCT 3 1/2" AC OVER 7" BASE (FIRE LANE)
- (29) CONCRETE BROWDITCH (SDRSD D-75)
- (30) WING TYPE HEADWALL (SDRSD D-34, AND D-35)

LEGEND

- 177.50 — FINISH FLOOR ELEVATION
- SIDEWALK ENTRY ELEVATIONS @ ALL EXTERIOR DOORWAY ENTRANCE/EXIT MATCH BUILDING FINISH FLOOR ELEVATION MINUS 0.02 FOOT (1/4 – INCH)
- FIRE LANE
- ASPHALT PAVING
- NEW BUILDING

NOTES:
REFER TO ARCHITECTURAL PLANS FOR MORE DETAILED CONSTRUCTION INFORMATION OF SURFACE IMPROVEMENTS: (STAIRS, RAMPS, ETC.)

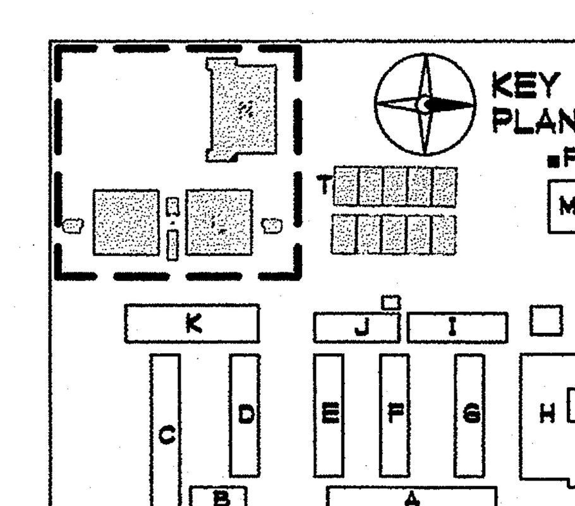
ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE "PROTECTED IN PLACE" AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.



FIRE LANE PAVING SECTION

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE "PROTECTED IN PLACE" AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PROVIDE GRADE BEAM WITH MINIMUM 12-INCH EMBEDMENT BELOW FINISH GRADE SURFACE AS SHOWN ON CIVIL DRAWINGS. SEE STRUCTURAL DRAWINGS.



CMD

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

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OFFICE OF REGULATION SERVICES
4-106494
AC PB FLS SS
MAR 2 8 2005
DATE

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 renewal STATE OF CALIFORNIA

SHEET TITLE
GRADING AND DRAINAGE PLAN
ASBUILT SEWER 6/1/06

C-3.1

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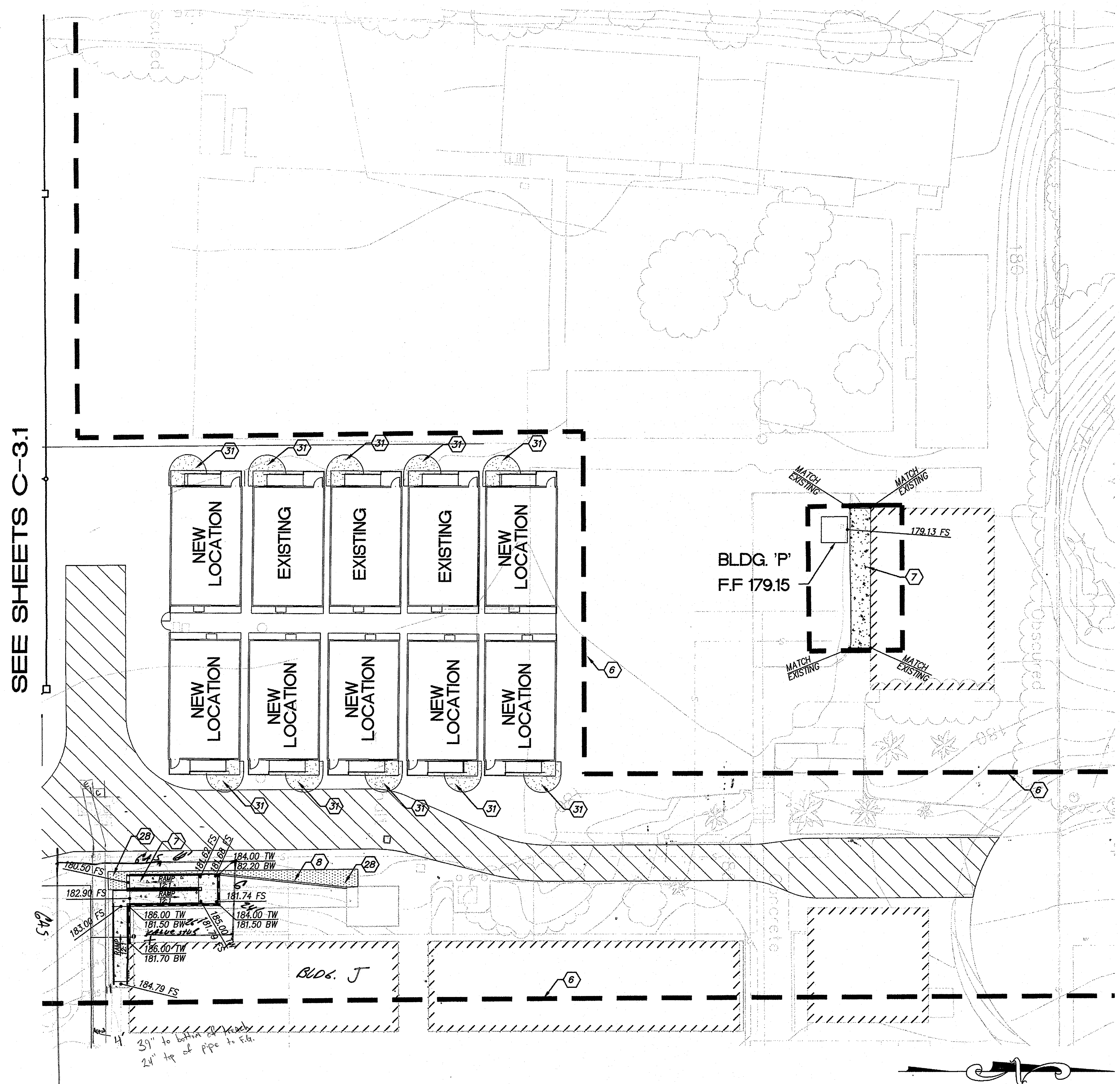


NOTE:
SEE STRUCTURAL DRAWING FOR RETAINING WALLS

CONSTRUCTION NOTES:

- (6) LIMIT OF WORK
- (7) 4" PCC SIDEWALK (SDRSD G-7) SEE ARCHITECTURAL DRAWING FOR ADDITIONAL NOTES AND DETAIL
- (8) 6" AC BERM (SDRSD G-5)
- (28) CONSTRUCT 3 1/2" OVER 7" BASE (FIRE LANE)
- (31) ASPHALT RAMP SEE ARCHITECURAL DRAWINGS

LEGEND

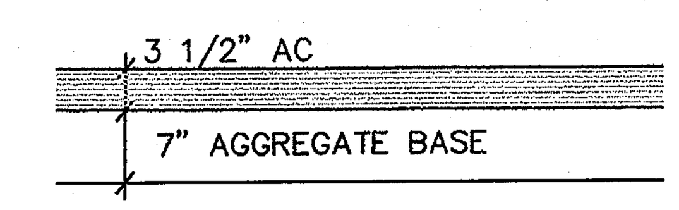
177.50 FINISH FLOOR ELEVATION

FIRE LANE

NEW BUILDING

NOTES:
REFER TO ARCHITECTURAL PLANS FOR MORE DETAILED CONSTRUCTION INFORMATION OF SURFACE IMPROVEMENTS: (STAIRS, RAMPS, ETC.)

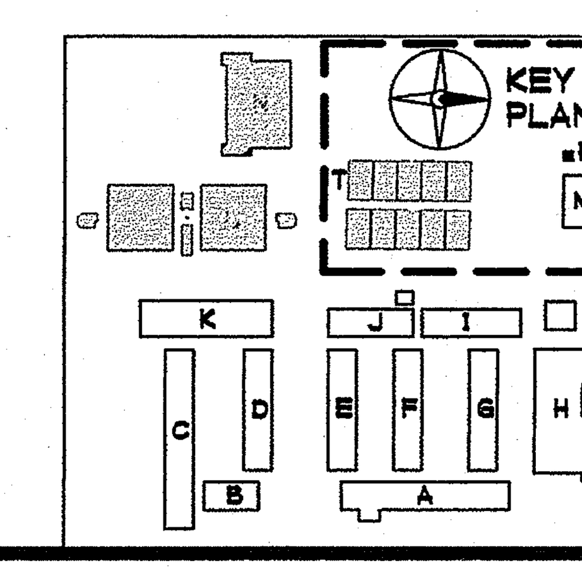
ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.



FIRE LANE PAVING SECTION

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PROVIDE GRADE BEAM WITH MINIMUM 12-INCH EMBEDMENT BELOW FINISH GRADE SURFACE AS SHOWN ON CIVIL DRAWINGS. SEE STRUCTURAL DRAWINGS.



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JOHN SCOTT GROTH
C-26609
4/30/2007
renewal
STATE OF CALIFORNIA

SHEET TITLE
GRADING & DRAINAGE PLAN

C-3.2

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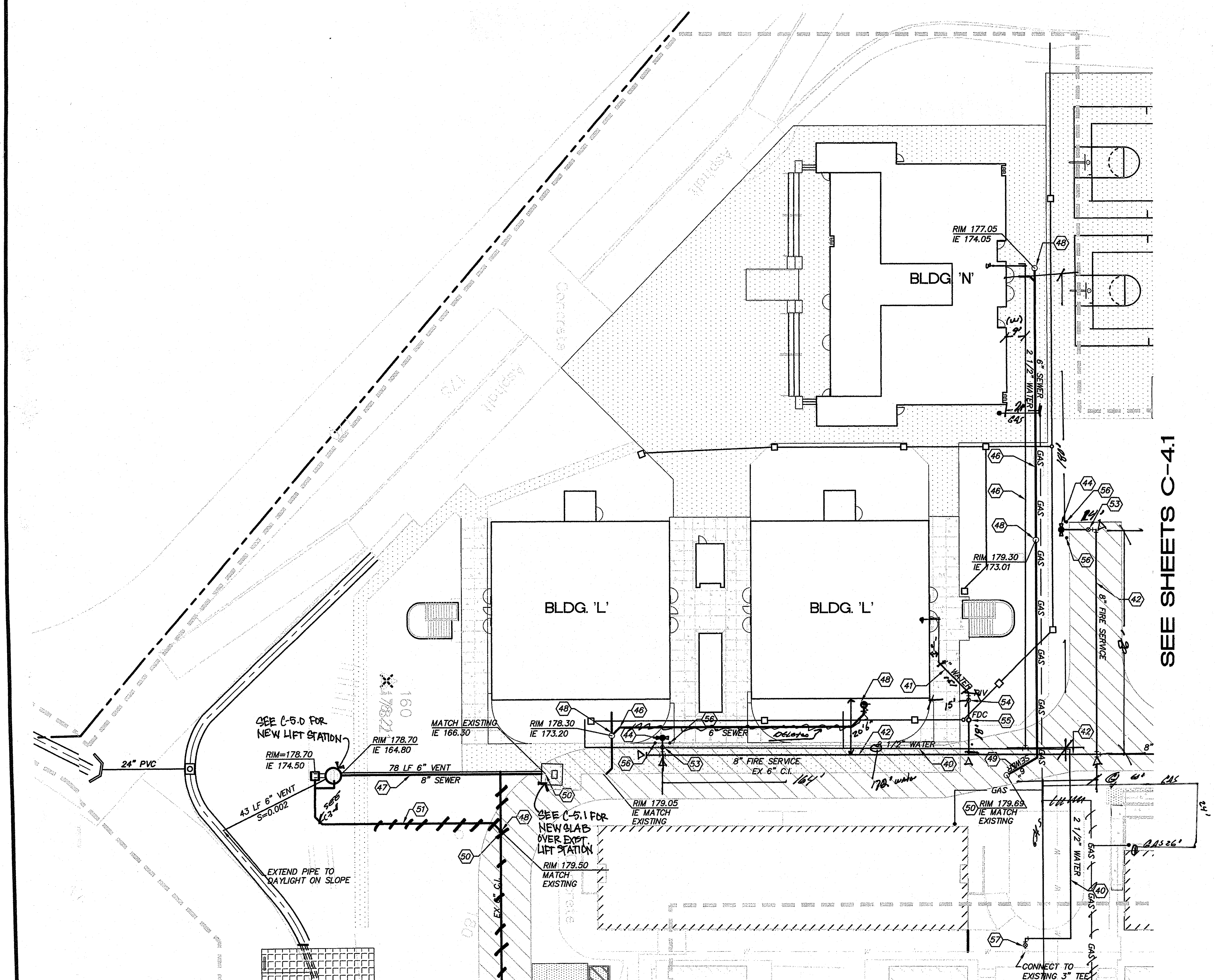

NOTE:
CONTRACTOR TO POTHOLE AND VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES TO BE JOINED. SEE SHEET C5.0 AND C5.1 FOR LIFT STATION RELOCATION

20' 10' 0 20' 40'
SCALE: 1"=20'

CONSTRUCTION NOTES:

- (40) 2 1/2" COPPER WATER LINE
- (41) 4" PVC C-900 WATER
- (42) 8" PVC C-900 FIRE LINE
- (44) FIRE HYDRANT ASSEMBLY
- (46) 6" PVC SEWER LINE
- (47) 8" PVC SEWER LINE
- (48) CLEANOUT
- (49) 48" DIAMETER MANHOLE
- (50) CONNECT TO EXISTING
- (51) 4" FORCE MAIN
- (53) 6" GATE VALVE
- (54) PIV VALVE
- (55) FDC
- (56) PROTECTION POST (SDRSD W-16)
- (57) 3" GATE VALVE
- △ THRUST BLOCKS OSD W-4

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.

KEY PLAN

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

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LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 STATE OF CALIFORNIA

SHEET TITLE
SEWER AND WATER PLAN

C-4.0

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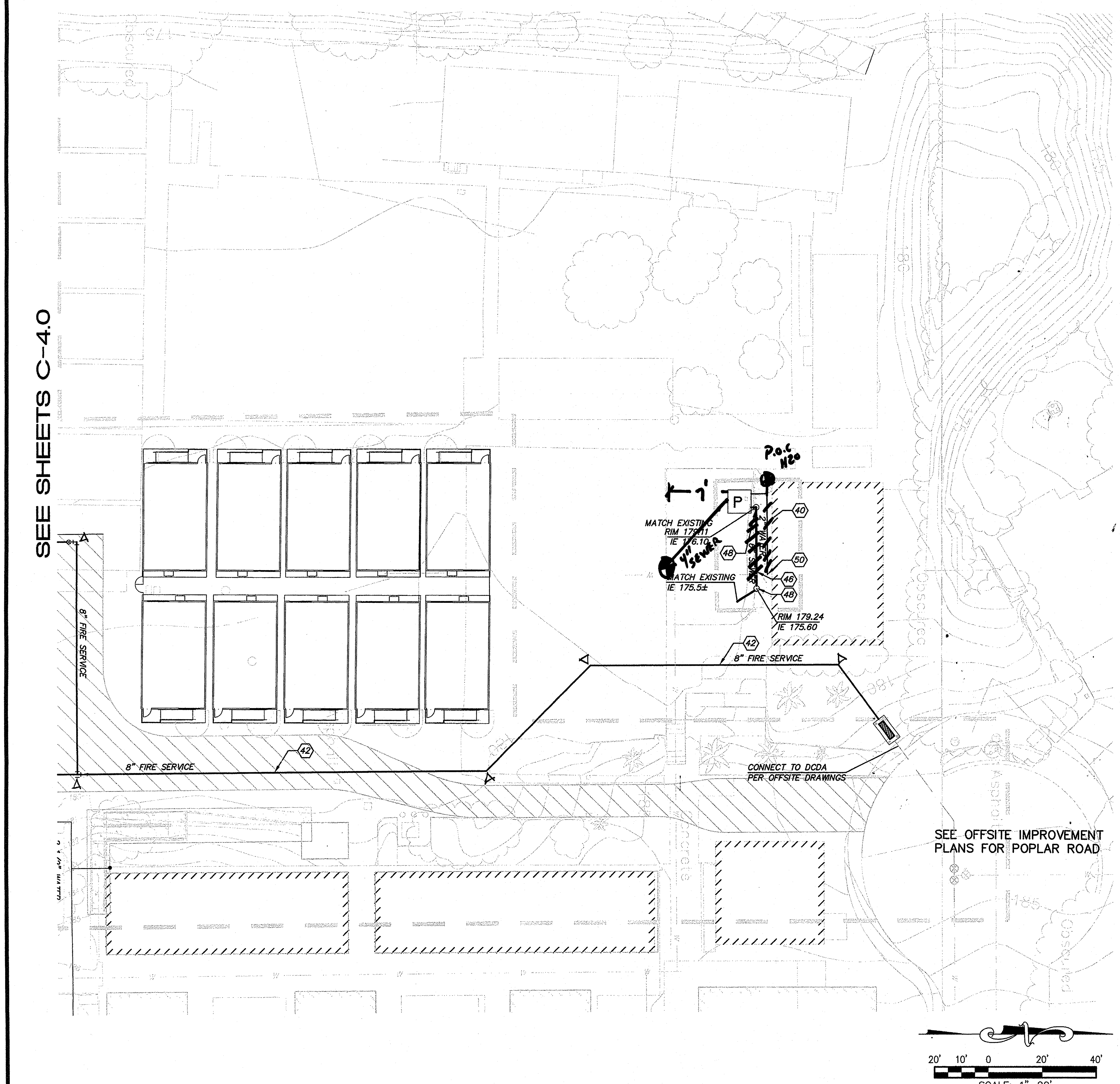


CONSTRUCTION NOTES:

- (40) 2" COPPER WATER LINE
- (42) 8" PVC C-900
- (46) 4" PVC SEWER LINE
- (48) CLEANOUT
- (50) CONNECT TO EXIST
- △ THRUST BLOCKS OSD W-4

NOTE:

CONTRACTOR TO POTHOLE AND VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES TO BE JOINED

NOTE:

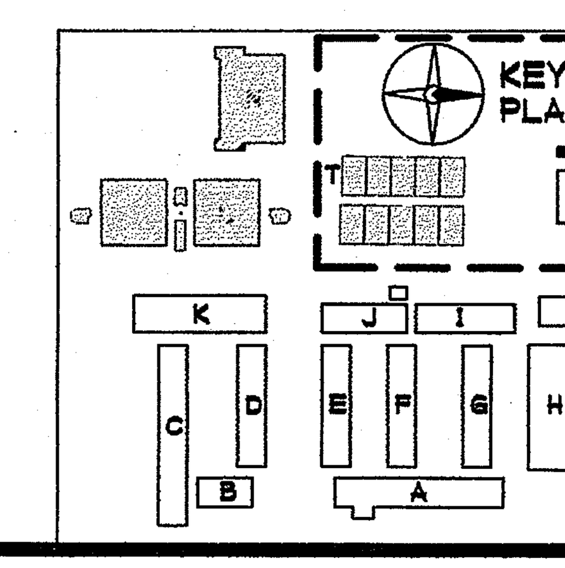
CONTRACTOR TO OBTAIN ENCROACHMENT PERMIT FROM THE CITY OF OCEANSIDE FOR ALL WORK WITHIN THE PUBLIC STREET AND PAY ALL CITY FEES.

NOTE:

ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE 'PROTECTED IN PLACE' AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.



CMD

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

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823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

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LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
renewal
STATE OF CALIFORNIA

SHEET TITLE
SEWER AND WATER PLAN

C-4.1

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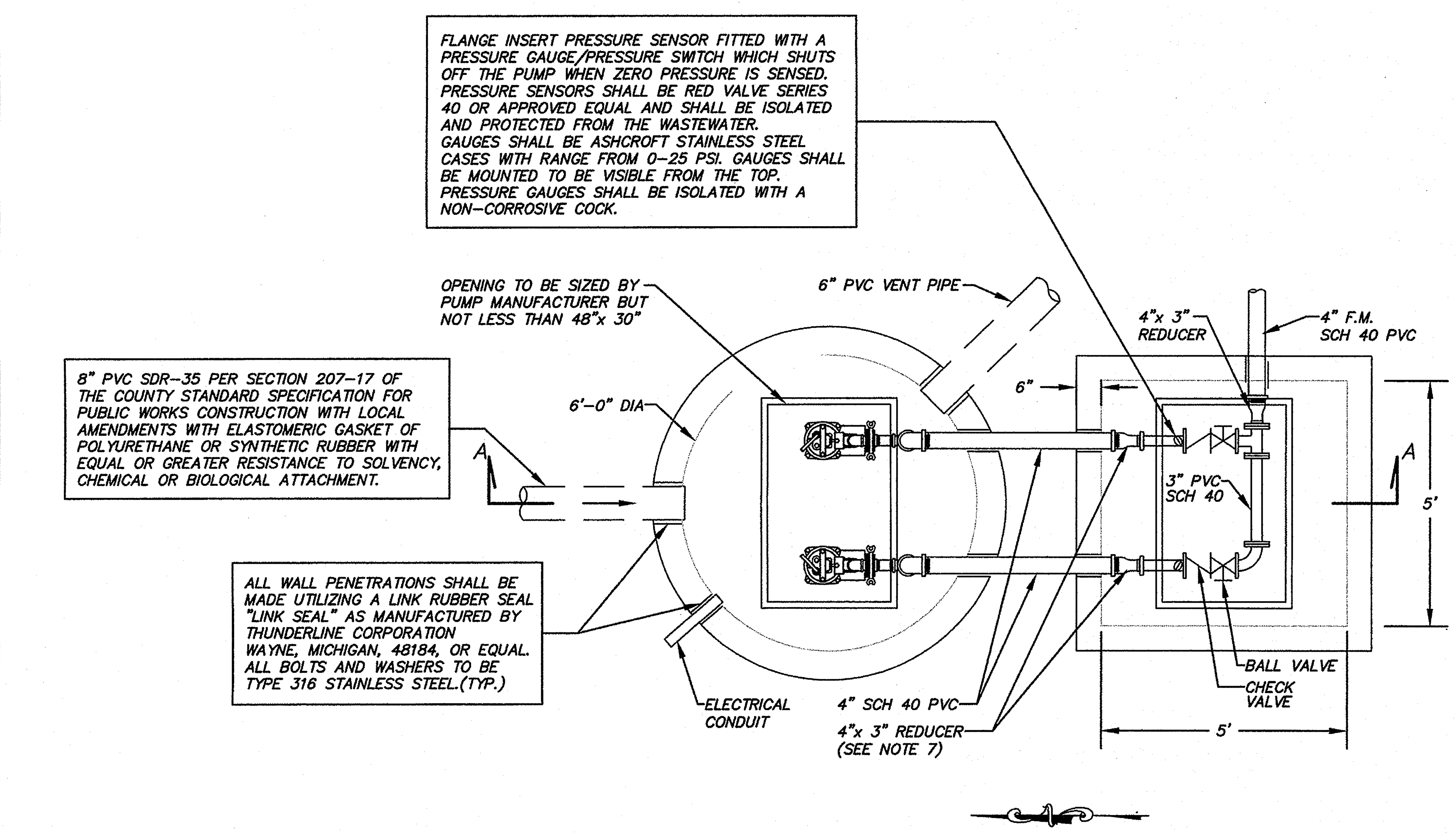
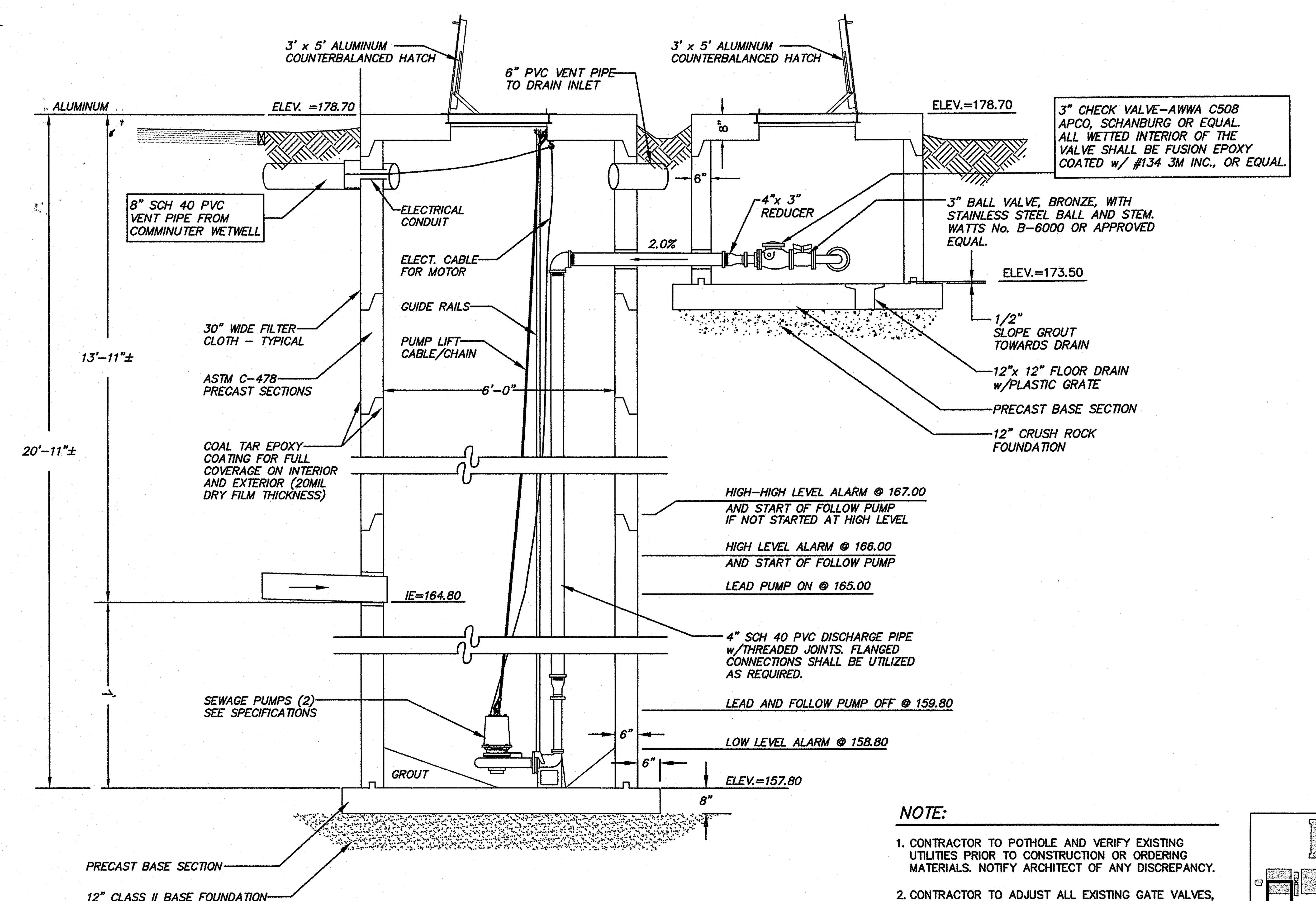


PLAN

N.T.S.

NOTES:

1. CONCRETE PERIMETER SHALL BE COATED WITH 14 MILS OF ASPHALTIC BASE COATING PRIOR TO ALUMINUM HATCH INSTALLATION.
2. UNDERGROUND PRESSURE PIPING SHALL HAVE THRUST BLOCKS AT BENDS OR APPROVED STAINLESS STEEL RETAINER GLANDS AT ALL M.J. CONNECTIONS.
3. SEE SPECIFICATIONS FOR SEWAGE PUMP AND CONTROL DETAILS.
4. SEE ELECTRICAL PLANS AND SPECIFICATIONS FOR ALL ELECTRICAL WORK INCLUDING THE LOCATION AND MOUNTING OF REMOTE PANELS INSIDE NEW BUILDING.
5. ACCESS HATCHES FOR THE GRINDER VAULT, THE NEW PUMP STATION VAULT AND THE VALVE VAULT SHALL BE 1/4" ALUMINUM, H-20 WHEEL LOADING REINFORCED, WITH MAXIMUM DEFLECTION OF 1/150th OF SPAN. SAFETY CHAIN SHALL BE PROVIDED. DOORS TO BE FITTED WITH HEAVY DUTY STAINLESS STEEL HINGES AND PINS AND PIVOT SO THE COVER DOES NOT PROTRUDE INTO CHANNEL FRAME. DOOR SHALL AUTOMATICALLY LOCK IN OPEN POSITION. DOOR SHALL BE EQUIPPED WITH A RECESSED, LOCKABLE STAINLESS STEEL HASP.
6. ALL PRESSURE PIPING VALVES, ETC. SHALL BE TESTED TO 150 psi AND HOLD THIS PRESSURE FOR 4 HOURS. ALL LEAKS SHALL BE REPAIRED AND PIPING ,ETC SHALL BE RETESTED UNTIL 150 psi IS MAINTAINED FOR 4 HOURS.
7. PVC PRESSURE PIPE MATERIALS AND INSTALLATION PER COUNTY STANDARDS FOR PUBLIC WORKS CONSTRUCTION SECTION 207-25.



SECTION A-A

N.T.S.

NOTE:

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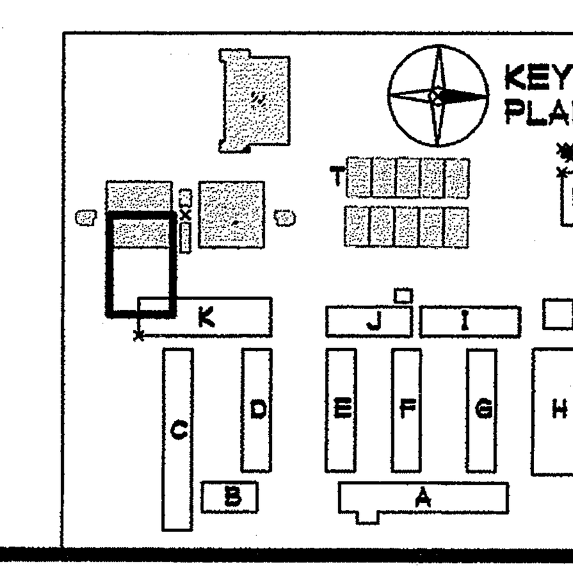

CMD

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PROJECT NOS.	025
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JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
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LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 Renewal STATE OF CALIFORNIA

SHEET TITLE
LIFT STATION DETAILS

C-5.0

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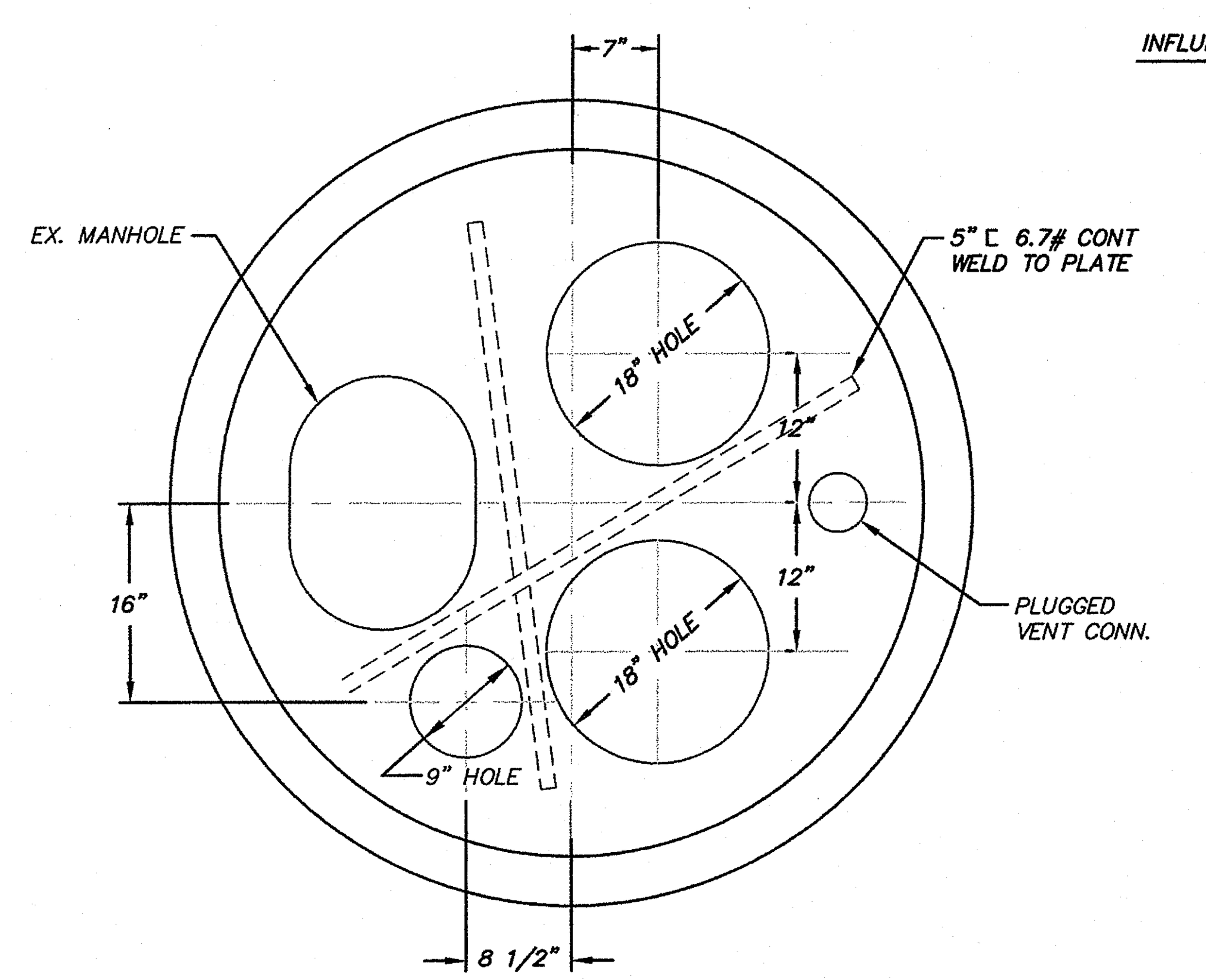
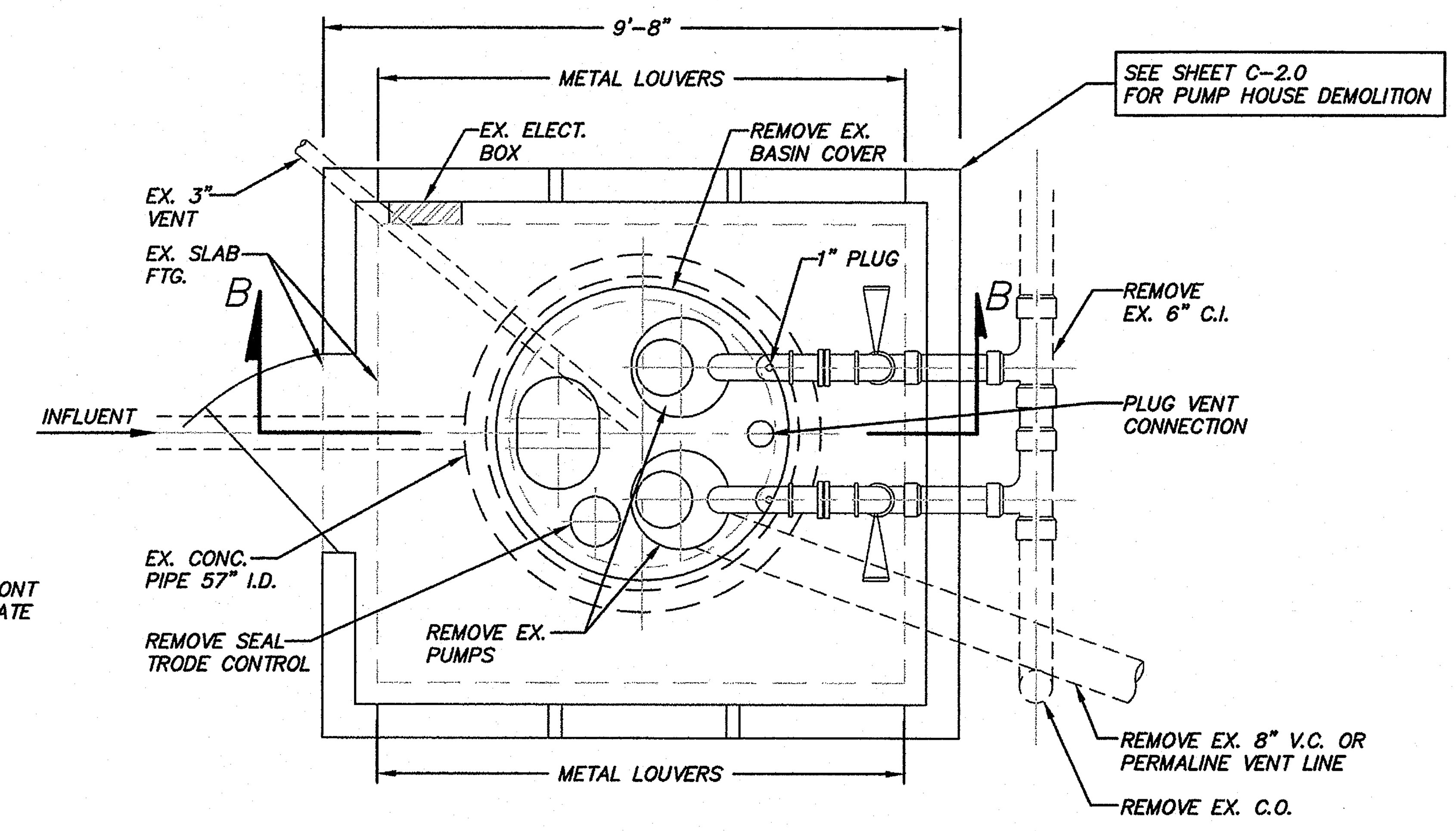
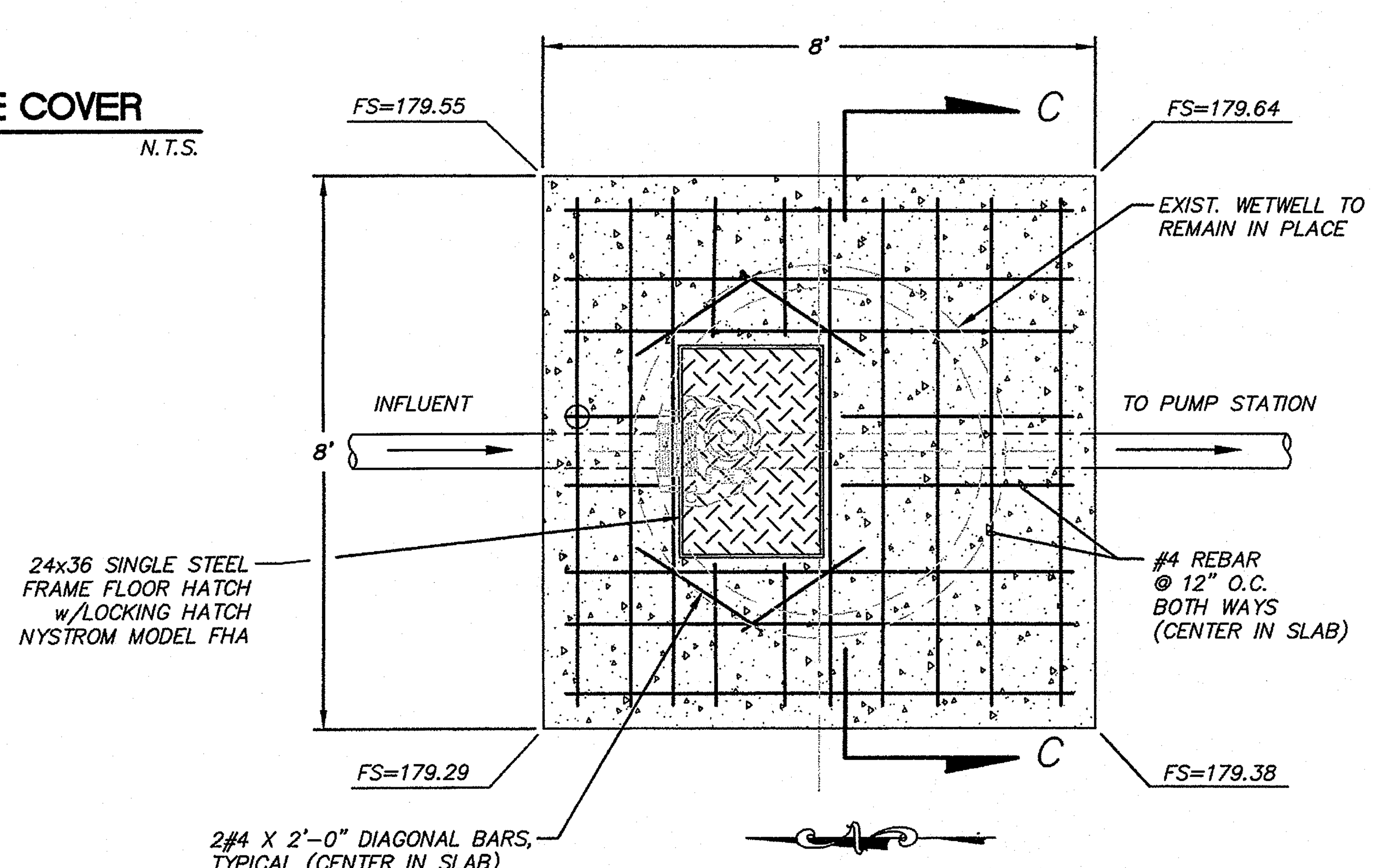
NOTE:
SEE ELECTRICAL PLANS FOR RELOCATION AND/OR INSTALLATION OF EXISTING/NEW ELECTRICAL EQUIPMENT AND WORK.



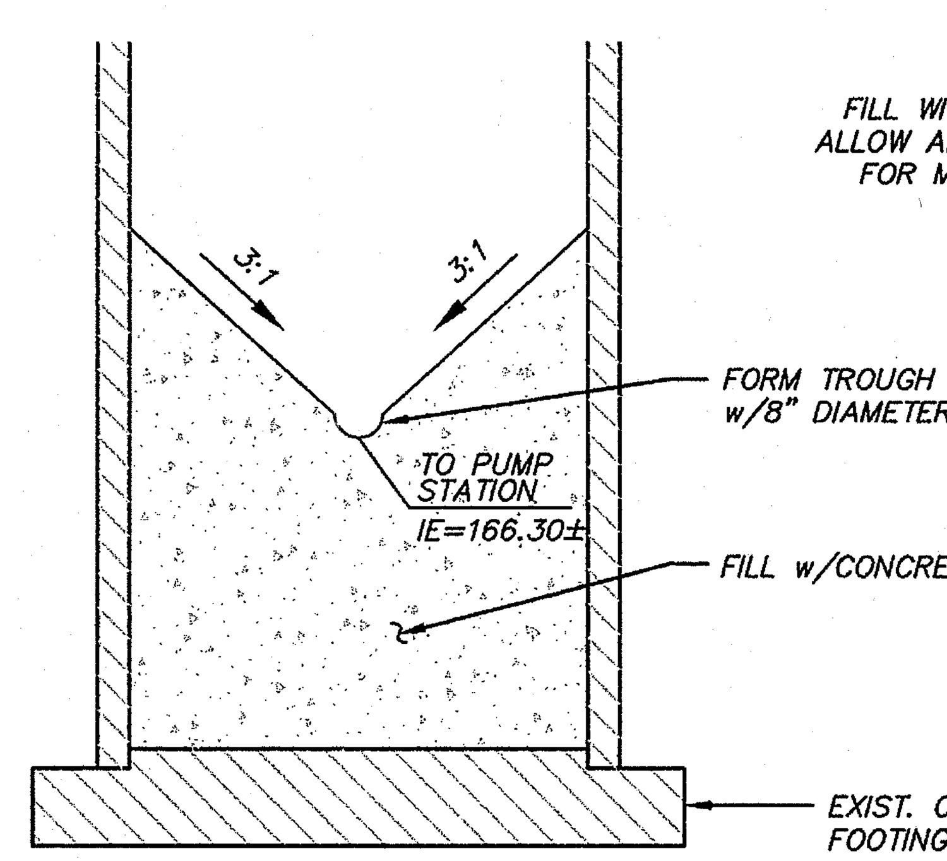
EXIST. STEEL PLATE COVER
(TO BE REMOVED) N.T.S.



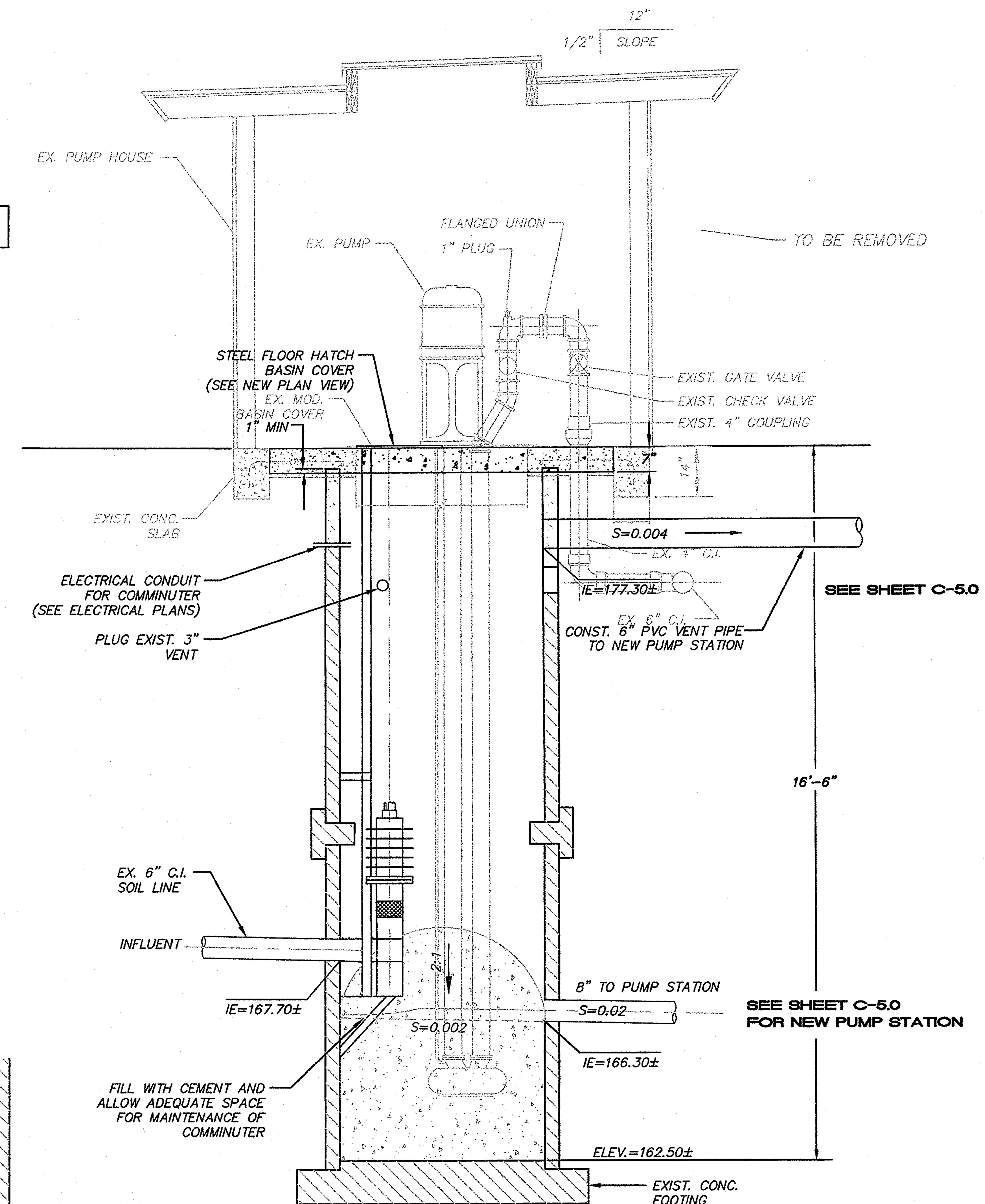
EXIST. PLAN VIEW
(TO BE REMOVED) N.T.S.



NEW PLAN VIEW
N.T.S.



SECTION B-B
N.T.S.



SECTION C-C
N.T.S.

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
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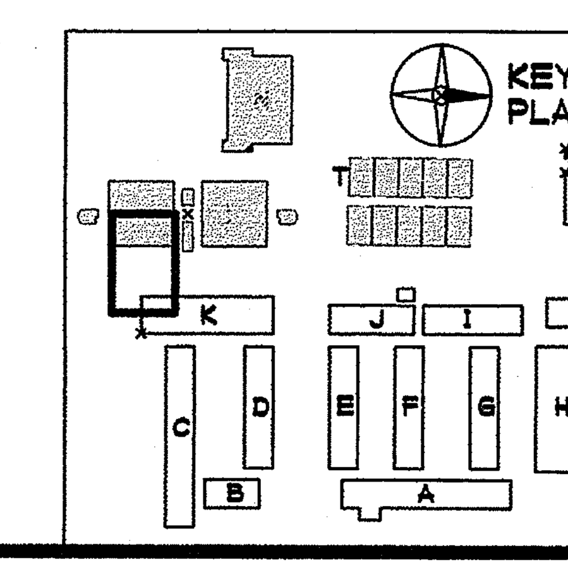
3. ALL UTILITIES NOT SPECIFICALLY DESIGNATED TO BE ABANDONED SHALL BE "PROTECTED IN PLACE" AND PROVIDE UNINTERRUPTED SERVICE THROUGHOUT CONSTRUCTION.



CMD

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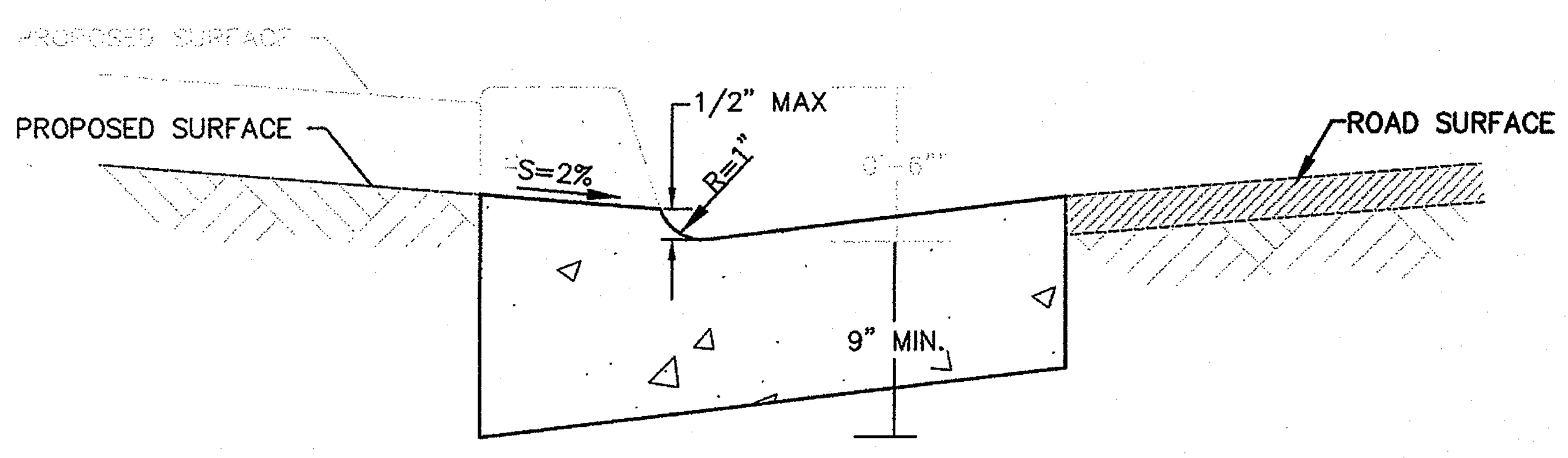
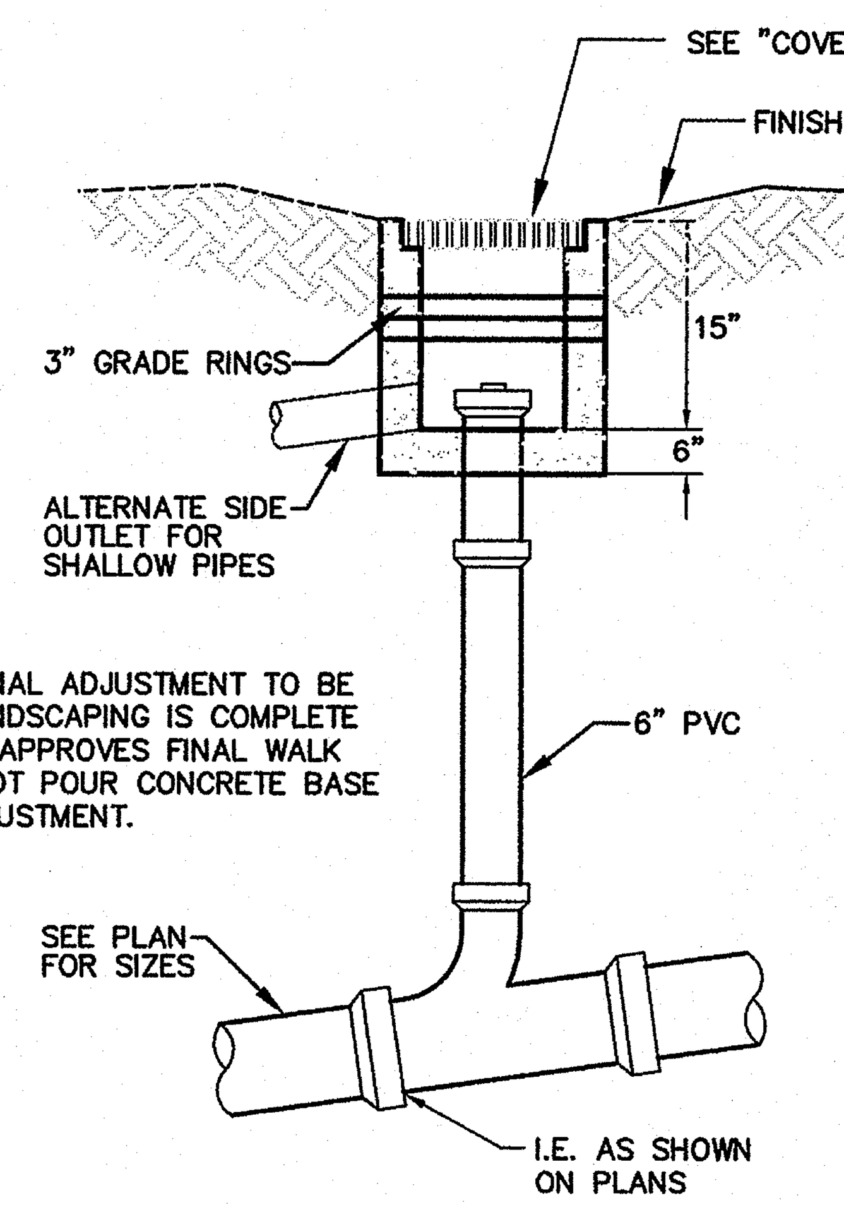
SHEET TITLE
LIFT STATION DETAILS

C-5.1



1 CURB AND GUTTER
TYPE G MODIFIED
N.T.S.



BROOKS PRODUCTS
BROOKS BOX MODEL 1212 (MODIFIED)
MODIFIED TO ACCEPT WYE AND ADDITIONAL PIPE
CATCH BASIN AND EXTENSIONS AS NOTED
SPECIAL ORDER KNOCKOUT
DIMENSIONS TO MATCH
CONNECTING PIPE SIZE(S)

NOTE:

CATCH BASIN FINAL ADJUSTMENT TO BE MADE AFTER LANDSCAPING IS COMPLETE AND ARCHITECT APPROVES FINAL WALK THROUGH. DO NOT POUR CONCRETE BASE UNTIL FINAL ADJUSTMENT.

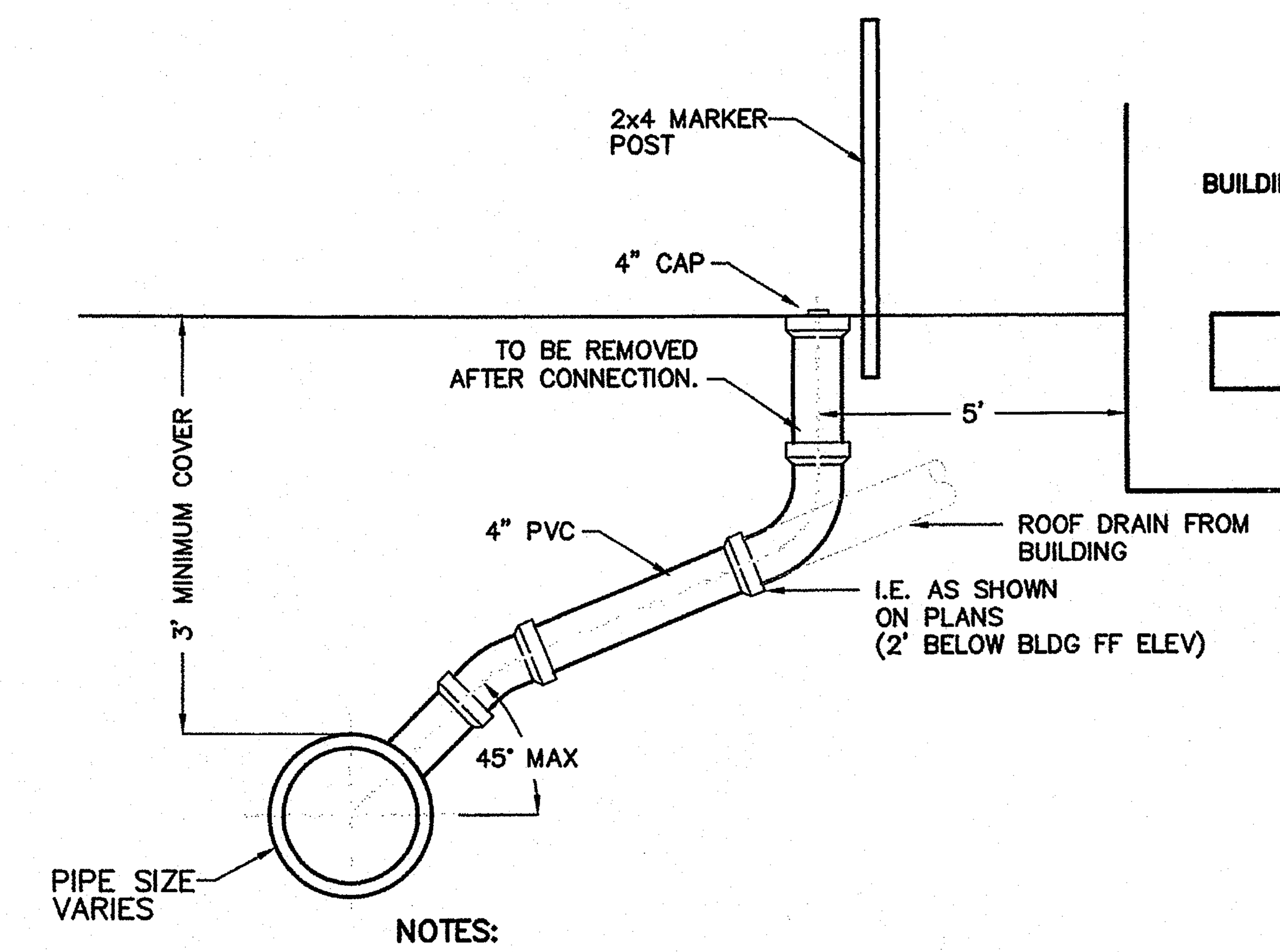
COVER NOTES:

CATCH BASIN:
PARKWAY GRATES LOCATED IN WALKING SURFACES SHALL HAVE MAXIMUM OPENINGS OF 1/2" IN DIRECTION OF TRAVEL. CONTRACTOR TO PROVIDE TWO 3" GRADE RINGS.

JUNCTION BOX:
INSTALL METAL OR PARKWAY COVER AS NOTED ON PLAN.

ALL STRUCTURES:
ALL STRUCTURES SHALL HAVE BOLT DOWN FRAME AND COVERS. HOT DIP GALVANIZE ALL METAL SURFACES

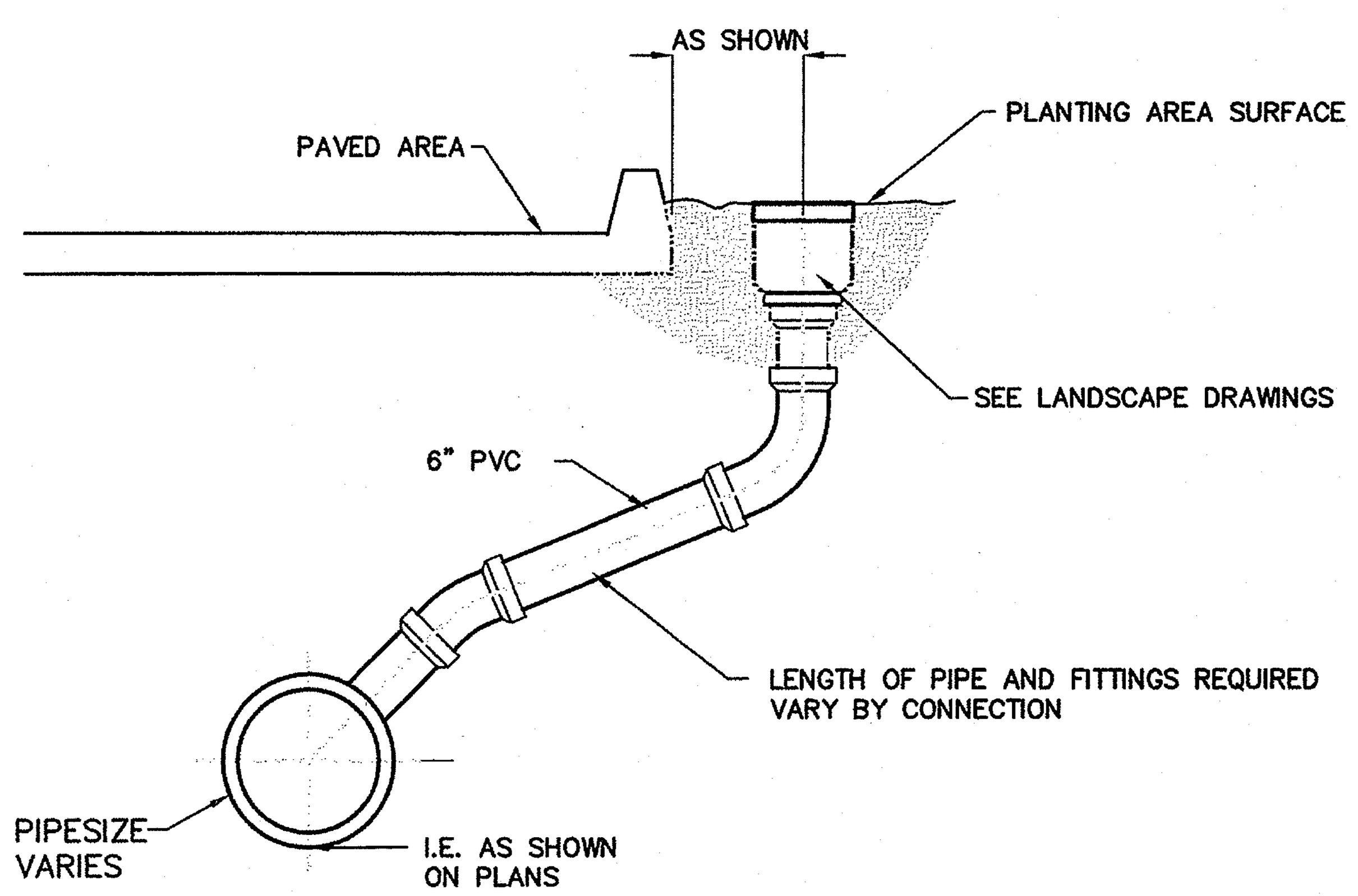
2 CATCH BASIN DETAIL
HARDSCAPE AREAS
N.T.S.



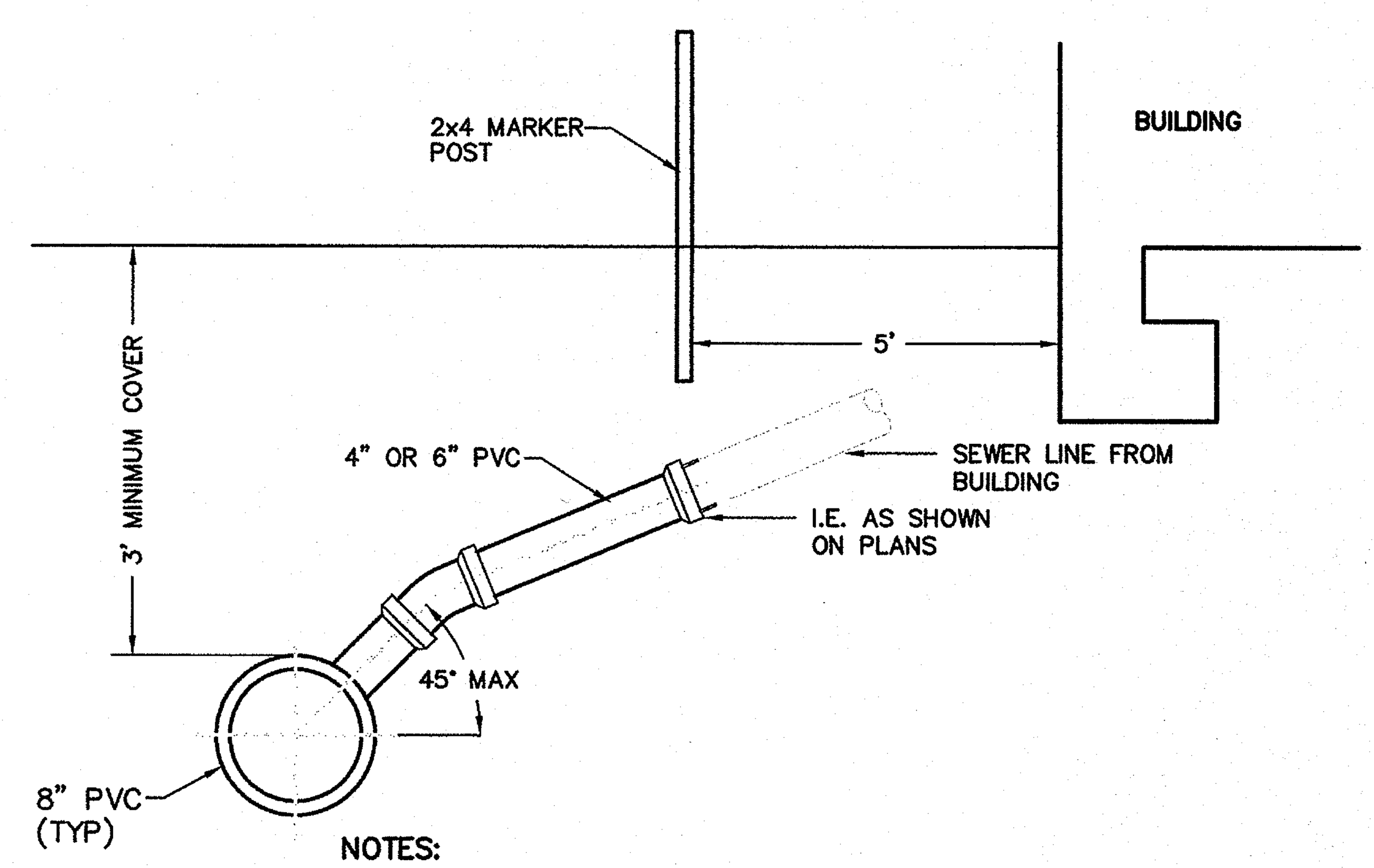
NOTES:

1. LENGTH OF PIPE AND FITTINGS REQUIRED VARY BY CONNECTION
2. ROOF DRAIN CONNECTION SHALL BE MARKED BY STAKING A 2" x 4" STUD 4' ABOVE GROUND. TOP 12" SHALL BE PAINTED RED.
3. CONTRACTOR TO CONNECT TO BUILDING SERVICE. REMOVE UNUSED RISER AND CAP AS NECESSARY.
3. CONTRACTOR TO COORDINATE SERVICE LOCATIONS WITH BUILDING PLUMBER, SEE PLUMBING DRAWINGS.

3 ROOF DRAIN CONNECTION
N.T.S.



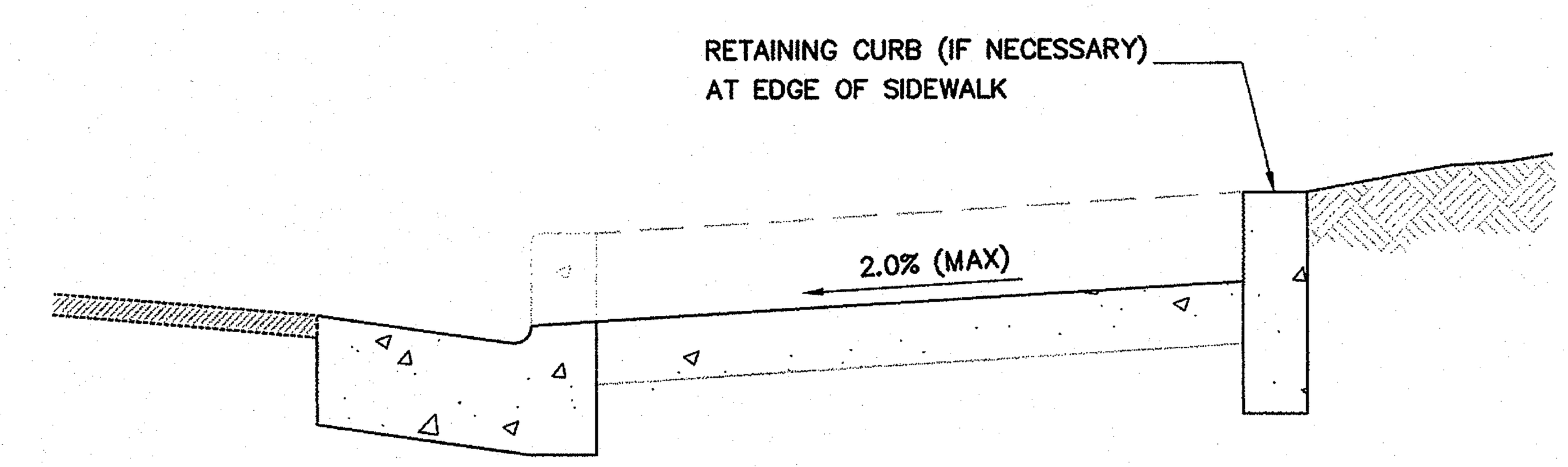
4 AREA DRAIN
LANDSCAPE AREAS
N.T.S.



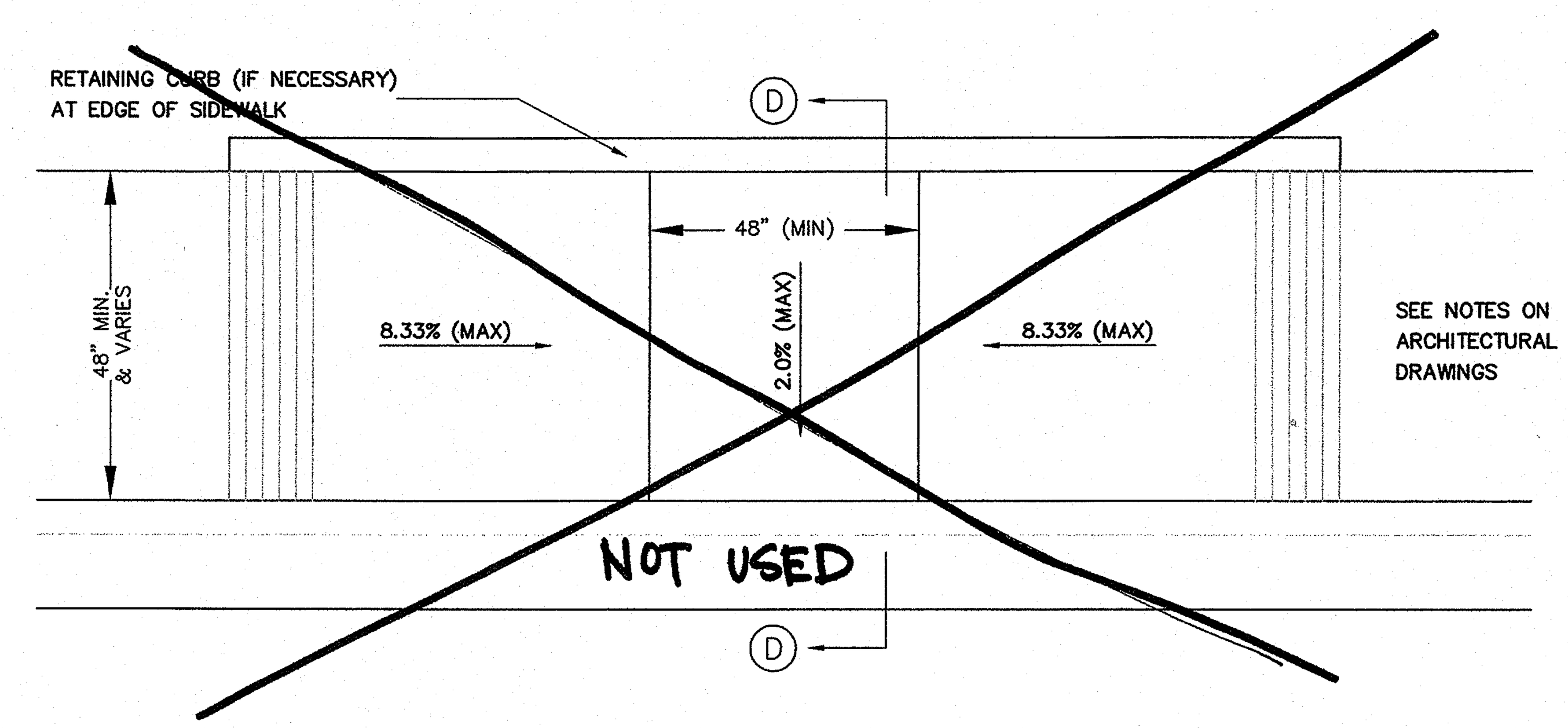
NOTES:

1. LENGTH OF PIPE AND FITTINGS REQUIRED VARY BY CONNECTION
2. SERVICE CONNECTION SHALL BE MARKED BY STAKING A 2" x 4" STUD 4' ABOVE GROUND. TOP 12" SHALL BE PAINTED GREEN.
3. CONTRACTOR TO CONNECT TO BUILDING SERVICE. REMOVE UNUSED RISER AND CAP AS NECESSARY.
4. CONTRACTOR TO COORDINATE SERVICE LOCATIONS WITH BUILDING PLUMBER SEE PLUMBING DRAWINGS.

5 SANITARY SEWER CONNECTION
N.T.S.



SECTION D-D
N.T.S.



6 ONSITE CURB RAMP
N.T.S.

NOTE:

1. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. NOTIFY ARCHITECT OF ANY DISCREPANCY.
2. CONTRACTOR TO ADJUST ALL EXISTING GATE VALVES, CLEANOUTS, MANHOLES AND OTHER APPURTENANCES TO GRADE.
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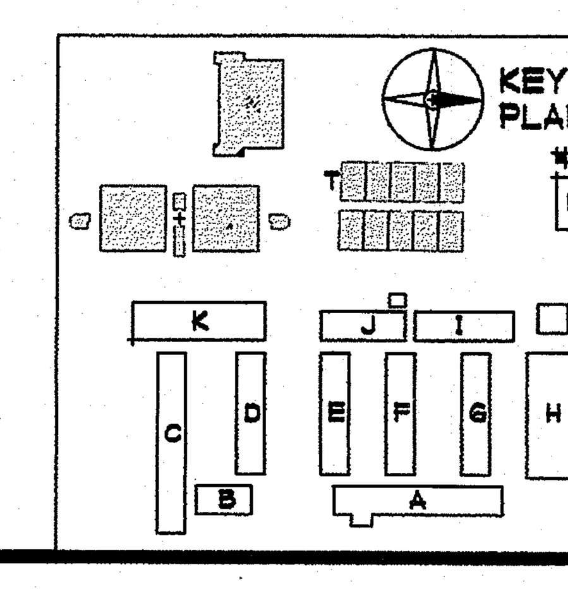

CMD

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LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 renewal STATE OF CALIFORNIA

SHEET TITLE
CONSTRUCTION DETAILS

C-5.2

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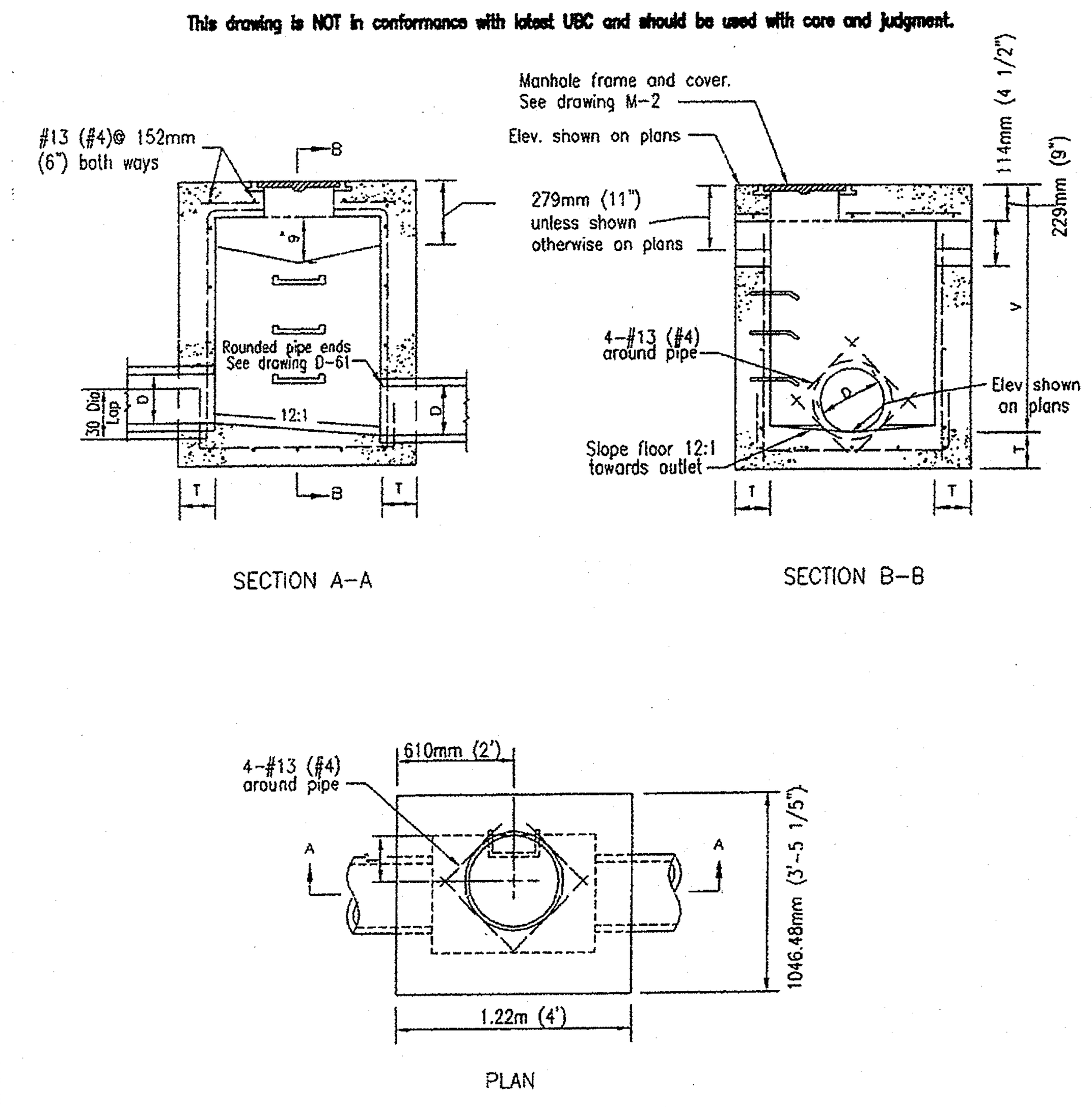
This drawing is NOT in conformance with latest UBC and should be used with care and judgment.



NOTE

1. See Standard Drawing D-11 for additional notes and details.
2. When V exceeds 1.22m (4') steps shall be installed. See Standard Drawing D-11 for details.
3. Exposed edges of concrete shall be rounded with a radius of 13mm (1/2").
4. Construct openings on both sides unless otherwise shown on plans.
5. Maintain 38mm (1-1/2") clear spacing between reinforcing and surface.
6. Install 1"ø steel protection bar

LEGEND ON PLANS

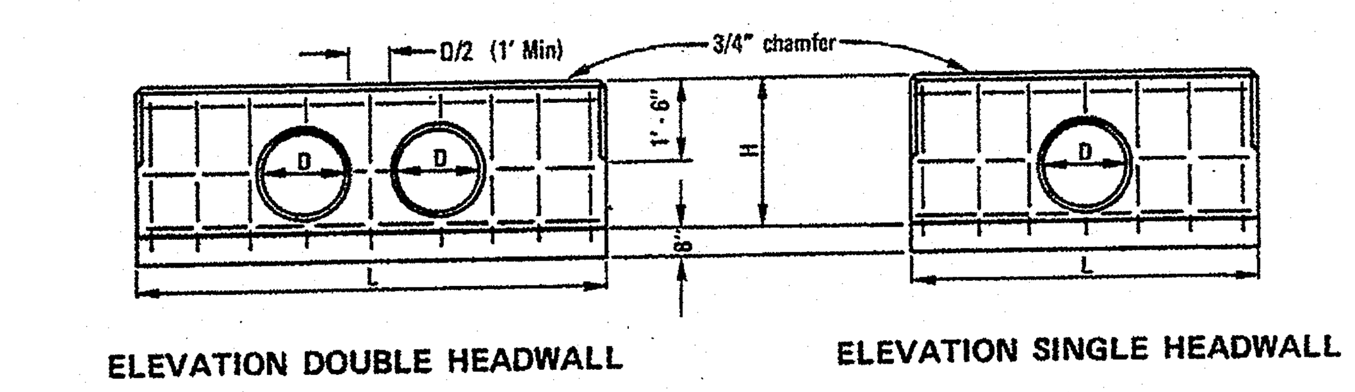
Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

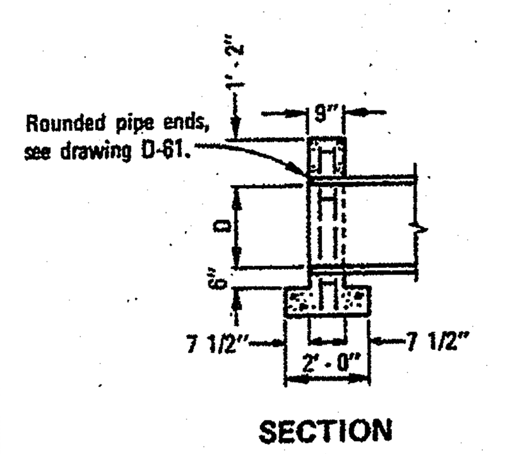
SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

CATCH BASIN - TYPE F

DRAWING NUMBER D-7





D	H	SINGLE L	SINGLE Steel Lbs.	SINGLE Conc C.Y.	DOUBLE L	DOUBLE Steel Lbs.	DOUBLE Conc C.Y.
12"	2'-8"	5'-0"	35	0.60	8'-0"	50	0.94
15"	2'-11"	6'-0"	40	0.75	9'-6"	60	1.17
18"	3'-2"	7'-0"	50	0.91	10'-6"	75	1.35
21"	3'-5"	7'-6"	60	1.02	11'-6"	90	1.52
24"	3'-8"	8'-6"	75	1.20	12'-6"	100	1.72
27"	3'-11"	9'-6"	85	1.39	14'-0"	115	2.00
30"	4'-2"	10'-0"	85	1.52	15'-0"	126	2.21
33"	4'-5"	11'-0"	100	1.73	16'-0"	130	2.42
36"	4'-8"	12'-0"	105	1.95	17'-0"	145	2.65
39"	4'-11"	12'-6"	130	2.09	18'-0"	170	2.88
42"	5'-2"	13'-6"	140	2.34	19'-0"	185	3.13
45"	5'-5"	14'-6"	150	2.60	20'-0"	195	3.38
48"	5'-8"	15'-0"	160	2.75	21'-0"	200	3.64
51"	5'-11"	16'-0"	180	3.03	22'-6"	225	4.02
54"	6'-2"	17'-0"	190	3.31	23'-6"	240	4.30

NOTES

1. Concrete shall be 560-C-3250
2. All reinforcing steel # 4 bars. All vertical and horizontal tie bars 18" maximum spacing.

LEGEND ON PLANS

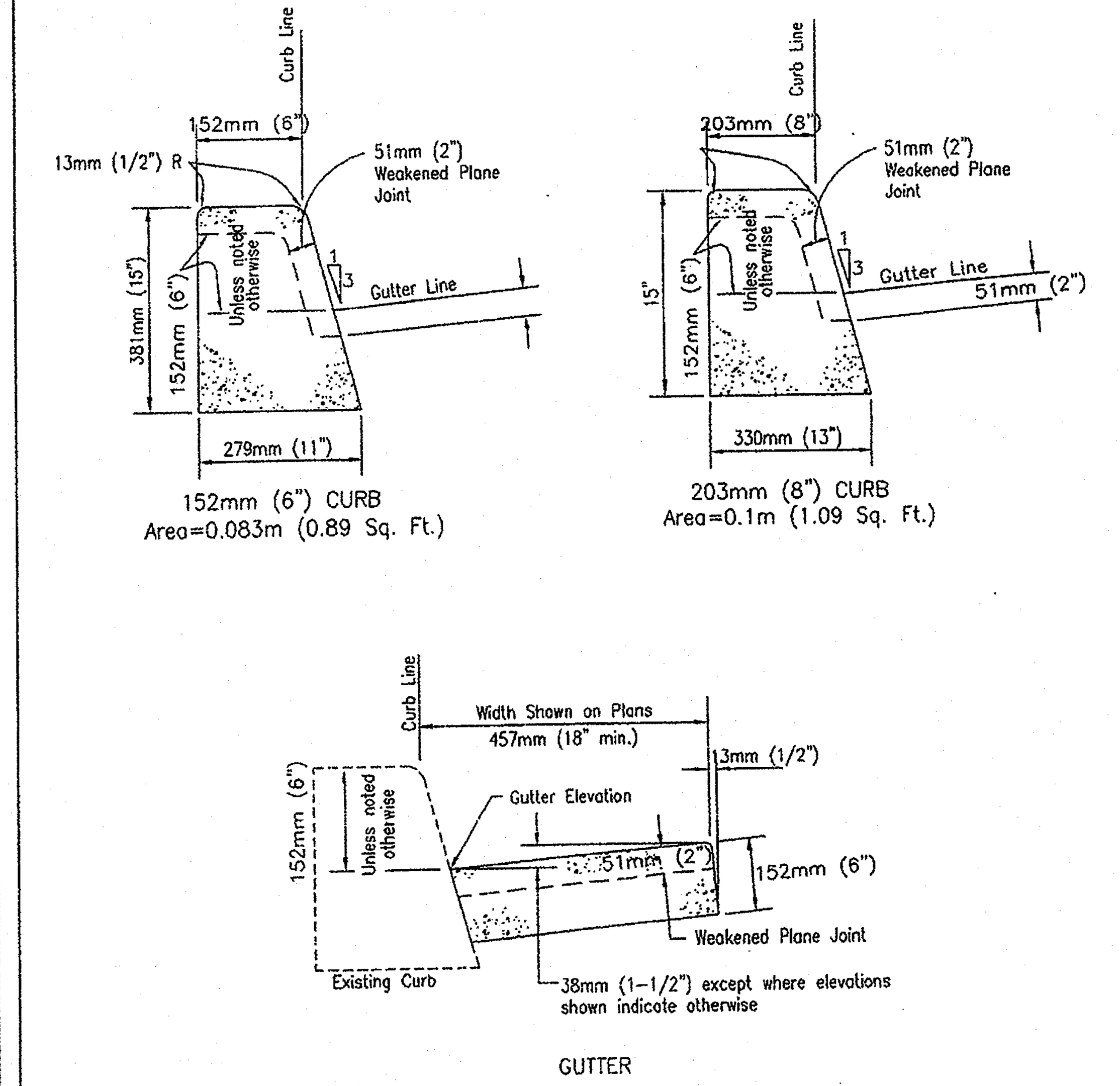
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. — Date

SAN DIEGO REGIONAL STANDARD DRAWING

STRAIGHT HEADWALL - TYPE A (CIRCULAR PIPE)

DRAWING NUMBER D-30

Revision	By	Approved	Date
Conc.			5-86
Dim. lines			7-88



NOTES

1. Concrete shall be 308kg/M³ -C-17-Mpa (520-C-2500).
2. See Standard Drawing G-10 for joint details.
3. Slope top of curb 6.35mm (1/4") per foot toward street.

LEGEND ON PLANS

152mm (6") curb

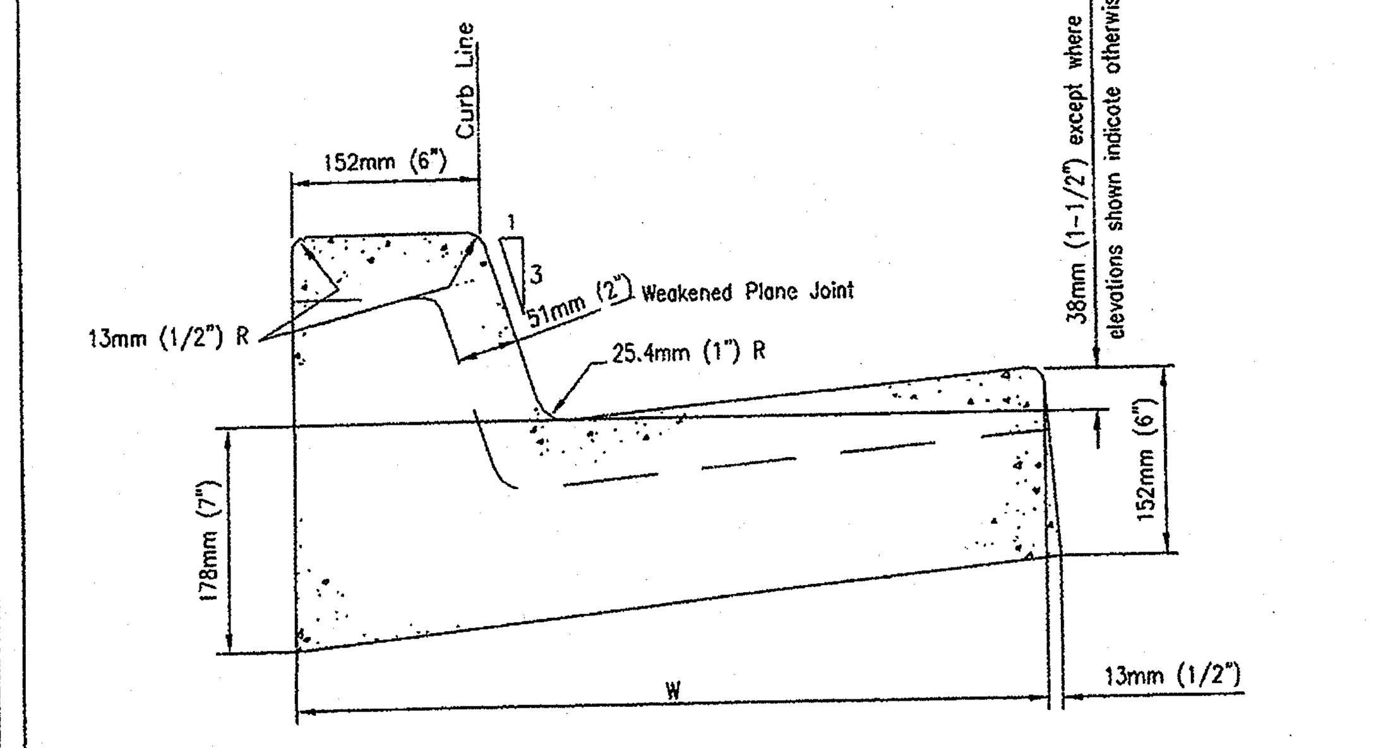
Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

CURBS AND GUTTER - SEPARATE

DRAWING NUMBER G-1



TYPE	W	*AREA
G	610mm (24")	.124sq. m (1.34sq ft.)
H	762mm (30")	.150sq. m (1.61sq ft.)

* with 152mm (6") Curb Face

NOTES

1. Concrete shall be 308kg/M3-C-17-Mpa (520-C-2500).
2. See Standard Drawing G-10 for joint details.
3. Slope top of curb 6.35mm (1/4") per foot toward street.

LEGEND ON PLANS

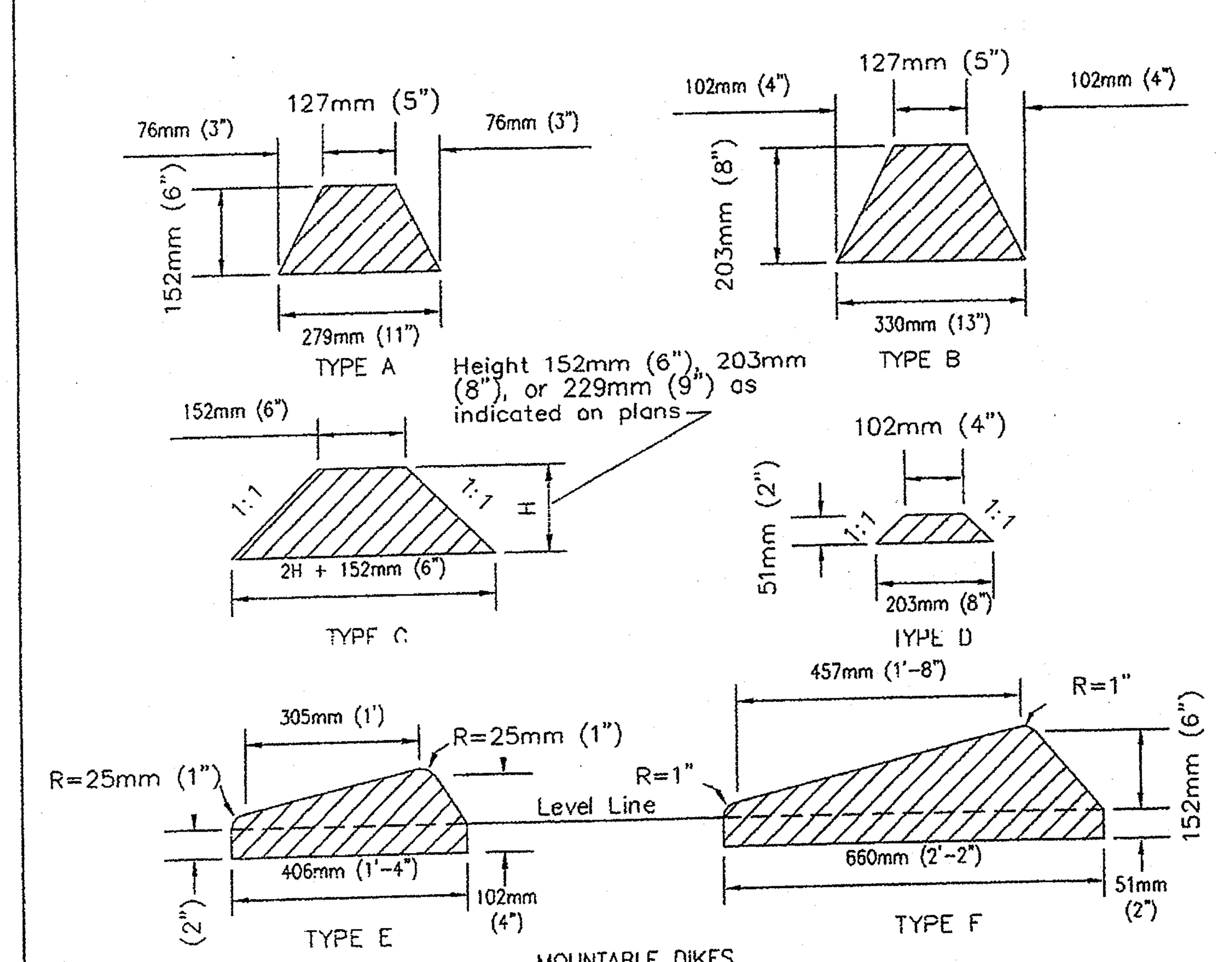
Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

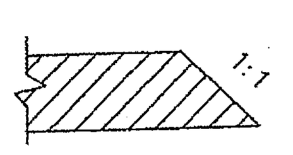
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

CURB AND GUTTER - COMBINED

DRAWING NUMBER G-2



Slope end of dike 1:1 when not joining other improvements



ALL TYPES - SIDE VIEW

APPROX. DIKE QUANTITIES	
TYPE	REQD PER LIN. FT.
A	25.4kg (0.0250 tn.)
B	38.1kg (0.0375 tn.)
C-152mm (6")	38.1kg (0.0375 tn.)
C-203mm (8")	59.2kg (0.0583 tn.)
C-229mm (9")	71.3kg (0.0702 tn.)
D	6.3kg (0.0062 tn.)
E	41.4kg (0.0407 tn.)
F	63.3kg (0.0623 tn.)

NOTES

1. Dike is to be placed on a 51mm (2") of A.C. surfacing, extending throughout the width of the dike.
2. AR-8000 grade asphalt to be used for all dikes.
3. A.C. dikes may be shaped and compacted with an extrusion machine or other equipment capable of shaping and compacting the material to the required cross section.

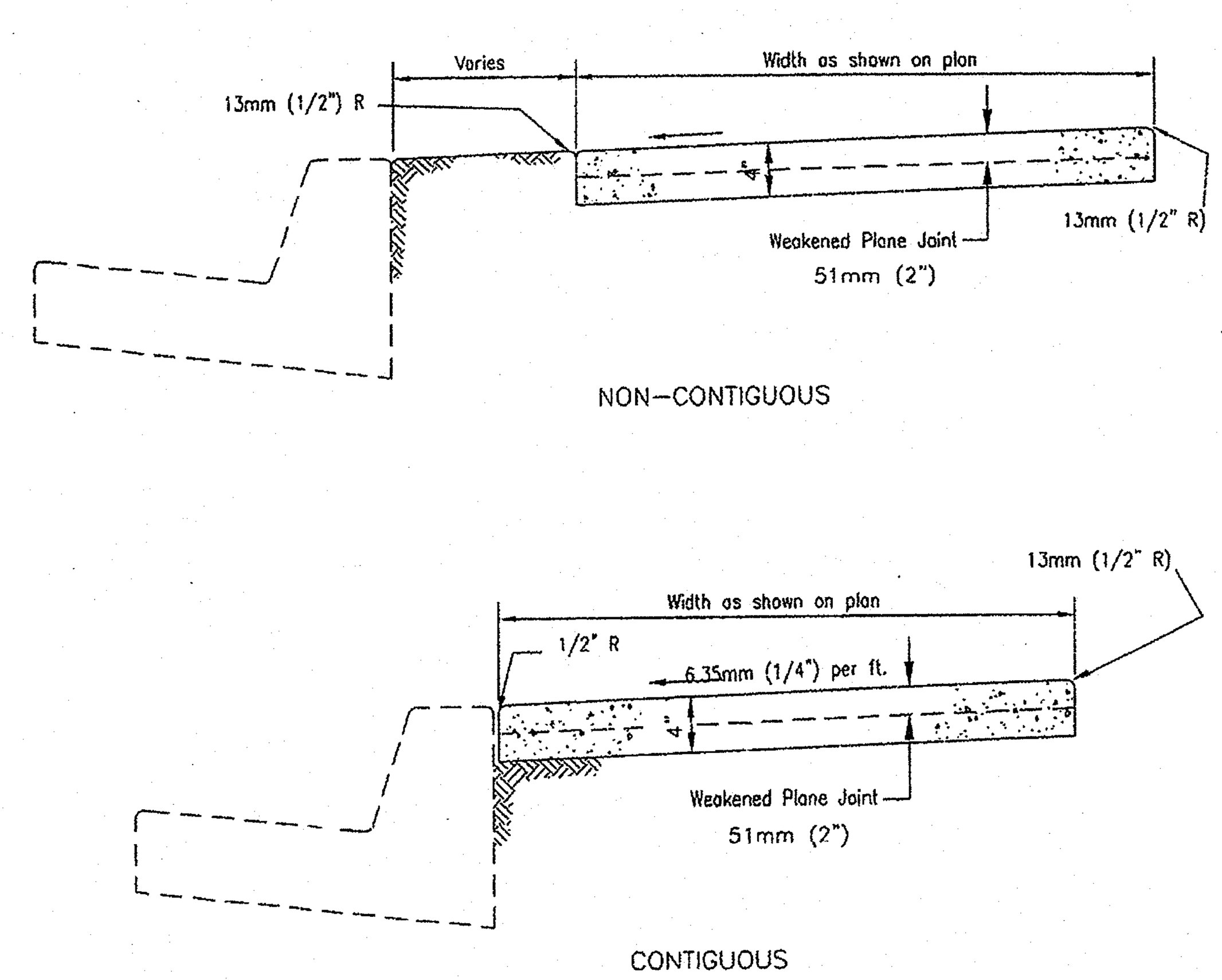
Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

DIKES - ASPHALT CONCRETE

DRAWING NUMBER G-5



NOTES

1. Concrete shall be 308 kg/M3 C 17 Mpa (520-C-2500).
2. See Standard Drawing G-9 and G-10 for joint details.

LEGEND ON PLANS

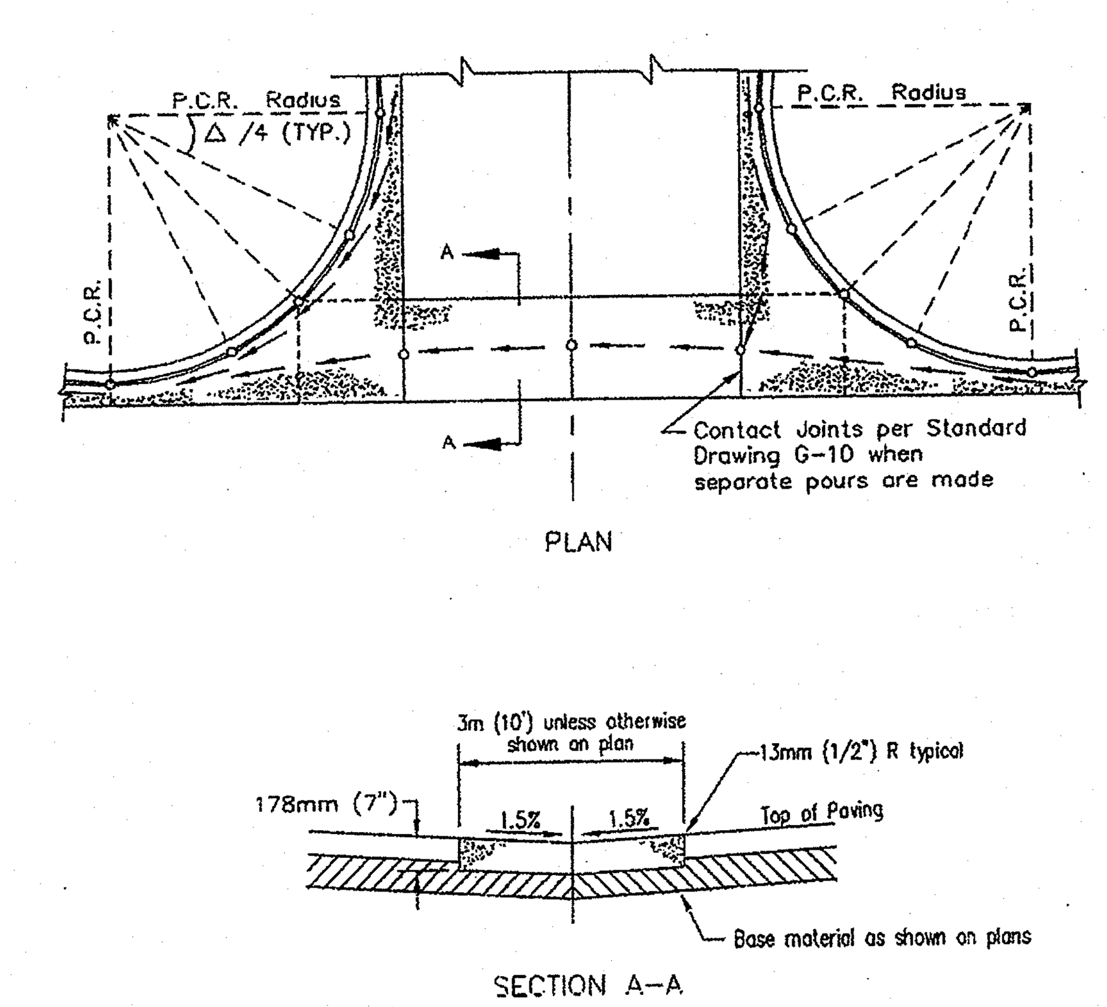
Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

SIDEWALK - TYPICAL SECTIONS

DRAWING NUMBER G-7



NOTES

1. Concrete shall be 332 kg/M3 C 22 Mpa (560 C 3250).
2. ---------- = Weakened plane joints.
3. ——— = Typical flowlines.
4. * = Elevations to be shown on plans.
5. Return segments to be 178mm (7") Thick.
6. Curb between P.C.R.s. shall be considered as part of cross gutter.
7. In all cases subgrade shall be compacted to 95% min relative compaction to depth of 305mm (12").

LEGEND ON PLANS

Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 — 3/01/2003

CROSS GUTTER

DRAWING NUMBER G-12

CMD

OUSD NO. 758-000

PROJECT NOS. 025

P. T. N. 73569-9

DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
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GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
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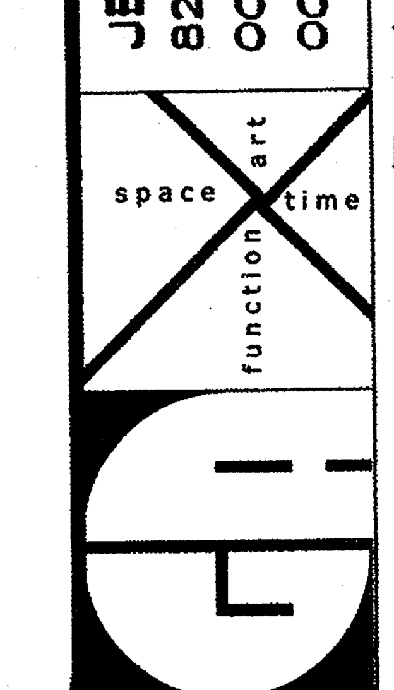

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4-106494
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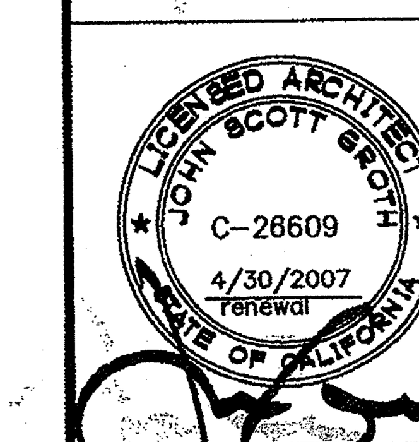
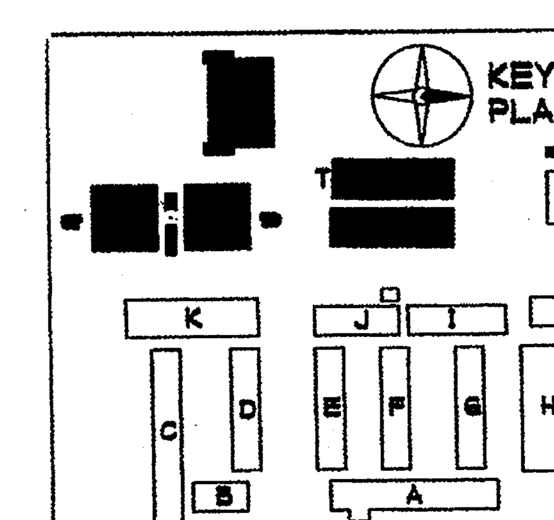
DATE MAR 2 8 2005





SHEET TITLE

STANDARD DRAWINGS

C-6.0

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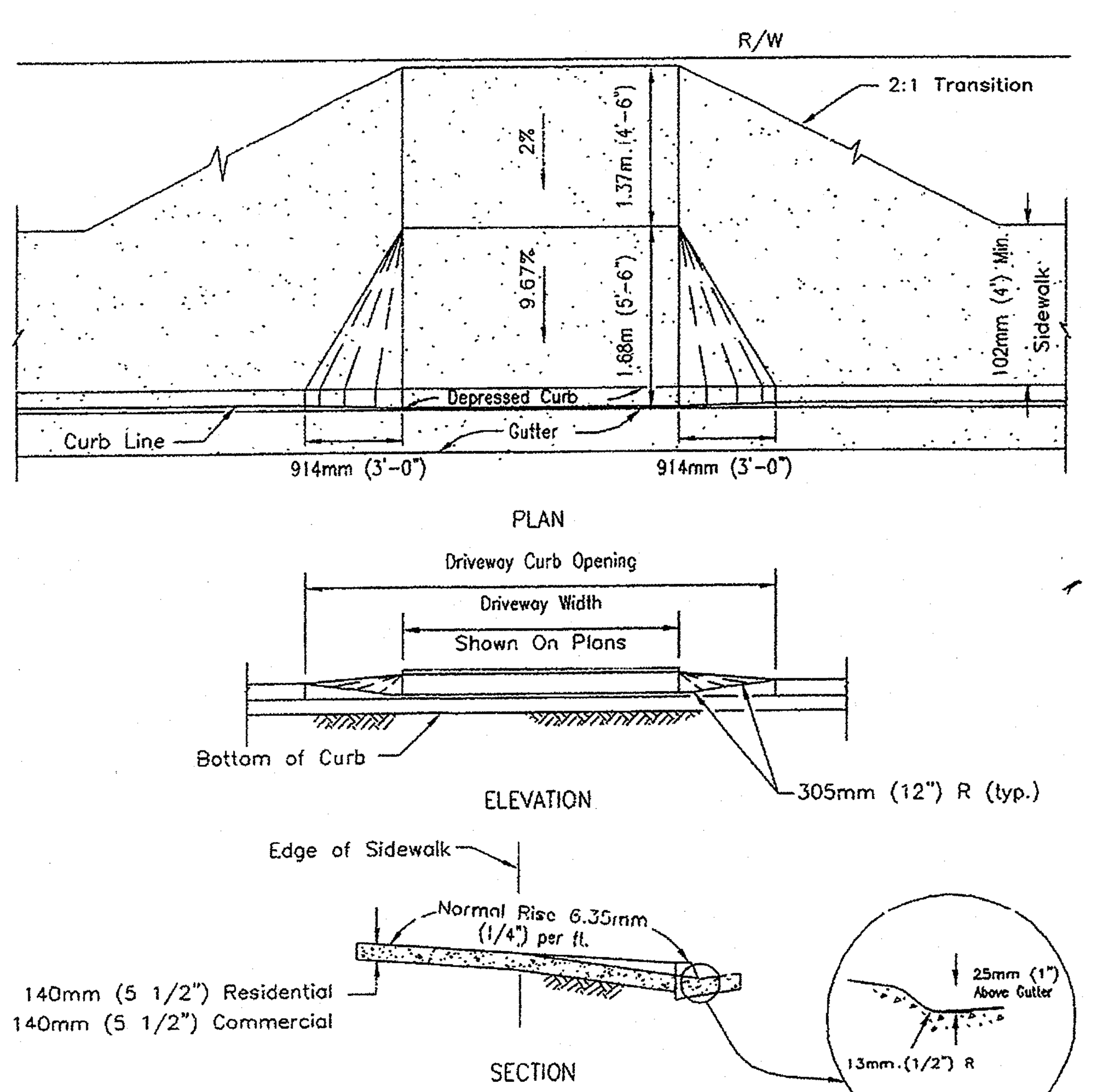


NOTES
1. No concrete shall be placed until forms and subgrade are inspected by the Agency.
2. Concrete shall be 332 kg/M3 C 22 Mpa (520-C-2500).
3. See Standard Drawings G-15 and G-16 for width and location requirements.
4. Driveway ramp to extend to 3m (10') from curb face or to property line whichever is less. (For commercial driveways only)
5. See Standard Drawings G-2 and G-10 for curb and joint details.

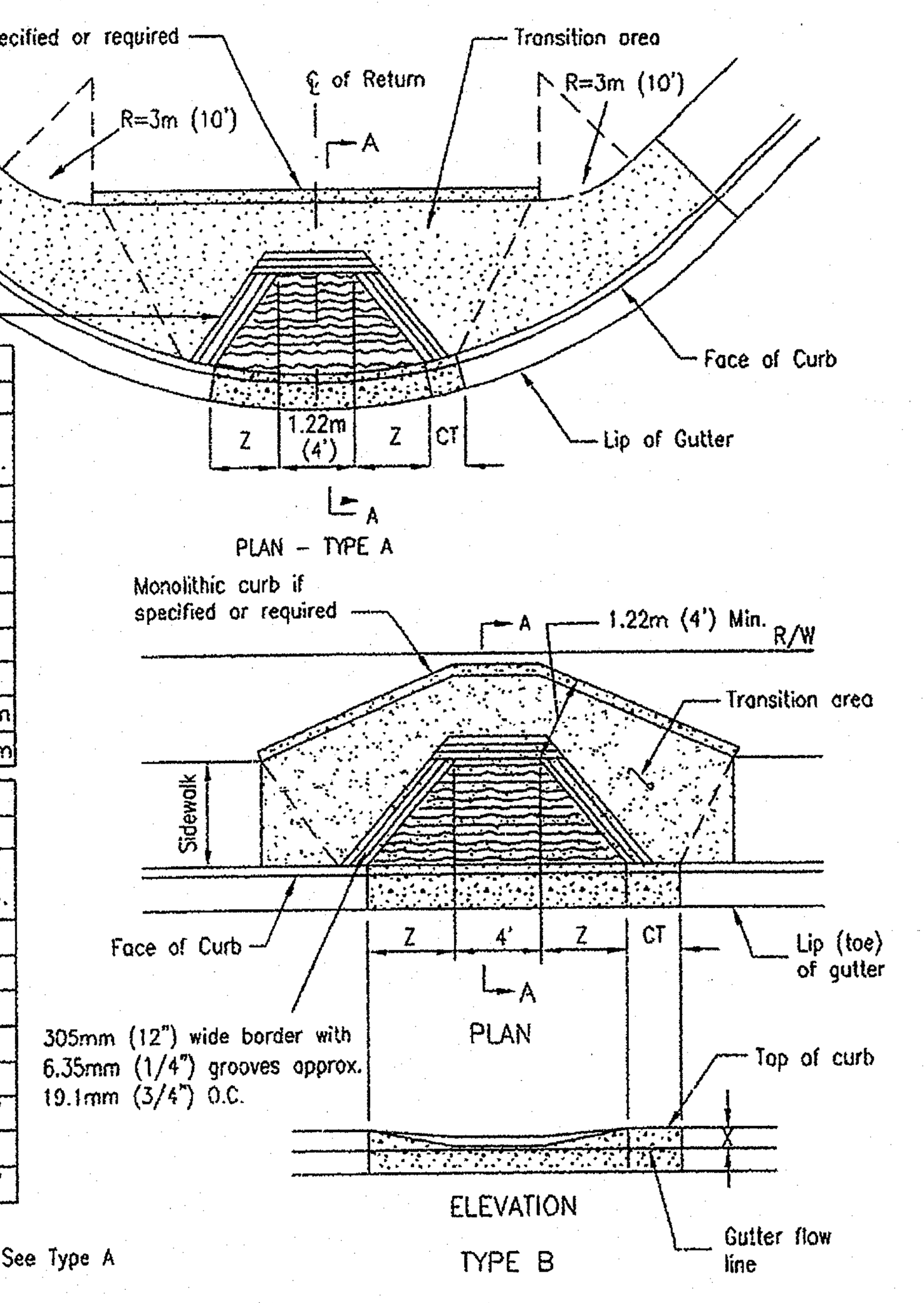
Revision	By	Approved	Date
ORIGINAL		R. Munoz	4/97
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

CONCRETE DRIVEWAY (Contiguous Sidewalk)

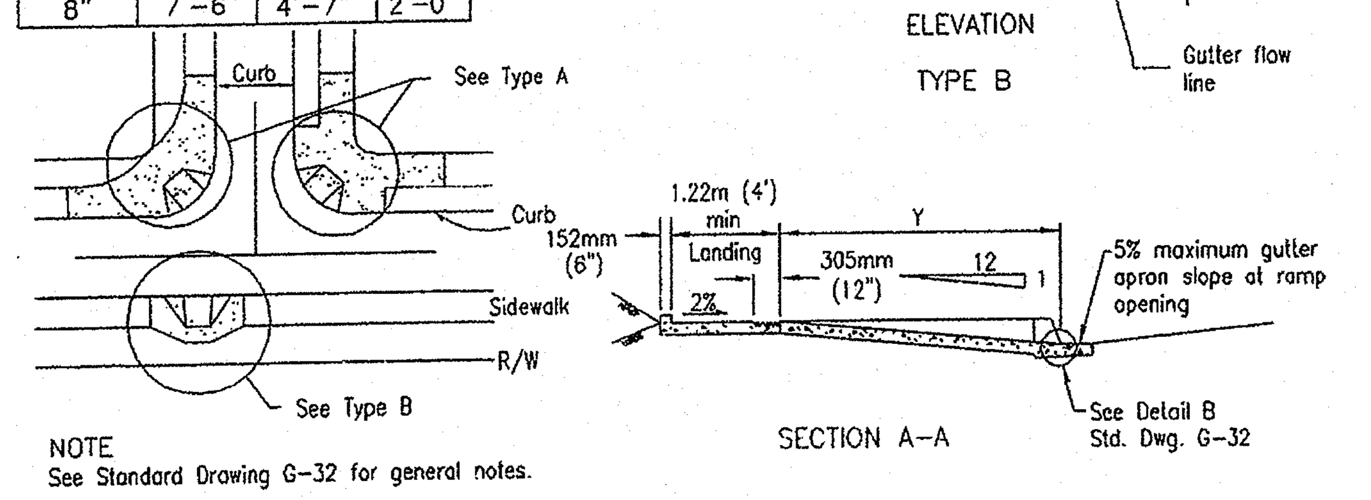
DRAWING NUMBER G-14A



305mm (12") wide border with 6.35mm (1/4") grooves approx. 19.1mm (3/4") O.C.

TABLE A - METRIC			
X	Y	Z	CT
CURB HEIGHT	RAMP LENGTH (12:1)	SIDE SLOPE (10:1)	CURB TRANS.
25mm	152mm	457mm	0
51mm	457mm	457mm	0
76mm	762mm	635mm	0
102mm	1.07m	889mm	0
127mm	1.37m	1.14m	0
152mm	1.68m	1.4m	0
178mm	1.98m	1.4m	305mm
203mm	2.29m	1.4m	610mm

TABLE A - U.S.			
X	Y	Z	CT
CURB HEIGHT	RAMP LENGTH (12:1)	SIDE SLOPE (10:1)	CURB TRANS.
1"	0'-6"	1'-6"	0'-0"
2"	1'-6"	1'-6"	0'-0"
3"	2'-6"	2'-1"	0'-0"
4"	3'-6"	2'-11"	0'-0"
5"	4'-6"	3'-9"	0'-0"
6"	5'-6"	4'-7"	0'-0"
7"	6'-6"	4'-7"	1'-0"
8"	7'-6"	4'-7"	2'-0"



NOTE
See Standard Drawing G-32 for general notes.

REFER TO ARCH. DRAWINGS FOR LOCATIONS AND ADDITIONAL REQUIREMENTS.

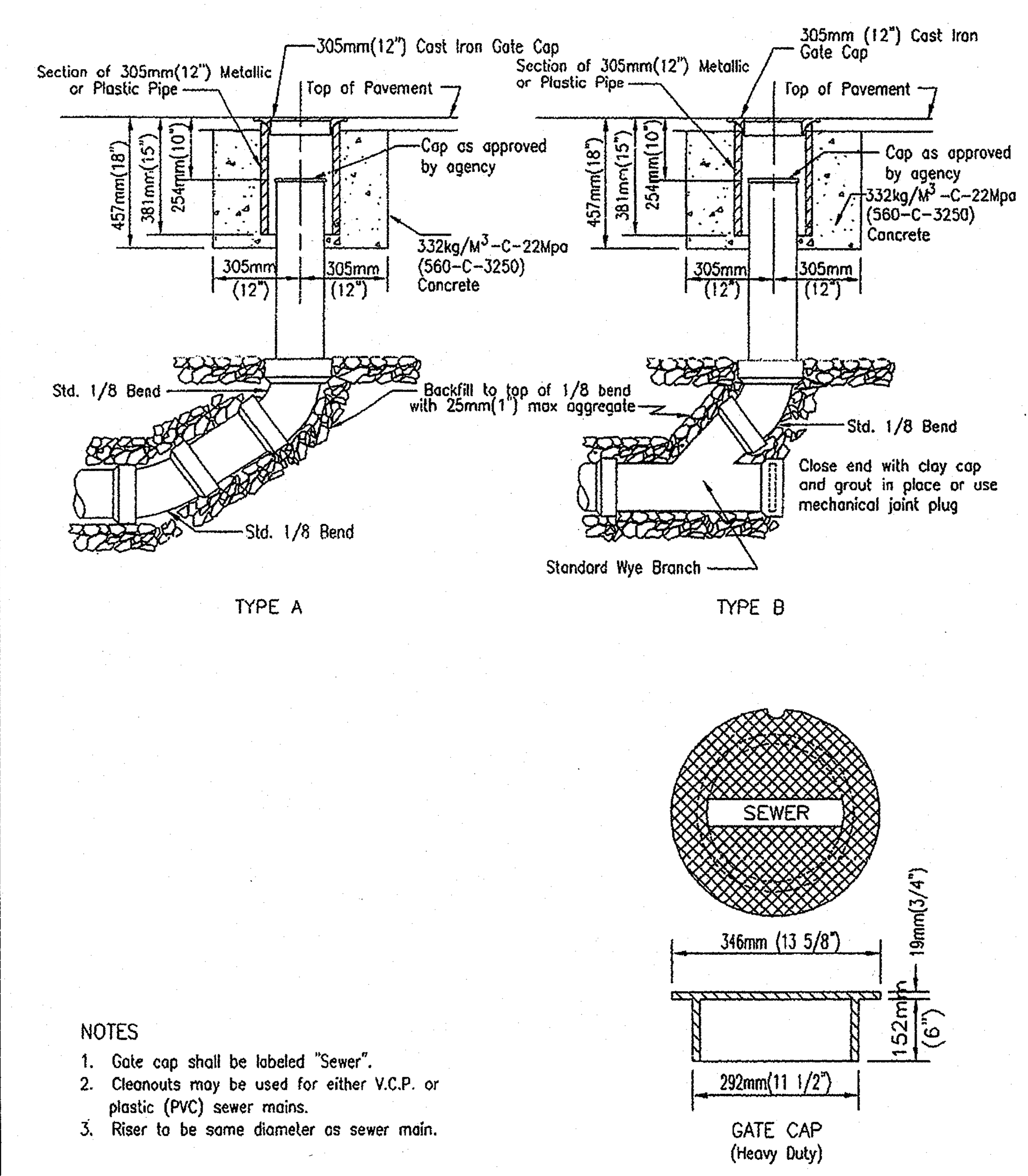
Revision	By	Approved	Date
ORIGINAL		M.Bohmanian	4/86
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

CURB RAMP - TYPES A and B (New Construction)

DRAWING NUMBER G-27



NOTES
1. Gate cap shall be labeled "Sewer".
2. Cleanouts may be used for either V.C.P. or plastic (PVC) sewer mains.
3. Riser to be same diameter as sewer main.

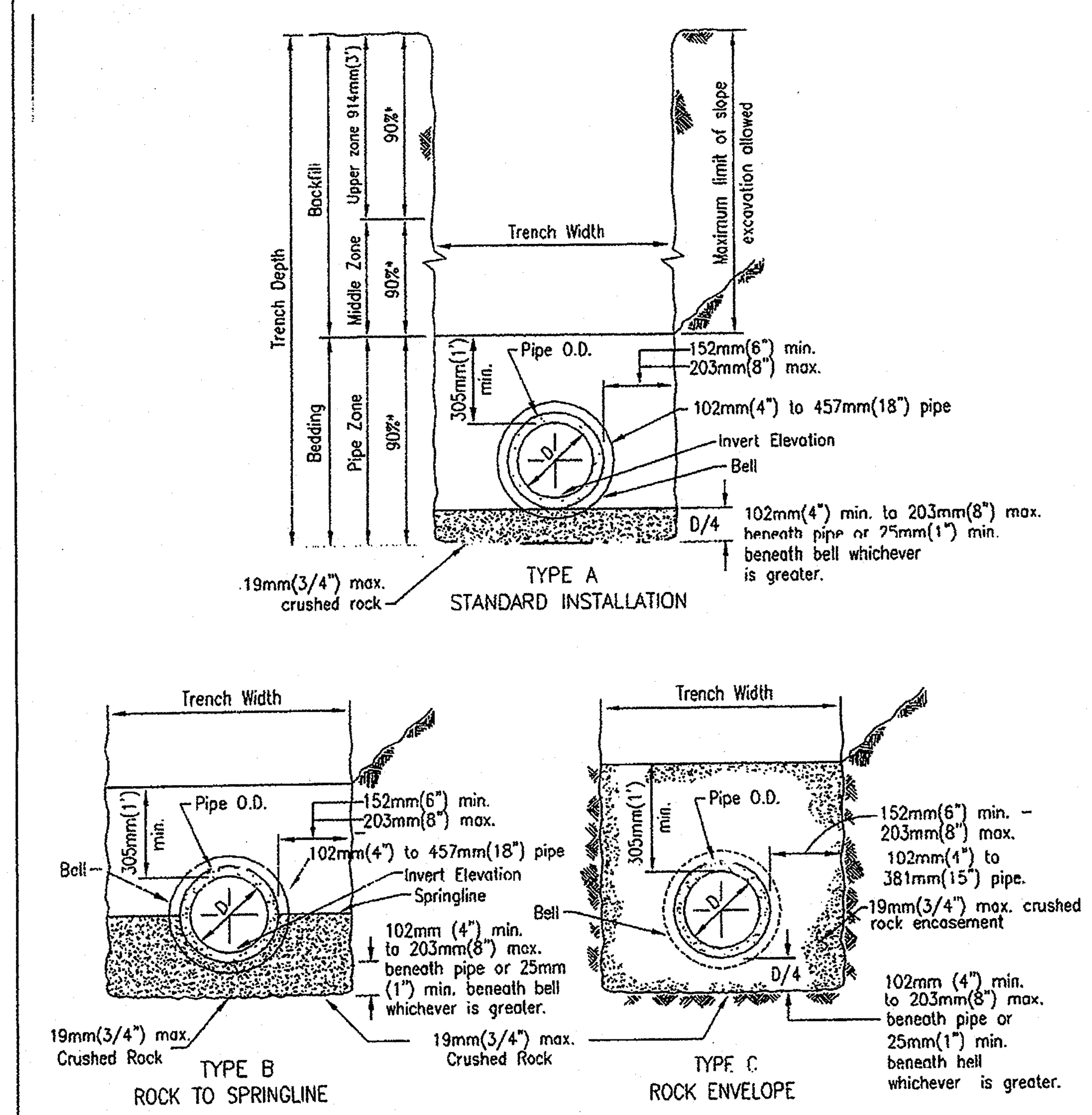
Revision	By	Approved	Date
ORIGINAL		R. Munoz	4/97
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

SEWER MAIN CLEANOUT (203mm(8") DIAMETER MAXIMUM)

DRAWING NUMBER S-3



NOTES
1. For trenching in improved streets, see Standard Drawings G-24 or G-25 for trench resurfacing.
2. (*) indicates minimum relative compaction.
3. Minimum depth of cover from the top of pipe to finish grade for all sanitary sewer installations shall be 914mm(3') For cover less tnan 914mm(3'), see Standard Drawing S-7 for concrete encasement.
4. See Type A installation for details not shown for Types B and C.

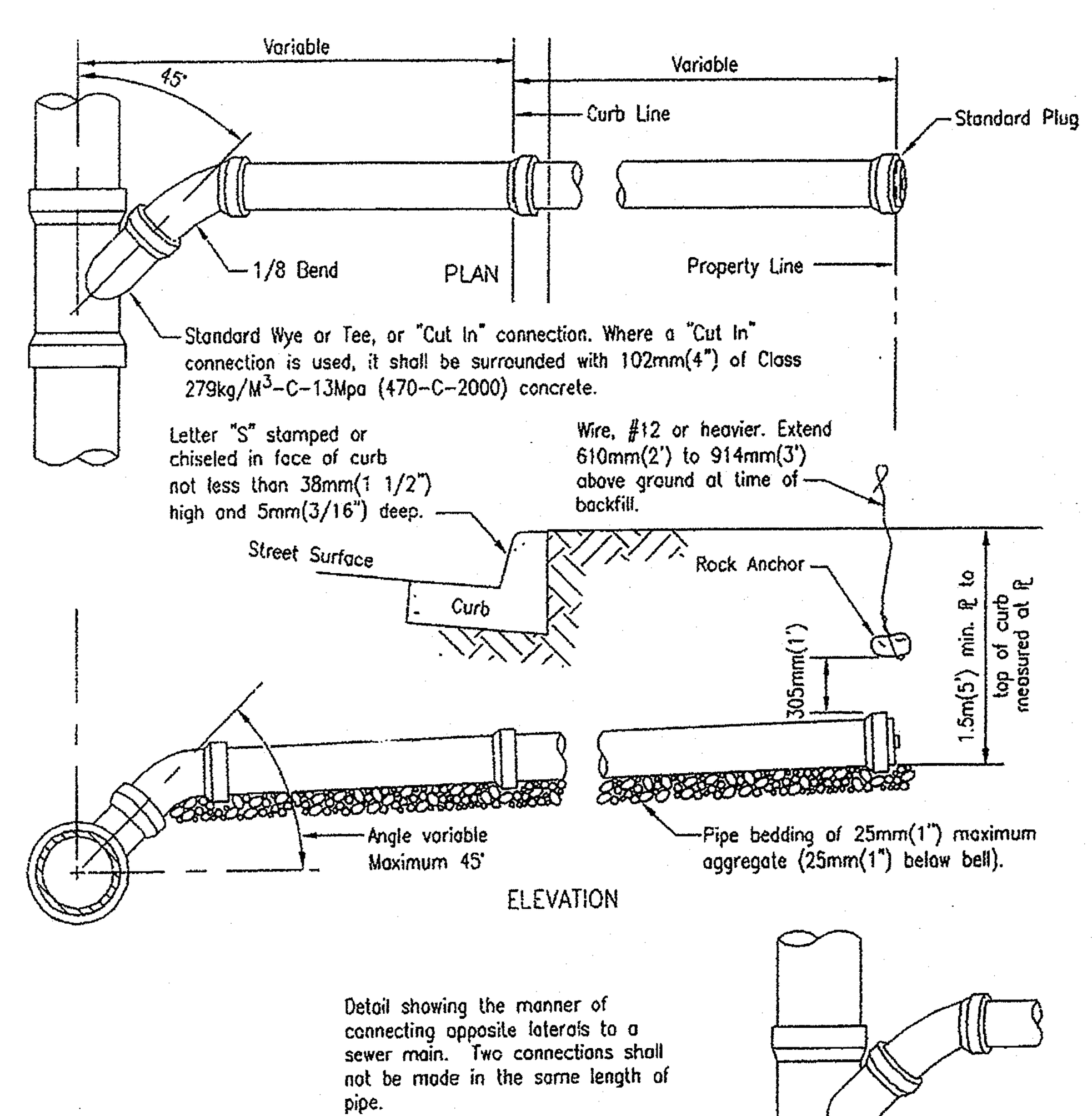
Revision	By	Approved	Date
ORIGINAL		A.Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

PIPE BEDDING AND TRENCH BACKFILL FOR SEWERS

DRAWING NUMBER S-4



NOTES
1. In no case shall a lateral connect to the sewer main directly on top of the pipe.
2. Sewer laterals shall have a minimum slope of 2%.
3. All joints on sewer lateral pipe shall be compression type or approved solvent weld.
4. Lateral shall extend to property line unless otherwise shown on plans.

LEGEND ON PLANS

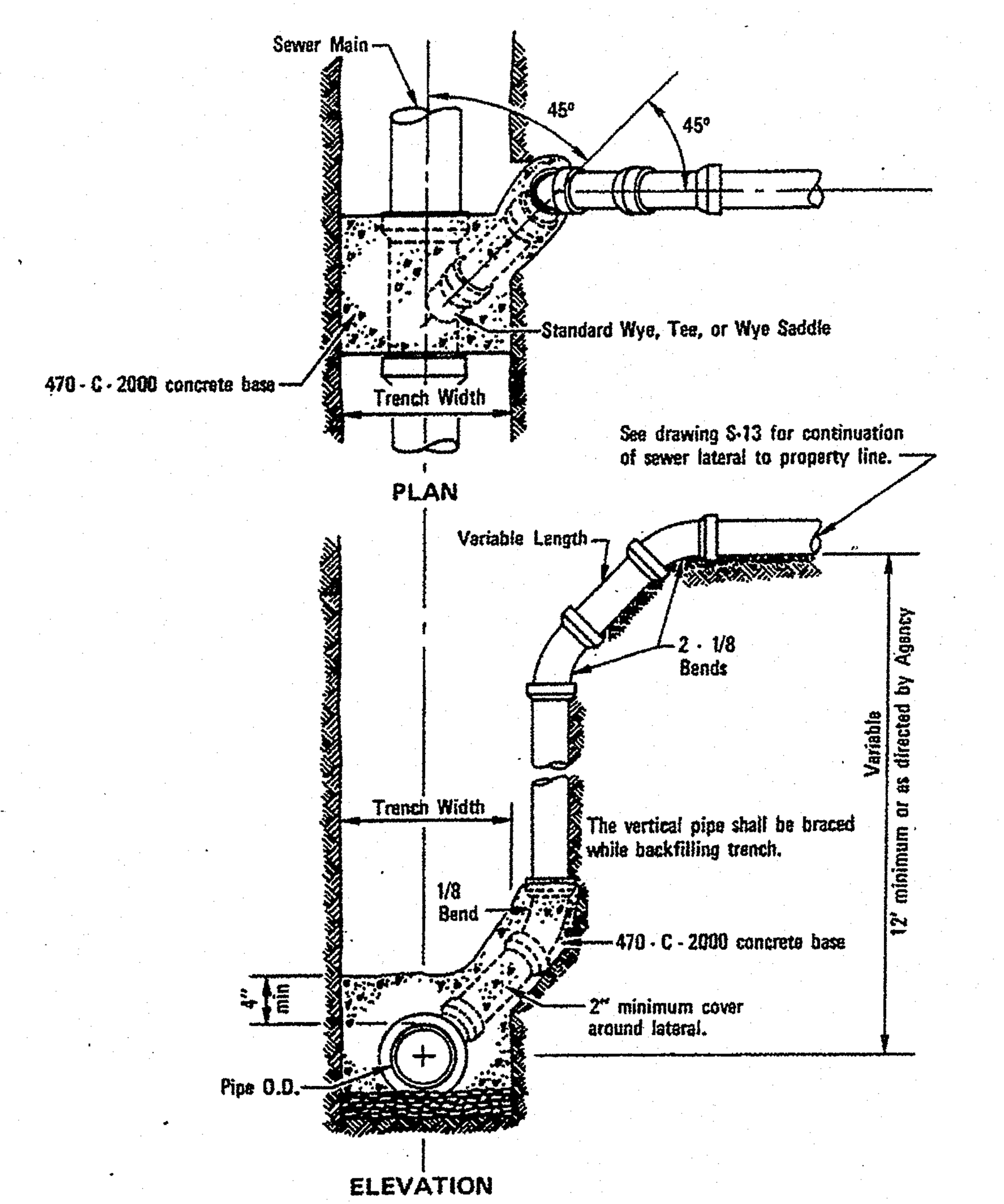
Revision	By	Approved	Date
ORIGINAL		A.Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

HOUSE CONNECTION (SEWER LATERAL)

DRAWING NUMBER S-13



NOTE
All joints on sewer lateral pipe shall be compression type or approved solvent weld.

LEGEND ON PLANS

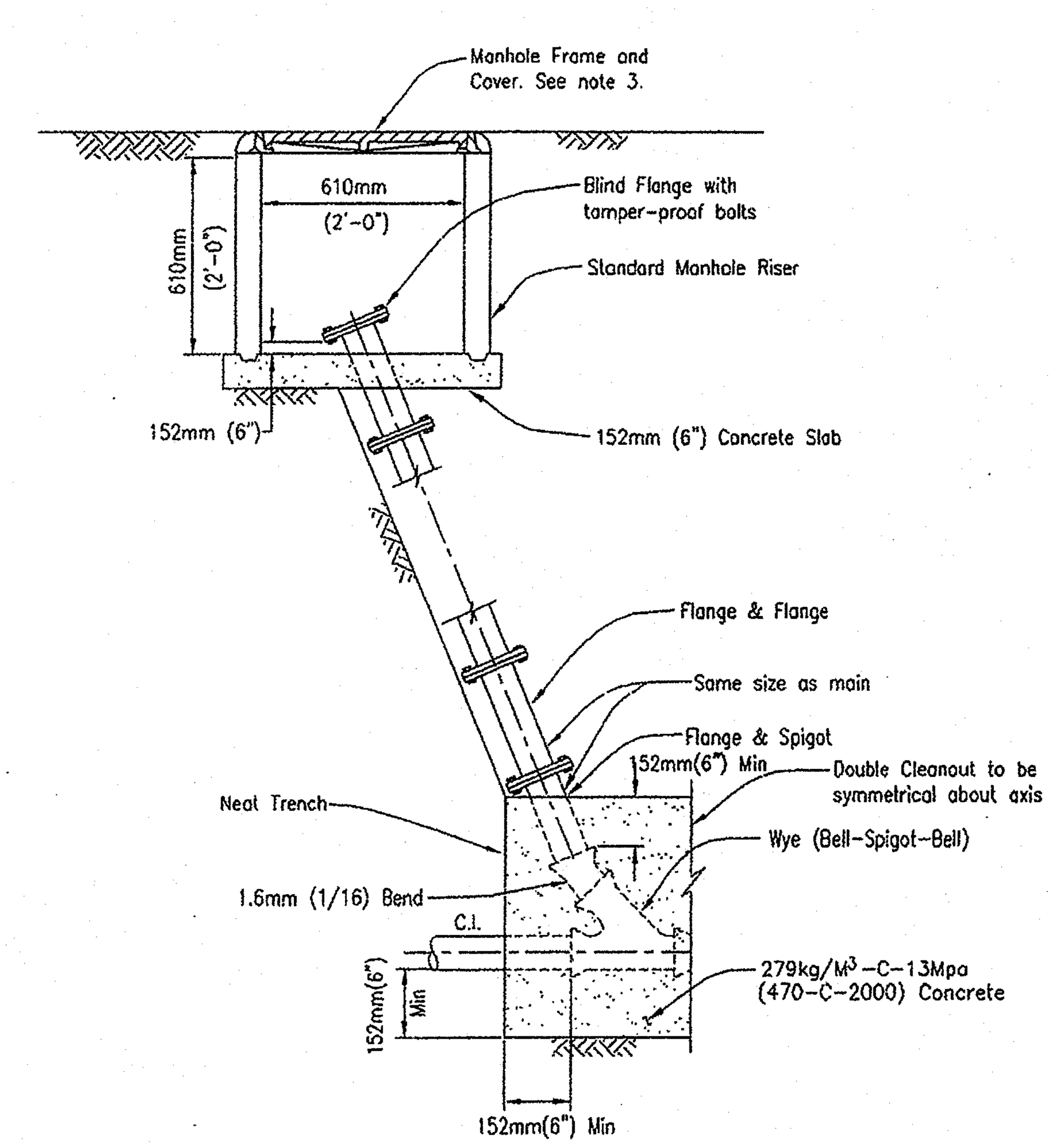
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Coordinator R.C.E. 19887 Dec. 1975

DRAWING NUMBER S-14

SAN DIEGO REGIONAL STANDARD DRAWING

Revision	By	Approved	Date

DEEP CUT HOUSE CONNECTION (SEWER LATERAL)



NOTES
1. Similar polyvinyl chloride components may be used in accordance with A.S.T.M. Standard Specification D-3033.
2. Concrete slab shall be 332kg/M3-C-22Mpa (560-C-3250) concrete.
3. ... heavy duty manhole frame and cover, Standard Drawing M-1, in areas subject to vehicular ...; use light duty manhole frame and cover, Standard Drawing M-2, in all other locations.

LEGEND ON PLANS

C.O.

Revisio...	By	Approved	Date
ORIGINAL		J. Solomon	7/79
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE — Chairperson R.C.E. 19246 Date 3/01/2003

...EANOUT - SEWER FORCE MAIN

DRAWING NUMBER S-16

CMD

OUSD NO. 758-000

PROJECT NOS. 025

P. T. N. 73569-9

DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
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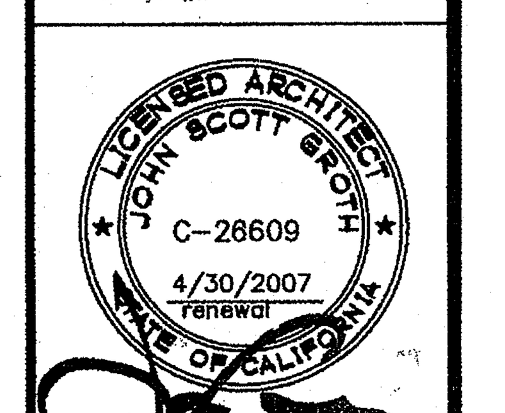

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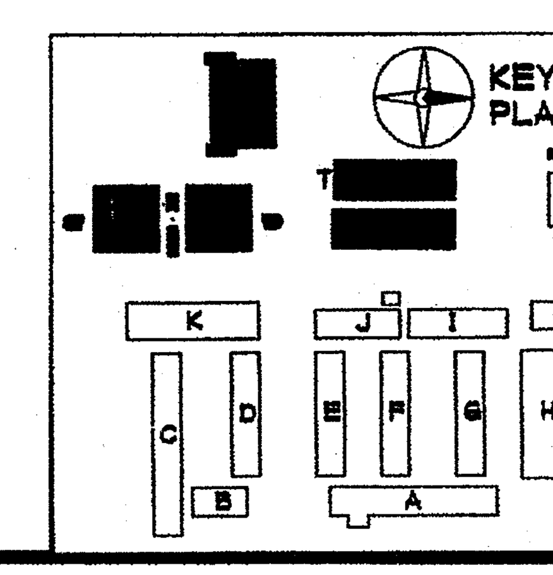

STANDARD DRAWINGS

C-6.1

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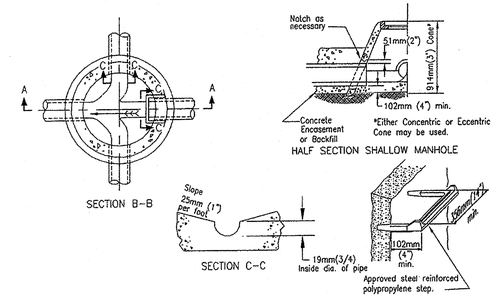


NOTES

1. Manhole frame and all joints shall be set in Class "C" mortar.
2. All precast components shall be manufactured in accordance with ASTM C-478, except step spacing.
3. Vertical wall of cone shall be on the upstream side of the manhole.
4. Concrete base shall be 332kg/M^3-C-22Mpa(560-C-3250).
5. Approved water stop required for plastic pipe connections.
6. Flexible joints shall be required within 305mm(12") of inside face of manhole (except for plastic pipe).
7. Precast sections shall be used within dimension"A" as required, in order of preference listed:
   A) Cone (notched for pipe if dimension "A" is less than 914mm(3')).
   B) 76mm(3") to 457mm(18") of 914mm(3') diameter grade rings and/or risers.
   C) 1.22m(4') diameter shaft variable height.
   D) Top step shall be 381mm(15") maximum from top of frame and cover.
8. All patching within manhole base shall be epoxy mortar.
9. Prior approval of precast base is required by the Agency.

LEGEND ON PLANS

M.H. No. 2

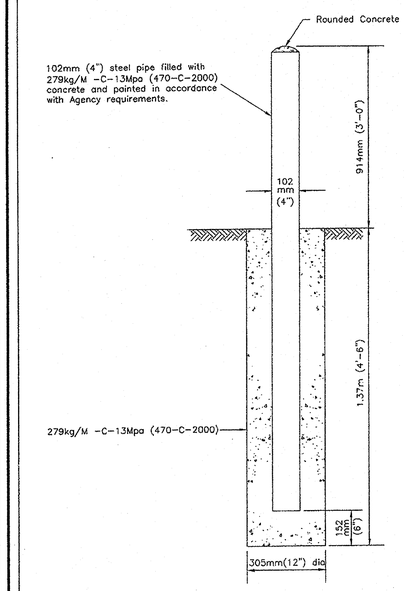
Revision	By	Approved	Date
ORIGINAL		D. Solomon	7/79
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

MANHOLE - 1.2m(4') x 914mm(3') DIAMETER (FOR 381mm(15") MAXIMUM DIAMETER

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Chairperson R.C.E. 19246 Date

DRAWING NUMBER S-17



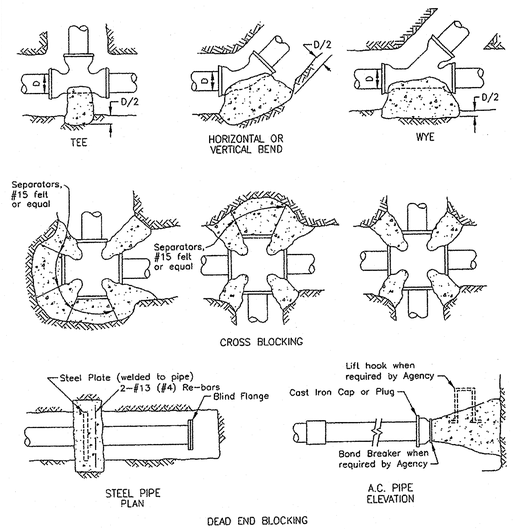
Revision	By	Approved	Date
ORIGINAL		A.Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

PROTECTION POST

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Chairperson R.C.E. 19246 Date

DRAWING NUMBER W-16



DEAD END BLOCKING

NOTES

1. Concrete shall be 279kg/M^3-C-13Mpa (470-C-2000).
2. See Standard Drawing W-18 for bearing areas.

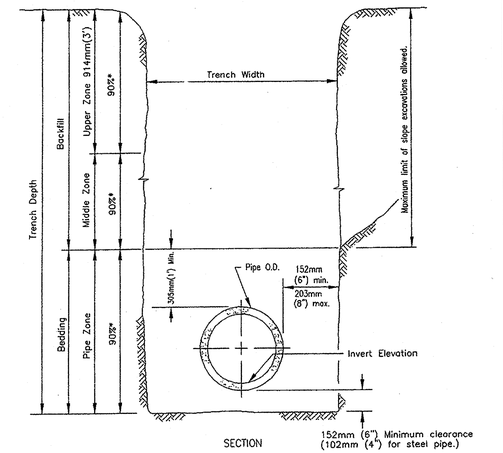
Revision	By	Approved	Date
ORIGINAL		A.Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

CONCRETE THRUST BLOCKS

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Chairperson R.C.E. 19246 Date

DRAWING NUMBER W-17



NOTES

1. For trenching on improved streets see standard drawing G-24 or G-25 for resurfacing details.
2. (*) indicates minimum relative compaction.
3. Bedding material shall either be sand, gravel, crushed aggregate or native free draining granular material having a sand equivalent (SE) of not less than (50) and an expansion coefficient, when saturated with water, of not more than 0.5 of one percent (0.5%).

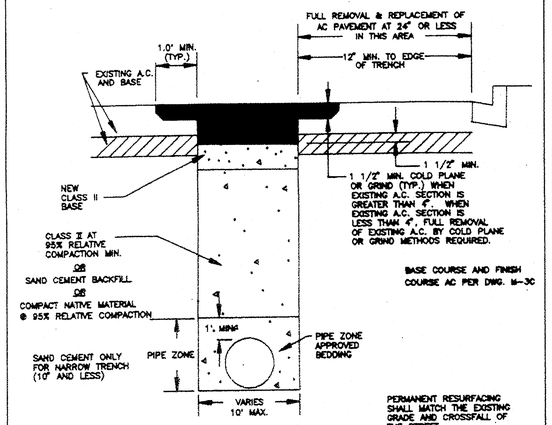
Revision	By	Approved	Date
ORIGINAL		A.Kercheval	12/75
Add Metric		T. Stanton	03/03

SAN DIEGO REGIONAL STANDARD DRAWING

PIPE BEDDING AND TRENCH BACKFILL FOR WATER MAINS

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Chairperson R.C.E. 19246 Date

DRAWING NUMBER W-21



FOR TRENCHES WHEN NATIVE SOIL AND CLASS II IS USED AS BACKFILL

A REPORT PREPARED BY A REGISTERED SOILS ENGINEER SHALL BE SUBMITTED TO THE CITY. THE SOILS ENGINEER SHALL CERTIFY THAT THE BACKFILL IS WITHIN THE OPTIMUM MOISTURE RANGE AND HAS BEEN PROPERLY COMPACTED. THE BACKFILL SHALL BE TESTED AT EACH VERTICAL FOOT, AND EACH 50 LINEAR FEET OF TRENCH WITH A MINIMUM OF 1 TEST PER TRENCH.

Revision	By	Approved	Date

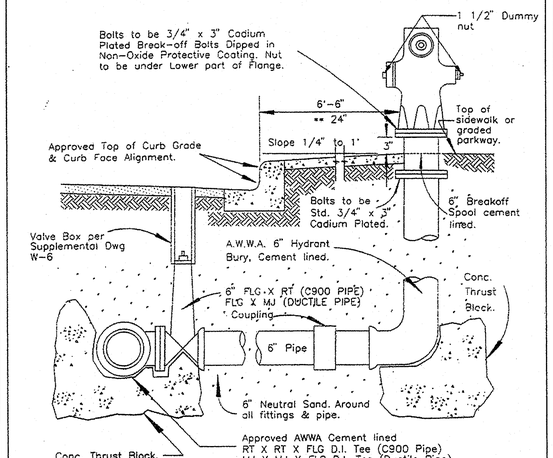
CITY OF OCEANSIDE

TRENCH BACKFILLING & RESURFACING

Ronald W Beck 2/4/04
CITY ENGINEER P.E. Date

STANDARD DRAWING NO. M-3A

APPROVED FIRE HYDRANT MODELS		
TYPE	OUTLETS	JAMES JONES
RESIDENTIAL	1-2 1/2", 1-4"	MODEL J - 3700
COMMERCIAL	2-2 1/2", 1-4"	MODEL J - 3765



NOTES: Finish with approved Fire Hydrant Yellow Paint, manufactured by Proline.
all bolts to be Cadium plated
** When Hydrant is located in parkway

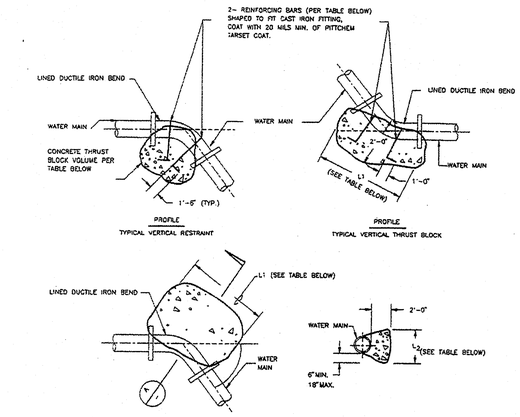
Revision	By	Approved	Date

CITY OF OCEANSIDE

FIRE HYDRANT

Ronald W Beck 2/4/04
CITY ENGINEER Date

STANDARD DRAWING NO. W-2



NOTES:

1. BEARING SURFACE OF ALL THRUST BLOCKS TO BE POURED AGAINST FIRM UNDISTURBED EARTH. (FULL BEARING STRENGTH)
2. ALL CONCRETE TO BE 3000 P.S.I.

PIPE SZ.	THRUST BLOCK DIMENSIONS																PIPE SZ.
	0° TO 11 1/4°				11 1/4° TO 22 1/2°				22 1/2° TO 45°				45° TO 90°				
	HORIZ. L1 L2	VERT. VOL. CY	VERT. REBAR		HORIZ. L1 L2	VERT. VOL. CY	VERT. REBAR		HORIZ. L1 L2	VERT. VOL. CY	VERT. REBAR		HORIZ. L1 L2	VERT. VOL. CY	VERT. REBAR		
4"	1.0 x 1.0	0.4	#6		1.0 x 1.5	0.8	#6		1.5 x 2.0	1.5	#6		2.0 x 3.0	2.7	#6	2.0 x 2.0	1.3	4"
6"	1.0 x 1.5	0.6	#6		1.5 x 2.0	1.3	#6		2.0 x 3.0	2.5	#6		3.0 x 3.5	4.7	#6	2.5 x 3.0	3.3	6"
8"	1.0 x 2.0	1.1	#6		2.0 x 2.0	2.1	#6		3.0 x 3.0	4.1	#6		4.0 x 4.0	7.6	#8	3.0 x 4.0	5.4	10"
10"	1.5 x 2.0	1.5	#6		2.0 x 2.5	3.0	#6		3.0 x 4.0	5.9	#6		4.5 x 5.0	10.8	#8	4.0 x 4.0	7.6	12"
12"	2.0 x 2.0	2.0	#6		3.0 x 3.0	4.0	#6		4.0 x 4.0	8.0	#8		6.0 x 5.5	14.7	#8	4.5 x 5.0	10.4	14"
16"	2.0 x 3.0	2.6	#6		3.0 x 3.5	5.2	#6		4.5 x 5.0	10.3	#8		7.0 x 5.5	19.0	#10	5.0 x 5.5	13.4	16"

TABLE BASED ON 200 PSI PRESSURE AND 2000 PSF ALLOWABLE SOIL BEARING PRESSURE.

Revision	By	Approved	Date

CITY OF OCEANSIDE

TYPICAL THRUST BLOCK

Ronald W Beck 2/4/04
CITY ENGINEER Date

STANDARD DRAWING NO. W-4

CMD

OUSD NO. 758-000

PROJECT NOS. 025

P. T. N. 73569-9

DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

space time function art

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC RB FLS MA SS
DATE MAR 2 8 2009

LICENSED ARCHITECT JOHN SCOTT GROTH C-28609 4/30/2007 renewal STATE OF CALIFORNIA

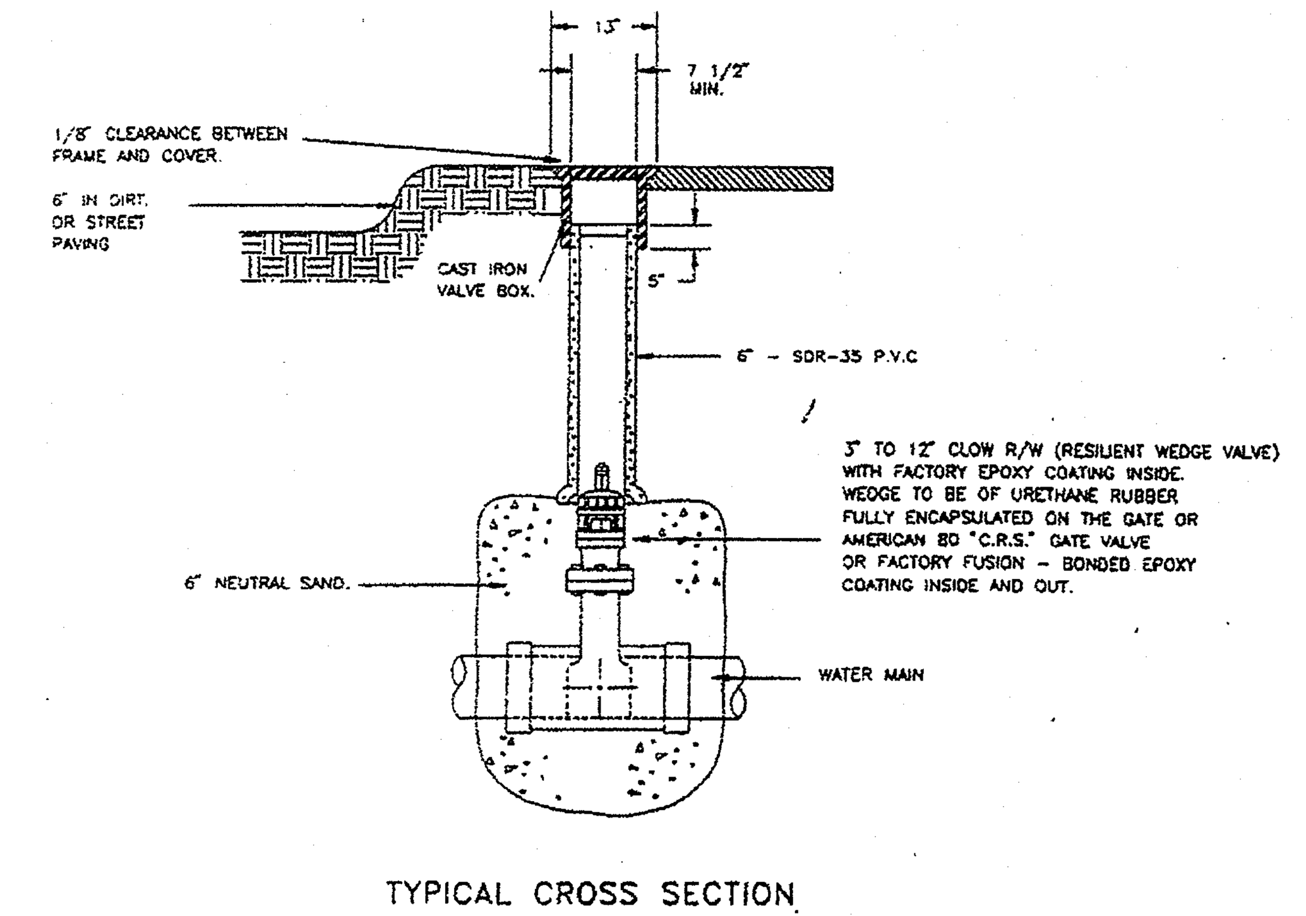
KEY PLAN

SHEET TITLE

STANDARD DRAWINGS

C-6.2

0:\804\05\00\DWGS\C-5.2.dwg 10/18/2004 3:57:13 PM PDT



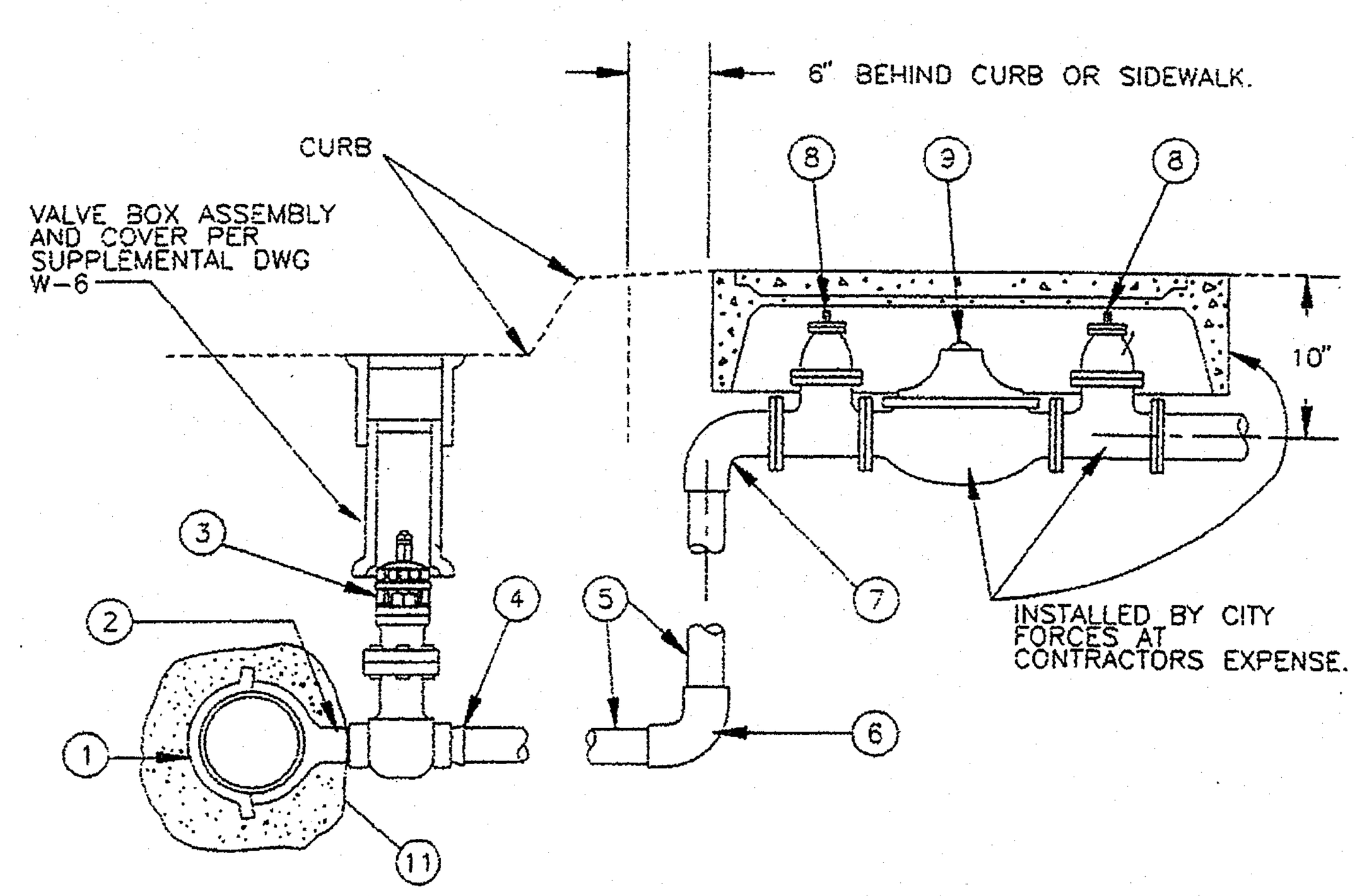
TYPICAL CROSS SECTION

TRIANGLE C.I. TRAFFIC COVERS FOR RECLAIMED WATER LINES

COVER WITH CITY OF OCEANSIDE WATER DEPT. CASTED ON TOP BY SOUTH BAY FOUNDARY G-V8 FRAME AND COVER

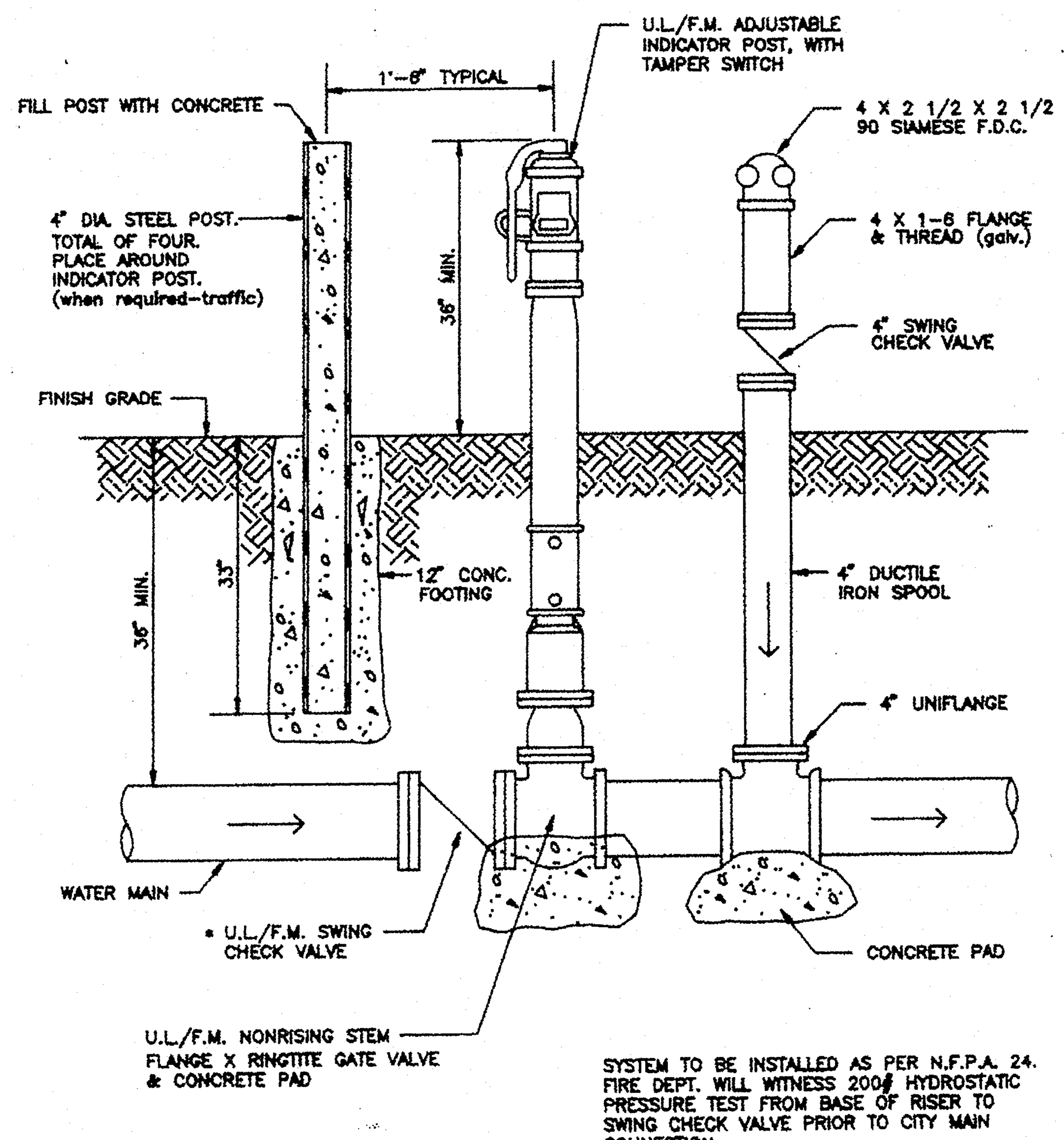
PLAN

Revision	By	Approved	Date	CITY OF OCEANSIDE	CITY ENGINEER / Date
				VALVE BOX AND COVERS	STANDARD DRAWING NO. W-6



1. BRONZE SERVICE CLAMP JAMES JONES J-979PROVIDED WITH TWO FLATTED "U" BOLTS MADE OF DURONZE (SILICON BRONZE) OR SIMILAR WITH NEOPRENE SELF SEALING TAMPERED GASKET OR "O" RING
2. 2" x 3" BRASS NIPPLE.
3. 2" MUELLER NO. 2380-8 GATE VALVE. /2" SQ. OPERATING NUT.
4. 2" COPPER TO M.I.P. ADAPTER.
5. 1 1/2" OR 2" TYPE "K" COPPER TUBING (RIGID).
6. 1 1/2" OR 2" COPPER TO COPPER 90° ELBOW.
7. 1 1/2" OR 2" COPPER TO M.I.P. 90° ELBOW.
8. 1 1/2" OR 2" FLANGED x SCREW BALL VALVE, JAMES JONES NO. J-1912
9. 1 1/2" OR 2" WATER METER.
10. ALL JOINTS SILVER SOLDER.
11. SERVICES TO BE ENCASED IN 6" NEUTRAL SAND

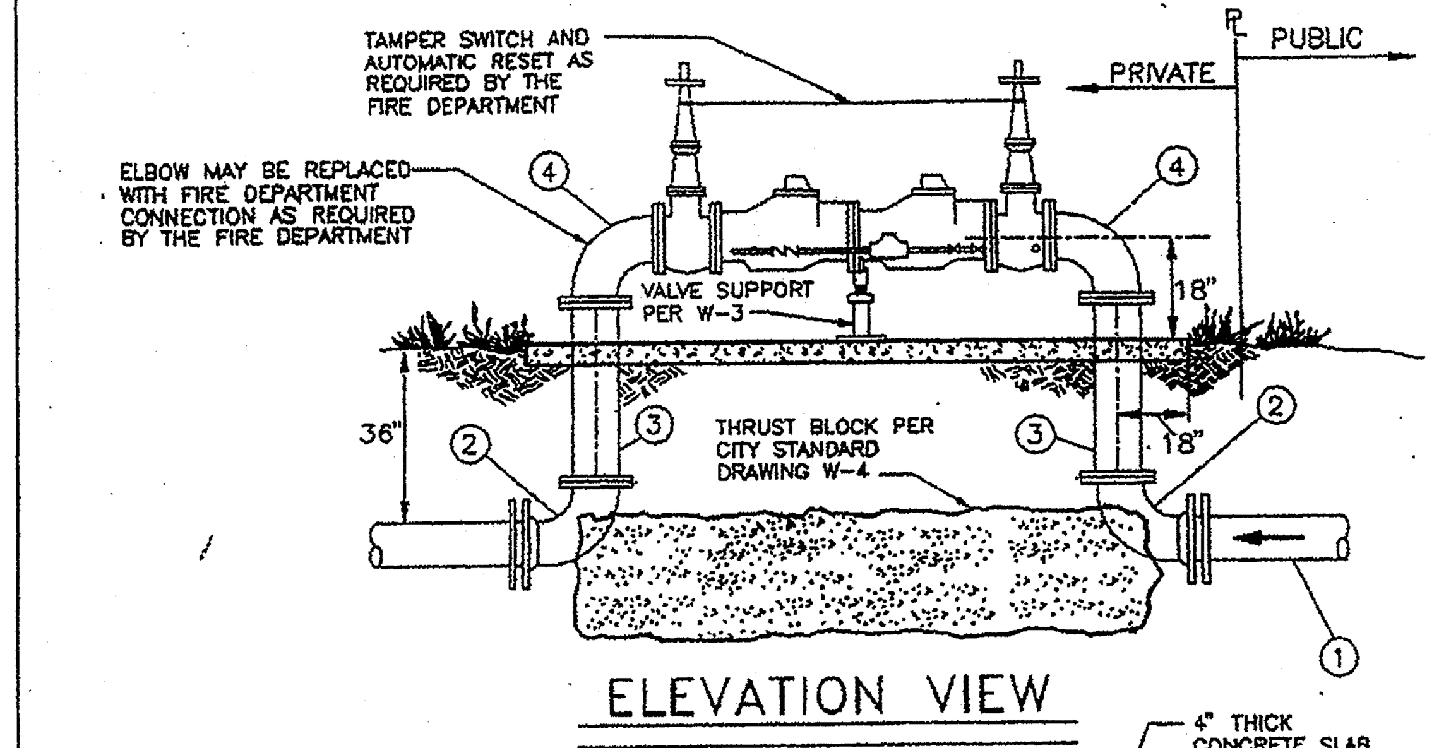
Revision	By	Approved	Date	CITY OF OCEANSIDE	CITY ENGINEER / Date
				STANDARD 1 1/2" & 2" METER SERVICE	STANDARD DRAWING NO. W-9



SYSTEM TO BE INSTALLED AS PER N.F.P.A. 24. FIRE DEPT. WILL WITNESS 200# HYDROSTATIC PRESSURE TEST FROM BASE OF RISER TO SWING CHECK VALVE PRIOR TO CITY MAIN CONNECTION.

* REQUIDED WITH ON-SITE HYDRANT(S) ONLY

Revision	By	Approved	Date	CITY OF OCEANSIDE	CITY ENGINEER / Date
				STANDARD POST INDICATOR VALVE INSTALLATION WITH FIRE DEPARTMENT CONNECTION	STANDARD DRAWING NO. W-16

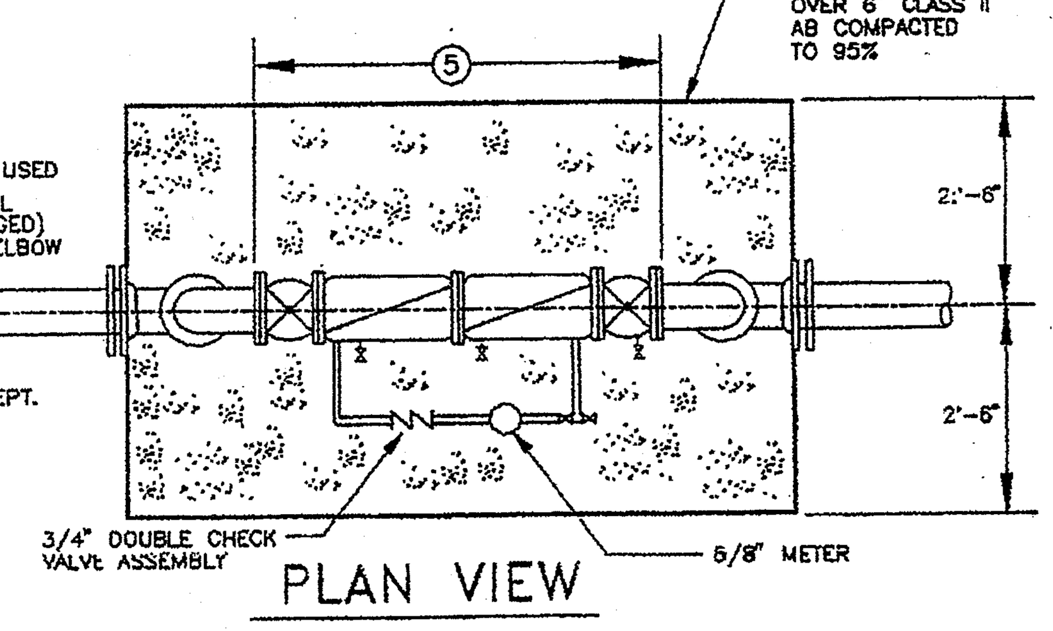


ELEVATION VIEW

NOTES:

1. PUBLIC WATER MAIN
2. 90 DUCTILE IRON ELBOW: FLG X FLG; FLG X RT; FLG X MECHANICAL JOINT (UNI-FLANGE SHALL NOT BE USED
3. FLANGED DUCTILE IRON SPOOL (BOTH ENDS SHALL BE FLANGED)
4. 90 FLANGED DUCTILE IRON ELBOW
5. "FACTORY ASSEMBLED"

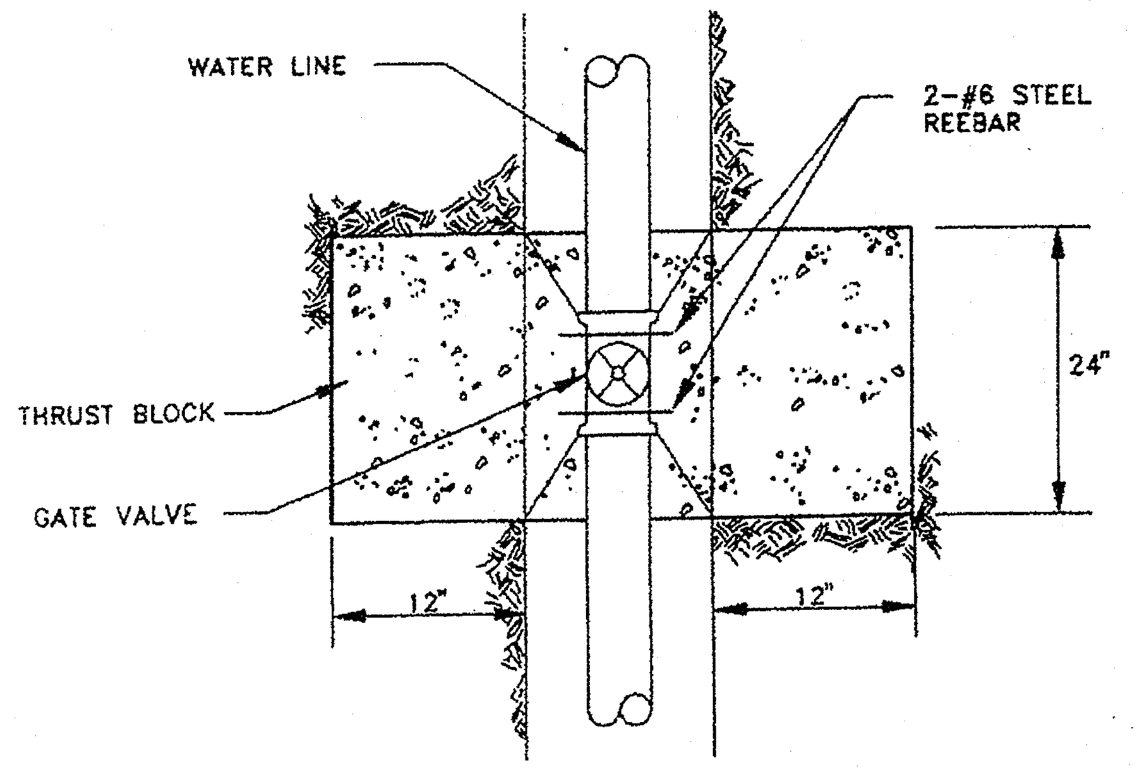
DOUBLE CHECK DETECTOR CHECK ASSEMBLY W/RESILIENT SEATED OS&Y SHUT OFF VALVES APPROVED BY THE DEPT. OF HEALTH SERVICES. OFFICE OF DRINKING WATER. WITH A 5/8" SENSUS BY-PASS METER AND A 3/4" DOUBLE CHECK (5/8" BY-PASS METER MUST BE PURCHASED FROM THE CITY OF OCEANSIDE WATER UTILITIES DEPARTMENT)

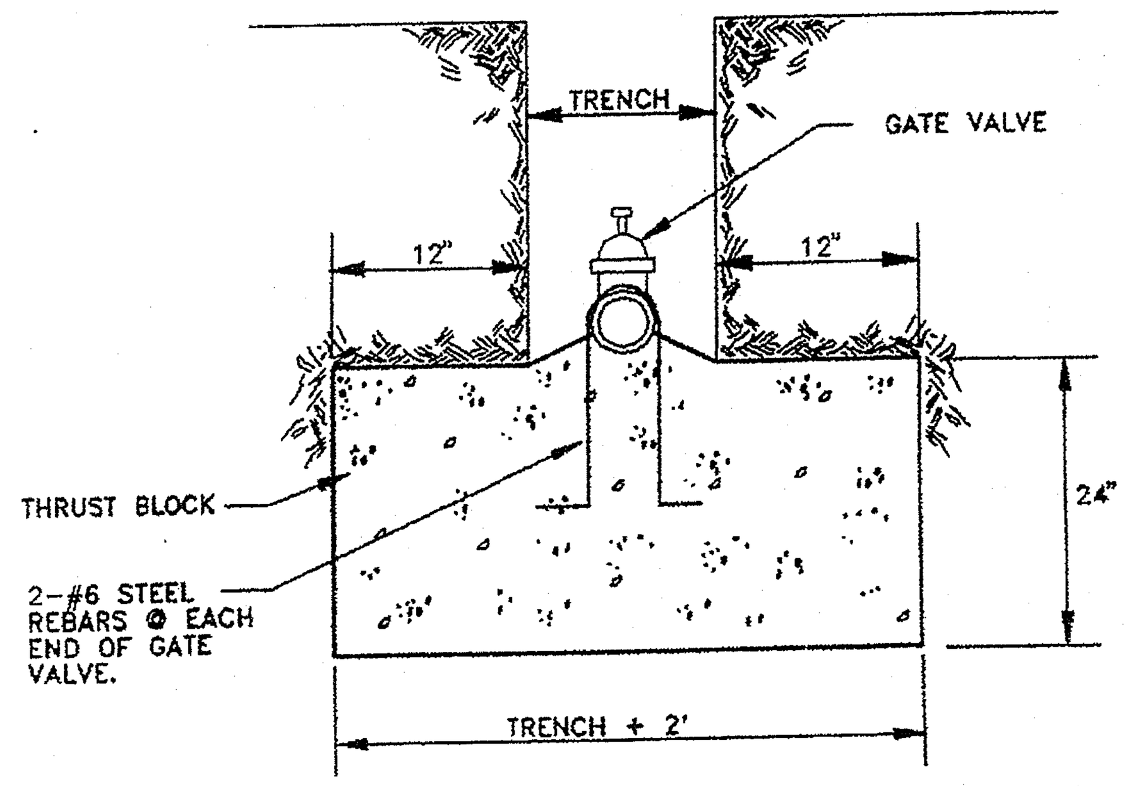


PLAN VIEW

THIS ASSEMBLY SHALL BE INSPECTED BY THE WATER UTILITIES DEPARTMENT. AFTER WATER UTILITIES DEPARTMENT'S APPROVAL ASSEMBLY SHALL BE TESTED BY A CITY APPROVED TESTER. THE DEVELOPER/OWNER IS RESPONSIBLE FOR THE COST OF TESTING THE ASSEMBLY. THERE AFTER, THE ASSEMBLY SHALL BE TESTED ANNUALLY AT THE OWNER'S EXPENSE. THE TEST REPORT IS TO BE SUBMITTED TO THE CITY WATER UTILITIES DEPARTMENT. PHONE NUMBER 966-8785

Revision	By	Approved	Date	CITY OF OCEANSIDE	CITY ENGINEER / Date
				DOUBLE CHECK-DETECTOR CHECK ASSEMBLY	STANDARD DRAWING NO. W-17





Revision	By	Approved	Date	CITY OF OCEANSIDE	CITY ENGINEER / Date
				LINE VALVE INSTALLATION	STANDARD DRAWING NO. W-24

CMD	
OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
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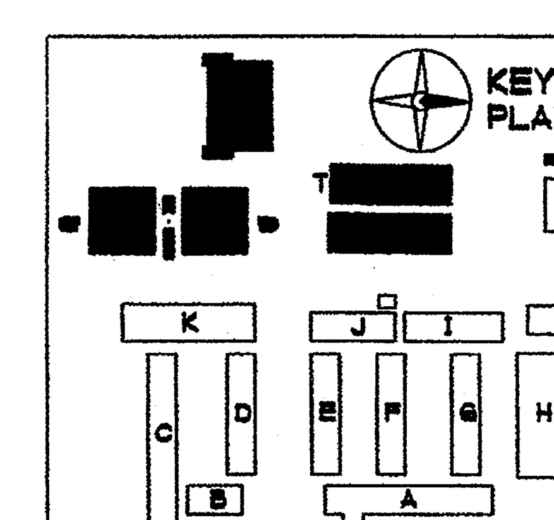
LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
renewal
STATE OF CALIFORNIA



SHEET TITLE

STANDARD DRAWINGS

C-6.3

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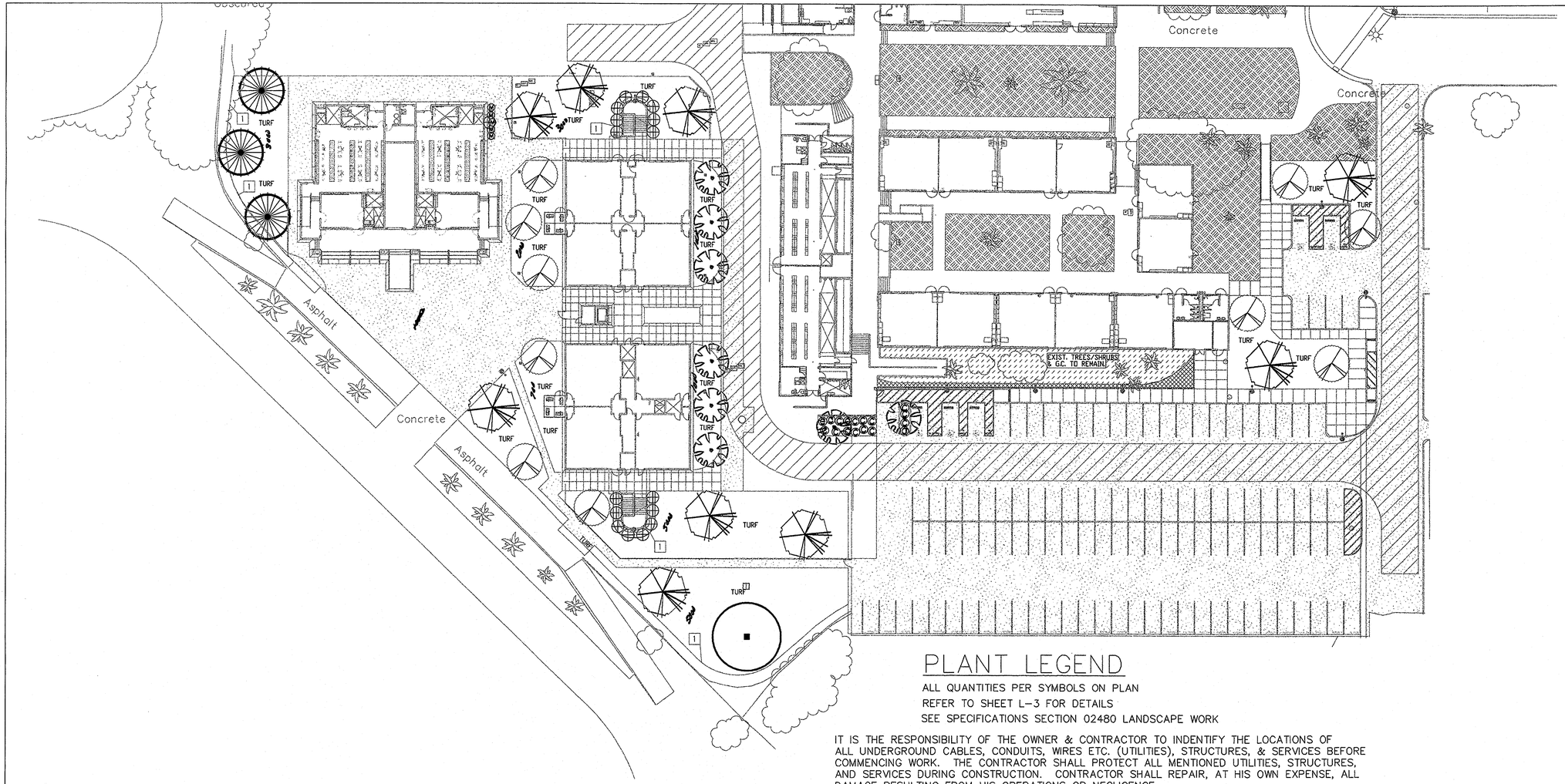

PLANT LEGEND

ALL QUANTITIES PER SYMBOLS ON PLAN
REFER TO SHEET L-3 FOR DETAILS
SEE SPECIFICATIONS SECTION 02480 LANDSCAPE WORK

IT IS THE RESPONSIBILITY OF THE OWNER & CONTRACTOR TO INDENTIFY THE LOCATIONS OF ALL UNDERGROUND CABLES, CONDUITS, WIRES ETC. (UTILITIES), STRUCTURES, & SERVICES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROTECT ALL MENTIONED UTILITIES, STRUCTURES, AND SERVICES DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ALL DAMAGE RESULTING FROM HIS OPERATIONS OR NEGLIGENCE.

24" BOX
SEQUOIA SEMPERVIRENS
COAST REDWOOD

48" BOX
CEDRUS DEODORA
DEODOR CEDAR

24" BOX
PINUS CANARIENSIS
CANARY ISLAND PINE

24" BOX STANDARD
LAGERSTROEMIA INDICA 'TUSCARORA'
CRAPE MYRTLE

24" BOX
QUERCUS PALUSTRIS
PIN OAK

© 2 GALLON PINK FLOWER CARPET
ROSA X FLOWER CARPET PINK
MONROVIA NURSERY

⊕ 5 GALLON
CALLIANDRA INEQUILATERA
PINK POWDER PUFF

Ⓜ 5 GALLON
MYRTUS COMMUNIS COMPACTA
DWARF MYRTLE

MULCH ALL PLANTING AREAS WITH 1" LAYER OF
FOREST FINES 1/2 - 1" SIZE MULCH
AGRI-SERVICE 760-643-4041

ROOT BARRIERS REQUIRED FOR ALL TREES WITHIN 5' OF PAVEMENT
USE DEEPROOT BARRIER UB 24-2 PER MANUFAC. SPECS.
FOR INFO CALL 1-800-766-8835

TURF AREAS: HydroSeed 12 LBS. PER 1000 SQFT.
Ballfield Mix- 3A by Agrono-Tec Seed Co.
call 1-800-543-4109

[1] MOW STRIP LAWN EDGING: 2X4 BEND-A-BOARD
MADE BY EPIC PLASTICS EPICPLASTICS.COM 510-235-9339
INSTALL PER MANUFAC. SPECIFICATIONS

EXISTING TREES/SHRUBS/GC TO REMAIN

GROUND COVER:
ADD GAZAINIA GROUNDCOVER TO MATCH EXISTING

LANDSCAPE PLANTING PLAN

1" = 30'

2/23/05

REGISTERED LANDSCAPE ARCHITECT
TODD CURE'
No. 2587
EXP. 5-31-05
STATE OF CALIFORNIA

Earth Sculpture Design
Landscape Architects Site Planning
Construction Management
1756 Kings Rd. Vista, CA 92084 (760) 941-7800

KEY PLAN

plotted 2/23/05

TMC

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

OUSD NO.
758-000
PROJECT NOS.
025
P. T. N.
73569-9
DATE
2/23/05
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

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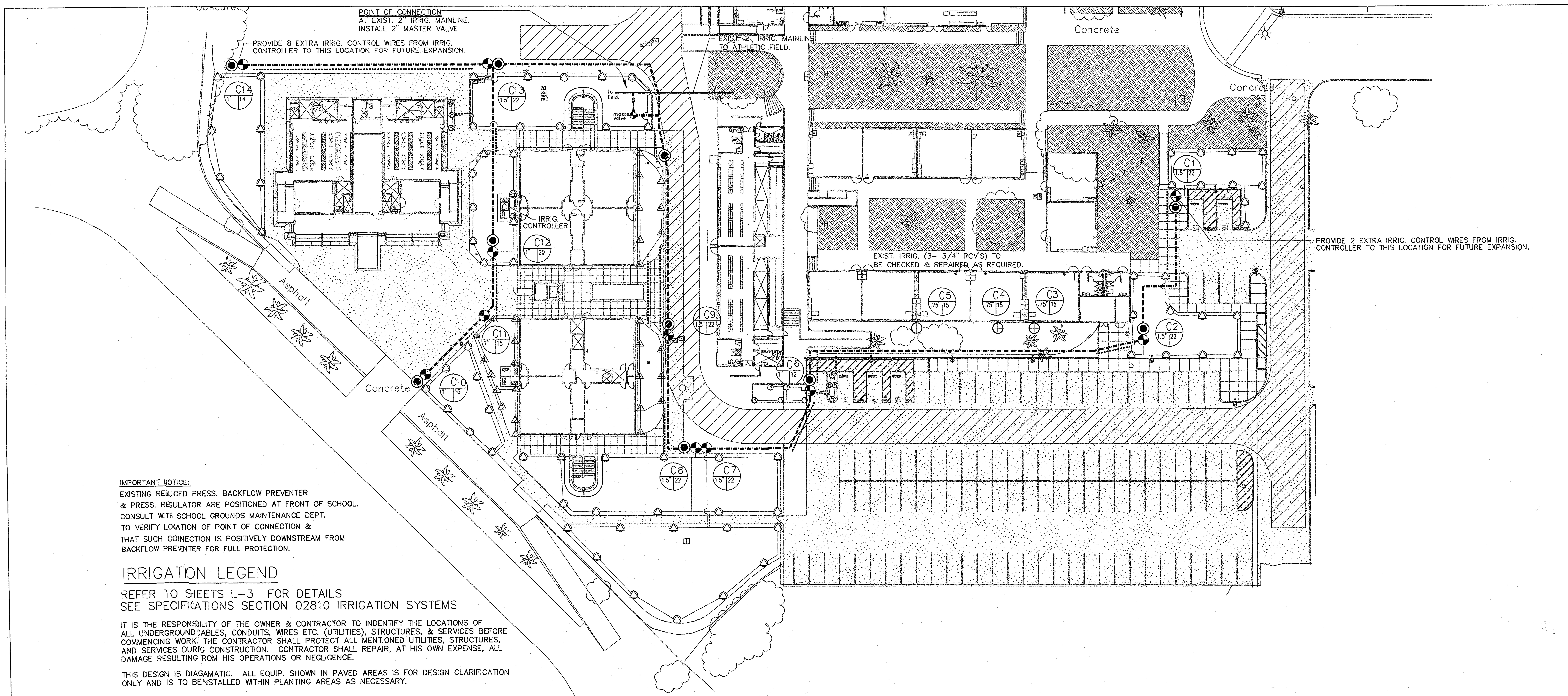
DATE MAR 2 8 2005

LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007 RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
landscape planting plan

L-1



IMPORTANT NOTICE:

EXISTING REDUCED PRESS. BACKFLOW PREVENTER & PRESS. REGULATOR ARE POSITIONED AT FRONT OF SCHOOL. CONSULT WITH SCHOOL GROUNDS MAINTENANCE DEPT. TO VERIFY LOCATION OF POINT OF CONNECTION & THAT SUCH CONNECTION IS POSITIVELY DOWNSTREAM FROM BACKFLOW PREVENTER FOR FULL PROTECTION.

IRRIGATION LEGEND

REFER TO SHEETS L-3 FOR DETAILS
SEE SPECIFICATIONS SECTION 02810 IRRIGATION SYSTEMS

IT IS THE RESPONSIBILITY OF THE OWNER & CONTRACTOR TO INDENTIFY THE LOCATIONS OF ALL UNDERGROUND CABLES, CONDUITS, WIRES ETC. (UTILITIES), STRUCTURES, & SERVICES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROTECT ALL MENTIONED UTILITIES, STRUCTURES, AND SERVICES DURIG CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ALL DAMAGE RESULTING ROM HIS OPERATIONS OR NEGLIGENCE.

THIS DESIGN IS DIAGAMATIC. ALL EQUIP. SHOWN IN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND IS TO BENSTALLED WITHIN PLANTING AREAS AS NECESSARY.

PVC PIP CLASS 315 2-1/2" PRESSURE MAINLINE (BURY 1", BURY 24" UNDER PAVING)

PVC CLAS 200 NON-PRESSURE LATERAL LINE PIPING BURY 12 BURY 24" UNDER PAVING

PIPE SIZECHART
3/4" ....0-10..GPM
1" ....11-16..GPM
1-1/2" ....17-35..GPM
2" ....36-55..GPM

PVC SCHD40 SLEEVES

USE SCHD. 40 PVC PI FOR LATERALS UNDER PAVING INSIDE SLEEVES. ALL SLEEVES TO BE SCHD. 40 PVC ND TWO TIMES SIZE OF LATERAL OR MAINLINE. USE SEPARATE 2" DIAM. SLEEVES FORWIRING.

MATCO-NCA 755 SERIES BRASS BALL VALVE (MAINLINE ZE).

RAINBIRD (SERIES ELEC. REMOTE-CONTROL VALVES INSTALL INSUBTERRANEAN 12X18" VALVE BOX

EXISTING EC. REMOTE-CONTROL VALVES.
CONNECT RES FROM NEW CONTROLLER TO EXIST. RCV'S.

C3 — CONTRCER STATION NO.
1.5" 31 — GPM (GLONS PER MINUTE)
— VAVLE E

RAINBIRD 3RC 3/4" QUICK COUPLER VALVE INSTALL IN ROUND VALVE BOX.

RAINBIRD ES-MC24 24 STATION WALL MOUNT DIGITAL CONTROLLER WHICH CAN CONVERTED TO A SATELLITE CONTROLLER TO WORK WITH CENTR/CONTROL SYSTEMS. WITH RAINBIRRAIN CHECK AUTO. RAIN SHUTOFF. CONTRACTOR) PROVIDE ELEC. TO CONTROLLER. SEE ELEC. DRAWINGS.

RAINBIRD 1812-SAM-PRS 12" POP-UP
PRESS. REGULATING SEAL-A-MATIC POP-UP SPRAY HEAD
SEE RAINBIRD SPRAY NOZZLE SHCEDULE BELOW.

RAINBIRD 1804-SAM-PRS 4" POP-UP
PRESS. REGULATING SEAL-A-MATIC POP-UP SPRAY HEAD
SEE RAINBIRD SPRAY NOZZLE SHCEDULE BELOW.

RAINBIRD SPRAY NOZZLE SCHEDULE

1	8' RADIUS ADJUSTABLE ARC RAINBIRD 8 VAN
2	10' RADIUS ADJUSTABLE ARC RAINBIRD 10 VAN
3	12' RADIUS ADJUSTABLE ARC RAINBIRD 12 VAN
4	15' RADIUS ADJUSTABLE ARC RAINBIRD 15 VAN
5	END-STRIP RAINBIRD 15EST
6	SIDE STRIP 4 X 28 RAINBIRD 15SST
7	6' RADIUS ADJUSTABLE ARC RAINBIRD 6 VAN
8	5' MULTI-PORT LOW VOLUME RAINBIRD

HUNTER I-20-6P-ARV-XX: I SERIES 6" POP-UP ROTOR ADJUSTABLE ARC/DRAIN CHECK VALVE
USE STANDARD NOZZLE #1 FOR QUARTER SPRAY PATTERNS, NOZZLE #2 FOR HALF SPRAYS, NOZZLE #3.5 FOR 3/4 SPRAYS, NOZZLE #4 FOR FULL CIRCLE SPRAY. (MATCHED PRECIPITATION RATES).

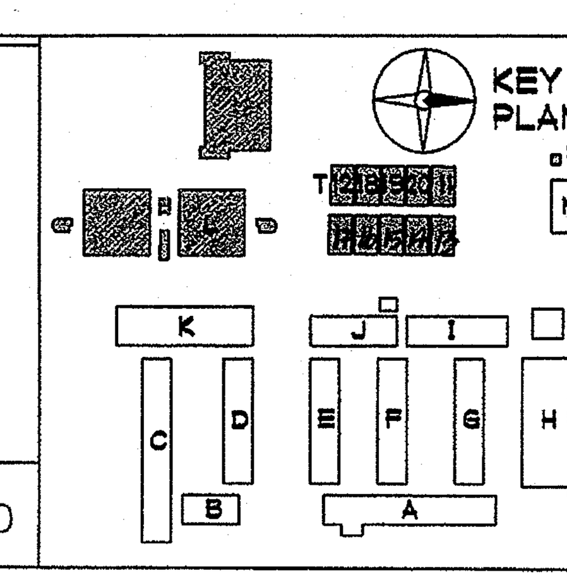
LANDSCAPE IRRIGATION PLAN

1" = 30'

2/23/05

REGISTERED LANDSCAPE ARCHITECT
TODD CURE'
No. 2587
EXP. 5-31-05
STATE OF CALIFORNIA

Earth Sculpture Design
Landscape Architects Site Planning
Construction Management
1756 Kings Rd. Vista, CA 92084 (760) 941-7800



plotted 2/23/05

TMC

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	2/23/05
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
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OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
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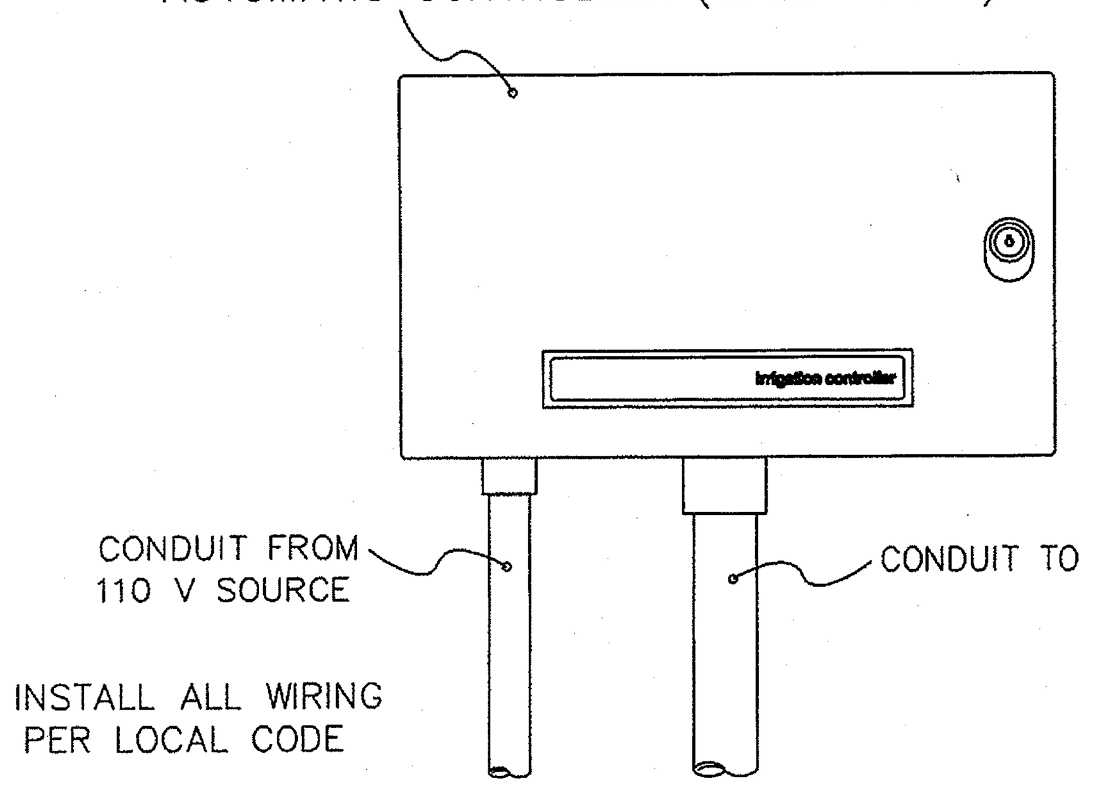
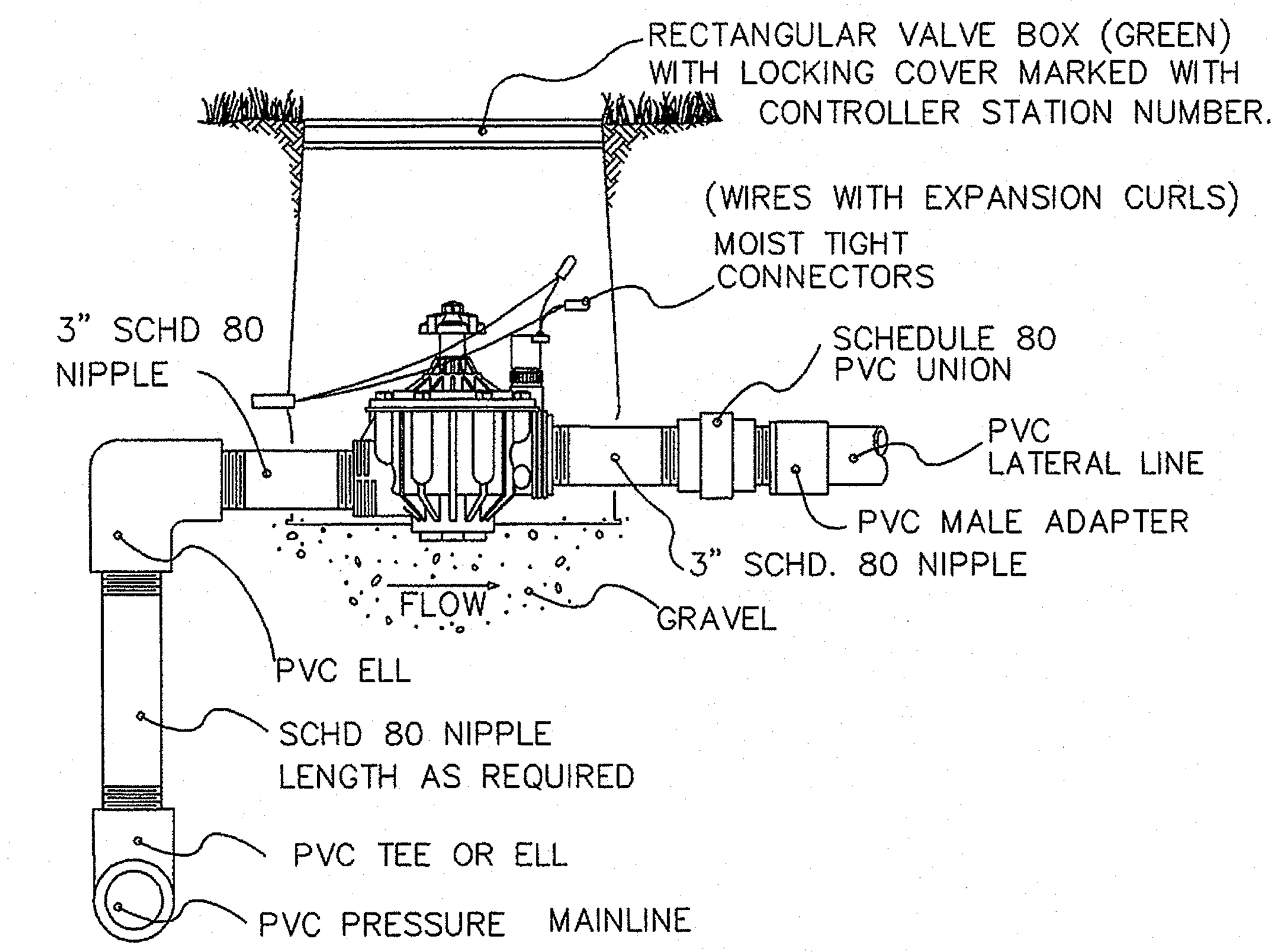
LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
landscape irrigation plan

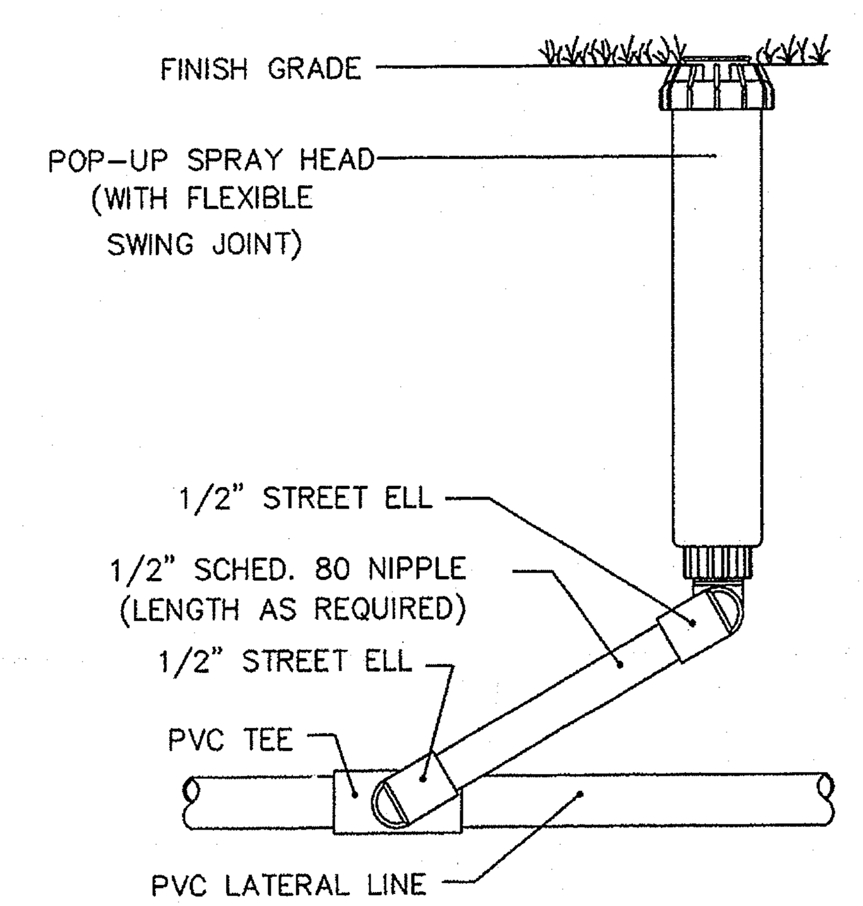
L-2



AUTOMATIC CONTROLLER

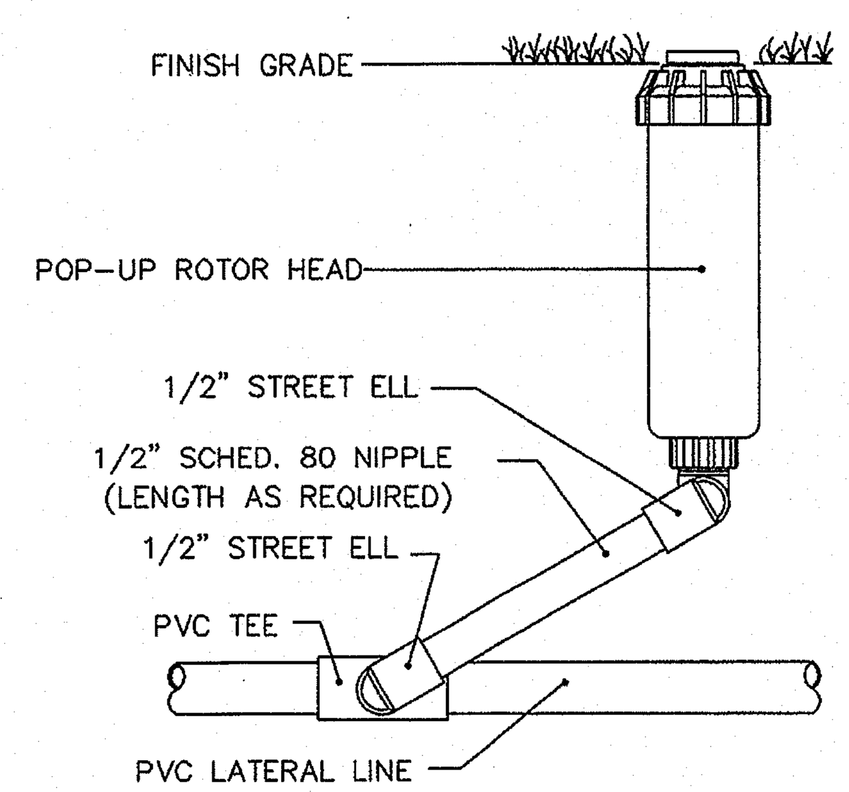


AUTOMATIC CONTROL VALVE



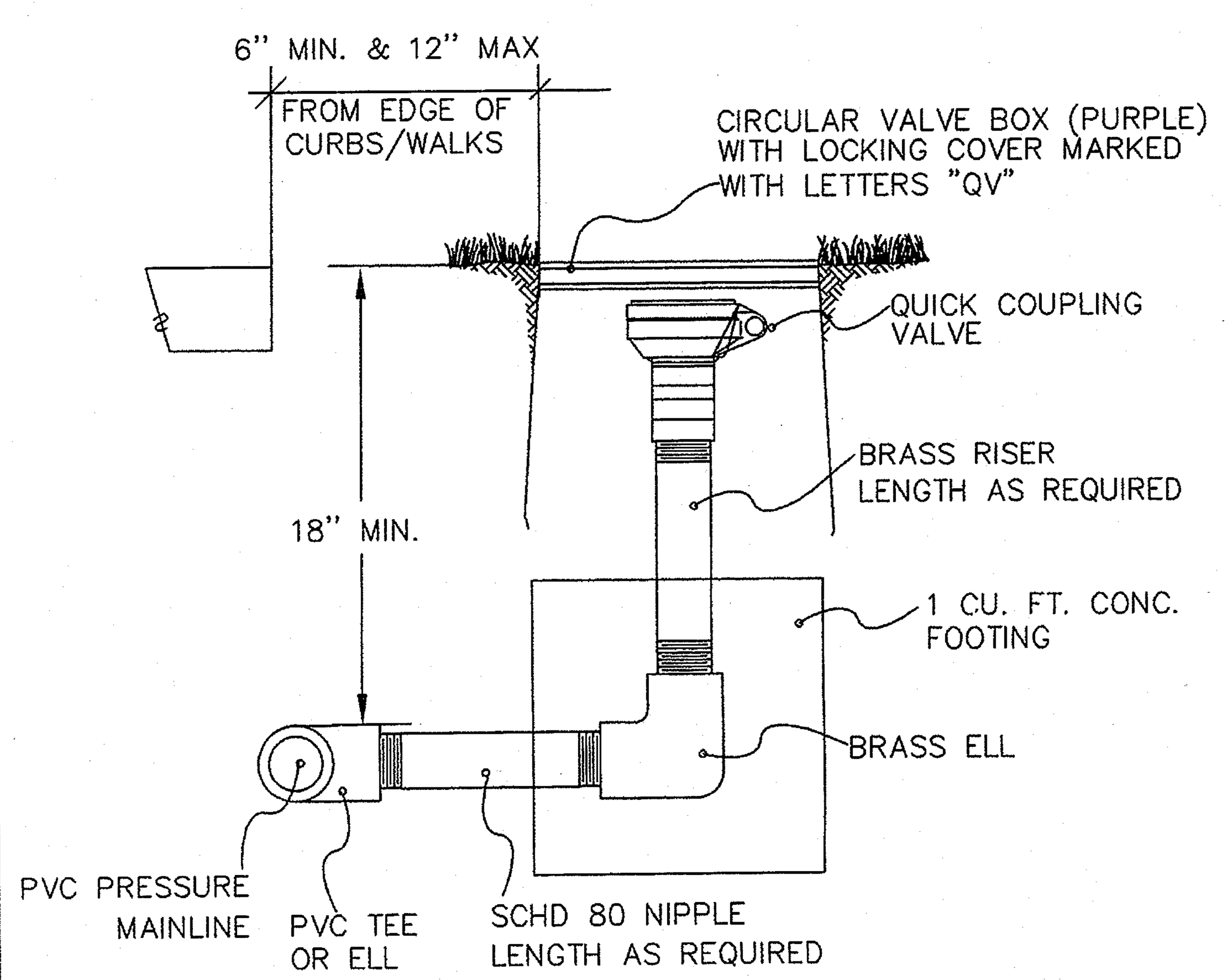
POP-UP SPRAY HEAD
NO SCALE INSTALLATION DETAIL

POP-UP SPRAY HEAD

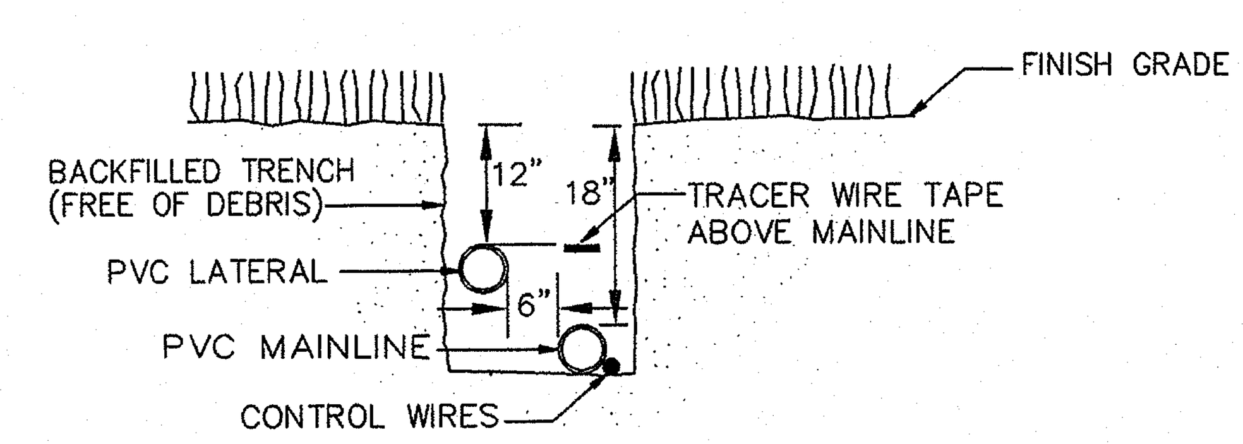


POP-UP ROTOR HEAD
NO SCALE INSTALLATION DETAIL

POP-UP ROTOR HEAD

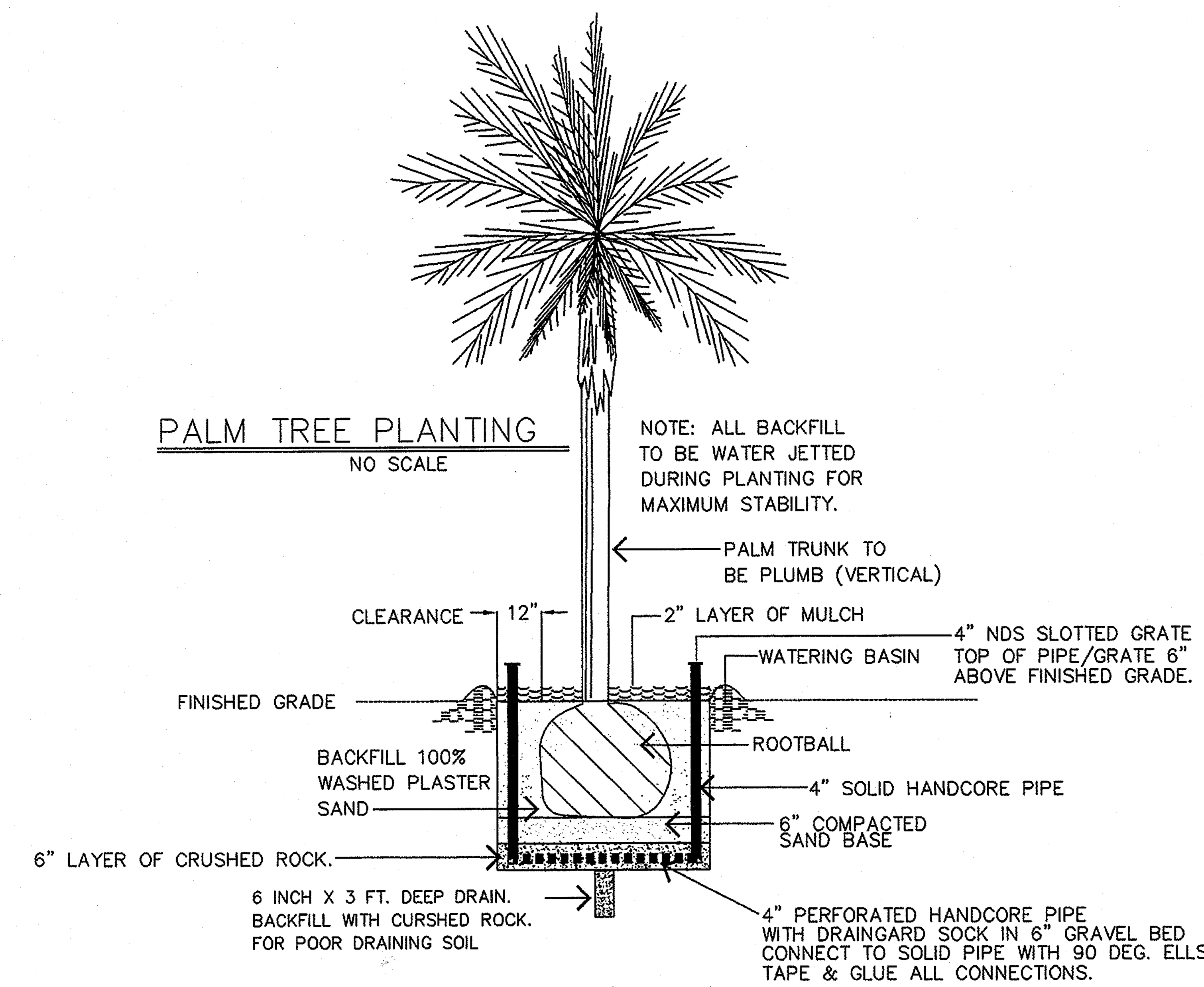


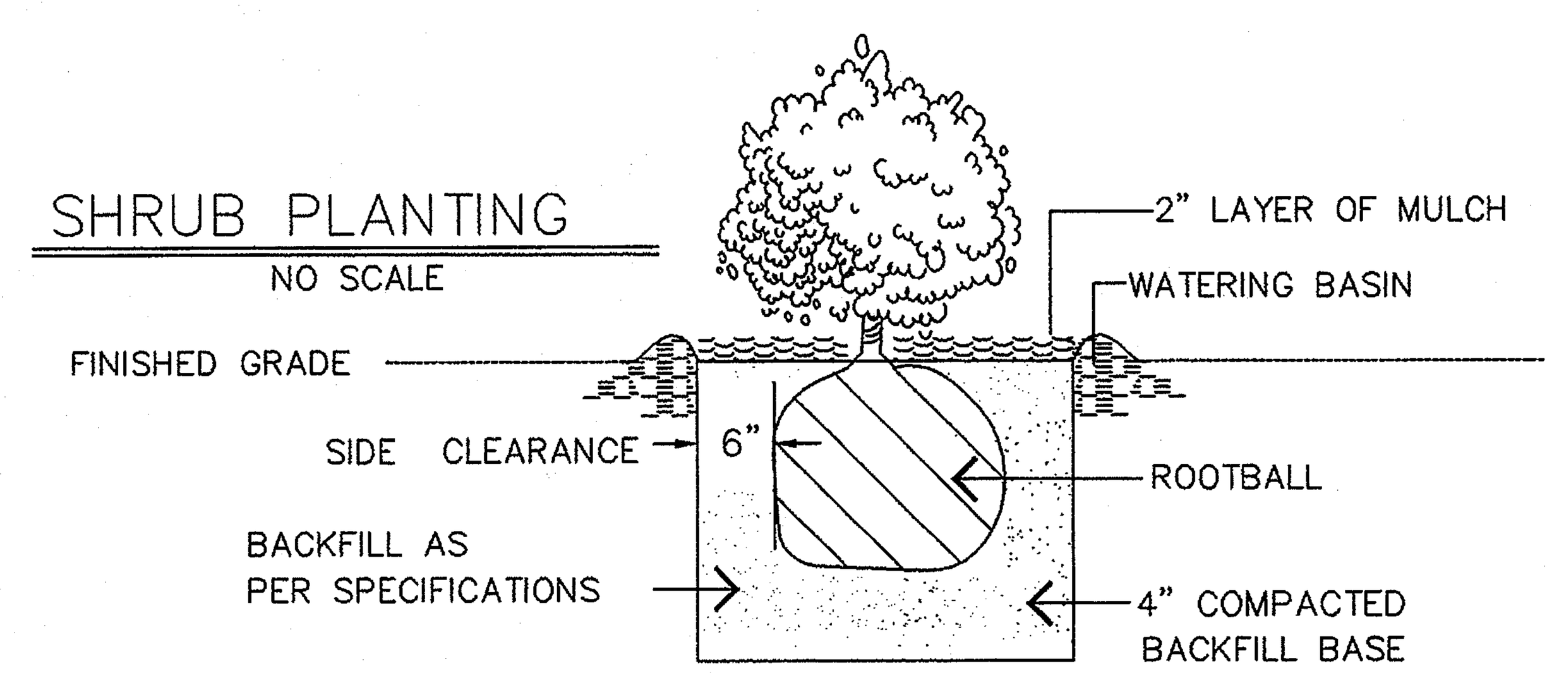
QUICK COUPLING VALVE

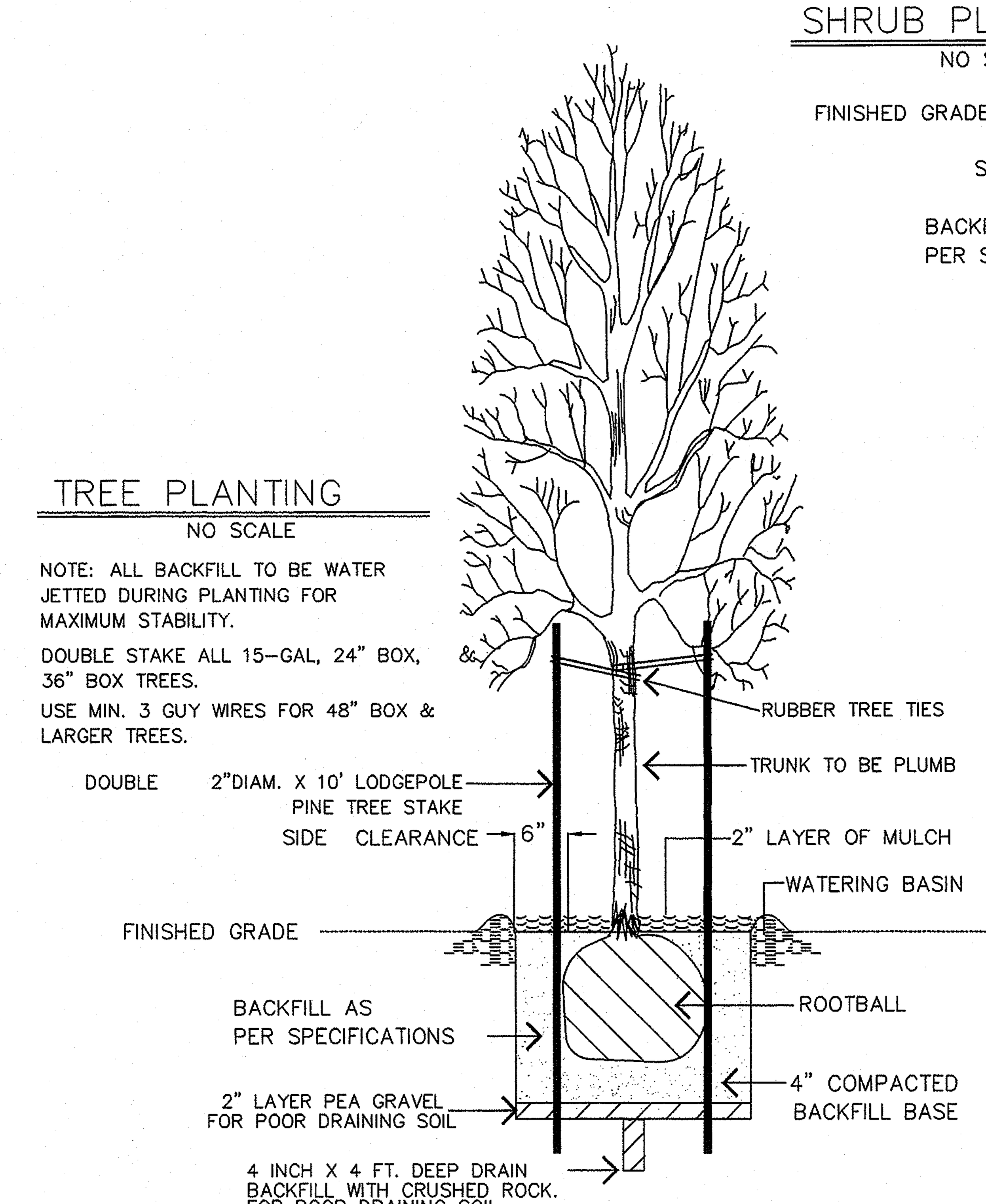


TRENCHING
INSTALLATION Not To Scale

TRENCHING DETAIL







2-23-05

REGISTERED LANDSCAPE ARCHITECT
TODD CURE'
No. 2587
EXP. 8-31-05
STATE OF CALIFORNIA

Earth Sculpture Design
Landscape Architects Site Planning
Construction Management

1756 Kings Rd. Vista, CA 92084 (760) 941-7800

plotted 2/23/05

TMC

PHONE 760-754-8191
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JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

DSA
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
LANDSCAPE
PLANTING
IRRIGATION
DETAILS

L-3

MANDATORY HVAC SYSTEM MEASURES

1. ALL WORK INDICATED ON DRAWINGS AND/OR SPECIFICATIONS SHALL BE COORDINATED WITH WORKS OF OTHER TRADES PRIOR TO START OF WORK.
2. ALL HVAC EQUIPMENT LISTED IN SECTION 2-5314(A) MUST BE CEC CERTIFIED.
3. ALL DUCTWORK SHALL BE INSULATED CONSISTENT WITH THE REQUIREMENTS OF SECTION 118, 123, AND 124 E.E.S. AND TABLE 6D AND SECTION 604 OF CMC.
4. ALL HVAC EQUIPMENT AND APPLIANCE SHALL MEET THE REQUIREMENTS PER SECTIONS 111-113, 115 AND 120-129 E.E.S.
5. ALL HVAC SYSTEMS SHALL MEET THE CONTROL REQUIREMENTS PER SECTION 112 AND 122 E.E.S.
6. ALL VENTILATION SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH UBC (CALIFORNIA EDITION).
7. THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER, MANAGER, AND THE ORIGINAL OCCUPANTS A LIST OF THE HEATING, VENTILATION, AND AIR CONDITIONING FEATURES, MATERIALS, AND COMPONENTS INSTALLED IN THE BUILDING AND INSTRUCTIONS ON HOW TO USE THEM.
8. INSULATION MATERIAL SHALL MEET THE CALIFORNIA QUALITY STANDARD PER SECTION 118 E.E.S.
9. ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) PROCEDURAL STANDARDS, OR ASSOCIATED AIR BALANCE COUNCIL (AABC) NATIONAL STANDARDS. TESTING AND BALANCING SHALL BE DONE BY AN INDEPENDENT QUALIFIED AGENCY.
10. ALL SYSTEMS SHALL PROVIDE THE MINIMUM OUTSIDE AIR AS SHOWN ON THE MECHANICAL DRAWINGS, AND SHALL BE MEASURED AND CERTIFIED BY THE INDEPENDENT QUALIFIED TESTING AGENCY.

SEISMIC CRITERIA

DESIGN CRITERIA

1) THE SEISMIC ANCHORAGE OF MECHANICAL EQUIPMENT SHALL CONFORM TO C.C.R. TITLE 24, 2001 CBC SECTION 1632A AND TABLE 16A-O. ANCHORAGE DETAILS NOT SHOWN ON THE APPROVED PLANS OR OTHERWISE APPROVED BY DSA ARE SUBJECT TO FIELD APPROVAL BY THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF RECORD AND FIELD APPROVAL BY DSA.
2) ALL DUCTWORK AND PIPING SHALL BE SUPPORTED AND BRACED IN ACCORDANCE WITH SMACNA GUIDELINES AND AS APPROVED BY DSA.

LEGEND

SYMBOL	ABBREV.	DESCRIPTION
		FLEXIBLE CONNECTION, DUCTWORK
	10X6	DUCT SIZE (1ST NUMBER INDICATES SIDE SHOWN)
	(L)	INTERNALLY LINED DUCTWORK
	TV	SQUARE ELBOW WITH TURNING VANES
		ROUND ELBOW
	MVD	MANUAL VOLUME DAMPER
	R.A.	RETURN AIR
	S.A.	SUPPLY AIR
	E.A.	EXHAUST AIR
	UC	UNDERCUT DOOR
—OA—	OA	OUTSIDE AIR
		FLEXIBLE DUCTWORK
		ROUND DUCT UP
		CEILING SUPPLY AIR DIFFUSER (4-WAY THROW UNLESS NOTED OTHERWISE)
	RR/RG	RETURN AIR REGISTER/GRILLE
	ER/EG	EXHAUST AIR REGISTER/GRILLE
T	TSTAT	THERMOSTAT
BT	BT	BYPASS TIMER
	CFM	CUBIC FEET PER MINUTE
	EF	EXHAUST FAN
	EXH.	EXHAUST AIR
	ESP	EXTERNAL STATIC PRESSURE (INCHES OF WATER)
	FPM	FEET PER MINUTE
	SA	SUPPLY AIR
	RA	RETURN AIR
SD	SD	DUCT MOUNTED SMOKE DETECTOR INTERLOCK WITH FIRE ALARM. SEE ELECT. DWGS.
	BDD	BACKDRAFT DAMPER
	OBD	OPPOSED BLADE DAMPER
	MFR	MANUFACTURER
TC	TC	TIMECLOCK (ELECTRONIC PROGRAMMABLE)
	HP	HORSEPOWER
	FLA	FULL LOAD AMPS
		POINT OF CONNECTION
	AFF	ABOVE FINISHED FLOOR

GENERAL NOTES

1. ALL BRANCH DUCTS SHALL HAVE BALANCE DAMPERS WITH QUADRANT LOCKS.
2. ALL DUCT SIZES SHOWN ARE NET INSIDE DIMENSIONS.
3. DUCTWORK SHALL BE GALVANIZED SHEET METAL IN COMPLETE CONFORMANCE WITH C.M.C., AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS. FLEXIBLE DUCTS MAY BE USED TO CONNECT INTO AIR OUTLETS AND INLETS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL BE 7'-0".
   ALL BRACING OF DUCTS AND PIPINGS SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES AS APPROVED BY DSA/OR8.
   WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND DSA FIELD ENGINEER.
   A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.
4. ALL FLEXIBLE DUCTS SHALL BE INSULATED. MINIMUM BEND RADIUS SHALL BE TWICE THE DUCT DIAMETER.
5. SUPPLY AND RETURN DROPS SHALL BE SHEET METAL PLENUM.
6. DUCT AND PLENUM INSULATION SHALL BE IN ACCORDANCE WITH THE CALIFORNIA ENERGY COMMISSION (C.E.C.) LATEST EDITION TABLE 2-53B, THE STATE MECHANICAL CODE PART 4, TITLE 24, CALIFORNIA ADMINISTRATIVE CODE, AND THE LATEST EDITION OF THE UNIFORM MECHANICAL CODE (C.M.C.) SECTION 1005.
7. ALL SHEET METAL DUCTS SHALL BE INSULATED BY MEANS OF FOIL WRAP, 3/4 LB. DENSITY FIBERGLASS INSULATION. INSULATION SHALL BE UL LISTED.
8. THERMOSTATS SHALL BE LOCATED AT 4' - 0" ABOVE FINISHED FLOOR (46" MAX. IF MOUNTED OVER CASEWORK OR OTHER OBSTRUCTION) IN ACCORDANCE WITH A.D.A. REQUIREMENTS, UNLESS NOTED OTHERWISE.
9. CONDENSATE DRAIN PIPING SHALL BE COPPER TYPE "L", AND SHALL BE ROUTED TO AN APPROVED RECEPTOR.
10. PROVIDE FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET OF ALL FANS.
11. COORDINATE FINAL LOCATIONS OF AIR DISTRIBUTION DEVICES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS, I.E. LIGHTS, SPEAKERS, TILES AND SPRINKLER HEADS.
12. ALL SUPPLY DIFFUSERS SHALL HAVE 4-WAY AIR FLOW DISTRIBUTION PATTERNS, UNLESS INDICATED OTHERWISE.
13. COORDINATE FINAL LOCATIONS OF THERMOSTATS WITH TENANT. FIELD COORDINATE LOCATIONS WITH OTHER TRADES INCLUDING ELECTRICAL, TELEPHONE, ETC.
14. FIRE/SMOKE DAMPERS SHALL BE INSTALLED ON ALL DUCTWORK PASSING THROUGH FIRE SEPARATING WALLS, AND SHALL BE INSTALLED AS PER UL, LOCAL, STATE, AND N.F.P.A. FIRE CODES.
15. ALL ROOF PENETRATIONS, CUTTING, PATCHING, BLOCKOUTS, STRUCTURAL SUPPORT, ROOF OPENINGS, LEVELING OF PRE-FAB CURBS SHALL BE BY GENERAL CONTRACTOR. CONTRACTOR SHALL VERIFY EXACT ROOF OPENING SIZES WITH UNIT MANUFACTURER PRIOR TO START OF WORK AND SHALL MAKE ALL NECESSARY ADJUSTMENTS AT NO EXTRA COST TO OWNER.
16. LOCATION OF ALL MECHANICAL EQUIPMENT SHOWN ARE SCHEMATIC. CONTRACTOR SHALL FIELD COORDINATE EXACT LOCATIONS AND REQUIRED SERVICE/MAINTENANCE CLEARANCES PRIOR TO START OF WORK.
17. CONTRACTOR SHALL VERIFY WEIGHTS OF ALL MECHANICAL EQUIPMENT WITH THEIR MANUFACTURER PRIOR TO START OF WORK. IF DIFFERENT THAN THE WEIGHTS INDICATED ON DRAWINGS, CONTRACTOR SHALL INFORM THE STRUCTURAL PORTION OF THE CONTRACT PRIOR TO START OF WORK.
18. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS W/MFR. AND COORDINATE WITH THE ELECTRICAL CONTRACTOR AND THE MANUFACTURER PRIOR TO START OF WORK. NOTIFY THE ARCHITECT, IN WRITING, IN CASE OF ANY DISCREPANCIES, PRIOR TO START OF WORK.
19. ALL HVAC EQUIPMENT, APPLIANCES, AND DUCTWORK SHALL CONFORM TO THE LATEST GUIDELINES OF A.G.A., U.L., N.F.P.A., C.M.C., C.P.C., AND ALL OTHER LOCAL CODES HAVING JURISDICTION.
20. TEST AND BALANCE THE HVAC SYSTEM AS PER REQUIREMENTS OF THE MANDATORY HVAC MEASURES INDICATED ON THIS SHEET.
21. CONTRACTOR SHALL FIELD VERIFY EXACT CEILING SPACE AVAILABLE FOR ROUTING OF DUCT, PRIOR TO START OF WORK, INFORM ARCHITECT, IN WRITING, IN CASE OF ANY DISCREPANCY OR POTENTIAL CONFLICTS PRIOR TO FABRICATING AND/OR PURCHASE OF ANY DUCTWORK.
22. SEISMIC RESTRAINT OF MECHANICAL DUCTING SHALL MEET THE PROVISIONS OF SMACNA PUBLICATION "SEISMIC RESTRAINT MANUAL: GUIDELINES FOR MECHANICAL SYSTEMS" 1991 OR LATEST EDITION. OSHPD R# 0010.

RFI #105

Soltek Pacific

Request for Information 105
Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OcearProject # 575 — Soltek Pacific
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 105 — Importance: Normal — Date Created: 10/17/2005

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject	Discipline	Category
Fire walls	Mechanical	

Specification Section	Reference	Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments	Sched Impact Comments	Dwg Impact Comments

Sketch Numbers

Author Company	Authored By	Author RFI Number
Soltek Pacific	Gary Miinch	

Cc: Company Name	Contact Name	Copies	Notes

Question — Date Required: 10/24/2005

There are a lot of penetrations going thru rated exterior fire walls. Is there going to be fire dampers?The drawing do not show any and the electrical does not have power to any.

Suggestion

Answer Company	Answered By	Co-Respondent
Groth Architects Inc.	Tim Irish	

Answer — Date Answered: 10/18/2005

Per note #14, sheet M1.1, and also per cbc 2001 the version under which this approval was granted, fire/smoke dampers shall be installed on all ductwork passing thru fire separating walls.
I think this specifically covers the entire project.
Electrical dwgs do not show the ckt's for wiring these, and therefore do the following to wire these devices:

Run your wires for fire/smoke dampers off of the fire alarm system wiring. The same is true if additional detectors are needed due to this issue.

Code mandates this response. As Contractor is aware, we tried to get another solution approved, but to no avail at DSA. The drawings will stand as approved.

Prolog Manager Printed on: 5/4/2006 SPMASTER

Soltek Pacific

Request for Information 105
Detailed, Grouped by each number, with routing info

10-26-2005: This response will supercede previous response.

Exterior walls shall be of 1-hour construction per table 6-A.

Openings in exterior walls are not required to be protected per Table 5-A of the CBC. The distance to the property line from the exterior wall exceeds 10 feet. Fire dampers are not required. This exemption is applicable to exterior walls on gridlines 1, 6, 7, 12, A, and B.

Soltek Pacific

Request for Information 003
Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OcearProject # 575 — Soltek Pacific
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 003 — Importance: High — Date Created: 5/11/2005

From	Company	Sent	For	Via
To	Company	Received	Comments	
Matt Caronna	Soltek Pacific	5/11/2005		
Steve Shires	PinnacleOne/Barnhart, Inc.	5/11/2005		

Subject	Discipline	Category
Fire Smoke Dampers	Mechanical	

Specification Section	Reference	Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments	Sched Impact Comments	Dwg Impact Comments

Sketch Numbers

Author Company	Authored By	Author RFI Number
Soltek Pacific	Matt Caronna	

Cc: Company Name	Contact Name	Copies	Notes

Question — Date Required: 5/18/2005

Per General notes on sheet M-1.1 Item # 14 is call out for fire smoke dampers penetrating fire rated walls. Mechanical plans MQL 2.1, 2.2, 2.3 & 2.4 Shows duct work penetrating from Mechanical room into classrooms, as well as the outside air louver with no fire smoke dampers. Are fire smoke dampers needed?

Suggestion

Answer Company	Answered By	Co-Respondent
PinnacleOne/Barnhart, Inc.	Steve Shires	

Answer — Date Answered: 5/13/2005

We have issued an ASI #002 related to this issue. See this ASI, as an augment to this response.

Fire/Smoke dampers ARE required for penetrations through fire rated walls. Per our drawing sheets wall resume, all exterior walls are 1hr fire rated.

Fire/Smoke dampers will be required at these rated walls.

Thank you.

Prolog Manager Printed on: 5/4/2006 SPMASTER Page 1

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E-Mail tsqeng@tsqeng.com
#04036
03/18/2005

KEY PLAN

PLOTTED 03-18-05 @ 10 AM

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
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GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
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space · function · art · time

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4-106494
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
MECHANICAL SCHEDULES

M-1.1

SPLIT SYSTEM HEAT PUMP SCHEDULE

TAG	CONDENSING UNIT LOCATION	NOMINAL CAPACITY (BTU/HR) COOLING / SENSIBLE	HEATING	AMB. TEMP	ELECTRICAL MCA	VOLTS	PH	MAX. FUSE (AMP.)	SEER (EER)	COP	BASIS OF DESIGN	OPER. WT (LBS)	ANCHORAGE DETAIL	AIR HANDLING UNIT TAG	LOCATION	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. S.P. (IN W.G.)	ELECTRICAL MCA	MAX. FUSE (AMP.)	VOLTS	PH.	SYSTEM DESIGN ON	OPER. WT. (LBS)	ANCHORAGE DETAIL	FILTERS QUANTITY/ SIZE	REMARKS
HP L1, HP L9	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L1, FC L9	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L2, HP L10	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L2, FC L10	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L3, HP L11	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L3, FC L11	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L4, HP L12	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L4, FC L12	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L5, HP L13	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L5, FC L13	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L6, HP L14	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L6, FC L14	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L7, HP L15	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L7, FC L15	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)
HP L8, HP L16	ON GRADE	46000 / 32,000	45500	90°F	20.6	208	3	35	10.2	4.3	CARRIER 389RC048	255	3/MQL-2.6	FC L8, FC L16	MECH. CLOSET	1600	600	0.5	5.4	15	208	1	CARRIER FB4ANF048	175	2/MQL2.5	1 @ 21-1/2"X19-7/8"	(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)

1. PROVIDE CARRIER DEBONAIR 250 FLATSTAT THERMOSTAT, CONTROL WIRING, CONDUITS, AND ALL OTHER ACCESSORIES REQUIRED AS PER MANUFACTURER'S RECOMMENDATIONS FOR PROPER FUNCTION OF THE SYSTEM
2. PROVIDE REFRIGERANT PIPING & INSULATION. SIZE SHALL BE AS PER MFR'S REQUIREMENT, BASED UPON FINAL DEVELOPED LENGTH. PROVIDE FULL REFRIGERANT CHARGE FOR THE ENTIRE SYSTEM. SEE MANUFACTURER'S INSTALLATION MANUAL FOR PROPER CHARGE QUANTITY, PRESSURE, ETC.
3. FOR CONDENSATE DRAIN PIPING, SEE PLUMBING DRAWINGS.
4. FOR CONTROL DIAGRAM SEE 7/M3-2.
5. PROVIDE ADJUSTABLE FAN SPEED.
6. PROVIDE ALL ACCESSORIES PER MANUFCTURER'S RECOMMENDATIONS INCLUDING: LIQUID SOLENOID VALVE, LIQUID LINE FILTER/DRYER, SIGHT GLASS, MOISTURE INDICATOR, AND OUTDOOR UNIT CYCLE PROTECTOR.
7. PROVIDE COPPER FIN AND COPPER TUBES FOR CONDENSING UNIT COILS.
8. STACKED CONDENSING UNITS USING FACTORY SUPPLIED STACKING KIT. SEE DETAIL 3/MQL-2.5.
9. PROVIDE UVC-1. SEE SCHEDULE ON M-1.2.
10. PROVIDE ALL ACCESSORIES REQUIRED FOR LONG LINE APPLICATION.
11. PROVIDE UL900 CLASS 1 OR CLASS 2 PLEATED MEDIA FILTER 30 PERCENT EFFICIENCY.
12. PROVIDE ALL ACCESSORIES REQUIRED FOR LONG LINE APPLICATION.

PACKAGED HEAT PUMP UNIT SCHEDULE

TAG	LOCATION	NOMINAL CAP. @ ARI COND. (TONS)	SUPPLY FAN CFM @ FT. ALT.	O.A. CFM	EXT. S.P. (IN. W.C.)	FLA	COMPR'R(S) NO.	LRA	COND'R. FAN(S) NO.	FLA. (TOTAL)	(SEER) EER	UNITS POWER SUPPLY MIN. CIRC. AMPS	MAX. FUSE SIZE	V	PH.	COOLING (MBH) SENSIBLE	TOTAL	AIR TEMPS(?F) E.D.B.	E.W.B.	A.M.B.	HEATING COP (HSPF)	CAP. (MBH)	FILTERS NO/SIZE	TYPE	UNIT DISCHARGE SIDE	BOTTOM	CURB MOUNT (YES/NO)	SYSTEM DESIGNED ON MAKE	MODEL	REMARKS	OPER. WT. (LBS.)
HP N1	ROOF	1-1/2	600	100	0.5	--	1	48	1	--	10	14	20	208	1	14.9	19	80	67	95	(2.9)	16	1 @ 20"X20"X1"	(1)	YES	NO	YES	CARRIER	50JS018	(1)(2)(3)(4)(5)(6)(7)	400
HP N2	ROOF	1-1/2	600	100	0.5	--	1	48	1	--	10	14	20	208	1	14.9	19	80	67	95	(2.9)	16	1 @ 20"X20"X1"	(1)	YES	NO	YES	CARRIER	50JS018	(1)(2)(3)(4)(5)(6)(7)	400

1. 1-INCH THROWAWAY
2. PROVIDE 8" ROOF CURB.
3. PROVIDE PROGRAMMABLE THERMOSTAT (CARRIER MODEL # 33CS250), CONTROL WIRING AND ALL ACCESSORIES REQUIRED BY MANUFACTURER FOR PROPER FUNCTION OF SYSTEM
4. PROVIDE FILTER KIT & OUTSIDE AIR HOOD.
5. FIELD VERIFY EXACT ELECTRICAL LOADS, VOLTAGE AND PHASE WITH MANUFACTURER AND COORDINATE WITH ELEC. CONTRACTOR PRIOR TO START OF WORK.
6. FOR MOUNTING SEE DETAIL 1/M3.1
7. PROVIDE COPPER FINS & TUBES FOR CONDENSING COILS.

AIR DISTRIBUTION DEVICE SCHEDULE

TAG	MAKE	DESC	TYPE	FRAMING	MODEL	OBD (Y/N)	REMARK
A	TITUS	SUPPLY	PLENUM SLOT DIFFUSER	T-BAR	TBD-10	N	(1)(3)(4)
B	TITUS	RETURN	PLENUM SLOT DIFFUSER	T-BAR	MLR-39	N	(1)(3)(5)
C	TITUS	SUPPLY	PLENUM SLOT DIFFUSER	SURFACE	TBD-10	Y	(1)(2)(3)(9)
D	TITUS	SUPPLY	DIFFUSER	SURFACE	PMC 300RL	N	(7)(9)
E	TITUS	RELIEF	EGGCRATE CEILING	T-BAR	50F	N	
F	TITUS	SUPPLY	PERFORATED DIFFUSER	T-BAR	PMC	N	
G	TITUS	RETURN	PERFORATED GRILLE	T-BAR	PAR	N	(7)
H	TITUS	RETURN/RELIEF	CEILING	SURFACE	350RL	N	(8)(9)
J	SHOEMAKER	EXHAUST	WALL LOUVER/ BACKDRAFT DAMPER	SURFACE	3550	N	(6)(8)
K	TITUS	SUPPLY	CEILING	SURFACE	MCD	N	(9)

1. PROVIDE FACTORY FABRICATED SHEET METAL PLENUM
2. PROVIDE 2-SLOT, 1 1/2" SLOT, OVAL-TO-ROUND ADAPTER, FACTORY INSTALLED BLADES FOR TWO-WAY THROW
3. PROVIDE OVAL-TO-ROUND NECK ADAPTOR, SEE 3/M-3.2.
4. PROVIDE 2-SLOT, 1 1/2" SLOT, 48" LENGTH FACTORY INSTALLED BLADES FOR 2-WAY THROW (UNLESS NOTED OTHERWISE ON FLOORPLAN), T-BAR FRAME, AND T-BAR CENTER STRIP.
5. 4-SLOT, 48" LENGTH, T-BAR FRAME
6. INTERNAL ADJUSTABLE COUNTER BALANCE DAMPER.
7. STEEL GRILLE.
8. PROVIDE FINISH W/ PROTECTION FOR COASTAL CONDITIONS.
9. PROVIDE "YOUNG REGULATOR" WITH RECESSED SLEEVE AND ESCUTCHEON COVER TO MATCH ADJACENT ARCHITECTURAL FINISHES.

EXHAUST FAN SCHEDULE

TAG	CONTROL	MFR. MODEL	CFM	E.S.P. (IN. WG.)	HP (WATTS)	SONES	POWER	OPER. WEIGHT (LBS.)	ANCHORAGE DETAIL	REMARKS
EF L1	LIGHT SWITCH	COOK GC-140	130	0.2	(62)	2.9	120	15	4/M3.2	(1)
EF L2	T-STAT	COOK GC-620	400	0.25	(233)	3.3	120	35	4/M3.2	(1)(5)
EF L3	T-STAT	COOK 135 ACEB	1150	0.25	1/4	6.5	120	60	7/M3.1	(5)(6)
EF L4	LIGHT SWITCH	COOK GC-620	400	0.30	(233)	3.3	120	35	4/M3.2	(1)(7)
EF L5	LIGHT SWITCH	COOK GC-720	400	0.75	(233)	3.3	120	36	4/M3.2	(2)(7)
EF L6	LIGHT SWITCH	COOK GC-180	200	0.5	(155)	2.9	120	16	4/M3.2	(2)
EF N1	TIME CLOCK	COOK 210-ACW-B	4200	0.375	3/4	11.3	208	210	5/M3.2	(3)
EF N2	TIME CLOCK	COOK 210-ACW-B	4200	0.375	3/4	11.3	208	210	5/M3.2	(3)
EF N3	TIME CLOCK	COOK 120-ACRU-B	840	0.375	1/6	6.5	120	55	7/M3.1	(4)
EF N4	TIME CLOCK	COOK 100-ACRU-B	400	0.2	1/4	4.3	120	30	7/M3.1	(3)(4)
EF P1	LIGHT SWITCH	COOK GC-140	130	0.2	(62)	2.9	120	15	4/M3.2	(2)(7)

1. PROVIDE WITH DISCONNECT, WHITE ALUMINUM GRILLE, BACKDRAFT DAMPER AND SPRING TYPE VIBRATION ISOLATORS.
2. PROVIDE WITH STANDARD DISCONNECT, ROOF CAP W/BIRDSCREEN AND SPRING TYPE VIBRATION ISOLATORS.
3. PROVIDE PROGRAMMABLE TIMER, BACKDRAFT DAMPER AND BIRDSCREEN. PROVIDE CONDUIT, WIRING AND ALL ACCESSORIES REQUIRED.
4. PROVIDE PREFABRICATED FACTORY ROOF CURB, PROGRAMMABLE TIMER, BACKDRAFT DAMPER AND BIRDSCREEN. FOR CONTROL DIAGRAM SEE DETAIL 5/M3.1.
5. PROVIDE LINE VOLTAGE TSTAT, CONDUIT, WIRING, & ALL ACCESSORIES. SEE 5/M3.1.
6. PROVIDE FACTORY ROOF CURB, BACKDRAFT DAMPER, & DISCONNECT.
7. SEE ELECTRICAL DRAWINGS FOR LIGHT SWITCH INTERLOCK AND LOCATION.

UVC EMITTER SCHEDULE

TAG	SERVICE	MANUFACTURER	POWER	V	PH	REMARKS
UVC 1	SPLIT SYSTEM UNITS	CARRIER	80W	115	1	(1)(2)(3)(4)(5)(6)
UVC 2	PACKAGED ROOFTOP UNITS	CARRIER	80W	115	1	(1)(2)(3)(4)(5)(6)

1. INCLUDE LIGHTS, POWER SUPPLY, MOUNTING PACKAGE, CLEANING KIT
2. PROVIDE DOOR SWITCH
3. 24 HR OPERATION OF LAMP
4. INSTALL IN HEAT PUMP FAN COIL UNIT AS PER MANUFACTURER'S RECOMMENDATION.
5. PROVIDE 3-PRONG ELECTRICAL CONNECTOR FOR PLUG-IN AT WALL SOCKET MECHANICAL CLOSET.
6. PROVIDE (1) UVC EMITTER FOR EACH FAN COIL UNIT. SEE SCHEDULES ON SHEET M-1.2.

BOOSTER FAN SCHEDULE

TAG	CTRL	MANUFACTURER	CFM	ESP	WATTS	POWER	WEIGHT
BF L.1	(1)	FANTECH DBF-110	50	0.2	60	120-1PH	15

1. INTERLOCK WITH ELECTRIC DRYER.

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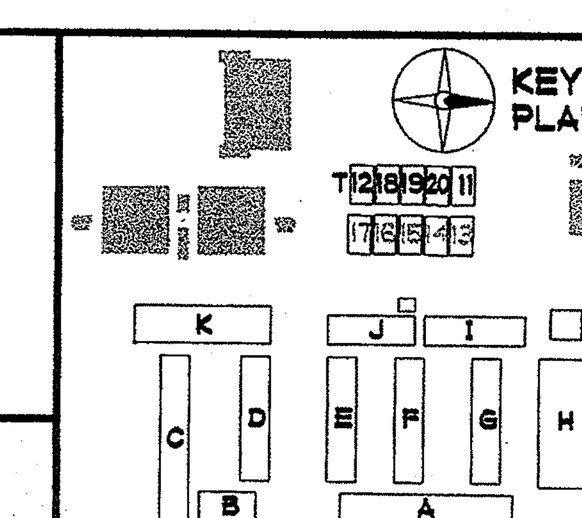
03/18/2005

REGISTERED PROFESSIONAL ENGINEER FARZAD TADAYON No. M29230 Exp. 3/31/07 MECHANICAL STATE OF CALIFORNIA



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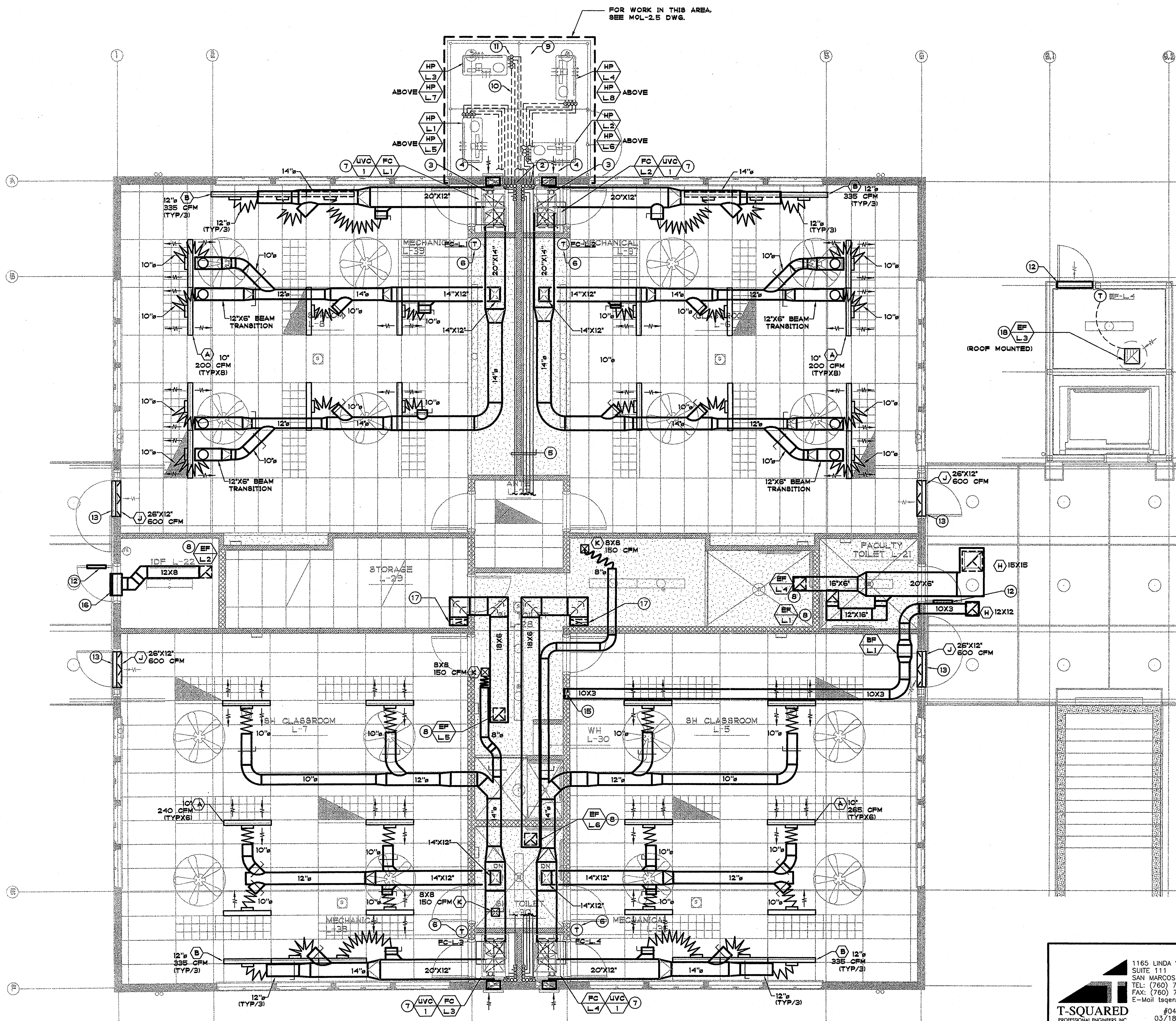
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
MECHANICAL SCHEDULES

M-1.2



BUILDING L FIRST FLOOR PLAN SOUTH - MECHANICAL

1/4" = 1'-0"

KEY NOTES

1. FOR TYPICAL DUCT TAKEOFF DETAIL, SEE 2/M-3.1.
2. REFRIGERANT LINE SET PIPING (WITH INSULATION AND STAINLESS STEEL JACKET) DOWN AND RUN ABOVE GRADE TO CORRESPONDING CONDENSING UNIT. SEE DETAIL 9/M-3.1 (TYPICAL OF 8)
3. FOR PRIMARY & SECONDARY CONDENSATE DRAINS, SEE PLUMBING DRAWINGS.
4. 24"X18" OUTDOOR AIR INTAKE LOUVER WITH BIRDSCREEN (BY OTHERS) SEE ELEVATION ON 5/MQL-2.5.
5. REFRIGERANT LINE SET PIPING ABOVE CEILING. SUPPORT AS PER SMACNA. ROUTE TO CORRESPONDING FAN COIL UNIT.
6. PROPOSED THERMOSTAT LOCATION. VERIFY EXACT LOCATION WITH ARCH. & OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SEE MOUNTING DETAIL 2/M-3.2.
7. FOR TYPICAL FAN COIL UNIT CONTROL DIAGRAM DETAIL, SEE 7/M-3.2.
8. FOR TYPICAL EXHAUST FAN CONTROL DIAGRAM DETAIL, SEE 5/M-3.1. FOR TYPICAL EXHAUST FAN MOUNTING DETAIL, SEE 4/M-3.2.
9. TYPICAL MANUFACTURER'S CLEARANCE REQUIREMENTS.
10. REFRIGERANT LINE SET PIPING THRU WALL TO ABOVE GRADE, SEE DETAIL 8/M3.1 (TYPICAL/8).
11. REFRIGERANT PIPING ABOVE GRADE. CONNECT PIPING TO CORRESPONDING HEAT PUMP UNIT. SEAL OPENING WEATHERTIGHT.
12. 18"X14" LOW DOOR LOUVER, SEE DOOR SCHEDULE ON ARCH'L PLANS.
13. 26"X12" RELIEF AIR LOUVER WITH BIRDSCREEN, MOUNTED ABOVE DOOR (BY OTHERS), WITH INTERNAL ADJUSTABLE COUNTER BALANCE BACKDRAFT DAMPER.
14. EXHAUST FAN CONTROL BY LINE VOLTAGE THERMOSTAT SET AT 83°F, SEE DIAGRAM 5/M3.1.
15. 3" X 10" DRYER DUCT WITH ACCESSIBLE CLEANOUT DOOR, ROUTE TO ABOVE CEILING.
16. 22" X 8" WALL EXHAUST LOUVER W/ BIRDSCREEN, SEE ARCH DRAWINGS FOR SCHEDULE AND DETAILS.
17. 18" X 6" EXHAUST DUCT UP THRU FLOOR IN SHAFT TO ROOF CAP. SEE MQL-2.3 FOR CONTINUATION.
18. PROVIDE 18"X18" EXHAUST PLENUM WITH GRILLE AT BOTTOM INTO ELEV. EQUIP. ROOM, SEE DETAIL 7/M-3.1.

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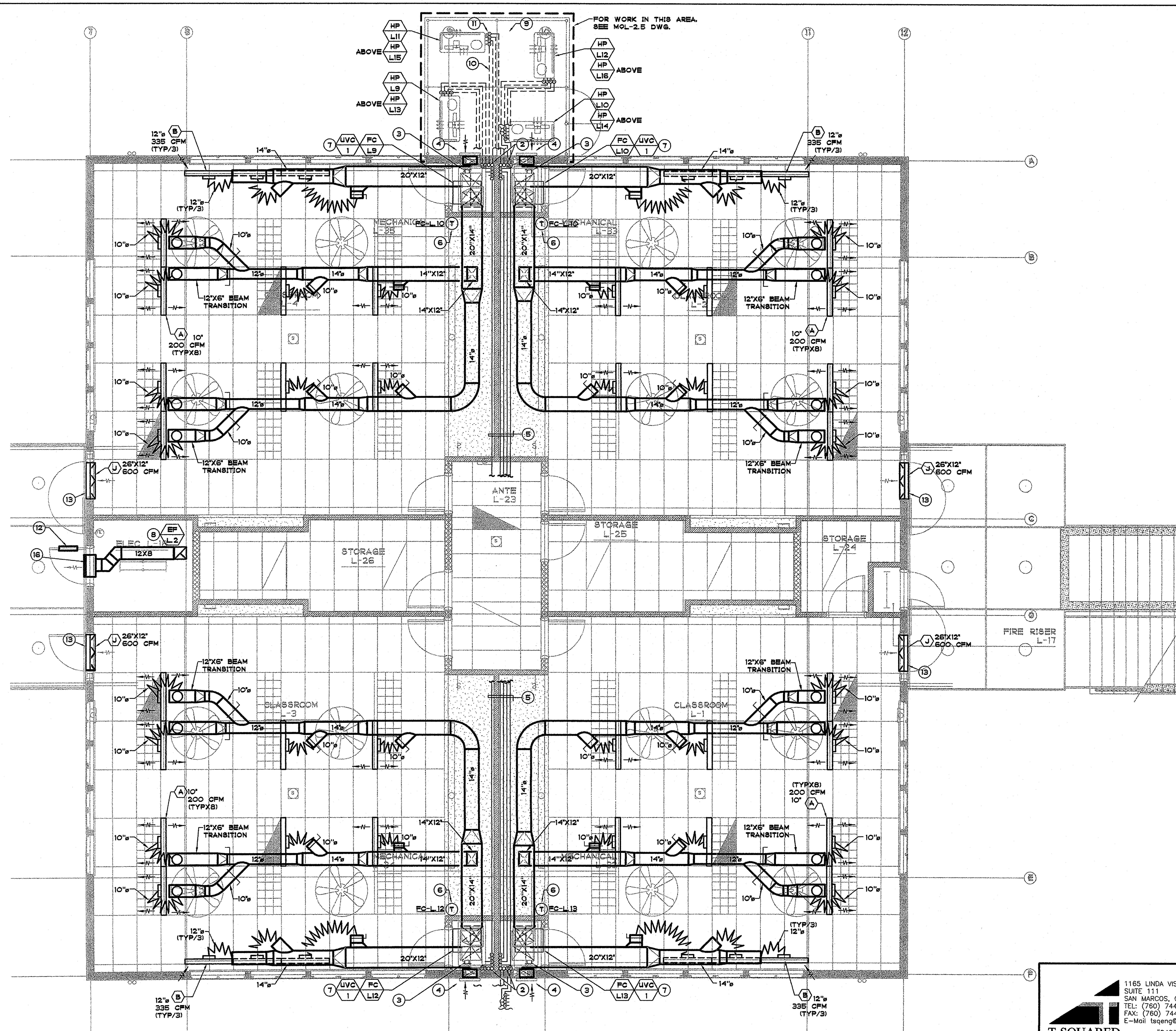
03/18/2005

KEY PLAN

SHEET TITLE
MECHANICAL
BLDG "L" SOUTH
1ST FLOOR PLAN

MQL-2.1



BUILDING L FIRST FLOOR PLAN NORTH - MECHANICAL

1/4" = 1'-0"

KEY NOTES

1. FOR TYPICAL DUCT TAKEOFF DETAIL, SEE 2/M-3.1.
2. REFRIGERANT LINE SET PIPING (WITH INSULATION AND STAINLESS STEEL JACKET) DOWN AND RUN ABOVE GRADE TO CORRESPONDING CONDENSING UNIT. SEE DETAIL 9/M-3.1 (TYPICAL OF 8)
3. FOR PRIMARY & SECONDARY CONDENSATE DRAINS, SEE PLUMBING DRAWINGS.
4. 24"X18" OUTDOOR AIR INTAKE LOUVER WITH BIRDSCREEN (BY OTHERS SEE ELEVATION ON 5/MΦL-2.5.
5. REFRIGERANT LINE SET PIPING ABOVE CEILING. SUPPORT AS PER SMACNA. ROUTE TO CORRESPONDING FAN COIL UNIT.
6. PROPOSED THERMOSTAT LOCATION. VERIFY EXACT LOCATION WITH ARCH. & OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SEE MOUNTING DETAIL 2/M-3.2.
7. FOR TYPICAL FAN COIL UNIT CONTROL DIAGRAM DETAIL, SEE 7/M-3.2.
8. FOR TYPICAL EXHAUST FAN CONTROL DIAGRAM DETAIL, SEE 5/M-3.1. FOR TYPICAL EXHAUST FAN MOUNTING DETAIL, SEE 4/M-3.2.
9. TYPICAL MANUFACTURER'S CLEARANCE REQUIREMENTS.
10. REFRIGERANT LINE SET PIPING THRU WALL TO ABOVE GRADE. SEE DETAIL 8/M3.1 (TYPICAL/8).
11. REFRIGERANT PIPING ABOVE GRADE. CONNECT PIPING TO CORRESPONDING HEAT PUMP UNIT. SEAL OPENING WEATHERTIGHT.
12. 18"X14" LOW DOOR LOUVER. SEE DOOR SCHEDULE ON ARCH'L PLANS.
13. 26"X12" RELIEF AIR LOUVER WITH BIRDSCREEN, MOUNTED ABOVE DOOR (BY OTHERS), WITH INTERNAL ADJUSTABLE COUNTER BALANCE BACKDRAFT DAMPER.
14. EXHAUST FAN CONTROL BY LINE VOLTAGE THERMOSTAT SET AT 83°F. SEE DIAGRAM 5/M3.1.
15. 3" X 10" DRYER DUCT WITH ACCESSIBLE CLEANOUT DOOR. ROUTE TO ABOVE CEILING.
16. 22" X 8" WALL EXHAUST LOUVER W/ BIRDSCREEN. SEE ARCH DRAWINGS FOR SCHEDULE AND DETAILS.

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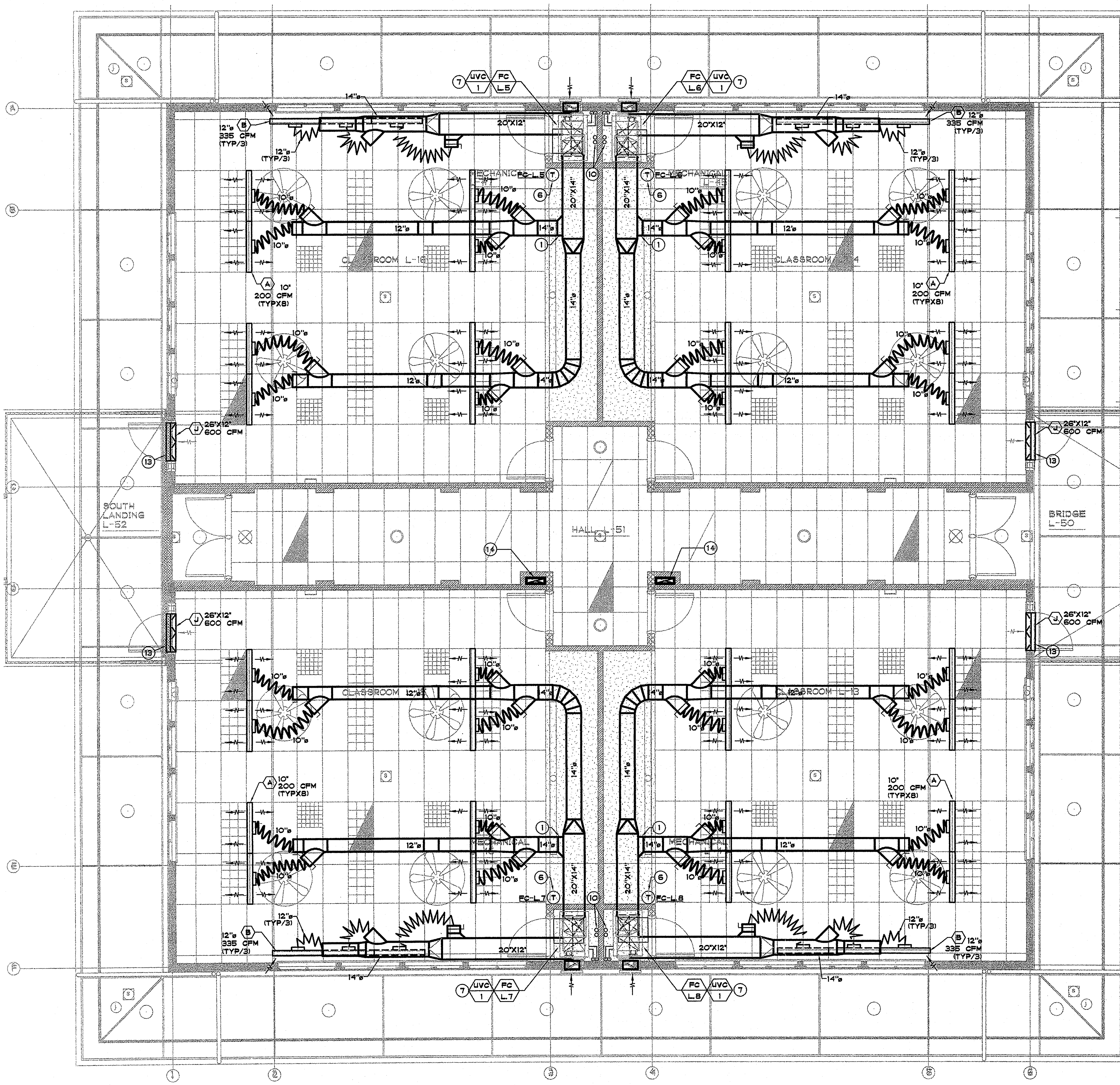
REGISTERED PROFESSIONAL ENGINEER — MECHANICAL — STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
MECHANICAL
BLDG "L" NORTH
1ST FLOOR PLAN

MΦL-2.2



BUILDING L SECOND FLOOR PLAN SOUTH - MECHANICAL

1/4" = 1'-0"

KEY NOTES

1. FOR TYPICAL DUCT TAKEOFF DETAIL, SEE 2/M-3.1.
2. REFRIGERANT LINE SET PIPING (WITH INSULATION AND STAINLESS STEEL JACKET) DOWN TO 1ST FLOOR.
3. FOR PRIMARY & SECONDARY CONDENSATE DRAINS, SEE PLUMBING DRAWINGS.
4. 24"X18" OUTDOOR AIR INTAKE LOUVER WITH BIRDSCREEN (BY GENERAL CONTRACTOR). PROVIDE 24"X18" MOTORIZED DAMPER OPEN TO MECHANICAL ROOM (BY MECHANICAL CONTRACTOR).
5. NOT USED
6. PROPOSED THERMOSTAT LOCATION. VERIFY EXACT LOCATION WITH ARCH. & OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SEE MOUNTING DETAIL 2/M-3.2.
7. FOR TYPICAL FAN COIL UNIT CONTROL DIAGRAM DETAIL, SEE 7/M-3.2.
8. FOR TYPICAL EXHAUST FAN CONTROL DIAGRAM DETAIL, SEE 5/M-3.1. FOR TYPICAL EXHAUST FAN MOUNTING DETAIL, SEE 4/M-3.2.
9. TYPICAL MANUFACTURER'S CLEARANCE REQUIREMENTS.
10. 6"ø PVC WITH REFRIGERANT LINE SET PIPING BELOW GRADE FROM BELOW (TYP. OF 4 LOCATIONS)
11. NOT USED
12. 18"X14" LOW DOOR LOUVER, SEE DOOR SCHEDULE ON ARCH'L PLANS.
13. 26"X12" RELIEF AIR LOUVER WITH BIRDSCREEN, MOUNTED ABOVE DOOR (BY GENERAL CONTRACTOR), WITH INTERNAL ADJUSTABLE COUNTER BALANCE BACKDRAFT DAMPER.
14. 18" X 6" EXHAUST DUCT RISER FROM BELOW, SEE MQL-2.1 RISE TO ROOF CAP, SEE DETAIL 4/M3.1.

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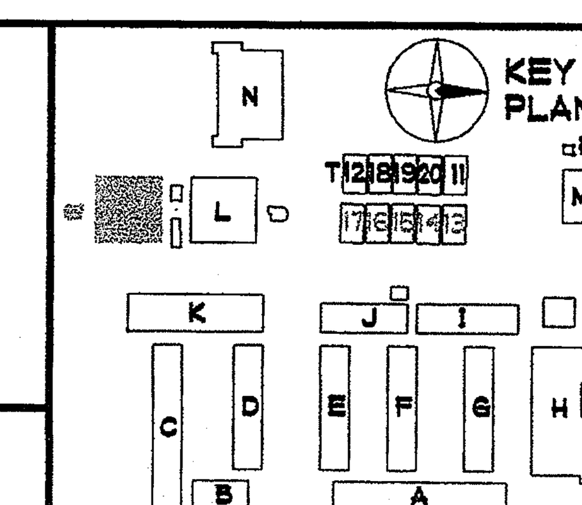

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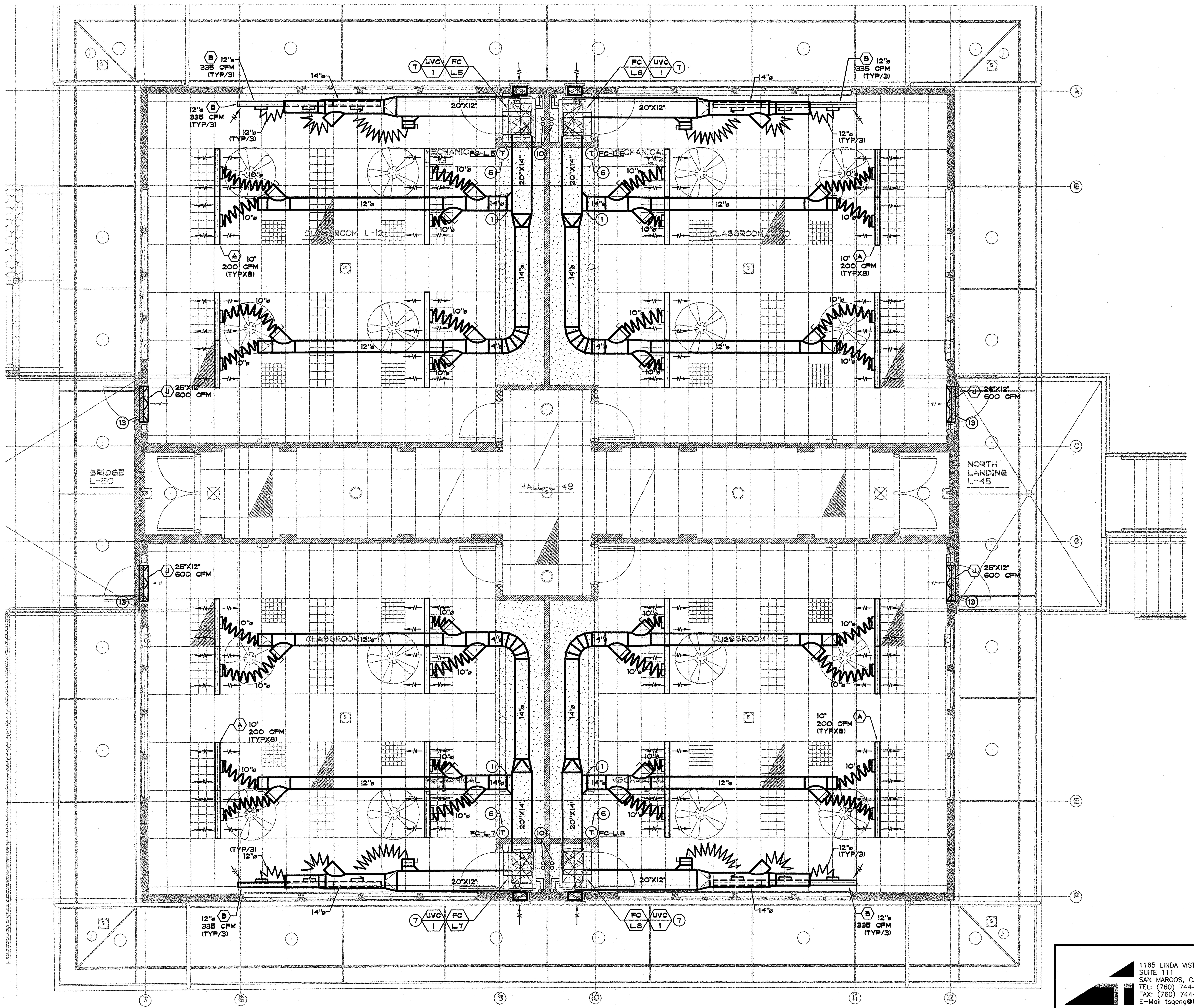
SHEET TITLE
MECHANICAL
BLDG "L" SOUTH
2ND FLOOR PLAN

MQL-2.3



BUILDING L SECOND FLOOR PLAN NORTH - MECHANICAL

1/4" = 1'-0"

KEYNOTES

1. FOR TYPICAL DUCT TAKEOFF DETAIL. SEE 2/M-3.1.
2. REFRIGERANT LINE SET PIPING (WITH INSULATION AND STAINLESS STEEL JACKET) DOWN TO 1ST FLOOR.
3. FOR PRIMARY & SECONDARY CONDENSATE DRAINS. SEE PLUMBING DRAWINGS.
4. 24"X12" OUTDOOR AIR INTAKE LOUVER WITH BIRDSCREEN (BY GENERAL CONTRACTOR). PROVIDE 24"X12" MOTORIZED DAMPER OPEN TO MECHANICAL ROOM (BY MECHANICAL CONTRACTOR).
5. NOT USED
6. PROPOSED THERMOSTAT LOCATION. VERIFY EXACT LOCATION WITH ARCH. & OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SEE MOUNTING DETAIL 2/M-3.2.
7. FOR TYPICAL FAN COIL UNIT CONTROL DIAGRAM DETAIL. SEE 7/M-3.2.
8. FOR TYPICAL EXHAUST FAN CONTROL DIAGRAM DETAIL. SEE 5/M-3.1. FOR TYPICAL EXHAUST FAN MOUNTING DETAIL. SEE 4/M-3.2.
9. TYPICAL MANUFACTURER'S CLEARANCE REQUIREMENTS.
10. 6"ø PVC WITH REFRIGERANT LINE SET PIPING BELOW GRADE (TYPICAL/8).
11. 6"ø PVC UP FROM BELOW GRADE. CONNECT PIPING TO CORRESPONDING HEAT PUMP UNIT. SEAL OPENING WEATHERTIGHT.
12. 18"X14" LOW DOOR LOUVER. SEE DOOR SCHEDULE ON ARCH'L PLANS.
13. 26"X12" RELIEF AIR LOUVER WITH BIRDSCREEN, MOUNTED ABOVE DOOR (BY GENERAL CONTRACTOR), WITH INTERNAL ADJUSTABLE COUNTER BALANCE BACKDRAFT DAMPER.

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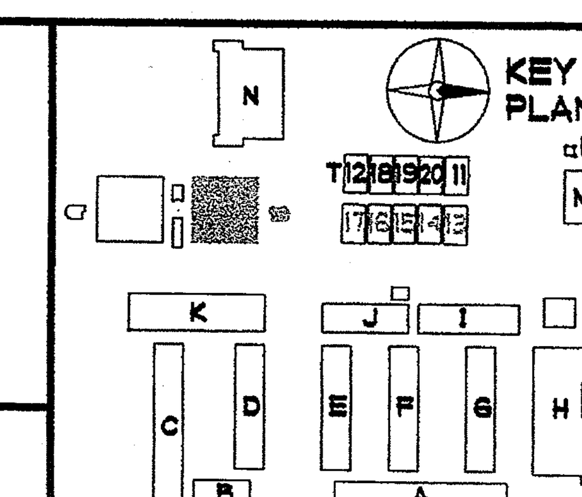


KEY PLAN

SHEET TITLE

MECHANICAL
BLDG "L" NORTH
2ND FLOOR PLAN

MQL-2.4

MICROMETL

INSTALLATION INSTRUCTIONS FOR WS9511-11 STACKING RACK

STEP #1

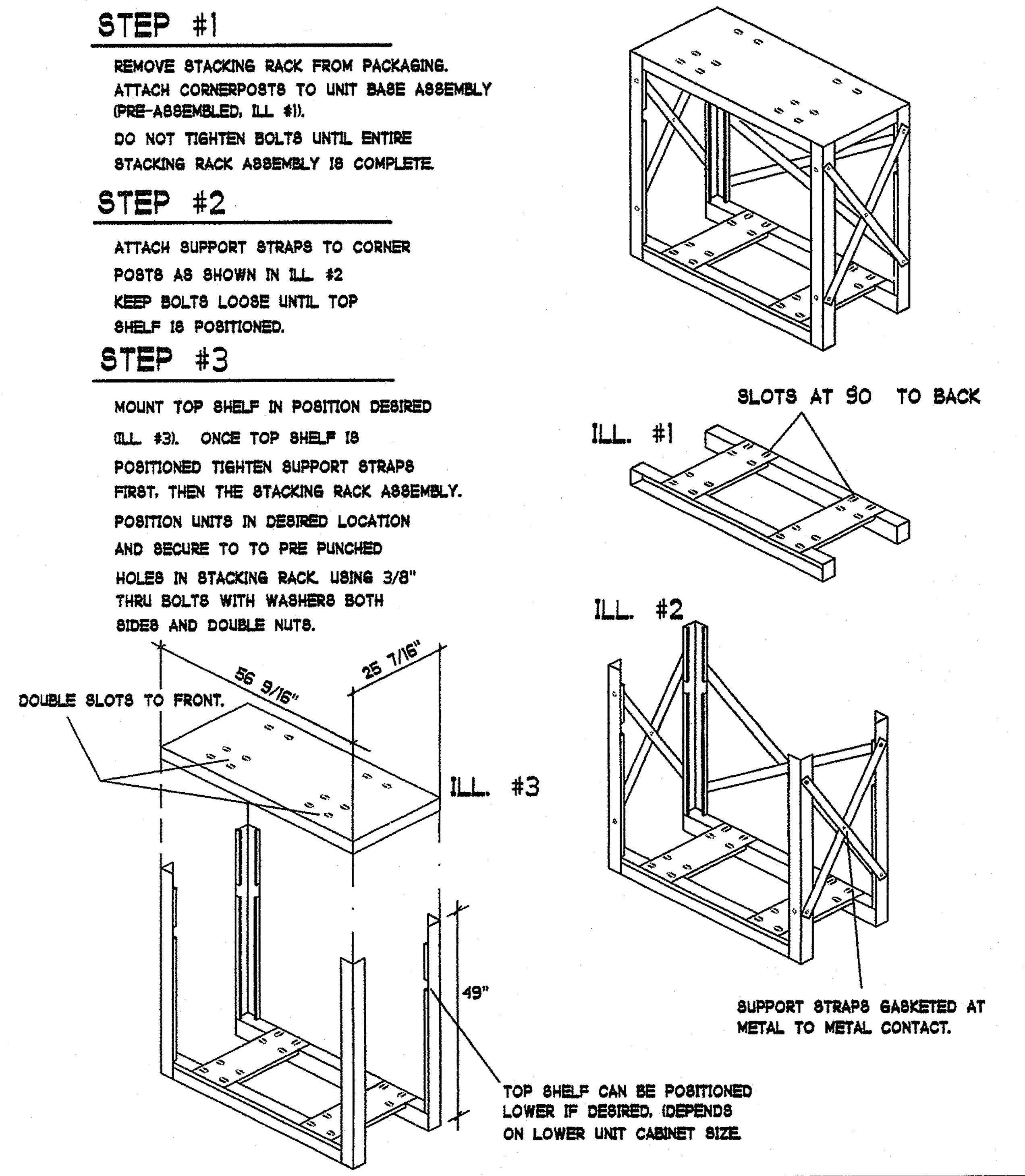
REMOVE STACKING RACK FROM PACKAGING. ATTACH CORNERPOSTS TO UNIT BASE ASSEMBLY (PRE-ASSEMBLED, ILL. #1). DO NOT TIGHTEN BOLTS UNTIL ENTIRE STACKING RACK ASSEMBLY IS COMPLETE.

STEP #2

ATTACH SUPPORT STRAPS TO CORNER POSTS AS SHOWN IN ILL. #2 KEEP BOLTS LOOSE UNTIL TOP SHELF IS POSITIONED.

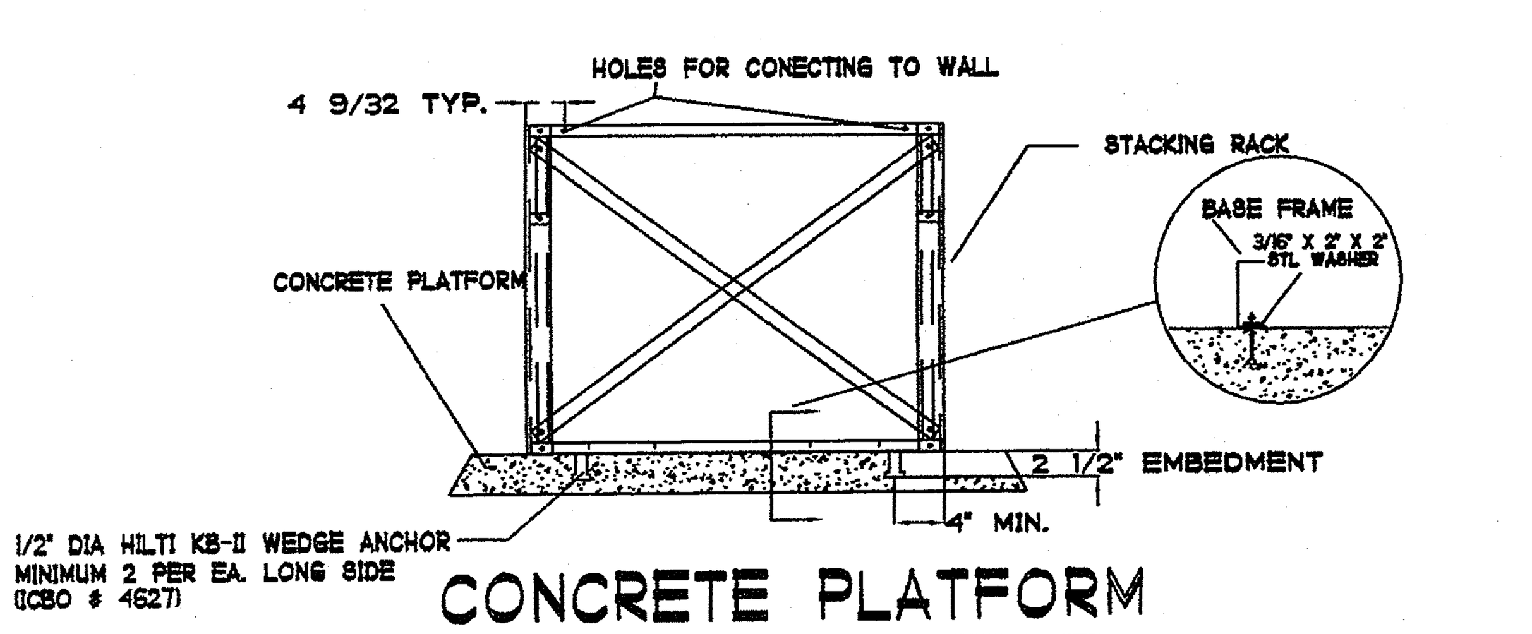
STEP #3

MOUNT TOP SHELF IN POSITION DESIRED (ILL. #3). ONCE TOP SHELF IS POSITIONED TIGHTEN SUPPORT STRAPS FIRST, THEN THE STACKING RACK ASSEMBLY. POSITION UNITS IN DESIRED LOCATION AND SECURE TO TO PRE PUNCHED HOLES IN STACKING RACK, USING 3/8" THRU BOLTS WITH WASHERS BOTH SIDES AND DOUBLE NUTS.



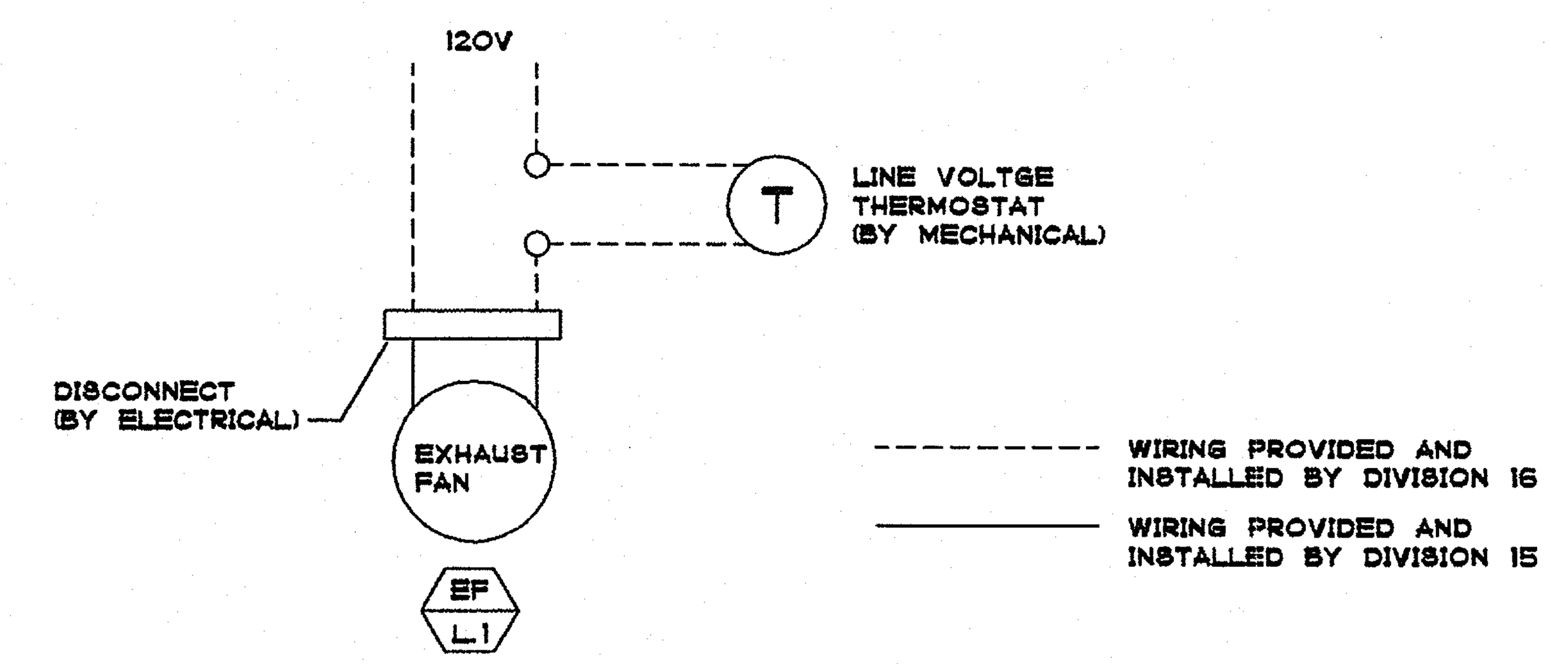
MICROMETL

ANCHORING INSTRUCTIONS FOR WS9511-11 STACKING RACK



NO SCALE

CONDENSING UNIT MOUNTING DETAILS 3



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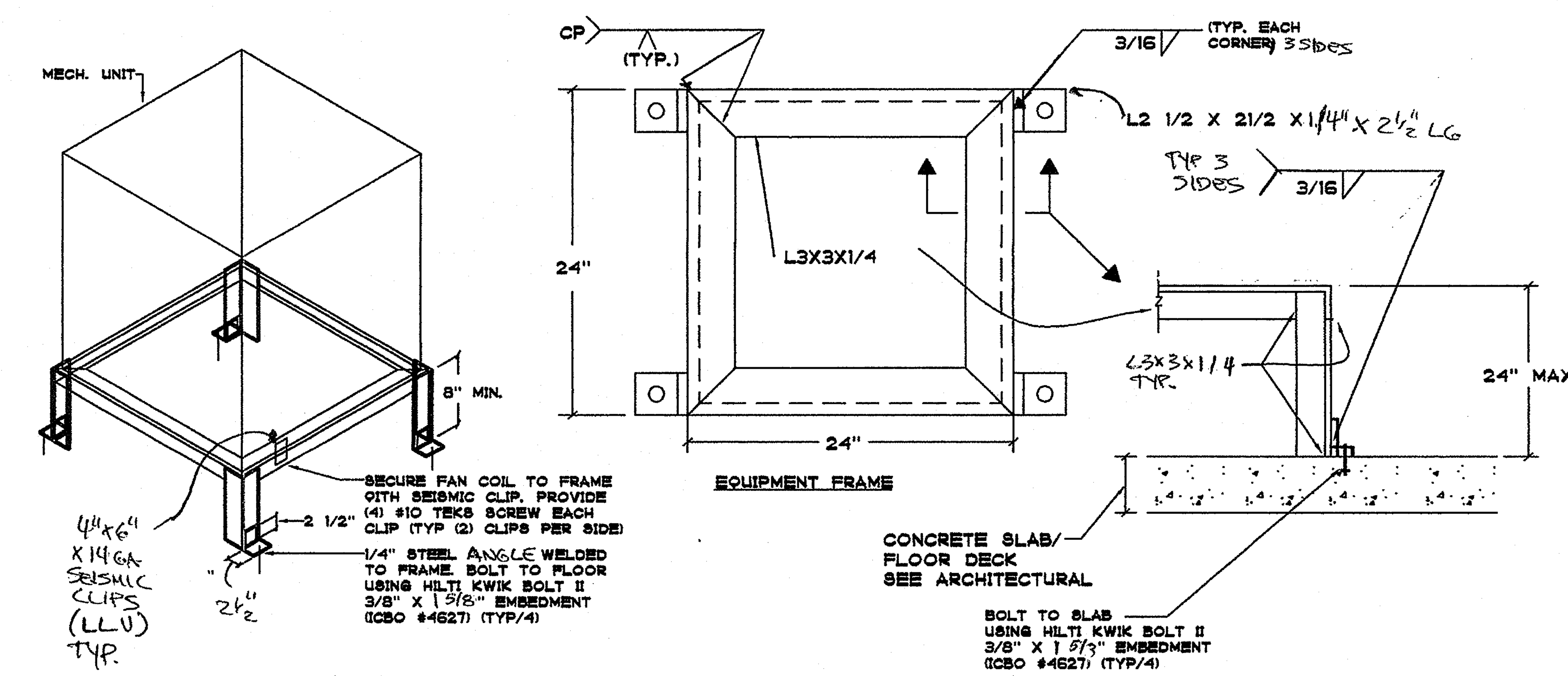
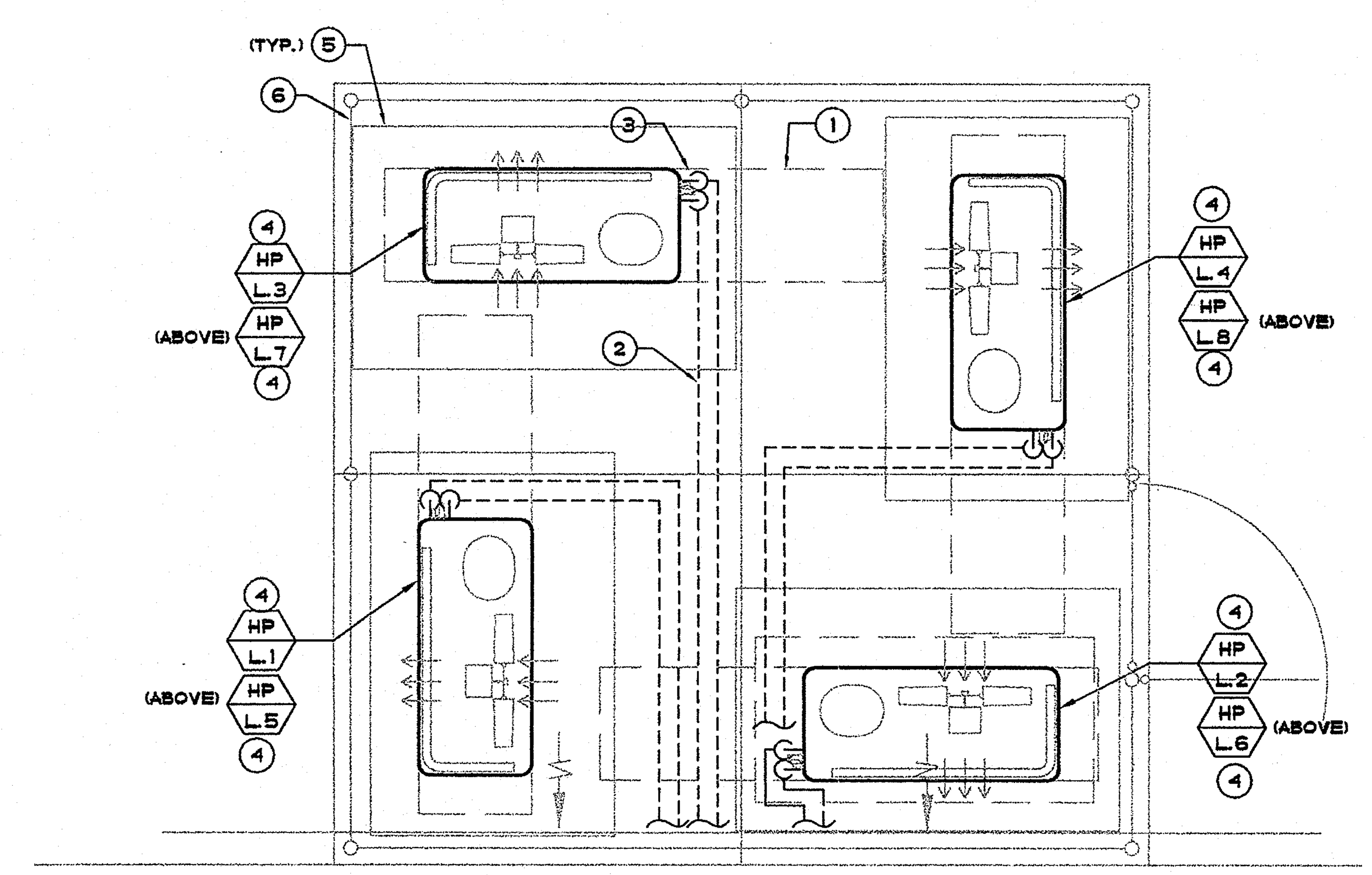
EXHAUST FAN CONTROL DIAGRAM 1



FAN COIL SUPPORT DETAIL

NO SCALE 2

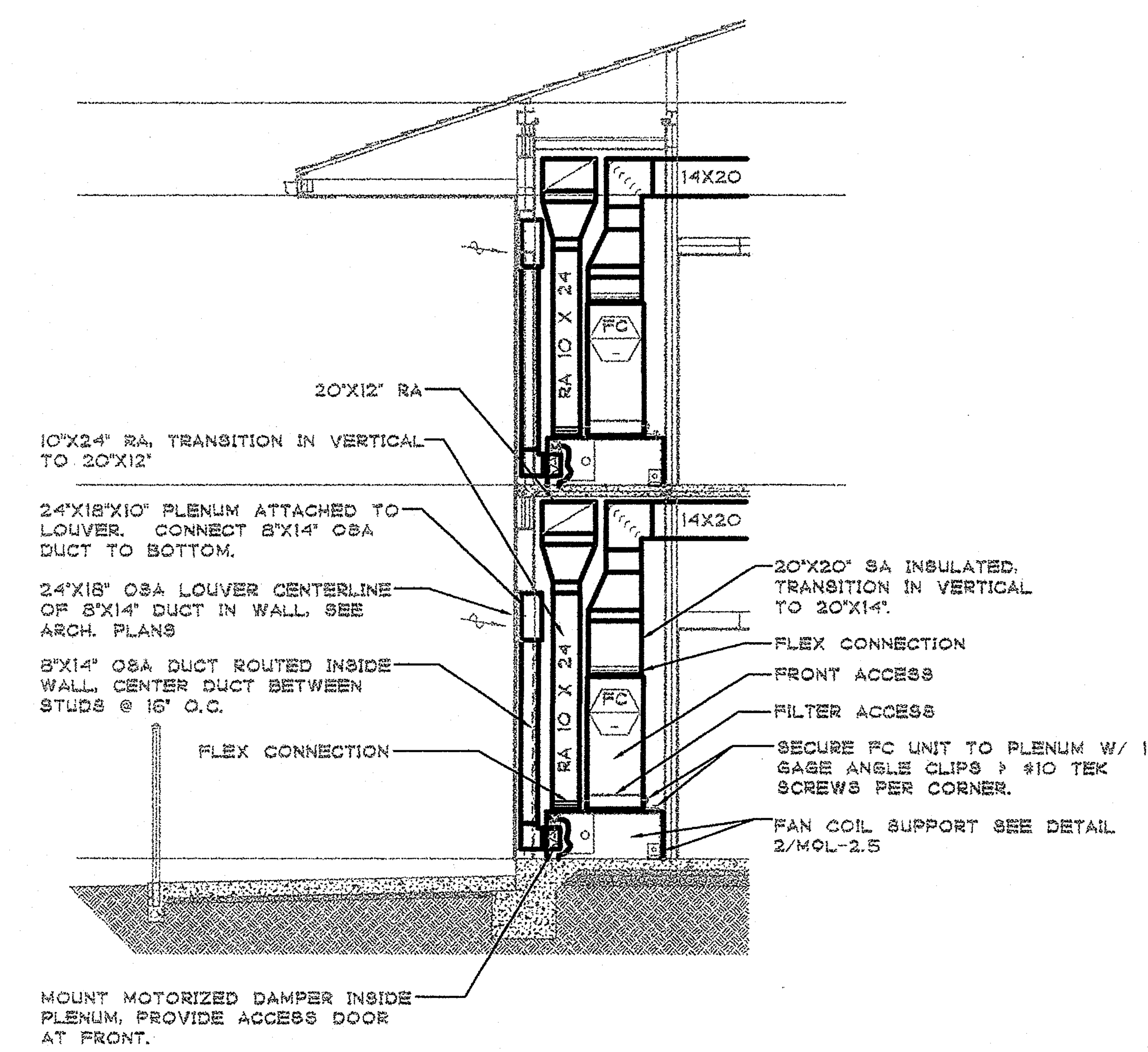


1. TYPICAL MANUFACTURER'S CLEARANCE REQUIREMENTS. FIELD VERIFY EXACT DIMENSIONS PRIOR TO START OF WORK.
2. REFRIGERANT LINE SET PIPING ABOVE GRADE. PROVIDE STAINLESS STEEL JACKET ON INSULATED PIPE. (TYPICAL/8).
3. REFRIGERANT PIPING AT ABOVE GRADE. CONNECT PIPING TO ASSOCIATED HEAT PUMP. PROVIDE STAINLESS STEEL JACKET ON INSULATED PIPE.
4. FOR HEAT PUMP SCHEDULE, SEE DRAWING M-1.3.
5. PROVIDE 4" THICK CONCRETE PAD, 72" LONG X48" WIDE FOR HP UNITS. - SEE 4/SGL.1
6. CHAIN LINK FENCE. SEE ARCH. DWGS.

NOTE: DRAWING MOL-2.2 NORTH 1ST FLOOR PLAN YARD IS SIMILAR.

MECHANICAL YARD ENLARGED PLAN

SCALE: 1/2"=1'-0" 4



NOTE:
TYPICAL FOR BOTH 1ST AND 2ND FLOOR FAN COILS.

MECHANICAL SECTION

NO SCALE 5

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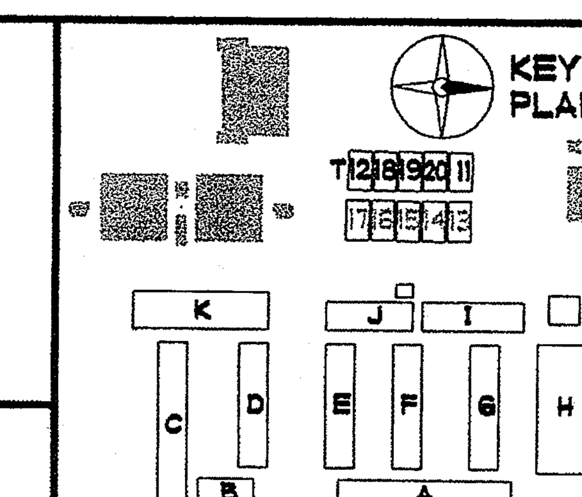

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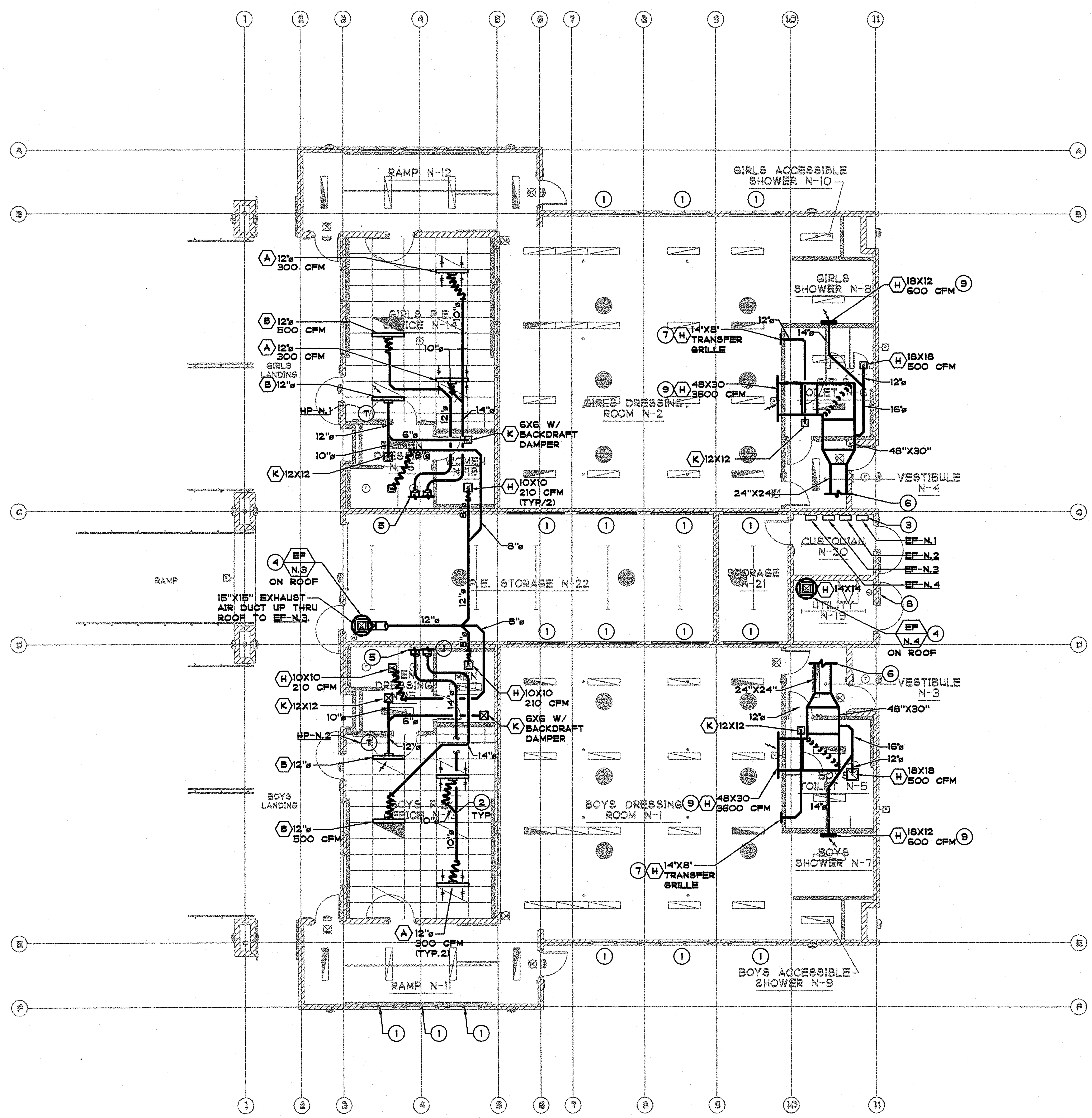
SHEET TITLE

MECHANICAL DETAILS

MOL-2.5



BUILDING N FLOOR PLAN – MECHANICAL

1/4" = 1'-0"

KEYNOTES

1. MAKE-UP AIR LOUVER FOR DIMENSION AND LOCATION SEE ARCHITECTURAL DRAWINGS.
2. FOR DUCT TAKE OFF SEE DETAIL 3/M3.1
3. LOCATION OF PROG. TIMERS FOR EXHAUST FANS.
4. FOR EXHAUST FAN SCHDEULE, SEE DRAWING SHEET M-1.2. PROVIDE 14" X 14" EXHAUST GRILLE TO DUCT THRU ROOF.
5. SA & RA DUCTS THRU PARAPET WALL ABOVE TO HP UNITS. TRANSITION TO ROUND DUCT AT ABOVE CEILING LOCATIONS. FOR CONTINUATION, SEE MN-2.2.
6. EXHAUST DUCTS THRU PARAPET WALL ABOVE TO WALL MOUNTED FAN, SEE MN-2.2 FOR CONTINUATION.
7. MOUNT TRANSFER GRILLE TO +12'-0" ABOVE ADJACENT TOILET ROOM CEILING. ROUTE TRANSFER DUCT TO DIFFUSER.
8. 18"X14" DOOR LOUVER, SEE ARCH. DWG'S FOR TYPE AND LOCATION.
9. MOUNT GRILLE TO +12'-0" ABOVE FINISHED FLOOR.

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OCEANSIDE UNIFIED S.D.

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

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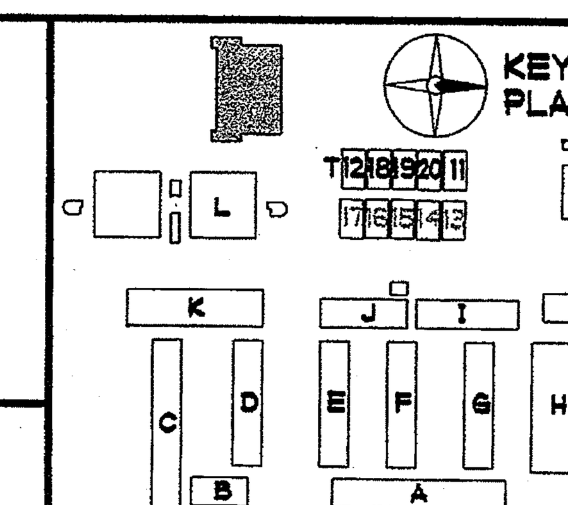
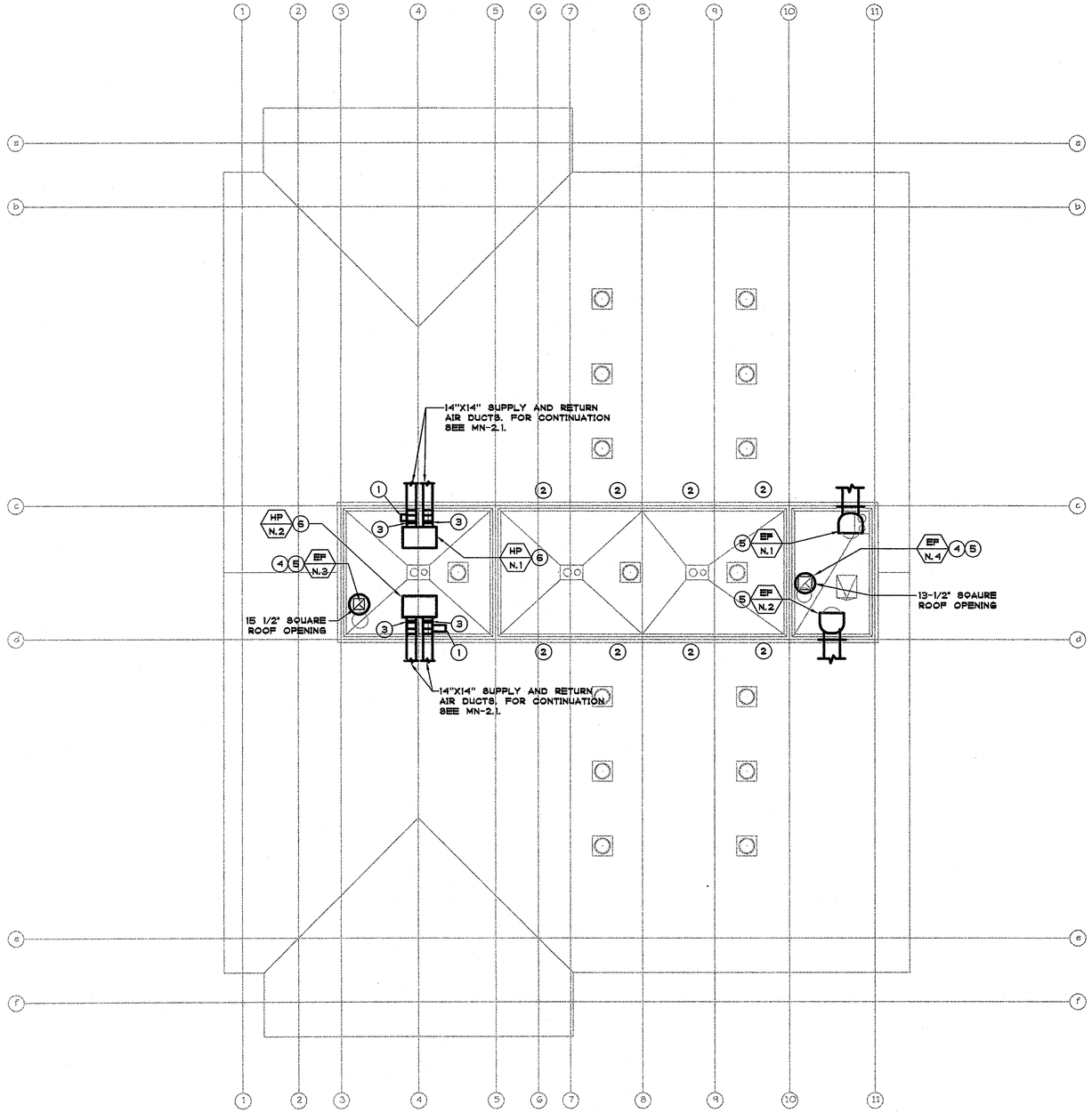
#04036
03/18/2005

REGISTERED PROFESSIONAL ENGINEER MECHANICAL STATE OF CALIFORNIA



SHEET TITLE
BUILDING N
FLOOR PLAN –
MECHANICAL

MN-2.1



BUILDING N ROOF PLAN - MECHANICAL

1/8" = 1'-0"

KEYNOTES

1. OUTSIDE AIR HOOD. LOCATE 10'-0" FROM ALL VENTS/EXHAUST.
2. MAKE-UP AIR LOUVER FOR DIMENSION AND LOCATION SEE ARCHITECTURAL DRAWINGS.
3. OUTDOOR TYPE FLEXIBLE CONNECTION.
4. UPBLAST FAN MOUNTED ON FACTORY CURB. FAN OUTLET SHALL BE LOCATED MIN. 10'-0" FROM OUTDOOR AIR INTAKE OF HEAT PUMP UNIT. FOR DETAILS SEE T/M3.1. VERIFY ROOF OPENING SIZE WITH MANUFACTURER PRIOR TO START OF WORK.
5. FOR EXHAUST FAN SCHEDULE. SEE DRAWING SHEET M-1.3.
6. FOR PACKAGED HEAT PUMP UNIT SCHEDULE. SEE DRAWING SHEET M-1.2.

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73569-9
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JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

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03/18/2005

REGISTERED PROFESSIONAL ENGINEER
THOMAS
No. 19330
Exp. 12/31/07
MECHANICAL
STATE OF CALIFORNIA

KEY PLAN

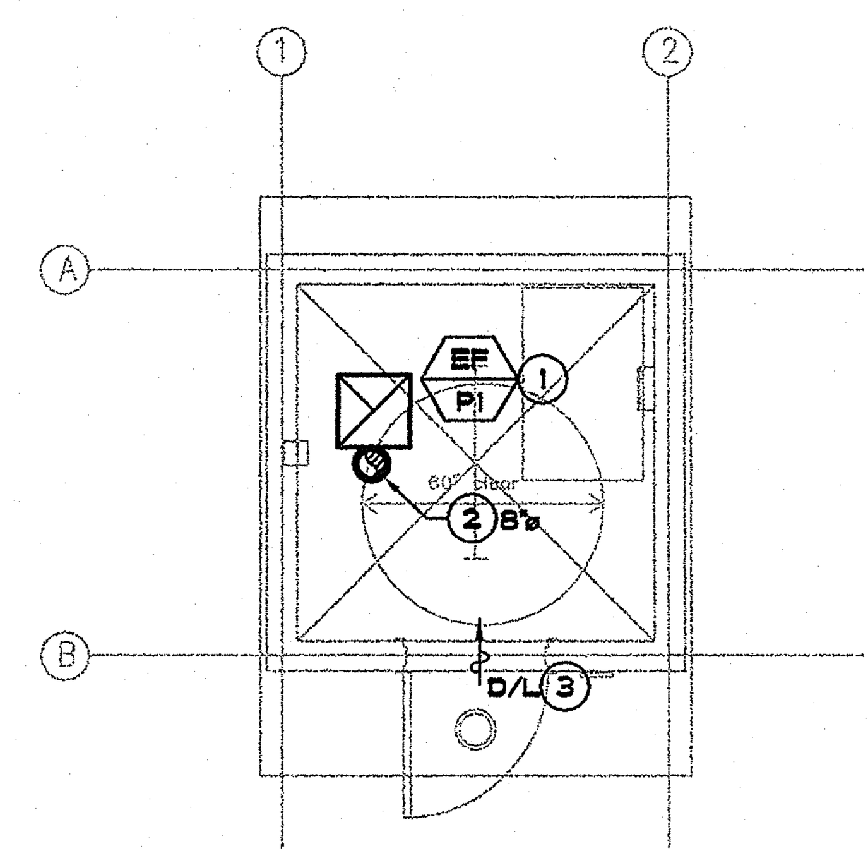
SHEET TITLE

BUILDING N
FLOOR PLAN -
MECHANICAL

MN-2.2

KEYNOTES

1. CEILING MOUNTED EXHAUST FAN. PROVIDE FLEX CONNECTOR AT OUTLET OF FAN. FOR CONTROL DIAGRAM, SEE DETAIL 5/M3.1.
2. EXHAUST DUCT FROM EXHAUST FAN UP THROUGH ROOF TO ROOF CAP. FOR ROOF CAP DETAIL, SEE 4/M3.1.
3. DOOR LOUVER. FOR EXACT SIZE AND LOCATION, SEE ARCHITECTURAL DRAWINGS.



BUILDING P FLOOR PLAN - MECHANICAL

1/4" = 1'-0"

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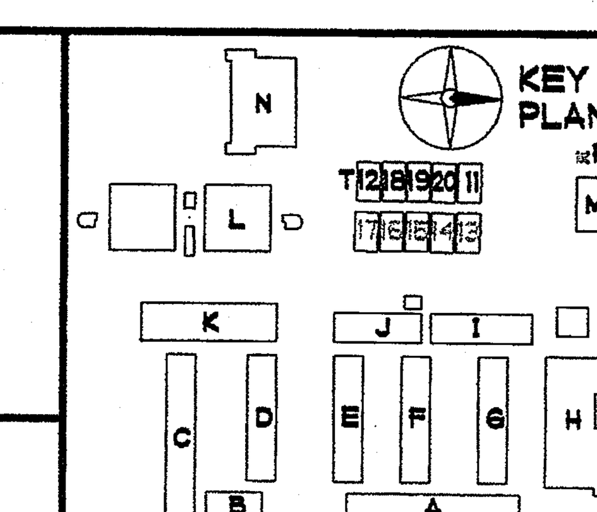

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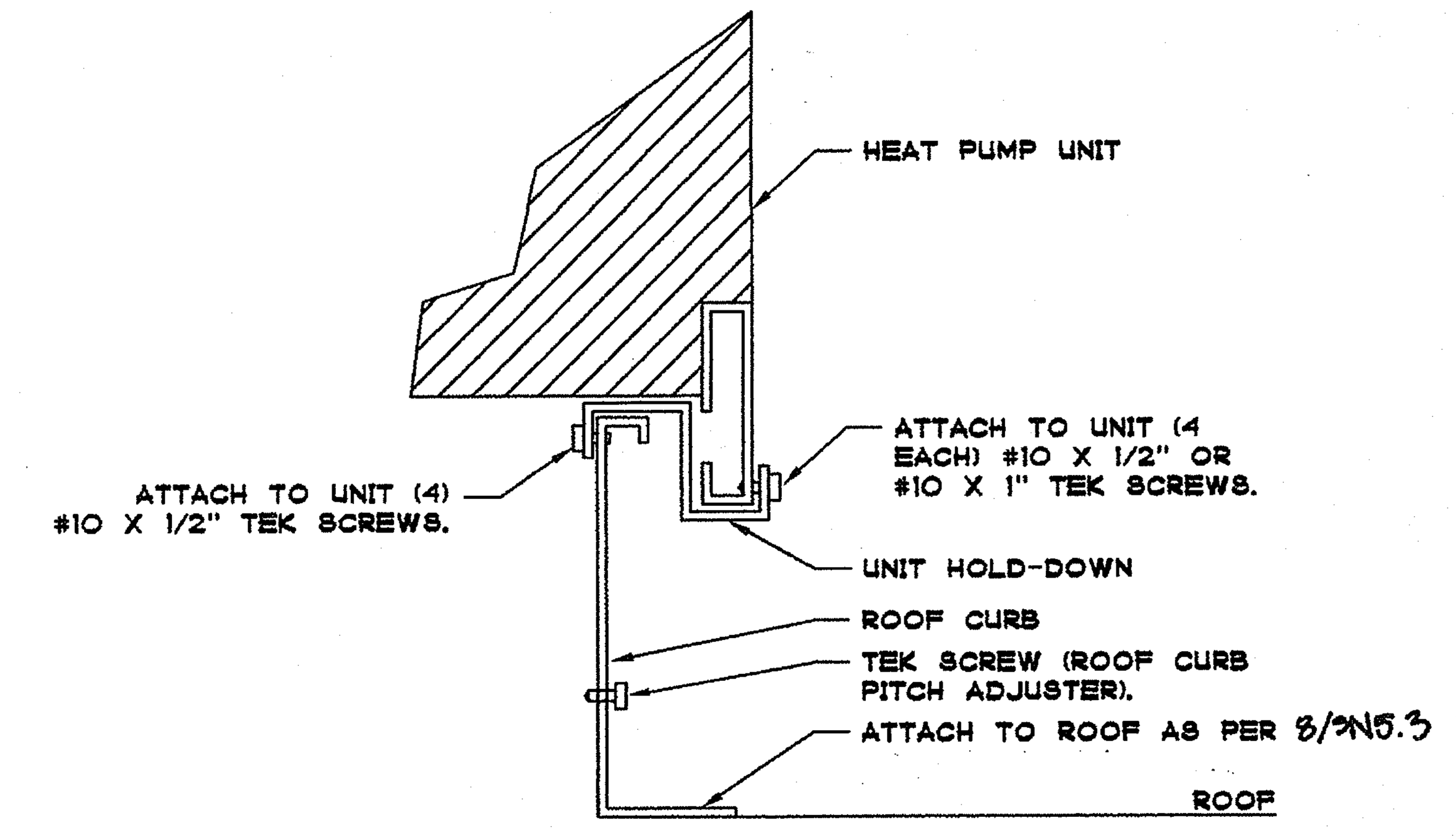
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
BUILDING P
FLOOR PLAN -
MECHANICAL

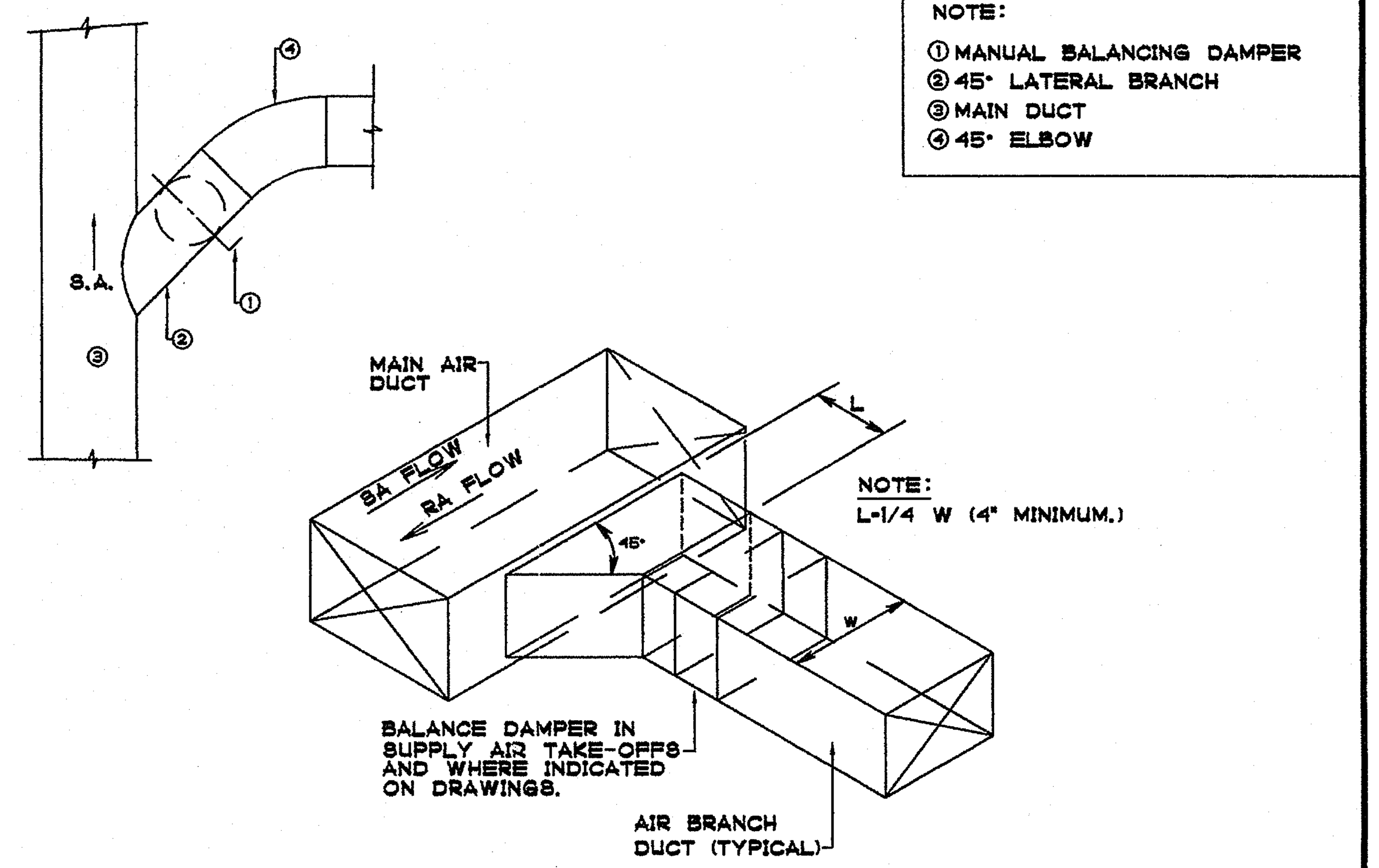
MP-2.1



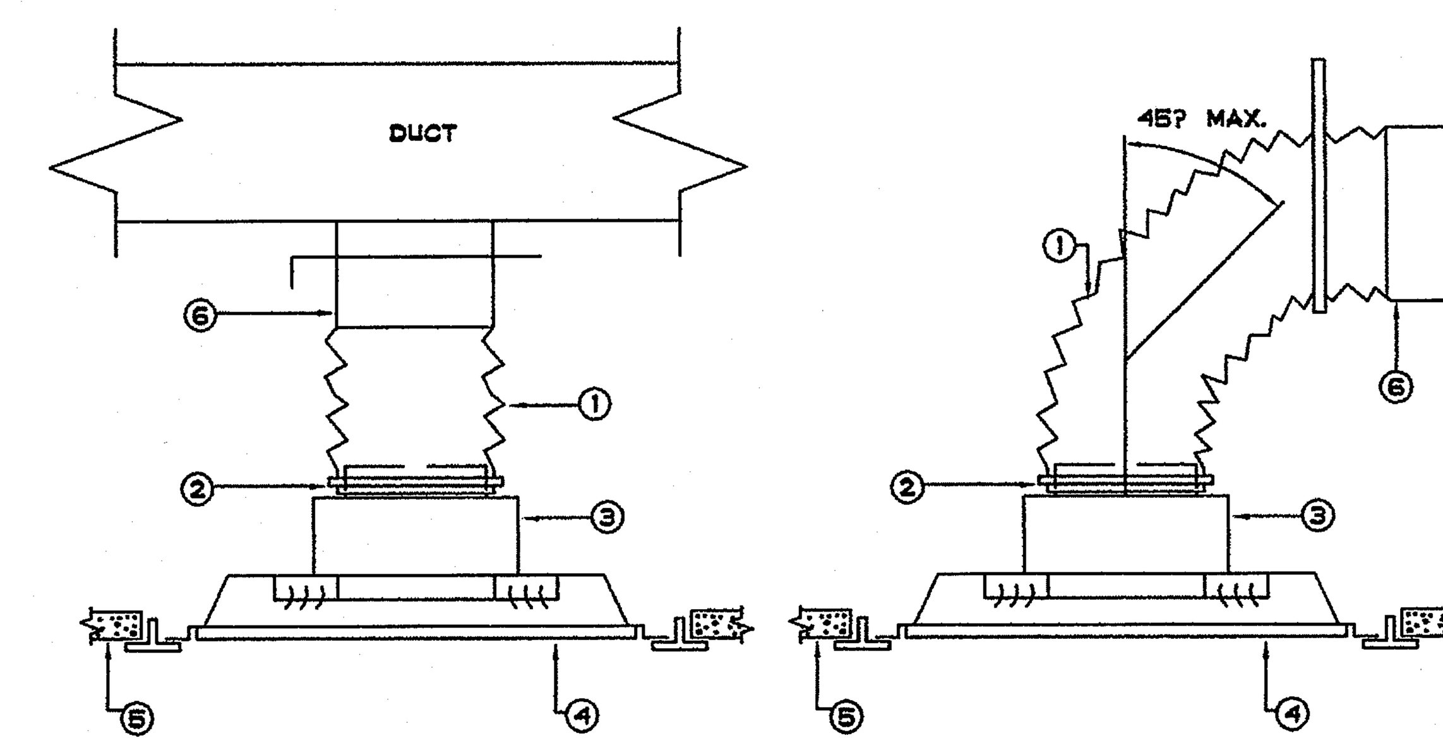
NOTES:

1. FOR FLASHING, WATER PROOFING AND ATTACHMENT TO ROOF REQUIREMENTS SEE ARCHITECTURAL AND STRUCTURAL PLANS.

ROOFTOP UNIT MOUNTING DETAIL — NO SCALE — 1

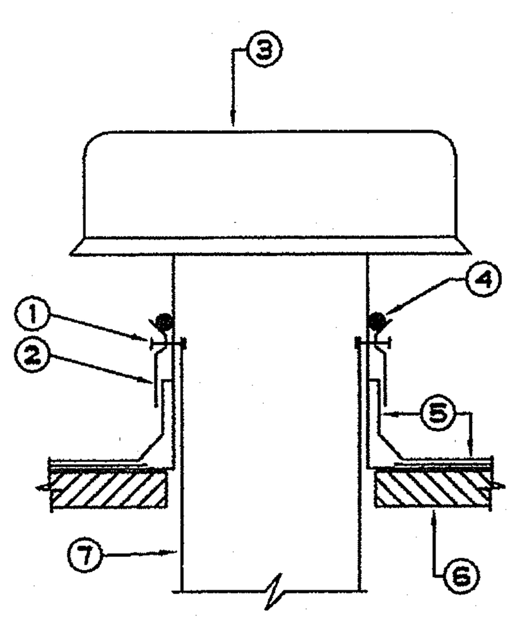


DUCT TAKE-OFF DETAIL — NO SCALE — 2



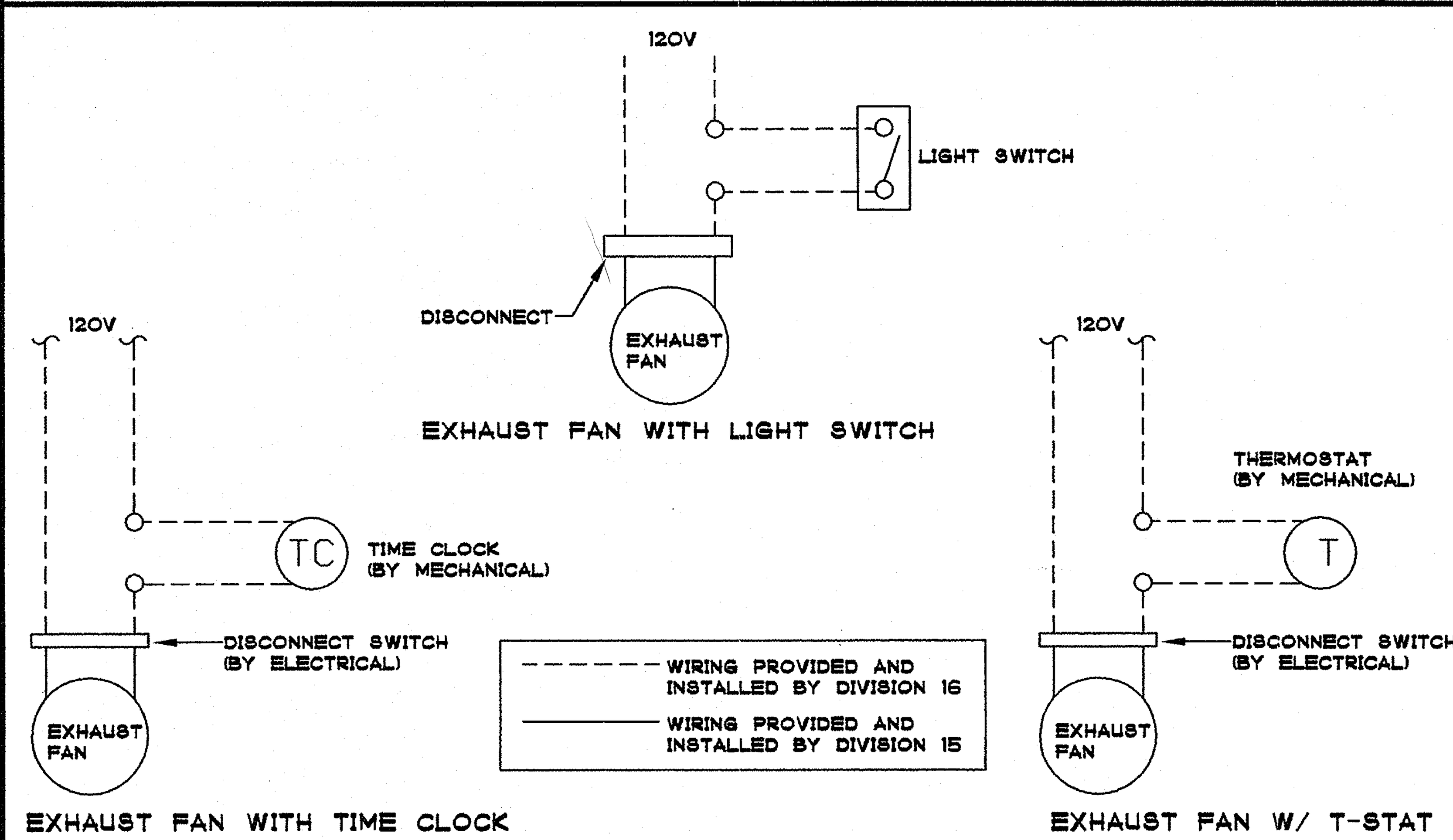
① FLEXIBLE DUCT
② CLAMP (NO DUCT TAPE)
③ SQUARE TO ROUND ADAPTOR (WHERE REQUIRED)
④ DIFFUSER OR GRILLE
⑤ LAY-IN T-BAR CEILING
⑥ SPIN-IN FITTING W/ QUADRANT DAMPER

CEILING DIFFUSER/REGISTER DETAIL — NO SCALE — 3



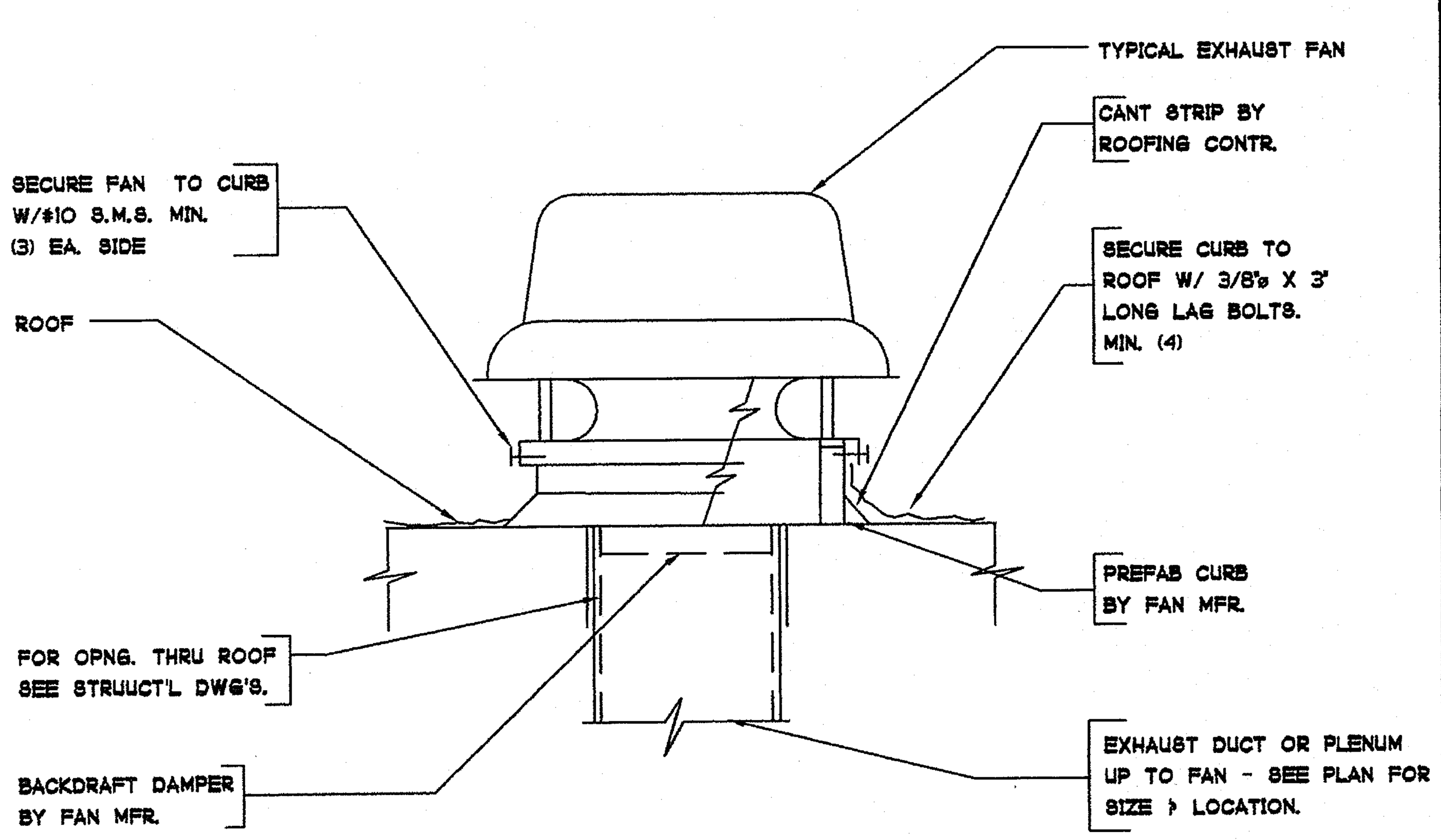
① SECURE W/ 1/2" GALVANIZED BOLTS (TYP. OF 4)
② COUNTER FLASHING
③ ROOF CAP
④ WATER PROOF SEALANT ALL AROUND
⑤ ROOFING AS PER ARCH. & STRUCT. DWGS.
⑥ ROOF STRUCTURE
⑦ EXHAUST DUCT THROUGH ROOF

ROOF CAP DETAIL — NO SCALE — 4



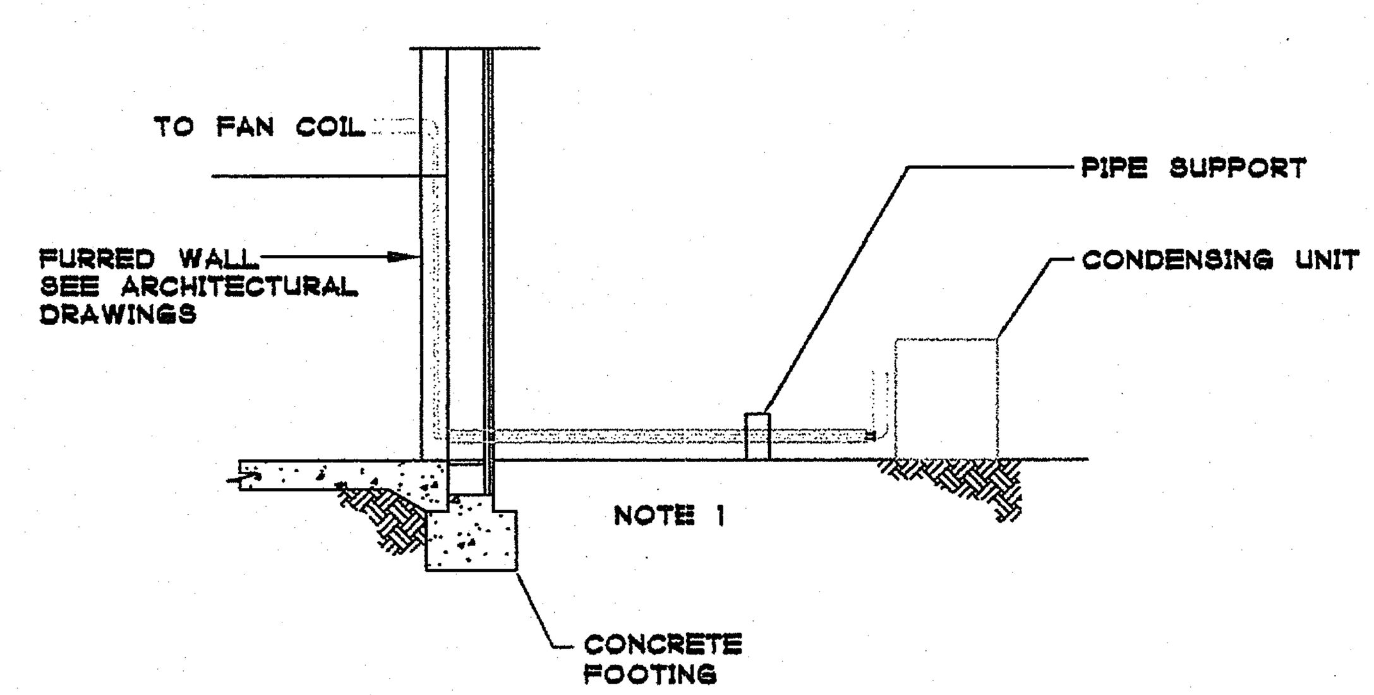
EXHAUST FAN CONTROL DIAGRAM — NO SCALE — 5

NOT USED — NO SCALE — 6



NOTE: SEE ADDITIONAL DETAILS ON SN1.2 & SOL1.2

DOWNBLAST EXHAUST FAN DETAIL — NO SCALE — 7



NOTE 1:
ROUTE REFRIGERANT PIPES ALONG MECHANICAL CLOSET WALL. PENETRATE WALL AND ROUTE TO ABOVE GROUND W/ SUPPORTS. PROVIDE STAINLESS STEEL JACKET AND INSULATION. COORDINATE PIPING IN WALL WITH ELECTRICAL & PLUMBING CONTRACTOR'S PRIOR TO START OF WORK.

REFRIGERANT PIPE TO CU DETAIL — NO SCALE — 8

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03/18/2005

KEY PLAN

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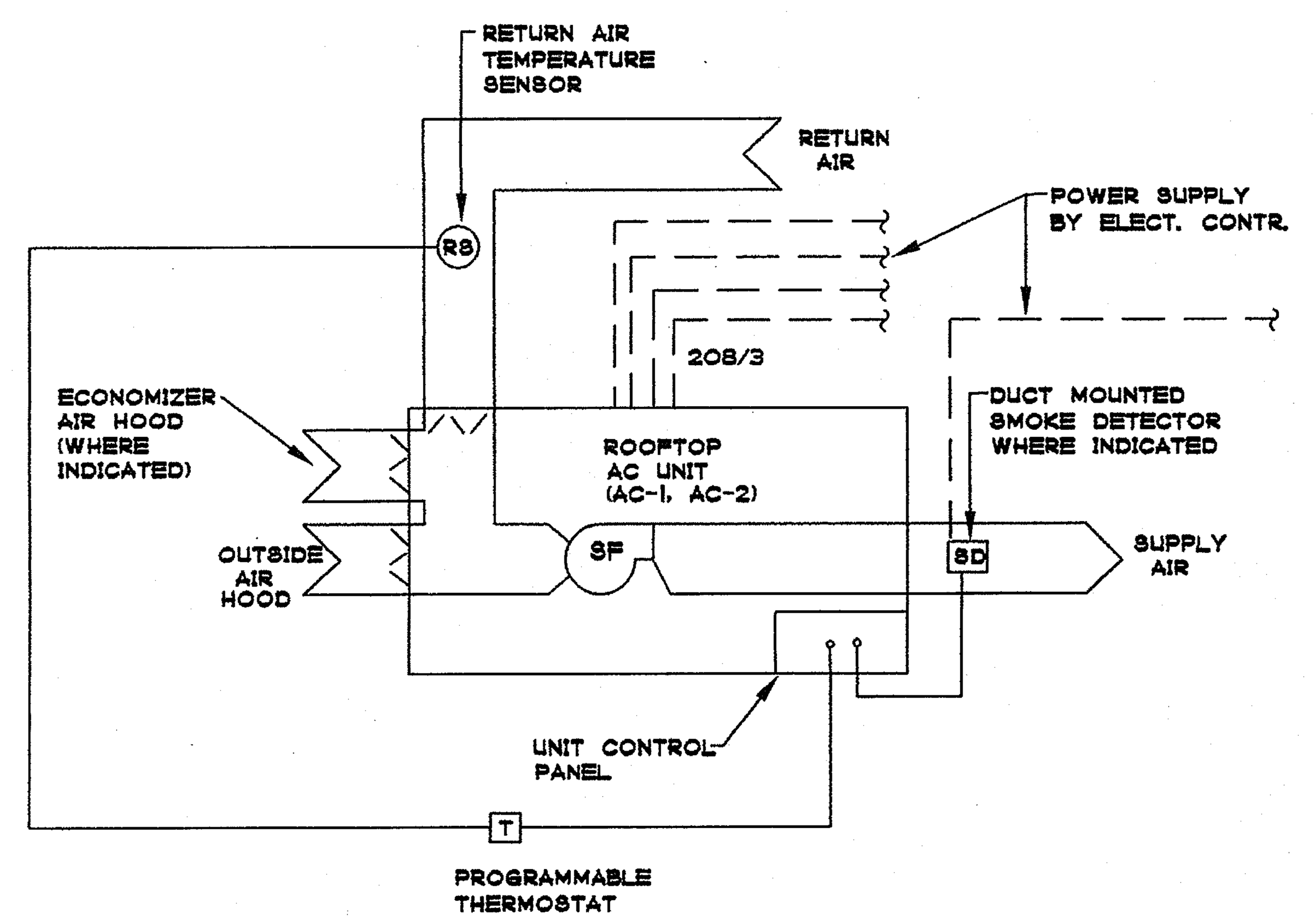
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

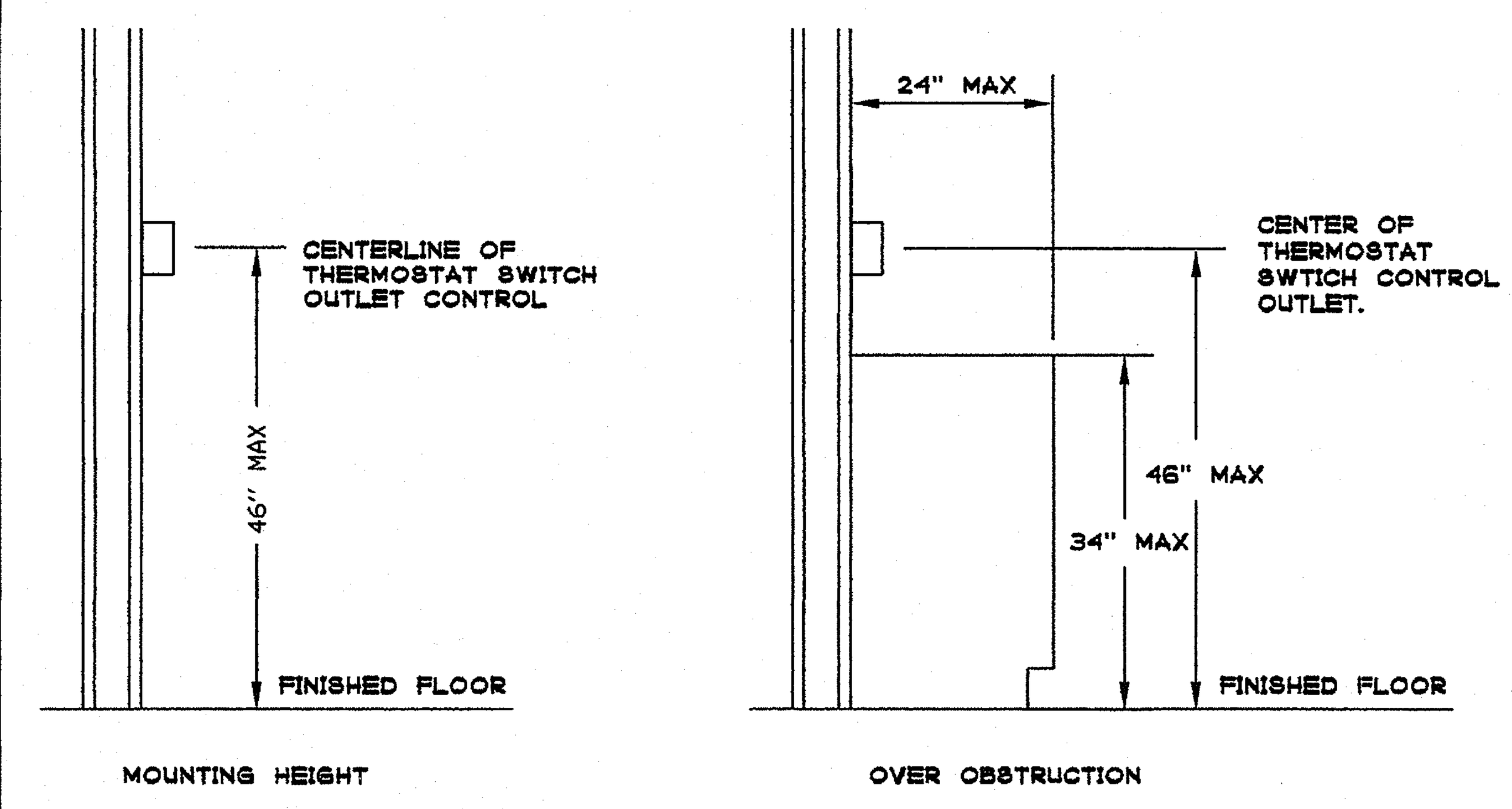
SHEET TITLE
MECHANICAL DETAILS

M-3.1

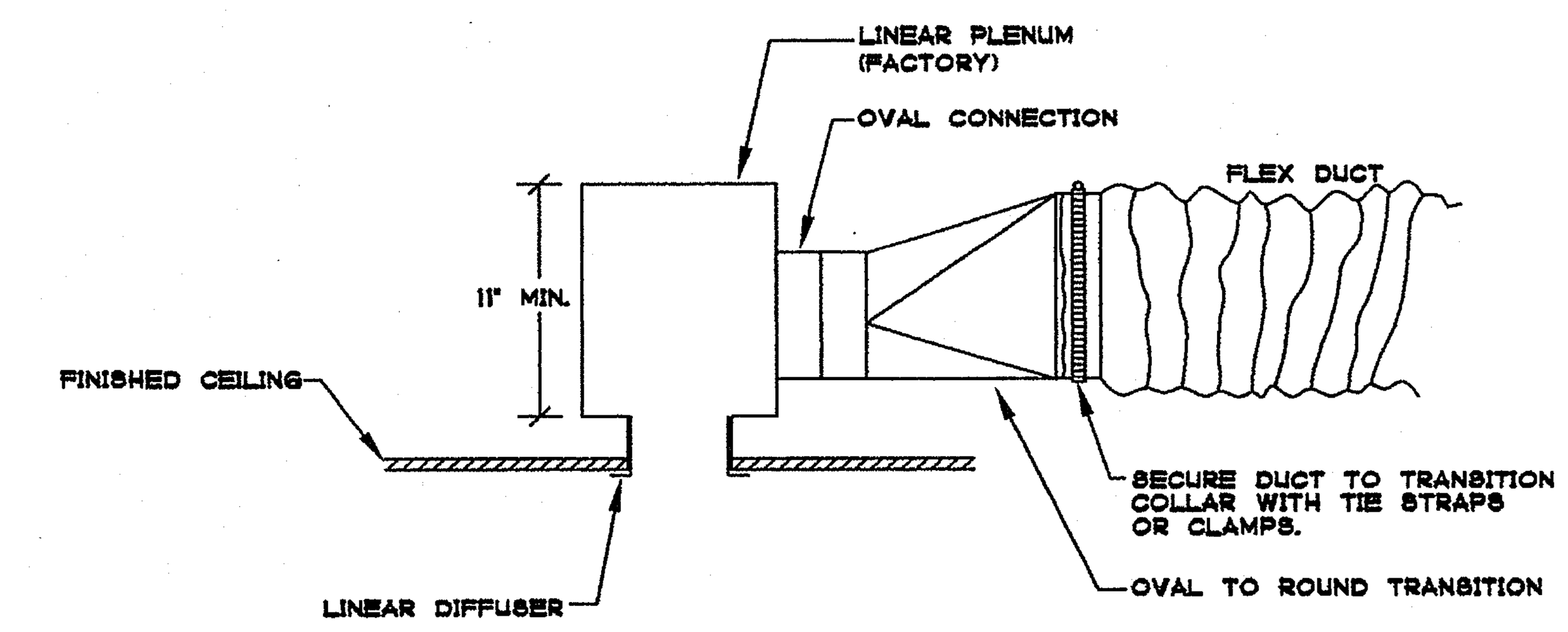
PLOTTED@03-18-05 @ 10 AM



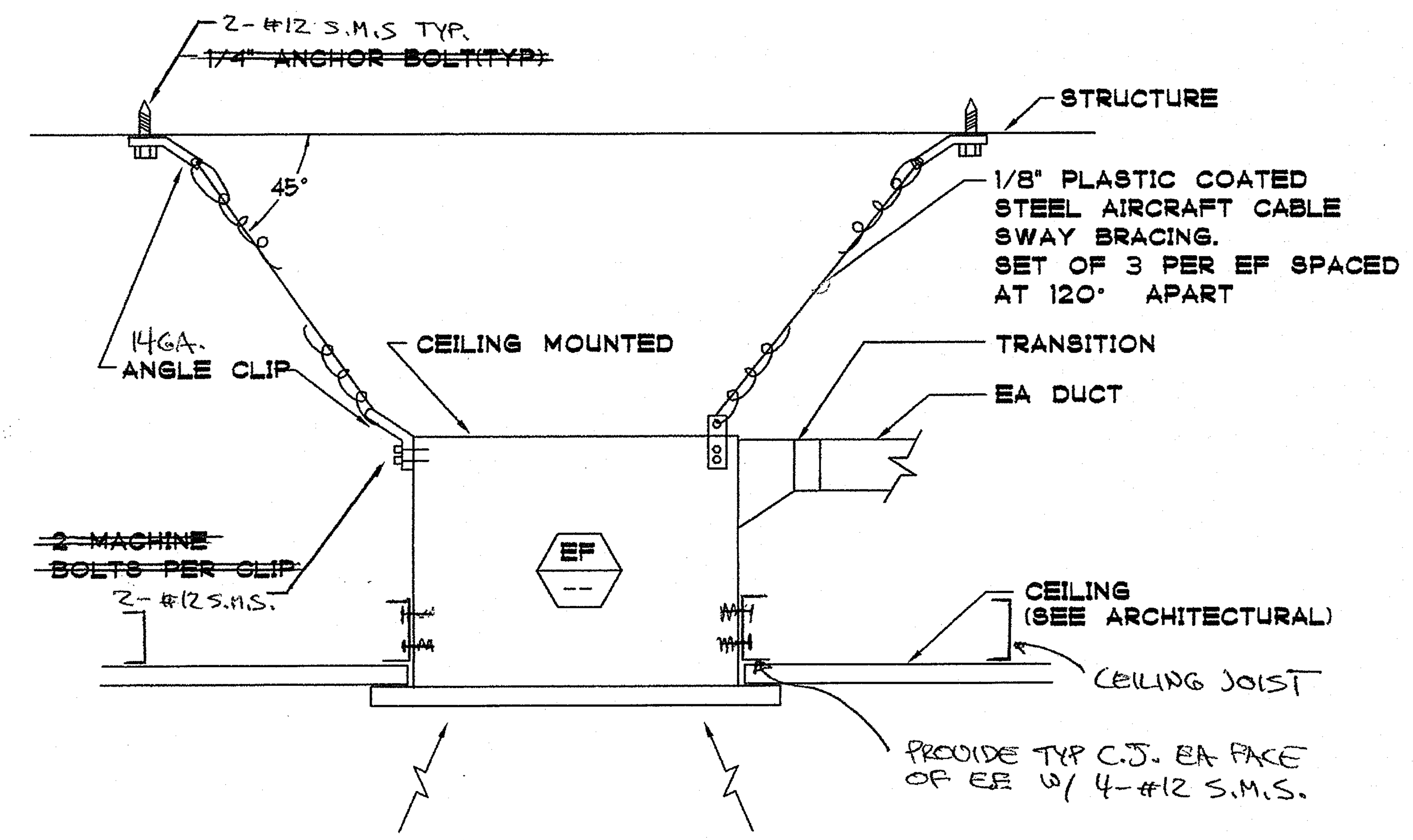
ROOFTOP A/C UNIT CONTROL DIAGRAM — NO SCALE — 1



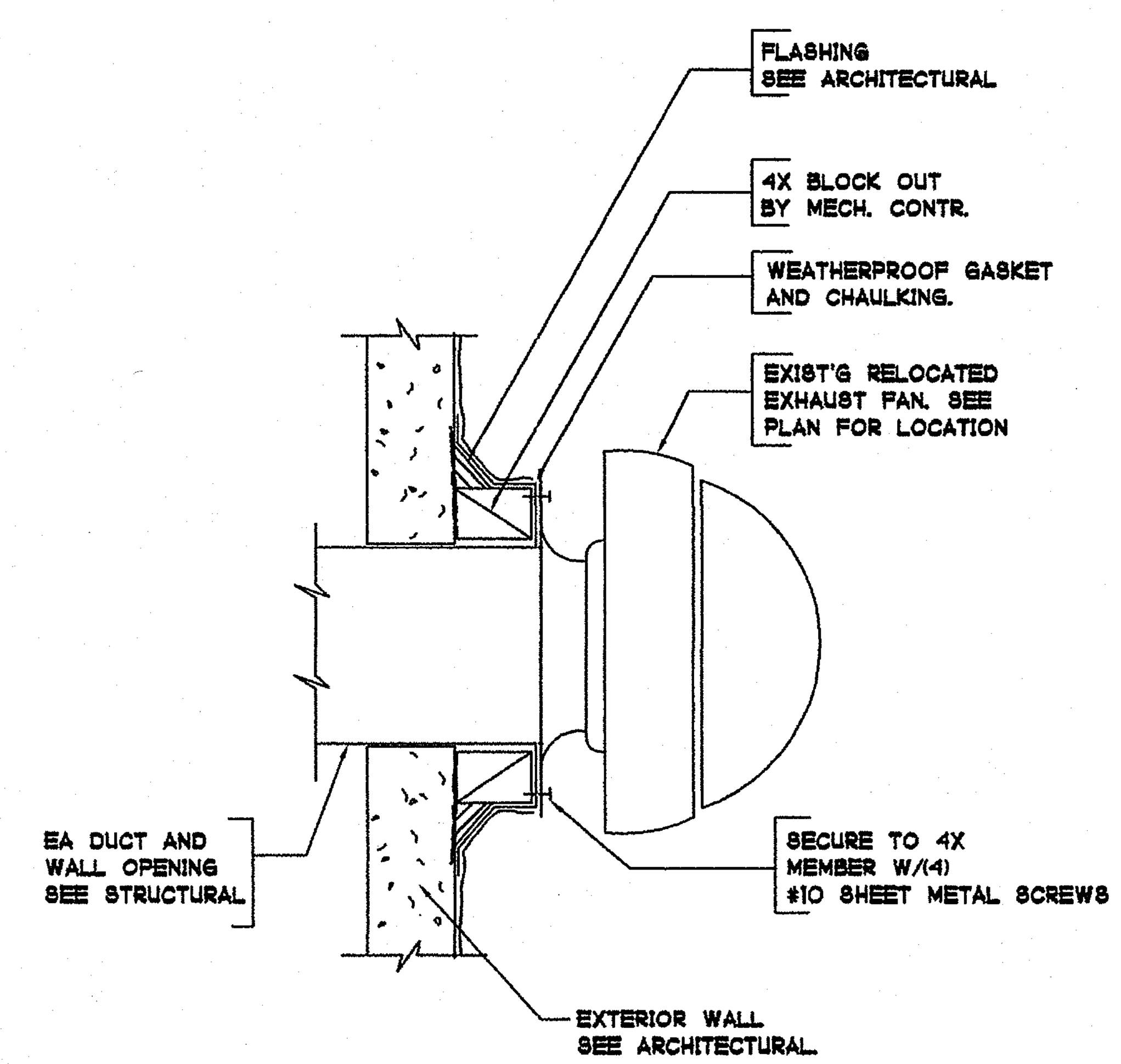
THERMOSTAT MOUNTING DETAIL — NO SCALE — 2



LINEAR DIFFUSER PLENUM DETAIL — NO SCALE — 3

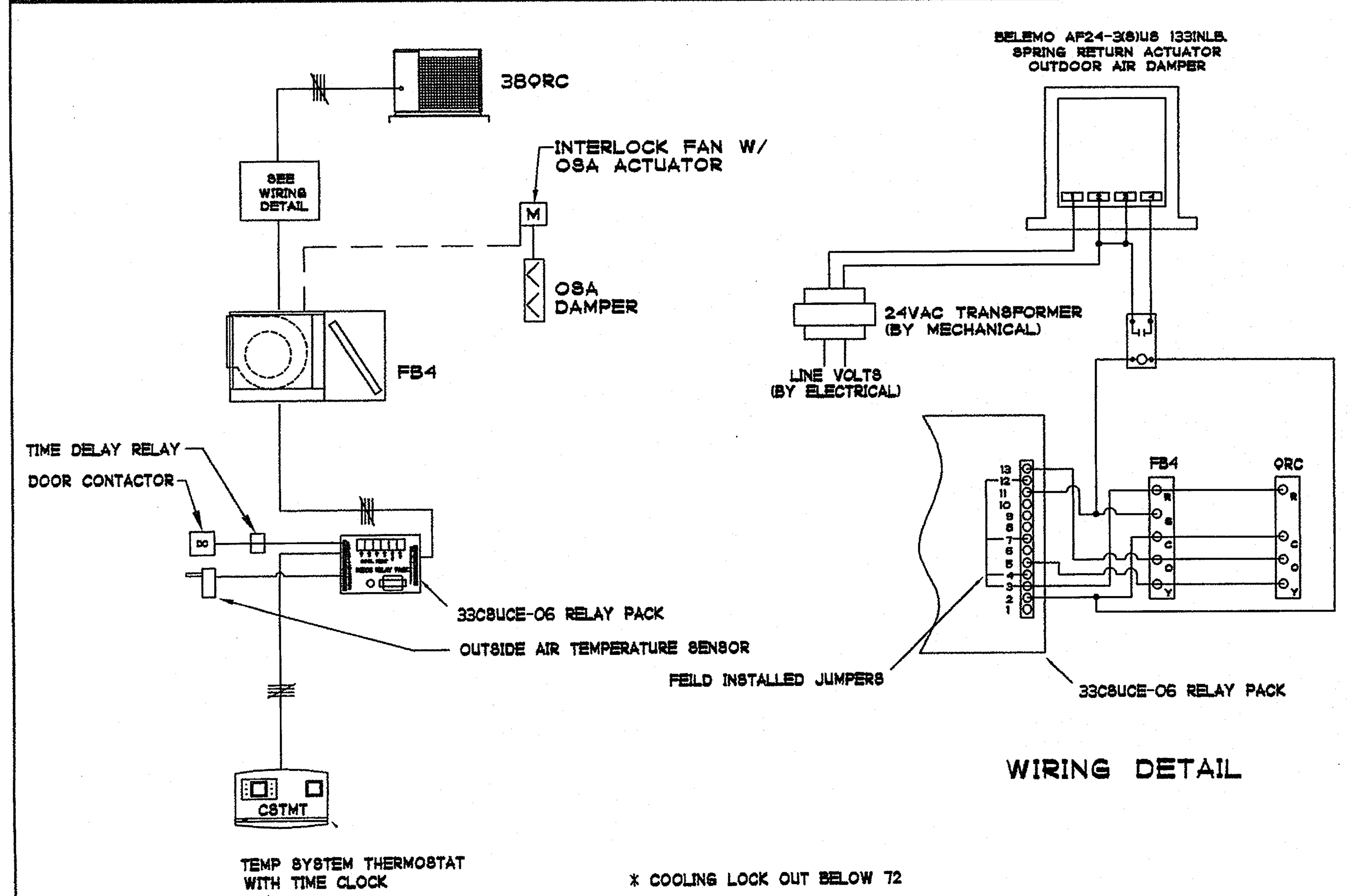


CEILING EXHAUST FAN MOUNTING DETAIL — NO SCALE — 4



WALL MOUNTED EXHAUST FAN DETAIL — NO SCALE — 5

NOT USED — NO SCALE — 6



SEQUENCE OF OPERATIONS:

1. SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS. CONTRACTOR SHALL VERIFY TIME SCHEDULES WITH SCHOOL DISTRICT PRIOR TO COMMISSIONING OF SYSTEM.

2. THERMOSTAT PROGRAMMING SHALL INCLUDE SCHOOL HOLIDAY SCHEDULES.

3. COMPRESSOR COOLING FUNCTION SHALL BE LOCKED OUT WHEN OUTDOOR TEMPERATURE IS BELOW 72 DEG. F (AS DETERMINED BY OUTDOOR AIR TEMPERATURE SENSOR LOCATED IN SHADE OF SOFFET).

4. ACCESS TO PROGRAMMING FUNCTION (AFTER SYSTEM IS FULLY COMMISSIONED) SHALL BE LIMITED TO THE SCHOOL MAINTENANCE STAFF AND SHALL REQUIRE CODE ACCESS. ALL THERMOSTATS SHALL BE PROGRAMMED WITH THE SAME ACCESS CODE. CONTRACTOR SHALL PROVIDE THE CODE (IN WRITING) AND DETAILED THERMOSTAT PROGRAMMING INSTRUCTIONS TO THE MAINTENANCE STAFF.

5. THE OCCUPANT SHALL HAVE THE ABILITY TO ADJUST THE HEATING SETPOINT FROM 60 DEG F TO 70 DEG F AND THE COOLING SETPOINT FROM 72 DEG F TO 80 DEG F. THE OCCUPANT SHALL HAVE THE ABILITY TO MANUALLY OVERRIDE THE UNOCCUPIED SCHEDULE FOR 1 TO 4 HOURS.

6. OSA DAMPER SHALL OPEN TO REQUIRED POSITION WHEN FAN IS IN OPERATION, & CLOSE WHEN FAN SHUTS DOWN.

7. WHEN DOOR IS OPEN FOR TIME DETERMINED BY SCHOOL AUTHORITY, FAN COIL & HEAT PUMP UNIT TO SHUT DOWN.

FAN COIL/CU UNIT CONTROL DIAGRAM — NO SCALE — 7

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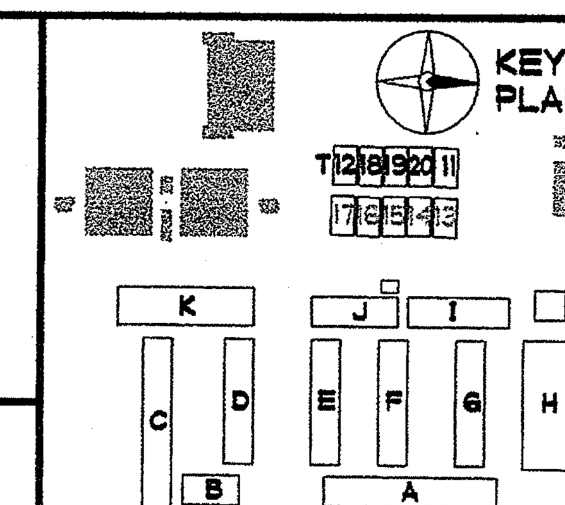
03/18/2005

REGISTERED PROFESSIONAL ENGINEER — M29230 — 3/31/07 — MECHANICAL — STATE OF CALIFORNIA



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LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 — RENEWAL — STATE OF CALIFORNIA

SHEET TITLE
MECHANICAL DETAILS

M-3.2

PLUMBING GENERAL NOTES

1. ALL PLUMBING WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE, UNIFORM BUILDING CODE, CALIFORNIA MECHANICAL CODE, C.A.C. TITLE 24, AMERICANS WITH DISABILITIES ACT (A.D.A.), NATIONAL FIRE PROTECTION ASSOCIATION (N.F.P.A.), THE LOCAL CITY AND COUNTY CODES, AND ALL OTHER CODES HAVING JURISDICTION. IN CASE OF CONFLICT, THE MORE STRICT REGULATIONS SHALL GOVERN.

2. CONTRACTOR SHALL NOTIFY ALL LOCAL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE GAS COMPANY, ELECTRIC COMPANY, TELEPHONE COMPANY, AND THE WATER DEPARTMENT, ABOUT THE EXTENT OF PLUMBING WORK. ALL EXCAVATION WORK SHALL BE APPROVED BY ALL UTILITY COMPANIES TO ASSURE PREVENTION OF INTERRUPTION OF EXISTING SERVICES PRIOR TO START OF WORK.

3. ALL PLUMBING WORK SHALL BE COORDINATED WITH THE WORKS OF OTHER TRADES PRIOR TO START OF WORK. NECESSARY ADJUSTMENTS SHALL BE MADE AT NO EXTRA COST.

4. FOR MINIMUM PIPE SIZE CONNECTIONS TO EACH PLUMBING FIXTURE SEE PLUMBING FIXTURE SCHEDULE. THESE VALUES ARE MINIMUM; LARGER CONNECTIONS MAY RESULT BASED ON THE DIFFERENT MANUFACTURER'S RECOMMENDATIONS.

5. SEWER AND VENT PIPE SHALL BE ABS SCHEDULE 40 AND SHALL CONFORM TO ASTMD 2321-89.

6. HOT AND COLD WATER PIPES, AND CONDENSATE DRAIN PIPES ABOVE GROUND SHALL BE ASTM B88 TYPE "L" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS.

7. COLD WATER PIPES BELOW GROUND SHALL BE ASTM B88 TYPE "K" HARD DRAWN COPPER TUBING FACTORY INSULATED WITH WROUGHT COPPER FITTINGS.

8. PROVIDE DIELECTRIC FITTINGS FOR DISSIMILAR METALS IN CONTACT.

9. PROVIDE HANGERS AND SUPPORTS FOR PIPING IN ACCORDANCE WITH THE RECOMMENDATIONS OF MSS SP-69.

10. PROVIDE VALVES AT THE FOLLOWING LOCATIONS:
    - A) WATER MAIN SHUT-OFF VALVE IN VALVE BOX.
    - B) VALVE WITH HOSE CONNECTION ON DOWNSTREAM SIDE OF THE MAIN SHUT-OFF VALVE.
    - C) SHUT-OFF VALVE ON EACH SUPPLY TO EACH FIXTURE AND EQUIPMENT ITEM NOT PROVIDED WITH CONTROL STOP OR OTHER AUXILIARY SHUT-OFF VALVE.

    INSTALL SHUT-OFF VALVES SO THAT STEMS EITHER ARE VERTICAL WITH HANDWHEELS OR OPERATORS ON TOP OR ARE HORIZONTAL AND SO THAT VALVES ARE EASILY ACCESSIBLE FOR OPERATION, SERVICE, REMOVAL AND REPLACEMENT.

11. PROVIDE SLEEVES FOR ALL PIPE AND TUBING PASSING THROUGH FLOORS, ROOFS, AND WALLS. PACK OAKUM INTO THE SPACE AROUND THE PIPE OR TUBING. PROVIDE FLASHING FOR ALL PIPES EXTENDING THROUGH THE ROOF.

12. ALL VENT TERMINATIONS AT ROOF SHALL BE AT LEAST 10 FEET AWAY FROM OUTSIDE AIR INTAKES, OPERABLE WINDOWS, AND THE LIKE.

13. FILL CRACKS BETWEEN FIXTURES AND WALL/FLOORS WITH SILICONE RUBBER SEALANT.

14. LOCATE, SIZE, AND INSTALL WATER HAMMER ARRESTERS IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE STANDARD NO. WH-201.

15. INSTALL FIXTURES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODES. SECURE FLOOR OUTLET OF FLOOR-MOUNTED FIXTURES TO DRAINAGE CONNECTIONS AND FLOOR IN A RIGID MANNER. RIGIDLY SUPPORT WALL-HUNG FIXTURES BY MEANS OF METAL SUPPORTING MEMBERS. USE CHROMIUM-PLATED BRASS BOLTS, NUTS, AND WASHERS WHERE EXPOSED. ALL CONNECTIONS SHALL BE MADE GAS-TIGHT AND WATER-TIGHT. USE OF PUTTY AND PLASTICS FOR GASKETS WILL NOT BE PERMITTED.

16. PROVIDE ALL FIXTURE COMPONENTS AS INDICATED ON DRAWINGS. PROVIDE ADDITIONAL COMPONENTS AS PER MANUFACTURER'S RECOMMENDATIONS FOR PROPER OPERATION OF THE FIXTURES.

17. PROVIDE EACH PLUMBING FIXTURE(INCLUDING HOSE BIBS) WITH AN INDIVIDUAL STOP OR COMPRESSION VALVE OF POLISHED CHROME-PLATED LOOSE KEY TYPE.

18. WHERE DEPTHS OR INVERTS ELEVATIONS ARE NOT INDICATED, PROVIDE MINIMUM COVERAGE (ABOVE TOP OF PIPES) AS FOLLOWS:
    - A) ANY PIPING UNDER SLAB (TOP OF PIPE TO UNDERSIDE OF SLAB): 18 INCHES.
    - B) CAST IRON AND COPPER PIPES IN OTHER LOCATIONS: 18 INCHES.

19. EXCAVATE TO UNDISTURBED EARTH: CUT LEVEL AND FORM TRUE. REMOVE DEBRIS, RUBBISH AND SOFT MATERIAL (SUCH AS MUD). WHERE ROCK IS ENCOUNTERED, UNDERCUT TRENCHES 6-INCHES AND FILL WITH WELL TAMPED NEUTRAL SAND AND PEA GRAVEL TO PROPER PIPE ELEVATION. DURING EXCAVATION FREE OF STANDING WATER. UNDERCUT TRENCH 6- INCHES AND INSTALL PIPING IN A 6-INCH NEUTRAL SAND ENVELOPE.

20. BACKFILL TO A POINT 12-INCHES ABOVE TOP OF PIPING WITH EARTH (EXCAVATED MATERIAL MAY BE USED) FREE OF CLAY, DEBRIS, RUBBISH, ROCKS, OR CLODS OVER 4-INCHES IN THE GREATEST DIMENSION. BACKFILL ABOVE 12-INCHES FROM TOP OF PIPING MAY BE WITH EXCAVATED MATERIAL. APPLY BACKFILL BY HAND IN 6-INCH DEEP LAYERS THE FULL WIDTH OF THE TRENCH. MOISTEN EACH LAYER (DO NOT FLOOD OR PUDDLE), AND HAND TAMP TO A MINIMUM 90 PERCENT COMPACTION BEFORE PROCEEDING WITH THE NEXT LAYER OF BACKFILL.

21. DO NOT EXCAVATE UNDER FOUNDATIONS OR FOOTINGS EXCEPT IN MANNER PERMITTED BY THE ARCHITECT. DO NOT BACKFILL UNTIL INSTALLED PIPING HAS BEEN SUCCESSFULLY TESTED AND INSPECTED.

22. ALL GAS PIPING MATERIAL AND INSTALLATION SHALL BE IN COMPLETE COMPLIANCE OF THE UNIFORM PLUMBING CODE (LATEST EDITION).
    ALL NEW GAS PIPING ABOVEGROUND SHALL BE "BLACK STEEL".
    ALL GAS PIPING BELOW GROUND SHALL BE POLYETHYLENE (PE) PIPING PER ASTM D 2513. FITTINGS SHALL BE AS PER ASTM D 2683 AND ASTM D 2513.
    PROVIDE FLEXIBLE CONNECTIONS AND GAS COCKS AT ALL GAS OUTLETS.
    PROVIDE FLEXIBLE CONNECTION AT ALL GAS PIPING CONNECTIONS INTO GAS BURNING EQUIPMENT AND APPLIANCES.

23. ALL CONDENSATE WASTE SHALL BE DRAINED BY MEANS OF RIGID INDIRECT WASTE PIPES INTO A FLOOR SINK VIA LEGAL AIR GAP OR TO A P-TRAP WITH NO MORE THAN 10 NOMINATIONS OF AIR CONDITIONING CONNECTED TO THE P-TRAP.

24. HORIZONTAL RUNS OF DRAIN LINES SHALL BE AT LEAST 3/4 INCH FROM THE WALL AND SIX (6) INCHES OFF THE FLOOR AND SHALL TERMINATE AT LEAST ONE (1) INCH ABOVE THE OVERFLOW RIM OF THE FLOOR SINK.

25. FLOOR SINKS SHALL BE LOCATED WITHIN 15 FEET OF THE DRAIN OPENING OF THE EQUIPMENT SERVED.

26. ALL SINKS AND LAVATORIES SHALL BE SUPPLIED WITH HOT (MAXIMUM 120 DEG. F) AND COLD RUNNING WATER UNDER PRESSURE. ALL LAVATORIES OR HAND SINKS SHALL HAVE A COMBINATION FAUCET OR PREMIXING FAUCET CAPABLE OF SUPPLYING WARM WATER FOR A MINIMUM OF 10 SECONDS.

27. CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND SIZES OF DRAINS FROM ALL EQUIPMENT, WITH THE MANUFACTURERS PRIOR TO START OF WORK.

28. PROVIDE VACUUM BREAKERS AT HOSE BIBBS.

29. COORDINATE AND VERIFY ALL GAS LOADS OF ALL APPLIANCES AND EQUIPMENT WITH THE MANUFACTURER PRIOR TO START OF WORK.

30. COORDINATE SAWCUTTING SEQUENCE WITH OTHER TRADES PRIOR TO START OF WORK.

31. ALL SEWER AND DRAINAGE PIPING SHALL BE INSTALLED AS PER UPC (LATEST EDITION). SLOPE SHALL BE MINIMUM 1/4 INCH PER FOOT DROP.

32. ALL HOT WATER PIPING AND DRAIN PIPES UNDER ACCESSIBLE SINKS AND LAVS SHALL BE INSULATED. THERE SHALL BE NO SHARP OR ABRASIVE OBJECTS OR SURFACES UNDER LAVATORIES. INSULATE UNDERSIDE OF ALL METAL UNDER ACCESSIBLE LAVATORIES/SINKS.

33. CONTRACTOR SHALL FIELD VERIFY AVAILABLE INVERT ELEVATIONS PRIOR TO START OF WORK. IN CASE OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS, INFORM ARCHITECT IN WRITING, BEFORE PROCEDDING FURTHER

TITLE 24 NOTES

1. ALL PLUMBING SYSTEM COMPONETS SHALL MEET OR EXCEED THE REQUIREMENTS OF U.B.C. (CALIFORNIA EDITION) , UMC, UPC, NEC, NFPA, ASTM, ANSI, AND ALL LOCAL AND STATE CODE REQUIREMENTS.
2. ALL PLUMBING EQUIPMENT LISTED IN (CCR) SECTION 2-111 MUST BE CERTIFIED BY THE MANUFACTURER TO MEET OR EXCEED SPECIFICATIONS OR EFFICIENCIES ADOPTED BY THE CEC.
3. ALL HEATERS FOR DOMESTIC HOT WATER MUST BE CERTIFIED BY THE MANUFACTURER TO MEET THE SPECIFICATIONS OR EFFICIENCIES AS ADOPTED BY THE CEC. IN ACCORDANCE WITH SECTION 10-113 OF THE CCR AND ENERGY EFFICICENCY STANDARDS RESIDENTIAL NON-RESIDENTIAL
4. ALL PIPING SHALL BE INSULATED IN ACCORDANCE TO SECTION 1201.1.8 OF UMC (CALIFORNIA EDITION) .
5. ALL INSULATION INSTALLED SHALL MEET THE FLAME SPREAD AND SMOKE DENSITY REQUIREMENTS OF SECTION 1201.1.8 UMC (CALIFORNIA EDITION) WHEN TESTED IN ACCORDANCE WITH UBC (CALIFRONIA EDITON) STANDARD 8-6.
6. FAUCETS SHALL BE 2.2 GPM MAXIMUM.
7. PROVIDE ULTRA LOW FLUSH TOILETS., 1.6 GPF MAXIMUM.
8. ALL GAS APPLIANCES MUST HAVE PILOTLESS IGNITION SYSTEM IN ACCORDANCE WITH SECTION 115 OF CEC.
9. ALL ACCESSIBLE FIXTURES SHALL BE INSTALLED AS PER THE LATEST REQUIREMENTS OF TITLE 24 AND ADA (AMERICANS WITH DISABILITIES ACT).
10. WATER HEATER SHALL COMPLY WITH SECTION 608.3 OF UPC 1997, FOR THERMAL EXPANSION REQUIREMENTS.

PLUMBING LEGEND

SYMBOL	ABBREV.	DESCRIPTION
	S	SEWER ABOVE & BELOW GRADE
	V	SANITARY VENT
	CW	COLD WATER LINE
	HW	HOT WATER LINE
	HWR	HOT WATER RETURN LINE
G	G	GAS LINE
CD	CD	CONDENSATE DRAIN
	A.D.A.	AMERICANS WITH DISABILITIES ACT
	FCO	FLOOR CLEAN-OUT
	WCO	WALL CLEAN-OUT
	N.T.S.	NOT TO SCALE
	CGO	GRADE CLEAN-OUT
	SOV	SHUT-OFF VALVE
	GC	GAS COCK
	POC	POINT OF CONNECTION
SD	SD	STORM DRAIN
	ABV	ABOVE
	BEL	BELOW
	DN	DOWN
	CLG	CEILING
	FLR	FLOOR
	VTR	VENT THRU ROOF
	CONT	CONTINUE
	AP	ACCESS PANEL
	U	UNION
	HC	ACCESSIBLE
		REDUCER IN PIPE
MPG	MPG	MEDIUM ORESSURE GAS (NATURAL)
	P & T	PRESSURE & TEMPERATURE RELIEF VALVE
		RISER
	VTR	VENT THRU ROOF
	CFH	CUBIC FEET PER HOUR
	PRV	PRESSURE REGULATING VALVE
	GPM	GALLONS PER MINUTE
	T	THERMOMETER
	AS	AQUASTAT
		PIPE DOWN
		PIPE UP
	FC	FLEXABLE CONNECTOR, PIPING
	CV	CHECK VALVE
	BV	BALL VALVE
	TYP.	TYPICAL
	MFR.	MANUFACTURER
	N.S.F.	NATIONAL SANITATION FOUNDATION
	B/G	BELOW GRADE
	WHA	WATER HAMMER ARRESTOR
	(E)	EXISTING

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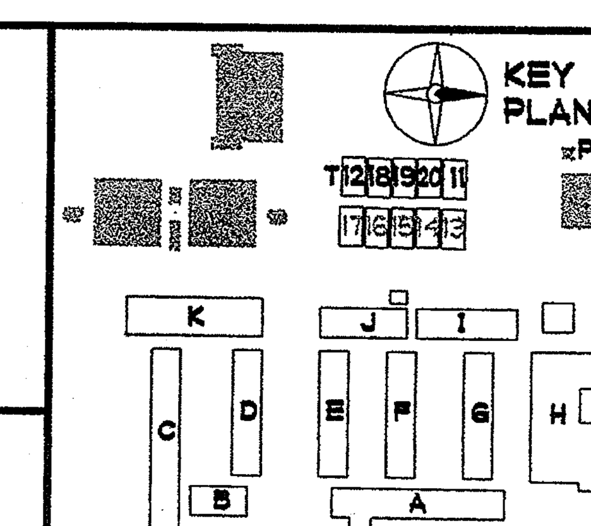

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SHEET TITLE
PLUMBING
LEGEND & NOTES

P-1.1

FIXTURE DATA AND WATER CALCULATION BUILDING "L"

DESCRIPTION	HOT AND COLD WATER				SEWER		
	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS CW	TOTAL FIXTURE UNITS HW	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS
WATER CLOSET (FLUSH VALVE)	3	5	15		3	4	12
LAVATORY	3	1	3	2.25	3	1	3
SINK	16	2	32	24	16	2	32
SHOWER STALL	1	2	2	1.5	1		
CLOTHESWASHER	1	4	4	3	1	2	2
SHOWER DRAIN	1	2			1	2	2
FLOOR SINK	8				8	2	16
FLOOR DRAIN (EMER)	4				4		
TOTAL			56	31			32

MAIN DOMESTIC WATER SUPPLY SIZING:
BASED ON CPC 2001 EDITION, CHART A-2, A-3, & A-4 (TYPE-L)

WATER SUPPLY SIZING:
TOTAL FIXTURE UNITS · · · · · 56 GPM : · · · · 54
OTHERS: · · · · 0
TOTAL : 54

WATER PRESSURE :
PER JEFF FRIEND OF CITY OF OCEANSIDE WATER DISCTRICT TEL. NO 1-760-435-5901, JULY 28 2004. · · · · · 45 PSI

DESIGN WATER PRESSURE @ MAIN PIPE. BOOSTER PUMP · · · · · 60 PSI

LENGTH OF DOMESTIC WATER SYSTEM : FROM WATER METER TO BUILDING L · · · · · 809

PRV REQUIRED : · · · · · YES

PRESSURE INSIDE BLDG. : · · · · · 60 PSI

LOSSES:

WATER METER · · · · · 7 PSI

STATIC HEIGHT (15 FEET X .43) : · · · · · 7 PSI

RESIDUAL PRESSURE : · · · · · 30 PSI

TOTAL LOSSES : · · · · · 44 PSI

ALLOWABLE FRICTION LOSS PER 100': · · · · · 15 PSI

$\frac{16 \times 100}{809} = 2$ PSI

VELOCITY NOT TO EXCEED 8 FT/SEC

DCW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 8 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	1.8	0	0
3/4"	4	4	0
1"	9	12	0
1-1/4"	18	26	0
1-1/2"	25	42	8
2"	50	127	48
2-1/2"	90	326	195

DHW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 5 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	3	3	0
3/4"	5	6	0
1"	8	10	0

FIXTURE DATA AND WATER CALCULATION BUILDING "N"

DESCRIPTION	HOT AND COLD WATER				SEWER		
	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS CW	TOTAL FIXTURE UNITS HW	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS
WATER CLOSET (FLUSH VALVE)	5	5	25		5	4	20
LAVATORY	14	1	14	11	14	1	14
SINK	2	2	4	3	2	2	4
SHOWER	6	2	12	9	6		
MOP SINK	1	3	3	2.25	1		
SHOWER DRAIN	2	2			2	2	4
FLOOR DRAIN (EMERGENCY)	4				4		
TOTAL			58	26			42

MAIN DOMESTIC WATER SUPPLY SIZING:
BASED ON CPC 2001 EDITION, CHART A-2, A-3, & A-4 (TYPE-L)

WATER SUPPLY SIZING:
TOTAL FIXTURE UNITS · · · · · 58 GPM : · · · · 55
OTHERS: · · · · 0
TOTAL : 55

WATER PRESSURE :
PER JEFF FRIEND OF CITY OF OCEANSIDE WATER DISCTRICT TEL. NO 1-760-435-5901, JULY 28 2004. · · · · · 45 PSI

DESIGN WATER PRESSURE @ MAIN PIPE. BOOSTER PUMP · · · · · 60 PSI

LENGTH OF DOMESTIC WATER SYSTEM : FROM WATER METER TO BUILDING N · · · · · 780

PRV REQUIRED : · · · · · YES

PRESSURE INSIDE BLDG. : · · · · · 60 PSI

LOSSES:

WATER METER · · · · · 7 PSI

STATIC HEIGHT (15 FEET X .43) : · · · · · 7 PSI

RESIDUAL PRESSURE : · · · · · 30 PSI

TOTAL LOSSES : · · · · · 44 PSI

ALLOWABLE FRICTION LOSS PER 100': · · · · · 15 PSI

$\frac{16 \times 100}{780} = 2$ PSI

VELOCITY NOT TO EXCEED 8 FT/SEC

DCW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 8 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	1.8	0	0
3/4"	4	4	0
1"	9	12	0
1-1/4"	18	26	0
1-1/2"	25	42	8
2"	50	127	48
2-1/2"	90	326	195

DHW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 5 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	3	3	0
3/4"	5	6	0
1"	8	10	0

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	MIN. PIPE SIZE CW	HW	V	S	DESCRIPTION
WC-1	WATER CLOSET (FLOOR MTD.)	1-1/2"	-	2"	4"	VITREOUS CHINA, LOW COMSUMPTION 1.6 GPF, 15" HIGH FLUSH VALVE
WC-1A	WATER CLOSET ACCESSIBLE (FLOOR MTD.)	1-1/2"	-	2"	4"	VITREOUS CHINA, LOW COMSUMPTION 1.6 GPF, 17"HIGH FLUSH VALVE
UR-1	URINALS (WALL MTD.)	1"	-	2"	2"	VITREOUS CHINA, LOW COMSUMPTION 1.0 GPF
UR-1A	URINALS ACCESSIBLE (WALL MTD.)	1"	-	2"	2"	VITREOUS CHINA, LOW COMSUMPTION 1.0 GPF
LV-1A	LAVATORY (ACCESSIBLE) (WALL MTD.)	3/4"	-	2"	2"	COLD WATER ONLY VITREOUS CHINA, FRONT OVERFLOW, 4" ON CENTER
LV-2A	LAVATORY (ACCESSIBLE) (WALL MTD.)	3/4"	3/4"	2"	2"	VITREOUS CHINA, FRONT OVERFLOW, 4" ON CENTER
SK-1A	CLASSROOM SINK COUNTER MTD (ACCESSIBLE)	3/4"	3/4"	2"	2"	SINGLE BOWL 18 GAUGE TYPE 304, 18-8 STAINLESS STEEL SELF RIMMING SINGLE BOWL WITH 3 HOLES, COLD AND HOT WATER
SK-2A	CLASSROOM SINK COUNTER MTD (ACCESSIBLE)	3/4"	-	2"	2"	SINGLE BOWL 18 GAUGE TYPE 304, 18-8 STAINLESS STEEL SELF RIMMING SINGLE BOWL WITH SINGLE HOLE. COLD WATER ONLY
SHR-1	SHOWER 3-PERSON UNIT WALL MOUNT	3/4"	3/4"	2"	2"	STAINLESS STEEL COVERING 18 GAUGE
SHR-1A	SHOWER ACCESSIBLE	3/4"	3/4"	-	-	WALL/HAND SHOWER WITH FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTIONAND FLANGE, 30" SLIDE BAR FOR HAND SHOWER MOUNTING.
SHD-1	SHOWER DRAIN	-	-	2"	2"	DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLAR. STRAINER: STANILESS STEEL
DF-1A	DRINKING FOUNTAIN ACCESSIBLE	3/4"	-	2"	2"	DUAL LEVEL, STAINLESS STEEL
FD-1	FLOOR DRAIN	-	-	2"	2"	DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLAR. STRAINER: STANILESS STEEL
RD-1	ROOF DRAIN	-	-	-	SEE FLOOR PLAN	DURA-COATED CAST IRON BODY
OD-1	OVERFLOW DRAIN	-	-	-	SEE FLOOR PLAN	DURA-COATED CAST IRON BODY
HB-1	HOSE BIBB	3/4"	-	-	-	STAINLESS STEEL BOX AND HINGED COVER WITH OPERATING KEY LOCK AND "WATER" STAMPED ON COVER.
MS-1	MOP SINK	3/4"	3/4"	2"	3"	FLOOR MOUNT
FS-1	FLOOR SINK	-	-	2"	2"	1/2 GRATE (NICKEL BRONZE) 12X12 TOP

FIXTURE DATA AND WATER CALCULATION BUILDING "P"

DESCRIPTION	HOT AND COLD WATER				SEWER		
	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS CW	TOTAL FIXTURE UNITS HW	NO. OF FIXTURES	F.U. PER FIXTURE	TOTAL FIXTURE UNITS
WATER CLOSET (FLUSH VALVE)	1	5	5		1	4	4
LAVATORY	1	1	1	.75	1	1	1
FLOOR DRAIN (EMER)	1				1		
TOTAL			6	.75			5

MAIN DOMESTIC WATER SUPPLY SIZING:
BASED ON CPC 2001 EDITION, CHART A-2, A-3, & A-4 (TYPE-L)

WATER SUPPLY SIZING:
TOTAL FIXTURE UNITS · · · · · 6 GPM : · · · · 23
OTHERS: · · · · 0
TOTAL : 23

DESIGN WATER PRESSURE @ MAIN PIPE. BOOSTER PUMP · · · · · 60 PSI

LENGTH OF DOMESTIC WATER SYSTEM : FROM WATER METER TO BUILDING P · · · · · 938

PRV REQUIRED : · · · · · YES

PRESSURE INSIDE BLDG. : · · · · · 60 PSI

LOSSES:

WATER METER · · · · · 7 PSI

STATIC HEIGHT (15 FEET X .43) : · · · · · 7 PSI

RESIDUAL PRESSURE : · · · · · 30 PSI

TOTAL LOSSES : · · · · · 44 PSI

ALLOWABLE FRICTION LOSS PER 100': · · · · · 15 PSI

$\frac{16 \times 100}{50} = 32$ PSI

VELOCITY NOT TO EXCEED 8 FT/SEC

DCW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 8 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	3	3	0
3/4"	8	10	0
1"	18	26	0
1-1/4"	30	54	13
1-1/2"	40	86	28
2"	70	225	108
2-1/2"	105	406	270

DHW PIPE SIZING SCHEDULE
MAXIMUM VELOCITY = 5 FPS.

PIPE SIZE	GPM	FIXTURE UNITS FLUSH TANK	FIXTURE UNITS FLUSH VALVE
1/2"	3	3	0
3/4"	5	6	0
1"	8	10	0

CIRCULATION PUMP SCHEDULE

SYMBOL	LOCATION	MANUFACTURER	DESCRIPTION
CP-1	WH-1	"TACO"	PROVIDE CIRCULATING PUMP, "TACO" MODEL 008 PNP CIRCULATION PUMP WITH SIX FOOT LINE CORD, 24 HOUR ANALOG TIMER AND TEMPERATURE AQUASTAT. 8 GPM, 10 FT HEAD, 0.43 AMP, 115V, 1PH

WATER HEATER SCHEDULE FOR BLDG "N"

TAG	MANUFACTURER & MODEL NO.	LOCATION	STORAGE CAPACITY (GAL.)	GAS INPUT (BTUH)	REMARKS	OPER. WEIGHT (LBS)
WH-1 WH-2	A.O. SMITH BTH-120 LOW NOX	WATER HEATER JANITORS ROOM	60	125,000	(1)(2)(3)(4)(5)(6)(7)(8)	850

(1) APPROVED FOR USE IN CALIFORNIA LOW NOX TYPE.
(2) SEE WATER HEATER DETAIL ON 2/P3.1
(3) FULLY AUTOMATIC CONTROLS WITH SAFETY SHUTOFF.
(4) DIRECT VENT WATER HEATER. 3" PVC PIPE FOR VENTING AND AIR INTAKE. VERIFY PIPE SIZE WITH MANUFACTURER PRIOR TO START OF WORK.
(5) PROVIDE "POWERS" MIXING VALVE 1432-PC-E-M-O HI-LO SET AT 110°F.
(6) PROVIDE EXPANSION TANK FLEXCON MODEL WH-120, 32 GALLONS
(7) PROVIDE A.O. SMITH TWO UNIT MANIFOLD KIT (PART NUMBER 78692)
(8) PROVIDE ASME RATED PTR VALVE

EQUIPMENT SCHEDULE

SYMBOL	EQUIPMENT	LOCATION	MANUF.	MODEL	REMARKS
TP 1	TRAP PRIMER	WALL	MIFAB	MI-500	"MIFAB" MI-500 WITH MI-DU 4 WAY DISTRIBUTION UNIT (IF APPLICABLE). SEE DETAIL 3/P3.1
WHA 1	WATER HAMMER ARRESTOR	VARIOUS (ABV CLG)	PPP, INC	"B"	PROVIDE WITH APPROVED ACCESS PANEL IF LOCATED IN HARDLID CEILING AREA. LOCATE AND INSTALL AS PER PDI-WH-201-C

ELECTRIC WATER HEATER SCHEDULE FOR BLDG "L"

TAG	MANUFACTURER	STORAGE CAPACITY (GALLONS)	ELECTRICAL KW	VOLT	PH.	REMARKS
WH-3	"A.O. SMITH" DEL-20	20	6	208	1	(1)(2)(3)(4)(5)

(1) UL LISTED
(2) PROVIDE MOUNTING BRACKETS
(3) PROVIDE MIXING VALVE "POWER" MODEL E490-1
(4) SINGLE ELEMENT
(5) FOR DETAILS SEE 8/P3.1

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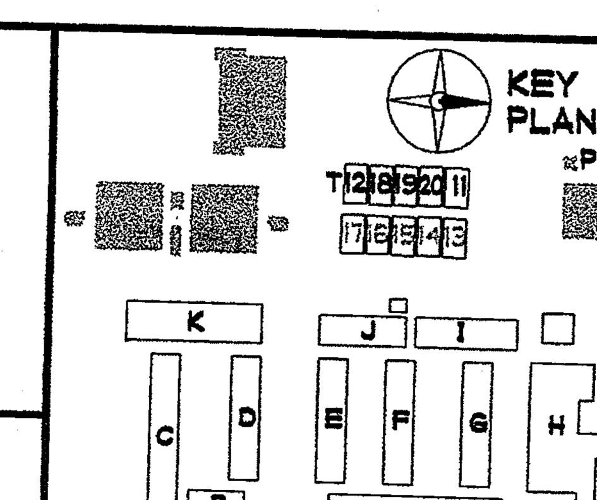

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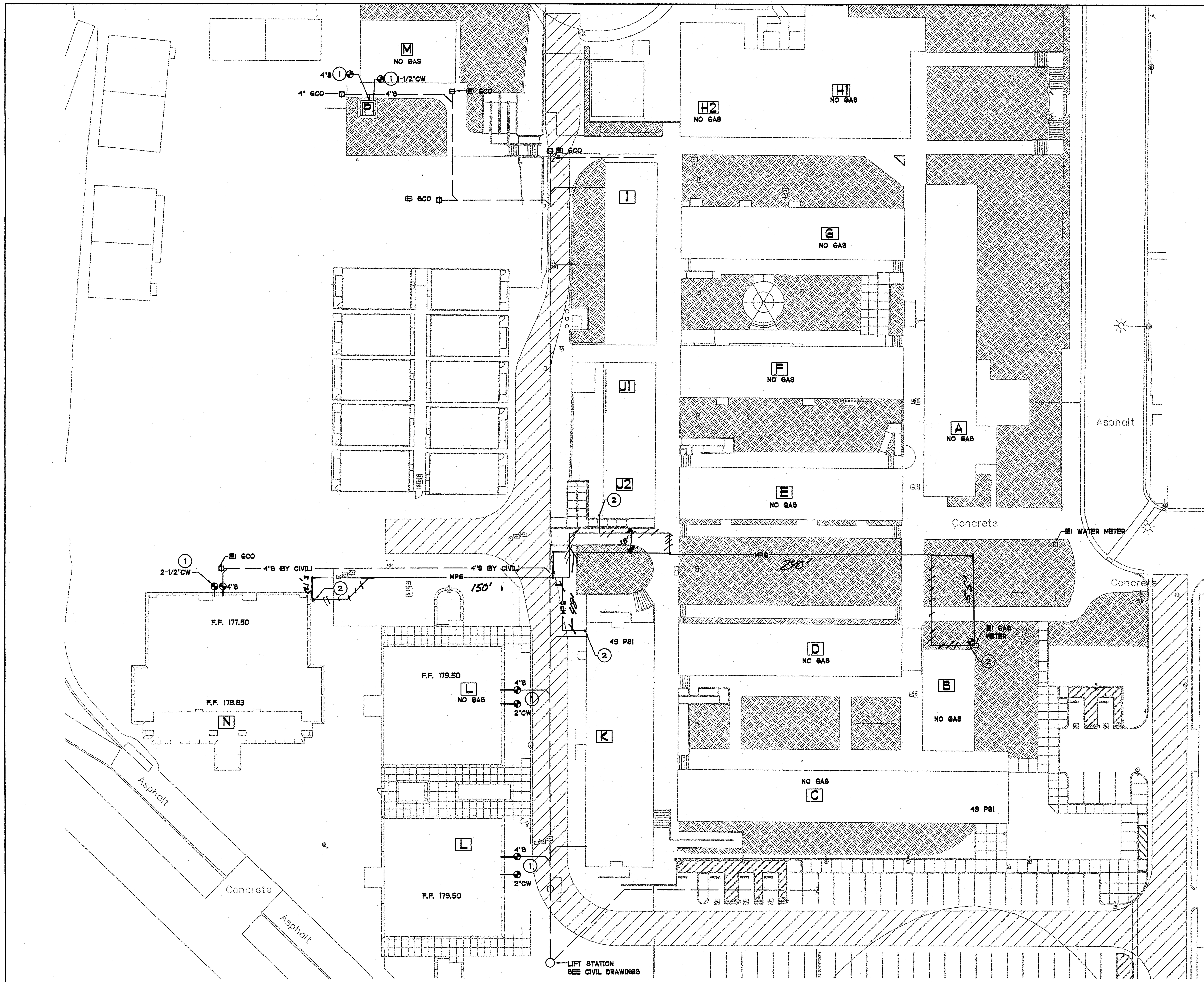
SHEET TITLE
PLUMBING LEGEND & NOTES

P-1.2

KEY NOTES

1. SEE CIVIL DRAWINGS FOR CONTINUATION
2. PROPOSED LOCATION OF GAS PRESSURE REGULATOR WITH SHUT-OFF VALVE. FIELD VERIFY EXACT LOCATION AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.
3. VERIFY ANTICIPATED FUTURE LOAD WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK. IN CASE OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS INFORMED ARCHITECT IN WRITING BEFORE PROCEDING FURTHER.



PLUMBING SITE PLAN

SCALE: 1"=30'-0"

VERIFY GAS LOAD WITH EQUIPMENT VENDOR PRIOR TO START OF WORK. INFORM ARCHITECT IN WRITING IN CASE OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS BEFORE PROCEEDING FURTHER.

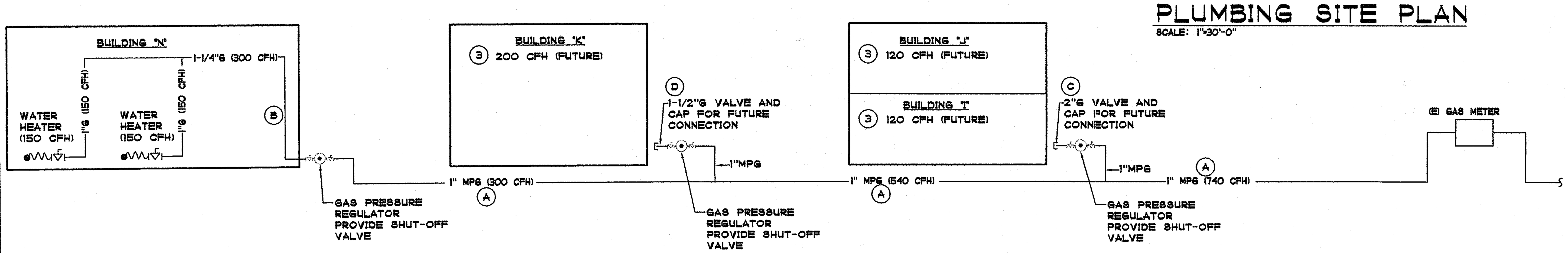
ALL GAS APPLIANCES SHALL BE CONNECTED BY MEANS OF GAS COCKS AND FLEXIBLE CONNECTORS. VERIFY ALL GAS LOADS WITH MANUFACTURER PRIOR TO START OF WORK. INFORM ARCHITECT AND ENGINEER IN WRITING IN CASE OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS

(A) TOTAL DEVELOPED LENGTH 786 FEET
GAS SIZE PIPING IS BASED ON CHAPTER 12 TABLE 12-6 COLUMN 850 FEET
TOTAL LOAD = 740 CFH
GAS PRESSURE OF 5 PSI. FIELD VERIFY AVAILABLE PRESSURE PRIOR TO START OF WORK.

(B) TOTAL DEVELOPED LENGTH 85 FEET
GAS SIZE PIPING IS BASED ON CHAPTER 12 TABLE 12-3 COLUMN 100 FEET
TOTAL LOAD = 300 CFH

(C) TOTAL DEVELOPED LENGTH 322 FEET
GAS SIZE PIPING IS BASED ON CHAPTER 12 TABLE 12-3 COLUMN 400 FEET
TOTAL LOAD = 240 CFH

(D) TOTAL DEVELOPED LENGTH 188 FEET
GAS SIZE PIPING IS BASED ON CHAPTER 12 TABLE 12-3 COLUMN 250 FEET
TOTAL LOAD = 200 CFH



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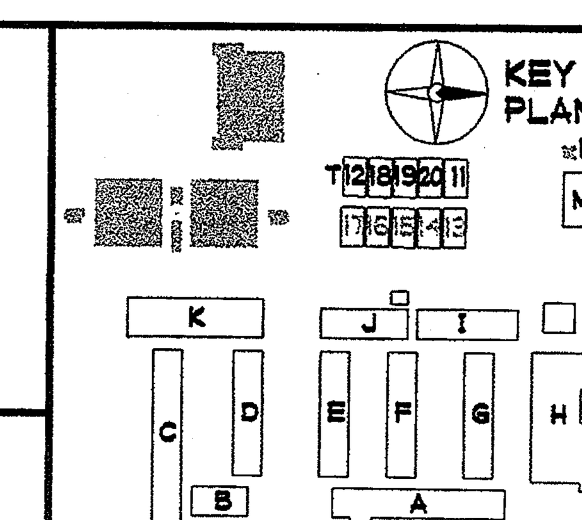

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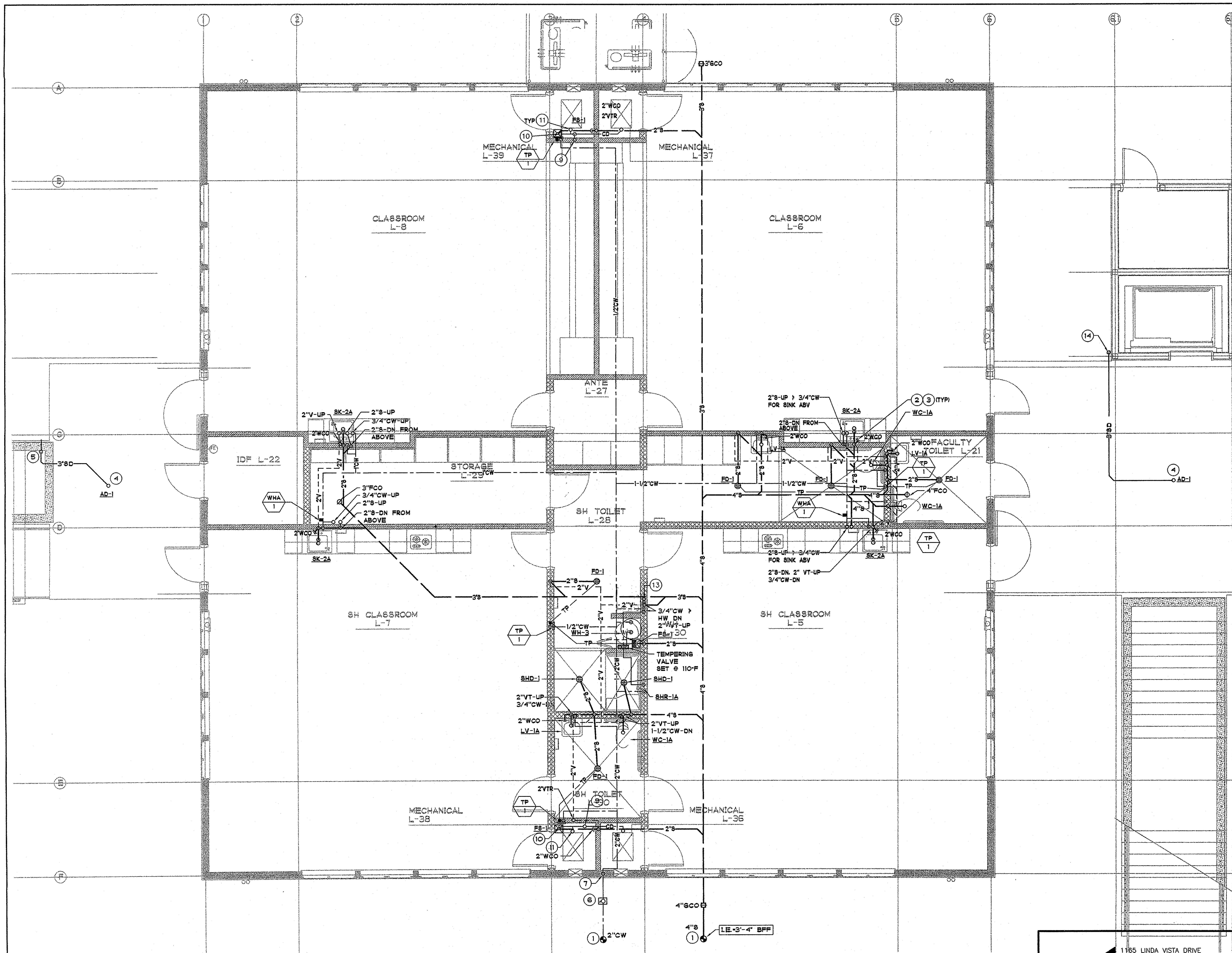
SHEET TITLE
PLUMBING
SITE PLAN

P-1.3



BUILDING L FIRST FLOOR PLAN SOUTH - PLUMBING

1/4" = 1'-0"

KEYNOTES

1. FOR CONTINUATION SEE CIVIL DRAWINGS
2. 2" VENT RISER
3. 2" SEWER UP TO SINK ON 2ND FLOOR
4. 3" STORM DRAIN UP TO AREA DRAIN ON 2ND FLOOR
5. 3" DRAIN DOWN ALONG WALL AND OUT THRU WALL. TERMINATE 6" ABOVE FINISHED GRADE AND SPILL TO GRADE.
6. BUILDING MAIN SHUT-OFF VALVE INSIDE CONCRETE UTILITY BOX MARKED "WATER"
7. 2" COLD WATER PIPING UP INSIDE WALL TO CEILING SPACE AND ROUTE AS INDICATED.
8. 3/4"COLD WATER DOWN AND UP FOR FIRST AND SECOND FLOOR CLASSROOM SINK.
9. 3/4" CONDENSATE DRAIN PIPING FROM ABOVE.
10. 3/4" CONDENSATE DRAIN PIPING SPILL INTO FLOOR SINK
11. 3/4" CONDENSATE DRAIN FROM FAN COIL SEE DETAIL 4/P3.1
12. 3" DRAIN DOWN INSIDE WALL AND OUT THRU WALL. TERMINATE 6" ABOVE FINISHED GRADE AND SPILL TO GRADE.
13. CLOTHESWASHER STANDPIPE. SEE DETAIL 6/P3.1
14. 3" STORM DRAIN TO SPILL INTO DOWNSPOUT. SEE ARCHTECTURAL DRAWINGS.

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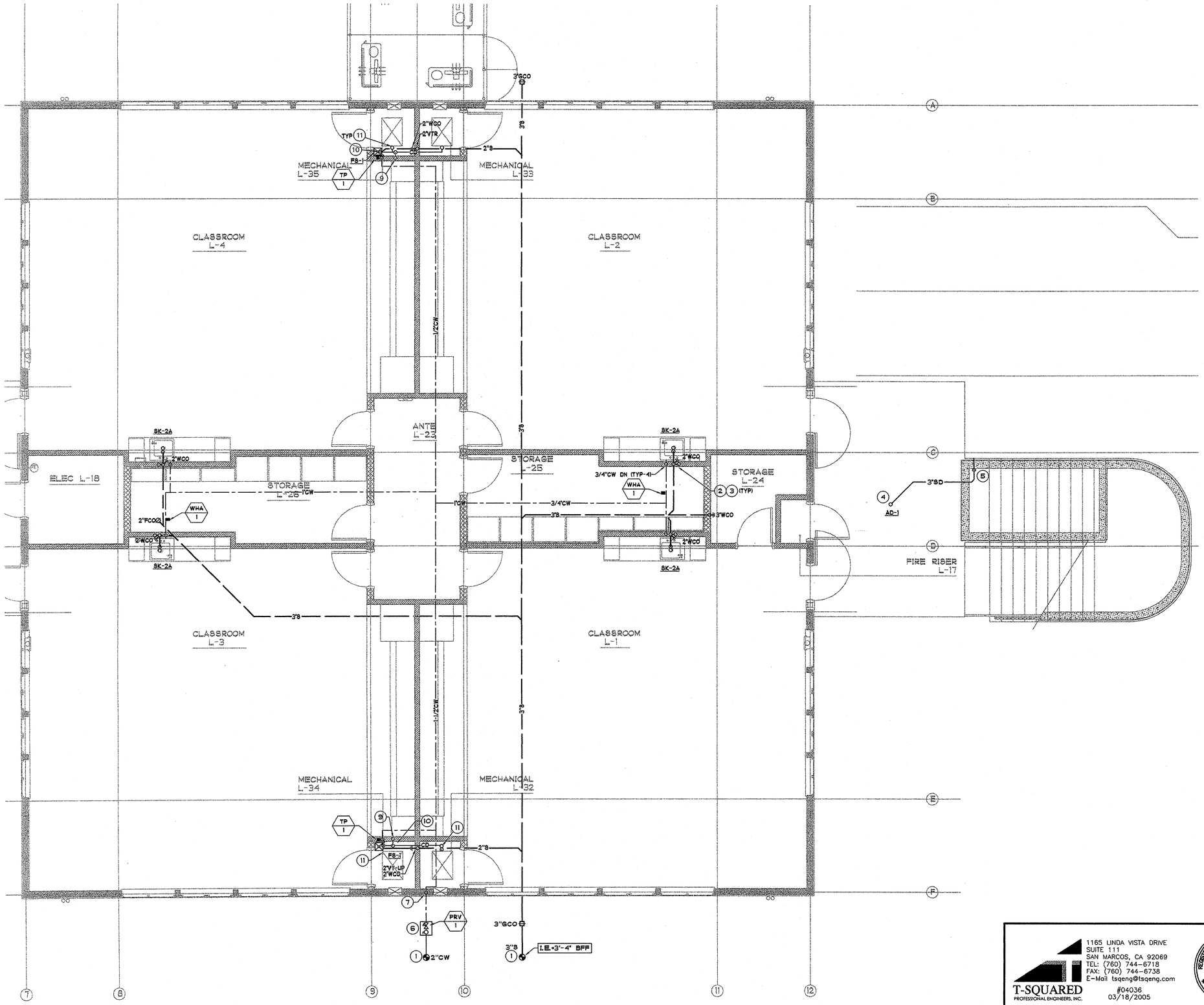
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
PLUMBING
BLDG "L" SOUTH
1ST FLOOR PLAN

P9L-2.1



KEYNOTES

1. FOR CONTINUATION SEE CIVIL DRAWINGS
2. 2" VENT RISER
3. 2" SEWER UP TO SINK ON 2ND FLOOR
4. 3" STORM DRAIN UP TO AREA DRAIN ON 2ND FLOOR
5. 3" DRAIN DOWN ALONG WALL AND OUT THRU WALL TERMINATE 6" ABOVE FINISHED GRADE AND SPILL TO GRADE
6. BUILDING MAIN SHUT-OFF VALVE INSIDE CONCRETE UTILITY BOX MARKED "WATER"
7. 2" COLD WATER PIPING UP INSIDE WALL TO CEILING SPACE AND ROUTE AS INDICATED.
8. 3/4"COLD WATER DOWN AND UP FOR FIRST AND SECOND FLOOR CLASSROOM SINK.
9. 3/4" CONDENSATE DRAIN PIPING FROM ABOVE.
10. 3/4" CONDENSATE DRAIN PIPING SPILL INTO FLOOR SINK
11. 3/4" CONDENSATE DRAIN FROM FAN COIL SEE DETAIL 4/P3.1
12. 3" DRAIN DOWN INSIDE WALL AND OUT THRU WALL TERMINATE 6" ABOVE FINISHED GRADE AND SPILL TO GRADE.

BUILDING L FIRST FLOOR PLAN NORTH - PLUMBING

1/4" = 1'-0"

PLOTTED@03-18-05 @ 10 AM

OUSD NO.
758-000

PROJECT NOS.
025

P. T. N.
73569-9

DATE

REVISIONS

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

space time function cost

GROTH ARCHITECTS

DSA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

4-106494

AC MS FLS SS

DATE MAR 2 8 2005

LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL DATE
STATE OF CALIFORNIA

T-SQUARED
PROFESSIONAL ENGINEERS, INC.
1165 LINDA VISTA DRIVE
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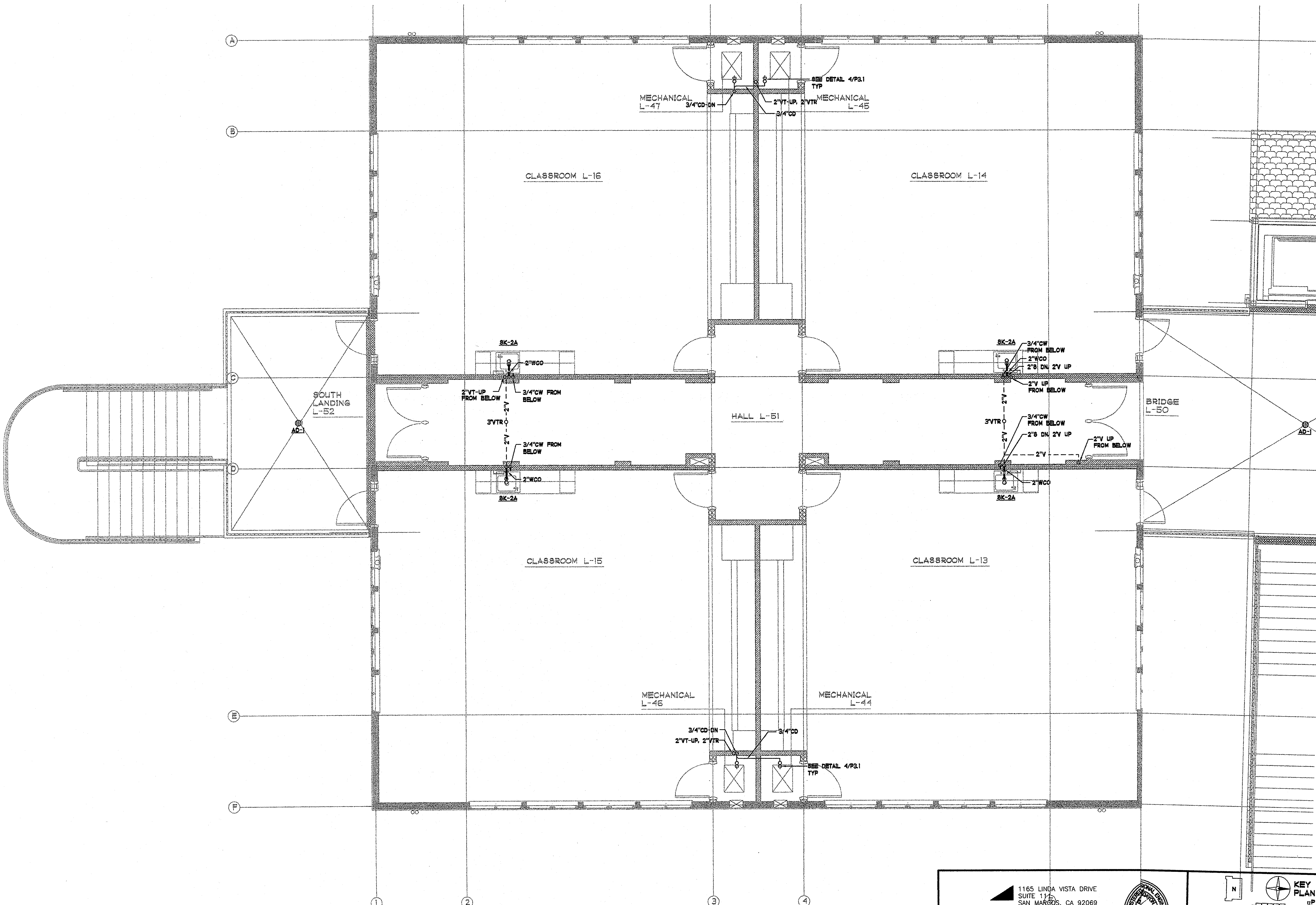
E-Mail tsqeng@tsqeng.com
#04036
03/18/2005

REGISTERED PROFESSIONAL ENGINEER
BRAD TAYLOR
No. 29230
Exp. 3/31/07
MECHANICAL
STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
PLUMBING
BLDG "L" NORTH
1ST FLOOR PLAN

PQL-2.2



BUILDING L SECOND FLOOR PLAN SOUTH - PLUMBING

1/4" = 1'-0"

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03/18/2005

KEY PLAN

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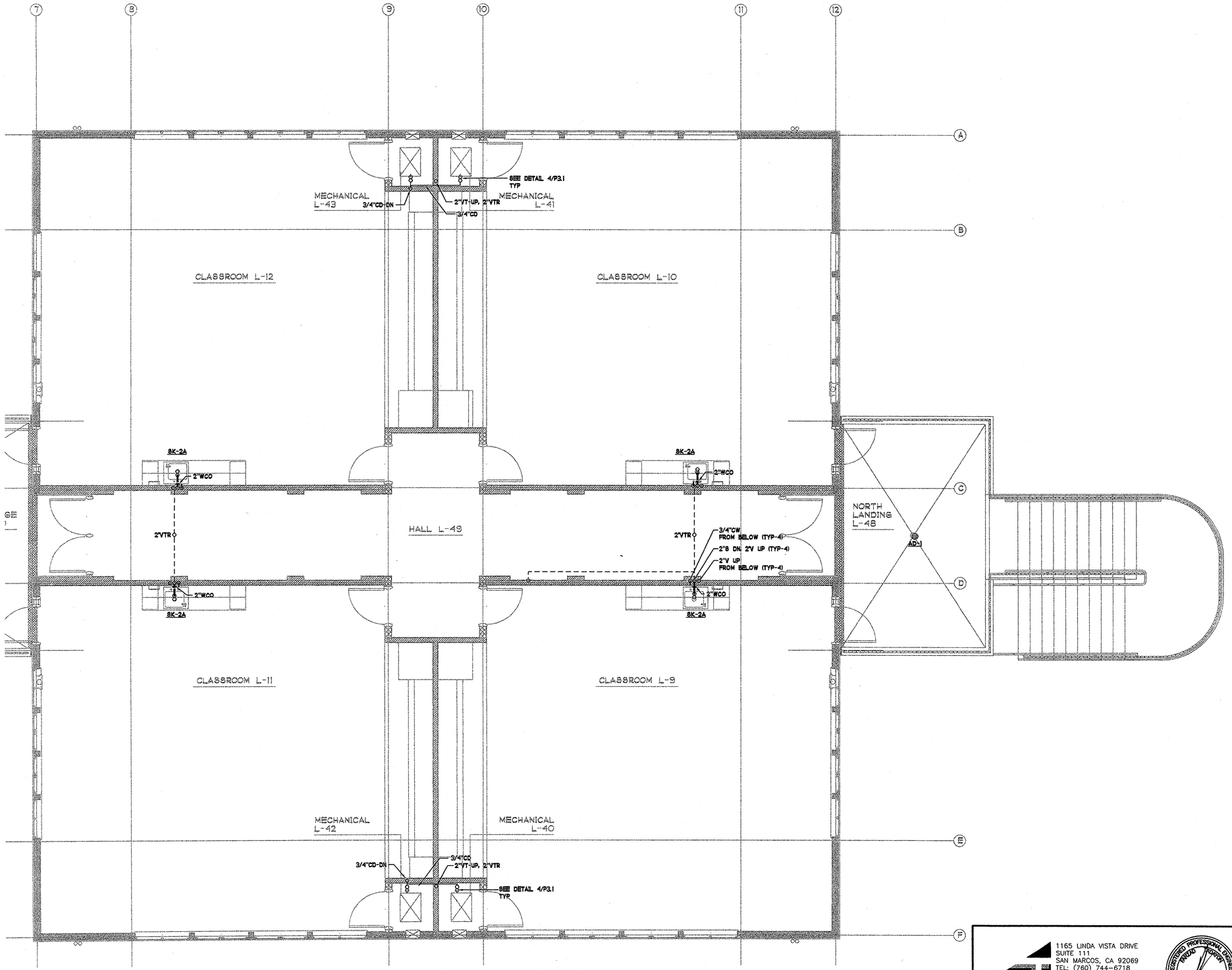
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
PLUMBING
BLDG "L" SOUTH
2ND FLOOR PLAN

PQL-2.3



BUILDING L SECOND FLOOR PLAN NORTH - PLUMBING

1/4" = 1'-0"

PLOTTED 03-18-05 @ 10 AM

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4/30/2007
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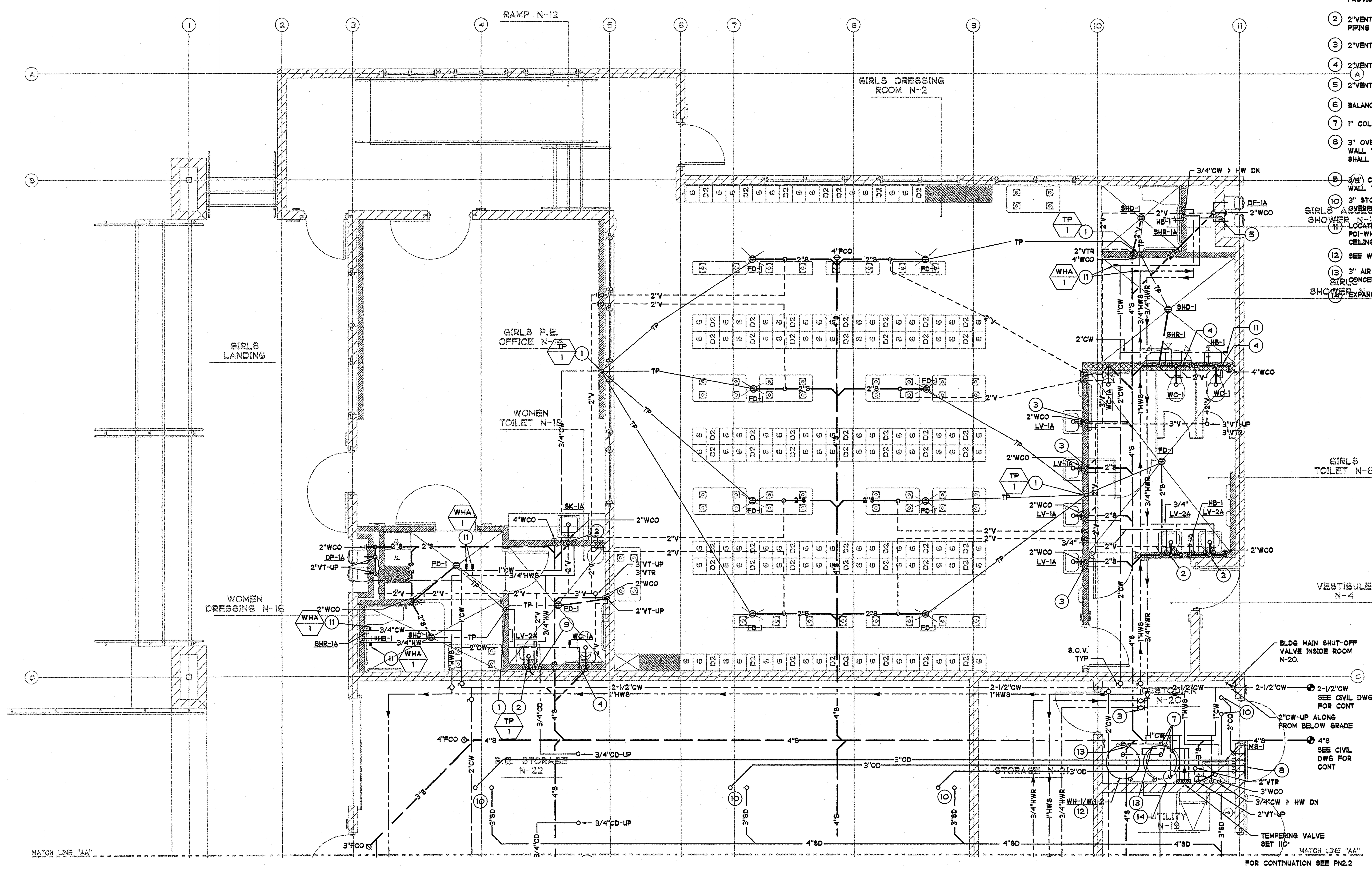
REGISTERED PROFESSIONAL ENGINEER
RAZAD NOORIAN
No. E29230
Exp. 3/31/07
MECHANICAL
STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
PLUMBING
BLDG "L" NORTH
2ND FLOOR PLAN

PQL-2.4



KEY NOTES

1. 1/2 "COLD WATER PIPING DOWN INSIDE WALL TO TRAP PRIMER VALVE "MIFAB" MR-500. ROUTE 1/2" COPPER LINE BELOW SLAB TO FLOOR DRAIN. PROVIDE ACCESS PANEL.
2. 2"VENT PIPING UP, 2" SEWER PIPING DOWN, 3/4" COLD AND HOT WATER PIPING DOWN.
3. 2"VENT PIPING UP, 2" SEWER PIPING DOWN, 3/4" COLD DOWN
4. 2"VENT PIPING UP, 1-1/2"COLD WATER DOWN
5. 2"VENT PIPING UP, 3/4"COLD WATER DOWN
6. BALANCING VALVE
7. 1" COLD WATER AND HOT WATER DOWN WITH SHUT-OFF VALVE
8. 3" OVERFLOW DRAIN DOWN ALONG WALL AND OUT THRU WALL TO SPILL INTO THE DAYLIGHT. BOTTOM OF PIPE SHALL BE 6" ABOVE FINISHED GRADE.
9. 3/4" CONDENSATE DRAIN PIPING DOWN INSIDE WALL AND OUT THRU WALL TO CONNECT TO TAILPIECE OF LAVATORY/HAND SINK
10. 3" STORM DRAIN AND OVERFLOW DRAIN FROM ROOF DRAIN AND OVERFLOW DRAIN ABOVE. SEE PN-2.3
11. LOCATE AND INSTALL WATER HAMMER ARRESTOR PER PDI-WH-201-C. PROVIDE ACCESS PANEL IF ABOVE HARDLID CEILING.
12. SEE WATER HEATER DETAIL #2/P3.1
13. 3" AIR INTAKE AND EXHAUST UP TO CONNECT TO CONCENTRIC VENT. SEE WATER HEATER DETAIL #2/P3.1
14. EXPANSION TANK. SEE WATER HEATER DETAIL #2/P3.1

BUILDING N FLOOR PLAN - PLUMBING

1/4" = 1'-0"

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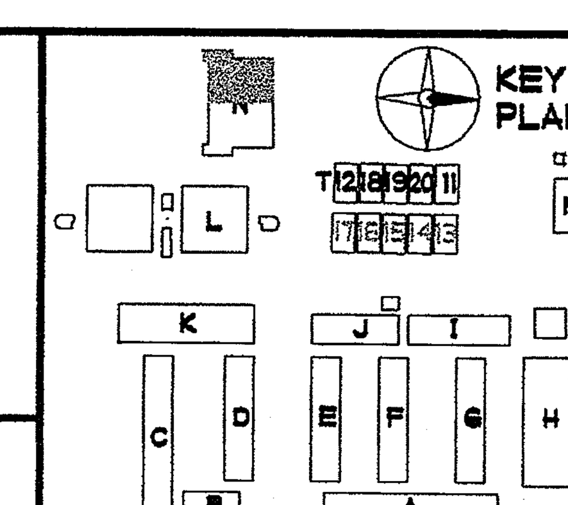

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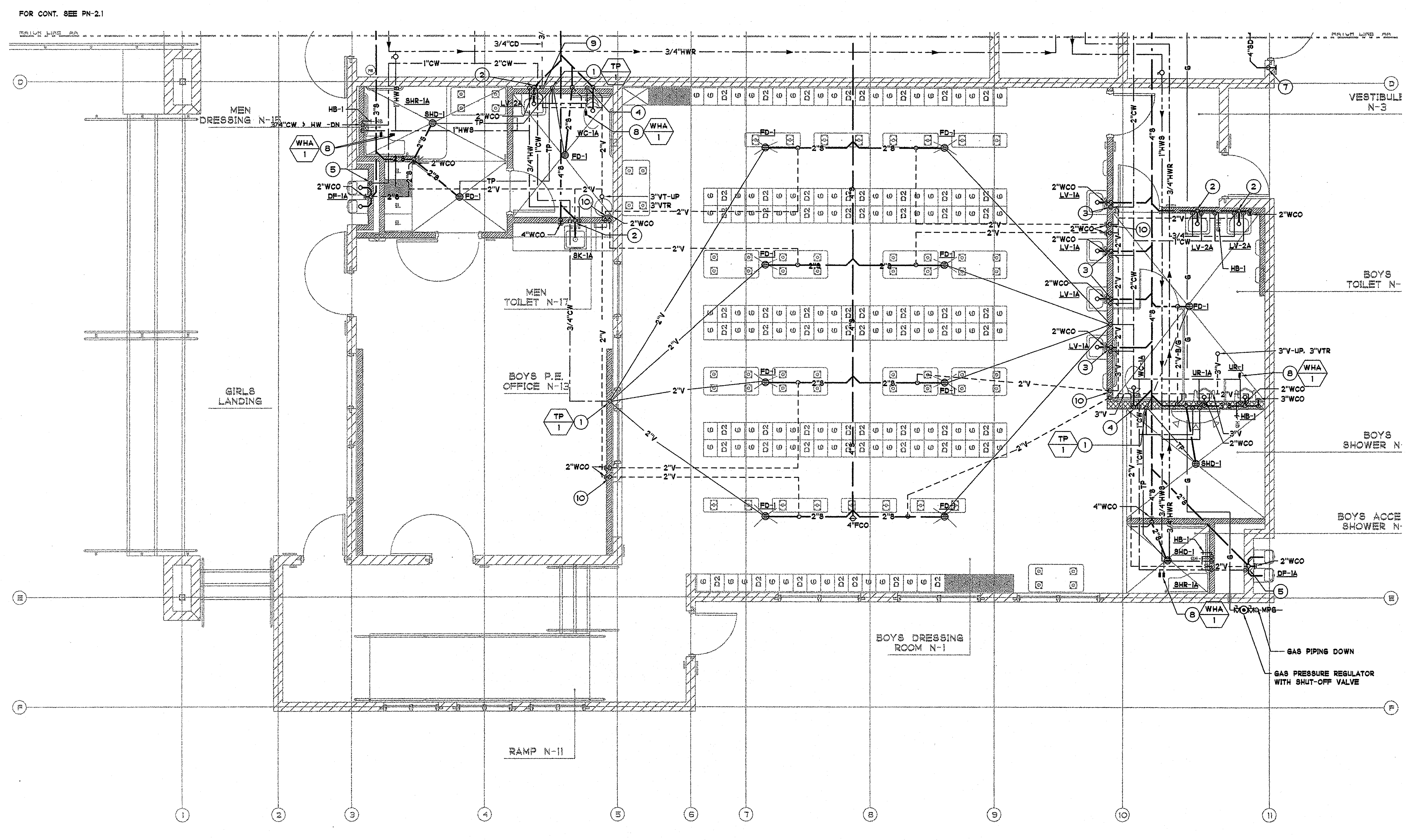
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
BUILDING N
FLOOR PLAN -
PLUMBING

PN-2.1

PLOTTED BY: JOHN DATE: 18 MAR 2005 TIME: 09:11 FILENAME: T:\2004\04036 JEFFERSON MIDDLE SCHOOL\PLBG\04036_PN2122.DWG



KEY NOTES

1. 1/2 "COLD WATER PIPING DOWN INSIDE WALL TO TRAP PRIMER VALVE "MIFAB" MR-500. ROUTE 1/2" COPPER LINE BELOW SLAB TO FLOOR DRAIN. PROVIDE ACCESS PANEL.
2. 2"VENT PIPING UP, 2" SEWER PIPING DOWN, 3/4" COLD AND HOT WATER PIPING DOWN.
3. 2"VENT PIPING UP, 2" SEWER PIPING DOWN, 3/4" COLD DOWN
4. 2"VENT PIPING UP, 1-1/2"COLD WATER DOWN
5. 2"VENT PIPING UP, 3/4"COLD WATER DOWN
6. 3" STORM DRAIN AND OVERFLOW DRAIN FROM ROOF DRAIN AND OVERFLOW DRAIN FROM ABOVE. SEE PN-2.3
7. 4" STORM DRAIN DOWN INSIDE WALL AND OUT THRU WALL TO DAYLIGHT TO SPILL INTO CONCRETE SPLASH BLOCK. BOTTOM OF PIPE SHALL BE 6" ABOVE FINISHED GRADE.
8. LOCATE AND INSTALL WATER HAMMER ARRESTOR PER PDI-WH-201-C. PROVIDE ACCESS PANEL IF ABOVE HARDLID CEILING.
9. 3/4" CONDENSATE DRAIN PIPING DOWN INSIDE WALL AND OUT THRU WALL TO CONNECT TO TAILPIECE OF LAVATORY/HAND SINK
10. 2" VENT PIPING UP INSIDE WALL FROM BELOW GRADE TO CEILING SPACE.

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PROJECT NOS. 025
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LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

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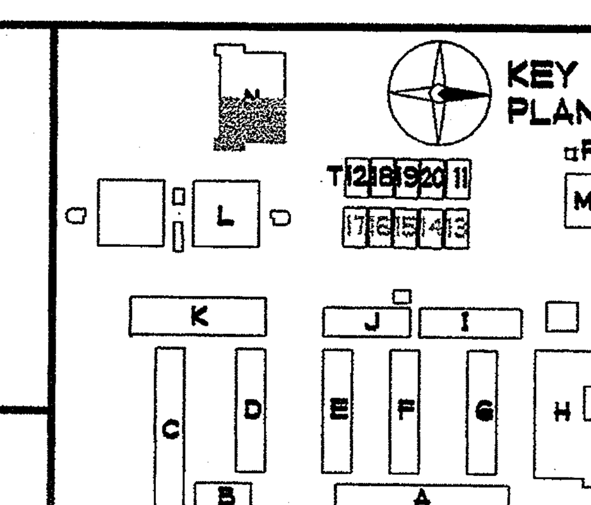
03/18/2005

REGISTERED PROFESSIONAL ENGINEER M29230 3/31/07 MECHANICAL STATE OF CALIFORNIA

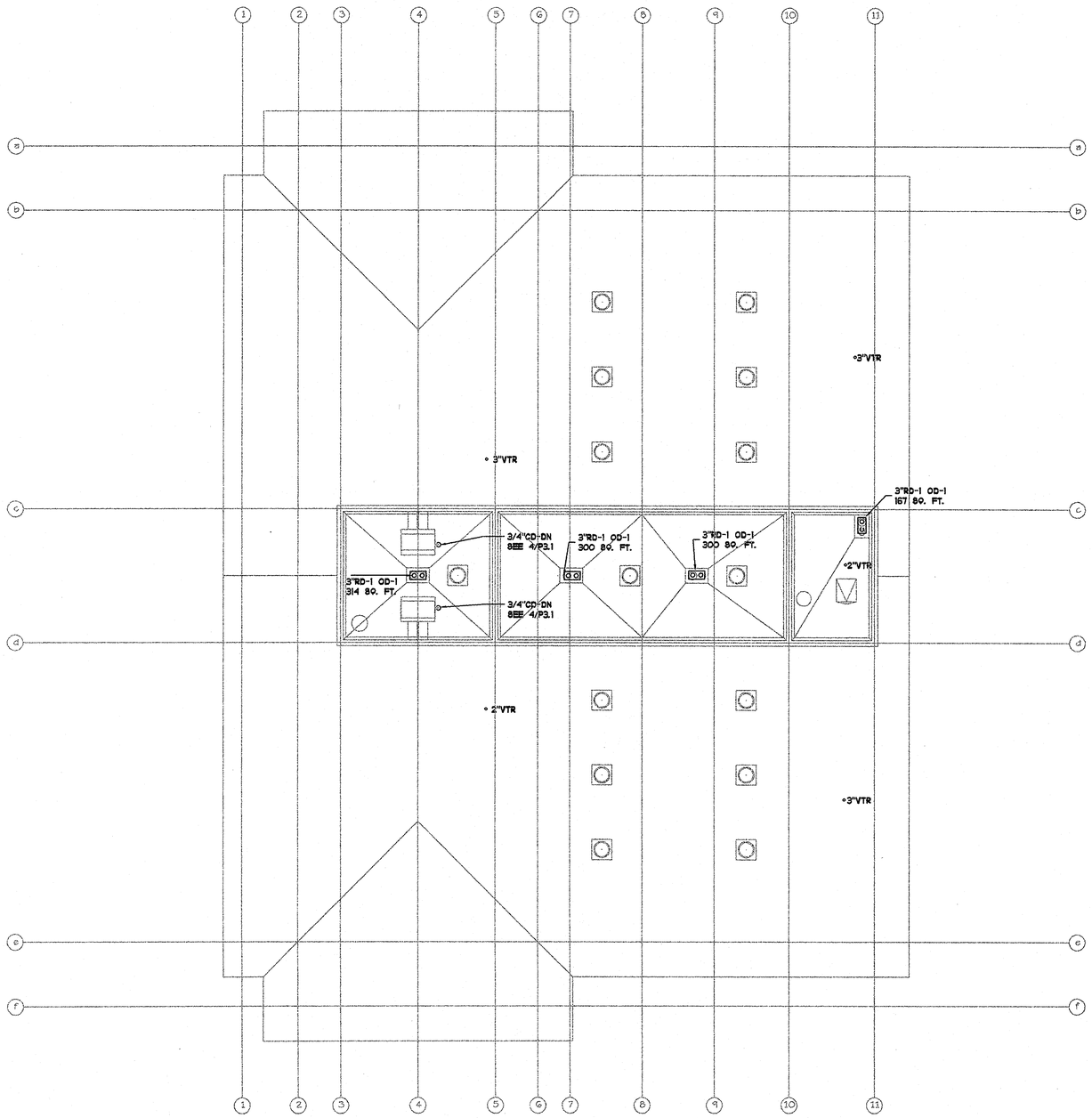


SHEET TITLE
BUILDING N FLOOR PLAN - PLUMBING

PN-2.2

BUILDING N FLOOR PLAN - PLUMBING

1/4" = 1'-0"



BUILDING N ROOF PLAN

1/8" = 1'-0"

PLOTTED03-18-05 @ 10 AM

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function + art

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LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
BUILDING N
FLOOR PLAN -
PLUMBING

PN-2.3

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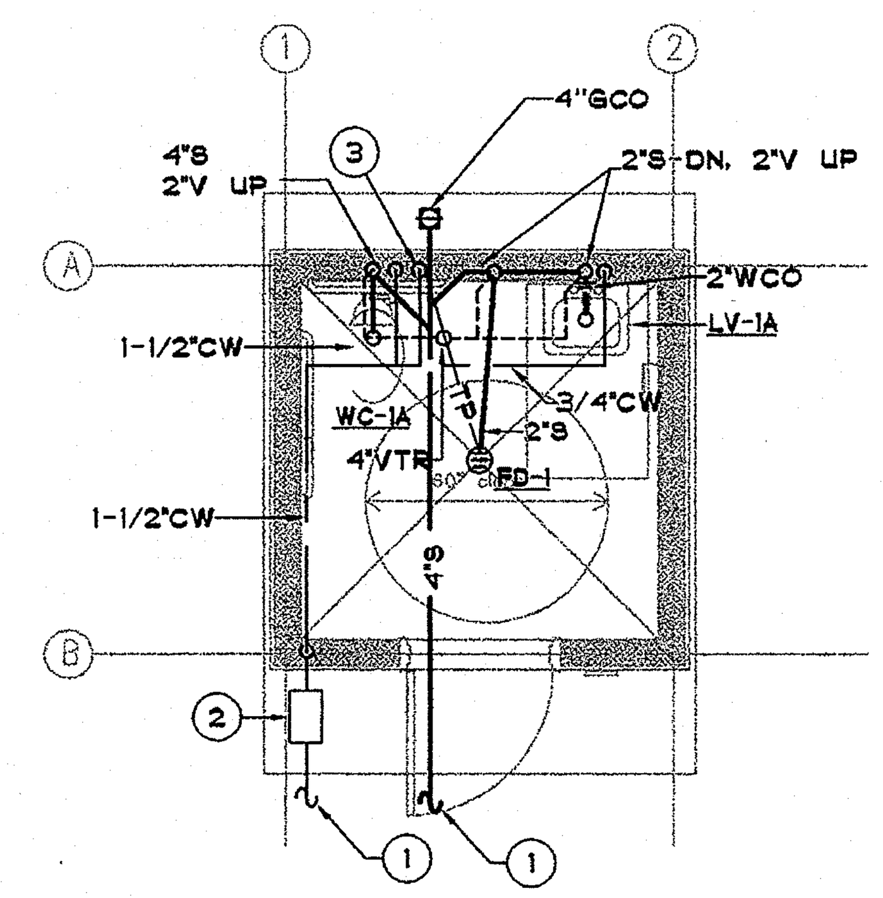
REGISTERED PROFESSIONAL ENGINEER
HAROLD T. MORTON
No. 49020
EXP. 6/30/07
MECHANICAL
STATE OF CALIFORNIA

KEY PLAN

KEYNOTES

1. FOR CONTINUATION OF COLD WATER AND SEWER LINES. SEE PLUMBING DRAWING P1.3 AND CIVIL DRAWINGS.
2. BUILDING MAIN SHUT OFF VALVE INSIDE CONCRETE UTILITY BOX.
3. 1/2" COLD WATER PIPING DOWN INSIDE WALL TO TRAP PRIMER VALVE "MIFAB" MR-500. ROUTE 1/2" COPPER LINE TO FLOOR DRAIN. PROVIDE "MIFAB" UNIVERSAL ACCESS PANEL.



BUILDING P FLOOR PLAN - PLUMBING

1/4" = 1'-0"

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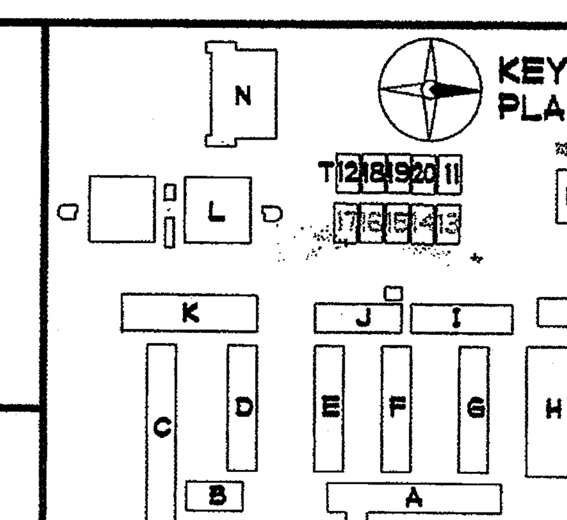
03/18/2005

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA



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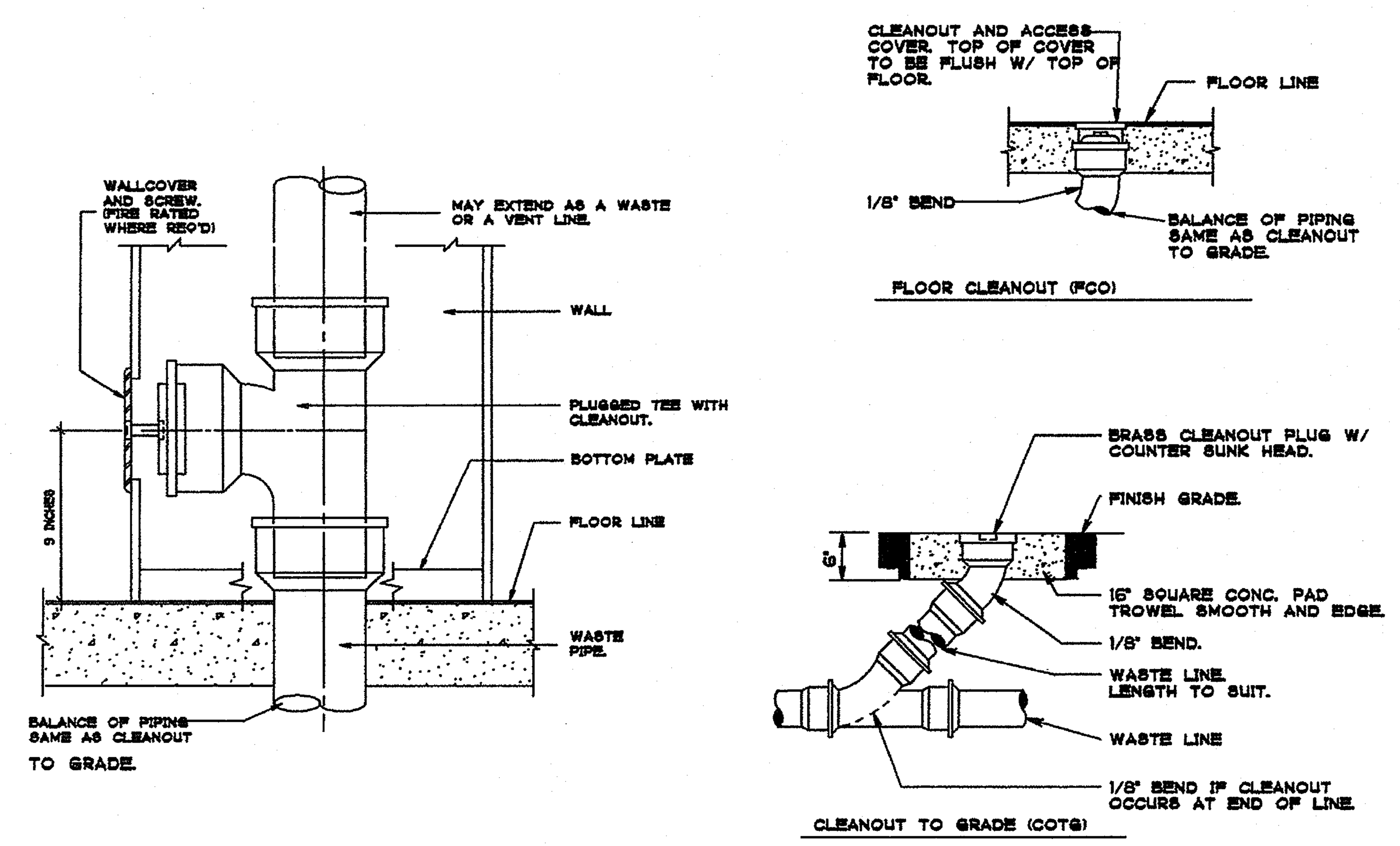
LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE

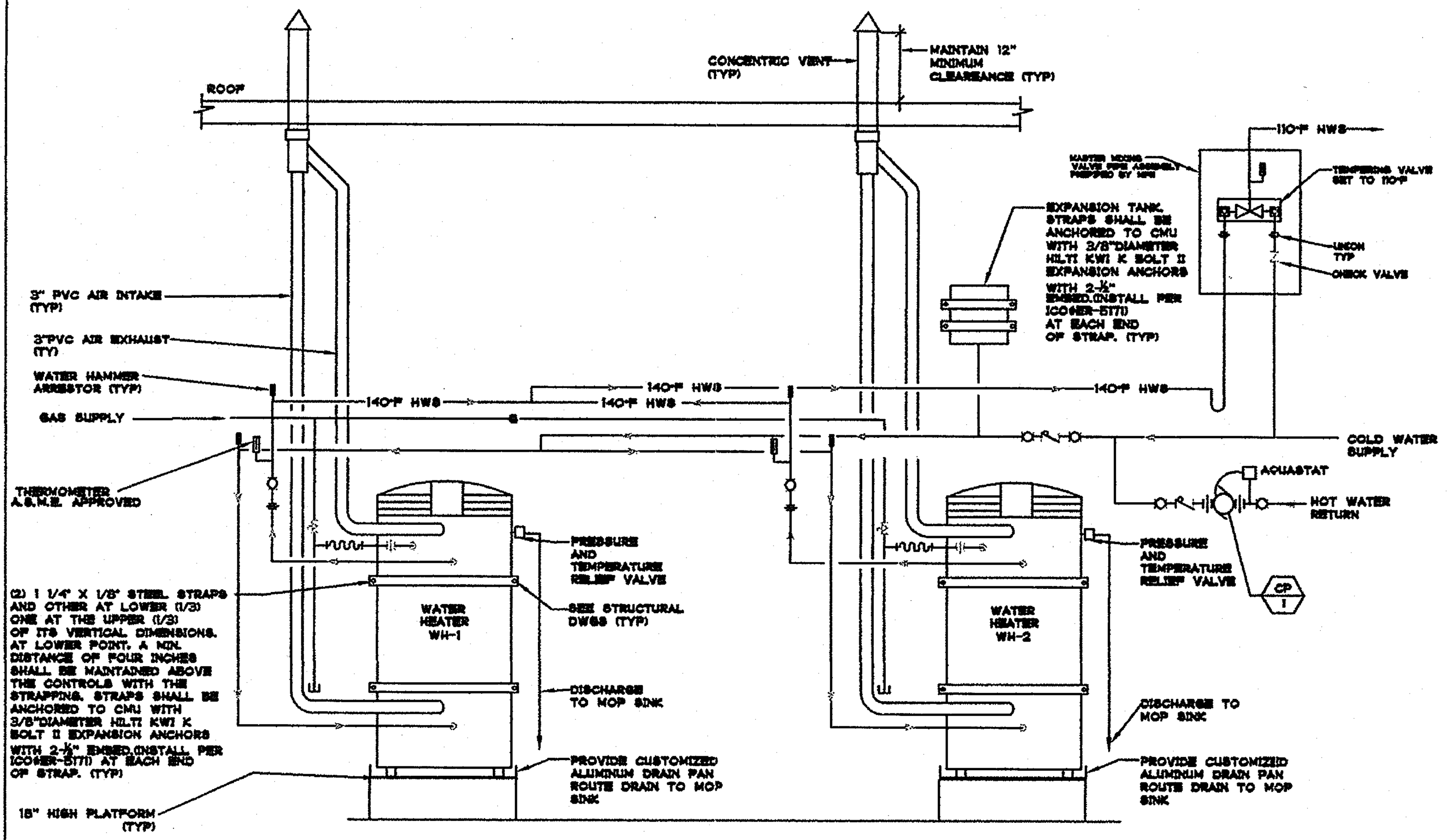
BUILDING P FLOOR PLAN - PLUMBING

PP-2.1



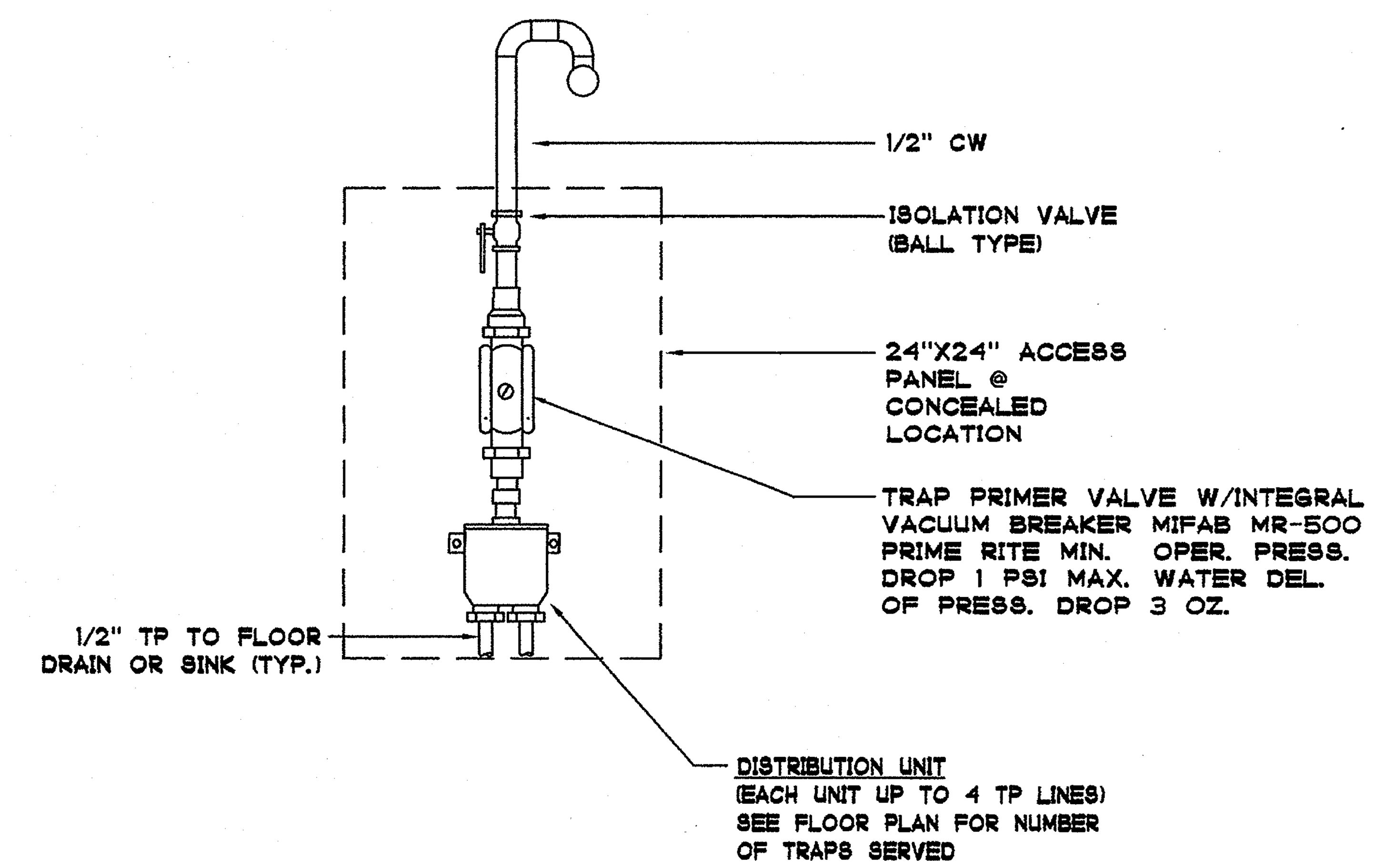
CLEANOUT DETAIL

SCALE NONE | 1



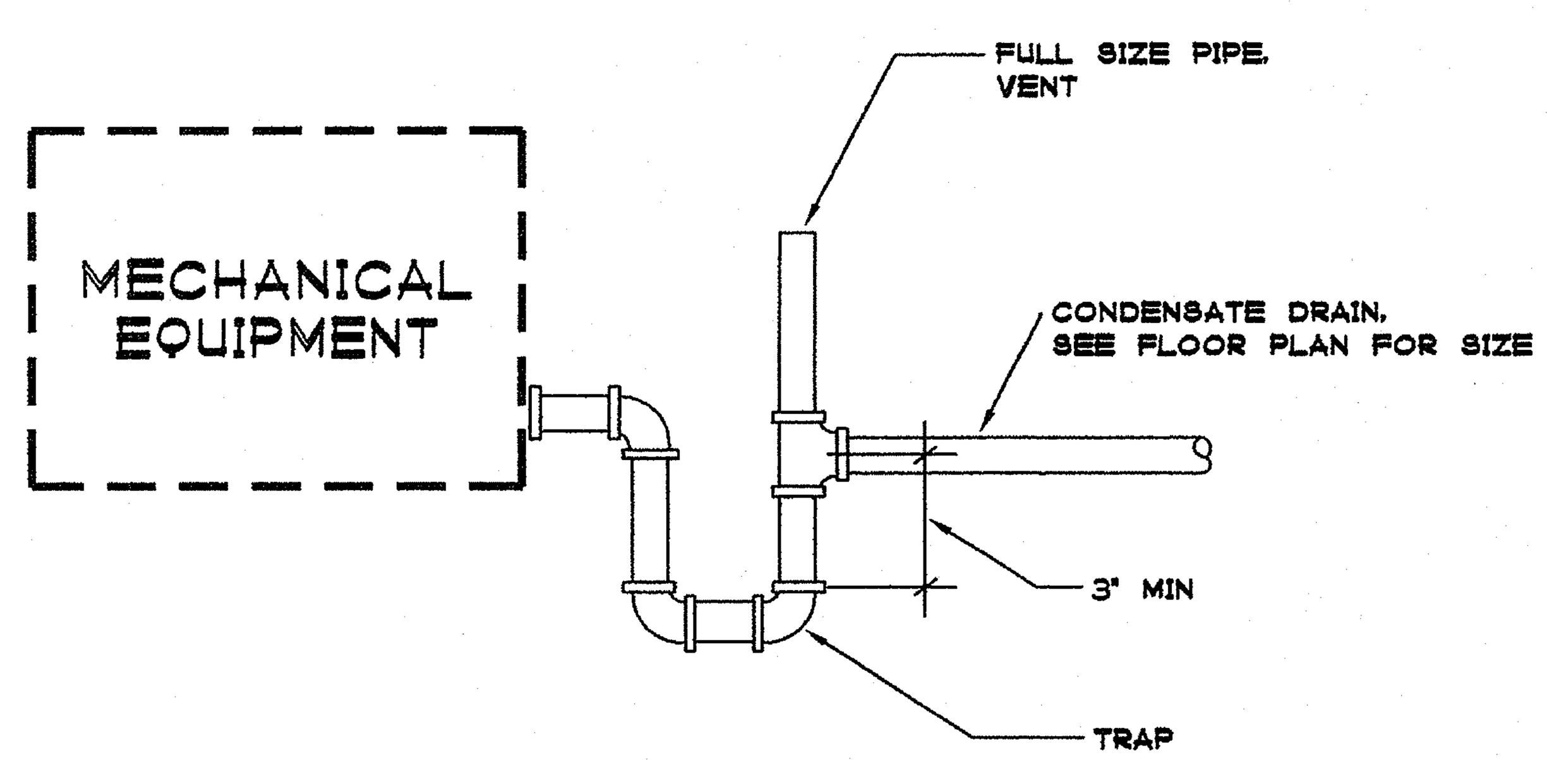
WATER HEATER AND MIXING VALVE DETAIL FOR BUILDING "N"

SCALE NONE | 2



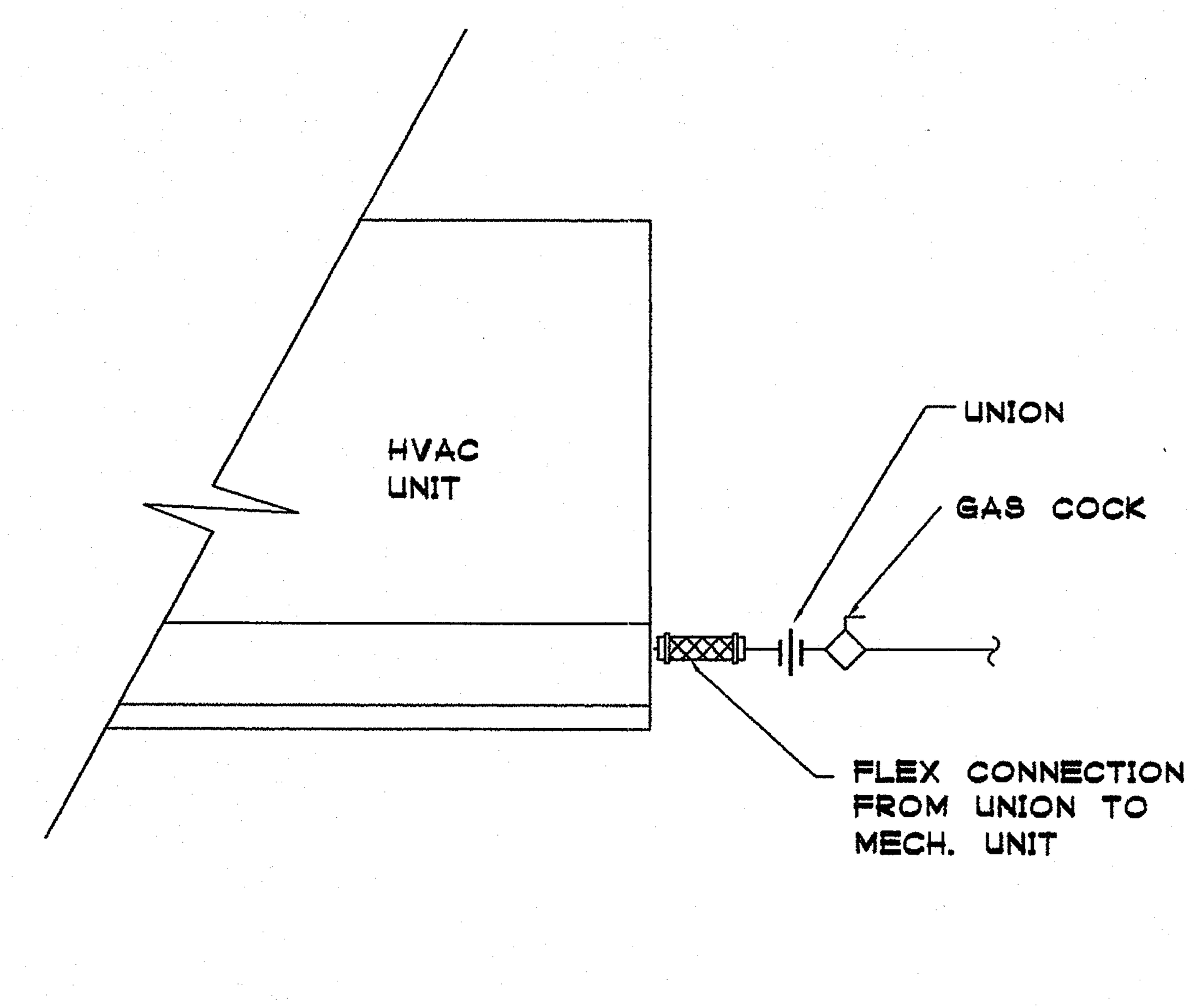
TRAP PRIMER DETAIL

SCALE NONE | 3



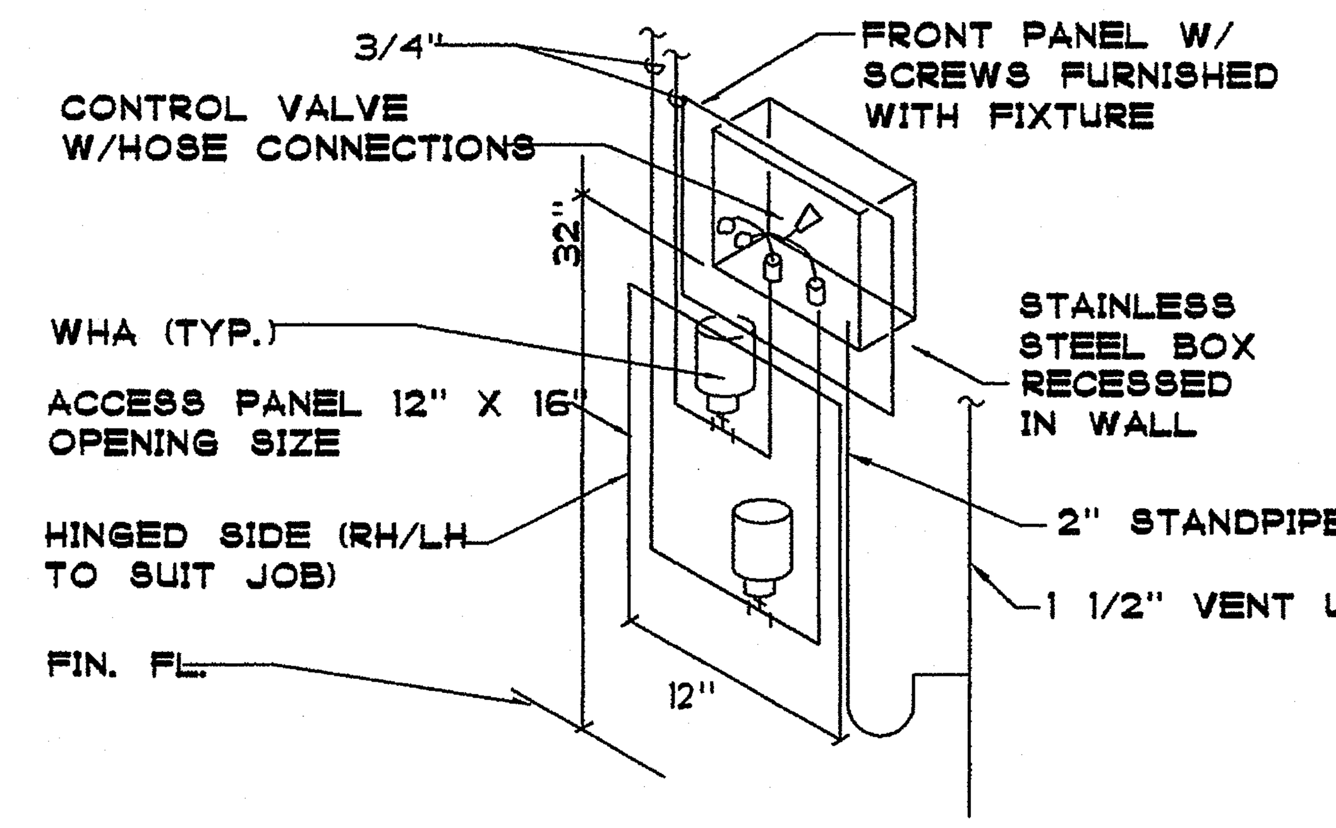
CONDENSATE DRAIN TRAP DETAIL

SCALE NONE | 4



GAS CONNECTION DETAIL

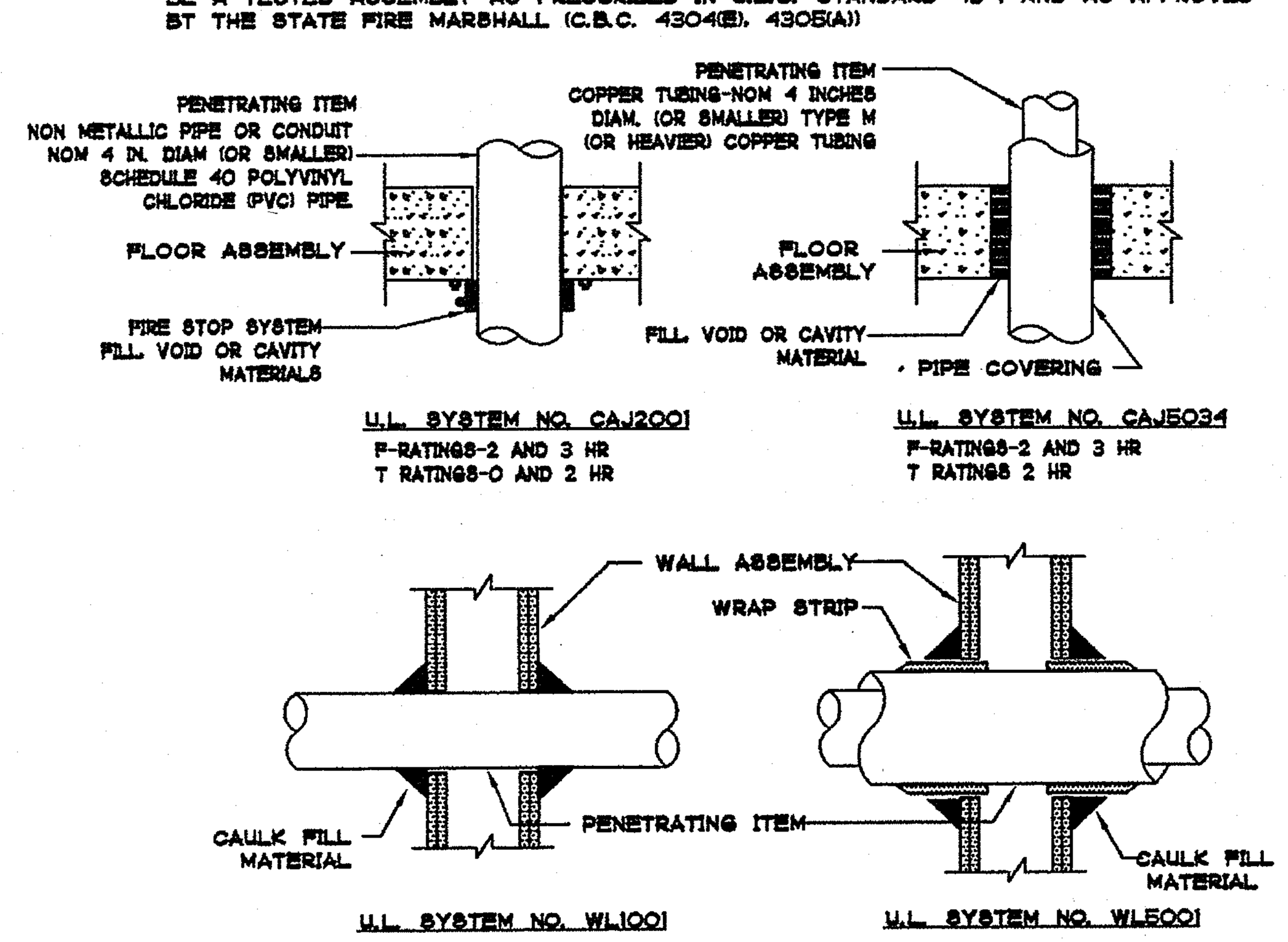
SCALE NONE | 5



CLOTHES WASHER STAND PIPE DETAIL

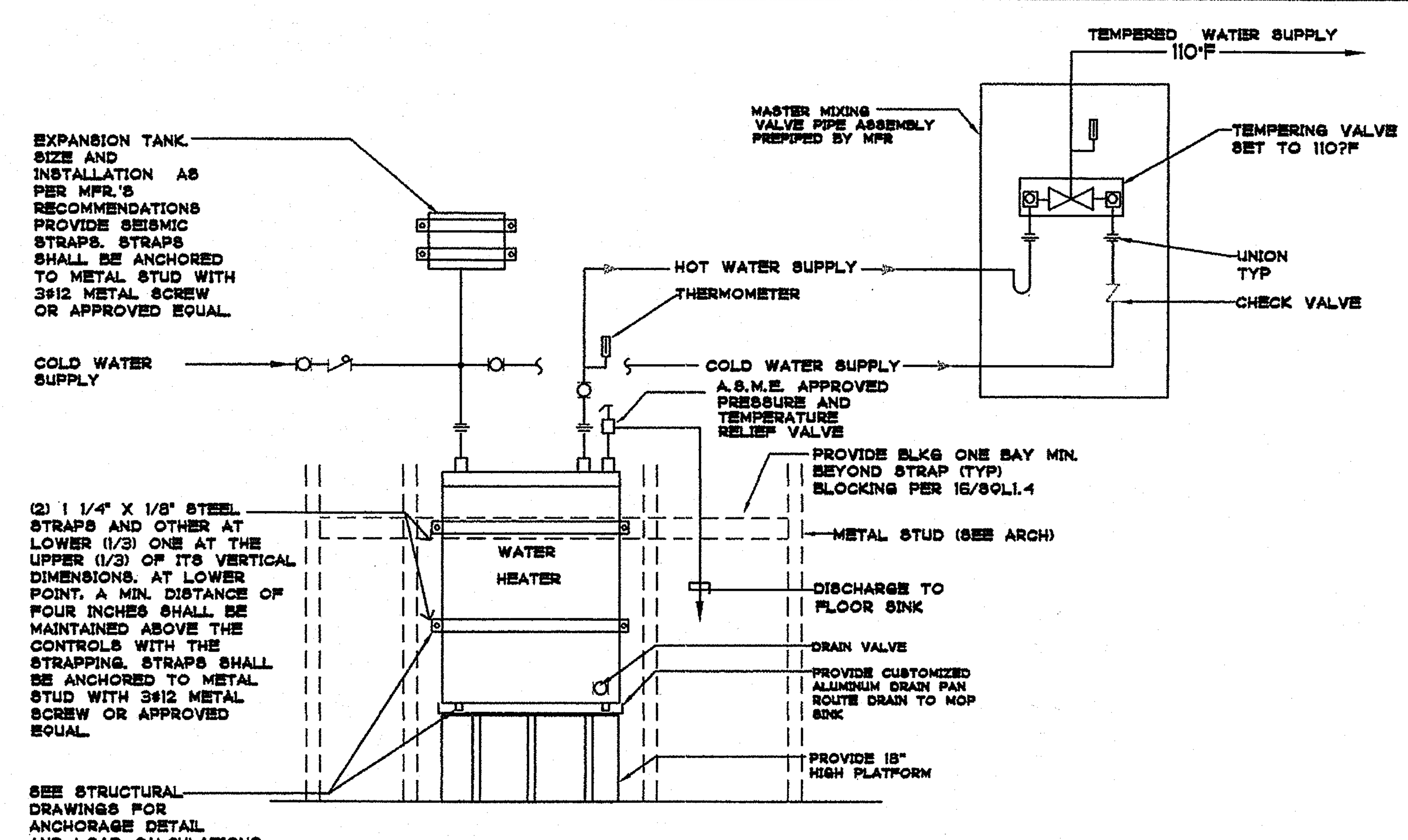
SCALE NONE | 6

PENETRATIONS OF PIPES, CONDUITS, ETC., IN WALLS, FLOORS OR CEILING ASSEMBLIES REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A TESTED ASSEMBLY AS PRESCRIBED IN U.B.C. STANDARD 43-1 AND AS APPROVED BT THE STATE FIRE MARSHALL (C.B.C. 4304(E), 4305(A))



PIPE PENETRATION DETAIL

SCALE NONE | 7



WATER HEATER AND MIXING VALVE DETAIL FOR BUILDING "L"

SCALE NONE | 8

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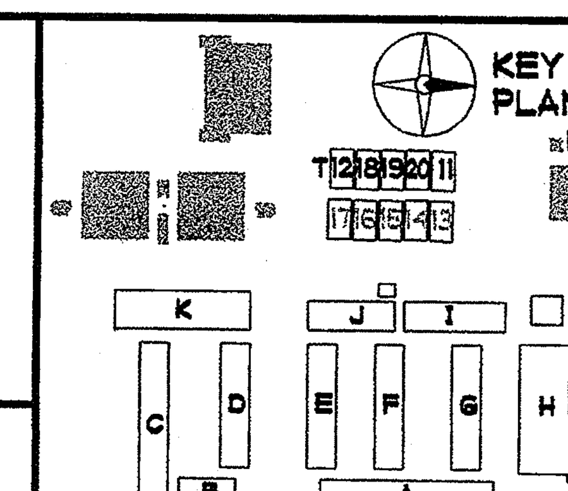
03/18/2005

REGISTERED PROFESSIONAL ENGINEER FARZAD TADAYON No. M29230 Exp. 3/31/07 MECHANICAL STATE OF CALIFORNIA



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JEFFERSON MS NEW CONSTRUCTION
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OCEANSIDE UNIFIED S.D.

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FAX 760-754-8291

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4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
PLUMBING DETAILS

P-3.1

GENERAL

- SOLID SYMBOL WITH "X" INDICATES FIXTURE, DEVICE, OUTLET OR EQUIPMENT TO REMAIN
- — —X— — CONDUIT OR WIRING EXISTING TO REMAIN
- INDICATES SURFACE MOUNTED BOX FOR ITEM SHOWN
- INDICATES FLUSH MOUNTED BOX FOR ITEM SHOWN.
- 12 — "12" DENOTES CIRCUIT NUMBER
- 12ab — "12" DENOTES CIRCUIT NUMBER. "ab" DENOTES SWITCHING SCHEME.
- A — LIGHTING FIXTURE SCHEDULE REFERENCE.
- 2 — KITCHEN EQUIPMENT SCHEDULE REFERENCE.
- EF 2 — MECHANICAL SCHEDULE REFERENCE.
- 2 — NOTE REFERENCE
- 3 — DETAIL NUMBER DESIGNATION.
- E1 — SHEET DETAIL APPEARS ON.
- A1/E11 — DETAIL OR SECTION REFERENCES IN NOTES.
- +48" — INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF BOX OR DEVICE.

LIGHTING

- FLUORESCENT LIGHTING FIXTURE, RECESSED IN LAY-IN TYPE CEILING.
- SHADING INDICATES FIXTURES SUPPLIED WITH EMERGENCY BATTERY PACK. AN UNSWITCHED HOT CIRCUIT SHALL BE CONNECTED TO EACH BALLAST. ALL LAMPS SHALL BE SWITCHED.
- SURFACE MOUNTED FLUORESCENT OR HID LIGHT FIXTURE.
- SURFACE MOUNTED WRAPAROUND FLUORESCENT
- SURFACE MOUNTED WALLWASH FIXTURE.
- DOWNLIGHT FIXTURE, RECESSED IN CEILING.
- LIGHTING FIXTURE, WALL MOUNTED AT HEIGHT NOTED.
- LIGHTED EXIT SIGN. TOP MOUNTED ON CEILING OR STEM MOUNTED AT HEIGHT NOTED. SHADED SIDE INDICATES FACE. PROVIDE ARROWS WHERE SHOWN TO INDICATE DIRECTION OF TRAVEL.
- DOUBLE SIDED EXIT SIGN. PROVIDE ARROWS WHERE SHOWN TO INDICATE DIRECTION OF TRAVEL.
- BACK OR END MOUNTED EXIT SIGN, AT HEIGHT NOTED.
- $ — TOGGLE SWITCH, SPST AT +48"U.O.N.
- $ a,b,c — INDICATES MULTIPLE SWITCHES IN SINGLE MULTI-GANGED BOX WITH COMMON COVERPLATE. "a, b & c" INDICATES NUMBER OF INDIVIDUAL SWITCHES AND FIXTURES CONTROL. PROVIDE BARRIERS BETWEEN 277V AND 120V CIRCUITS AND TWO DIFFERENT 277 VOLT CIRCUITS.
- $a $b — INDICATES SWITCHES a,b MOUNTED IN SEPARATE BOXES WITH SEPARATE COVERPLATES.
- DS — WALL MOUNTED LOW VOLTAGE DIGITAL 6 BUTTONS SWITCH AT +48" U.O.N.
- M — SWITCH TYPE WALL MOUNTED MOTION SENSOR AT +48" UON.
- M — CEILING MOUNTED MOTION SENSOR - ONE WAY TYPE.
- M — CEILING MOUNTED MOTION SENSOR - 360° TYPE .

SUBSCRIPT ADJACENT TO SWITCHES INDICATES:
a,b,c etc. = FIXTURE CONTROLLED.
3 = THREE POLE
T = MANUAL MOTOR STARTER WITH THERMAL OVERLOADS
M = MOMENTARY CONTACT ON-OFF WITH SPRING RETURN TO CENTER

POWER DEVICES

- DUPLEX RECEPTACLE, WALL MOUNTED AT +18" U.O.N.
- DUPLEX RECEPTACLE IN FLUSH FLOOR BOX.
- TWO DUPLEX RECEPTACLES (FOURPLEX) IN TWO GANG BOX WALL MOUNTED AT +18" U.O.N.
- DUPLEX RECEPTACLE TOP HALF SWITCHED.
- RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH. SEE ARCHITECTURAL INTERIOR ELEVATIONS
- DUPLEX RECEPTACLE AND TOGGLE SWITCH MOUNTED IN 2 GANG BOX WITH COMMON COVER PLATE AT + 48" UON OR CENTERED WITH ADJACENT HORIZONTAL MOUNTED RECEPTACLES.
- TC — TIME SWITCH WALL MOUNTED @ +60" UON
- 5-30R — SPECIAL RECEPTACLE OUTLET WITH NEMA CONFIGURATION NUMBER AS NOTED, AT +18" U.O.N.
- DUPLEX RECEPTACLE FLUSH MOUNTED IN CEILING.
- IG — ISOLATED GROUND DUPLEX RECEPTACLE WALL MOUNTED AT +18" U.O.N.
- L — RECEPTACLE WITH LOCKING FACEPLATE.
- G — GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE.

RACEWAY SYSTEMS

- CONDUIT OR WIRING EXISTING TO REMAIN
- WIRE INSTALLED IN EXISTING CONDUIT
- REMOVE EXISTING WIRE EXISTING CONDUIT TO REMAIN
- WIRING OR CONDUIT CONCEALED IN WALL OR CEILING.
- WIRING OR CONDUIT EXPOSED.
- WIRING OR CONDUIT CONCEALED UNDERGROUND
- FLEXIBLE CONDUIT.
- CONDUIT TURNED UP. / CONDUIT TURNED DOWN.
- CONDUIT TERMINATED AND CAPPED.
- A-1,3 — HOMERUN TO PANELBOARD. 'A' - CIRCUITS 1 & 3,CROSS MARKS, IF SHOWN, INDICATES NUMBER OF WIRES. FEEDER OR CIRCUIT NUMBERS AS NOTED.

UNLESS OTHERWISE INDICATED (GROUND WIRE NOT SHOWN):

2 #12, 1/2" C.	6 #12, 3/4" C.
3 #12, 1/2" C.	7 #12, 3/4" C.
4 #12, 1/2" C. 3/4" C.	8 #12, 3/4" C.
5 #12, 3/4" C.	9 #12, 3/4"C.

POWER - DISTRIBUTION

- MAIN DISTRIBUTION SWITCHBOARD
- SURFACE / FLUSH — PANELBOARD.
- SURFACE / FLUSH — SIGNAL SYSTEM TERMINAL CABINETS AS NOTED.
- T — TRANSFORMER, FLOOR MOUNTED TYPE (PLAN VIEW)
- F — FUSED SAFETY DISCONNECT SWITCH. SEE OVERCURRENT DEVICE KEY
- NON FUSED SAFETY DISCONNECT SWITCH. SEE OVERCURRENT DEVICE KEY
- COMBINATION NON-FUSED SAFETY DISCONNECT SWITCH AND MOTOR STARTER SEE OVERCURRENT DEVICE KEY
- "2" — MAGNETIC MOTOR STARTER. "2" INDICATES NEMA SIZE.
- $T — MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOADS.
- MOTOR CONNECTION
- JUNCTION OR OUTLET BOX. CEILING OR WALL MOUNTED AS INDICATED. LOCATE ABOVE ACCESSIBLE CEILINGS UON.
- E / C — UNDERGROUND PULL BOX. "E" INDICATES "ELECTRICAL" "C" INDICATES "COMMUNICATIONS".
- GROUND ROD

SINGLE LINE DIAGRAM

- GROUNDING ELECTRODE
- SPLICE
- TERMINAL
- CIRCUIT BREAKER. SEE OVERCURRENT DEVICE KEY
- FUSED SWITCH. SEE OVERCURRENT DEVICE KEY

PAGING SYSTEM

- PA SURFACE / PA FLUSH — PAGING SYSTEM CEILING MOUNTED SPEAKER
- PA — PAGING SYSTEM SPEAKER, WALL MOUNTED AT +96" U.O.N.
- PA — PAGING SYSTEM WIDE ANGLE PROJECTION HORN, WALL MOUNTED AT +8'-0" U.O.N.
- V — PAGING SYSTEM WALL MOUNTED VOLUME CONTROL AT +48" AFF. WITH 3/4"C. ABOVE ACCESSING CEILING.

TELEVISION / SECURITY SYSTEM

- TV — TELEVISION SYSTEM OUTLET WITH JACK, WALL MOUNTED AT +18" U.O.N.
- D — SECURITY SYSTEM MAGNETIC DOOR SWITCH ROUGH-IN WITH ¾"C.O. FLUSH IN DOOR FRAME. STUB CONDUIT WITH INSULATED BUSHING ABOVE ACCESSIBLE CEILING.
- AD — SECURITY SYSTEM AUDIO DETECTOR OUTLET BOX ONLY WITH COVER PLATE MOUNTED 12" BELOW FINISHED CEILING OR 9'-6" AFF. STUB ¾"C.O. ABOVE ACCESSIBLE CEILING.
- SP — SECURITY SYSTEM ACCESS CONTROL TOUCH PAD OUTLET BOX ONLY WITH COVER PLATE, WALL MOUNTED AT +48" AFF. U.O.N. STUB ¾"C.O. ABOVE ACCESSIBLE CEILING. VERIFY LOCATION WITH SCHOOL DISTRICT PRIOR TO START OF WORK.

DATA SYSTEMS

- 4 — QUAD VOICE/DATA OUTLET WALL MOUNTED AT +18" U.O.N. WITH (4) INSERTS WIRED WITH (4) TYPE "A" CABLES BACK TO DATA PATCH PANEL IN RESPECTIVE IDF. PROVIDE 1 ¼" CONDUIT FROM DEVICE AND TERMINATE ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHING.
- 2 — DUAL VOICE/DATA OUTLET WALL MOUNTED AT +18" U.O.N. WITH (2) INSERTS WIRED WITH (2) TYPE "A" CABLES BACK TO DATA PATCH PANEL IN RESPECTIVE IDF. PROVIDE 1 ¼" CONDUIT FROM DEVICE AND TERMINATE ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHING.
- 1 — SINGLE VOICE/DATA OUTLET WALL MOUNTED AT +18" U.O.N. WITH (1) INSERTS WIRED WITH (1) TYPE "A" CABLES BACK TO DATA PATCH PANEL IN RESPECTIVE IDF. PROVIDE 1 ¼" CONDUIT FROM DEVICE AND TERMINATE ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHING.
- F J — WALL MOUNTED OUTLET BOX W/BLANK COVERPLATE AT +18" U.O.N. PROVIDE 1¼"C. WITH INSULATED BUSHINGS STUBBED ABOVE ACCESSIBLE CEILING.

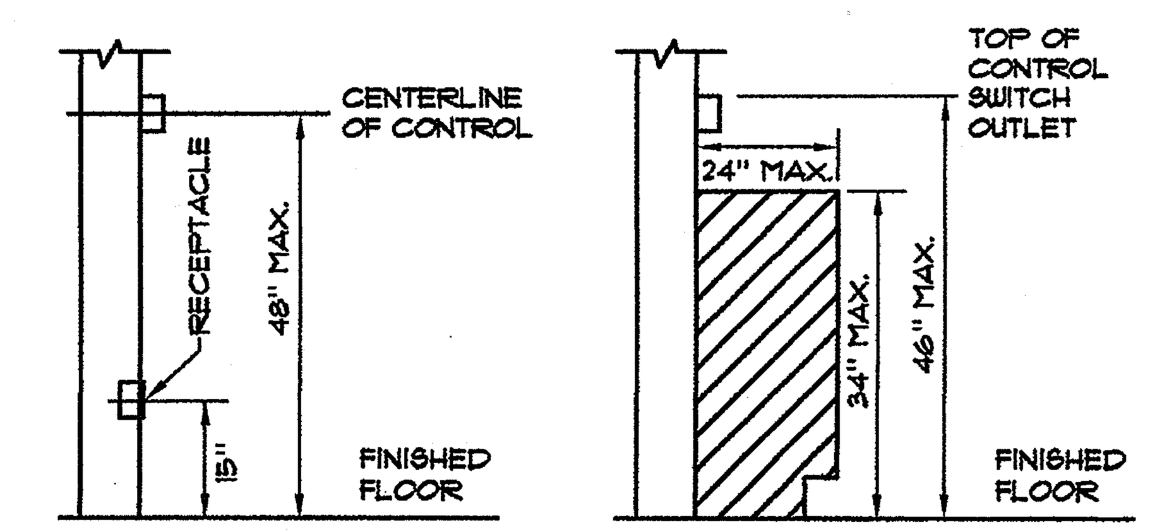
ABBREVIATIONS

AC	ALTERNATING CURRENT	FLR.	FLOOR	PH OR Φ	PHASE
A/C	AIR CONDITIONER	FRAC.	FRACTIONAL	PNL.	PANEL
AFF.	ABOVE FINISHED FLOOR	FT.	FOOT, FEET	PVC	POLYVINYL CHLORIDE
AIC	AMPS INTERRUPTING CAPACITY	FUT.	FUTURE	P	POLE
ALT.	ALTERNATE	GFI	GROUND FAULT INTERRUPTER	PT	POTENTIAL TRANSFORMER
ARCH.	ARCHITECT	GRD	GROUND	REC	RECESSED
AUX.	AUXILIARY	HGT	HEIGHT	RECPT	RECEPTACLE
A OR AMP	AMPERE	HID	HIGH INTENSITY DISCHARGE	REQD	REQUIRED
BD	BOARD	HP	HORSEPOWER	REQMT	REQUIREMENT
BLDG.	BUILDING	HTR.	HEATER	R/O	RECEPTACLE OUTLET
CB	CIRCUIT BREAKER	HZ	HERTZ	RM	ROOM
C	CONDUIT	IDF	INTERMEDIATE DISTRIBUTION FRAME	SHT.	SHEET
CAB.	CABINET	I.G.	ISOLATED GROUND	SWT.	SWITCH
CLG.	CEILING	J-BOX OR JB	JUNCTION BOX	SWBD.	SWITCHBOARD
CCT.	CIRCUIT	KVA	KILOVOLT AMP	SQ.	SQUARE
C.O.	CONDUIT ONLY	KW	KILOWATT	TELE	TELEPHONE
CONN	CONNECT, CONNECTION	KWHR	KILOWATT HOUR	TERM.	TERMINAL
DIA.	DIAMETER	LT.	LIGHT	T.T.B.	TELEPHONE TERMINAL BOARD
DIAG.	DIAGRAM	LT. FIX.	LIGHT FIXTURE	T.V.H.E.	TELEVISION HEAD END EQUIPMENT
DISC.	DISCONNECT	LTG	LIGHTING	TV	TELEVISION
DIST.	DISTRIBUTION	LV	LOW VOLTAGE	TRANSF.	TRANSFORMER
DN.	DOWN	MDF	MAIN DISTRIBUTION FRAME	TYP.	TYPICAL
DWG	DRAWING	MECH	MECHANICAL	UON	UNLESS OTHERWISE NOTED
EC	EMPTY CONDUIT	MFR.	MANUFACTURER	V	VOLT
ELEC.	ELECTRICAL	MT.	MOUNT	VA	VOLTAMPERE
EWC	ELECTRIC WATER COOLER	MTD.	MOUNTED	W	WATT OR WIRE
EQUIP.	EQUIPMENT	MTG.	MOUNTING	WP	WEATHERPROOF
FA	FIRE ALARM	MLO	MAIN LUGS ONLY		
FACP	FIRE ALARM CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER		
FIXT.	FIXTURE	NEC	NATIONAL ELECTRIC CODE		
FLEX.	FLEXIBLE	NTS	NOT TO SCALE		
		NO.	NUMBER		
		NF	NONFUSIBLE		
		OC	ON CENTER		

GENERAL NOTES

A. THE SEISMIC ANCHORAGE OF ELECTRICAL EQUIPMENT SHALL CONFORM TO C.C.R. TITLE 24, 2001 CBC SECTION 1632A AND TABLE 16A-O. ANCHORAGE DETAILS NOT SHOWN ON THE APPROVED PLANS OR OTHERWISE APPROVED BY DSA ARE SUBJECT TO FIELD APPROVAL BY THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF RECORD AND FIELD APPROVAL BY DSA.

B. ALL CONDUITS AND CABLE TRAYS SHALL BE SUPPORTED AND BRACED IN ACCORDANCE WITH SMACNA GUIDELINES AND AS APPROVED BY DSA.



NOTE:
MOUNTING HEIGHT DIMENSIONS ARE TYPICAL FOR ALL HAND OPERABLE DEVICES.

ACCESSIBILITY REQUIREMENTS

LIST OF 2001 CALIFORNIA CODE OF REGULATIONS

THE APPROVAL JURISDICTION IS THE CALIFORNIA DIVISION OF THE STATE ARCHITECT (DSA)

1. IF THE SCOPE OF WORK IS INCREASED, A CHANGE ORDER SHALL BE SUBMITTED TO DSA.
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CHANGE ORDER APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, C.C.R.
3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, C.C.R.

LIST OF 2001 CALIFORNIA CODE OF REGULATIONS (CCR)
APPLICABLE CODES AS OF NOVEMBER 1, 2002

2001 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2001 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
2001 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
2001 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
2001 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2001 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE, PART , TITLE 24 C.C.R.
2001 CALIFORNIA HISTORICAL BUILDING CODE, PART 8, TITLE 24 C.C.R.
2001 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
2001 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
1998 TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS	1999 EDITION
NFPA 14	STANDPIPE SYSTEMS	2000 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	1998 EDITIONS
NFPA 17a	WET CHEMICAL SYSTEMS	1998 EDITION
NFPA 20	STATIONARY PUMPS	1999 EDITION
NFPA 24	PRIVATE FIRE MAINS (INCLUDED IN 1999 NFPA 13)	1995 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) (NOTE SEE UL STANDARD 1971 FOR "VISUAL DEVICES")	1999 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2000 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2000 EDITION

REFERENCE CODE SECTION FOR NFPA STANDARDS - 2001 CBC (SFM) 3504.1

629-002B
REGISTERED PROFESSIONAL ENGINEER — JOSE L. FRESCAS — E 13800 — EXP. 9/30/06 — ELECTRICAL — STATE OF CALIFORNIA
08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

space art time function

DSA
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

SHEET TITLE
ELECTRICAL SYMBOLS AND NOTES

E0-1

FILE: J:\629-002B\6292E01.dwg Mar 21, 2005 - 9:25am
XREF: 6292BDR.dwg

LUMINAIRE SCHEDULE

TYPE	MTG.	LAMP #	LAMP CODE WATT/LUMENS COLOR	LUMINAIRE DESCRIPTION	MANUFACTURER & CATALOG NUMBER	INPUT WATTS, VOLTS	REF. NOTES
A	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	2x4 RECESSED 3 LAMP TROFFER, 24-CELL 3" DEEP PARABOLIC LOUVER. ELECTRONIC BALLASTS, BI LEVEL SWITCHING. SECOND COMPARTMENT BALLAST. XPS SERIES LAMP/ BALLAST COMBINATION.	COLUMBIA #P424-332G -LD38-S-EB8120XPS -2BC OR EQUAL	72W 120V	
AE	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS TYPE 'A' EXCEPT WITH EM BATTERY PACK (NI-CAD, 90 MIN, 1400 LUMEN).	COLUMBIA #P424-332G -LD38-S-EB8120XPS -2BC-EL14 OR EQUAL	72W 120V	
AI	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS TYPE 'A' EXCEPT WITH DIMMING BALLAST (0-10V) FOR OPERATION WITH DAYLIGHT DIMMING CONTROLS	COLUMBIA #P424-332G -LD38-S-EB8120DIM0 -10V-2BC OR EQUAL	93W 120V	
AIE	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS TYPE 'AI' EXCEPT WITH EMERGENCY BATTERY PACK (NI-CAD, 90 MIN, 1400 LUMEN)	COLUMBIA #P424-332G -LD38-S-EB8120DIM0 -10V-2BC-EL14 OR EQUAL	93W 120V	
B	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	2x4 FLUORESCENT TROFFER WITH PATTERN 19 ACRYLIC LENS AND XPS SERIES LAMP/ BALLAST COMBINATION	COLUMBIA #4PS24-332G -FSA19-EB8120XPS OR EQUAL	93W 120V	
BE	REC GRID	3	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS 'B' EXCEPT WITH EM BATTERY PACK, 90 MIN 1400 LUMENS.	COLUMBIA #4PS24-232G -FSA19-EB8120XPS -EL14 OR EQUAL	72W 120V	
BI	REC GRID	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SIMILAR TO TYPE 'B' EXCEPT WITH TWO LAMPS.	COLUMBIA #4PS24-232G -FSA19-EB8120XPS OR EQUAL	49W 120V	
BIE	REC GRID	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS 'BI' EXCEPT WITH EM BATTERY PACK, 90 MIN 1400 LUMENS.	COLUMBIA #4PS24-232G -FSA19-EB8120XPS -EL14 OR EQUAL	49W 120V	
C	SURF. CLG.	1	F28/T5/841 28W/2900 4100°K	LOW PROFILE FLUORESCENT WALL LIGHTER, SEMI-ELLIPTICAL HOUSING CONSISTING OF (3) 4' SECTIONS TANDEM MOUNTED.	ELLIPTIPAR #F144-T128S-22- 1-0K-0	94W 120V	1 LAMP PER 4' LENGTH
D	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	4' FLUORESCENT STRIP WITH ELECTRONIC BALLAST AND WIRE GUARD.	COLUMBIA CS4-232-EB8-120XPS CSWG4	49W 120V	
DIE	SURF.	2	FO25/T8/ XPS/ECO 25 4100°K	3' FLUORESCENT STRIP WITH ELECTRONIC BALLAST, EMERGENCY BATTERY PACK AND WIRE GUARD.	COLUMBIA CS3-225-EB8-120 CSWG3-EL	50W 120V	
DE	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SIMILAR TO TYPE 'D' EXCEPT WITH EMERGENCY BATTERY PACK	COLUMBIA CS4-232-EB8-120XPS CSWG4-EL	49W 120V	
E	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	1x4 FLUORESCENT FIXTURE WITH XPS SERIES LAMP/ BALLAST COMBINATION.	COLUMBIA #PM14-232-FS- A19-EB8-120XPS	49W 120V	
EE	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SAME AS TYPE 'E' EXCEPT WITH EMERGENCY BATTERY PACK	COLUMBIA #PM14-232-FS- A19-EB8-120XPS-EL	49W 120V	
F	REC.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	1x4 FLUORESCENT WITH IMPACT PRISMATIC LENS AND XPS SERIES LAMP/ BALLAST COMBINATION.	COLUMBIA #5PS14-232F-FS- -DR12-EB8120XPS	49W 120V	
FE	REC.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SIMILAR TO TYPE 'G' EXCEPT WITH EMERGENCY BATTERY PACK	COLUMBIA #5PS14-232F-FS- -DR12-EB8120XPS-EL	49W 120V	
G	REC.	2	CFQ18W/ G24D/3 18W/1250 4100°K	7½" FLUORESCENT DOWNLIGHT WITH POLYCARBONATE LENS	KIRLIN #RR90721-43	38W 120V	
GE	REC.	2	CFQ18W/ G24D/3 18W/1250 4100°K	SIMILAR TO TYPE 'KE' EXCEPT WITH EMERGENCY BATTERY PACK	KIRLIN #RR90721-43-73	38W 120V	
H	PEND	-	-	CEILING FAN WITH 52" BLADE, MULTI FAN CONTROL AND 3" RODS	MINKA #F568-WH #FC-M WESTINGHOUSE SAF-T-GRID#01070	65W 120V	
J	REC.	2	CFTR42W/ GX24Q/4 42W/3200 4100°K	9" COMPACT FLUORESCENT RECESSED DOWNLIGHT WITH SPREAD LENS, DAMP LOCATION LISTED.	KIRLIN #RR80926- 13-46-	90W 120V	
JE	REC.	2	CFTR42W/ GX24Q/4 42W/3200 4100°K	SIMILAR TO TYPE 'N' EXCEPT WITH EMERGENCY BATTERY PACK	KIRLIN #RR80926- 13-46-73	90W 120V	
K	REC.	1	CFTR42W/ GX24Q/4 42W/3200 4100°K	8" COMPACT FLUORESCENT RECESSED DOWNLIGHT WITH SPREAD LENS, DAMP LOCATION LISTED.	KIRLIN #RR80823-13-17-45- 46-FT-FR	45W 120V	
KE	REC.	1	CFTR42W/ GX24Q/4 42W/3200 4100°K	SIMILAR TO TYPE 'P' EXCEPT WITH EMERGENCY BATTERY PACK.	KIRLIN #RR80823-13-17-45- 46-FT-FR-73	45W 120V	
L	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	4' FLUORESCENT FIXTURE WITH .156" POLYCARBONATE LENS AND ELECTRONIC BALLAST. U.L. LISTED FOR DAMP LOCATION.	MORLITE LPL-2000-232- -EB120	59W 120V	
LE	SURF.	2	FO32/T8/ XPS/ECO 32/3150 4100°K	SIMILAR TO TYPE 'K' EXCEPT WITH EMERGENCY BATTERY PACK.	MORLITE LPL-2000-232- -EB120-EMG	59W 120V	

LUMINAIRE SCHEDULE (continued)

TYPE	MTG.	LAMP #	LAMP CODE WATT/LUMENS COLOR	LUMINAIRE DESCRIPTION	MANUFACTURER & CATALOG NUMBER	INPUT WATTS, VOLTS	REF. NOTES
M	WALL	1	CFTR42W/ GX24Q/4 42W/3200 4100°K	13" ROUND WALL MOUNTED FIXTURE WITH ELECTRONIC BALLAST, HIGH IMPACT POLYCARBONATE LENS.	KENALL #MR13CD-S-CC-42P- 1-120-EB-9500	45W 120V	
ME	WALL	1	CFTR42W/ GX24Q/4 42W/3200 4100°K	SIMILAR TO TYPE 'M' EXCEPT WITH EMERGENCY BATTERY PACK.	KENALL #MR13CD-S-CC-42P -1-120-EB-EL-9500	45W 120V	
X		N/A	N/A	SELF-ILLUMINATING EXIT SIGN WITH GREEN FACE WITH MOLDED ABS HOUSING, .125" THICK DIFFUSER PLATE AND 20 YEAR LIFE.	PERMEX #P-160-G-20-SS	N/A	
X1		N/A	N/A	SAME AS TYPE "X" EXIT, EXCEPT DOUBLE FACED.	PERMEX #P-160-G-20-DF-SS	N/A	
SA1	POLE	1	LU150 CLEAR 150W	SINGLE POLE MOUNTED FIXTURE WITH ONE PIECE DIE CAST ALUMINUM HOUSING. MOUNTED AT 16' AFG ON CONCRETE POLE. FINISH DARK BRONZE.	KIM #1A-VLA17W3- 150HPS120-DBP	185W 120V	SEE DETAIL 2/E4-2

629-002B

REGISTERED PROFESSIONAL ENGINEER STONE L. FROBERG No. 5950 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO.
758-000
PROJECT NOS.
025
P. T. N.
73569-9
DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

space art time function

GROTH ARCHITECTS. INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

DSA
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
LUMINAIRE SCHEDULE

EO-2

FILE: J:\629-002B\6292E02.dwg Mar 21, 2005 - 9:29am
XREF: 6292BDR.dwg

CERTIFICATE OF COMPLIANCE — Part 1 of 3 — LTG-1

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004
PROJECT ADDRESS: 823 ACACIA ST OCEANSIDE — Building Permit #
PRINCIPAL DESIGNER - LIGHTING: EDWARD PALMA — TELEPHONE: 858-279-0242
DOCUMENTATION AUTHOR: ILA + Zammit Engineering — TELEPHONE: (858) 279-0242 — Checked by/Date, Enforcement Agency Use

GENERAL INFORMATION

DATE OF PLANS: 10/27/04 — BUILDING CONDITIONED FLOOR AREA: 18,194 Sq.Ft. — CLIMATE ZONE: 7

BUILDING TYPE: [X] NONRESIDENTIAL [ ] HIGH RISE RESIDENTIAL [ ] HOTEL/MOTEL GUEST ROOM
PHASE OF CONSTRUCTION: [X] NEW CONSTRUCTION [ ] ADDITION [ ] ALTERATION [ ] EXISTING + ADDITION
METHOD OF LIGHTING COMPLIANCE: [X] COMPLETE BUILDING [ ] AREA CATEGORY [ ] TAILORED [ ] PERFORMANCE

STATEMENT OF COMPLIANCE

This Certificate of Compliance lists the building features and performance specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to building lighting requirements.

The documentation preparer hereby certifies that the documentation is accurate and complete.

DOCUMENTATION AUTHOR: STONE FROBERG — SIGNATURE: [signature] — DATE: 10/27/04

The Principal Lighting Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the lighting requirements contained in Sections 110, 119, 130 through 132, and 146 or 149 of Title 24, Part 6.

Please check one:

- [ ] I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer or electrical engineer, or I am a licensed architect.
- [ ] I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by Section 5537.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
- [ ] I affirm that I am eligible under the exemption to Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 5538 and 6737.1.

PRINCIPAL LIGHTING DESIGNER - NAME: EDWARD PALMA — SIGNATURE: Stone Froberg — DATE: 10/27/04 — LIC. #: 5950

LIGHTING MANDATORY MEASURES

Indicate location on plans of Note Block for Mandatory Measures

INSTRUCTIONS TO APPLICANT

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.
LTG-1: Required on plans for all submittals. Part 2 and 3 may be incorporated in schedules on plans.
LTG-2: Required on all submittals.
LTG-3: Optional. Use only if lighting control credits are taken.
LTG-4: Optional. Use only if Tailored method is used.
LTG-5: Optional. Use only if Tailored method is used.

EnergyPro3.1 By EnergySoft User Number 5127 Job Number 629-002B Page:1 of 7

LIGHTING COMPLIANCE SUMMARY — Part 2 of 3 — LTG-1

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

INSTALLED LIGHTING SCHEDULE

Code	LUMINAIRE DESCRIPTION	LAMPS TYPE DESCRIPTION	#	Watts Per Lamp	BALLASTS DESCRIPTION	#	Luminaire (Lamp + Ballast) #	Watts	Total Watts

Lighting Schedule on Plans Shows Exterior Lighting Meets
[ ] Efficacy and Control Requirement of 130(c)
[ ] Control Requirements of 131(f)

Subtotal from this Page	0
Total	23,314
Portable Lighting (From LTG-1)	0
Less Control Credit Watts (From LTG-3)	5,392
Adjusted Actual Watts	17,922

MANDATORY AUTOMATIC CONTROLS

CONTROL LOCATION (Room #)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Exterior, etc.)	SPACE CONTROLLED	NOTE TO FIELD

CONTROLS FOR CREDIT

CONTROL LOCATION (Room # or Dwg. #)	CONTROL IDENTIFICATION	CONTROL TYPE (Occupant, Daylight, Dimming, etc.)	LUMINAIRES CONTROLLED TYPE	# OF LUMINAIRES	NOTE TO FIELD
SCHOOL		Occ Sensor > 250 sqft	C	48	
SCHOOL		Occ Sensor Storage	B	10	
SCHOOL		Daylighting Controls - 30%	A1/A1E	96	

NOTES TO FIELD - For Building Department Use Only

EnergyPro3.1 By EnergySoft User Number:5127 Job Number:629-002B Page:3 of 7

LIGHTING COMPLIANCE SUMMARY — LTG-2

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

ACTUAL LIGHTING POWER

LUMINAIRE NAME	DESCRIPTION	NUMBER OF LUMINAIRES	WATTS PER LUMINAIRE (Including Ballast)	CEC DEFAULT Y	N*	Total Watts
A/AE	(3) 4 ft T8 XPS Lamp/PSX Ballast Elec	108	72.0	X		7,776
A1/A1E	(3) 4 ft Fluorescent T8 XPS dimming ballast	96	93.0	X		8,928
B	(3) 4 ft T8 XPS Lamp/PSX Ballast Elec	10	72.0	X		720
B1	(2) 4 ft T8 XPS Lamp/PSX Ballast Elec	12	49.0		X	588
C	(1) 4 ft Fluorescent T5 Elec	48	94.0		X	4,512
F/FE	(2) 4 ft T8 XPS Lamp/PSX Ballast Elec	10	49.0		X	490
G	(2) 18w Compact Fluorescent Quad 2 Pin	6	50.0	X		300

Subtotal from this Page	23,314
Building Total	23,314
Portable Lighting (From LTG-1)	0
Less Control Credit Watts (From LTG-3)	5,392
Adjusted Actual Watts	17,922

ALLOWED LIGHTING POWER (Choose One Method)

COMPLETE BUILDING METHOD

BUILDING CATEGORY (From Table 1-M)	WATTS PER SF	COMPLETE BLDG. AREA	ALLOWED WATTS
Comp Bldg School	1.40	18,194	25,472

AREA CATEGORY METHOD

AREA CATEGORY (From Table 1-N)	WATTS PER SF	AREA (SF)	ALLOWED WATTS
PAGE TOTAL			
BUILDING TOTAL		AREA	WATTS

TAILORED METHOD

TOTAL ALLOWED WATTS (From LTG-4 or from computer run.)

EnergyPro 3.1 By EnergySoft User Number 5127 Job Number: 629-002B Page:5 of 7

LIGHTING COMPLIANCE SUMMARY — Part 2 of 3 — LTG-1

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

INSTALLED LIGHTING SCHEDULE

Code	LUMINAIRE DESCRIPTION	LAMPS TYPE DESCRIPTION	#	Watts Per Lamp	BALLASTS DESCRIPTION	#	Luminaire #	Watts	Total Watts
A/AE	(3) 4 ft T8 XPS Lamp/PSX Ballast Elec	FO32T8/XPS	3	32	Electronic	1.0	108	72.0	7,776
A1/A1E	(3) 4 ft Fluorescent T8 XPS dimming ballast	F32T8	3	32	Electronic Dimming	1.5	96	93.0	8,928
B	(3) 4 ft T8 XPS Lamp/PSX Ballast Elec	FO32T8/XPS	3	32	Electronic	1.0	10	72.0	720
B1	(2) 4 ft T8 XPS Lamp/PSX Ballast Elec	FO32T8/XPS	2	32	Electronic	1.0	12	49.0	588
C	(1) 4 ft Fluorescent T5 Elec	F28T5	1	28	Electronic	1.0	48	94.0	4,512
F/FE	(2) 4 ft T8 XPS Lamp/PSX Ballast Elec	FO32T8/XPS	2	32	Electronic	1.0	10	49.0	490
G	(2) 18w Compact Fluorescent Quad 2 Pin	CFQ18W/G24d-2	2	18	Magnetic Standard	2.0	6	50.0	300

Lighting Schedule on Plans Shows Exterior Lighting Meets
[ ] Efficacy and Control Requirement of 130(c)
[ ] Control Requirements of 131(f)

Subtotal from this Page	23,314
Total	23,314
Portable Lighting (From LTG-1)	0
Less Control Credit Watts (From LTG-3)	5,392
Adjusted Actual Watts	17,922

MANDATORY AUTOMATIC CONTROLS

CONTROL LOCATION (Room #)	CONTROL IDENTIFICATION	CONTROL TYPE (Auto Time Switch, Exterior, etc.)	SPACE CONTROLLED	NOTE TO FIELD

CONTROLS FOR CREDIT

CONTROL LOCATION (Room # or Dwg. #)	CONTROL IDENTIFICATION	CONTROL TYPE (Occupant, Daylight, Dimming, etc.)	LUMINAIRES CONTROLLED TYPE	# OF LUMINAIRES	NOTE TO FIELD
SCHOOL		Occ Sensor <= 250 sqft	B1	12	
SCHOOL		Occ Sensor <= 250 sqft	A/AE	108	
SCHOOL		Occ Sensor <= 250 sqft	G	6	
SCHOOL		Occ Sensor <= 250 sqft	F/FE	10	

NOTES TO FIELD - For Building Department Use Only

EnergyPro3.1 By EnergySoft User Number:5127 Job Number:629-002B Page:2 of 7

LIGHTING COMPLIANCE SUMMARY — Part 3 of 3 — LTG-1

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

TABLE 1A - PORTABLE LIGHTING NOT SHOWN ON PLANS FOR OFFICE AREAS >250 SQUARE FEET

A ROOM # OR ZONE ID	B DEFAULT (W/sqft)	C AREA (SF)	D TOTAL WATTS (B X C)
	TOTAL	0	0

TABLE 1B - PORTABLE LIGHTING SHOWN ON PLANS FOR OFFICE AREAS >250 SQUARE FEET

A ROOM # OR ZONE ID	B PORTABLE LIGHTING Description	C # OF FIXT.	D LUMIN. WATTS PER FIXTURE	E TASK AREA (SF)	F # OF TASK AREAS	G TOTAL AREA (SF) (D x E)	H TOTAL WATTS (C x E)
SCHOOL				18,194	1	18,194	
					TOTAL	18,194	0

TABLE 1C - PLANS SHOW PORTABLE LIGHTING IS NOT REQUIRED FOR OFFICE AREAS > 250 SQUARE FEET

ROOM # OR ZONE ID	TOTAL AREA (SF)
TOTAL	0

Designer needs to provide detailed documentation that the lighting level provided by the overhead lighting meets the needs of the space. The details include luminaire types, CU, and mounting locations relative to work areas.

BUILDING SUMMARY - PORTABLE LIGHTING

BUILDING SUMMARY	TOTAL AREA (SF) (FROM TABLES 1A+1B+1C)	TOTAL WATTS (FROM TABLES 1A+1B)
BUILDING TOTAL	18,194	0

EnergyPro3.1 By EnergySoft User Number:5127 Job Number:629-002B Page:4 of 7

LIGHTING CONTROL CREDIT WORKSHEET — LTG-3

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

WORKSHEET

A ROOM # ZONE ID	B LIGHTING CONTROL DESCRIPTION	C PLANS REF.	D ROOM AREA (SF)	E DAYLIGHTING ROOM RATIO*	F GLAZING VLT	G WATTS OF CONTROL LIGHTING	H LIGHTING ADJUST. FACTOR	I CONTROL CREDIT WATTS (G X H)
SCHOOL	Occ Sensor <= 250 sqft	B1	18,194			588	0.20	118
SCHOOL	Occ Sensor <= 250 sqft	A/AE	18,194			7,776	0.20	1,555
SCHOOL	Occ Sensor <= 250 sqft	G	18,194			300	0.20	60
SCHOOL	Occ Sensor <= 250 sqft	F/FE	18,194			490	0.20	98
SCHOOL	Occ Sensor > 250 sqft	C	18,194			4,512	0.10	451
SCHOOL	Occ Sensor Storage	B	18,194			720	0.60	432
SCHOOL	Daylighting Controls 30%	A1/A1E	18,194			8,928	0.30	2,678

* For windows, use the Window Wall Ratio for the room. For skylights, use the Skylight-to-Roof ratio for the room.

PAGE TOTAL: 5,392
BUILDING TOTAL: 5,392
Enter on LTG-1 and 2: Actual Lighting Power calculation

EnergyPro 3.1 By EnergySoft User Number 5127 Job Number: 629-002B Page:6 of 7

LIGHTING MANDATORY MEASURES — LTG-MM

PROJECT NAME: JEFFERSON MIDDLE SCHOOL — DATE: 10/26/2004

	DESCRIPTION	Designer	Enforcement
[ ]	131(d)1 For every floor, all interior lighting systems shall be equipped with a separate automatic control to shut off the lighting. This automatic control shall meet the requirements of Section 119 and may be an occupancy sensor, automatic time switch, or other device capable of automatically shutting off the lighting.		
[ ]	131(d)2 Override for Building Lighting Shut-off: The automatic building shut-off system is provided with a manual, accessible override switch in sight of the lights. The area of override is not to exceed 5,000 square feet.		
[X]	119(h) Automatic Control Devices Certified: All automatic control devices specified are certified, all alternate equipment shall be certified and installed as directed by the manufacturer.		
[X]	111 Fluorescent Ballast and Luminaires Certified: All fluorescent fixtures specified for the project are certified and listed in the Directory. All installed fixtures shall be certified.		
[X]	132 Tandem Wiring for One and Three Lamp Fluorescent Fixtures: All one and three lamp fluorescent fixtures are tandem wired with two lamp ballasts where required by Standards Section 132; or all one and three lamp fluorescent fixtures are specified with electronic high-frequency ballasts and are exempt from tandem wiring requirements.		
[X]	131(a) Individual Room/Area Controls: Each room and area in this building is equipped with a separate switch or occupancy sensor device for each area with floor-to-ceiling walls.		
[X]	131(b) Uniform Reduction for Individual Rooms: All rooms and areas greater than 100 square feet and more than 0.8 watts per square foot of lighting load shall be controlled with bi-level switching for uniform reduction of lighting within the room.		
[X]	131(c) Daylight Area Control: All rooms with windows and skylights that are greater than 250 square feet and that allow for the effective use of daylight in the area shall have 50% of the lamps in each daylit area controlled by a separate switch; or the effective use of daylight cannot be accomplished because the windows are continuously shaded by a building on the adjacent lot. Diagram of shading during different times of the year is included on plans.		
[X]	131(f) Control of Exterior Lights: Exterior mounted fixtures served from the electrical panel inside the building are controlled with a directional photo cell control on the roof and a corresponding relay in the electrical panel, or uses an astronomical time clock.		
[ ]	131(e) Display Lighting. Display lighting shall be separately switched on circuits that are 20 amps or less.		
[ ]	130(c) Efficacy of Exterior Lights: Exterior mounted fixtures with lamps over 100 Watts served from the electrical panel inside the building have a source efficacy of at least 60 lumens per Watt, or are controlled by a motion sensor.		

EnergyPro 3.1 By EnergySoft User Number: 5127 Job Number: 629-002B Page:7 of 7

629-002B
REGISTERED PROFESSIONAL ENGINEER — STONE L. FROBERG — No. E13350 — Exp. 9/30/06 — ELECTRICAL — STATE OF CALIFORNIA
08-10-04

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OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.

space art time function

DSA
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

SHEET TITLE
TITLE 24

E0-3

DUCTBANK SCHEDULE (1)

TAG	POWER DUCTS			SIGNAL & COMMUNICATION DUCTS			FIRE ALARM DUCTS		
	CONDUIT	ASSIGNED USE	NOTES	CONDUIT	ASSIGNED USE	NOTES	CONDUIT	ASSIGNED USE	NOTES
101	(8) 4" (4) 4"	(3000C) TO BLDG. L SPARE		×	×		×	×	
102	×	×		(2) 4" (2) 2" (2) 2" (1) 2" (1) 2"	TEL./DATA INTERCOM/P.A. TV SECURITY SPARE	(2)	(1) 2"	FIRE ALARM	
103	(8) 4" (4) 4"	(3000C) TO BLDG. L SPARE		(2) 4" (1) 2" (1) 2" (1) 2" (1) 2"	TEL./DATA INTERCOM/P.A. TV SECURITY SPARE	(2)	(1) 2"	FIRE ALARM	
104	(8) 4" (2) 4"	(3000C) TO BLDG. L SPARE		×	×		×	×	
105	(2) 4"	SPARE		(1) 4" (1) 2" (1) 2" (1) 2" (1) 2"	TEL./DATA (SPARE) INTERCOM/P.A. (SPARE) TV (SPARE) SECURITY (SPARE) SPARE	(2)	(1) 2"	FIRE ALARM	
106	×	×		(1) 4" (1) 4"	TEL./DATA INTERCOM/P.A./TV SPARE	(2)			
201	(1) 3" (1) 3"	(300B) TO BLDG. N SPARE		(1) 4" (1) 2" (1) 2" (1) 2" (1) 2"	TEL./DATA INTERCOM/P.A. TV SECURITY SPARE	(2)	(1) 2"	FIRE ALARM	
202	(2) 4"	SPARE		(1) 2" (1) 2" (1) 2" (1) 2"	INTERCOM/P.A. TV SECURITY SPARE		(1) 2"	FIRE ALARM	
203	(1) 3"	(300B) TO BLDG. N		(1) 2"	LIGHTING CONTROLS		×	×	

SCHEDULE NOTES:

(1) FOR ENCASEMENT REQUIREMENTS SEE 5/E4-1

(2) PROVIDE 50% OF THE 4" CONDUITS WITH 1-1" INNERDUCT AND 2-1¼" INNERDUCT.

FEEDER SCHEDULE

NOTES FOR SCHEDULE:
1. ALL CONDUCTORS SHALL BE COPPER TYPE WITH (DUAL RATED) THHN/THWN INSULATION.
2. 60 DEG. C. TERMINATION FOR CONDUCTORS #2 AWG AND SMALLER. 75 DEG. C. TERMINATION FOR #1 AWG AND LARGER.
3. EG = EQUIPMENT GROUND CONDUCTOR. (N) = NEUTRAL CONDUCTOR.
4. ONE CONDUIT PER FEEDER UNLESS OTHERWISE NOTED BY (NUMBER OF SETS).
5. CONDUIT SIZES SHOWN ARE MINIMUM. PROVIDE LARGER CONDUIT WHERE INDICATED ON PLANS OR DUCTBANK SCHEDULE.

ID. NO.	QTY. IF NOT ONE	CONDUIT SIZE: METAL INCHES	METAL mm	PLASTIC INCHES	PLASTIC mm	CONDUCTORS IN EACH CONDUIT
20A		1/2"	16mm	1/2"	16mm	3 #12 + 1 #12 EG
20B		1/2"	16mm	1/2"	16mm	4 #12 + 1 #12 EG
30A		1/2"	16mm	3/4"	21mm	3 #10 + 1 #10 EG
30B		1/2"	16mm	3/4"	21mm	4 #10 + 1 #10 EG
40A		3/4"	21mm	3/4"	21mm	3 #8 + 1 #10 EG
40B		3/4"	21mm	1"	27mm	4 #8 + 1 #10 EG
50A		3/4"	21mm	1"	27mm	3 #6 + 1 #10 EG
50B		1"	27mm	1"	27mm	4 #6 + 1 #10 EG
60A		1"	27mm	1-1/4"	35mm	3 #4 + 1 #10 EG
60B		1-1/4"	35mm	1-1/4"	35mm	4 #4 + 1 #10 EG
60C		1-1/4"	35mm	1-1/4"	35mm	3 #4 + 1 #1(N) + 1 #10 EG
60T		1-1/4"	35mm	1-1/4"	35mm	4 #4 + 1 #8 GRD.
70A		1"	27mm	1-1/4"	35mm	3 #4 + 1 #8 EG
70B		1-1/4"	35mm	1-1/4"	35mm	4 #4 + 1 #8 EG
70F		1-1/2"	41mm	1-1/2"	41mm	4 #4 + 1 #4 EG
80A		1-1/4"	35mm	1-1/4"	35mm	3 #2 + 1 #8 EG
80B		1-1/4"	35mm	1-1/2"	41mm	4 #2 + 1 #8 EG
90A		1-1/4"	35mm	1-1/4"	35mm	3 #2 + 1 #8 EG
90B		1-1/4"	35mm	1-1/2"	41mm	4 #2 + 1 #8 EG
100A		1-1/4"	35mm	1-1/4"	35mm	3 #2 + 1 #8 EG
100B		1-1/4"	35mm	1-1/2"	41mm	4 #2 + 1 #8 EG
100C		1-1/2"	41mm	2"	53mm	3 #2 + 1 #3/0 (N)+1 #8 EG
125A		1-1/4"	35mm	1-1/2"	41mm	3 #1 + 1 #6 EG
125B		1-1/2"	41mm	2"	53mm	4 #1 + 1 #6 EG
125C		2"	53mm	2"	53mm	3 #1, 1 250 kcmil (N)+1 #6 EG
150A		1-1/2"	41mm	1-1/2"	41mm	3 #1/0 + 1 #6 EG
150B		2"	53mm	2"	53mm	4 #1/0 + 1 #6 EG
150C		2"	53mm	2"	53mm	5 #1/0 + 1 #6 EG
150T		2"	53mm	2"	53mm	4 #1/0 + 1 #4 GRD.
150L		2-1/2"	63mm	2-1/2"	63mm	4 #1/0 + 1 #6 GRD.
175A		1-1/2"	41mm	2"	53mm	3 #2/0 + 1 #6 EG
175B		2"	53mm	2"	53mm	4 #2/0 + 1 #6 EG
175C		2"	53mm	2-1/2"	63mm	5 #2/0 + 1 #6 EG
200A		2"	53mm	2"	53mm	3 #3/0 + 1 #6 EG
200B		2-1/2"	63mm	2-1/2"	63mm	4 #3/0 + 1 #6 EG
200C		2-1/2"	63mm	2-1/2"	63mm	5 #3/0 + 1 #6 EG
225A		2"	53mm	2-1/2"	63mm	3 #4/0 + 1 #4 EG
225B		2-1/2"	63mm	2-1/2"	63mm	4 #4/0 + 1 #4 EG
225C		3"	78mm	3"	78mm	5 #4/0 + 1 #4 EG
225T		2-1/2"	63mm	2-1/2"	63mm	4 #4/0 + 1 #2 GRD.
250A		2-1/2"	63mm	2-1/2"	63mm	3 250 kcmil + 1 #4 EG
250B		3"	78mm	3"	78mm	4 250 kcmil + 1 #4 EG
250C		3"	78mm	3"	78mm	5 250 kcmil + 1 #4 EG
250T		3"	78mm	3"	78mm	4 250 kcmil + 1 #2 GRD.

ID. NO.	QTY. IF NOT ONE	CONDUIT SIZE: METAL INCHES	METAL mm	PLASTIC INCHES	PLASTIC mm	CONDUCTORS IN EACH CONDUIT
300A		3"	78mm	3"	78mm	3 350 kcmil + 1 #4 EG
300B		3"	78mm	3"	78mm	4 350 kcmil + 1 #4 EG
300C		3-1/2"	91mm	3-1/2"	91mm	5 350 kcmil + 1 #4 EG
300D		3"	78mm	3"	78mm	4 350 kcmil + 1 #1 EG
350A		3"	78mm	3-1/2"	91mm	3 500 kcmil + 1 #2 EG
350B		3-1/2"	91mm	3-1/2"	91mm	4 500 kcmil + 1 #2 EG
350C		4"	103mm	4"	103mm	5 500 kcmil + 1 #2 EG
400A		3"	78mm	3-1/2"	91mm	3 600 kcmil + 1 #2 EG
400B		3-1/2"	91mm	4"	103mm	4 600 kcmil + 1 #2 EG
400C		4"	103mm	5"	129mm	5 600 kcmil + 1 #2 EG
400T		3-1/2"	91mm	4"	103mm	4 600 kcmil + 1 #1/0 GRD.
450A	(2)	2-1/2"	63mm	2-1/2"	63mm	3 #4/0 + 1 #2 EG
450B	(2)	2-1/2"	63mm	3"	78mm	4 #4/0 + 1 #2 EG
450C	(2)	3"	78mm	3"	78mm	5 #4/0 + 1 #2 EG
500A	(2)	2-1/2"	63mm	2-1/2"	63mm	3 250 kcmil + 1 #2 EG
500B	(2)	3"	78mm	3"	78mm	4 250 kcmil + 1 #2 EG
500C	(2)	3"	78mm	3"	78mm	5 250 kcmil + 1 #2 EG
500T	(2)	3"	78mm	3"	78mm	4 250 kcmil + 1 #1/0 kcmil GRD.
600A	(2)	3"	78mm	3"	78mm	3 350 kcmil + 1 #1 EG
600B	(2)	3"	78mm	3"	78mm	4 350 kcmil + 1 #1 EG
600C	(2)	3-1/2"	91mm	3-1/2"	91mm	5 350 kcmil + 1 #1 EG
600T	(2)	3"	78mm	3"	78mm	4 350 kcmil + 1 #2/0 GRD.
700A	(2)	3"	78mm	3"	78mm	3 500 kcmil + 1 #1/0 EG
700B	(2)	3-1/2"	91mm	3-1/2"	91mm	4 500 kcmil + 1 #1/0 EG
700C	(2)	4"	103mm	4"	103mm	5 500 kcmil + 1 #1/0 EG
800A	(2)	3-1/2"	91mm	3-1/2"	91mm	3 600 kcmil + 1 #1/0 EG
800B	(2)	4"	103mm	4"	103mm	4 600 kcmil + 1 #1/0 EG
800C	(2)	4"	103mm	5"	129mm	5 600 kcmil + 1 #1/0 EG
800T	(2)	4"	103mm	4"	103mm	4 600 kcmil + 1 #3/0 GRD.
1000A	(3)	3-1/2"	91mm	3-1/2"	91mm	3 500 kcmil + 1 #2/0 EG
1000B	(3)	4"	103mm	4"	103mm	4 500 kcmil + 1 #2/0 EG
1000C	(3)	4"	103mm	4"	103mm	5 500 kcmil + 1 #2/0 EG
1000F	(3)	4"	103mm	4"	103mm	4 600 kcmil + 1 #4/0 EG
1000T	(3)	4"	103mm	4"	103mm	4 500 kcmil + 1 #4/0 GRD.
1200A	(4)	3"	78mm	3"	78mm	3 350 kcmil + 1 #3/0 EG
1200B	(4)	3-1/2"	91mm	3-1/2"	91mm	4 350 kcmil + 1 #3/0 EG
1200C	(4)	3-1/2"	91mm	3-1/2"	91mm	5 350 kcmil + 1 #3/0 EG
1600A	(4)	3-1/2"	91mm	3-1/2"	91mm	3 600 kcmil + 1 #4/0 EG
1600B	(4)	4"	103mm	4"	103mm	4 600 kcmil + 1 #4/0 EG
1600C	(4)	4"	103mm	5"	129mm	5 600 kcmil + 1 #4/0 EG
2000A	(5)	4"	103mm	4"	103mm	3 600 kcmil + 1 250 kcmil EG
2000B	(5)	4"	103mm	4"	103mm	4 600 kcmil + 1 250 kcmil EG
2500A	(6)	4"	103mm	4"	103mm	3 600 kcmil + 1 350 kcmil EG
2500B	(6)	4"	103mm	4"	103mm	4 600 kcmil + 1 350 kcmil EG
3000A	(8)	4"	103mm	4"	103mm	3 600 kcmil + 1 400 kcmil EG
3000B	(8)	4"	103mm	4"	103mm	4 600 kcmil + 1 400 kcmil EG
3000C	(8)	4"	103mm	4"	103mm	4 600 kcmil + 1 600 kcmil EG
4000A	(10)	4"	103mm	4"	103mm	3 600 kcmil + 1 500 kcmil EG
4000B	(10)	4"	103mm	4"	103mm	4 600 kcmil + 1 500 kcmil EG

629-002B

REGISTERED PROFESSIONAL ENGINEER STONE L. FROBERG No. 5950 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
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PLOTTED @ 3/18/05

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PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

space time art function

GROTH ARCHITECTS, INC.
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC ___ FLS ___ SS ___
DATE MAR 2 8 2005

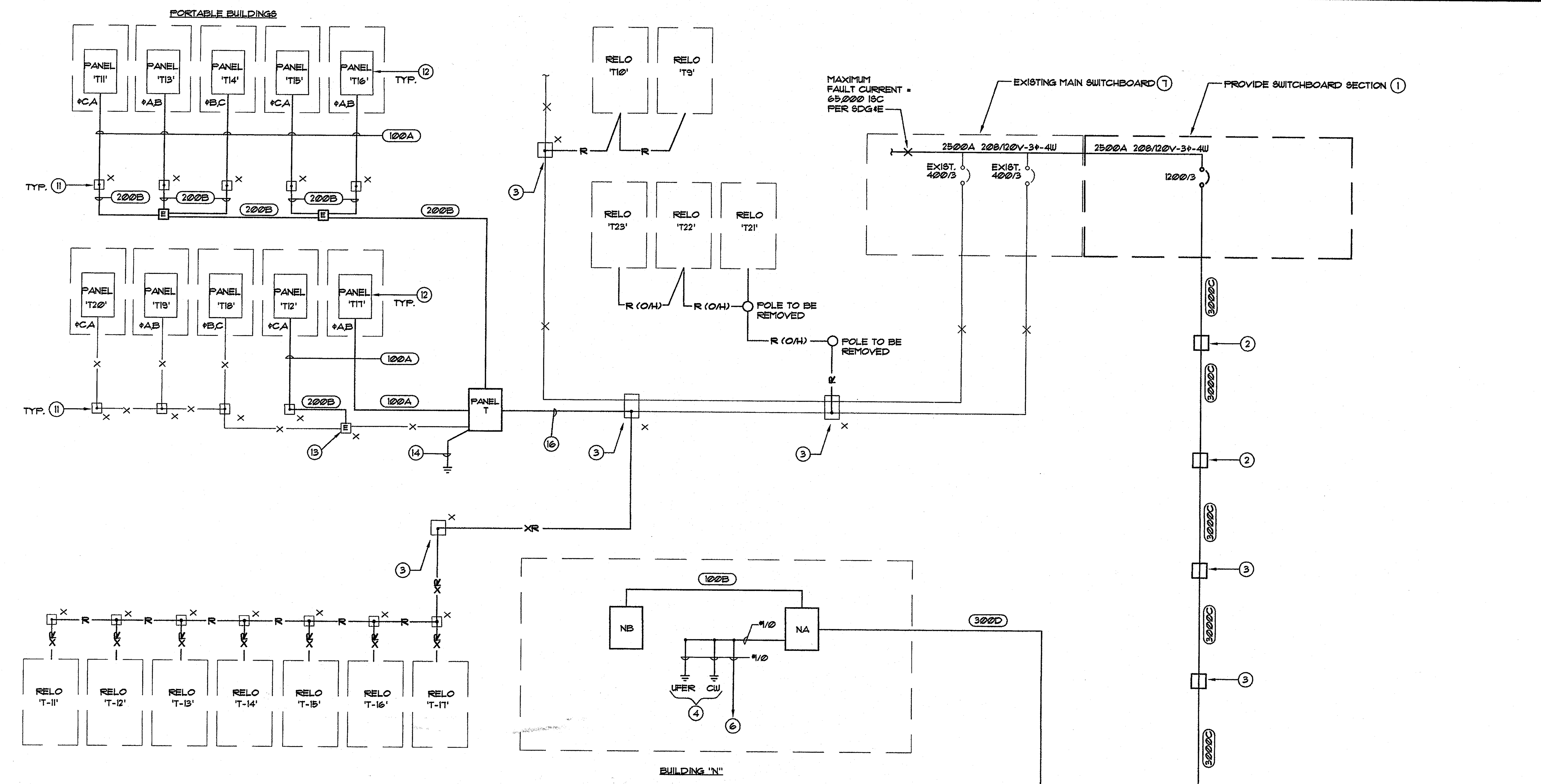
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

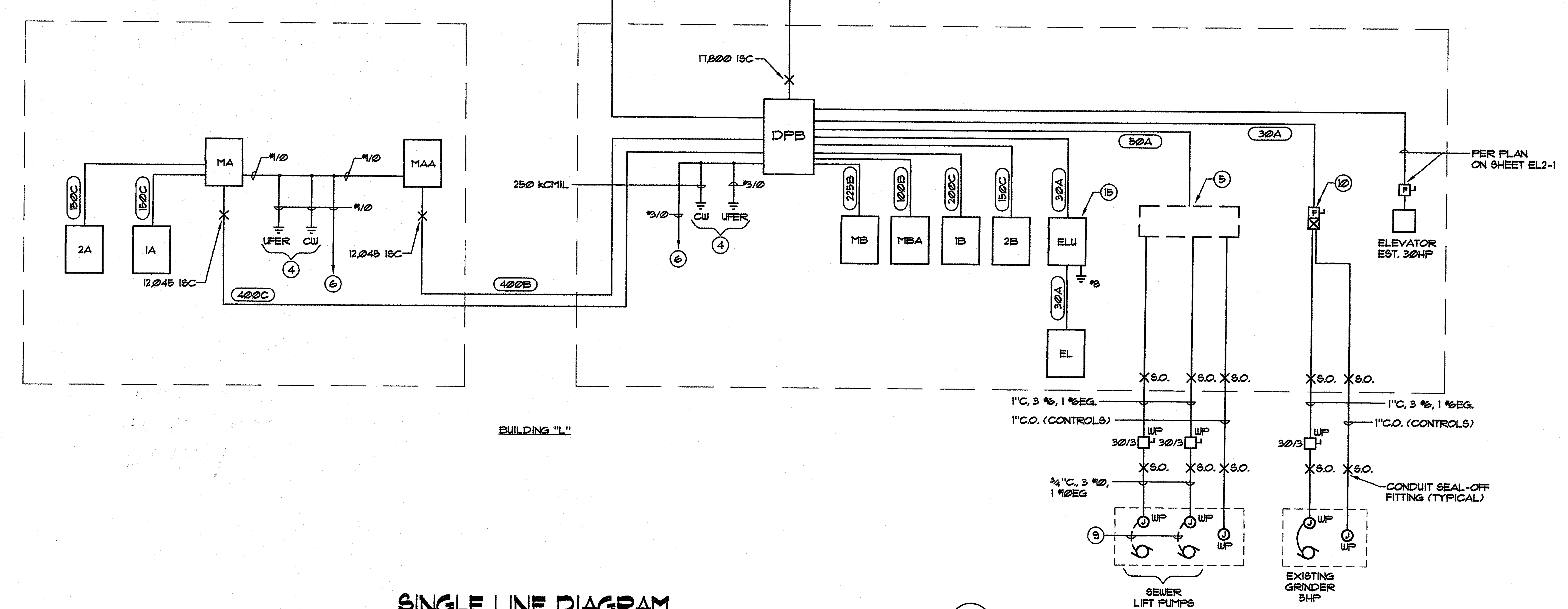
SHEET TITLE

POWER AND SIGNAL DISTRIBUTION SCHEDULES

E0-4

FILE: J:\629-002B\6292EQ4.dwg, Mar 21, 2005 - 9:30am
XREF: 6292BDR.dwg





SINGLE LINE DIAGRAM

NO SCALE

1 / E0-6

PANEL: DPB			VOLTAGE: 208 /120V, 3-PH, 4W			BUS SIZE: 1200A		MAIN: 1200A/3P M.C.B.		
LOCATION: ELECT			MOUNTING: SURFACE			A/C RATING: 22,000A		FEED: TOP X BOTTOM X		
CIRCUIT CODE: blank or N: NON-CONTINUOUS				L: LONG-CONTINUOUS		R: DEMANDABLE RECEPT'S		K: KITCHEN		P: PANEL
ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
SUBFEED "2B"	P	150/	1	8512				50/	N	LIFT STATION PUMPS
				4036			2			(2) 5 HP
SAME CKT AS ABOVE	P	/	3		6980			/	N	SAME CKT AS ABOVE
					4036		4			
SAME CKT AS ABOVE	P	/3	5			6866		/3	N	SAME CKT AS ABOVE
						4036	6			
SUBFEED "1B"	P	200/	7	9982				30/	N	GRINDER STATION
				2018			8			5 HP
PART OF CIRCUIT ABOVE	P	/	9		11288			/	N	SAME CKT AS ABOVE
					2018		10			
PART OF CIRCUIT ABOVE	P	/3	11			10320		/3	N	SAME CKT AS ABOVE
						2018	12			
SUBFEED "MBA"	P	100/	13	10336				175/	N	ELEVATOR
				10623			14			(EST. 30 HP)
PART OF CIRCUIT ABOVE	P	/	15		10364			/	N	SAME CKT AS ABOVE
					10623		16			
PART OF CIRCUIT ABOVE	P	/3	17			9768		/3	N	SAME CKT AS ABOVE
						10623	18			
BUSSED SPACE			19					225/	P	SUBFEED "MB"
				12748			20			
SUBFEED "ELU"	P	30/	21		1250			/	P	SAME CKT AS ABOVE
					13183		22			
SAME AS CIRCUIT ABOVE	P	/2	23			1250		/3	P	SAME CKT AS ABOVE
						14900	24			
SUBFEED "MA"	P	400/	25	21197						BUSSED SPACE
							26			
SAME CKT AS ABOVE	P	/	27		19824					BUSSED SPACE
							28			
SAME CKT AS ABOVE	P	/3	29			19141				BUSSED SPACE
							30			
SUBFEED "MAA"	P	400/	31	19108						BUSSED SPACE
							32			
PART OF CIRCUIT ABOVE	P	/	33		24988					BUSSED SPACE
							34			
PART OF CIRCUIT ABOVE	P	/3	35			26288				BUSSED SPACE
							36			
SUBFEED "NA"	P	225/	37	6573						BUSSED SPACE
							38			
PART OF CIRCUIT ABOVE	P	/	39		6137					BUSSED SPACE
							40			
PART OF CIRCUIT ABOVE	P	/3	41			4275				BUSSED SPACE
							42			

CONN. VA PHASE A	105133	CONN. VA (CODE N)	190749	DEMAND KVA	362.1
CONN. VA PHASE B	110691	CONN. VA (CODE L)	77147	DEMAND AMPS	1005.7
CONN. VA PHASE C	109485	CONN. VA (CODE R)	130360	CONN. AMPS	903.6
TOTAL CONN. VA	325309	CONN. VA (CODE K)	6700	HIGH PH AMPS/LCL	1067.5

629-002B

REGISTERED PROFESSIONAL ENGINEER STONE L. FROBERG No. 5950 Exp. 9/30/05 ELECTRICAL STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

SHEET NOTES:

1. EXTEND BUS TO NEW SWITCHBOARD SECTION.
2. PULLBOX IN TUNNEL, PER SITE PLAN ON SHEET E1-1.
3. PULLBOX, PER SITE PLAN ON SHEET E1-1.
4. PROVIDE GROUNDING ELECTRODE FOR EQUIPMENT GROUNDING CONDUCTOR. DO NOT BOND TO GROUNDED CIRCUIT CONDUCTOR (NEUTRAL). SEE CEC 250-32 (b) (1).
5. PUMP CONTROL PANEL FURNISHED BY DIV. 2.
6. BOND TO FIRE SPRINKLER PIPING AND METALLIC GAS PIPING PER CEC 250-104.
7. EXISTING PEAK DEMAND = 198kW PER SDG&E. EXISTING SERVICE LATERAL AMPACITY = 2300A.
8. PROVIDE CONDUIT SEAL-OFF FITTING.
9. FLEXIBLE CABLES FURNISHED BY LIFT STATION MANUFACTURER.
10. PROVIDE COMBINATION STARTER, NEMA SIZE 1.
11. EXISTING JUNCTION BOX, PER FLOOR PLANS ON SHEET ET1-1.
12. EXISTING CLASSROOM PANEL TO REMAIN. PROVIDE GROUNDING PER CEC ART. 250-24(c) AND GROUNDING DETAIL 1/ET1-1.
13. TAP TO EXISTING FEEDER IN EXISTING UNDERGROUND PULL BOX.
14. 1#1/0, ¾"C. TO MADE ELECTRODE PER CEC ARTICLE 250-24(c) AND GROUNDING DETAIL 1/ET1-1.
15. EMERGENCY LIGHTING UNIT 'ELU'. 25kVA/25KW, 208V INPUT, 208/120V OUTPUT.
16. EXTEND 400A FEEDER TO PANEL 'T'.

PLOTTED @ 3/18/05

OUSD NO.	758-000
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LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
SINGLE LINE DIAGRAM

E0-5

629-002B

REGISTERED PROFESSIONAL ENGINEER — STONE L. FROBERG — ELECTRICAL — STATE OF CALIFORNIA — 9/30/06

08-10-04

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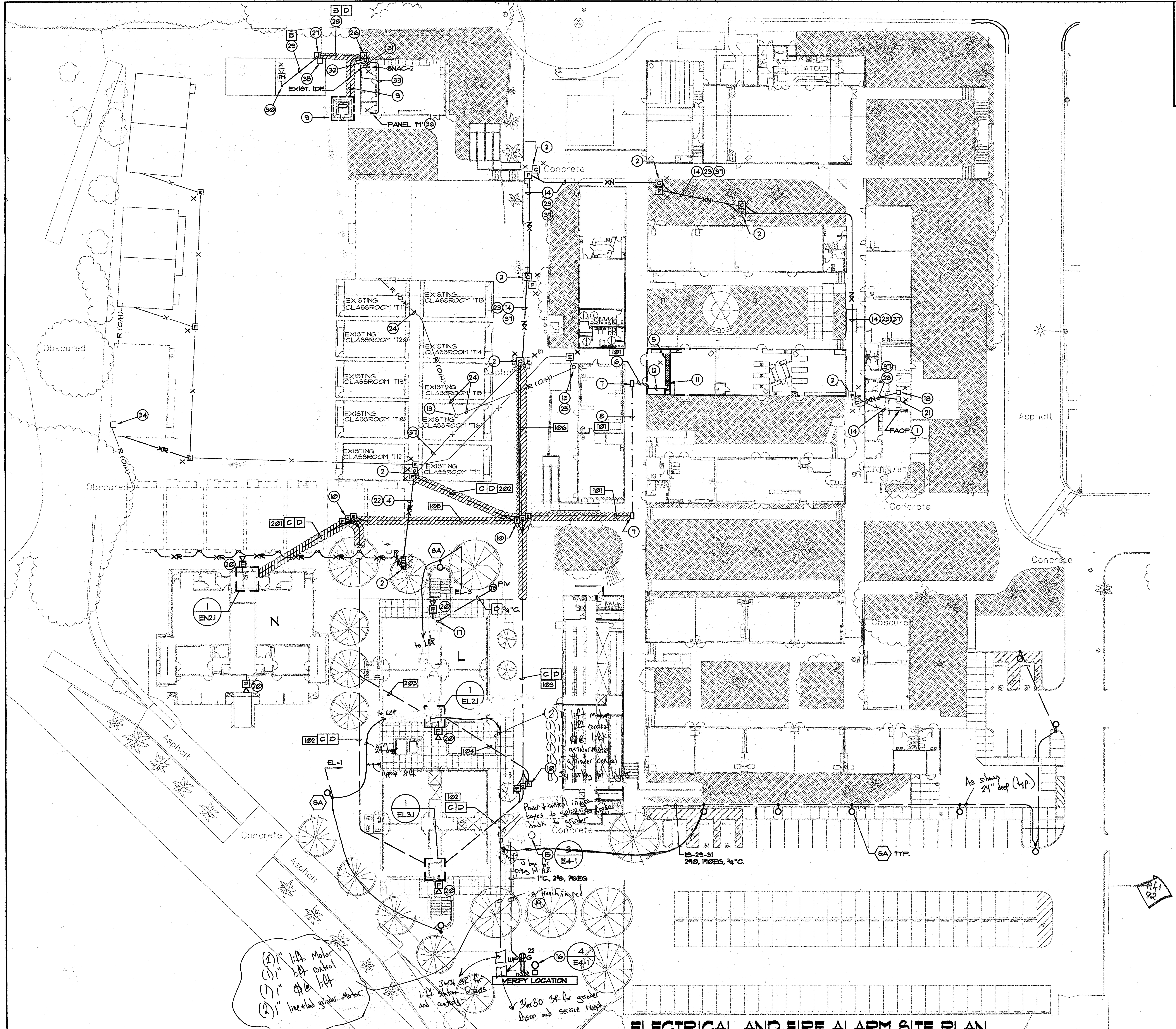

ELECTRICAL AND FIRE ALARM SITE PLAN

1" = 30' - 0"

SHEET NOTES:

1. EXISTING FIRE ALARM CONTROL PANEL 'FCI-7200A'.
2. EXISTING FIRE ALARM AND COMMUNICATION UNDERGROUND PULLBOX TO REMAIN.
3. EXISTING UNDERGROUND PULL BOXES TO REMAIN.
4. REMOVE EXISTING FIRE ALARM CABLES (INITIATING LOOP AND SNAC TRIP CIRCUITS) AND RECONNECT TO RELOCATED SNAC-T. SEE SHEET ET1-1.
5. EXISTING MAIN SWITCHBOARD.
6. RUN UNDERGROUND TO EXISTING UTILITY TUNNEL. CUT, PATCH AND REPAIR SURFACE TO MATCH EXISTING.
7. PULLBOX IN TUNNEL. 36" x 36" x 12" DEEP.
8. RUN EXPOSED ON WALL OF TUNNEL.
9. SEE SHEET EP1-1 FOR ADDITIONAL WORK.
10. POWER, SIGNAL AND FIRE ALARM PULLBOXES PER DETAIL 1/E4-3.
11. PROVIDE AND EXTEND SWITCHBOARD SECTION, SEE SINGLE LINE DIAGRAM.
12. ROUTE FEEDER CONDUITS EXPOSED IN ELECTRICAL ROOM AND DOWN TO TUNNEL.
13. REMOVE EXISTING POLE AND CONDUIT RISER.
14. EXISTING INITIATING LOOP AND SNAC TRIP SIGNAL TO REMAIN.
15. EXISTING SEWER VAULT WITH GRINDER 5HP, 208V-3Φ.
16. SEWER LIFT STATION WITH DUPLEX LIFT PUMPS, (2) 5HP, 208V-3Φ.
17. CONNECT TO TAMPER SWITCH IN FIRE RISER ROOM.
18. EXISTING DATA 'MDF' EQUIPMENT.
19. 1"C, 2 #6, 1 #6EG. TO RECEPTACLE IN ELEC. RM. 118. SEE SHEET E3-1.
20. SEE FIRE ALARM FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
21. EXISTING COMMUNIATION AND CATV HEAD END EQUIPMENT.
22. REMOVE AND PULL EXISTING FIBER, TELEPHONE AND TV CABLES BACK TO EXISTING UNDERGROUND PULL BOX AND TERMINATE IN EXISTING 'IDF' CABINET IN ROOM T17. SEE ET1-1 FOR ADDITIONAL REQUIREMENTS.
23. PROVIDE 1-1" INNERDUCT AND 2-1¼" INNERDUCT IN EXISTING 4"C.
24. REMOVE ALL EXISTING OVERHEAD CABLES. COORDINATE WITH DISTRICT PERSONNEL.
25. CAP EXISTING 2-3" UNDERGROUND CONDUITS.
26. PROVIDE 18"SQ. x 6"DEEP NEMA 3R JUNCTION BOX WITH BARRIER FOR FIRE ALARM CABLES. MOUNT AT +10'-0"AFF.
27. PROVIDE 18"SQ. x 6"DEEP NEMA 3R JUNCTION BOX WITH BARRIER FOR FIRE ALARM CABLES. MOUNT BOX AT CEILING LEVEL. PROVIDE 2-2"C. SLEEVES ABOVE ACCESSIBLE CEILING. COIL 10' OF COMMUNICATION CABLES ABOVE ACCESSIBLE CEILING.
28. PROVIDE 1-2"C. WITH (1) TYPE 'E' CABLE, SPARE 1-2"C.O. WITH PULL ROPE AND 1-1"C WITH FIRE ALARM CABLES INDICATED.
29. PROVIDE 1-¾"C WITH FIRE ALARM CABLES INDICATED. ROUTE CONDUIT ABOVE ACCESSIBLE CEILING.
30. CONNECT TO EXISTING FIRE ALARM MINI-HORN. RELOCATE END OF LINE 'EOL' IN CLASSROOM 'T8' EXISTING FIRE ALARM MINI-HORN.
31. PROVIDE 1-¾"C WITH FIRE ALARM CABLES INDICATED. ROUTE CONDUIT EXPOSED IN 'IDF' ROOM.
32. PROVIDE 1-2"C. WITH (1) TYPE 'E' CABLE.
33. ROUTE BRANCH CIRCUIT ABOVE ACCESSIBLE CEILING.
34. DATA HUB TO BE RELOCATED BY 'OUSD'.
35. RELOCATED 'OUSD' DATA HUB. FINAL CONNECTIONS BY 'OUSD'.
36. PROVIDE 20A/1P CIRCUIT BREAKER IN EXISTING POLE SPACE #35. CIRCUIT BREAKER TO MATCH EXISTING TYPE AND AIC RATING.
37. REMOVE EXISTING (2) 4/C#18 CABLES BACK TO SOURCE. PROVIDE TYPE (2) 'M' CABLES AND RECONNECT TO EXISTING SYSTEM. COORDINATE WITH 'OUSD'.

GENERAL NOTES:

1. REFER TO FIRE ALARM WIRE SCHEDULE SHEET E2-1.
2. REFER TO DUCTBANK SCHEDULE SHEET E0-4.

PLOTTED @ 3/18/05

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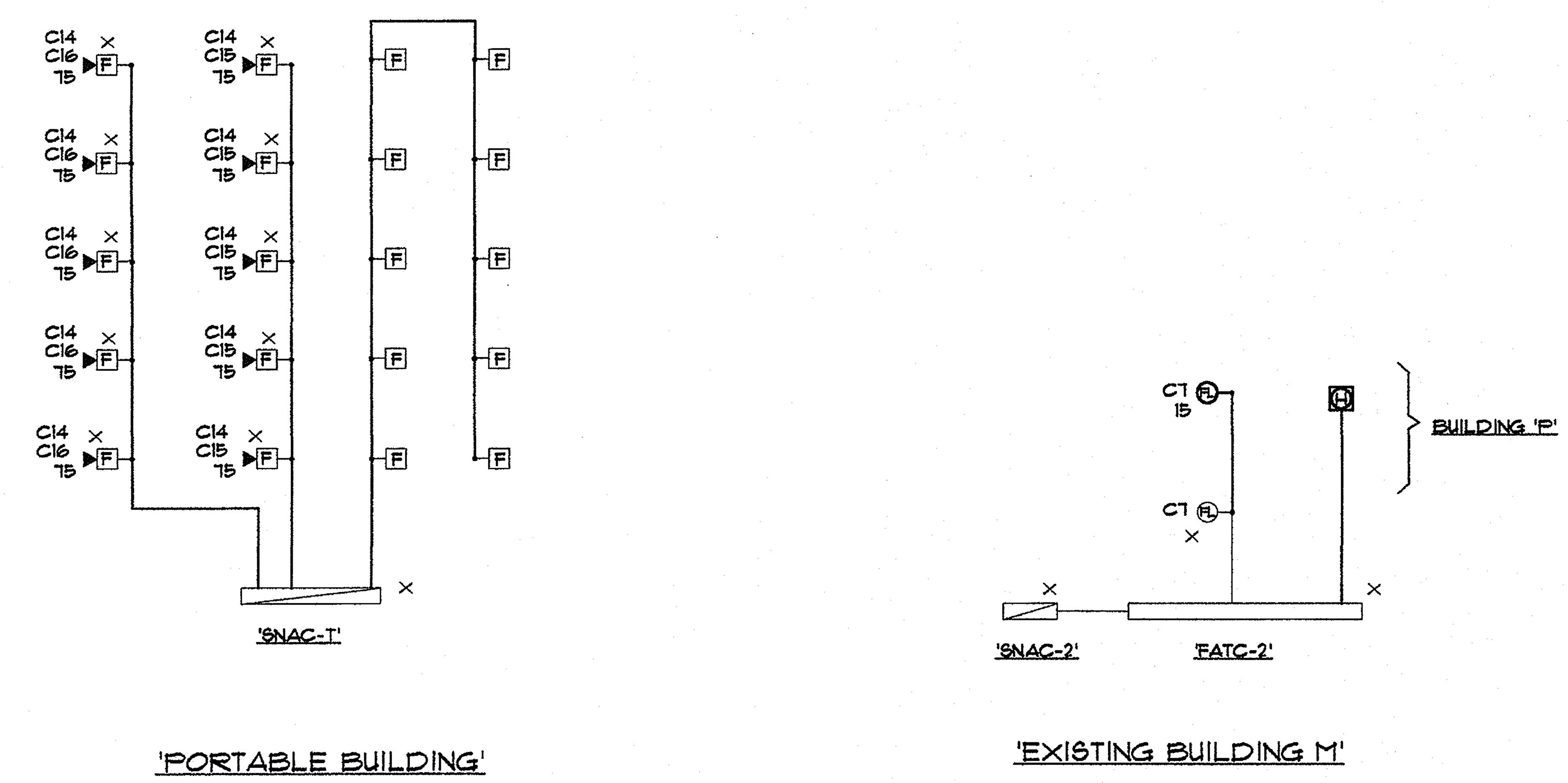
LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

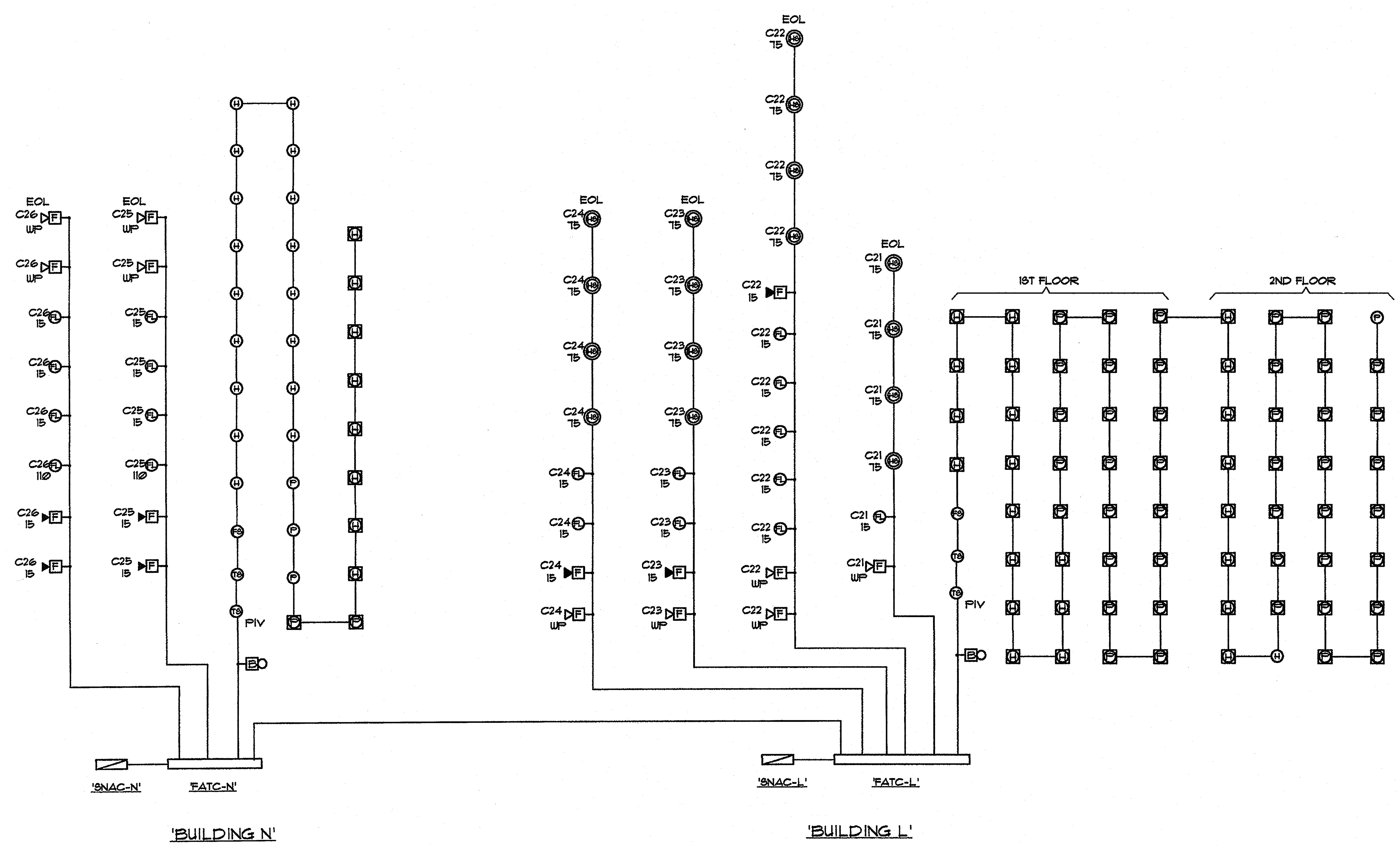
SHEET TITLE

ELECTRICAL AND FIRE ALARM SITE PLAN

E1-1

FILE: J:\629-002B\6292E11.dwg Mar 21, 2005 - 10:42am
XREF: 6292BDR.dwg 6292B-SITE.dwg DEMOSITE.dwg





FIRE ALARM RISER DIAGRAM

NO SCALE

FIRE ALARM WIRE SCHEDULE

A	1 WP #990 1 PAIR #16 1 RED / 1 BLK - INITIATING LOOP
B	2 #12 AWG THHN 1 RED / 1 BLK - HORN/STROBE
C	4 #12 AWG THHN 1 PNK / 1 PRP / 1 YEL / 1 BRN - NAC TRIP
D	1 WP #AQ225 1 PAIR 16 AWG 1 RED / 1 BLK - INITIATING LOOP (UNDERGROUND)

FIRE ALARM NOTES

1. EXISTING FIRE ALARM IS A MANUAL ACTIVATED SYSTEM. BUILDING 'L', 'N' AND 'P' FIRE ALARM IS FULLY AUTOMATIC.
2. ALL INTERIOR WIRING SHALL BE IN A ¾"C. MIN. U.O.N.
3. SMOKE DETECTORS SHALL BE 3' AWAY FROM SUPPLY AND RETURN AIR DIFFUSERS.

FIRE ALARM SYMBOLS

EXISTING ANALOG FIRE ALARM CONTROL PANEL
MODEL: FCI 7200A BSU/C
C.S.F.M. 7165-0694:174

SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT PANEL 'SNAC'
MODEL: FCI SNACS
SFM#: 7300-0694:230

HORN
MODEL: WHEELOCK MT-12/24-R-WP
SFM#: 7135-0785:11

STROBE
MODEL: WHEELOCK RSS-24MCW-FR
SFM#: 7125-0785:141

HORN/STROBE (LOW HORN SETTINGS)
MODEL: WHEELOCK AS-24MCW-FR
SFM#: 7125-0785:131

HORN/STROBE (LOW HORN SETTINGS)
MODEL: WHEELOCK AS-24MCC-FR
SFM#: 7125-0785:131

DUAL SYNC MODULE
MODEL: WHEELOCK #DSM-12/24
SFM#: 7300-0785:132

BELL
MODEL: WHEELOCK MB-G10-24-R
SFM#: 7135-0785:113

SMOKE DETECTOR
MODEL: FCI #ASD-PL2
SFM#: 7272-0694:254
BASE
MODEL: FCI #ADB-FL
SFM#: 7300-0694:194

HEAT DETECTOR
MODEL: FCI #ATD-L2
SFM#: 7270-0694:256
BASE
MODEL: FCI #ADB-FL
SFM#: 7300-0694:194

EXISTING MANUAL PULL STATION
MODEL: FCI #MS-7A
SFM#: 7150-0694:236

FLOW/TAMPER SWITCHES
MODEL: FCI #WS SERIES/PIBV2 SWITCH
SFM#: 7770-1209:140
SFM#: 7770-1209:149

ADDRESSABLE MONITOR MODULE
MODEL: AMM-2
SFM#: 7300-0694:178

C5 INDICATES SIGNAL CIRCUIT NUMBER

A FIRE ALARM WIRE SCHEDULE REFERENCE

FIRE ALARM SYSTEM NOTES

A. THE FIRE ALARM SYSTEM INFORMATION SHOWN ON THE CONSTRUCTION DOCUMENTS HEREIN SHALL BE CONSIDERED AS DESIGN CRITERIA INTENDED ONLY AS A GUIDE TO AID THE CONTRACTOR IN ESTABLISHING THE DESIGN AND CONSTRUCTION SCOPE OF WORK. THE CRITERIA SHALL SET THE QUANTITY, TYPE, CONFIGURATION AND BASIC FUNCTIONS OF THE SYSTEM REQUIRED. THIS CONTRACT SHALL REQUIRE THE CONTRACTOR TO PROVIDE COMPLETE DESIGN AND CONSTRUCTION OF A FIRE ALARM SYSTEM THAT COMPLIES WITH ALL REQUIREMENTS AND CODES AS DEFINED BY DIVISION OF STATE ARCHITECT (DSA).

B. THE FIRE ALARM SYSTEM INFORMATION INDICATED IN THESE DRAWINGS SHALL BE USED BY THE CONTRACTOR FOR PREPARATION OF DETAILED SHOP DRAWINGS. QUANTITY AND LOCATION OF AUTOMATIC DETECTORS, MANUAL STATIONS AND OTHER FIRE ALARM EQUIPMENT AND DEVICES, AS SHOWN ON THESE DRAWINGS SHALL BE INCLUDED IN SHOP DRAWINGS AND SUBMITTED FOR REVIEW AND APPROVAL. ADDITIONAL DEVICES MAY BE REQUIRED UPON REVIEW OF SHOP DRAWINGS AND UPON TEST OR INSPECTION OF FIRE ALARM SYSTEM. THE CONTRACTOR SHALL INCLUDE IN HIS BID AND BE RESPONSIBLE FOR DETERMINING FINAL QUANTITY AND LOCATION OF ALL FIRE ALARM DEVICES REQUIRED.

C. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE, CHAPTER 3 OF THE CALIFORNIA BUILDING CODE, THE CALIFORNIA FIRE CODE AND NFPA 72, 1999 EDITION. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE ENFORCING AGENCY.

D. WITH FIRE ALARM SUBMITTALS INCLUDE THE FOLLOWING:
1. POINT TO POINT WIRING DIAGRAM.
2. FIRE ALARM RISER DETAILS.
3. NUMBER OF CONDUCTORS PER CIRCUIT.
4. SIZE (GAUGE) AND INSULATION OF ELECTRICAL CONDUCTORS.
5. SYSTEM BATTERY CALCULATIONS.
6. WORST-CASE VOLTAGE DROP CALCULATIONS.
7. CSFM LISTING SHEET FOR EACH COMPONENT.
8. MANUFACTURER CUT SHEET FOR EACH COMPONENT.
9. LABEL ALL CIRCUITS ON RISER DIAGRAM, VOLTAGE DROP CALCULATIONS AND FLOOR PLANS.
10. FLOOR PLAN SHALL SHOW CONDUIT / WIRING RUNS.
11. SHOW CANDELA RATINGS ADJACENT TO STROBES ON FLOOR PLAN.

E. THE CONTRACTOR SHALL BE AN ESTABLISHED COMMUNICATIONS AND ELECTRONICS CONTRACTOR THAT HAS HAD AND CURRENTLY MAINTAINS A LOCALLY RUN AND OPERATED BUSINESS FOR AT LEAST FIVE YEARS. THE CONTRACTOR SHALL BE A DULLY AUTHORIZED DISTRIBUTOR AND INSTALLER OF THE EXISTING EQUIPMENT WITH FULL MANUFACTURER'S WARRANTY PRIVILEGES.

F. THE SYSTEM SHALL BE INSTALLED AND FULLY TESTED UNDER THE SUPERVISION OF TRAINED MANUFACTURER'S REPRESENTATIVE. THE SYSTEM SHALL BE DEMONSTRATED TO PERFORM ALL THE FUNCTIONS AS SPECIFIED.

629-002B

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SHEET TITLE
FIRE ALARM RISER DIAGRAM SYMBOLS AND NOTES

E2-1

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XREF: 6292BDR.dwg

VOLTAGE LINE LOSS CALCULATIONS

VOLTAGE LINE LOSS FORMULA:
(A) X (F) X (C) / (D)/ (E) = % LINE LOSS

(A)AMPS

75cd HORN/STROBE (AS-24MCC-FR) 0.138
15cd HORN/STROBE (AS-24MCW-FR) 0.052
30cd HORN/STROBE (AS-24MCW-FR) 0.076
75cd HORN/STROBE (AS-24MCC-FR) 0.132
110cd HORN/STROBE (AS-24MCW-FR) 0.169
15cd STROBE (RSS-24MCW-FR) 0.041
30cd STROBE (RSS-24MCW-FR) 0.063
75cd STROBE (RSS-24MCW-FR) 0.109
110cd STROBE (RSS-24MCW-FR) 0.140
EXTERIOR HORN 0.069
DUAL SYNC MODULE (DSM-12/24-R) 0.038
MINI HORN 0.017

OTHER DATA

(B) WIRE GAUGE 12
(C) WIRE RESISTANCE 21.6
(D) MCIRCULAR MILLS 6530
(E) VOLTS (DC) 20.4
(F) LINE WIRE FOOTAGE (PER CIRCUIT)

	75cd H/S CLG.	15cd HORN/ STROBE	30cd HORN/ STROBE	75cd HORN/ STROBE	110cd HORN/ STROBE	15cd STROBE	30cd STROBE	75cd STROBE	110cd STROBE	EXT. HORN	DUAL SYNC. MODULE	MINI HORN	TOTAL AMPS	LINE WIRE FOOTAGE	VOLTAGE LOSS	% LINE LOSS
EXISTING SNAC-2																
CIRCUIT 7 (C7)	0	0	0	0	1	3	0	0	0	2	0	0	0.430	300	0.43	2.09%
TOTAL	0	0	0	0	1	3	0	0	0	2	0	0	0.43			
SNAC-L																
CIRCUIT 21 (C21)	0	0	0	4	0	1	0	0	0	1	1	0	0.676	350	0.78	3.84%
CIRCUIT 22 (C22)	0	1	0	4	0	5	0	0	0	2	0	0	0.923	200	0.61	2.99%
CIRCUIT 23 (C23)	0	1	0	4	0	2	0	0	0	1	1	0	0.769	450	1.14	5.61%
CIRCUIT 24 (C24)	0	1	0	4	0	2	0	0	0	1	1	0	0.769	350	0.89	4.36%
TOTAL	0	3	0	16	0	10	0	0	0	5	3	0	3.137			
SNAC-N																
CIRCUIT 25 (C25)	0	2	0	0	0	3	0	0	1	2	1	0	0.543	250	0.45	2.20%
CIRCUIT 26 (C26)	0	2	0	0	0	3	0	0	1	2	1	0	0.543	250	0.45	2.20%
CIRCUIT 27 (SPARE)	0	0	0	0	0	0	0	0	0	0	0	0	0.000	0	0.00	0.00%
CIRCUIT 28 (SPARE)	0	0	0	0	0	0	0	0	0	0	0	0	0.000	0	0.00	0.00%
TOTAL	0	4	0	0	0	6	0	0	2	4	2	0	1.086			

SEQUENCE OF OPERATION MATRIX

INPUT \ OUTPUT	ANNUNCIATE SIGNAL AT FACP AND REMOTE ANNUN.	SOUND AUDIBLE/ VISUAL THROUGHOUT BUILDING	ACTIVATE ELEVATOR SHUNT TRIP BREAKER	ACTIVATE ELEVATOR RECALL	TRANSMIT SIGNAL TO CENTRAL STATION SERVICE	SHUTDOWN ASSOCIATED HVAC UNIT	SHUTDOWN ASSOCIATED SMOKE/FIRE DAMPER
ALARM SIGNALS							
AREA SMOKE DETECTOR	X	X			X		
AREA HEAT DETECTOR	X	X			X		
MANUAL FIRE ALARM STATION	X	X			X		
FIRE SPRINKLER WATERFLOW SWITCH	X	X			X		
SUPERVISORY SIGNALS							
HVAC DUCT DETECTOR	X				X		
SMOKE/FIRE DAMPER DUCT DETECTOR	X				X		
TAMPER SWITCH	X				X		
POWER FAILURE	X				X		
TROUBLE SIGNAL							
GROUND FAULT	X				X		
OPEN CIRCUIT	X				X		
SNAC SHORT	X				X		
LOW BATTERY	X				X		

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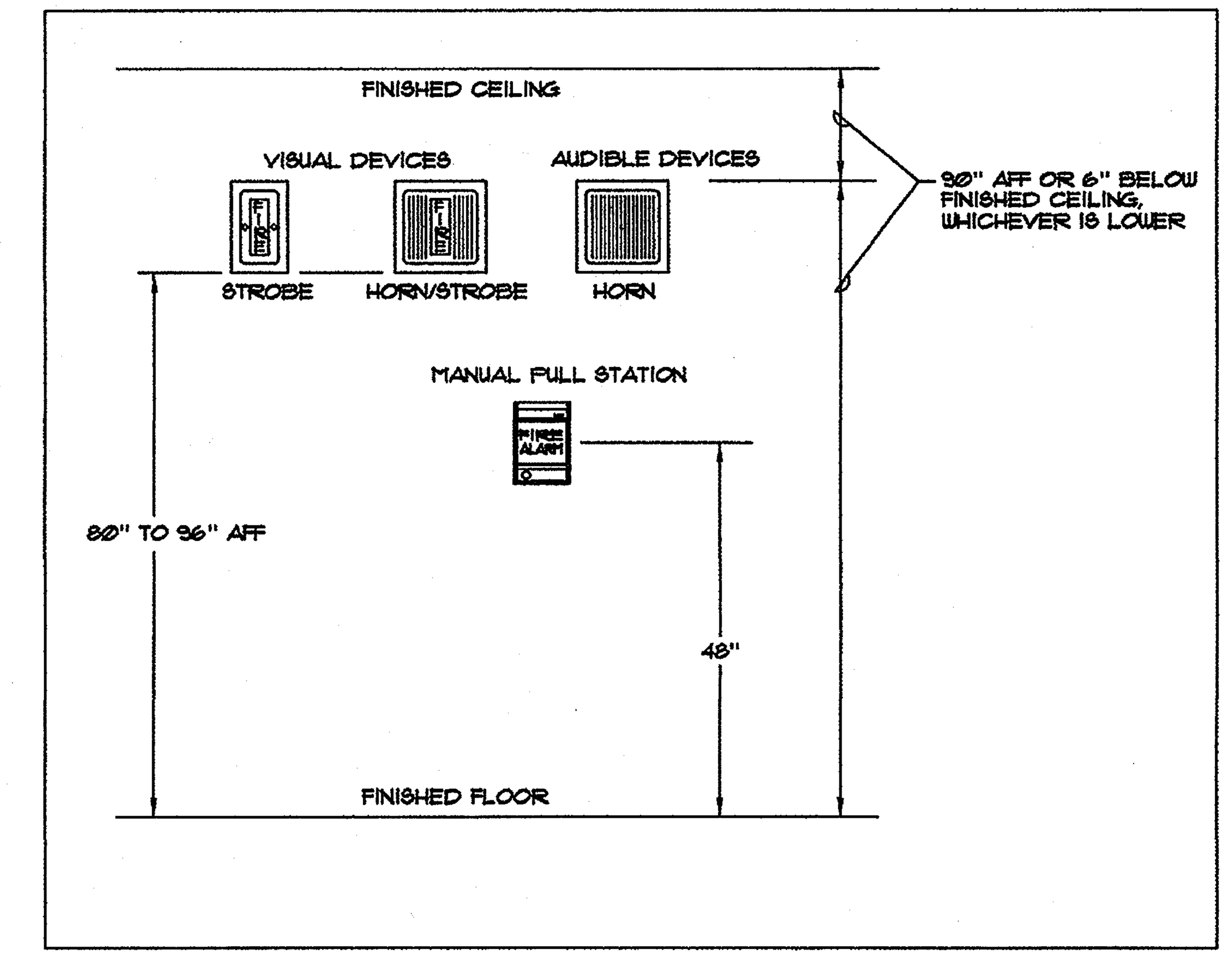

FIRE ALARM DEVICE ELEVATION

NO SCALE

BATTERY CAPACITY CALCULATIONS

BATTERY CAPACITY CALCULATION SHEET
SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT - SNAC-N

QTY	MODEL #	DESCRIPTION	STANDBY UNIT CURRENT (AMPS)	STANDBY TOTAL CURRENT (AMPS)	ALARM UNIT CURRENT (AMPS)	ALARM TOTAL CURRENT (AMPS)
1	SNAC-9	SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT	0.075	0.075	0.175	0.175
1	AOM-2S	SNAC PANEL VISUAL TRIP W/ AOM-2S	0.0003	0.000	0.0003	0.000
0	GX93W	MINI-HORN	0	0	0.022	0.000
4	MT-12/24-R	EXTERIOR HORN	0	0	0.069	0.276
4	AS-24MCW-FR	15cd HORN/STROBE	0	0	0.052	0.208
0	AS-24MCW-FR	30cd HORN/STROBE	0	0	0.076	0.000
0	AS-24MCC-FR	75cd HORN/STROBE	0	0	0.132	0.000
0	AS-24MCW-FR	110cd HORN/STROBE	0	0	0.169	0.000
6	RSS-24MCW-FR	15cd STROBE	0	0	0.041	0.246
0	RSS-24MCW-FR	30cd STROBE	0	0	0.063	0.000
0	RSS-24MCW-FR	75cd STROBE	0	0	0.109	0.000
2	RSS-24MCW-FR	110cd STROBE	0	0	0.140	0.280
1	MB-G10-2R-R	BELL	0	0	0.030	0.030
		TOTAL		0.075		1.185

BATTERY CALCULATIONS
======================

ASSUMPTIONS:
A) REQ'D BATTERY BACKUP - STANDBY 24 HRS
B) REQ'D BATTERY BACKUP - ALARM 10 MIN (0.17 HOURS)
C) ALLOWABLE ERROR 25%

D) TOTAL STANDBY BACKUP (AMP/HOURS) 1.81
E) TOTAL ALARM BACKUP 0.20
F) ALLOWABLE ERROR (C X (D+E)) 0.50

TOTAL AMP/HR REQ'D (D+E+F) 2.51 AMP/HRS

BATTERIES SUBMITTED: NP 7-12 AMP HOUR: 7 AMP/HOURS

BATTERY CAPACITY CALCULATION SHEET
SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT - SNAC-L

QTY	MODEL #	DESCRIPTION	STANDBY UNIT CURRENT (AMPS)	STANDBY TOTAL CURRENT (AMPS)	ALARM UNIT CURRENT (AMPS)	ALARM TOTAL CURRENT (AMPS)
1	SNAC-9	SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT	0.075	0.075	0.175	0.175
1	AOM-2S	SNAC PANEL VISUAL TRIP W/ AOM-2S	0.0003	0.000	0.0003	0.000
0	GX93W	MINI-HORN	0	0	0.022	0.000
5	MT-12/24-R	EXTERIOR HORN	0	0	0.069	0.345
3	AS-24MCW-FR	15cd HORN/STROBE	0	0	0.052	0.156
0	AS-24MCW-FR	30cd HORN/STROBE	0	0	0.076	0.000
16	AS-24MCC-FR	75cd HORN/STROBE	0	0	0.132	2.112
0	AS-24MCW-FR	110cd HORN/STROBE	0	0	0.169	0.000
10	RSS-24MCW-FR	15cd STROBE	0	0	0.041	0.410
0	RSS-24MCW-FR	30cd STROBE	0	0	0.063	0.000
0	RSS-24MCW-FR	75cd STROBE	0	0	0.109	0.000
0	RSS-24MCW-FR	110cd STROBE	0	0	0.140	0.000
1	MB-G10-2R-R	BELL	0	0	0.030	0.030
		TOTAL		0.075		3.198

BATTERY CALCULATIONS
======================

ASSUMPTIONS:
A) REQ'D BATTERY BACKUP - STANDBY 24 HRS
B) REQ'D BATTERY BACKUP - ALARM 10 MIN (0.17 HOURS)
C) ALLOWABLE ERROR 25%

D) TOTAL STANDBY BACKUP (AMP/HOURS) 1.81
E) TOTAL ALARM BACKUP 0.53
F) ALLOWABLE ERROR (C X (D+E)) 0.59

TOTAL AMP/HR REQ'D (D+E+F) 2.93 AMP/HRS

BATTERIES SUBMITTED: NP 7-12 AMP HOUR: 7 AMP/HOURS

BATTERY CAPACITY CALCULATION SHEET
SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT - SNAC-2

QTY	MODEL #	DESCRIPTION	STANDBY UNIT CURRENT (AMPS)	STANDBY TOTAL CURRENT (AMPS)	ALARM UNIT CURRENT (AMPS)	ALARM TOTAL CURRENT (AMPS)
1	SNAC-9	EXIST. SUPPLEMENTARY NOTIFICATION APPLIANCE CIRCUIT	0.075	0.075	0.175	0.175
1	AOM-2S	EXIST. SNAC PANEL VISUAL TRIP W/ AOM-2S	0.0003	0.000	0.0003	0.000
2	AH-24WP-R	EXIST. EXTERIOR HORN	0	0	0.041	0.082
2	RSS-24MCC-FW	EXIST. 15cd STROBE	0	0	0.045	0.090
1	AS-24MCC-FW	EXIST. 110cd HORN/STROBE	0	0	0.202	0.202
1	RSS-24MCC-FW	**EXIST. 15cd STROBE**	0	0	0.041	0.041
		TOTAL		0.075		0.590

BATTERY CALCULATIONS
======================

ASSUMPTIONS:
A) REQ'D BATTERY BACKUP - STANDBY 60 HRS
B) REQ'D BATTERY BACKUP - ALARM 15 MIN (0.25 HOURS)
C) ALLOWABLE ERROR 25%

D) TOTAL STANDBY BACKUP (AMP/HOURS) 4.52
E) TOTAL ALARM BACKUP 0.14
F) ALLOWABLE ERROR (C X (D+E)) 1.16

TOTAL AMP/HR REQ'D (D+E+F) 5.82 AMP/HRS

BATTERIES SUBMITTED: NP 7-12 AMP HOUR: 7 AMP/HOURS

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
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OFFICE OF REGULATION SERVICES
4-106494
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DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
FIRE ALARM CALCULATIONS AND DETAIL

E2-2

FILE: J:\629-002B\6292E22.dwg, Mar 21, 2005 - 9:32am
XREF: 6292BDR.dwg

629-002B
08-10-04

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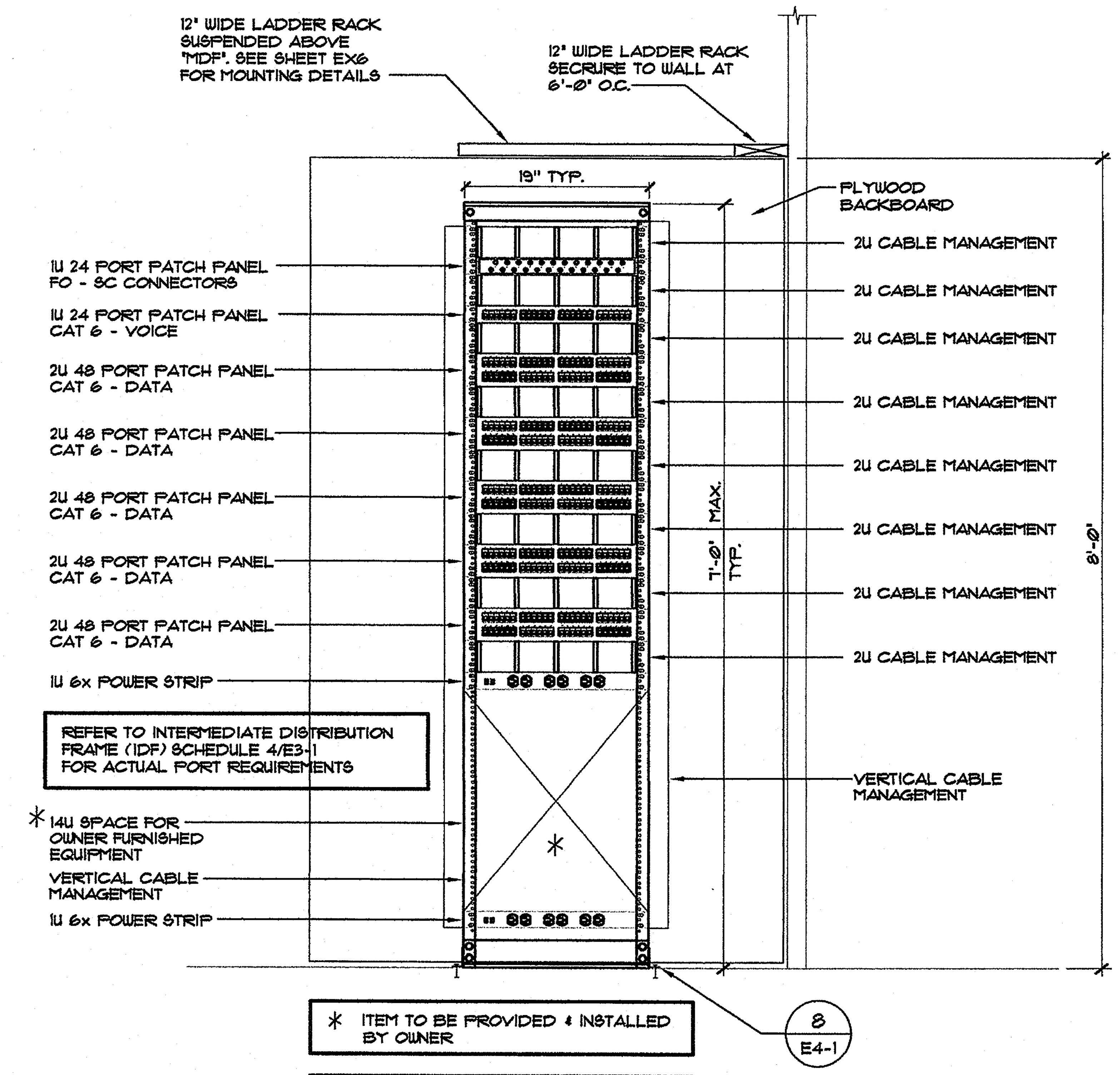

TYPICAL 'IDF' ELEVATION

1 / E3-1

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

IDF DESIGNATION	IDF LOCATION (ROOM #)	IDF SERVES (BUILDING/AREA)	NUMBER OF PORTS CONNECTED (1)	LIU (QTY/PORTS)	PATCH PANELS (QTY/PORTS EACH) VOICE/DATA	PATCH PANELS (QTY/PORTS EACH) VOICE ONLY	IDF TYPE	IDF WITH MOD 66 BLOCK	NOTES
IDF-L	IDF L-22	CLASSROOM BLDG. 'L'	192	1/24	(3)- 36 PORT	(1)- 48 PORT	FLOOR MTD	YES	(1)
IDF-N	UTILITY N-19	SHOWER / LOCKER BLDG. N	16	1/24	(1)- 24 PORT	(1)- 24 PORT	FLOOR MTD	YES	(1)

NOTES:

(1) VERIFY EXACT NUMBER OF REQUIRED PORTS WITH THE SIGNAL FLOOR PLANS.

INTERMEDIATE DISTRIBUTION FRAME (IDF) SCHEDULE

2 / E3-1

NO SCALE

PLOTTED @ 3/18/05

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
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4-106494
DATE MAR 2 8 2005

SHEET TITLE
IDF ELEVATION

E3-1

629-002B
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STATE OF CALIFORNIA
08-10-04

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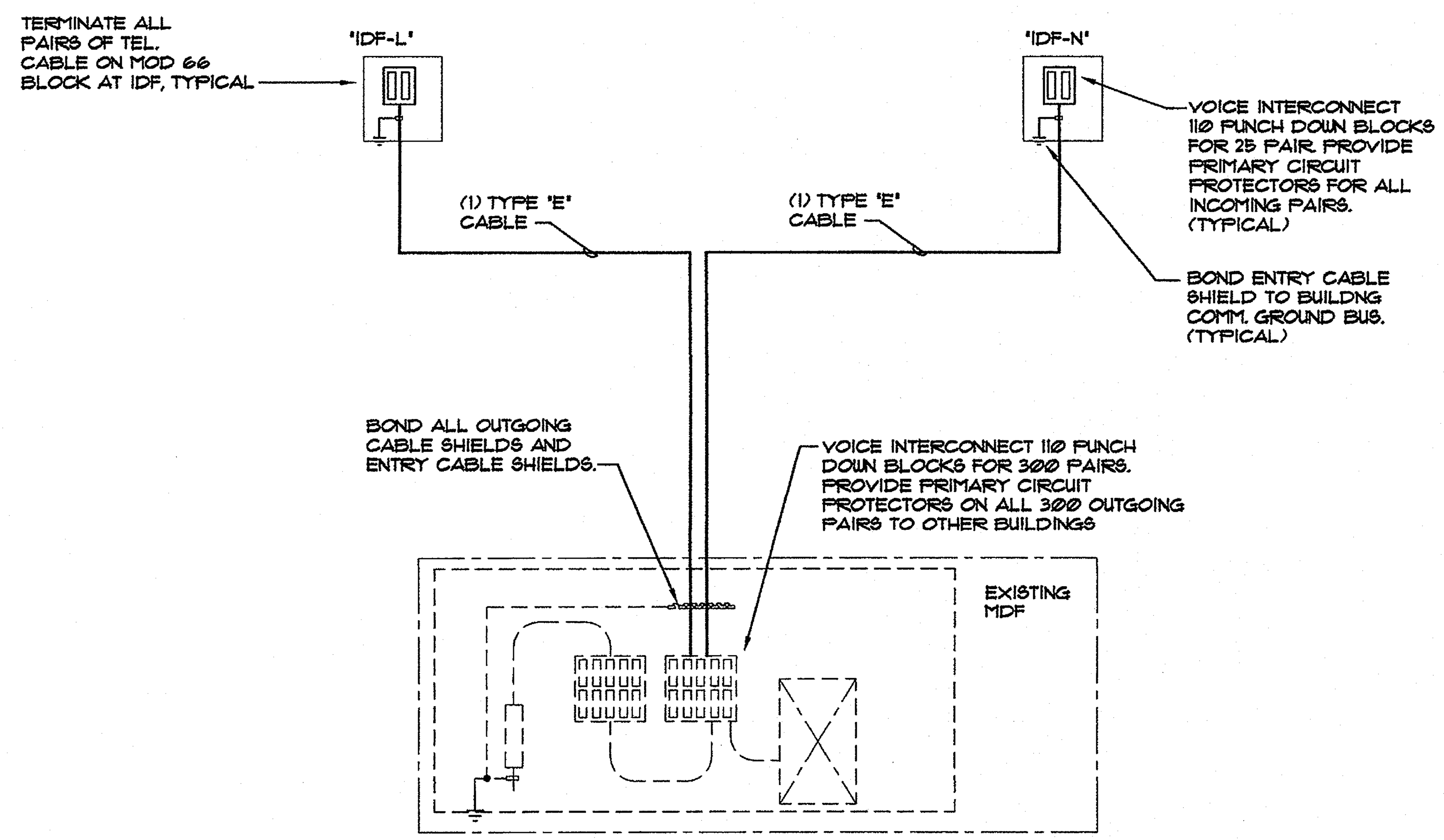


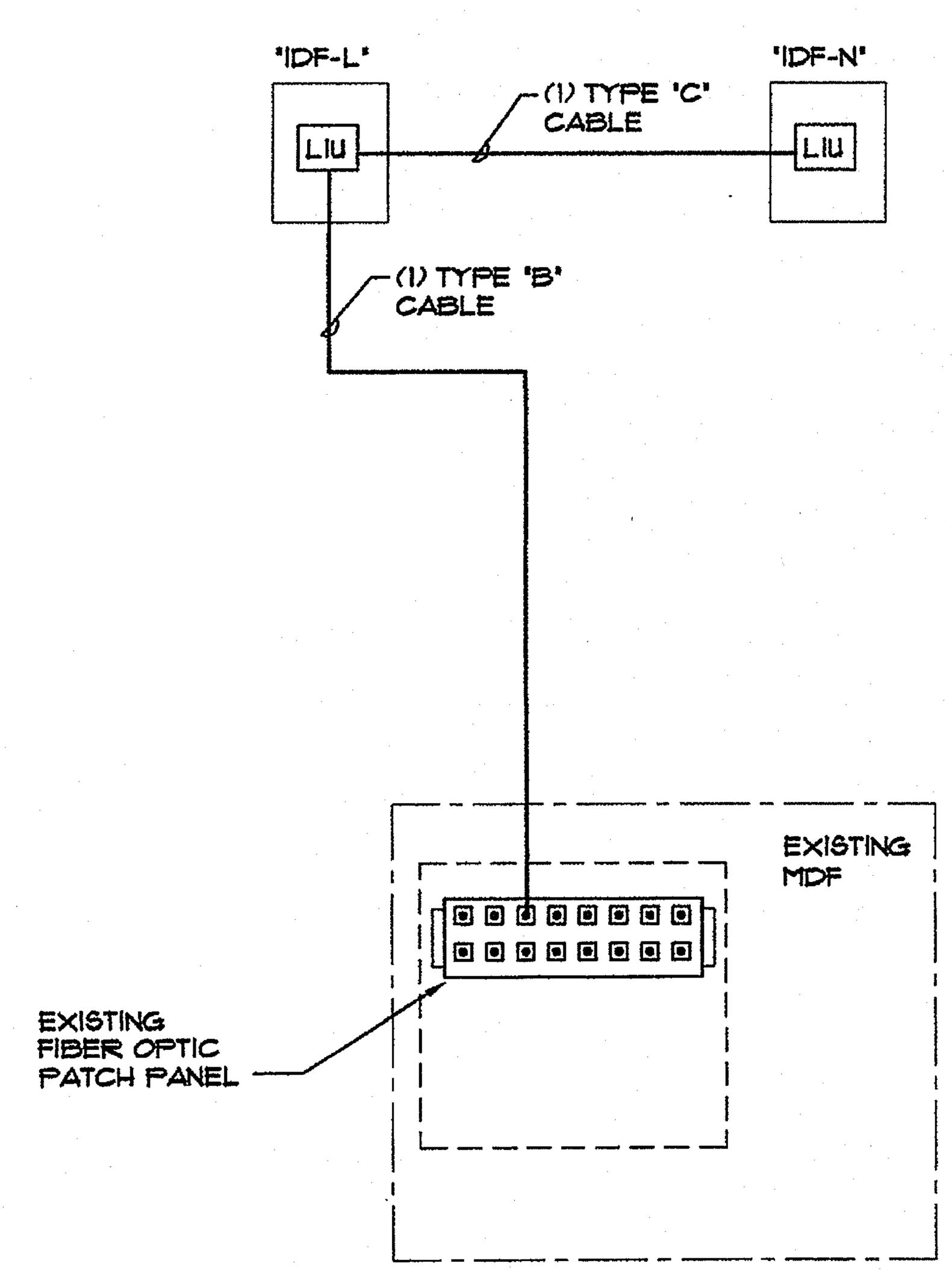
VOICE DISTRIBUTION SYSTEM RISER DIAGRAM (1 / E3-2)

NO SCALE

TYPE	NEW CABLE DESCRIPTION	MANUFACTURER/SUPPLIER (OR EQUAL)
"A"	CAT 6 DATA SYSTEM CABLE (BLUE), PLENUM RATED	SYSTEMAX #2071
"B"	(24)- STRAND MULTI-MODE FIBER OPTIC CABLE	SYSTEMAX #3DNX-024
"C"	(6)- STRAND FIBER OPTIC CABLE	SYSTEMAX #3DNX-006
"D"	RG-11U U.G. DIRECT BURIAL RATED COAXIAL TV CABLE	WEST PENN #1110
"E"	(25) PAIR U.G. RATED TEL. CABLE WITH ALPETH JACKET	ESSEX "SEALPIC" #04-097-31
"F"	DIRECT BURIAL RATED COAXIAL TV CABLE	COMMSCOPE P-500-JCASS
"G"	RG-6U- INTERIOR, COAXIAL TV CABLE, PLENUM RATED	WEST PENN #25841
"H"	4/C #22 (2 SHIELDED/2 UNSHIELDED) UG RATED PUBLIC ADDRESS CABLE. (INTERIOR SPEAKER)	WEST PENN #AQC355
"J"	4/C #22 (2 SHIELDED/2 UNSHIELDED) PUBLIC ADDRESS CABLE. (INTERIOR SPEAKER)	WEST PENN #355
"K"	2/C #18 U.G. RATED PUBLIC ADDRESS CABLE. (EXTERIOR SPEAKERS)	WEST PENN #AQ293
"L"	2/C #18 INTERIOR RATED PUBLIC ADDRESS CABLE. (EXTERIOR SPEAKERS)	WEST PENN #293
"M"	4/C #18 U.G. RATED CABLE	WEST PENN #AQ244

DATA AND COMMUNICATION SYSTEMS CABLE KEY (3 / E3-2)

NO SCALE



DATA SYSTEM 'BACKONE' RISER DIAGRAM (2 / E3-2)

NO SCALE

PLOTTED @ 3/18/05

OUSD NO. 758-000
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LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
VOICE AND DATA SYSTEMS RISER DIAGRAMS

E3-2

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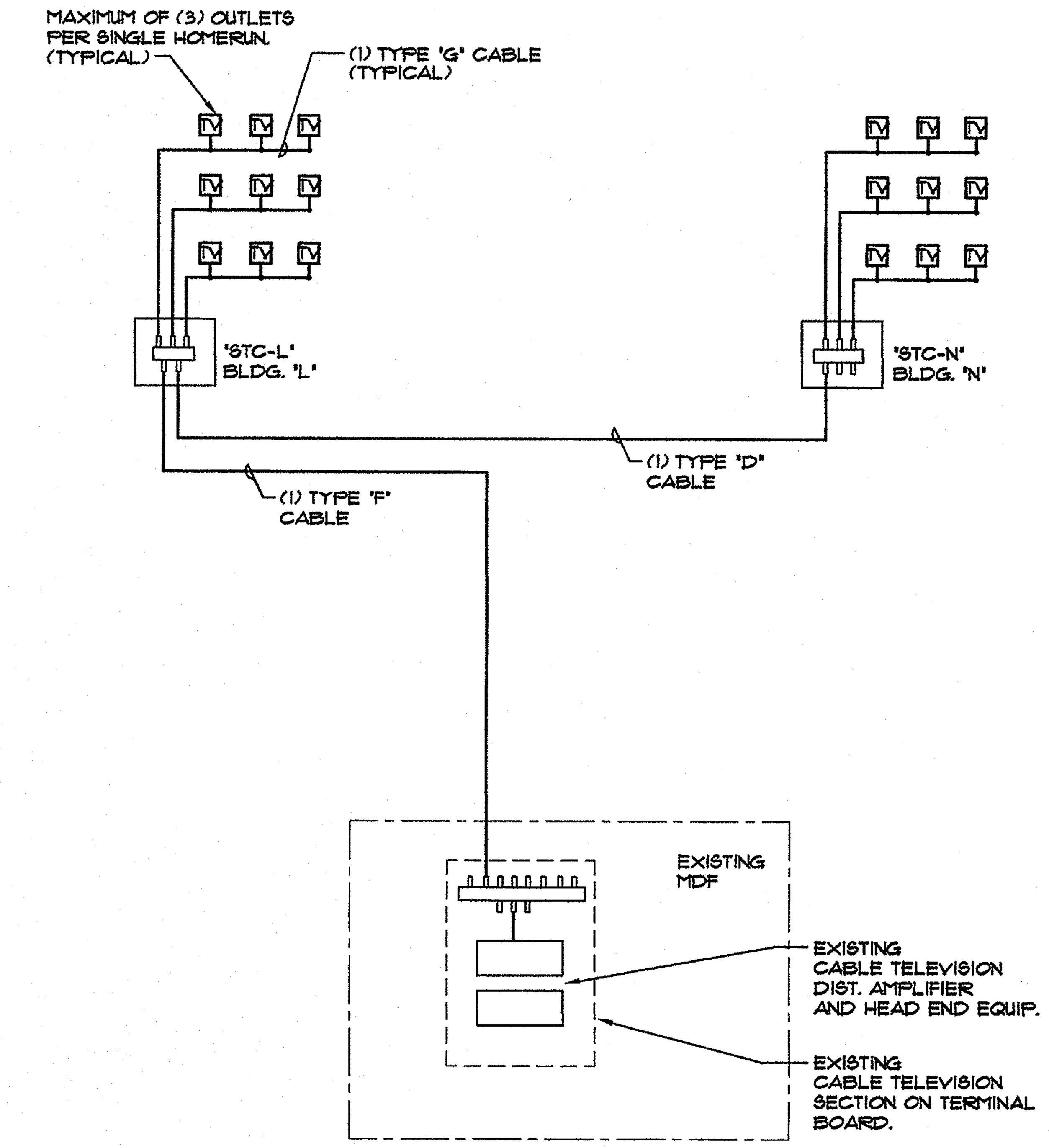
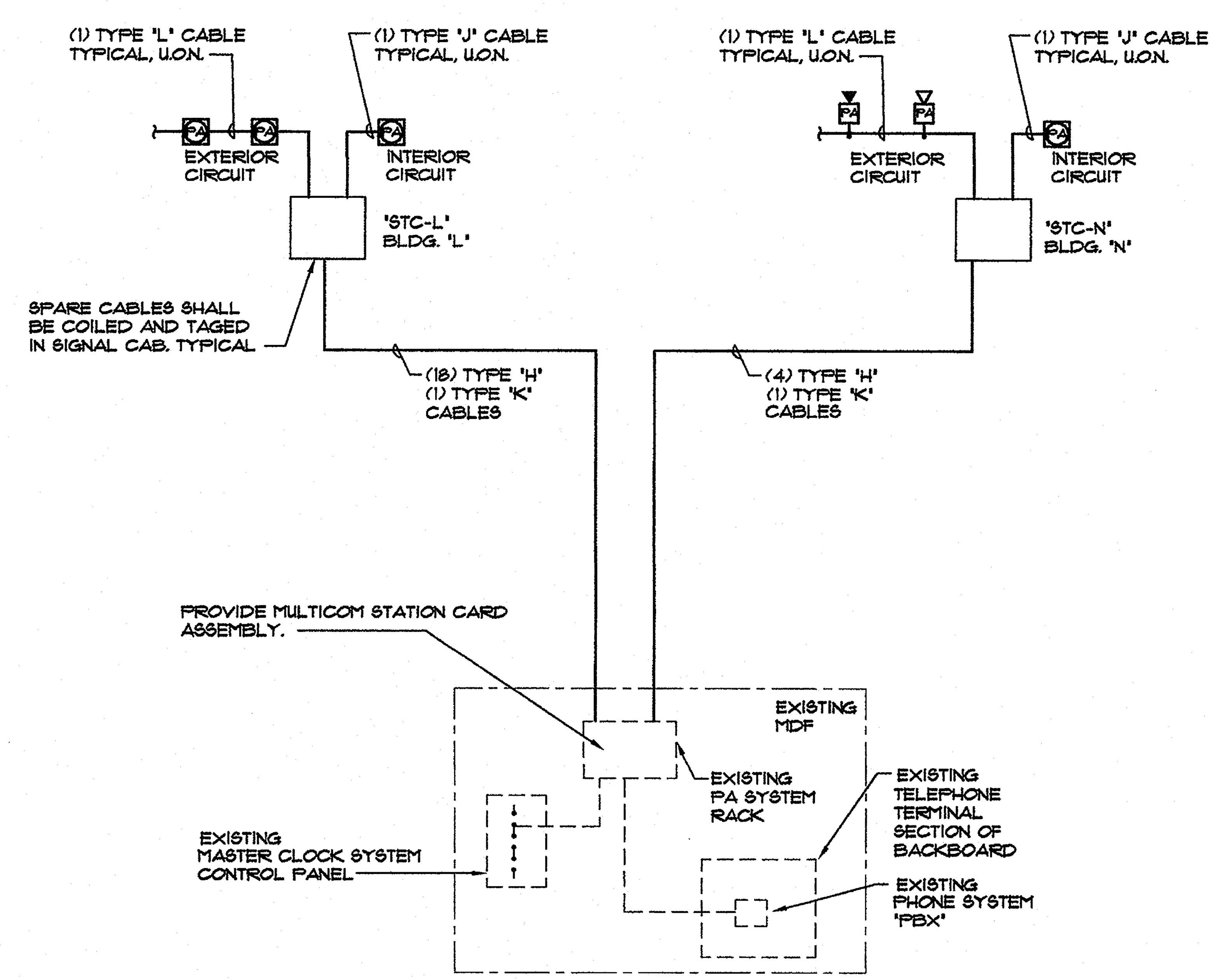


TV DISTRIBUTION SYSTEM RISER DIAGRAM

NO SCALE

1 / E3-3



PUBLIC ADDRESS DISTRIBUTION SYSTEM RISER DIAGRAM

NO SCALE

2 / E3-3

GENERAL NOTES:

1. REFER TO DATA AND COMMUNICATIONS CABLE KEY 3/E3-2.

629-002B

REGISTERED PROFESSIONAL ENGINEER STEVE L. FROBERG E 13650 9/30/05 ELECTRICAL STATE OF CALIFORNIA

08-10-04

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SHEET TITLE

TV AND P.A. RISER DIAGRAMS

E3-3

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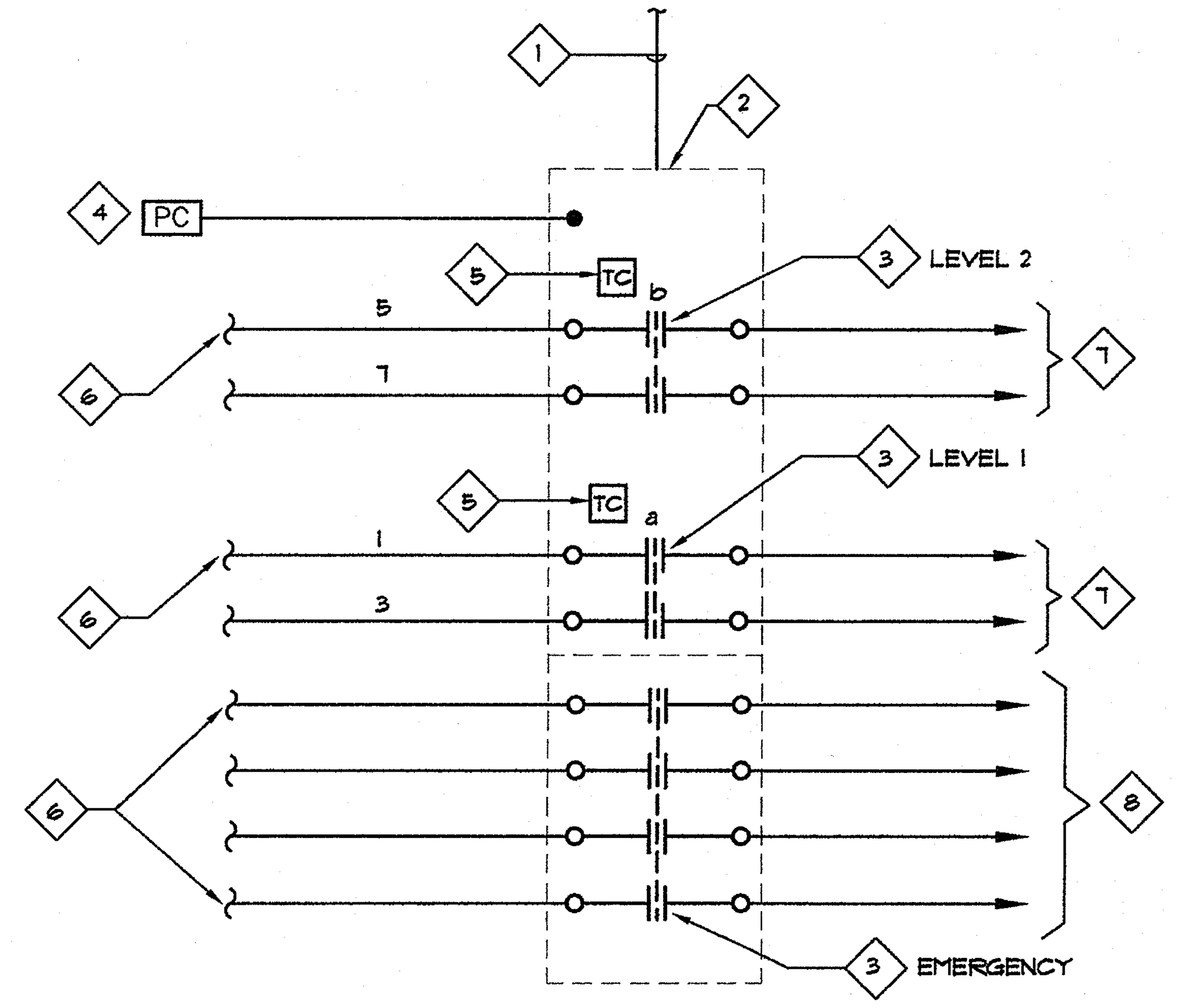


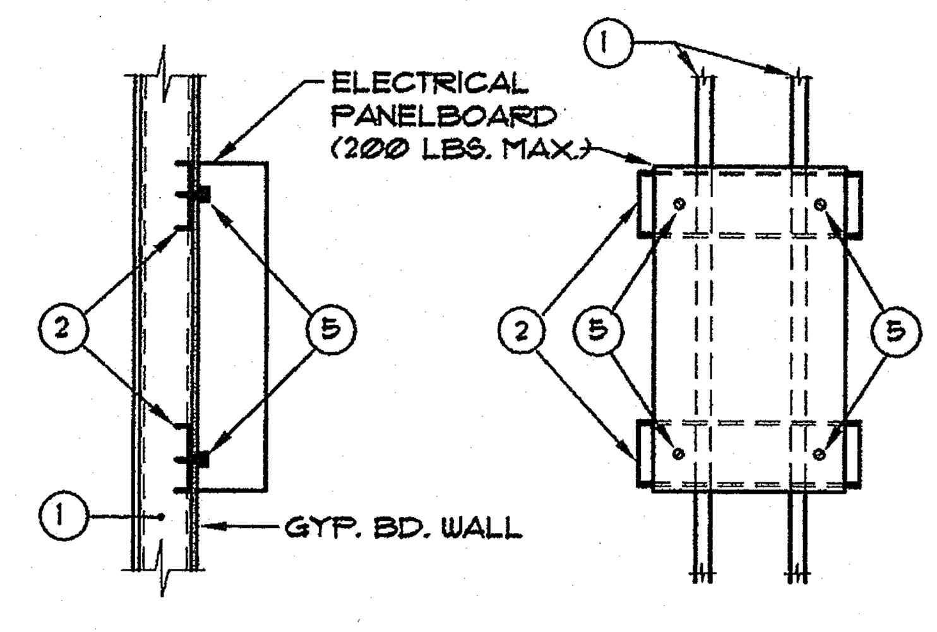
DETAIL NOTES:

1. 120V CONTROL CIRCUIT, (S-2).
2. LIGHTING CONTROL PANEL 'LCP'.
3. RELAYS AS REQUIRED IN LIGHTING CONTROL PANEL 'LCP'. PROVIDE 20% SPARE RELAYS. EMERGENCY RELAYS SHALL BE SEPARATED FROM NON-EMERGENCY RELAYS BY A SUITABLE BARRIER.
4. PHOTOCONTROL. INPUT TO 'LCP'. SEE PLANS FOR LOCATIONS.
5. 'LCP' INTERNAL TIMECLOCK, ASTRONOMIC DIAL, DUAL CHANNEL (a,b).
6. BRANCH CIRCUITS, PER PLANS.
7. TO EXTERIOR NON-EMERGENCY LIGHTING, PER PLANS.
8. TO EXTERIOR EMERGENCY LIGHTING, PER PLANS.

PHOTOCELL "ON" TIMECLOCK "OFF" WIRING DIAGRAM

NO SCALE

1 / E4-1



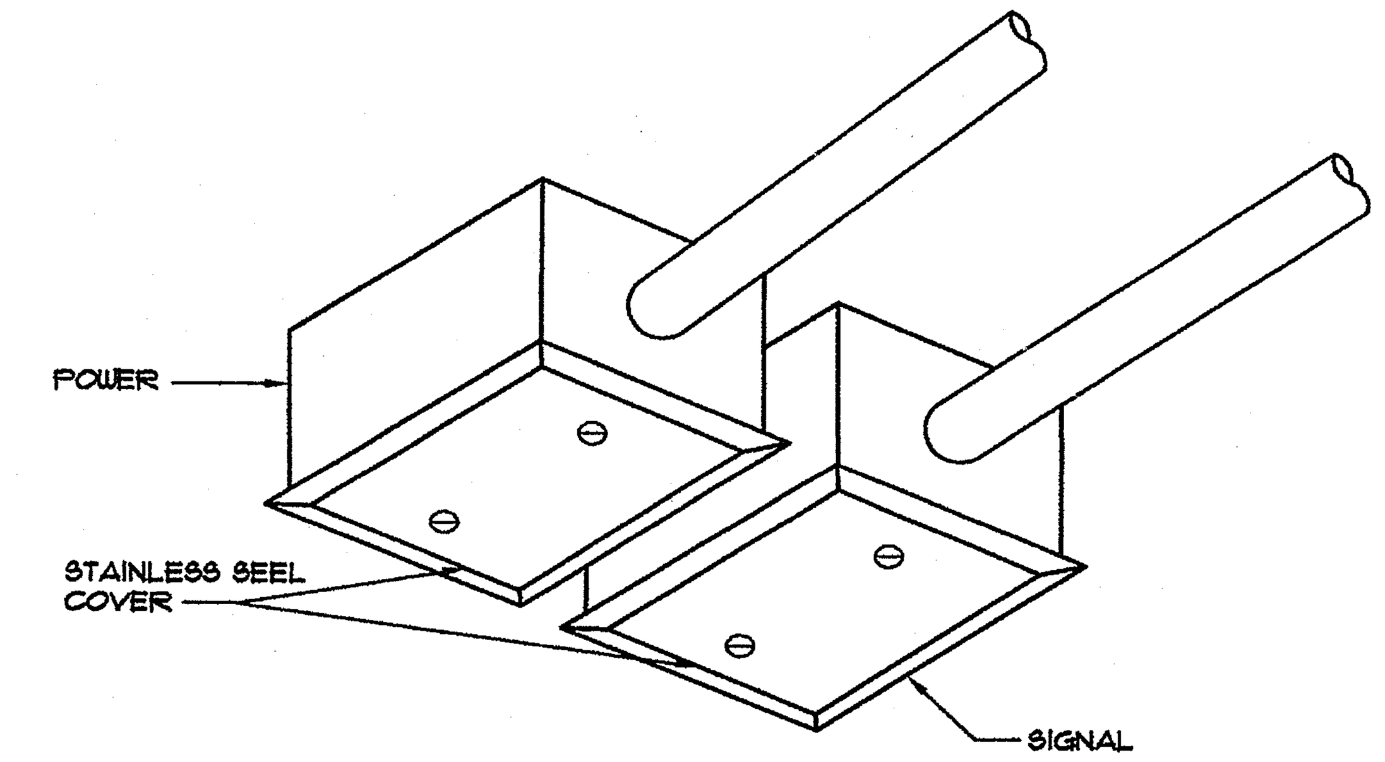
NOTES:

1. STRUCTURAL SCREW STUDS, SEE ARCHITECTURAL PLANS FOR SPACING.
2. REFER TO STRUCTURAL DETAIL 12/SQL1.3
3. TYPICAL AT ALL FLANGES OF BACKING CHANNEL TO STUDS.
4. TYPICAL AT WEB OF BACKING CHANNEL TO STUDS.
5. #12 SELF TAPPING SHEET METAL SCREWS, ANSI TYPE T. MASONRY WALL USE 4-3/8" ⌀ - HILTI KWIK BOLT II WITH 2½" EMBEDMENT

WALL MOUNTED PANELBOARD DETAIL

NO SCALE

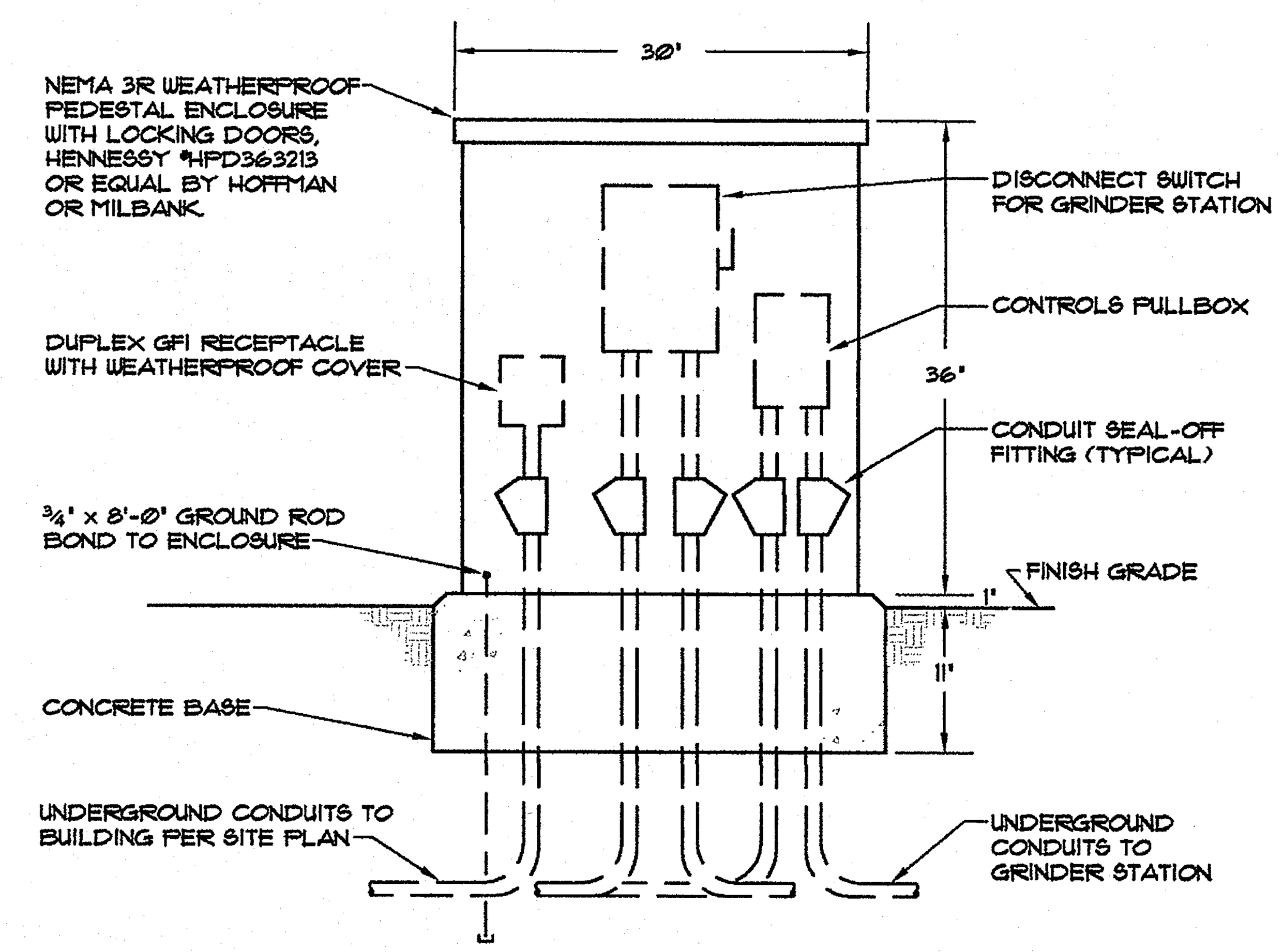
2 / E4-1



JUNCTION BOX DETAIL

NO SCALE (FUTURE POWER/SIGNAL FOR SURVEILLANCE CAMERA)

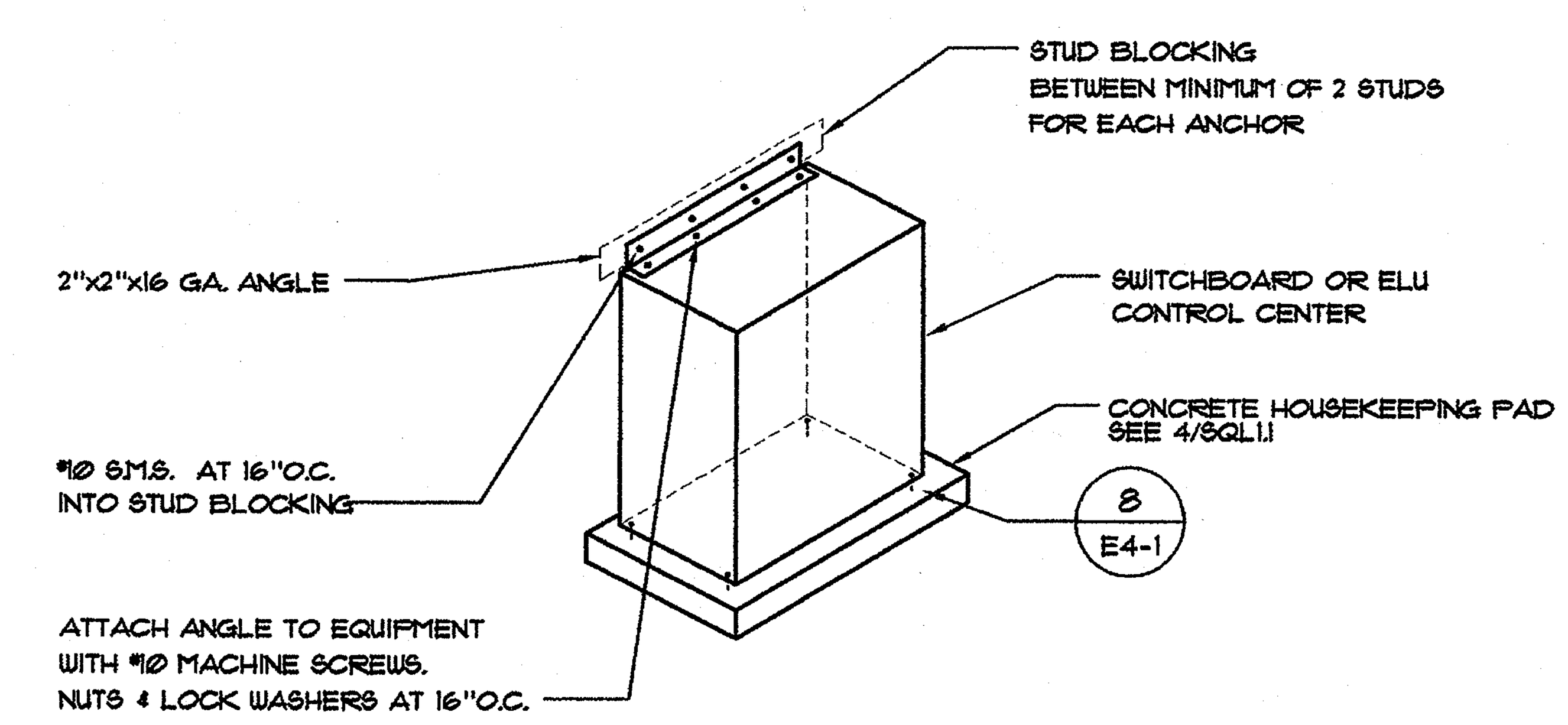
6 / E4-1



GRINDER PEDESTAL DETAIL

NO SCALE

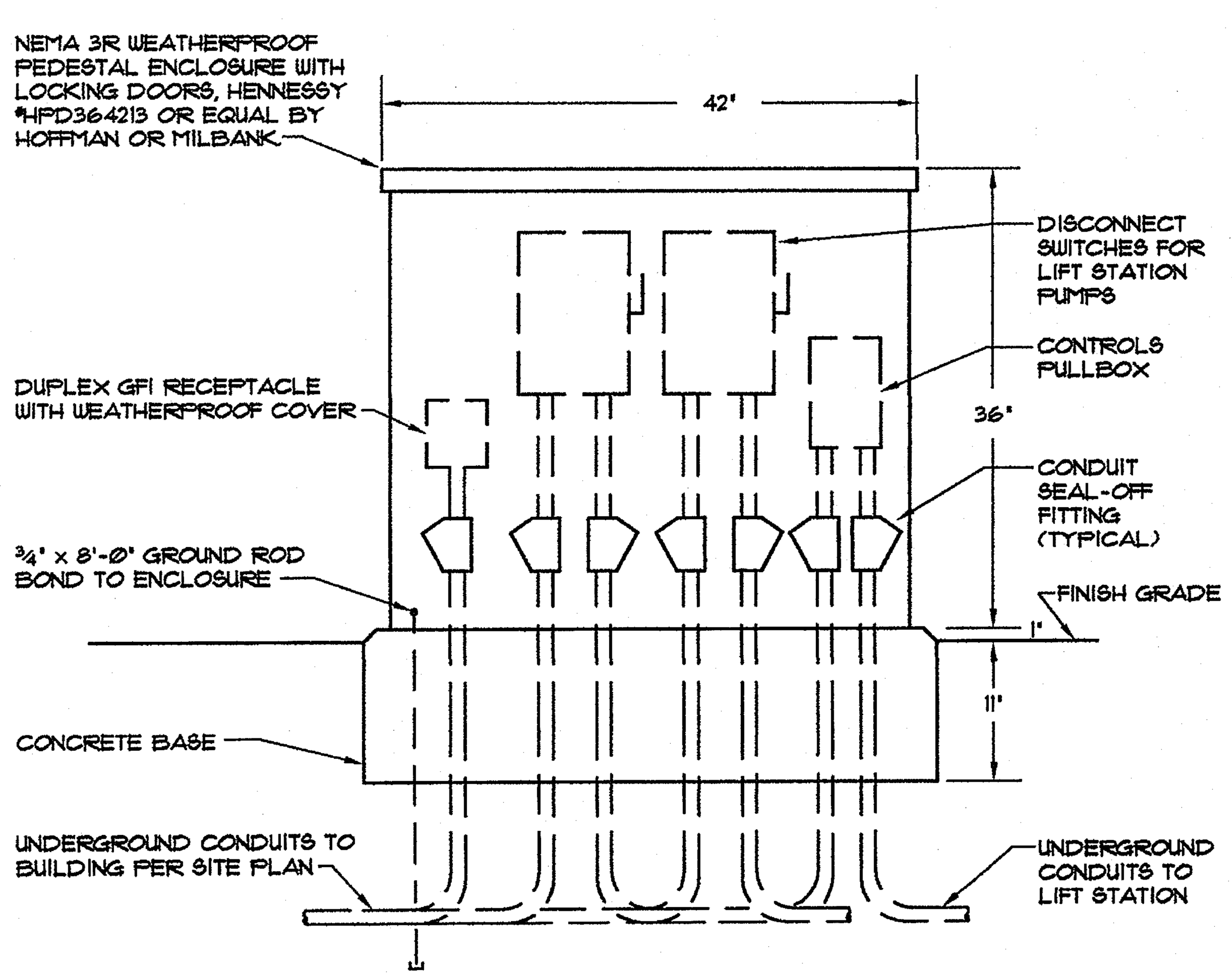
3 / E4-1



DISTRIBUTION (DPB) BOARD / ELU. MOUNTING DETAIL

NO SCALE

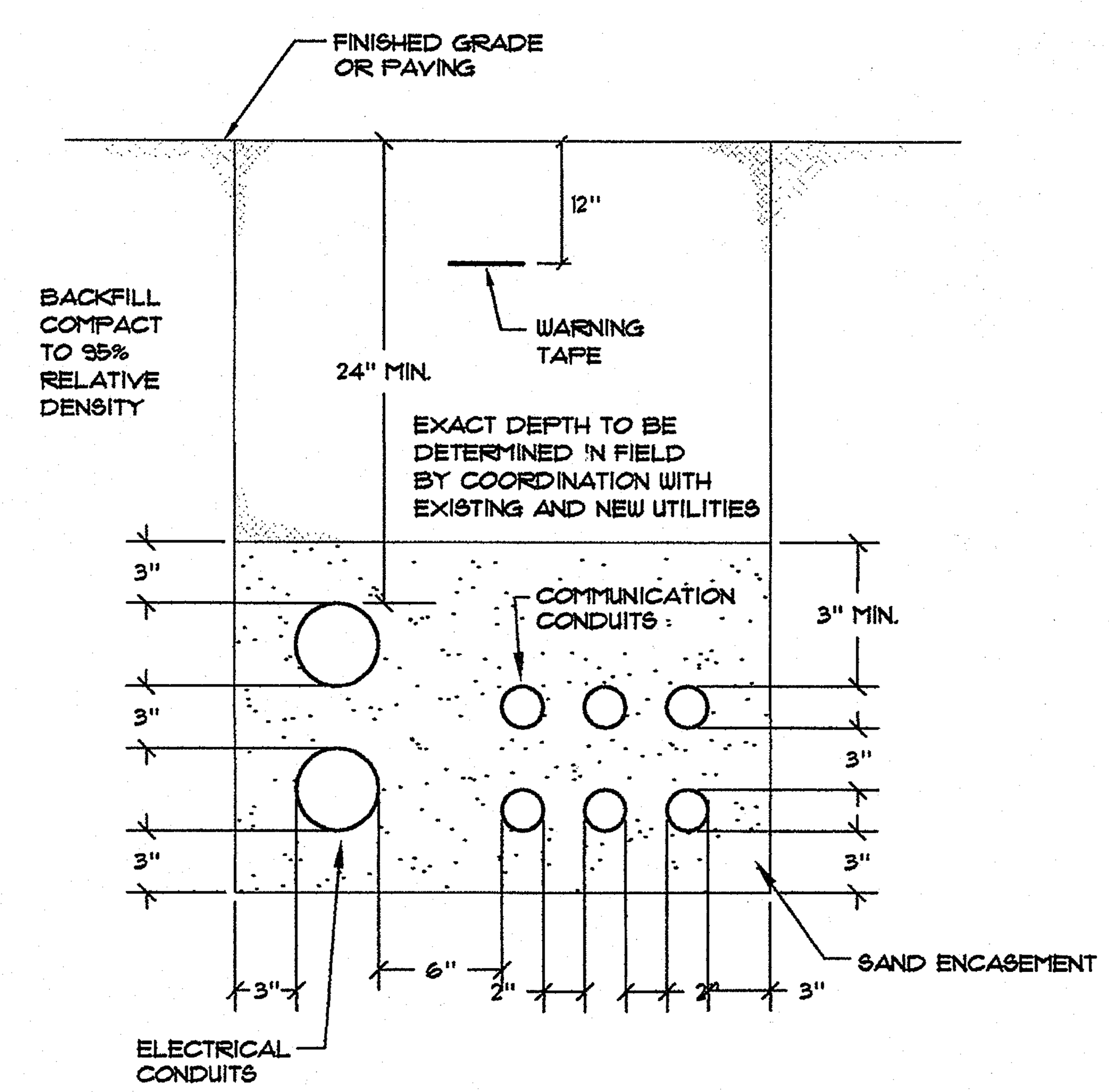
7 / E4-1



LIFT STATION PEDESTAL DETAIL

NO SCALE

4 / E4-1

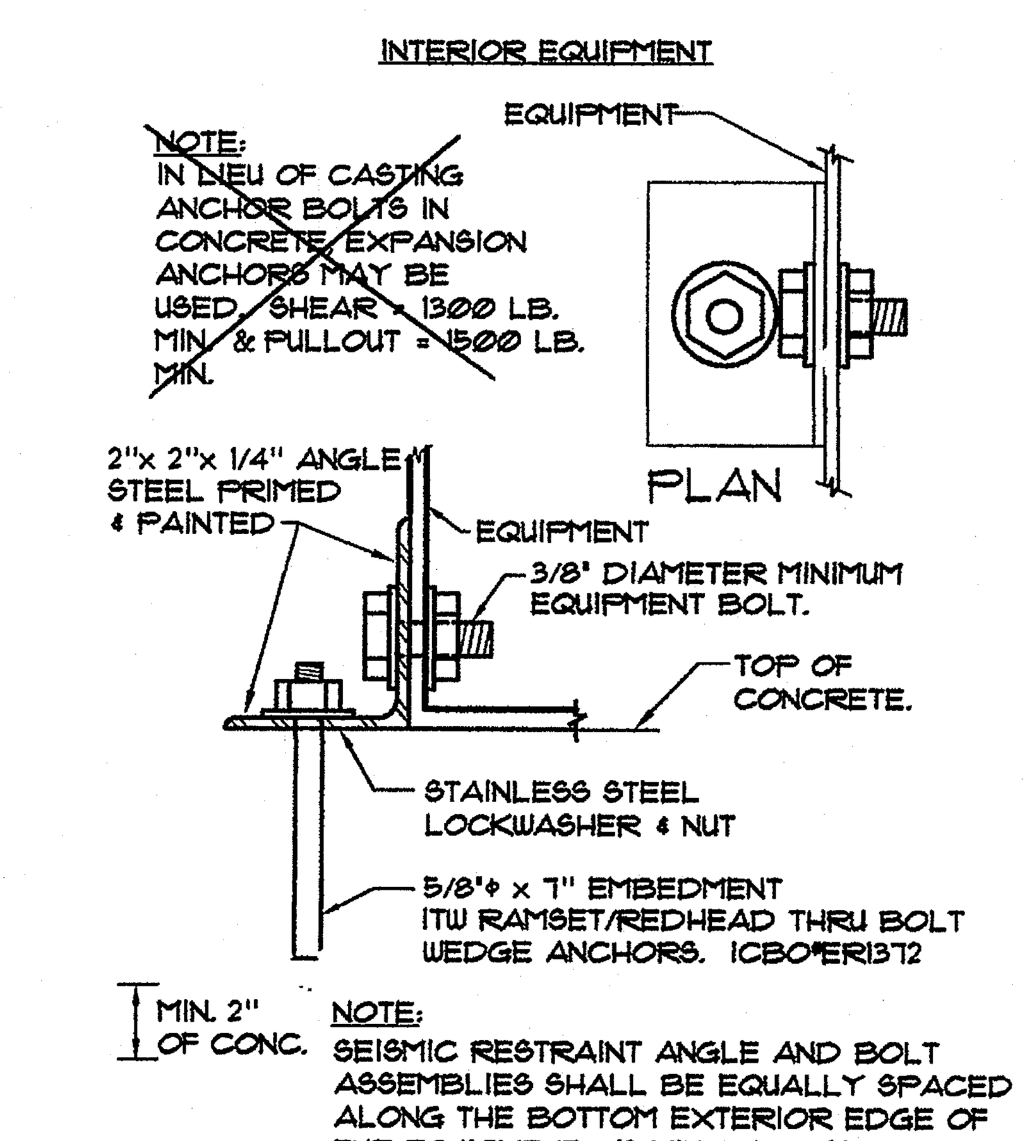


NUMBER AND SIZE OF CONDUITS SHALL BE AS SHOWN ON SITE PLANS.

TYPICAL TRENCH DETAIL

NO SCALE

5 / E4-1



NOTE: SEISMIC RESTRAINT ANGLE AND BOLT ASSEMBLIES SHALL BE EQUALLY SPACED ALONG THE BOTTOM EXTERIOR EDGE OF THE EQUIPMENT. (2 MIN. EACH SIDE OF EQUIPMENT)

ANGLE CLIP TYPE

FLOOR STANDING EQUIPMENT SEISMIC BRACING DETAIL

NO SCALE

8 / E4-1

629-002B

REGISTERED PROFESSIONAL ENGINEER STEVE L. FROBERG No. E 15650 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

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P. T. N. 73569-9

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SHEET TITLE

ELECTRICAL DETAILS

E4-1

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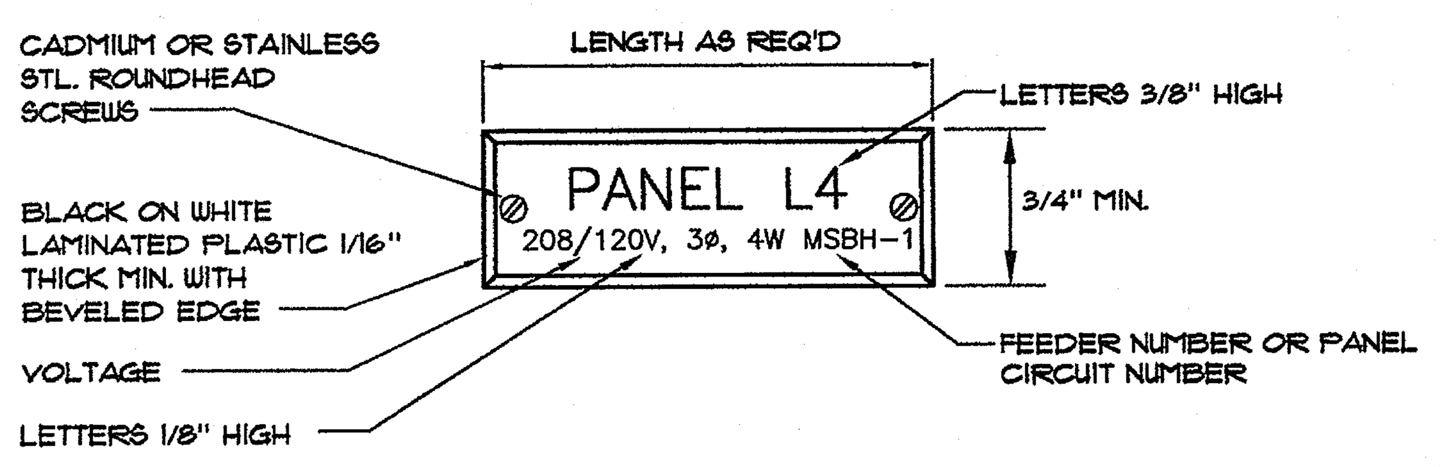
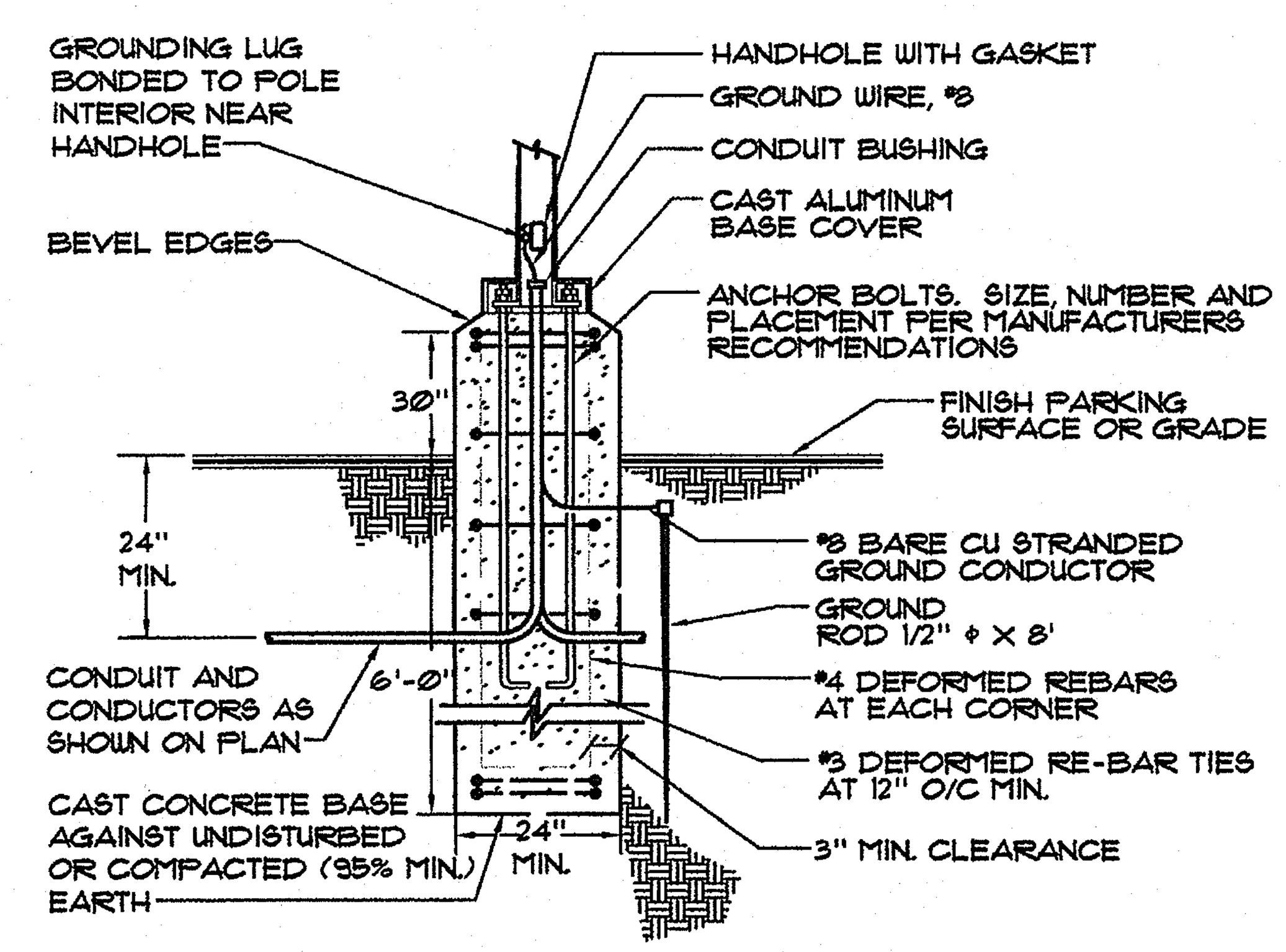
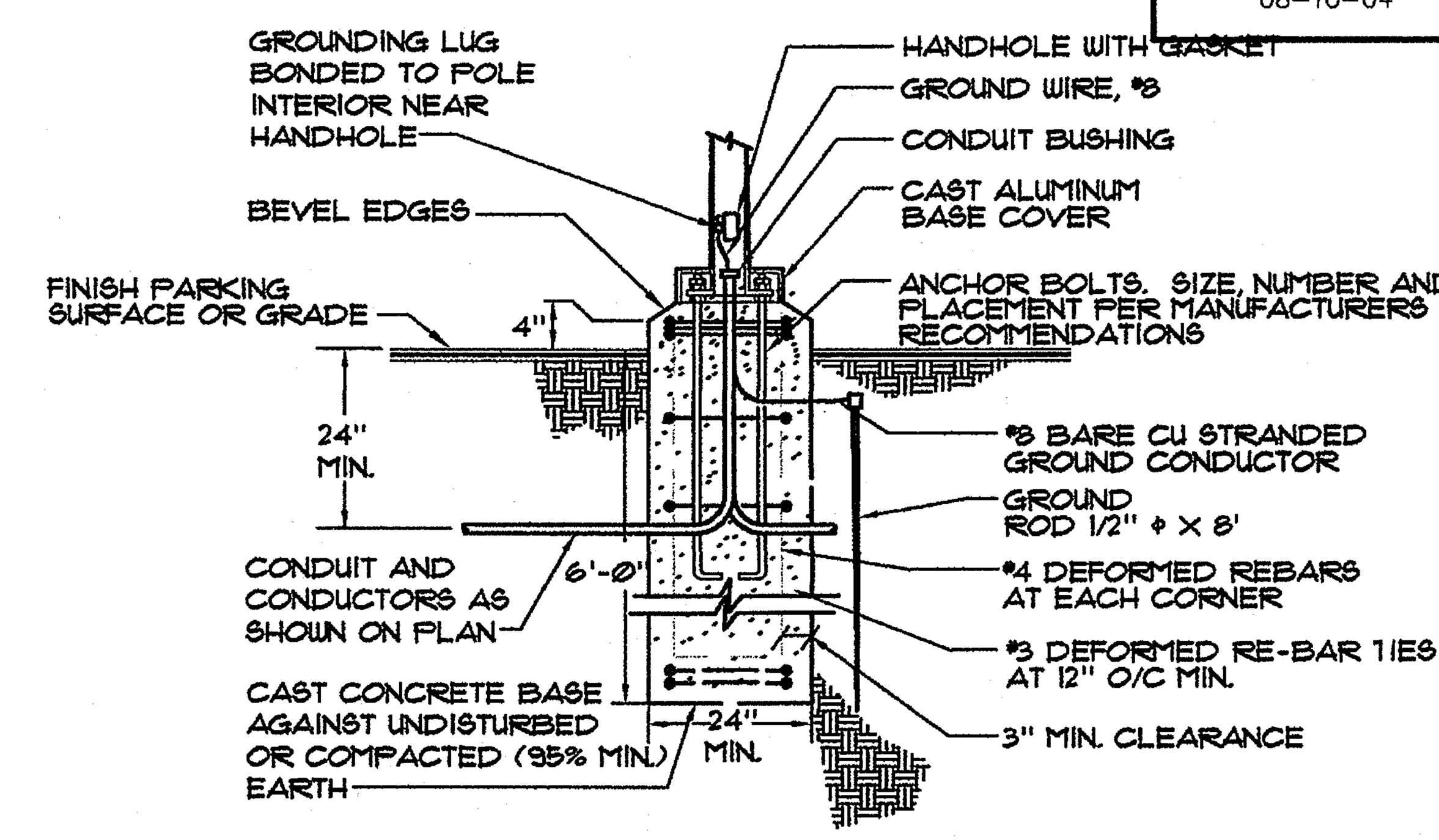


NAMEPLATE DETAIL
NO SCALE
3 / E4-2



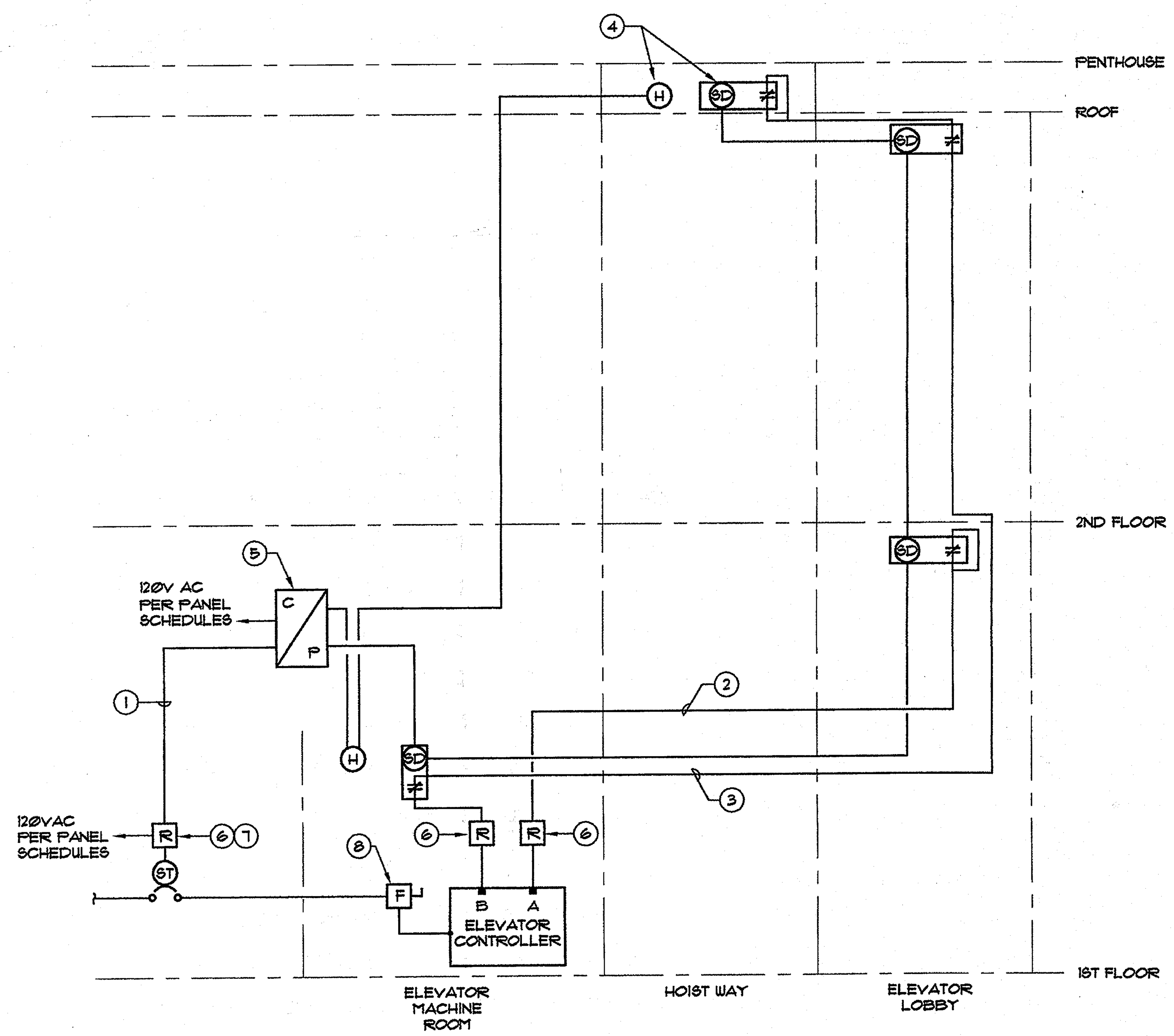
CONCRETE POLE IS A STANDARD PRODUCT OF POLE MANUFACTURER. FOR POLE BASE STRUCTURAL CALCULATIONS, REFER TO STRUCTURAL SITE CALCULATIONS.

TYPICAL POLE BASE DETAIL - HIGH BASE
NO SCALE
2 / E4-2



CONCRETE POLE IS A STANDARD PRODUCT OF POLE MANUFACTURER. FOR POLE BASE STRUCTURAL CALCULATIONS, REFER TO STRUCTURAL SITE CALCULATIONS.

TYPICAL POLE BASE DETAIL - LOW BASE
NO SCALE
1 / E4-2

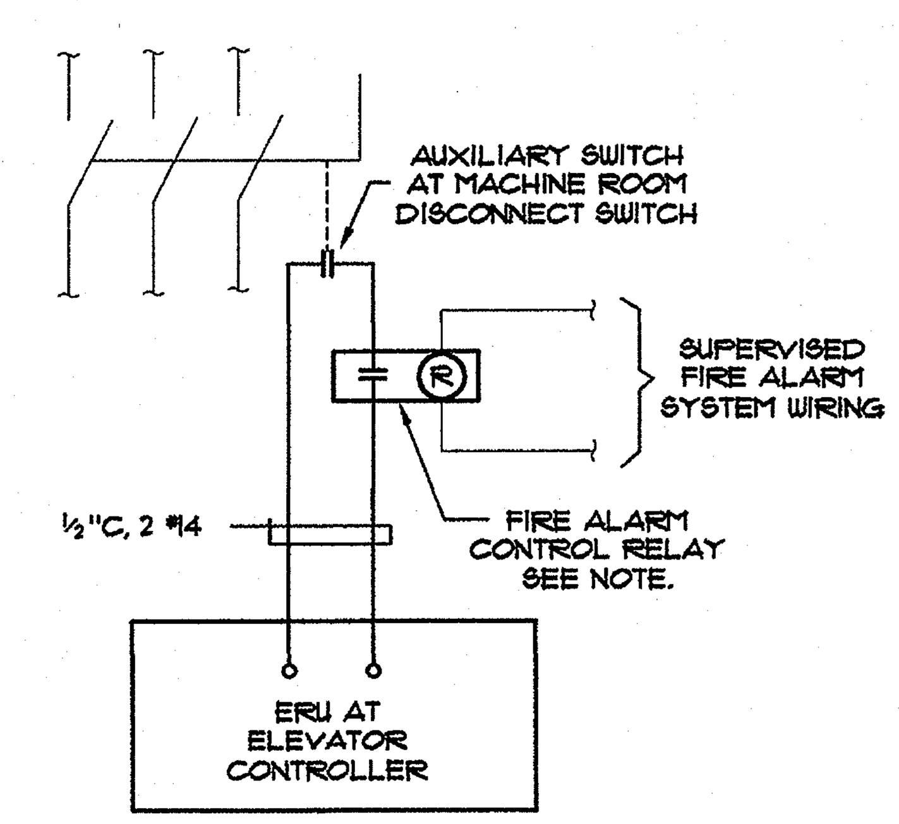


TYPICAL ELEVATOR CONTROL SCHEMATIC DIAGRAM
NO SCALE
5 / E4-2

LEGEND/NOTES:

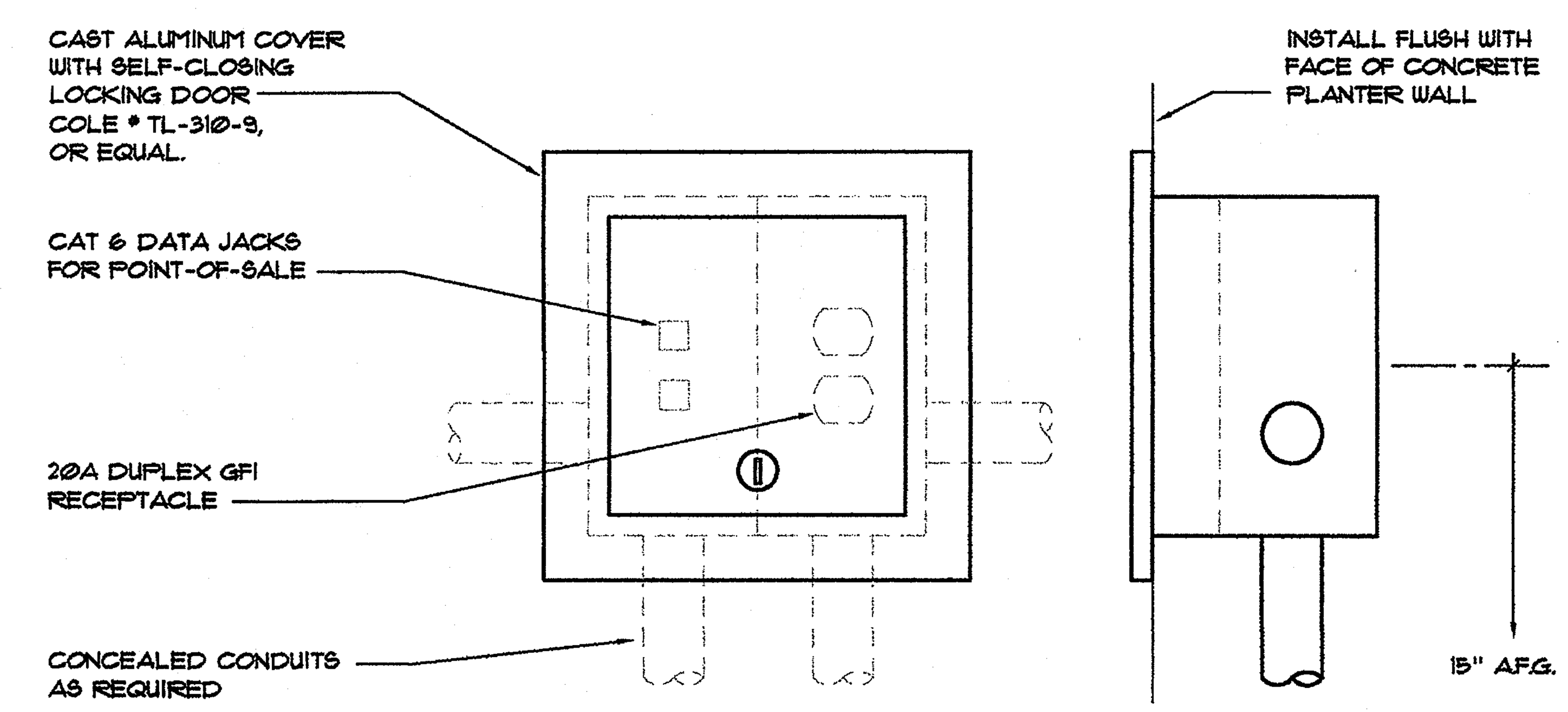
- (H) HEAT DETECTOR, RATE OF RISE TYPE, 135 DEGREES LOCATED WITHIN 2FT. OF EACH SPRINKLER HEAD.
- (SD) PHOTO-ELECTRIC SMOKE DETECTOR WITH NO./NC. AUXILIARY CONTACTS.
- (ST) SHUNT-TRIP CIRCUIT BREAKER.
- (F) ELEVATOR POWER FUSED SAFETY SWITCH.

1. SHUNT-TRIP CIRCUIT ACTIVATED BY HEAT DETECTORS ONLY.
2. ELEVATOR RECALL CIRCUIT 'A' ACTIVATED BY 1ST FLOOR SMOKE DETECTOR AND ELEVATOR MACHINE ROOM SMOKE DETECTOR IF MACHINE ROOM IS ADJACENT TO HOIST WAY ON 1ST FLOOR.
3. ELEVATOR RECALL CIRCUIT 'B' ACTIVATED BY SMOKE DETECTORS OTHER THAN THE 1ST FLOOR UNITS.
4. DETECTORS AT TOP OF HOIST WAY. PROVIDE ACCESS PANEL WITH UL-10B SELF CLOSING AND LOCKING DOOR. ONE ACCEPTABLE ACCESS PANEL AND SAFETY ENCLOSURE IS MANUFACTURED BY JJM CONSTRUCTION, PHONE (949) 683-6809.
5. FIRE ALARM SYSTEM CONTROL PANEL
6. ADDRESSABLE RELAY LOCATED WITHIN 3 FEET OF DEVICE CONTROLLED.
7. RELAY WITH MOMENTARY CONTACT FEATURE TO OPERATE FOR MAXIMUM 2 SECONDS TO AVOID SOLENOID DAMAGE IN THE SHUNT TRIP MECHANISM.
8. FUSED SWITCH WITH TWO NORMALLY OPEN SETS OF AUXILIARY CONTACTS (FOR ERU POWER SUPPLY DISCONNECTION). SEE DIAGRAM 6/E4-2

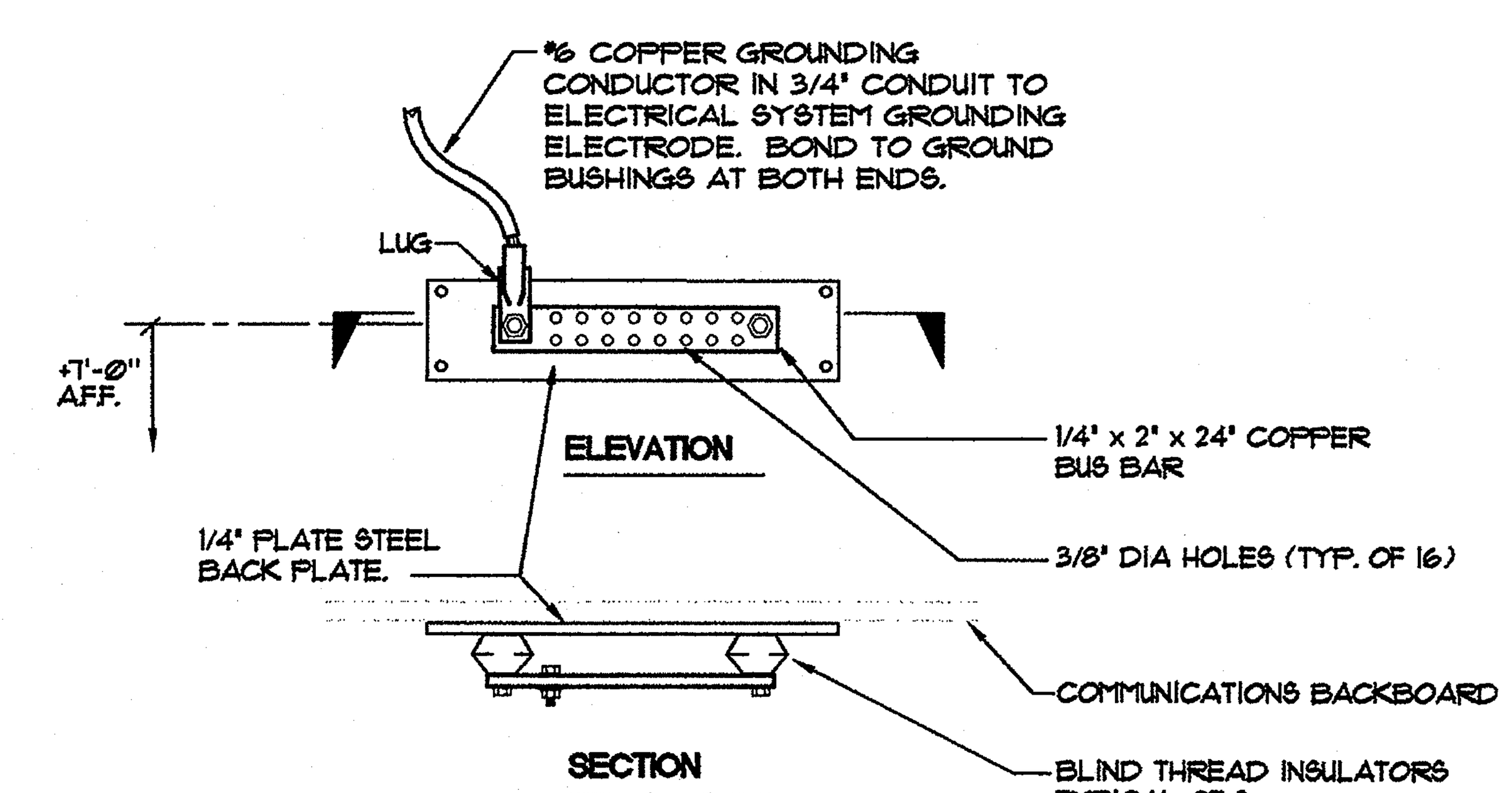


NOTE: RELAY SHALL OPERATE TO OPEN CONTACT WHEN FIRE ALARM PANEL SIGNALS SHUNT TRIP OPERATION.

ELEVATOR ERU CONTROL DIAGRAM
NO SCALE
6 / E4-2



CONNECTION BOX DETAIL
NO SCALE
4 / E4-2



COMMUNICATION GROUND BUS
NO SCALE
7 / E4-2

PLOTTED @ 3/18/05

PHONE 760-754-8191
FAX 760-754-8291
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
GROTH ARCHITECTS, INC.
space art time function

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
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DATE MAR 2 8 2005

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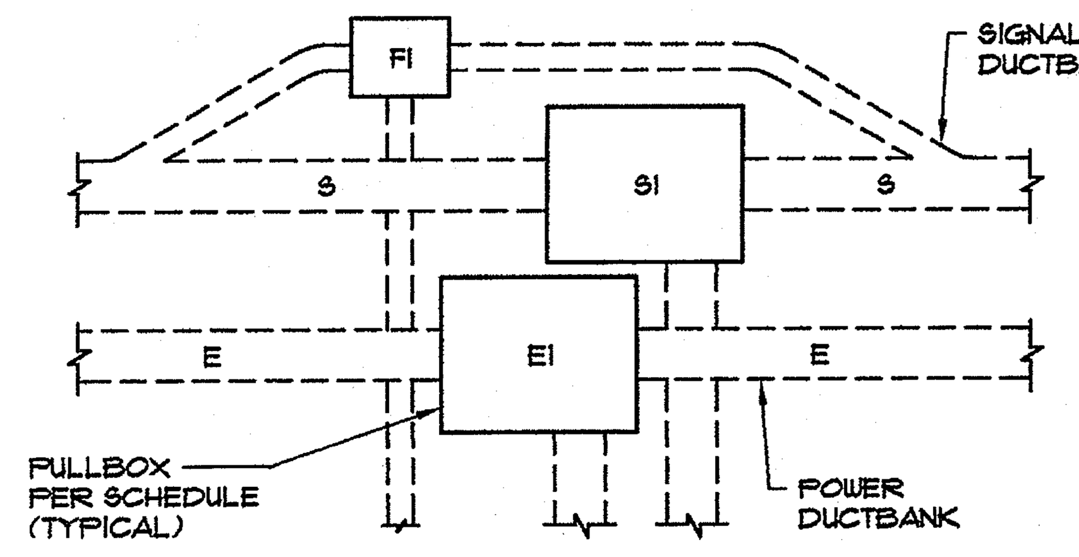
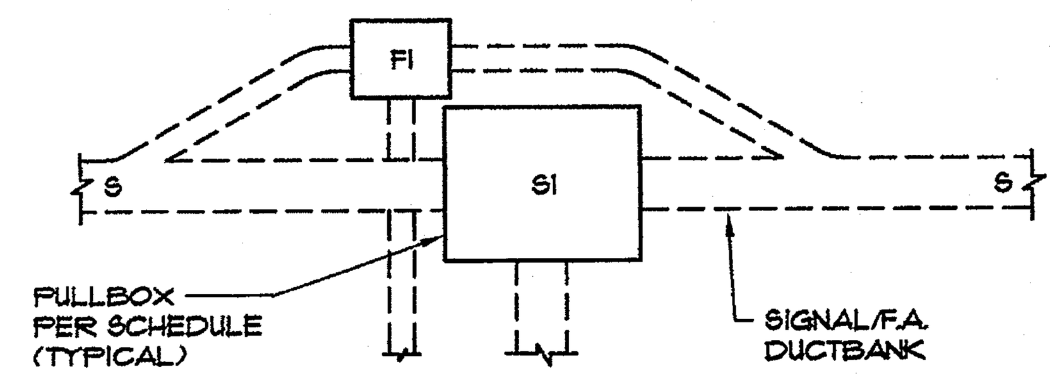
SHEET TITLE
DETAILS

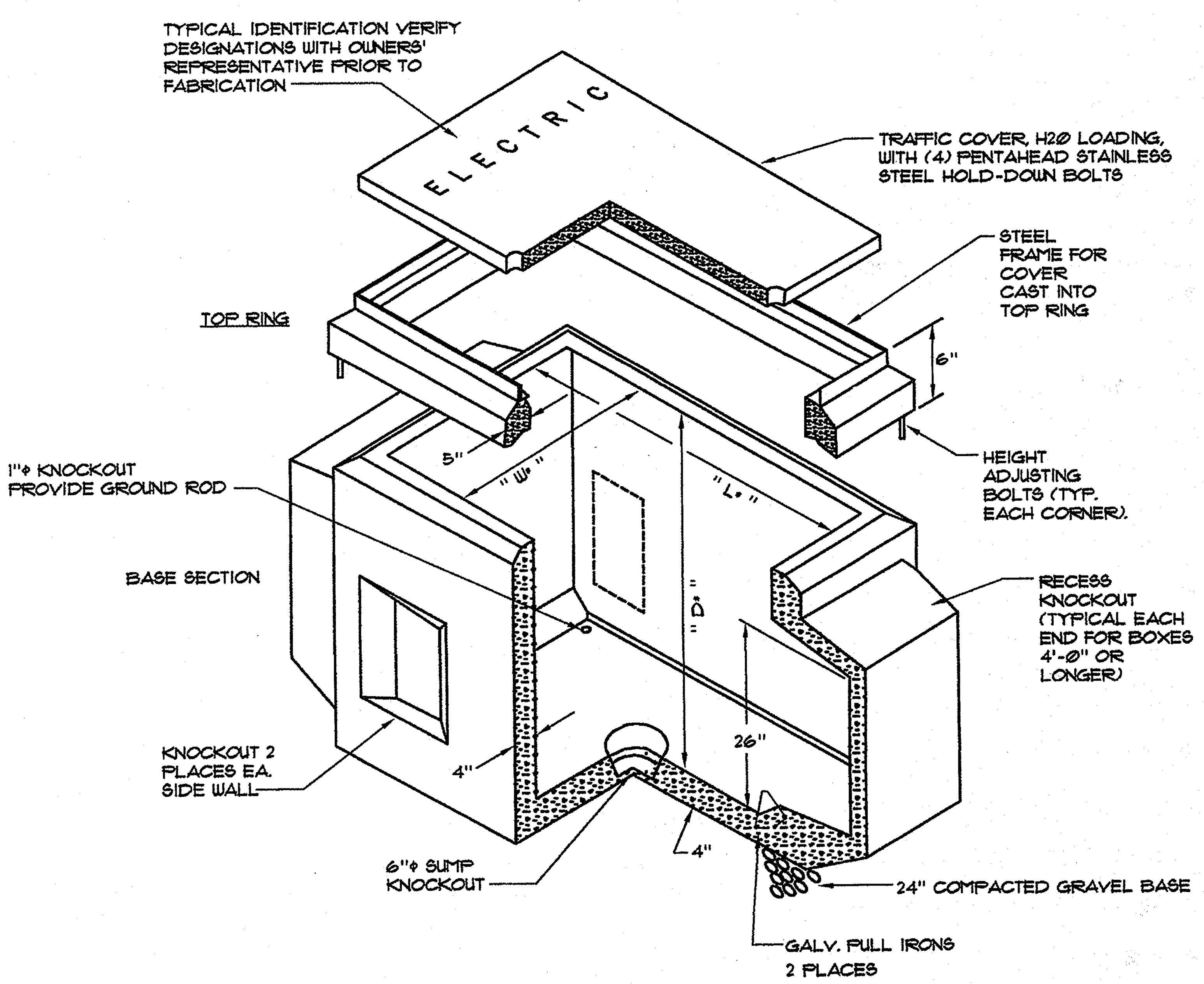
E4-2



POWER/SIGNAL/F.A. PULLBOX PLAN
NO SCALE
1 / E4-3



SIGNAL/F.A. PULLBOX PLAN
NO SCALE
2 / E4-3



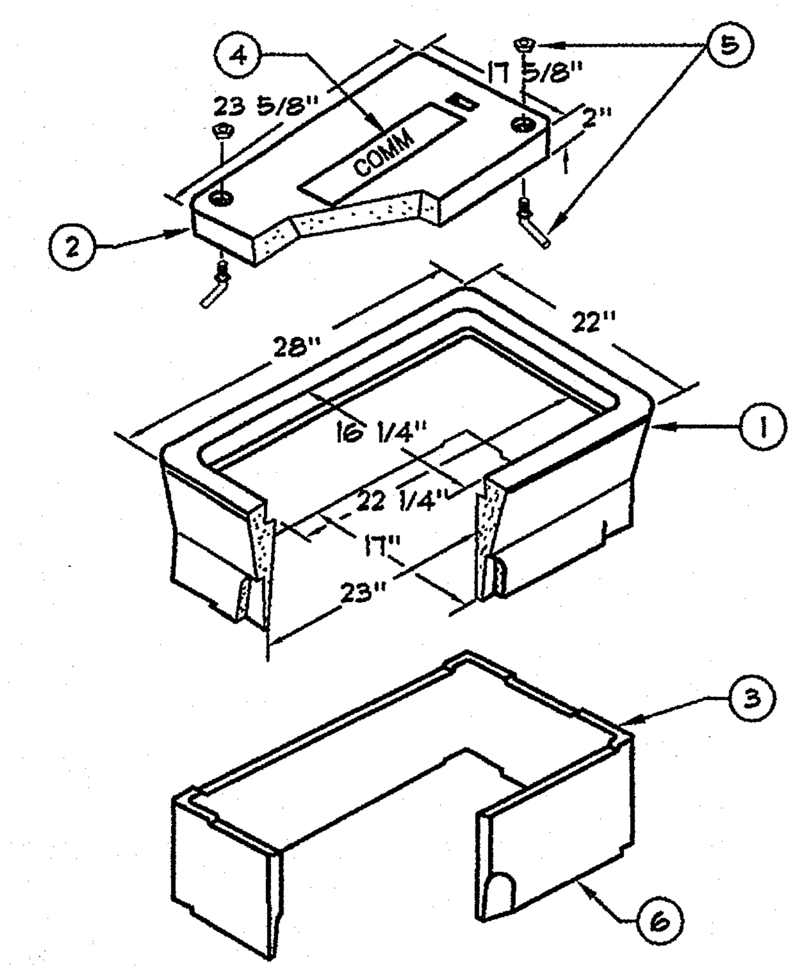
• FOR DIMENSIONS SEE PULLBOX SCHEDULE ON THIS SHEET.

POWER/SIGNAL PULLBOX DETAIL
NO SCALE
3 / E4-3

PULLBOX SCHEDULE

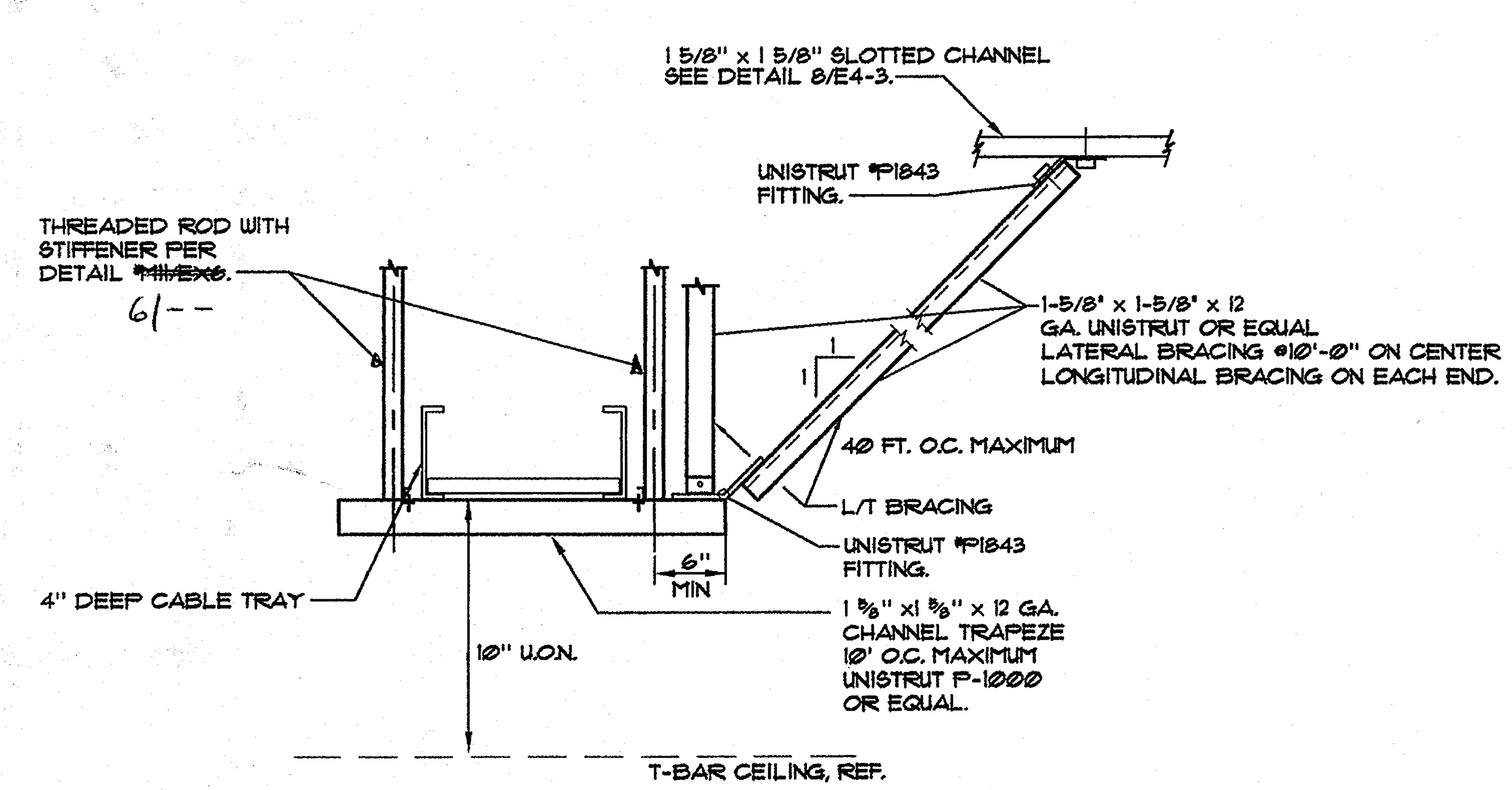
PULLBOX	TYPE	DETAIL	"L" (1)	"W" (1)	"D" (1)
EI	POWER	3/E4.3	48"	30"	36"
SI	SIGNAL	3/E4.3	48"	30"	36"
S2	SIGNAL	4/E4.3	PER DETAIL	PER DETAIL	PER DETAIL
FI	FIRE ALARM	4/E4.3	PER DETAIL	PER DETAIL	PER DETAIL

(1) VERIFY ALL DIMENSIONS BASED ON ACTUAL CONDUIT LAYOUT PRIOR TO ORDERING, PER C.E.C. 370-28.

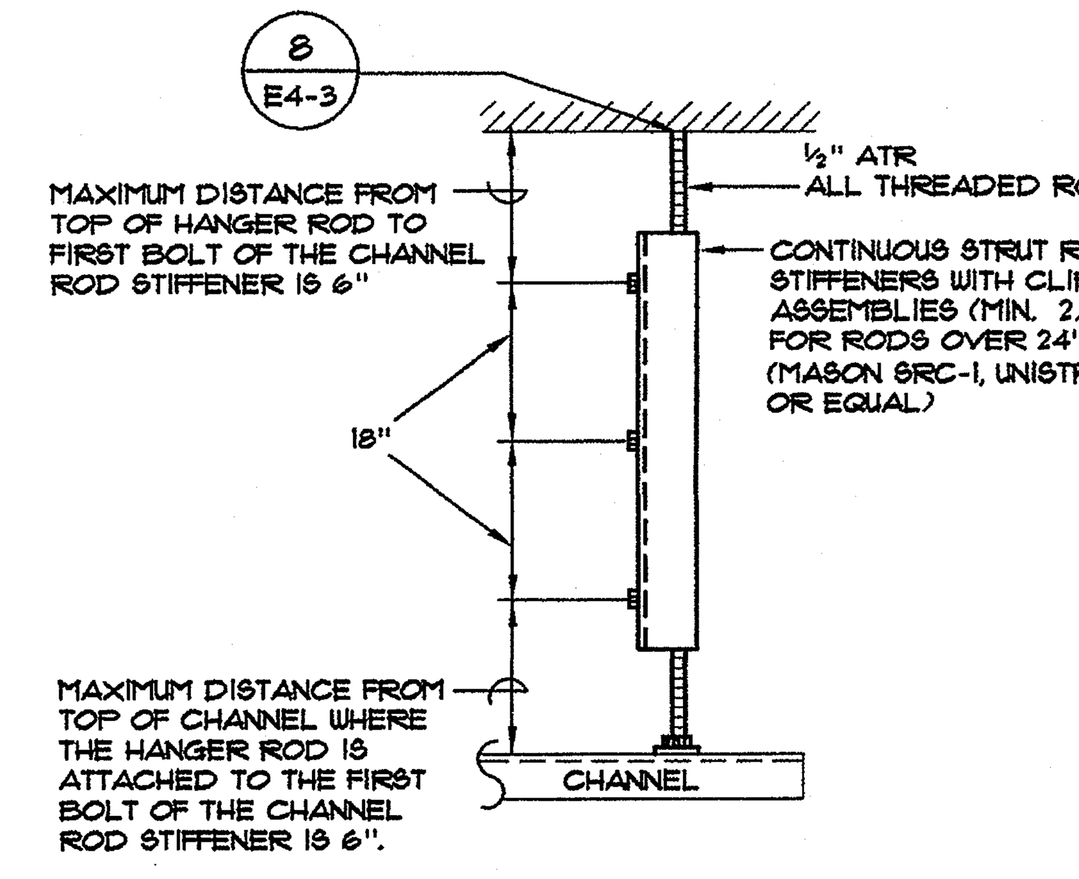


1. PRECAST CONCRETE, BOTTOMLESS PULLBOX
2. TRAFFIC TYPE BOLT DOWN COVER.
3. PRECAST CONCRETE EXTENSION
4. UTILITY IDENTIFICATION TO SAY "COMM" OR "FA" ON COVER.
5. TAMPER PROOF PENTA HEAD NUT AND SWING BOLT ON FIRE ALARM BOXES, STANDARD HEX HEAD ON FIELD COMM. BOXES (2 REQUIRED). ALL STAINLESS STEEL.
6. CONDUITS SHALL ENTER THROUGH SIDES OF EXTENSION.
7. INSTALL ON 12" BASE OF COMPACTED GRAVEL. SET BOX LEVEL, WITH TOP 1" ABOVE FINISHED GRADE.

FIRE ALARM PULLBOX DETAIL
NO SCALE
4 / E4-3

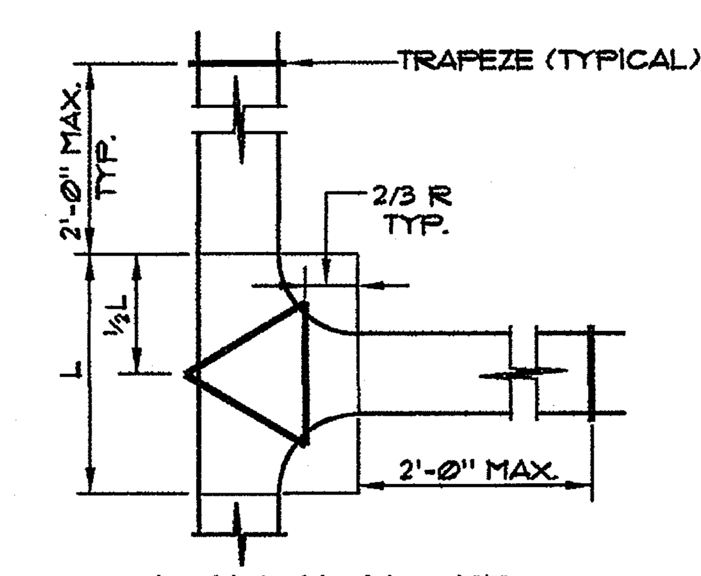


TYPICAL CABLE TRAY SEISMIC SUPPORT
NO SCALE
5 / E4-3



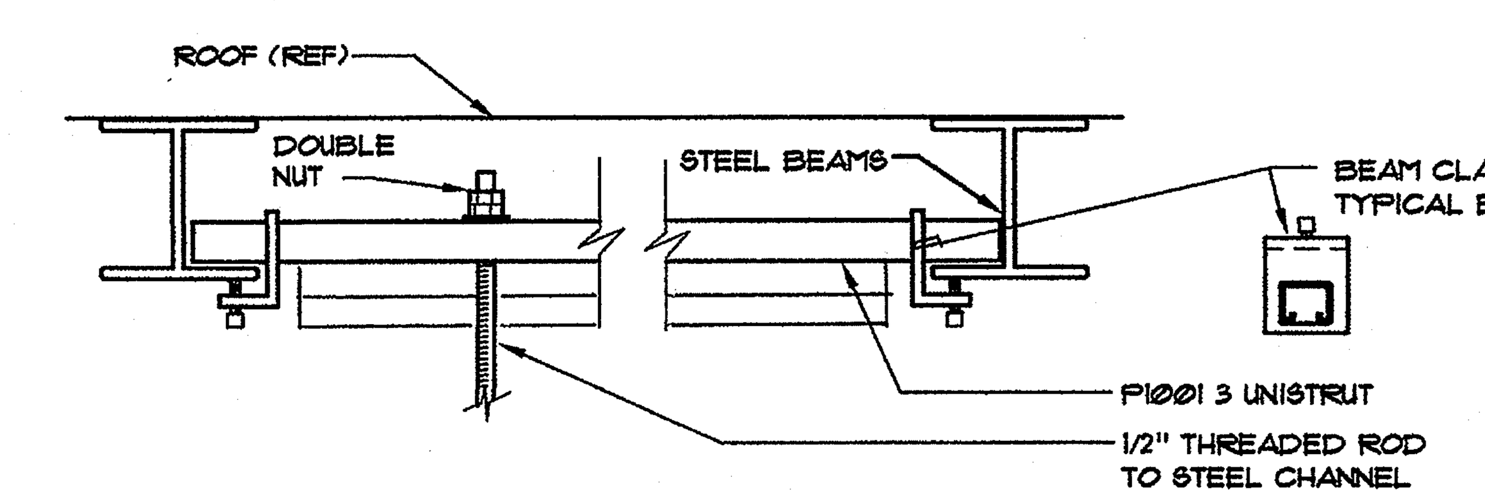
ROD STIFFNER DETAIL
NO SCALE
6 / E4-3

NOTES:
1. TRAPEZE 10' O.C. MAX. FOR STRAIGHT RUNS.
2. TRAPEZE REQUIRED 12" FROM FIRE RATED PENETRATIONS.
3. TRAPEZE REQUIRED AT INTERSECTIONS AS INDICATED BELOW.



HORIZONTAL TEE

TYPICAL CABLE TRAY SUPPORT CONDITIONS
NO SCALE
7 / E4-3



THREADED ROD MOUNTING TO STEEL BEAMS
NO SCALE
8 / E4-3

629-002B
REGISTERED PROFESSIONAL ENGINEER STEVE L. FROBERG E 13950 EXP. 9/30/05 ELECTRICAL STATE OF CALIFORNIA
08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO.	758-000
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OCEANSIDE UNIFIED S.D.

space art time function

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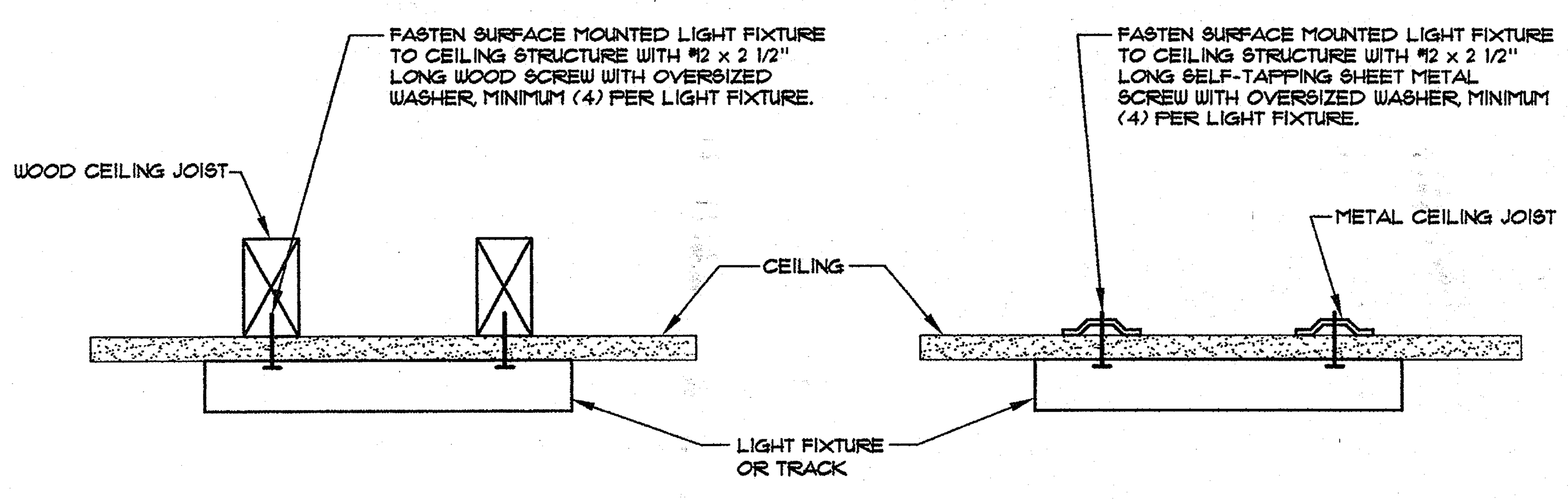
SHEET TITLE
DETAILS

E4-3

FILE: J:\629-002B\6292E43.dwg Mar 21, 2005 - 9:35am
XREF: 6292BDR.dwg

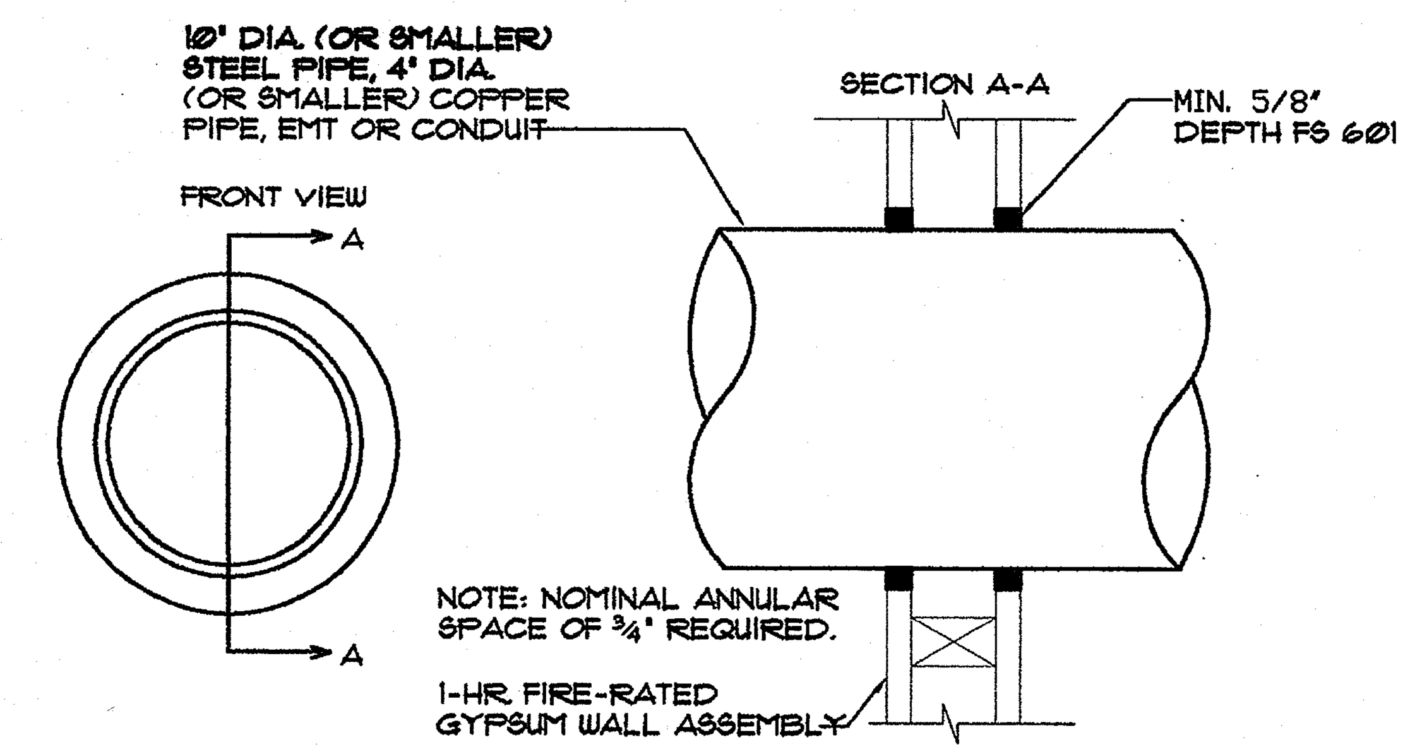


NOTE:

REFERENCE ARCHITECTURAL PLANS FOR TYPE OF CEILING STRUCTURE AT ALL FIXTURE LOCATIONS.

SURFACE MOUNTED FIXTURE MOUNTING DETAILS (1 / E4-4)

NO SCALE



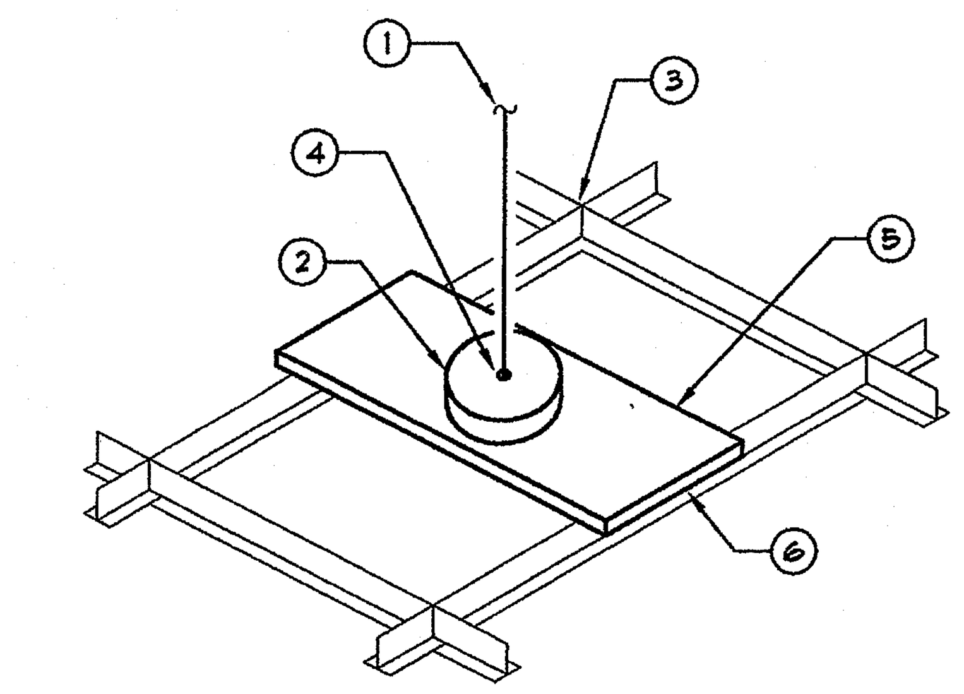
HILTI FS 601 IS RATED FOR 1,2, AND 3 HOURS IN ACCORDANCE WITH THE ASTM E84-91a TEST STANDARD. USE HILTI FS 601 FIRE-RATED SEALANT FOR ALL THROUGH PENETRATION FIRESTOP SYSTEMS.

INSTALLATION NOTES:

1. CLEAN PENETRATION OPENING AND SURFACES FROM LOOSE DEBRIS, DIRT, OIL AND WAX.
2. INSTALL BACKING MATERIAL AS REQUIRED.
3. APPLY FS 601 TO THE REQUIRED DEPTH, MAKING SURE THE SEALANT CONTACTS ALL SURFACES TO OBTAIN PROPER ADHESION.
4. USING PUTTY KNIFE OR EQUIVALENT, TOOL THE SEALANT IMMEDIATELY TO COMPLETELY FILL THE VOID AND PROVIDE A SMOOTH, NEAT FINISH.
5. LEAVE COMPLETED SEAL UNDISTURBED FOR AT LEAST 48 HOURS.

FIRE RATED CONDUIT PENETRATION DETAIL (2 / E4-4)

NO SCALE

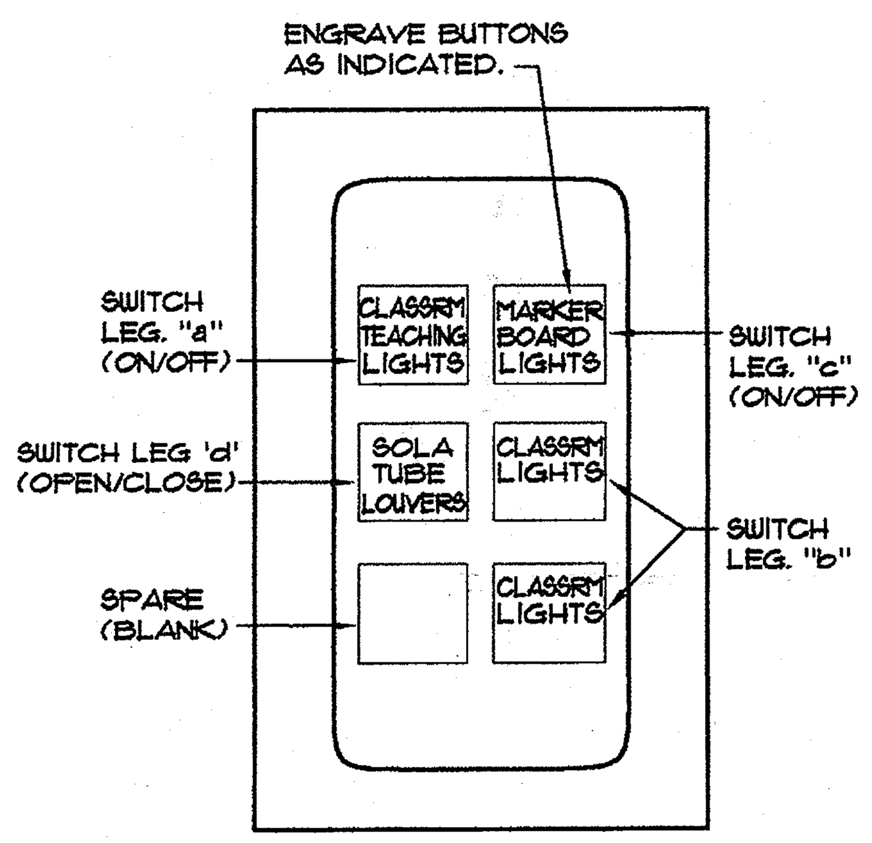


NOTES:

1. #12 SAFETY WIRE TIED TO SAFETY WIRE SUPPORT HOLE AND FASTENED TO BLDG. STRUCTURE W/ 1/4"x 2 1/2" LONG SCREW-EYE OR EQUAL.
2. LIGHT FIXTURE OR SPEAKER ENCLOSURE
3. EXPOSED T-BAR CEILING SYSTEM OR CONCEALED SUSPENSION SYSTEM
4. SAFETY WIRE SUPPORT HOLE IN FIXTURE OR SPEAKER ENCLOSURE
5. MOUNTING CHANNELS OR T-BAR BRIDGE TO SPAN CEILING SUSPENSION SYSTEM AS RECOMMENDED BY MFR.
6. ATTACH TO SUSPENSION SYSTEM W/CLIPS OR WIRE TIES.

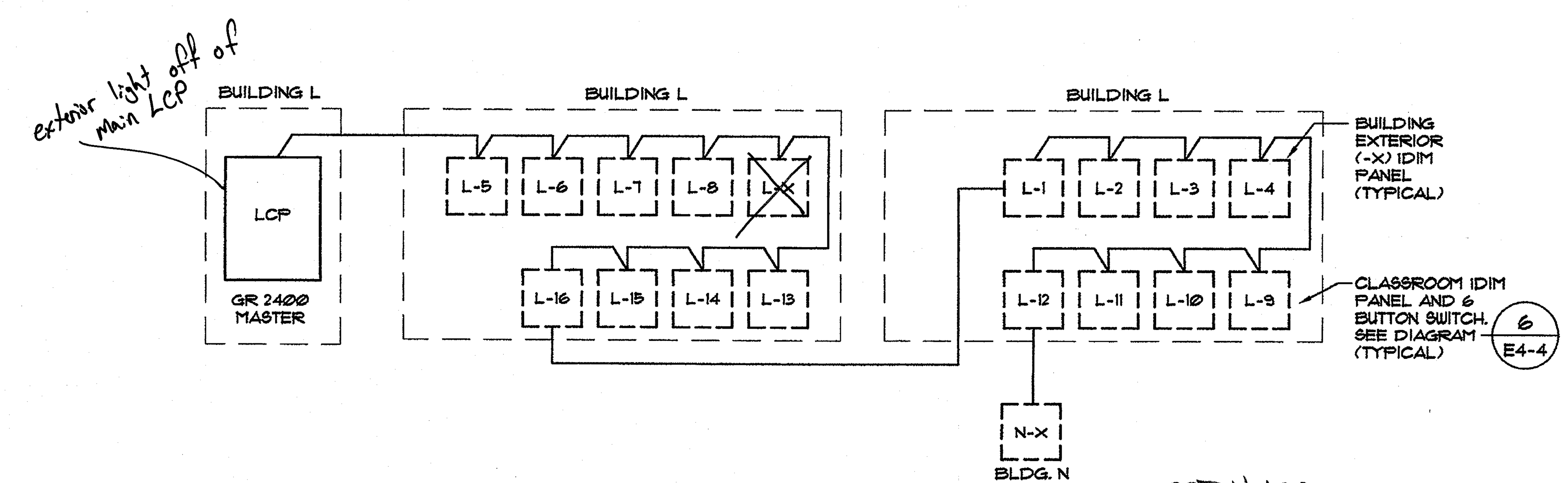
DOWN LIGHT/SPEAKER MOUNTING DETAIL (3 / E4-4)

NO SCALE



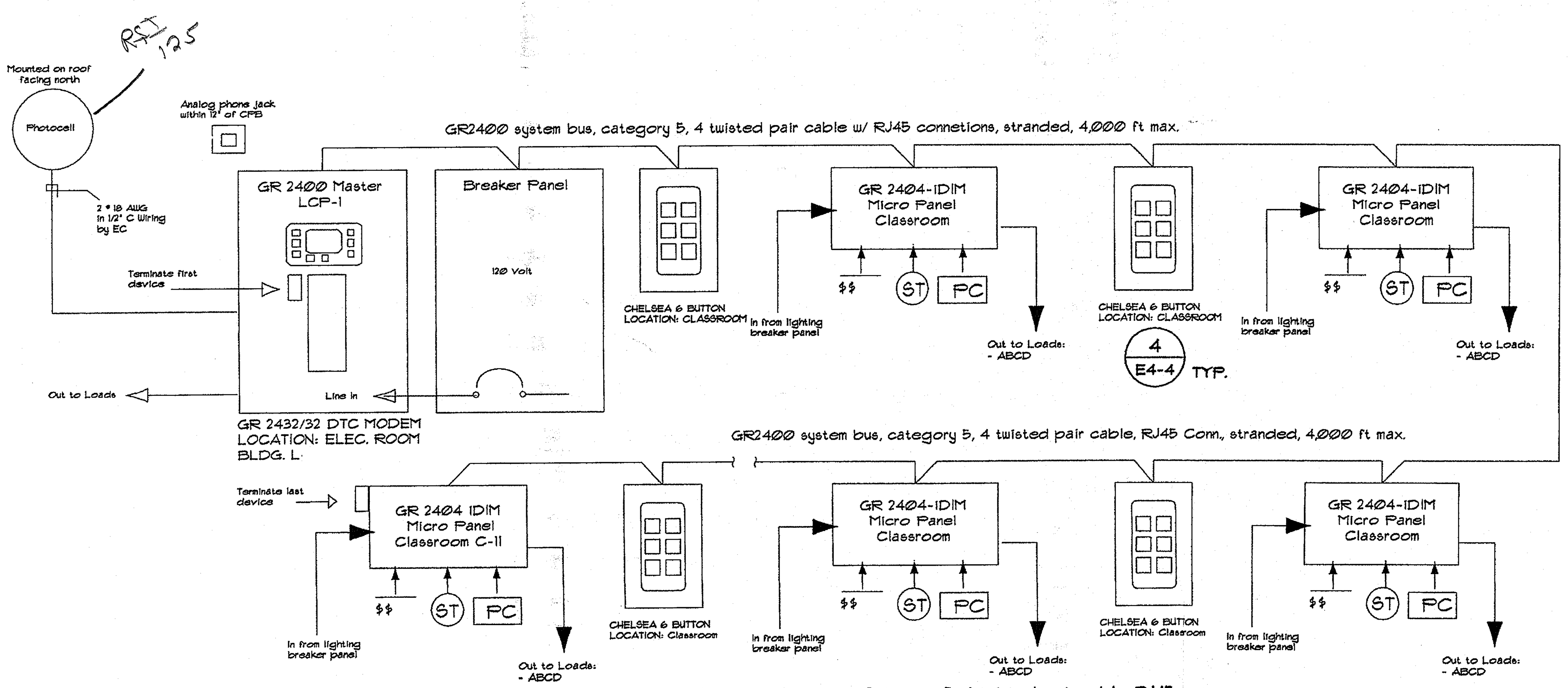
6 BUTTON LIGHTING SWITCH ELEVATION (4 / E4-4)

NO SCALE TYPICAL CLASSROOMS



LIGHTING CONTROL BUS DIAGRAM (5 / E4-4)

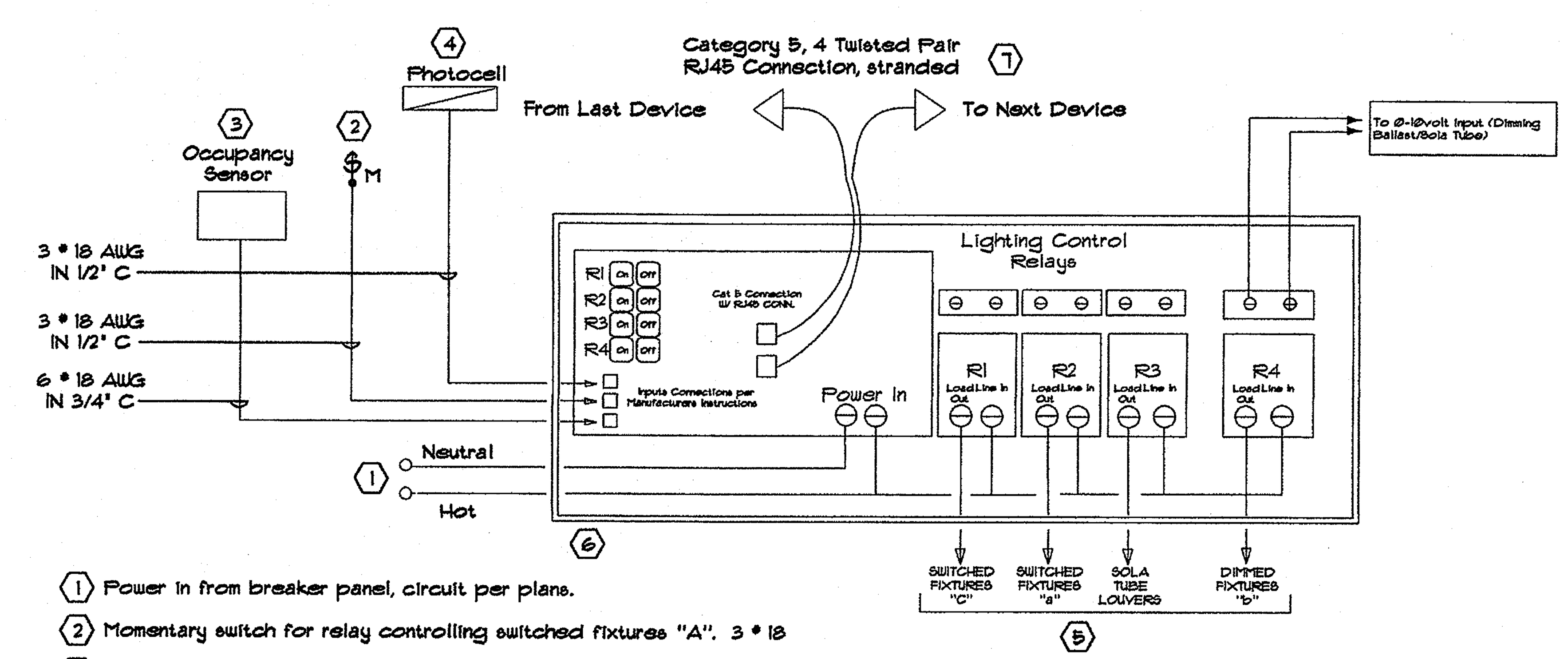
NO SCALE



1. Connect the system bus using Category 5, 4 twisted pair cable, RJ45 conn, stranded. System bus must be a straight line. No spurs. Terminate first and last device as shown.
2. Provide dedicated circuit to power Master LCP and Slave LCP.
3. Prior to bid, verify all questions with Lighting Control & Design, LA, CA 800.345.4448. Contact SALES REP:MICHAEL REYES 323-497-0001
4. Contact LC&D prior to turn over to confirm proper system operation and all time schedules. System must be fully operational to include operational modem. Verify time schedules with owner.
5. Provide telephone jack within 12" of LCP-1.
6. All wiring shall comply with local codes. and manufacturer's requirements

TYPICAL LIGHTING CONTROL SINGLE LINE (6 / E4-4)

NO SCALE



1. Power in from breaker panel, circuit per plans.
2. Momentary switch for relay controlling switched fixtures "A". 3 #18
3. Ceiling/corner mounted dual technology sensor connected to Micro Idim with 1/2"C-3#18, Sensor Switch #WV-PDT.(12V OR 24V)
4. Photocell mounted in Sola Tube connected to 'IDIM' with 1/2"C-3#18. Activation of PC shall turn ON/OFF/DIM lights.
5. Connect lighting switch legs AB,C,D to Relays 1, 2, 3 and 4, per plans and manufacturers instructions.
6. GR 2404-IDIM with NEMA 1 screw-cover enclosure, 6"h x 12"l x 4"d (minimum). Mount in accessible ceiling above wall switches.
7. Category 5, 4 twisted pair, w/RJ45 conn. (stranded cable only), connection from lighting panel. Daisy chained through each classroom's IDIM and 6 button station per manufacturers instructions. See lighting control Single Line.
8. Building exterior IDIM panel shall be similar except with (4) non-dim relays and without input connections.

TYPICAL GR 2404-IDIM WIRING DETAIL (7 / E4-4)

NO SCALE

629-002B
REGISTERED PROFESSIONAL ENGINEER — STEVE L. FROMMING — E 13950 — EXP. 9/30/08 — ELECTRICAL — STATE OF CALIFORNIA
08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
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PHONE 760-754-8191
FAX 760-754-8291

space art time function

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OFFICE OF REGULATION SERVICES
4-106494
AC FLS SS
DATE MAR 2 8 2005

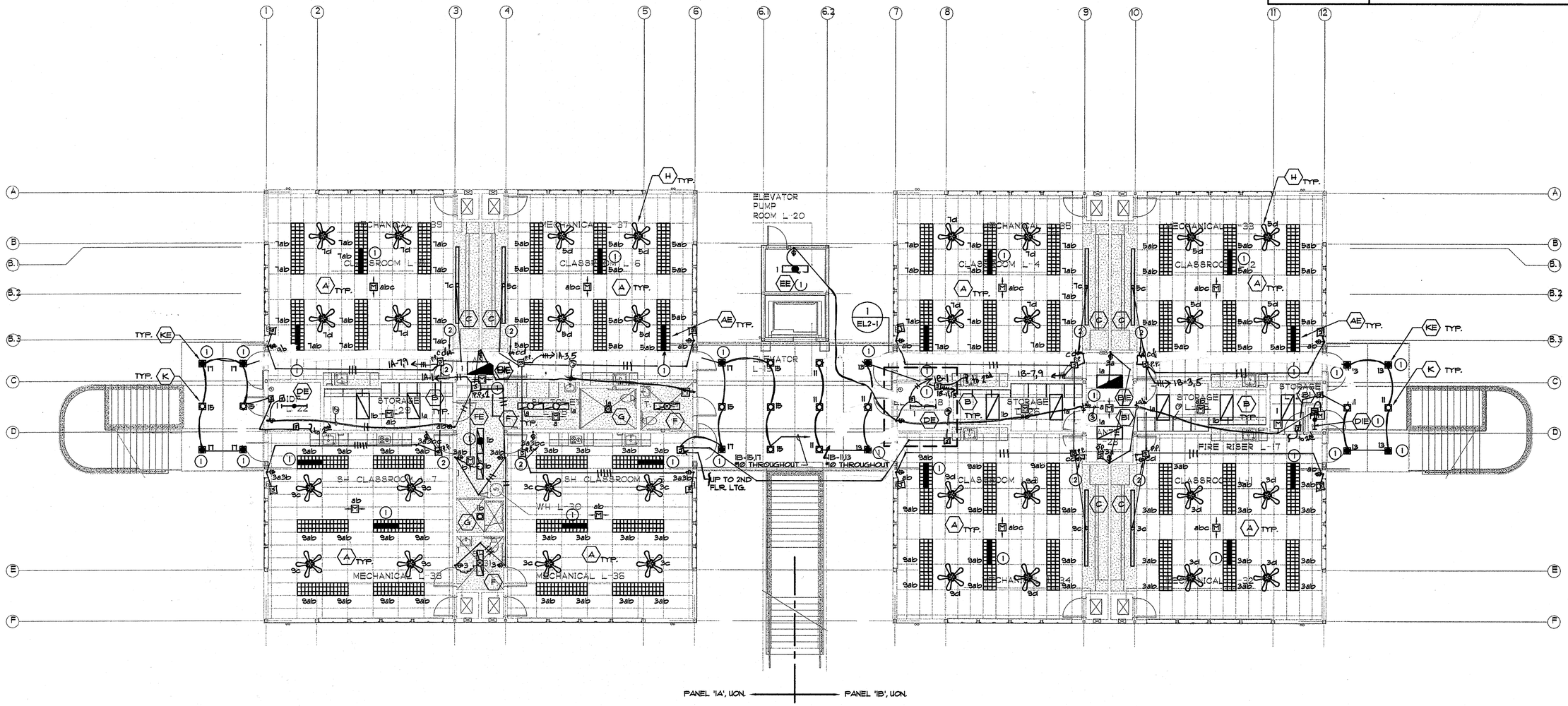
LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

SHEET TITLE

DETAILS

E4-4

FILE: J:\629-002B\6292E44.dwg Mar 21, 2005 - 9:35am
XREF: 6292BDR.dwg



BUILDING L- FIRST FLOOR LIGHTING PLAN

1/8" = 1'-0"

NOTES:

1. FIXTURE SHALL BE SWITCHED. PROVIDE ADDITIONAL UNSWITCHED CONDUCTOR TO FIXTURE FOR PROPER STANDBY OPERATION OF BATTERY PACK.
2. FAN CONTROL PROVIDED WITH CEILING FAN FIXTURE.
3. roughed in slab on grade

PP = J box w/ Power Pak for Motion Sensor

629-002B

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
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San Diego, CA. 92123
(858) 279-0242 – FAX (858) 279-0711

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OUSD NO.
758-000
PROJECT NOS.
025
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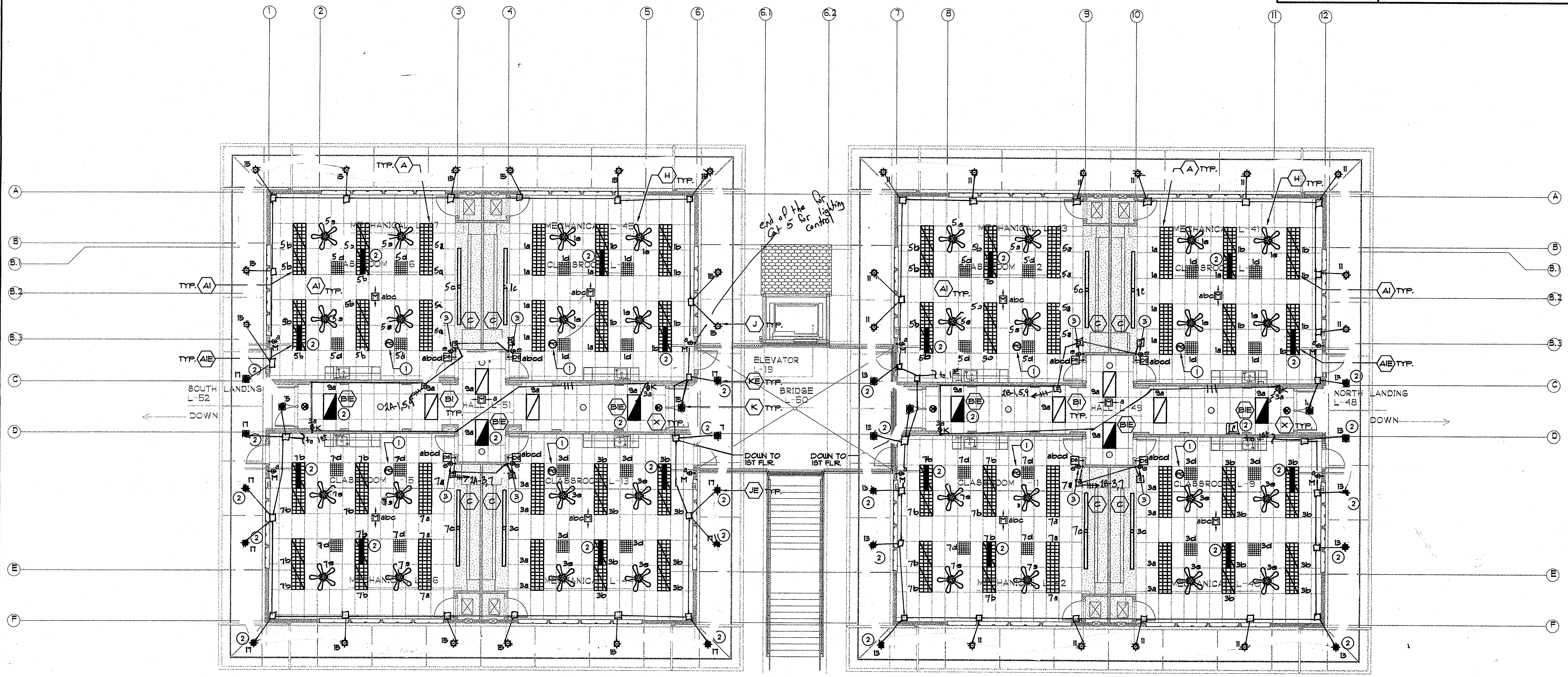
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
BUILDING L
FIRST FLOOR
LIGHTING PLAN

EL1-1

KEY PLAN

FILE: J:\629-002B\6292EL11.dwg Mar 21, 2005 - 9:36am
XREF: 6292FP1.dwg QL floor plan 1.dwg QL cing plan 1.dwg 6292B-KEYPLAN.dwg 6292BDR.dwg



BUILDING L- SECOND FLOOR LIGHTING PLAN

1/8" = 1'-0"

NOTES:

1. MOUNT PHOTOCELL VERTICALLY WITHIN SOLATUBE SO THAT LENS 'SEES' OPPOSITE SIDE OF TUBING, SEE ARCHITECTURAL DRAWINGS.
2. FIXTURE SHALL BE SWITCHED. PROVIDE ADDITIONAL UNSWITCHED CONDUCTOR TO FIXTURE FOR PROPER STANDBY OPERATION OF BATTERY PACK.
3. FAN CONTROL PROVIDED WITH CEILING FAN FIXTURE.

629-002B

08-10-04

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Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

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DATE MAR 2 8 2005

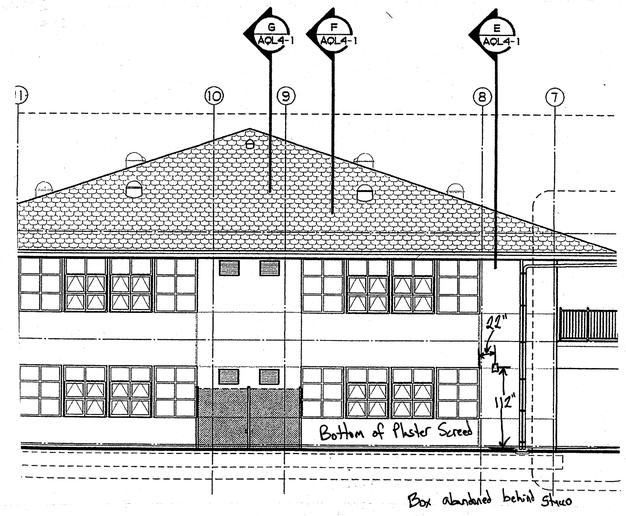
LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
BUILDING L
SECOND FLOOR
LIGHTING PLANS

EL1-2

FILE: J:\629-002B\6292EL12.dwg, Mar 21, 2005 - 9:36am
XREF: 6292FP2.dwg QL floor plan 2.dwg QL clng plan 2.dwg 6292B-KEYPLAN.dwg 6292BDR.dwg



Soltek Pacific

Request for Information 032

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OceanProject # 575
823 Acacia Street
Oceanside, CA 92054
Tel: 760-967-8188 Fax: 760-967-8222

Soltek Pacific

RFI #: 032 Importance: High Date Created: 7/8/2005

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject
Panel MA

Discipline
Electrical

Category

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number

Cc: Company Name | **Contact Name** | **Copies** | **Notes**

Question Date Required: 7/15/2005

Reference sheets EL2-1 and AQL3-1. In building L at grid lines 3 & 4 and C on the 1st floor there is a wall shown with (3) flush panels that has Pnl's MA, MAA and 1A in it. 1st of all this wall is only 4" deep and panels 1A and MAA are 5.75" deep This wall needs to be a 6" wall.
Next Pnl MA because of the amount and size of breakers in this panel can only come surface mount and is 75"h x 32"w x 10"d. Also because the door swings out (3) panels con not fit here anyway.
Gould electric has attached a drawing showing our proposed location for panel MA now. Please advise if this location is acceptable and if the wall housing for 1A and MAA will be changed to a 6" wall.
Also please look at the second floor recessed panel locations. Panel 2B and 2A need to be at least 6" walls, which it appears they are, but the same wall where 2B is shown there is also elevator signage shown. Attachment will be faxed.

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Dale Sana

Co-Respondent

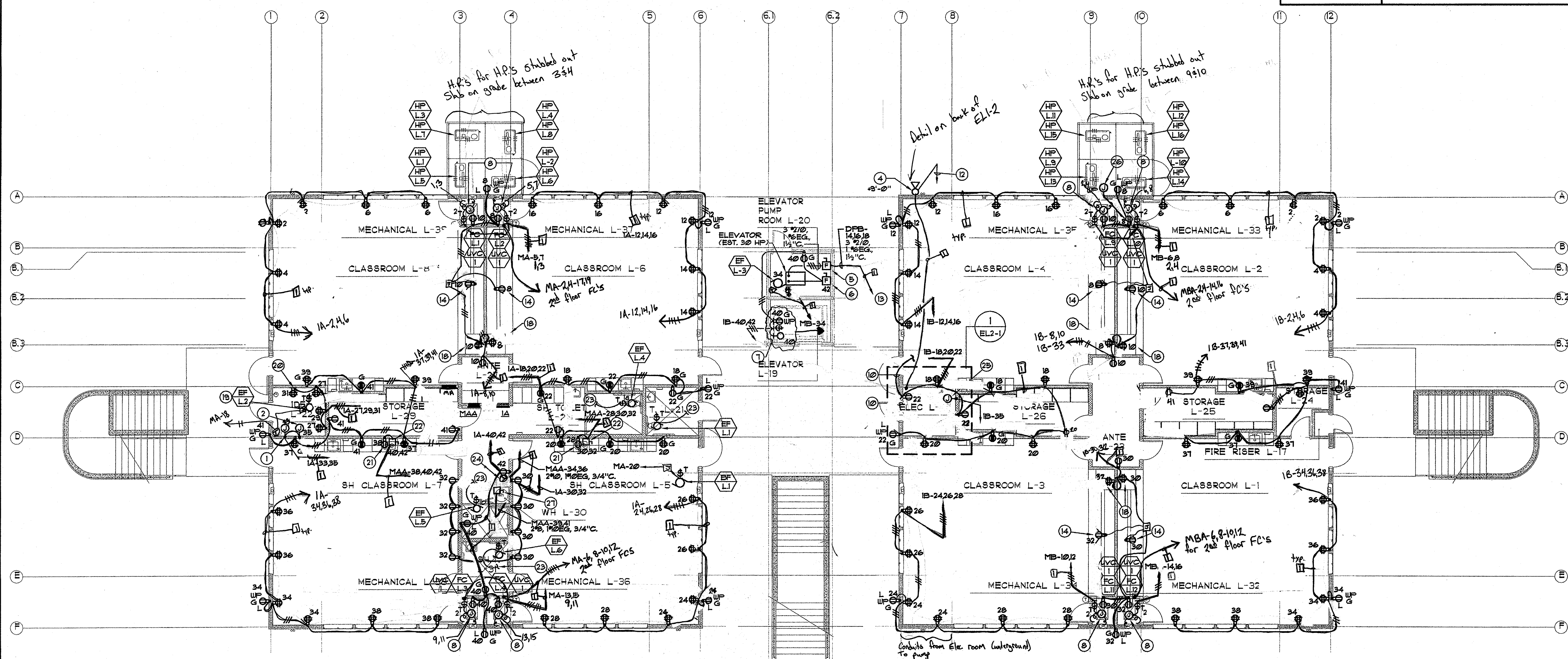
Answer Date Answered: 7/13/2005

See ASI #13, and related sketches sk-05, 06, & 07.
These are located for viewing in the Projects folder.
Signed copies to follow tomorrow.

Soltek Pacific

Request for Information 032
Detailed, Grouped by each number, with routing info

-Proposed panel location is not acceptable for ADA.
Please mount per sketches at storage side of room.
Panels at 4" wall can remain. This wall has been thickened to 7 1/2" and as such should fit flush mounting any panel you have mentioned.
-Move down below signage in same location shown.
Do not interfere w/hanging ht. of signage.



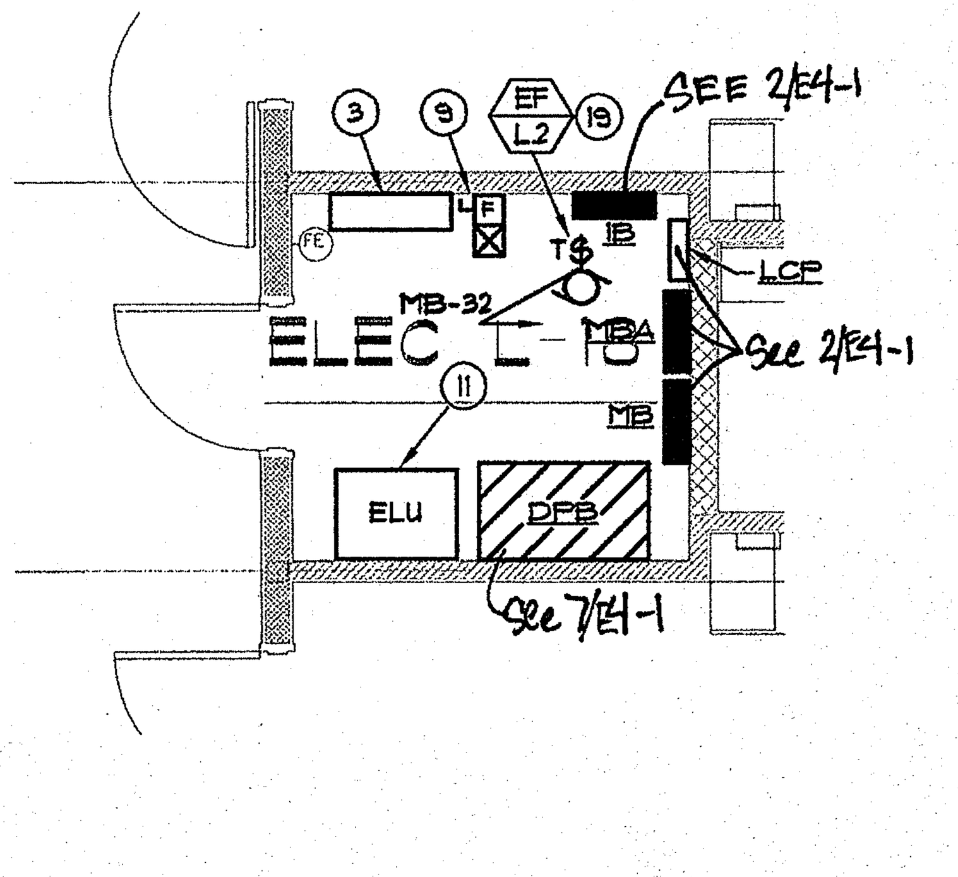
Conduits from Elec room (underground)
To pump
To grinder
To parking lot lights
To $

BUILDING L - FIRST FLOOR POWER PLAN

1/8" = 1'-0"

MECHANICAL UNIT - ELECTRICAL EQUIPMENT SCHEDULE				
UNIT NO.	FUSED DISCONNECT SWITCH SIZE (15)(16)(17)	STARTER	CONDUIT AND CONDUCTOR SIZE TO UNIT	BRANCH CIRCUIT
HP-L.1	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-1,3,5
HP-L.2	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-7,9,11
HP-L.3	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-13,15,17
HP-L.4	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-19,21,23
HP-L.5	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-2,4,6
HP-L.6	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-8,10,12
HP-L.7	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-14,16,18
HP-L.8	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MAA-20,22,24
HP-L.9	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MBA-13,15,17
HP-L.10	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MB-19,21,23
HP-L.11	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MBA-1,3,5
HP-L.12	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MB-7,9,11
HP-L.13	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MBA-19,21,23
HP-L.14	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MB-13,15,17
HP-L.15	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MBA-7,9,11
HP-L.16	3/35/60 240 VOLT NEMA 3R	-	3#10, 1#10EG, 3/4"C.	MB-1,3,5

3/35/60:
- SWITCH RATING (AMPS)
- FUSE SIZE (AMPS)
- NUMBER OF POLES



ELECTRICAL ROOM #L-18

1/4" = 1'-0"

(1) EL2-1

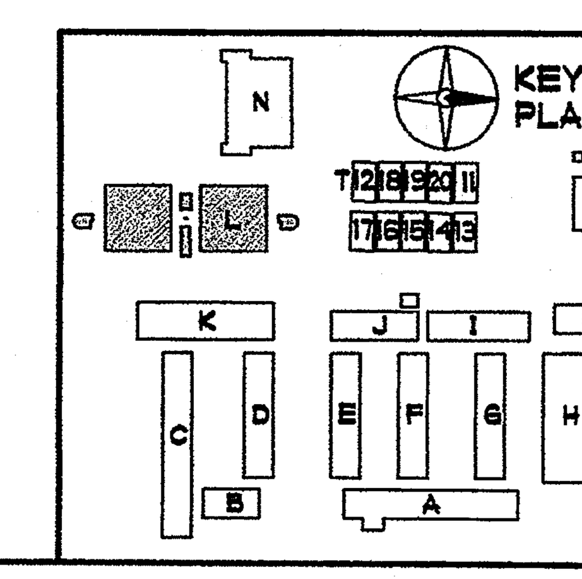
NOTES:

1. MOUNT AT +60" AFF. AND CONNECT TO "SNAC" PANEL #5.
2. MOUNT AT +60" AFF. AND CONNECT TO GAS DETECTOR PANEL.
3. INSTALL PUMP CONTROL PANEL FURNISHED BY DIV. 2. SEE SHEET E0-5. , SEE 2/E4-1
4. INSTALL PUMP ALARM HORN FURNISHED BY DIV. 2.
5. PROVIDE 200A-3P FUSED SWITCH WITH TIME-DELAY CURRENT LIMITING FUSES AS RECOMMENDED BY ELEVATOR MANUFACTURER. PROVIDE LIMIT SWITCH WITH FORM 'C' CONTACTS WIRED TO ELEVATOR CONTROLLER TO INDICATE WHEN FUSED SWITCH IS IN 'OPEN' POSITION.
6. PROVIDE 30A-2P FUSED SWITCH WITH 15A CURRENT LIMITING FUSES, FOR CAR LIGHTS.
7. COORDINATE ROUGH-IN LOCATION FOR PIT LIGHT, SWITCH & RECEPTACLE WITH ELEVATOR SHOP DRAWINGS.
8. PROVIDE 120V CONNECTIONS FROM FAN COIL CIRCUIT TO UVC-1 AND MOTORIZED DAMPER.
9. COMBINATION STARTER FOR EXISTING GRINDER STATION. SEE SHEET E0-5., SEE 2/E4-1
10. TO EXTERIOR RECEPTACLES AT GRINDER STATION & LIFT STATION. SEE SHEET E0-5.
11. EMERGENCY LIGHTING UNIT, SEE 7/E4-1
12. 1/2"C., 2#14 TO PUMP CONTROL PANEL.
13. SEE SINGLE LINE DIAGRAM, SHEET E0-5 FOR REQUIREMENTS.
14. MOUNT RECEPTACLE OUTLET HORIZONTALLY IN FALSE DRAWER FRONT.
15. MOUNT ON RIGID CONDUIT RISER(S).
16. HEAVY DUTY FUSED DISCONNECT SWITCH.
17. FUSE SIZES ARE INDICATED FOR REFERENCE ONLY. VERIFY AND PROVIDE FUSE SIZE PER MANUFACTURERS NAMEPLATE.
18. FOR MOUNTING HEIGHT, SEE ARCHITECTURAL INTERIOR ELEVATION.
19. CONNECT TO THERMOSTAT, SEE 5/M-3.1.
20. MOUNT RECEPTACLE OUTLET IN SIGNAL TERMINAL CABINET.
21. RECEPTACLE OUTLET FOR RANGE HOOD. REFER TO RANGE HOOD SHOP DRAWING FOR MOUNTING HEIGHT.
22. 20A/2P ENCLOSED CIRCUIT BREAKER FOR COOKTOP. REFER TO COOKTOP SHOP DRAWINGS FOR MOUNTING HEIGHT.
23. CONNECT TO LIGHTING SWITCH IN THIS ROOM.
24. RECEPTACLE OUTLET FOR OWNER FURNISHED EQUIPMENT. VERIFY ELECTRICAL REQUIREMENTS PRIOR TO START OF WORK.
25. JUNCTION BOX AT +60" AFF. FOR 'LCP'.
26. JUNCTION BOX AT +60" AFF. FOR IRRIGATION CONTROLLER.
27. 60A/2P, 240V NON-FUSIBLE DISCONNECT SWITCH FOR WATER HEATER.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.

(1) - roughed slab on grade



629-002B
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STATE OF CALIFORNIA
08-10-04

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PLOTTED @ 3/18/05

OUSD NO. 758-000

PROJECT NOS. 025

P. T. N. 73569-9

DATE

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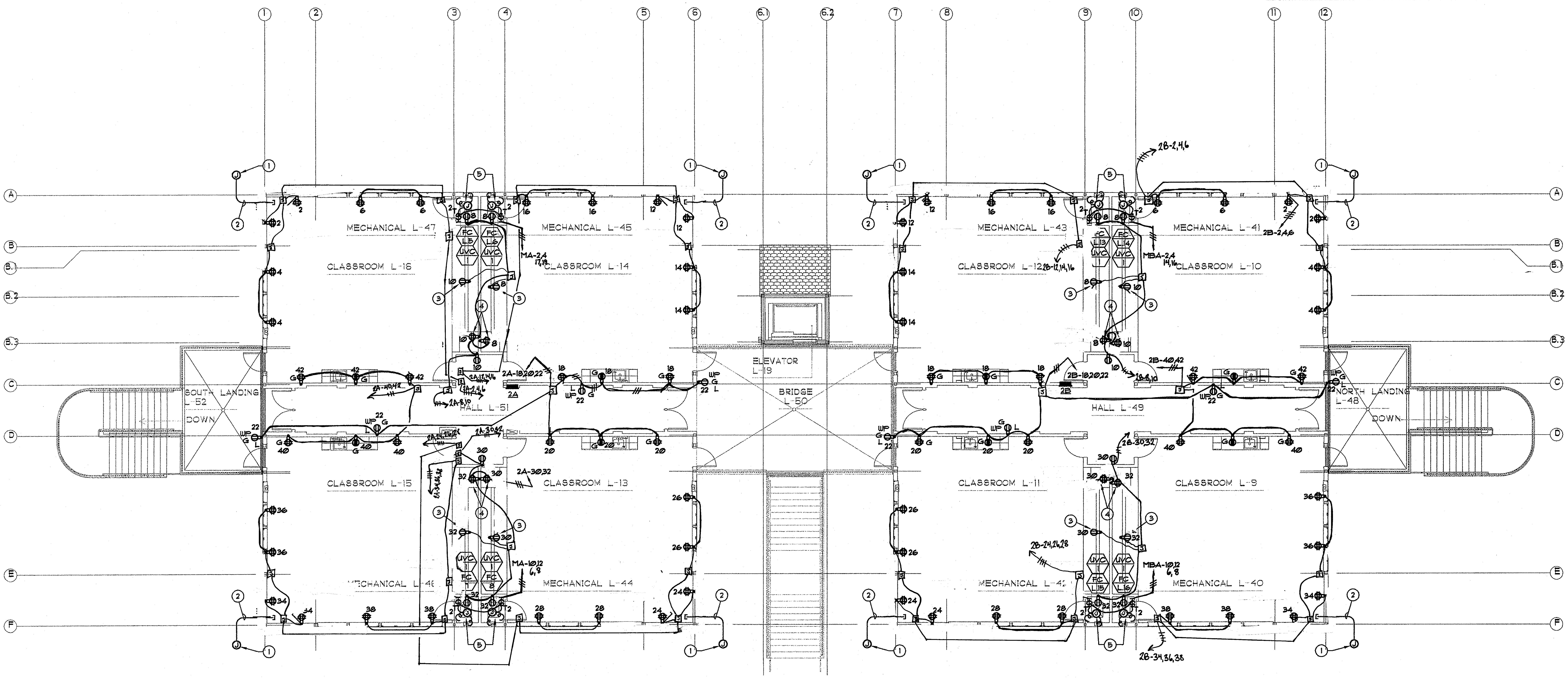
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
BUILDING L
FIRST FLOOR
POWER PLAN

EL2-1

FILE: J:\629-002B\6292EL21.dwg Mar 21, 2005 - 9:37am
XREF: 6292FP1.dwg QL floor plan 1.dwg QL elec plan 1.dwg 6292B-KEYPLAN.dwg 6292BDR.dwg



BUILDING L- SECOND FLOOR POWER PLAN

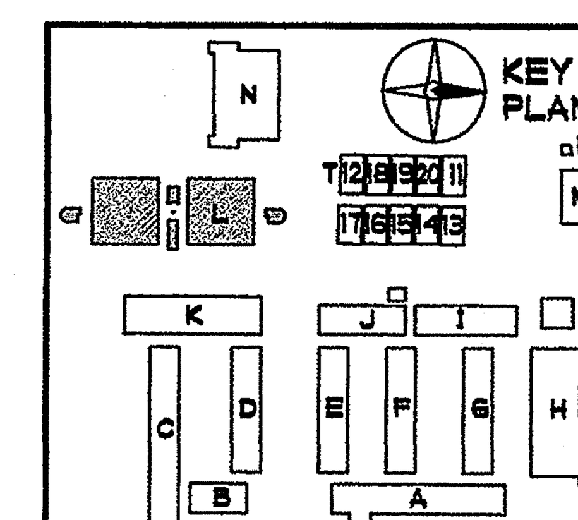
1/8" = 1'-0"

NOTES:

1. PROVIDE JUNCTION BOXES FOR FUTURE SURVEILLANCE CAMERA. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION. SEE DETAIL 6/E4-1.
2. PROVIDE (2) 3/4"C.O. WITH INSULATED BUSHINGS STUBBED ABOVE ACCESSIBLE CEILING.
3. MOUNT RECEPTACLE OUTLET HORIZONTALLY IN FALSE DRAWER FRONT.
4. FOR MOUNTING HEIGHT, SEE ARCHITECTURAL INTERIOR ELEVATION.
5. PROVIDE 120V CONNECTIONS FROM FAN COIL CIRCUIT TO UVC-1 AND MOTORIZED DAMPER.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.



629-002B

REGISTERED PROFESSIONAL ENGINEER STEVE L. FROBERG E 15850 EXP. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

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PLOTTED @ 3/18/05

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PROJECT NOS.	025
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SHEET TITLE
BUILDING L
SECOND FLOOR
POWER PLAN

EL2-2

FILE: J:\629-002B\6292EL22.dwg Mar 21, 2005 - 9:37am
XREF: QL floor plan 2.dwg QL elec plan2.dwg 6292B-KEYPLAN.dwg 6292BDR.dwg QL clng plan 2.dwg

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REGISTERED PROFESSIONAL ENGINEER
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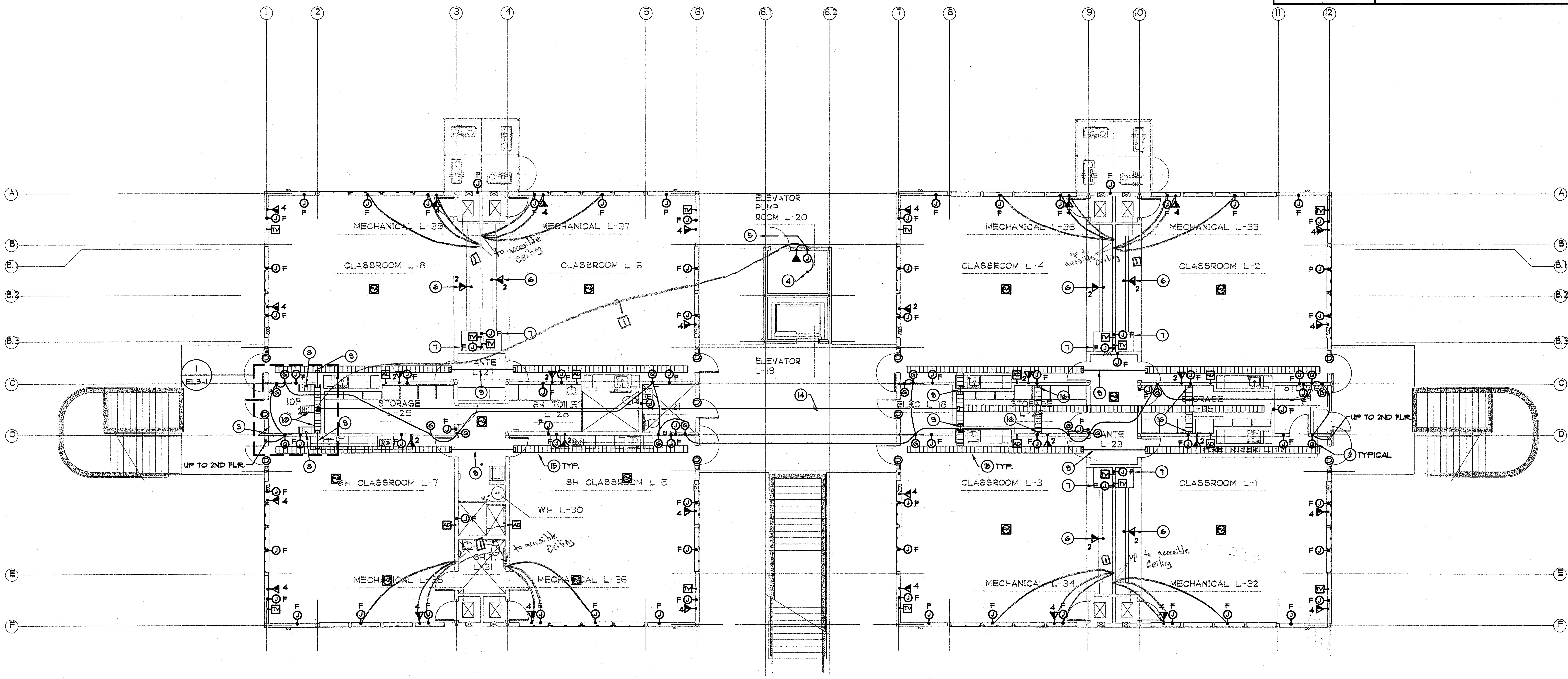
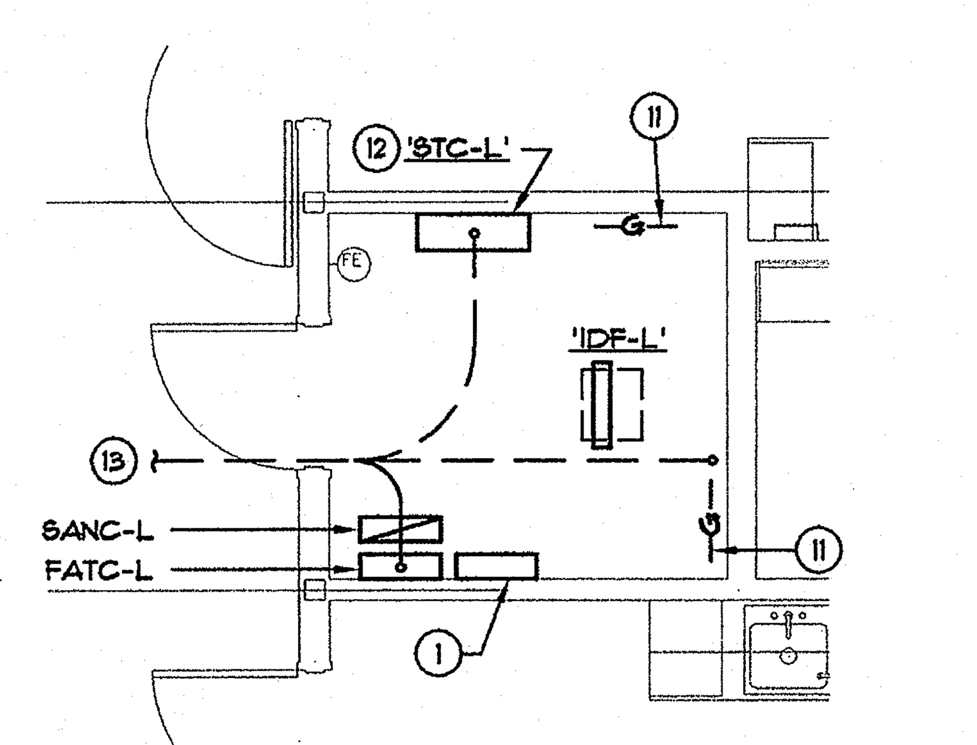


BUILDING L- FIRST FLOOR SIGNAL PLAN

1/8" = 1'-0"



IDF ROOM #L22

1/4" = 1'-0"

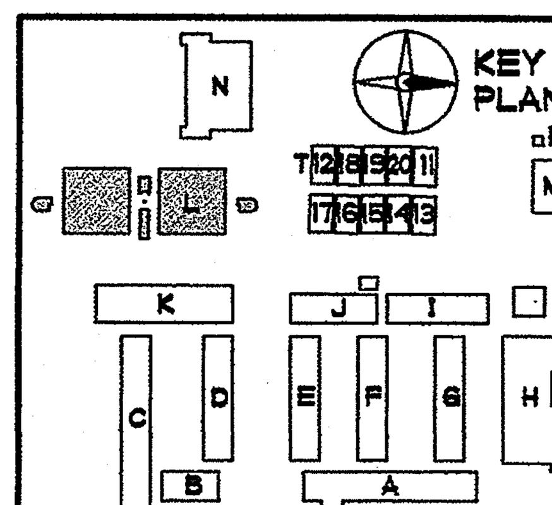
SHEET NOTES:

1. GAS DETECTOR PANEL.
2. METHANE GAS DETECTOR. INSTALL 1'-0" BELOW FIN. CEILING PER MANUFACTURER'S INSTRUCTIONS.
3. TO GAS DETECTOR PANEL.
4. CONNECT ¾"C.O. TO ELEVATOR CONTROLLER.
5. (1) 1"C.O TO STC-L.
6. MOUNT OUTLET HORIZONTALLY IN FALSE DRAWER FRONT.
7. FOR MOUNTING HEIGHT, SEE ARCHITECTURAL INTERIOR ELEVATIONS.
8. 6-2"C. FROM SECOND FLOOR CLASSROOM. STUB CONDUIT ABOVE CABLE TRAY WITH INSULATED BUSHINGS.
9. 4-2"C. ABOVE CABLE TRAY WITH INSULATED BUSHINGS.
10. 12" WIDE LADDER RACK WALL MOUNTED AT +9'-0" A.F.F. WITH SECTION SUSPENDED ABOVE 'IDF-L'
11. COMMUNICATION GROUND BUS PER DETAIL 7/E4-2.
12. 30" SQ. x 8"DEEP SIGNAL TERMINAL CABINET WITH HINGED FRONT VENTILATED LOUVER DOOR AND ¾" THICK PLYWOOD. ROUTE (3) 2"C. TO THE LADDER RACK FOR CABLE ROUTING. TERMINATE CONDUITS ON LADDER RACK WITH INSULATED BUSHINGS.
13. SEE SITE PLAN FOR CONTINUATION.
14. 5-2"C. AND 4-3"C. ABOVE CABLE TRAY WITH INSULATED BUSHINGS.
15. PROVIDE 12' WIDE x 4' DEEP CABLE TRAY ABOVE ACCESSIBLE CEILING. REFER TO DETAILS ON SHEET E4-3 FOR MOUNTING REQUIREMENTS.
16. 4-2"C. FROM SECOND FLOOR CLASSROOM. STUB CONDUIT ABOVE CABLE TRAY WITH INSULATED BUSHINGS.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.

[1] - slab on grade



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JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
BUILDING L
FIRST FLOOR
SIGNAL PLANS

EL3-1

FILE: J:\629-002B\6292EL31.dwg Mar 21, 2005 - 9:38am
XREF: 6292FP1.dwg QL floor plan 1.dwg 6292BDR.dwg 6292B-KEYPLAN.dwg QL elec plan 1.dwg QL clng plan 1.dwg QL floor plan 2.dwg

Soltek Pacific

Request for Information 002

Detailed, Grouped by each number, with routing info

Note 2/Sheet E L3-2
E L3-1

Jefferson Middle School, New Construction/OceanProject # 575
823 Acacia Street
Oceanside, CA 92054

Soltek Pacific
Tel: 760-967-8188 Fax: 760-967-8222

RFI #: 002 **Importance: Urgent** **Date Created: 5/6/2005**

From	Company	Sent	For	Via
To	Company	Received	Comments	
		5/6/2005		
Matt Caronna	Soltek Pacific	5/6/2005		
Matt Caronna	Soltek Pacific	5/8/2005		
Steve Shires	PinnacleOne/Barnhart, Inc.	5/6/2005		

Subject
Methane Gas Detectors

Discipline
Electrical

Category
Plan/Spec Discrepancies

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Yes		Not Sure		Yes

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number

Cc: Company Name	Contact Name	Copies	Notes

Question
Referencing Sheet EL3-1 and EL3-2 note 2 states Methane gas detector. Install 1'-0" below finish ceiling per manufacturer's instructions. There is no specification for this device or work. Please Clarify.

Date Required: 5/13/2005

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Steve Shires

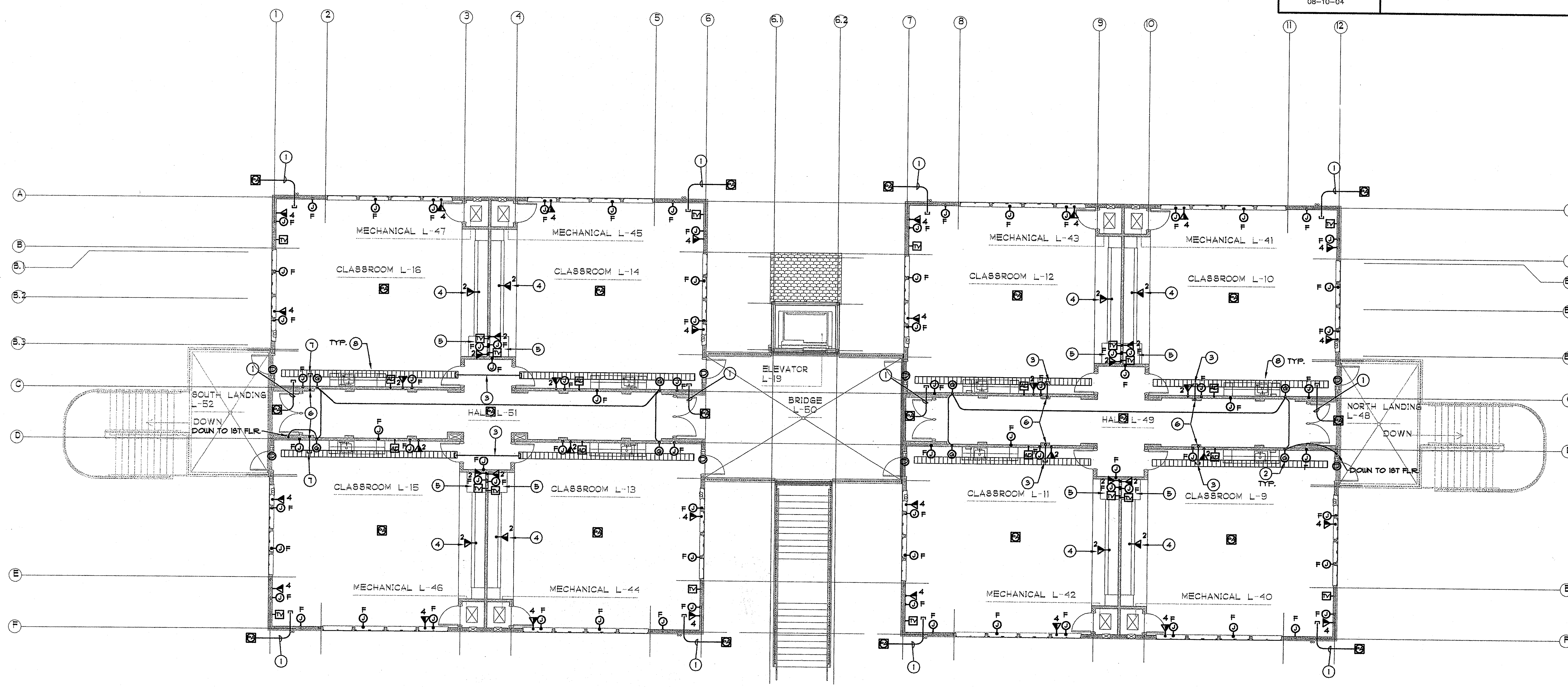
Co-Respondent

Answer
Engineer's Comments:

Date Answered: 5/11/2005

Methane Detectors Shall be by: Macurcos Inc. - Model GD -ZA

Hard copies & email PDF File sent as of 05/10/05 to Steve Shires, and Arthur Serata.



BUILDING L- SECOND FLOOR SIGNAL PLAN

1/8" = 1'-0"

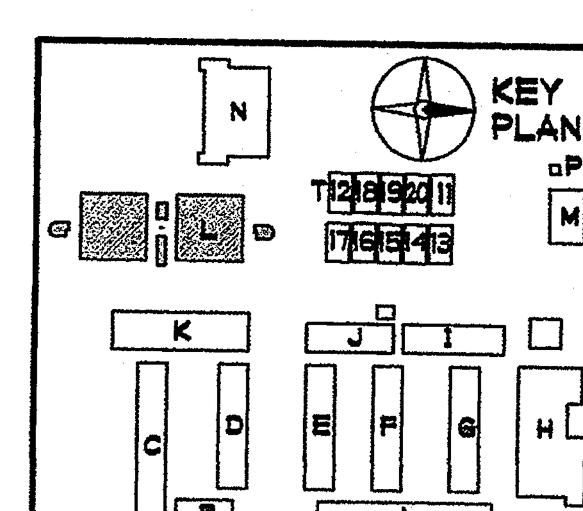
SHEET NOTES:

1. ¾"C. ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHING.
2. METHANE GAS DETECTOR. INSTALL 1'-0" BELOW FIN. CEILING PER MANUFACTURER'S INSTRUCTIONS.
3. STUB 4-2"C. ABOVE CABLE TRAY WITH INSULATED BUSHINGS.
4. MOUNT OUTLET HORIZONTALLY IN FALSE DRAWER FRONT.
5. FOR MOUNTING HEIGHT, SEE ARCHITECTURAL INTERIOR ELEVATIONS.
6. DOWN TO FIRST FLOOR CABLE TRAY.
7. STUB 6-2"C. ABOVE CABLE TRAY WITH INSULATED BUSHINGS.
8. PROVIDE 12" WIDE x 4" DEEP CABLE TRAY ABOVE ACCESSIBLE CEILING. REFER TO DETAILS ON SHEET E4-3 FOR MOUNTING REQUIREMENTS.

RFT 02

GENERAL NOTES:

1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.



629-002B

REGISTERED PROFESSIONAL ENGINEER STONE L. FROBERG No. 5950 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

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SHEET TITLE
BUILDING L
SECOND FLOOR
SIGNAL PLAN

EL3-2

FILE: J:\629-002B\6292EL32.dwg Mar 21, 2005 - 9:38am
XREF: 6292FP2.dwg QL floor plan 2.dwg 6292BDR.dwg 6292B-KEYPLAN.dwg QL clng plan 2.dwg QL elec plan 2.dwg

629-0028

REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — ELECTRICAL — 08-10-04

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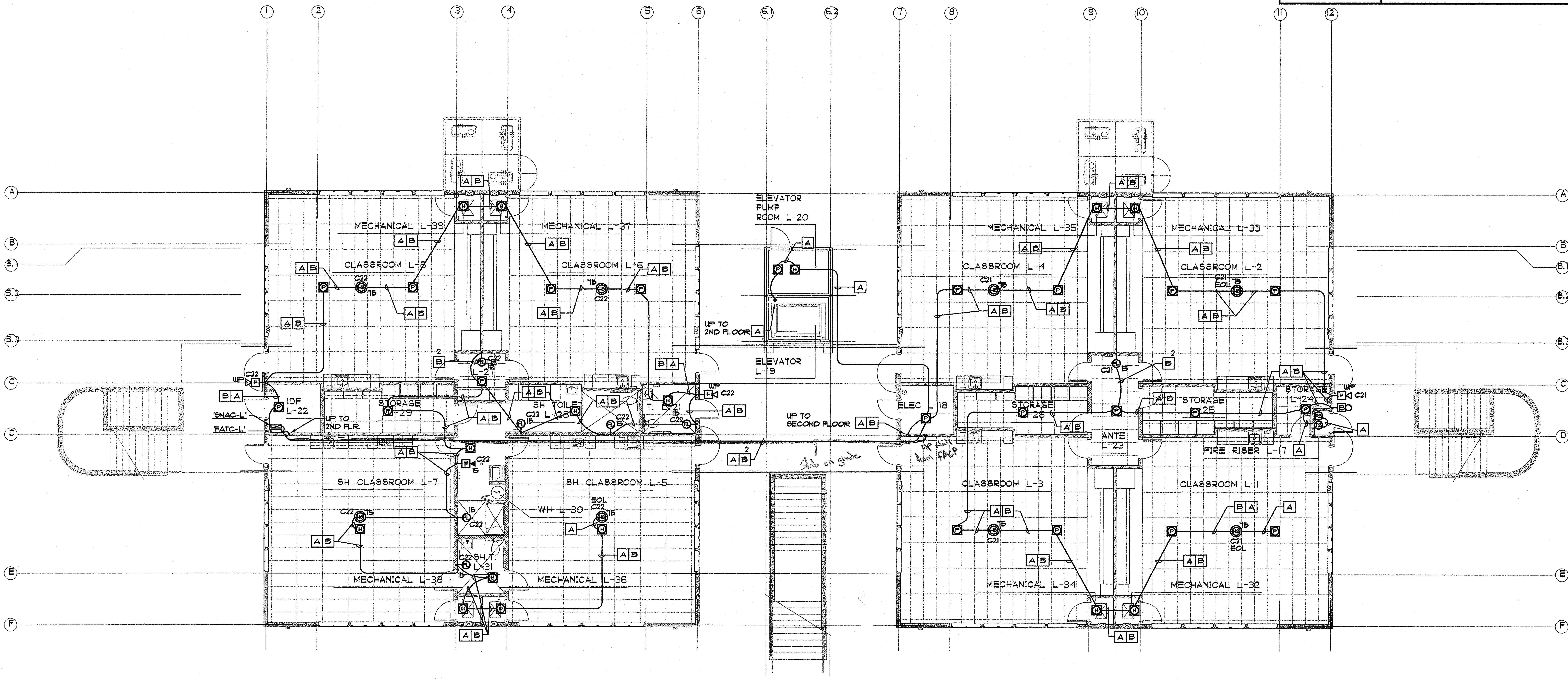

BUILDING L- FIRST FLOOR FIRE ALARM PLAN

1/8" = 1'-0"

DSA NOTE:
THIS IS A COMPLETE AUTOMATIC FIRE ALARM SUBMITTAL.

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
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DATE MAR 2 8 2005

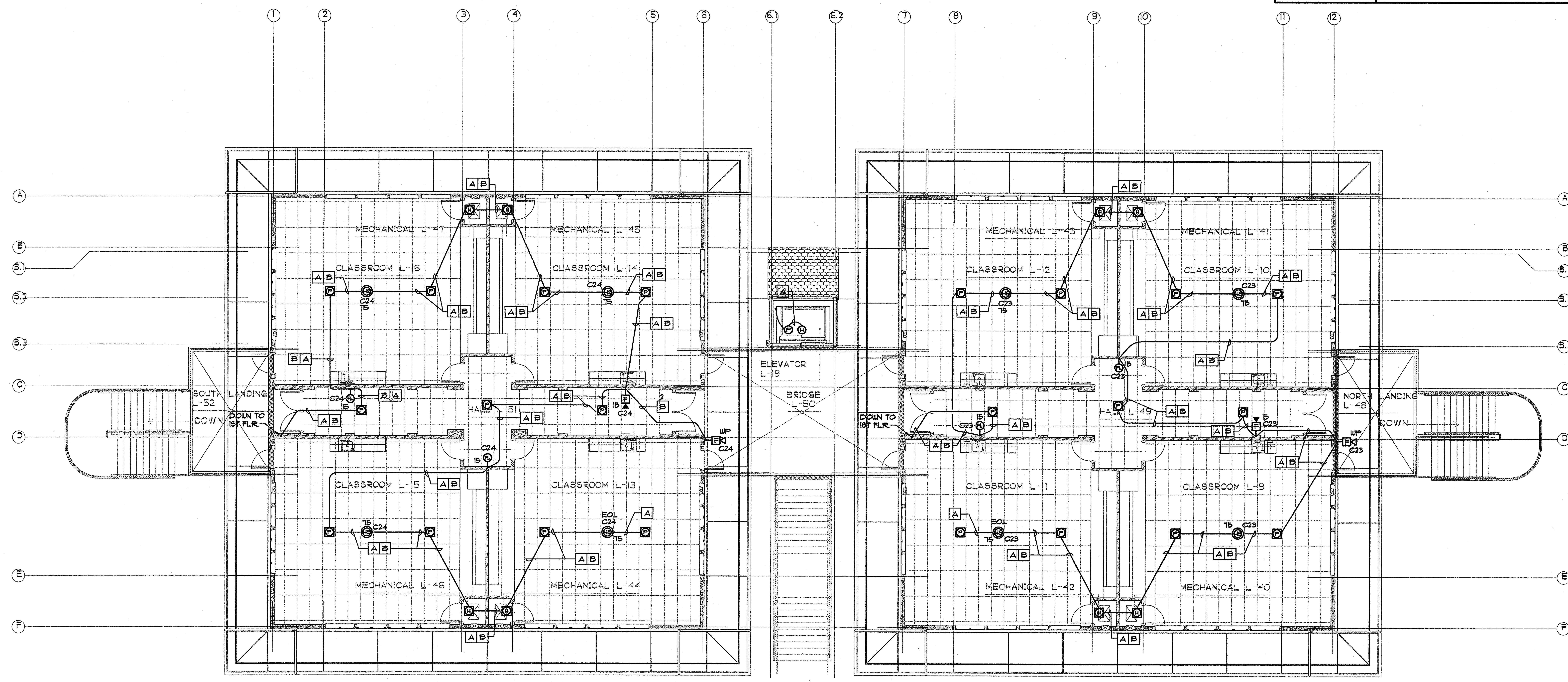
LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

KEY PLAN

SHEET TITLE
BUILDING L
FIRST FLOOR
FIRE ALARM PLANS

EL4-1

FILE: J:\629-0028\6292EL41.dwg Mar 21, 2005 – 9:38am
XREF: 6292FP1.dwg 6292BDR.dwg QL floor plan 1.dwg 6292B-KEYPLAN.dwg QL clng plan 1.dwg



BUILDING L- SECOND FLOOR FIRE ALARM PLAN

1/8" = 1'-0"

DSA NOTE:
THIS IS A COMPLETE AUTOMATIC FIRE ALARM SUBMITTAL.

629-002B

REGISTERED PROFESSIONAL ENGINEER
STONE L. FRENCH
E 9950
9/30/06
ELECTRICAL
STATE OF CALIFORNIA
08-10-04

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JOHN SCOTT GROTH
C-26609
4/30/2007
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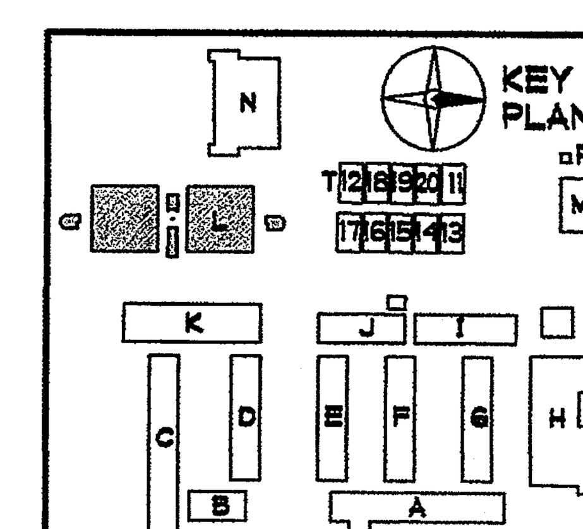
STATE OF CALIFORNIA



SHEET TITLE
BUILDING L
SECOND FLOOR
FIRE ALARM PLANS

EL4-2

FILE: J:\629-002B\6292EL42.dwg Mar 21, 2005 - 9:39am
XREF: 6292BDR.dwg QL floor plan 2.dwg 6292B-KEYPLAN.dwg QL clng plan 2.dwg

629-002B

REGISTERED PROFESSIONAL ENGINEER STONE L. FROBERG No. E 5950 Exp. 9/30/06 ELECTRICAL STATE OF CALIFORNIA
08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PANEL: 2B | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 225A | MAIN: LUGS ONLY
LOCATION: CORR. | MOUNTING: RECESSED | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
LTG – CLASSROOM L-10	L	20/1	1	1466				20/1	R	RECEPT CLASSROOM L-10
				720			2			
LTG – CLASSROOM L-9	L	20/1	3		1466			20/1	R	RECEPT CLASSROOM L-10
					720		4			
LTG – CLASSROOM L-12	L	20/1	5			1466		20/1	R	RECEPT CLASSROOM L-10
						720	6			
LTG – CLASSROOM L-11	L	20/1	7	1466				20/1	R	RECEPT LEARNING WALL L-12
				900			8			
LTG – CORRIDOR	L	20/1	9		294			20/1	R	RECEPT LEARNING WALL L-10
					720		10			
SPARE		20/1	11					20/1	R	RECEPT CLASSROOM L-12
						720	12			
SPARE		20/1	13					20/1	R	RECEPT CLASSROOM L-12
				720			14			
SPARE		20/1	15					20/1	R	RECEPT CLASSROOM L-12
					720		16			
SPARE		20/1	17					20/1	R	RECEPT CLASSROOM L-12
						900	18			
SPARE		20/1	19					20/1	R	RECEPT CLASSROOM L-11
				900			20			
SPARE		20/1	21					20/1	R	RECEPT L-49
					720		22			
SPARE		20/1	23					20/1	R	RECEPT CLASSROOM L-11
						720	24			
BUSSED SPACE			25					20/1	R	RECEPT CLASSROOM L-11
				720			26			
BUSSED SPACE			27					20/1	R	RECEPT CLASSROOM L-11
					720		28			
BUSSED SPACE			29					20/1	R	RECEPT LEARNING WALL L-11
						720	30			
BUSSED SPACE			31					20/1	R	RECEPT LEARNING WALL L-9
				900			32			
BUSSED SPACE			33					20/1	R	RECEPT CLASSROOM L-9
					720		34			
BUSSED SPACE			35					20/1	R	RECEPT CLASSROOM L-9
						720	36			
BUSSED SPACE			37					20/1	R	RECEPT CLASSROOM L-9
				720			38			
BUSSED SPACE			39					20/1	R	RECEPT CLASSROOM L-9
					900		40			
BUSSED SPACE			41					20/1	R	RECEPT CLASSROOM L-10
						900	42			CORR. 214

CONN. VA PHASE A	8512	CONN. VA (CODE N)	0	DEMAND KVA	20.8
CONN. VA PHASE B	6980	CONN. VA (CODE L)	6158	DEMAND AMPS	57.8
CONN. VA PHASE C	6866	CONN. VA (CODE R)	16200	CONN. AMPS	62.1
TOTAL CONN. VA	22358	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	77.0

PANEL: 1B | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 225A | MAIN: LUGS ONLY
LOCATION: Elect. Rm | MOUNTING: SURFACE | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
LTG – L-24, L-25, L-26	L	20/1	1	682				20/1	R	RECEPT CLASSROOM L-2
ELECT. – L-18, ELEV. L-23, L-28				900			2			
LTG – CLASSROOM L-1	L	20/1	3		1470			20/1	R	RECEPT CLASSROOM L-2
					720		4			
LTG – CLASSROOM L-2	L	20/1	5			1470		20/1	R	RECEPT CLASSROOM L-2
						720	6			
LTG – CLASSROOM L-4	L	20/1	7	1470				20/1	R	RECEPT LEARNING WALL L-4
				900			8			AND EXTERIOR
LTG – CLASSROOM L-3	L	20/1	9		1470			20/1	R	RECEPT LEARNING WALL L-2
					900		10			
(3) LTG. – EXTERIOR	L	20/1	11			1620		20/1	R	RECEPT CLASSROOM L-4
						900	12			
LTG. – EXTERIOR	L	20/1	13	990				20/1	R	RECEPT CLASSROOM L-4
				720			14			
LTG – EXTERIOR	L	20/1	15		1628			20/1	R	RECEPT CLASSROOM L-4
					720		16			
LTG. – EXTERIOR	L	20/1	17			990		20/1	R	RECEPT CLASSROOM L-4
						900	18			
SPARE		20/1	19					20/1	R	RECEPT CLASSROOM L-3
				1080			20			
SPARE		20/1	21					20/1	R	RECEPT ELEC. L-118, STOR. L-26
					900		22			AND LIFT STATION
Shunt Trip (elev.)		20/1	23					20/1	R	RECEPT CLASSROOM L-3
						900	24			
SPARE		20/1	25					20/1	R	RECEPT CLASSROOM L-3
				720			26			
SPARE		20/1	27					20/1	R	RECEPT CLASSROOM L-3
					720		28			
		20/	29					20/1	R	RECEPT LEARNING WALL L-3
						900	30			
		/2	31					20/1	R	RECEPT LEARNING WALL L-1
				900			32			
IRRIGATION CONTROLLER	N	20/1	33		500			20/1	R	RECEPT CLASSROOM L-1
					900		34			
LIGHTING CONTROLS	N	20/1	35			100		20/1	R	RECEPT CLASSROOM L-1
						720	36			
RECEPT CIR. L-1	R	20/1	37	900				20/1	R	RECEPT CLASSROOM L-1
				720			38			
RECEPT CIR. L-2	R	20/1	39		900			20/1	N	RECEPT & LTG ELEVATOR
					460		40			ELEVATOR PUMP ROOM L-19, L-20
RECEPT STORAGE L-24, L-25	R	20/1	41			900		20/1	L	ELEVATOR PUMP ROOM L-20
						200	42			CAR LIGHTS

CONN. VA PHASE A	9982	CONN. VA (CODE N)	1060	DEMAND KVA	30.3
CONN. VA PHASE B	11288	CONN. VA (CODE L)	11990	DEMAND AMPS	84.2
CONN. VA PHASE C	10320	CONN. VA (CODE R)	18540	CONN. AMPS	87.8
TOTAL CONN. VA	31590	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	103.6

PANEL: MB | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 225A | MAIN: LUGS ONLY
LOCATION: ELECT | MOUNTING: SURFACE | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
HP-L-16	L	35/	1	2151				15/	L	FC-L9 / MOTORIZED DAMPER
				596			2			
SAME CKT AS ABOVE	L	/	3		2151			/2	L	SAME CKT AS ABOVE
					568		4			UVC-1
SAME CKT AS ABOVE	L	/3	5			2151		15/	N	FC-L10 / MOTORIZED
						596	6			
HP-L-12	N	35/	7	2151				/2	N	SAME CKT AS ABOVE
				568			8			UVC-1
SAME CKT AS ABOVE	N	/	9		2151			15/	N	FC-L11 / MOTORIZED DAMPER
					596		10			
SAME CKT AS ABOVE	N	/3	11			2151		/2	N	SAME CKT AS ABOVE
						568	12			UVC-1
HP-L-14	N	35/	13	2151				15/	N	FC-L12 / MOTORIZED
				596			14			
SAME CKT AS ABOVE	N	/	15		2151			/2	N	SAME CKT AS ABOVE
					568		16			UVC-1
SAME CKT AS ABOVE	N	/3	17			2151		20/1		SPARE
						2151	18			
HP- L-10	N	45/	19	2151				20/1		SPARE
				2151			20			
SAME CKT AS ABOVE	N	/	21		2151			20/1		SPARE
					2151		22			
SAME CKT AS ABOVE	N	/3	23			2151		20/1		SPARE
						2151	24			
SPARE		20/1	25					20/1		SPARE
							26			
SPARE		20/1	27					20/1		SPARE
							28			
SPARE		20/1	29					20/1		SPARE
							30			
SPARE		20/1	31					20/1	N	EF-L2
				233			32			
SPARE		20/1	33					20/1	L	EF-L4
					696		34			
SPARE		20/1	35					20/1	N	SUMP PUMP
						830	36			
BUSSED SPACE			37							BUSSED SPACE
							38			
BUSSED SPACE			39							BUSSED SPACE
							40			
BUSSED SPACE			41							BUSSED SPACE
							42			

CONN. VA PHASE A	12748	CONN. VA (CODE N)	32518	DEMAND KVA	42.9
CONN. VA PHASE B	13183	CONN. VA (CODE L)	8313	DEMAND AMPS	119.2
CONN. VA PHASE C	14900	CONN. VA (CODE R)	0	CONN. AMPS	113.4
TOTAL CONN. VA	40831	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	128.6

PANEL: MBA | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 100A | MAIN: LUGS ONLY
LOCATION: ELECT RM. | MOUNTING: SURFACE | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
HP-L-11	N	35/	1	2151				15/	N	FC-L14UVC-1
				568			2			
SAME AS CIRCUIT ABOVE	N	/	3		2151			/2	N	SAME CKT AS ABOVE
					596		4			MOTORIZED DAMPER
SAME AS CIRCUIT ABOVE	N	/3	5			2151		15/	N	FC-L15/UVC-1
						568	6			
HP-L15	N	35/	7	2151				/2	N	SAME CKT AS ABOVE
				596			8			MOTORIZED DAMPER
SAME CKT AS ABOVE	N	/	9		2151			15/	N	FC-L16/UVC-1
					568		10			
SAME CKT AS ABOVE	N	/3	11			2151		/2	N	SAME CKT AS ABOVE
						596	12			MOTORIZED DAMPER
HP-L-9	N	35/	13	2151				15/	N	FC-L13/UVC-1
				568			14			
SAME CKT AS ABOVE	N	/	15		2151			/2	N	SAME CKT AS ABOVE
					596		16			MOTORIZED DAMPER
SAME CKT AS ABOVE	N	/2	17			2151				SAME CKT AS ABOVE
							18			
HP-L-13	N	35/	19	2151						SAME CKT AS ABOVE
							20			
SAME CKT AS ABOVE	N	/	21		2151					SAME CKT AS ABOVE
							22			
SAME CKT AS ABOVE	N	/3	23			2151				SAME CKT AS ABOVE
							24			
BUSSED SPACE			25							SAME CKT AS ABOVE
							26			
SAME CKT AS ABOVE			27							SAME CKT AS ABOVE
							28			
SAME CKT AS ABOVE			29							SAME CKT AS ABOVE
							30			
SAME CKT AS ABOVE			31							SAME CKT AS ABOVE
							32			
SAME CKT AS ABOVE			33							SAME CKT AS ABOVE
							34			
SAME CKT AS ABOVE			35							SAME CKT AS ABOVE
							36			
SAME CKT AS ABOVE			37							SAME CKT AS ABOVE
							38			
SAME CKT AS ABOVE			39							SAME CKT AS ABOVE
							40			
SAME CKT AS ABOVE			41							SAME CKT AS ABOVE
							42			

CONN. VA PHASE A	10336	CONN. VA (CODE N)	30468	DEMAND KVA	30.5
CONN. VA PHASE B	10364	CONN. VA (CODE L)	0	DEMAND AMPS	84.6
CONN. VA PHASE C	9768	CONN. VA (CODE R)	0	CONN. AMPS	84.6
TOTAL CONN. VA	30468	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	86.4

PANEL: 2A | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 225A | MAIN: LUGS ONLY
LOCATION: CORR. | MOUNTING: RECESSED | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
LTG – CLASSROOM L-14	L	20/1	1	1466				20/1	R	RECEPT CLASSROOM L-16
				720			2			
LTG – CLASSROOM L-13	L	20/1	3		1466			20/1	R	RECEPT CLASSROOM L-16
					720		4			
LTG – CLASSROOM L-16	L	20/1	5			1466		20/1	R	RECEPT CLASSROOM L-16
						720	6			
LTG – CLASSROOM L-15	L	20/1	7	1466				20/1	R	RECEPT LEARNING WALL L-14
				900			8			
LTG. – CORRIDOR	L	20/1	9		294			20/1	R	RECEPT LEARNING WALL L-16
					720		10			
SPARE		20/1	11					20/1	R	RECEPT CLASSROOM L-14
						720	12			
SPARE		20/1	13					20/1	R	RECEPT CLASSROOM L-14
				720			14			
SPARE		20/1	15					20/1	R	RECEPT CLASSROOM L-14
					720		16			
SPARE		20/1	17					20/1	R	RECEPT CLASSROOM L-14
						900	18			
SPARE		20/1	19					20/1	R	RECEPT CLASSROOM L-13
				900			20			
SPARE		20/1	21					20/1	R	RECEPT L-51
					720		22			
SPARE		20/1	23					20/1	R	RECEPT CLASSROOM L-13
						720	24			
BUSSED SPACE			25					20/1	R	RECEPT CLASSROOM L-13
				720			26			
BUSSED SPACE			27					20/1	R	RECEPT CLASSROOM L-13
					720		28			
BUSSED SPACE			29					20/1	R	RECEPT LEARNING WALL L-13
						720	30			
BUSSED SPACE			31					20/1	R	RECEPT LEARNING WALL L-15
				900			32			
BUSSED SPACE			33					20/1	R	RECEPT CLASSROOM L-15
					720		34			
BUSSED SPACE			35					20/1	R	RECEPT CLASSROOM L-15
						720	36			
BUSSED SPACE			37					20/1	R	RECEPT CLASSROOM L-15
				720			38			
BUSSED SPACE			39					20/1	R	RECEPT CLASSROOM L-15
					720		40			
BUSSED SPACE			41					20/1	R	RECEPT CLASSROOM L-16
						900	42			

CONN. VA PHASE A	8512	CONN. VA (CODE N)	0	DEMAND KVA	20.7
CONN. VA PHASE B	6800	CONN. VA (CODE L)	6158	DEMAND AMPS	57.5
CONN. VA PHASE C	6866	CONN. VA (CODE R)	16020	CONN. AMPS	61.6
TOTAL CONN. VA	22178	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	77.0

PANEL: 1A | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 225A | MAIN: LUGS ONLY
LOCATION: | MOUNTING: RECESSED | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
LTG – STOR. L-29 TOILET L-21,	L	20/1	1	1295				20/1	R	RECEPT CLASSROOM L-8
L-28, L-31 IDF. L-22, ANTE L-27, EF				720			2			
LTG – CLASSROOM L-5	L	20/1	3		1124			20/1	R	RECEPT CLASSROOM L-8
					720		4			
LTG – CLASSROOM L-6	L	20/1	5			1218		20/1	R	RECEPT CLASSROOM L-8
						720	6			
LTG – CLASSROOM L-8	L	20/1	7	1218				20/1	R	RECEPT LEARNING WALL L-6
				720			8			
LTG – CLASSROOM L-7	L	20/1	9		1124			20/1	R	RECEPT LEARNING WALL L-8
					900		10			
		20/1	11					20/1	R	RECEPT CLASSROOM L-6
						900	12			
		20/1	13					20/1	R	RECEPT CLASSROOM L-6
				720			14			
		20/1	15					20/1	R	RECEPT CLASSROOM L-6
					720		16			
		20/1	17					20/1	R	RECEPT CLASSROOM L-6
						720	18			
SPARE		20/1	19					20/1	R	RECEPT CLASSROOM L-5
				900			20			
		20/1	21					20/1	R	RECEPT TOILET L-21, L-28
					900		22			
		20/1	23					20/1	R	RECEPT CLASSROOM L-5
						900	24			
SPARE		20/1	25					20/1	R	RECEPT CLASSROOM L-5
				720			26			
IDF RM L-22	N	20/1	27		720			20/1	R	RECEPT CLASSROOM L-5
					720		28			
IDF	N	20/1	29			500		20/1	R	RECEPT CLASSROOM L-5
						720	30			
STC-L	N	20/1	31	500				20/1	R	RECEPT CLASSROOM L-7
				900			32			
(2)(1) SNAC PANEL #5	N	20/1	33		500			20/1	R	RECEPT CLASSROOM L-7
					900		34			
(1) GAS DETECTOR PANEL	N	20/1	35			500		20/1	R	RECEPT CLASSROOM L-7
						720	36			
RECEPT CLASS RM. L-7	R	20/1	37	720				20/1	R	RECEPT CLASSROOM L-7
				720			38			
RECEPT CLASSS RM. L-8	R	20/1	39		720			20/1	R	RM. L-28, L-31, MECH RM.
					1080		40			
RECEPT CIR. L-29, L-8, L-7	R	20/1	41			720		20/1	N	WASHER
						1500	42			

CONN. VA PHASE A	9133	CONN. VA (CODE N)	4220	DEMAND KVA	25.8
CONN. VA PHASE B	10128	CONN. VA (CODE L)	5979	DEMAND AMPS	71.6
CONN. VA PHASE C	9118	CONN. VA (CODE R)	18180	CONN. AMPS	78.8
TOTAL CONN. VA	28379	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	89.1

1. PROVIDE HANDLE LOCK-ON DEVICE.
2. PROVIDE RED CIRCUIT BREAKER.
3. SEE DETAIL 1/E4-1 AND 2/E4-1.

PANEL: MA | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 400A | MAIN: 400A/3P M.C.B.
LOCATION: CORR. | MOUNTING: RECESSED | AIC RATING: 22,000A | FEED: TOP X BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
FC-L1 / MOTORIZED DAMPER	L	15/	1	596				15/	N	FC-L6/UVC-1
				568			2			
SAME CKT AS ABOVE	L	/2	3		568			/2	N	SAME CKT AS ABOVE
UVC-1					596		4			MOTORIZED DAMPER
FC-L2 / MOTORIZED DAMPER	N	15/	5			596		15/	N	FC-L7/UVC-1
						568	6			
SAME CKT AS ABOVE	N	/2	7	568				/2	N	SAME CKT AS ABOVE
UVC-1				596			8			MOTORIZED DAMPER
FC-L3 / MOTORIZED DAMPER	N	15/	9		596			15/	N	FC-L8/UVC-1
					568		10			
SAME CKT AS ABOVE	N	/2	11			568		/2	N	SAME CKT AS ABOVE
UVC-1						596	12			MOTORIZED DAMPER
FC-L4 / MOTORIZED DAMPER	N	15/	13	596						BUSSED SPACE
							14			
SAME CKT AS ABOVE	N	/2	15		568					BUSSED SPACE
UVC-1							16			
FC-L5 / MOTORIZED DAMPER	N	15/	17			596		15/1	N	EF-L2
						233	18			
SAME CKT AS ABOVE	N	/2	19	568				15/1	N	BF-L1
				60			20			
BUSSED SPACE			21					20/1		SPARE
							22			
BUSSED SPACE			23					20/1		SPARE
							24			
BUSSED SPACE			25					20/1		SPARE
							26			
BUSSED SPACE			27					20/1		SPARE
							28			
BUSSED SPACE			29					20/1		SPARE
							30			
BUSSED SPACE			31							BUSSED SPACE
							32			
BUSSED SPACE			33							BUSSED SPACE
							34			
BUSSED SPACE			35							BUSSED SPACE
							36			
SUBFEED 2A	P	150/	37	8512				150/	P	SUBFEED "1A"
				9133			38			
PART OF CIRCUIT ABOVE	P	/	39		6800			/	P	PART OF CIRCUIT ABOVE
					10128		40			
PART OF CIRCUIT ABOVE	P	/3	41			6866		/3	P	PART OF CIRCUIT ABOVE
						9118	42			

CONN. VA PHASE A	21197	CONN. VA (CODE N)	16881	DEMAND KVA	87.9
CONN. VA PHASE B	19824	CONN. VA (CODE L)	25438	DEMAND AMPS	244.1
CONN. VA PHASE C	19141	CONN. VA (CODE R)	68400	CONN. AMPS	167.1
TOTAL CONN. VA	60162	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	291.8

PANEL: MAA | VOLTAGE: 208 /120V, 3-PH, 4W | BUS SIZE: 400A | MAIN: 400A/3P M.C.B.
LOCATION: 2ND FLR. CORR. | MOUNTING: RECESSED | AIC RATING: 22,000A | FEED: TOP BOTTOM X
CIRCUIT CODE: blank or N: NON-CONTINUOUS | L: LONG-CONTINUOUS | R :DEMANDABLE RECEPT'S | K: KITCHEN | P: PANEL

ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
HP-L1	L	35/	1	2151				35/	N	HP-L5
				2151			2			
SAME CKT AS ABOVE	L	/	3		2151			/	N	SAME CKT AS ABOVE
					2151		4			
SAME CKT AS ABOVE	L	/3	5			2151		/3	N	SAME CKT AS ABOVE
						2151	6			
HP-L2	N	35/	7	2151				35/	N	HP-L6
				2151			8			
SAME CKT AS ABOVE	N	/	9		2151			/	N	SAME CKT AS ABOVE
					2151		10			
SAME CKT AS ABOVE	N	/3	11			2151		/3	N	SAME CKT AS ABOVE
						2151	12			
HP-L3	N	35	13	2151				35/	N	HP-L7
				2151			14			
SAME CKT AS ABOVE	N	/	15		2151			/	N	SAME CKT AS ABOVE
					2151		16			
SAME CKT AS ABOVE	N	/3	17			2151		/3	N	SAME CKT AS ABOVE
						2151	18			
HP-L4	N	35	19	2151				35/	N	HP-L8
				2151			20			
SAME CKT AS ABOVE	N	/	21		2151			/	N	SAME CKT AS ABOVE
					2151		22			
SAME CKT AS ABOVE	N	/3	23			2151		/3	N	SAME CKT AS ABOVE
						2151	24			
SPARE		20/1	25					20/1		SPARE
							26			
SPARE		20/1	27					20/1	N	RANGE HOOD
					300		28			
SPARE		20/1	29					20/	K	COOK TOP
						1600	30			
BUSSED SPACE			31					/2	K	SAME CKT AS ABOVE
				1600			32			
BUSSED SPACE			33					30/	N	DRYER
					2880		34			
BUSSED SPACE			35					/2	N	SAME CKT AS ABOVE
						2880	36			
BUSSED SPACE			37					20/1	K	RANGE HOOD
				300			38			
WH-30	N	40/	39		3000			20/	K	COOK TOP
					1600		40			
SAME AS CIRCUIT ABOVE	N	/2	41			3000		/2	K	SAME CKT AS ABOVE
						1600	42			

CONN. VA PHASE A	19108	CONN. VA (CODE N)	57231	DEMAND KVA	70.0
CONN. VA PHASE B	24988	CONN. VA (CODE L)	6453	DEMAND AMPS	194.4
CONN. VA PHASE C	26288	CONN. VA (CODE R)	0	CONN. AMPS	195.5
TOTAL CONN. VA	70384	CONN. VA (CODE K)	6700	HIGH PH AMPS/LCL	223.5

PNL 2B	PNL 1B	PNL MB	PNL MBA
PNL 2A	PNL 1A	PNL MA	PNL MAA

PLOTTED @ 3/18/05

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
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space art time function

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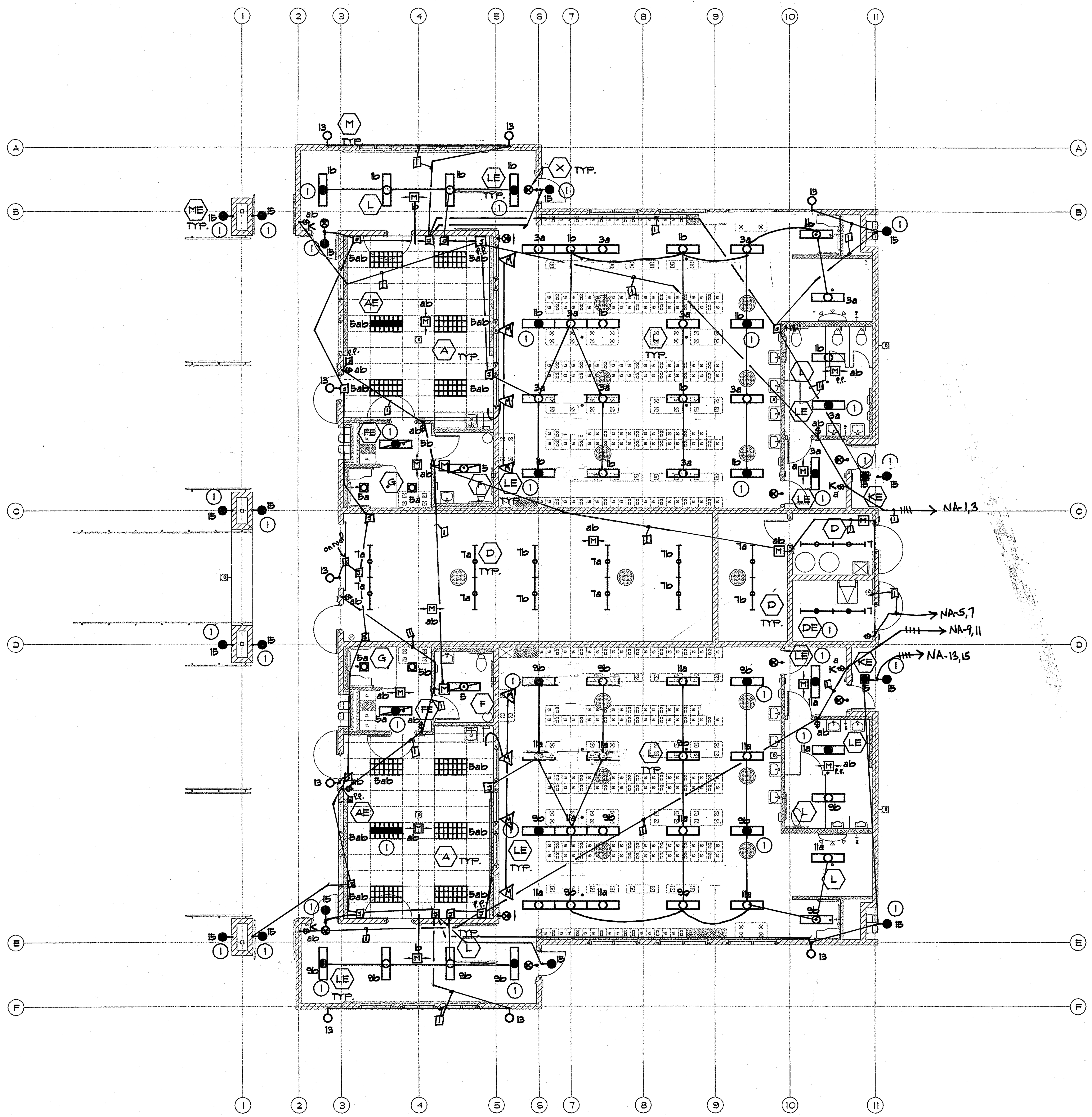
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
PANEL SCHEDULES

EL5-1

FILE: J:\629-002B\6292EL51.dwg Mar 21, 2005 - 9:39am
XREF: 6292BDR.dwg



BUILDING N- LIGHTING PLAN

1/8" = 1'-0"

NOTES:

(1) FIXTURE SHALL BE SWITCHED. PROVIDE ADDITIONAL UNSWITCHED CONDUCTOR TO FIXTURE FOR PROPER STANDBY OPERATION OF BATTERY PACK.

GENERAL NOTES:

1. CONNECT ALL LIGHTING FIXTURES TO PANEL 'NA'.
2. REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXACT LIGHT FIXTURE LOCATION.

P.P. = motion power pac

[1] - slab on grade

(M): motion sensor

629-002B

REGISTERED PROFESSIONAL ENGINEER STEVE L. FROBERG E 5800 9/30/06 ELECTRICAL STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
space art time function
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

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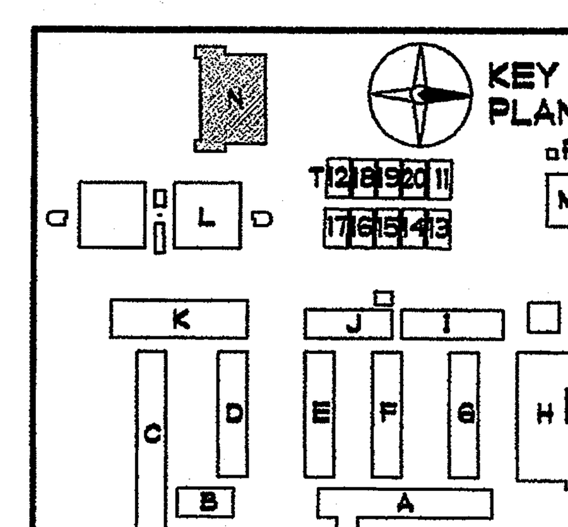
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC PB FLS [signature] SS [signature]
DATE MAR 2 8 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA



SHEET TITLE
BUILDING N
LIGHTING PLAN

EN1-1

FILE: J:\629-002B\6292EN11.dwg Mar 21, 2005 - 10:31am
XREF: SL floor plan.dwg SL clng plan.dwg 6292BDR.dwg 6292B-KEYPLAN.dwg

629-002B
REGISTERED PROFESSIONAL ENGINEER
STEVE L. FIGGINS
STATE OF CALIFORNIA
ELECTRICAL
08-10-04

ILA ZAMMIT ENGINEERING GROUP
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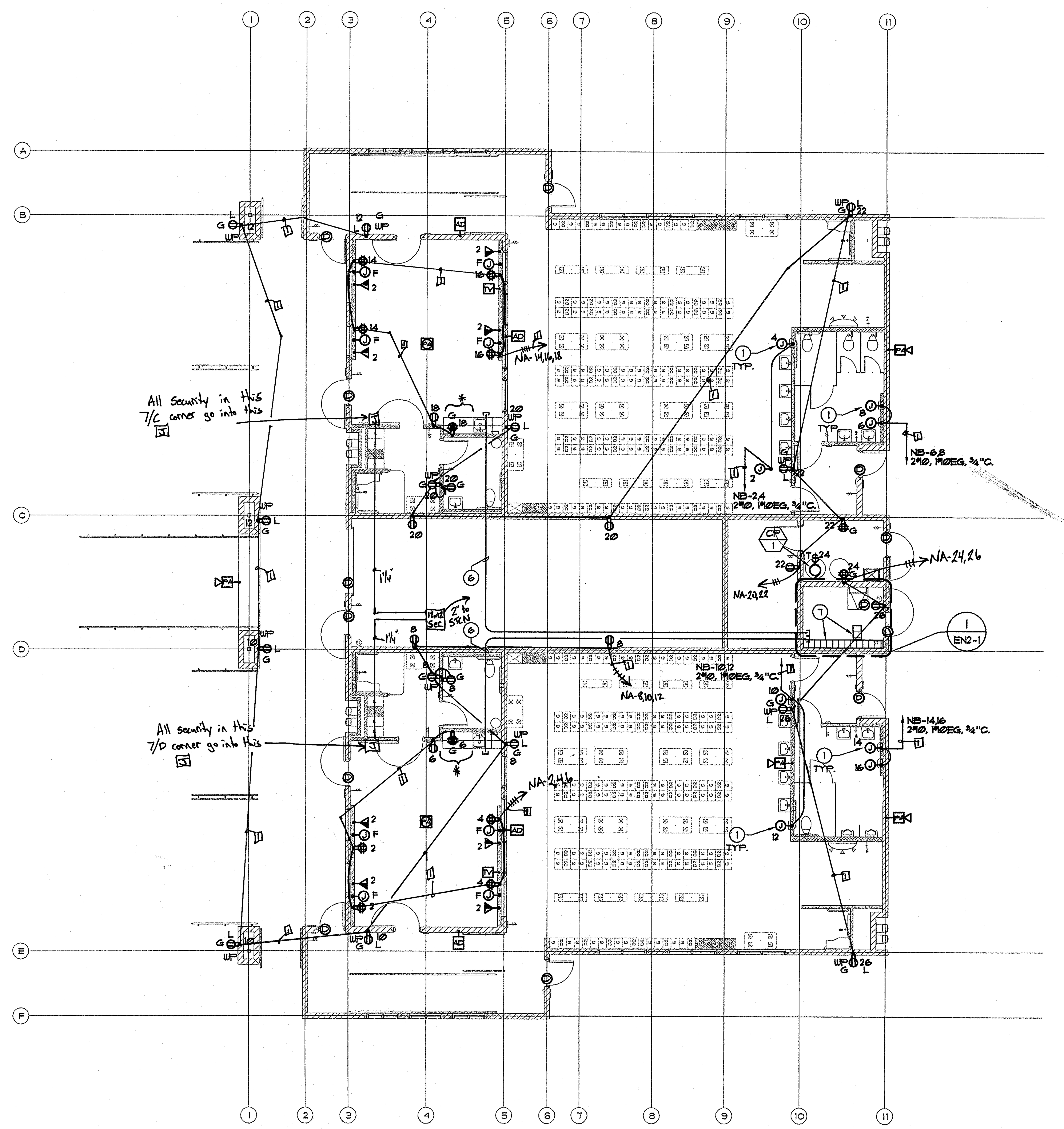


BUILDING N- POWER AND SIGNAL PLAN

1/8" = 1'-0"

GENERAL NOTES:

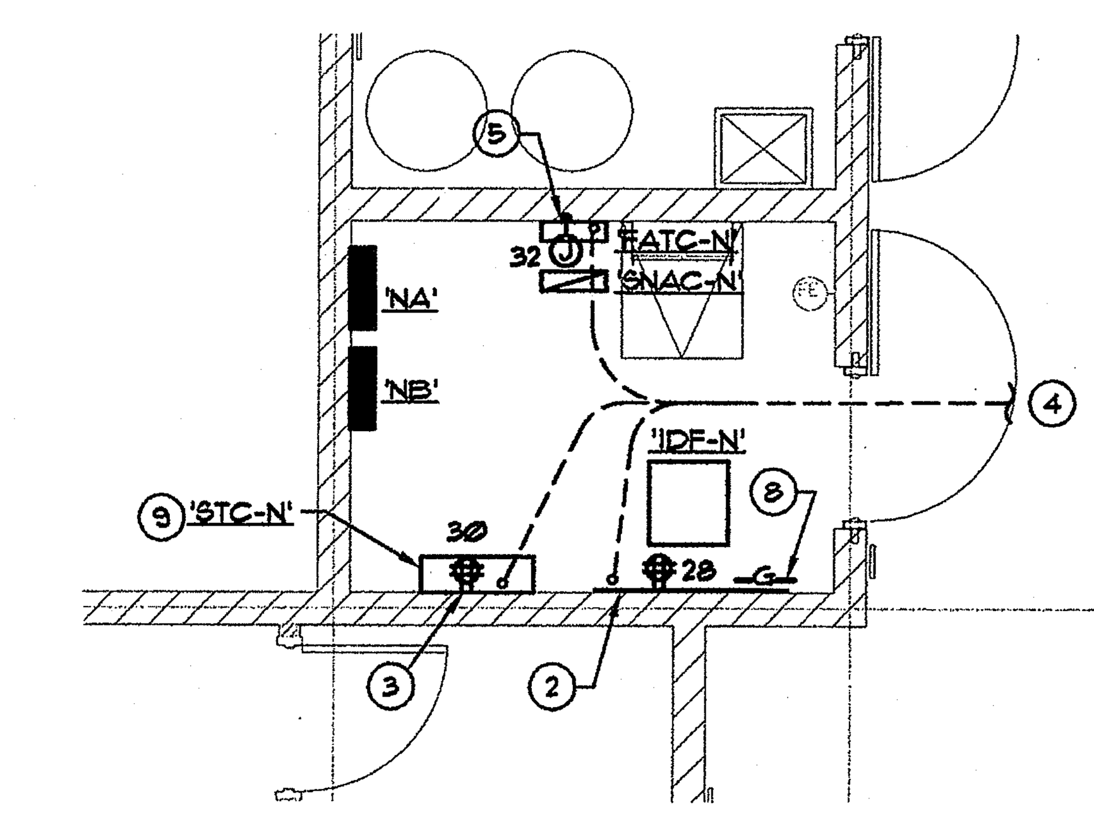
1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.
2. CONNECT ALL OUTLETS TO PANEL 'NA', U.O.N.
3. ALL SECURITY ROUGH-IN DEVICES SHALL HAVE ¾"C.O. TO 'STC-N'.
4. ALL PA DEVICES SHALL HAVE ¾"C. TO 'STC-N'.

SHEET NOTES:

(1) PROVIDE JUNCTION BOX FOR HAND DRYERS.
(2) PROVIDE 4' x 8' x ¾" FIRE TREATED PLYWOOD BACKBOARD WITH TWO COATS OF WHITE PAINT SECURED TO WALL FOR VOICE/DATA TERMINATIONS.
(3) MOUNT RECEPTACLE OUTLET IN 'STC-N'.
(4) SEE SITE PLAN FOR CONTINUATION.
(5) JUNCTION BOX AT +60" A.F.F. CONNECT TO 'SNAC-N' PANEL.
(6) 3-2"C. ABOVE CEILING WITH INSULATED BUSHINGS.
(7) 12" WIDE LADDER RACK WALL MOUNTED AT +9'-0" A.F.F. WITH SECTION SUSPENDED ABOVE 'IDF-N'
(8) COMMUNICATION GROUND BUS PER DETAIL 7/E4-2.
(9) 30" SQ. x 8" DEEP SIGNAL TERMINAL CABINET WITH HINGED FRONT VENTILATED LOUVER DOOR AND ¾" THICK PLYWOOD. ROUTE (3) 2"C. TO THE LADDER RACK FOR CABLE ROUTING. TERMINATE CONDUITS ON LADDER RACK WITH INSULATED BUSHINGS.

* All ▲ & (J) stub above ceiling @ this location

[1] roughed slab on grade

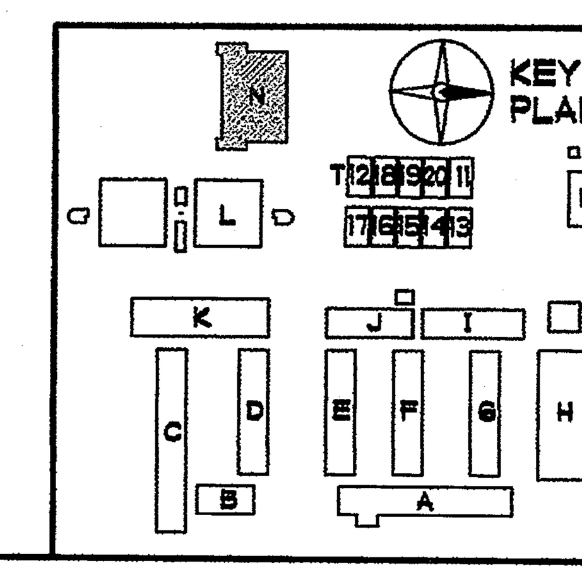


FOR WALL MOUNTED PANELBOARDS SEE 2/E4-1

ELECTRICAL ROOM #N-19

(1 / EN2-1)

1/4" = 1'-0"



KEY PLAN

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

GROTH ARCHITECTS, INC.
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OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

space art time function

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DATE MAR 2 8 2005

LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
BUILDING N
POWER AND
SIGNAL PLAN

EN2-1

FILE: J:\629-002B\6292EN21.dwg Mar 21, 2005 - 9:40am
XREF: SL floor plan.dwg SL elec plan.dwg 6292BOR.dwg 6292B-KEYPLAN.dwg SL clng plan.dwg

629-002B

REGISTERED PROFESSIONAL ENGINEER
STEVE L. FROSBERG
E 9850
EXP. 9/30/06
ELECTRICAL
STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
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San Diego, CA. 92123
(858) 279-0242 – FAX (858) 279-0711

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

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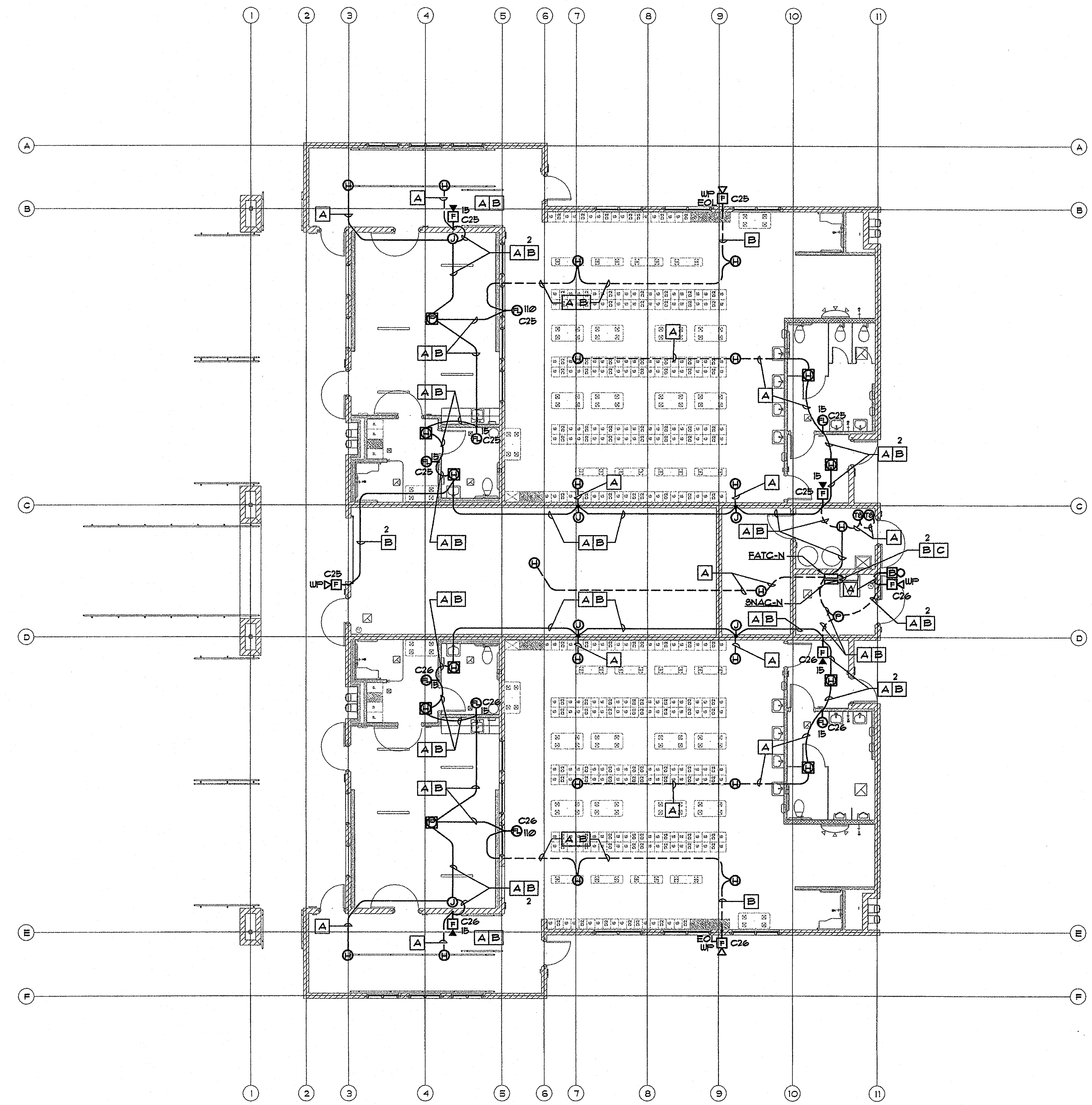
space art time function



DSA NOTE:
THIS IS A COMPLETE AUTOMATIC FIRE ALARM SUBMITTAL.

BUILDING N- FIRE ALARM PLAN

1/8" = 1'-0"

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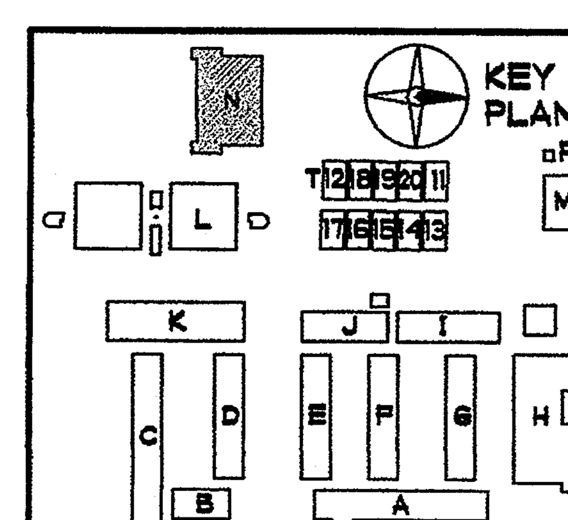
OFFICE OF REGULATION SERVICES
4-106494
AC PB FLS MA SS
DATE MAR 2 8 2005

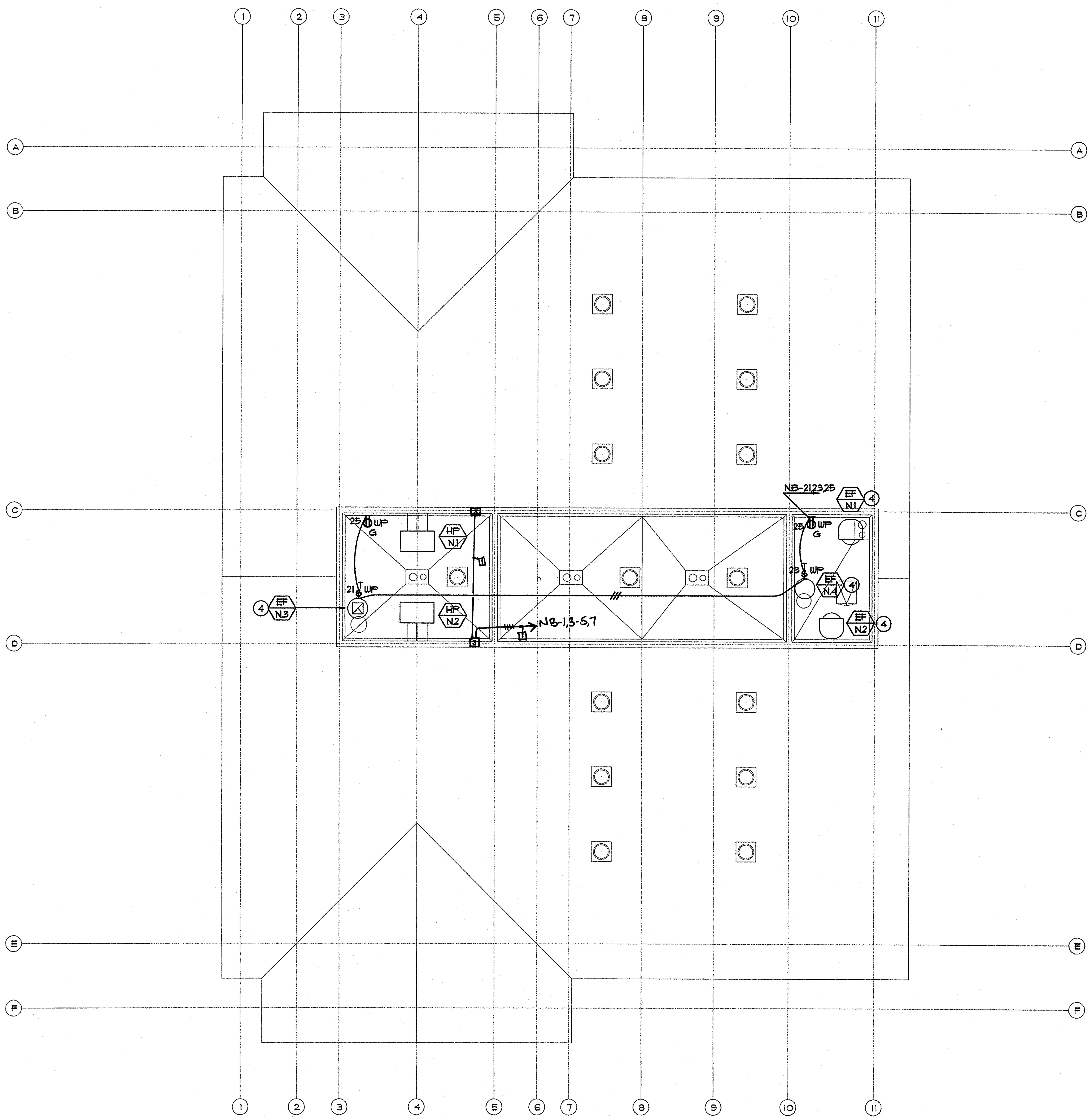
LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA



SHEET TITLE
BUILDING N
FIRE ALARM
PLAN

EN3-1

FILE: J:\629-002B\6292EN31.dwg Mar 21, 2005 - 9:41am
XREF: SL floor plan.dwg 62928DR.dwg 62928-KEYPLAN.dwg SL clng plan.dwg



BUILDING N- ROOF PLAN

1/8" = 1'-0"

629-002B
08-10-04

ILA ZAMMIT ENGINEERING GROUP
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San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

NOTES:

1. MOUNT ON RIGID CONDUIT RISER(S).
2. HEAVY DUTY FUSED DISCONNECT SWITCH.
3. FUSE SIZES ARE INDICATED FOR REFERENCE ONLY. VERIFY AND PROVIDE FUSE SIZE PER MANUFACTURERS NAMEPLATE.
4. CONTROLLED VIA TIME CLOCK, SEE 5/M-3.1.

GENERAL NOTES:

1. NO CONDUIT SHALL BE ROUTED EXPOSED ON ROOF.

MECHANICAL UNIT - ELECTRICAL EQUIPMENT SCHEDULE

UNIT NO.	FUSED DISCONNECT SWITCH SIZE (1)(2)(3)	STARTER	CONDUIT AND CONDUCTOR SIZE TO UNIT	BRANCH CIRCUIT
HP-N.1	2/20/30 240 VOLT NEMA 3R	-	2#12, 1#12EG, 3/4"C.	NB-1,3
HP-N.2	2/20/30 240 VOLT NEMA 3R	-	2#12, 1#12EG, 3/4"C.	NB-5,7
EF-N.1	3/15/30 240 VOLT NEMA 3R	Ø	3#12, 1#12EG, 3/4"C.	NB-9,11,13
EF-N.2	3/15/30 240 VOLT NEMA 3R	Ø	3#12, 1#12EG, 3/4"C.	NB-15,17,19

- SWITCH RATING (AMPS)
- FUSE SIZE (AMPS)
- NUMBER OF POLES

1 - slab on grade

PLOTTED @ 3/18/05

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
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FAX 760-754-8291

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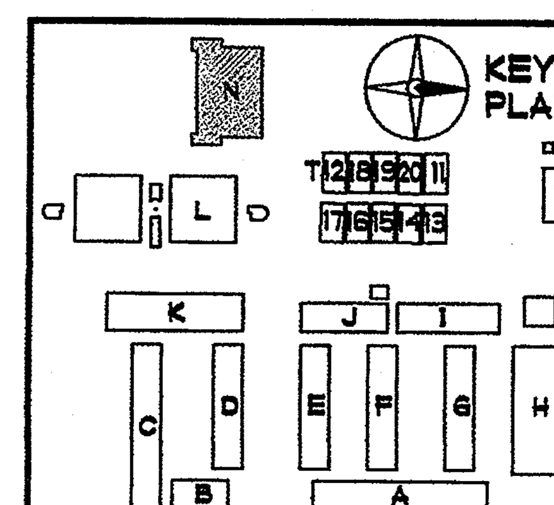
LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA



SHEET TITLE
BUILDING N ROOF PLAN

EN4-1

629-002B

REGISTERED PROFESSIONAL ENGINEER
STEVE L. FROBERG
ELECTRICAL
STATE OF CALIFORNIA

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

NOTES:

1. PROVIDE HANDLE LOCK-ON DEVICE.
2. PROVIDE RED CIRCUIT BREAKER.
3. SEE DETAIL 1/E4-1 AND 2/E4-1.

PANEL: NB	VOLTAGE: 208 /120V, 3-PH, 4W			BUS SIZE: 100 A				MAIN: lugs only		
LOCATION: UTILITY RM	MOUNTING: SURFACE			AIC RATING:				FEED: TOP X BOTTOM X		
CIRCUIT CODE: blank or N: NON-CONTINUOUS			L: LONG-CONTINUOUS		R: DEMANDABLE RECEPT'S			K: KITCHEN		P: PANEL
ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM
HP - N.1	L	20/	1	1266 2300			2	30/1	N	GIRLS HAND DRYER
SAME AS CIRCUIT ABOVE	L	/2	3		1266 2300		4	30/1	N	GIRLS HAND DRYER
HP - N.2	N	20/	5			1266 2300	6	30/1	N	GIRLS HAND DRYER
SAME AS CIRCUIT ABOVE	N	/2	7	1266 2300			8	30/1	N	GIRLS HAND DRYER
EF - N.1	N	15/	9		372 2300		10	30/1	N	BOYS HAND DRYER
SAME AS CIRCUIT ABOVE	N	/	11			372 2300	12	30/1	N	BOYS HAND DRYER
SAME AS CIRCUIT ABOVE	N	/3	13	372 2300			14	30/1	N	BOYS HAND DRYER
EF - N.2	N	15/	15		372 2300		16	30/1	N	BOYS HAND DRYER
SAME AS CIRCUIT ABOVE	N	/	17			372	18	20/1		SPARE
SAME AS CIRCUIT ABOVE	N	/3	19	372			20	20/1		SPARE
EF - N.3	N	15/1	21		672		22	20/1		SPARE
EF - N.4	N	15/1	23			696	24	20/1		SPARE
R/O ROOF	R	20/1	25	360			26	20/1		SPARE
BUSSED SPACE			27				28	20/1		SPARE
BUSSED SPACE			29				30	20/1		SPARE
BUSSED SPACE			31				32			BUSSED SPACE
BUSSED SPACE			33				34			BUSSED SPACE
BUSSED SPACE			35				36			BUSSED SPACE
SUBFEED "NB"	P	100/	37	6573			38			BUSSED SPACE
PART OF CIRCUIT ABOVE	P	/	39		6137		40			BUSSED SPACE
PART OF CIRCUIT ABOVE	P	/3	41			4275	42			BUSSED SPACE

CONN. VA PHASE A	17109	CONN. VA (CODE N)	26032	DEMAND KVA	46.7
CONN. VA PHASE B	15719	CONN. VA (CODE L)	9337	DEMAND AMPS	129.8
CONN. VA PHASE C	11581	CONN. VA (CODE R)	9040	CONN. AMPS	123.4
TOTAL CONN. VA	44409	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	150.0

PANEL: NA	VOLTAGE: 208 /120V, 3-PH, 4W			BUS SIZE: 225 A				MAIN: 225A/3P M.C.B			
LOCATION: UTILITY RM	MOUNTING: SURFACE			AIC RATING:				FEED: TOP X BOTTOM X			
CIRCUIT CODE: blank or N: NON-CONTINUOUS			L: LONG-CONTINUOUS		R: DEMANDABLE RECEPT'S			K: KITCHEN		P: PANEL	
ITEM	CODE	BKR	CKT	A	B	C	CKT	BKR	CODE	ITEM	
LTG. GIRLS DRESSING	L	20/1	1	944 720			2	20/1	R	R/O BOYS OFFICE	
LTG. GIRLS DRESSING	L	20/1	3		1003 720		4	20/1	R	R/O BOYS OFFICE	
LTG. GIRLS OFFICE	L	20/1	5			752 540	6	20/1	R	R/O BOYS OFFICE	
LTG. STORAGE UTILITY, CUSTODIAN	L	20/1	7	944 900			8	20/1	R	R/O MENS DRESSING BOYS DRESSING	
LTG. BOYS DRESSING	L	20/1	9		944 540		10	20/1	R	R/O EXTERIOR BOYS LANDING	
LTG. BOYS DRESSING	L	20/1	11			1003 540	12	20/1	R	R/O GIRLS OFFICE GIRLS LANDING	
(3) EXTERIOR LTG.	L	20/1	13	405 720			14	20/1	R	R/O GIRLS OFFICE	
(3) EXTERIOR LTG. EMERGENCY	L	20/1	15		810 720		16	20/1	R	R/O GIRLS OFFICE	
SPARE		20/1	17			540	18	20/1	R	R/O GIRLS OFFICE	
SPARE		20/1	19	900			20	20/1	R	R/O GIRLS DRESSING GIRLS DRESSING	
SPARE		20/1	21		900		22	20/1	R	R/O GIRLS DRESSING CUSTODIAN, STORAGE	
SPARE		20/1	23			400	24	20/1	R	CP-1	
BUSSED SPACE			25	540			26	20/1	R	R/O BOYS DRESSING UTILITY, EXTERIOR	
BUSSED SPACE			27		500		28	20/1	N	R/O 'IDF-N'	
BUSSED SPACE			29			500	30	20/1	N	R/O 'STC-N'	
BUSSED SPACE			31	500			32	20/1	N	SNAC - N	(1)(2)
BUSSED SPACE			33				34	20/1		SPARE	
BUSSED SPACE			35				36	20/1		SPARE	
BUSSED SPACE			37				38	20/1		SPARE	
BUSSED SPACE			39				40	20/1		SPARE	
BUSSED SPACE			41				42	20/1		SPARE	

CONN. VA PHASE A	6573	CONN. VA (CODE N)	1500	DEMAND KVA	18.7
CONN. VA PHASE B	6137	CONN. VA (CODE L)	6805	DEMAND AMPS	51.9
CONN. VA PHASE C	4275	CONN. VA (CODE R)	8680	CONN. AMPS	47.2
TOTAL CONN. VA	16985	CONN. VA (CODE K)	0	HIGH PH AMPS/LCL	59.6

PNL NA
PNL NB

PLOTTED @ 3/18/05

GROTH ARCHITECTS, INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

OUSD NO.
758-000
PROJECT NOS.
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P. T. N.
73569-9
DATE

REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

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LICENSED ARCHITECT
JOHN SCOTT GROTH
C-26609
4/30/2007
RENEWAL
STATE OF CALIFORNIA

SHEET TITLE
PANEL SCHEDULES

EN5-1

FILE: J:\629-002B\6292EN51.dwg Mar 21, 2005 - 9:41am
XREF: 6292BDR.dwg

Soltek Pacific

Request for Information 034

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OcearProject # 575 823 Acacia Street Oceanside, CA 92054	Tel: 760-967-8188 Fax: 760-967-8222	**Soltek Pacific**

RFI #: 034	**Importance: High**			**Date Created: 7/12/2005**
From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject	Discipline	Category
Photocell at Building P		

Specification Section	Reference	Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments	Sched Impact Comments	Dwg Impact Comments

Sketch Numbers

Author Company	Authored By	Author RFI Number
Soltek Pacific	Matt Caronna	Gould elec. # 13

Cc: Company Name	Contact Name	Copies	Notes

Question — Date Required: 7/19/2005

Ref. EP1-1 note 3 on the lighting plan. This note calls out for a photocell on the roof. This roof does not have a parapet that would hide the stub up and or the photocell. For aesthetic reasons, Gould would like to propose putting the photocell on the North facing wall under the roof line. The North wall does not have an overhang. Please advise.

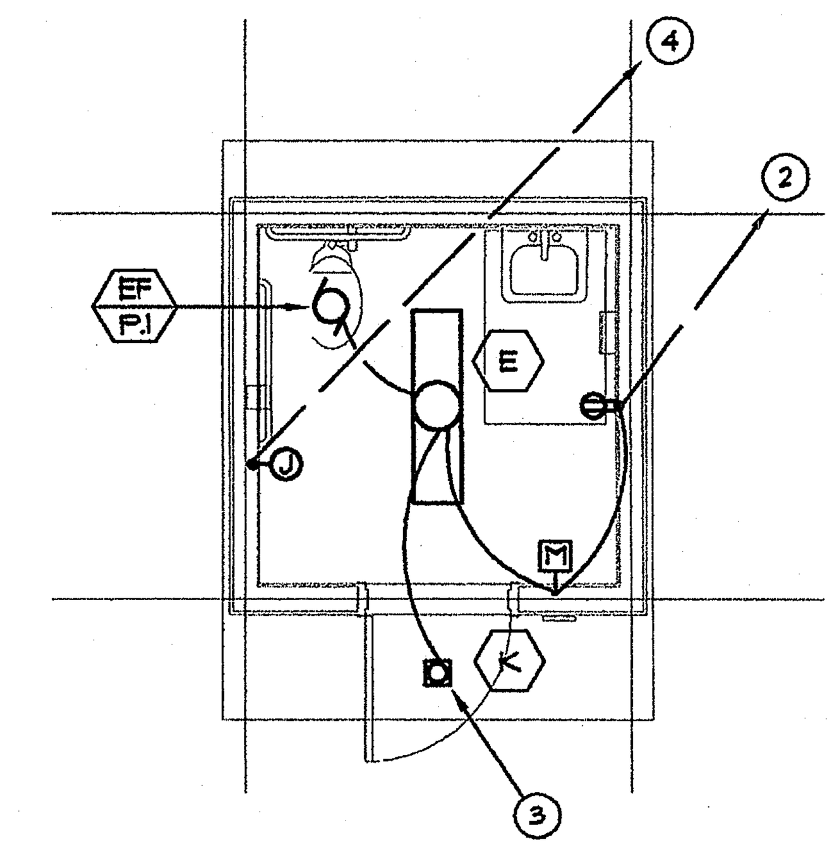
Suggestion

Answer Company	Answered By	Co-Respondent
PinnacleOne/Barnhart, Inc.	Dale Sana	

Answer — Date Answered: 7/14/2005

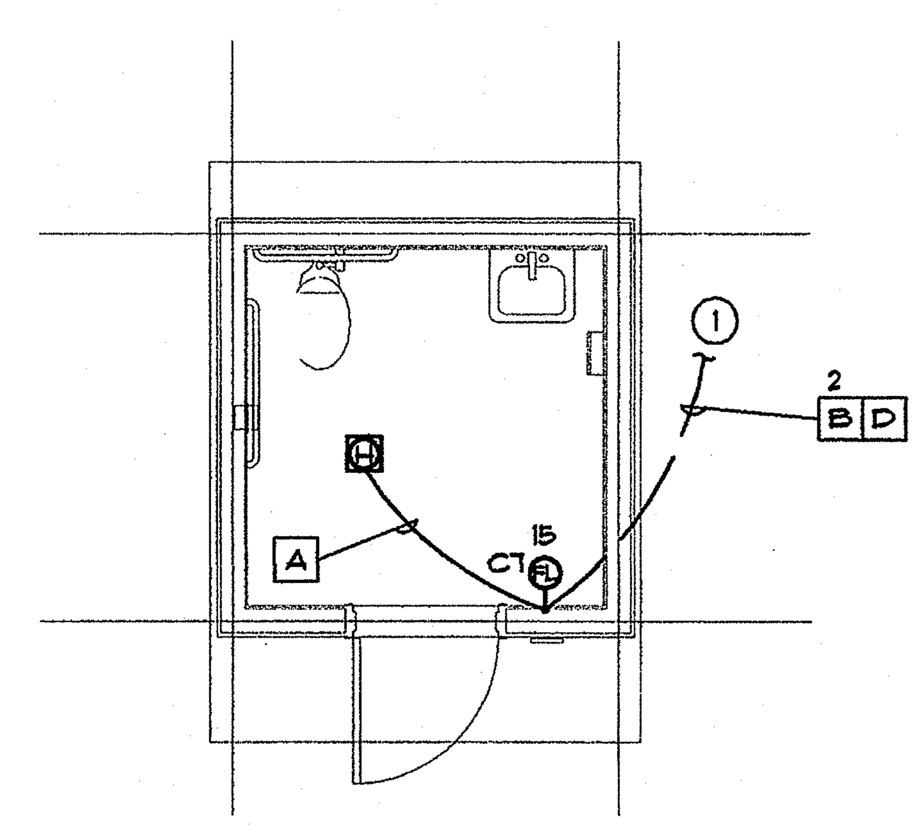
North facing wall is acceptable, and a good location.
We will change the location from roof to wall, per
this response to rfi.

Prolog Manager Printed on: 5/4/2006 SPMASTER Page 1



BUILDING P - LIGHTING AND POWER PLAN

1/4" = 1' - 0"



BUILDING P - FIRE ALARM PLAN

1/4" = 1' - 0"

629-002B

REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — ELECTRICAL

08-10-04

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

SHEET NOTES:

1. 1"C. TO 'SNAC-2' PANEL. SEE SITE PLAN FOR CONTINUATION.
2. 2#12, 1#12EG, 1"C. TO BUILDING 'M' PANEL. PROVIDE 20A/1P CIRCUIT BREAKER TO MATCH EXISTING TYPE AND AIC RATING.
3. CONTROLLED VIA PHOTOCELL ON ROOF. (RFI 34)
4. 1"C.O. TO BUILDING 'M' 'IDF'.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT OUTLET LOCATION.

PLOTTED @ 3/18/05

OUSD NO.	758-000
PROJECT NOS.	025
P. T. N.	73569-9
DATE	
REVISIONS	

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
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GROTH ARCHITECTS. INC.
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OFFICE OF REGULATION SERVICES
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LICENSED ARCHITECT — JOHN SCOTT GROTH — C-26609 — 4/30/2007 RENEWAL — STATE OF CALIFORNIA

SHEET TITLE
BUILDING P
ELECTRICAL PLANS

EP1-1

FILE: J:\629-002B\6292EP11.dwg Mar 21, 2005 - 9:42am
XREF: 6292BDR.dwg P floor plan.dwg

Soltek Pacific

Request for Information 030

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OceanProject # 575 — **Soltek Pacific**
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 030 — **Importance: High** — **Date Created: 7/6/2005**

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject
Comm. Pipes for T11, T12, T18, T19, T20

Discipline
Electrical

Category

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number
Gould Elec. # 10

Cc: Company Name — **Contact Name** — **Copies** — **Notes**

Question — **Date Required: 7/13/2005**
Ref. ET1-1 the existing communication underground vault has a dashed line going to building 'T12' that does not have a note on it. The existing run to 'T18' has two 2" for communication. The answer to RFI # 28 may determine what is needed here. Does 'T12' need only two more 2" or four more 2" conduits which will make six that feed that side of relo's.

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Dale Sana

Co-Respondent

Answer — **Date Answered: 7/8/2005**
Dashed line should have had a note #11 on it.
However, per engineer's previous comments:

-Only (4) 2" are required at ea. building.

-Gould will bring (6) 2" total into the grade box, for the district to have as spares if they need to run something additional to the rooms. In this way, they will be close to the building as it is.

If further direction is needed, please advise.

Soltek Pacific

Request for Information 051

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OceanProject # 575 — **Soltek Pacific**
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 051 — **Importance: Urgent** — **Date Created: 7/22/2005**

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject
Data Sleeves Between Relos

Discipline

Category

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number
Gould Elec. # 24

Cc: Company Name — **Contact Name** — **Copies** — **Notes**

Question — **Date Required: 7/29/2005**
Ref. ET1-1 note 7 calls for (3) 2" liquid tight between all relo's for communication. There is a steel beam (approx. 12" high) around the whole perimeter of the buildings below the roof. Below this beam is the top plate then the ceiling 1" below that. My only way to get above ceiling with these 2" is to drill through the beam. The (3) holes will be 2 1/2"diameter. The beam is not thick so the hole is possible, and we would put 3" between holes. Is this acceptable?

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Dale Sana

Co-Respondent

Answer — **Date Answered: 7/25/2005**
1. Do not drill the beams. These relos are not owned by the District and are temporarily leased only.
2. We do not want an underground installation, as the idea is for temporary for the relos.
Therefore, provide the following:

-Provide 2" conduits attached to the rear of the relos, to connect to the existing signal boxes located on the rear of each building.
Engineer is producing a drawing depicting the revised design, as per the above comments.

Soltek Pacific

Request for Information 028

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OceanProject # 575 — **Soltek Pacific**
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 028 — **Importance: High** — **Date Created: 7/6/2005**

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject
Communication Conduit at Portable Buildings

Discipline
Electrical

Category

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number
Gould Elec. # 8

Cc: Company Name — **Contact Name** — **Copies** — **Notes**

Question — **Date Required: 7/13/2005**
Ref. ET1-1 note 11 coming from the communication vault calls out for (6) 2" conduits to the building "T17". The existing J box these six will tie into is a 18" x 18" box which has 4 existing (yet abandoned) 2" coming out of the bottom that fill the whole entry space. These buildings in the past were fed only with two 2", then two 2" daisy chaining the rest. We are proposing to eliminate the two 2" spares, which would still leave four 2" feeding the building, due to the space at the bottom of the existing 18" x 18". Please advise.

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Dale Sana

Co-Respondent

Answer — **Date Answered: 7/8/2005**
Engineer's comments:
The spares can terminate in the grade box.
This is close enough that if we need them later, we can get them from there as req'd.

Therefore, Gould can eliminate the two spares and leave (4) 2" feeding the building directly.
Leave the 2 spares at the grade box.

Soltek Pacific

Request for Information 019

Detailed, Grouped by each number, with routing info

Jefferson Middle School, New Construction/OceanProject # 575 — **Soltek Pacific**
823 Acacia Street — Tel: 760-967-8188 Fax: 760-967-8222
Oceanside, CA 92054

RFI #: 019 — **Importance: Urgent** — **Date Created: 6/24/2005**

From	Company	Sent	For	Via
To	Company	Received	Comments	

Subject
Protable Buildings

Discipline
Electrical

Category

Specification Section

Reference

Reference Drawings

Cost Impact	Amount	Sched Impact	Days	Dwg Impact
Not Sure		Not Sure		Not Sure

Cost Impact Comments

Sched Impact Comments

Dwg Impact Comments

Sketch Numbers

Author Company
Soltek Pacific

Authored By
Matt Caronna

Author RFI Number
Gould Elec. #5

Cc: Company Name — **Contact Name** — **Copies** — **Notes**

Question — **Date Required: 7/1/2005**
Ref. ET-1.1 the three existing relocatable buildings T-18 - T-20 electrical is to remain un-touched. These buildings are fed underground to the first building T-18 then are surface piped between the other two with PVC on uni-strut. Due to the moving of the seven relocatables and the sepaeration of the two rows we would need to excavate between. We are proposing to run rigid PVC schedule 80 surface mount to match the existing. Please advise if this is acceptable.

Suggestion

Answer Company
PinnacleOne/Barnhart, Inc.

Answered By
Dale Sana

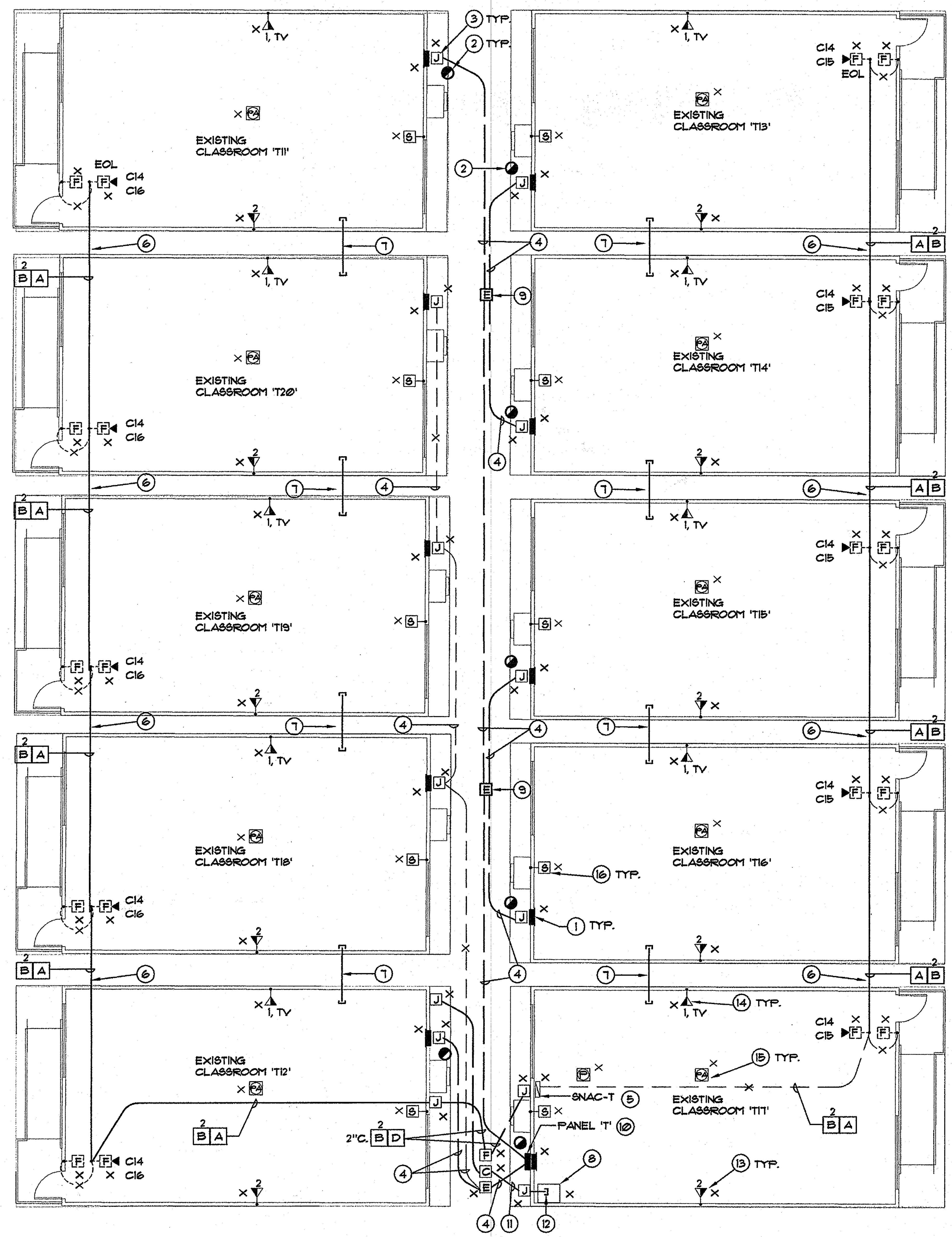
Co-Respondent

Answer — **Date Answered: 6/29/2005**
Engineer's comments:
-proposed running of rigid pvc schedule 80 surface mount to match existing is acceptable.

629-002B

ILA ZAMMIT ENGINEERING GROUP
Consulting Electrical Engineers
3625 Ruffin Rd., Suite 300
San Diego, CA. 92123
(858) 279-0242 - FAX (858) 279-0711

08-10-04

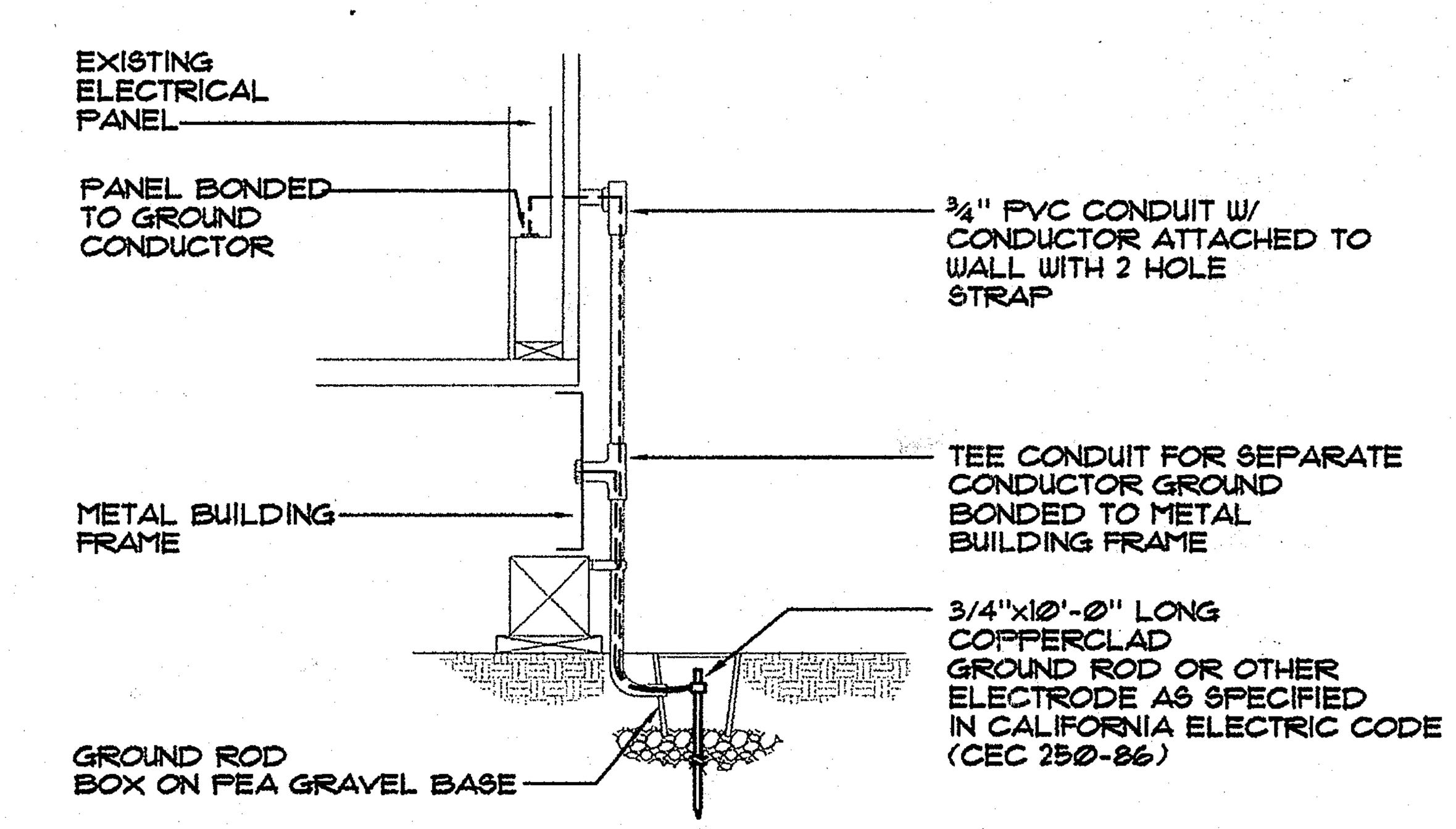


PORTABLE BUILDINGS ELECTRICAL AND FIRE ALARM PLAN

1/8" = 1' - 0"

SHEET NOTES:

1. EXISTING CLASSROOM (RESTROOM) PANEL TO REMAIN.
2. PROVIDE ELECTRODE CONNECTIONS TO PANEL AND BUILDING PER GROUNDING DETAIL 1/ET1-1.
3. EXISTING JUNCTION BOX TO REMAIN.
4. SEE SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
5. EXISTING SNAC PANEL TO REMAIN.
6. PROVIDE LIQUID TIGHT FLEXIBLE NON-METTALIC CONDUIT BETWEEN BUILDINGS.
7. PROVIDE 3-2" LIQUID TIGHT FLEXIBLE NON-METTALIC CONDUITS ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHINGS.
8. EXISTING 'IDF' AND ELECTRONICS TO REMAIN.
9. PROVIDE UNDERGROUND PULLBOX, SEE 3/E4.3.
10. PROVIDE LOCKABLE SURFACE MOUNTED, NEMA 3R, 42 POLE 400A PANELBOARD WITH (2) 200A/3P AND (1) 100A/2P CIRCUIT BREAKERS. PROVIDE 'RSC' RISERS TO PANELBOARD. SEE SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
11. PROVIDE THE FOLLOWING CONDUITS:
    (2) 2"C. FOR VOICE/DATA
    (1) 2"C. FOR PAGING
    (1) 2"C. FOR TV
    (2) 2"C. SPARE.
12. PROVIDE (4) 2"C. STUBBED ABOVE ACCESSIBLE CEILING WITH INSULATED BUSHINGS.
13. PROVIDE (2) TYPE 'A' CABLES TO EXISTING 'IDF' CABINET. PROVIDE NEW INSERTS IN EXISTING VOICE/DATA OUTLET.
14. PROVIDE (1) TYPE 'A' CABLE AND (1) TYPE 'G' CABLE TO EXISTING 'IDF' CABINET. PROVIDE NEW INSERT AND TV JACK IN EXISTING DATA/TV OUTLET.
15. PROVIDE (1) TYPE 'J' CABLE FROM EXISTING INTERIOR SPEAKER TO EXISTING 'IDF' CABINET.
16. RECONNECT SECURITY DEVICES. COORDINATE WITH SCHOOL DISTRICT.

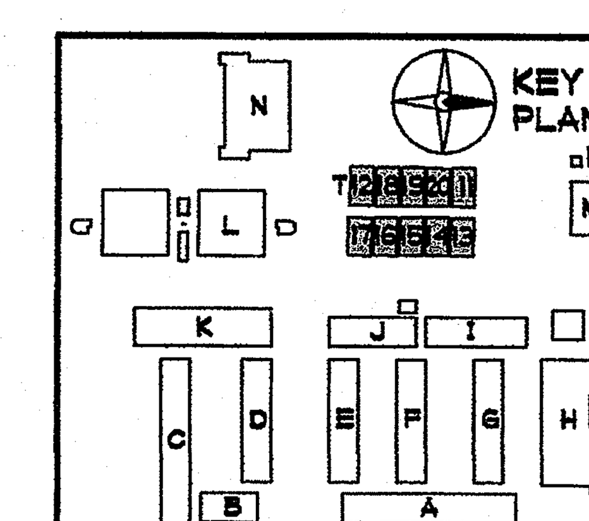


1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250-122.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (CEC 250-50). IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (CEC 250-50 & 250-52).
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER. (BOLTING ONLY IS NOT ACCEPTABLE BONDING).
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS (CEC 250-56) AS REQUIRED.

GROUNDING DETAIL

1 / ET1-1

NO SCALE



PLOTTED @ 3/18/05

OUSD NO. 758-000
PROJECT NOS. 025
P. T. N. 73569-9
DATE
REVISIONS

JEFFERSON MS NEW CONSTRUCTION
823 ACACIA STREET
OCEANSIDE, CA 92054
OCEANSIDE UNIFIED S.D.

space art time function

GROTH ARCHITECTS. INC.
3355 MISSION AVE. SUITE 234
OCEANSIDE, CALIFORNIA 92054
PHONE 760-754-8191
FAX 760-754-8291

DSA
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-106494
AC PB FLS SS
DATE MAR 28 2005

LICENSED ARCHITECT JOHN SCOTT GROTH C-26609 4/30/2007 RENEWAL STATE OF CALIFORNIA

SHEET TITLE
PORTABLE BUILDINGS ELECTRICAL AND FIRE ALARM PLANS

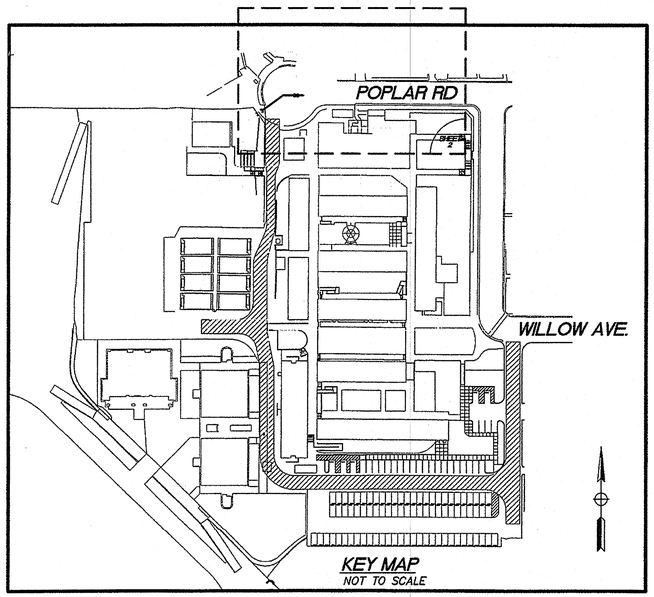
ET1-1

FILE: J:\629-002B\6292ET11.3wg Mar 21, 2005 - 10:02am
XREF: 6292BDR.dwg 6292B-SITE.dwg 6292B-KEYPLAN.dwg

POPLAR ROAD

ROAD IMPROVEMENT PLANS

FOR JEFFERSON MIDDLE SCHOOL



PLAN No.	DWG No.	SHEET TITLE	SHT No.
W-2157	T-1	TITLE SHEET, KEY MAP	1
W-2157	T-2	CONSTRUCTION NOTES, PLAN AND PROFILE	2

STANDARD DRAWINGS:

1. CITY OF OCEANSIDE ENGINEER'S DESIGN AND PROCESSING MANUAL, 1992 EDITION.
2. CITY OF OCEANSIDE STANDARD DRAWINGS,CURRENT EDITION (OSD)
3. SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (SDRSD), MARCH 2003 EDITION.
4. STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, JULY 2002 EDITION.

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2000 EDITION) INCLUDING REGIONAL SUPPLEMENT AMENDMENTS.
2. CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF TRAFFIC CONTROLS, FOR CONSTRUCTION AND MAINTENANCE WORK ZONES, 1996 EDITION.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, JULY 2002 EDITION.
4. CITY OF OCEANSIDE STREET LIGHT DESIGN POLICY MANUAL FOR NEW STREET LIGHT INSTALLATIONS DATED MARCH, 2001.

DECLARATION OF ENGINEER OF WORK

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY THE CITY OF OCEANSIDE IS A REVIEW FOR THIS LIMITED PURPOSE OF ENSURING THE PLANS COMPLY WITH CITY PROCEDURES AND OTHER APPLICABLE POLICIES AND ORDINANCES. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS.

AS ENGINEER OF WORK, I AGREE TO INDEMNIFY AND SAVE THE CITY OF OCEANSIDE, ITS OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY, CLAIMS, DAMAGES OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER OF WORK, MY EMPLOYEES, AGENTS OR CONSULTANTS.

Steven J. Barger 1/4/2005

STEVEN J. BARGER — DATE
R.C.E. C 34318 EXPIRES: 09-30-2005

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE WORK FOR THIS PROJECT, I HAVE REVIEWED THE ENGINEERING WORK ON THESE PLANS TO DETERMINE GENERAL COMPLIANCE WITH PLANS AND SPECIFICATIONS, AND THAT THE COMPLETED CONSTRUCTION IS IN SUBSTANTIAL CONFORMANCE WITH THESE PLANS.

STEVEN J. BARGER — DATE
R.C.E. C 34318

WORK TO BE DONE

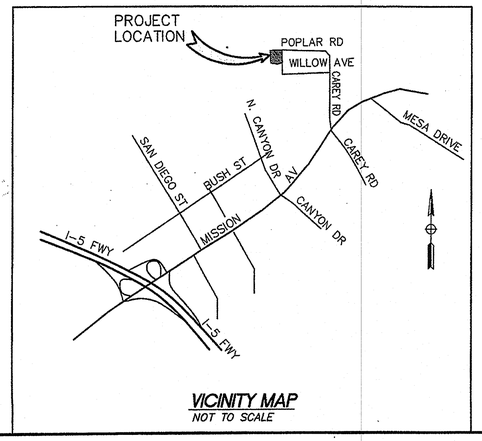
IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS; THE CURRENT CITY OF OCEANSIDE ENGINEER'S DESIGN AND PROCESSING MANUAL, THE CITY OF OCEANSIDE STANDARD DRAWINGS, THE SAN DIEGO REGIONAL STANDARD DRAWINGS AND THE CITY OF OCEANSIDE PUBLIC WORKS DEPARTMENT TRANSPORTATION DIVISION STREET LIGHT DESIGN POLICY MANUAL.

LEGEND: OFFSITE (PUBLIC)

	DESCRIPTION	STD. DWGS	QUANTITES	SYMBOL
	EXISTING WATER MAIN	SIZE & TYPE PER PLAN		W
	PROPERTY LINE			
	REMOVE AC PAVING		165 SF	
1	INSTALL 10" FLANGE TEE .W/. TRUST BLOCK	OSD W-4	.2 EA	
2	10" GATE VALVE	OSD W-6	.1 EA	
3	10" PVC WATER MAIN (C-900)	SIZE & TYPE PER PLAN	67 LF	W
4	8" DOUBLE CHECK - DETECTOR CHECK ASSEMBLY	OSD W-17	.1 EA	
5	INSTALL 10"x45° BEND .W/TRUST BLOCK	OSD W-4	.1 EA	
6	CONNECT TO EXISTING AC PIPE AT NEAREST JOINT			
7	TRENCH RESURFACING	OSD M-3A	165 SF	
8	SAWCUT AC PAVING		116 LF	
9	PROTECTION POSTS	SDRSD W-16	.4 EA	

REFERENCE DRAWING(S)

POPLAR ROAD
DWGS R-2157, R-7155



VICINITY MAP
NOT TO SCALE

CAUTION

AT LEAST TWO (2) WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL REQUEST MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE BELOW LISTED REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER.

Underground Service Alert
Call TOLL FREE
1-800
422-4133
TWO WORKING DAYS BEFORE YOU DIG

CITY OF OCEANSIDE APPROVALS	
PLANS REVIEWED AND APPROVED BY FIRE DEPARTMENT	PLANS REVIEWED AND APPROVED BY WATER UTILITIES DEPARTMENT
APPROVED BY:	APPROVED BY:
DATE:	DATE: 1-25-2005

APPROVED CHANGES:

NO.	DESCRIPTION	APPROVED	DATE

OWNER / APPLICANT:
OCEANSIDE UNIFIED SCHOOL DISTRICT
2111 MISSION AVENUE
OCEANSIDE, CA 92054
PH: (760) 439-5534
FAX: (760) 757-8387

REGISTERED PROFESSIONAL ENGINEER — STEVEN J. BARGER — No. 34318 — EXPIRES 9-30-05 — CIVIL — STATE OF CALIFORNIA

CORNERSTONE ENGINEERING INC.
2191 EL CAMINO REAL SUITE 206
OCEANSIDE, CA 92054
TEL: (760) 722-3495
FAX: (760) 722-9490
CONSULTING CIVIL ENGINEERING AND LAND SURVEYING
www.cornerstoneeng.com

BENCHMARK:
Description:
Location:
Record From:
Elev: Datum:

E-30-04 — T - 1

SHEET	CITY OF OCEANSIDE ENGINEERING DEPARTMENT	SHEETS
1		2

POPLAR DRIVE IMPROVEMENTS
TITLE SHEET, KEY MAP

APPROVED 1/31/05
MARLA DOYLE — R.C.E. 35086 — CITY ENGINEER

ENGINEER OF WORK	Checked By:	PLAN NUMBER
Steven J. Barger	Approval Date: - -05	W-2157
STEVEN J. BARGER R.C.E. 34318		

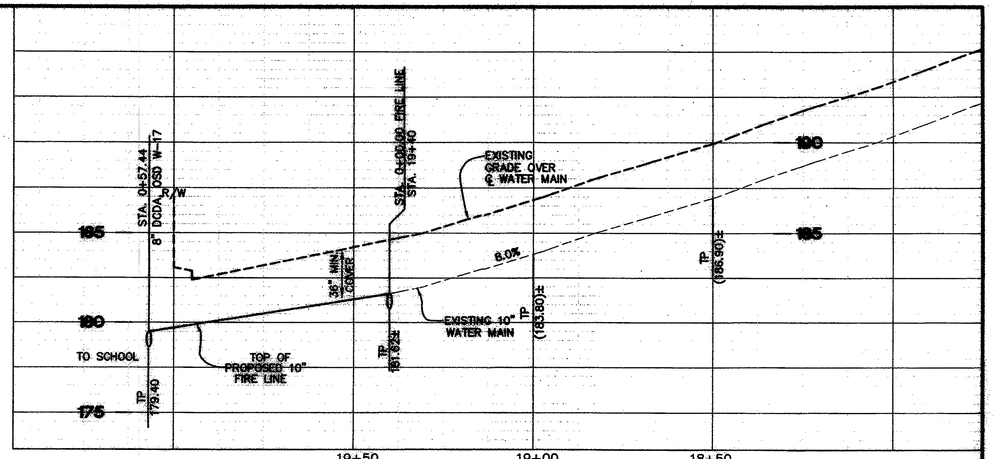
O:\804\05\00\DWGS\OFFSITE\1-TITLE.dwg 10/18/2004 3:59:10 PM PDT

GENERAL NOTES

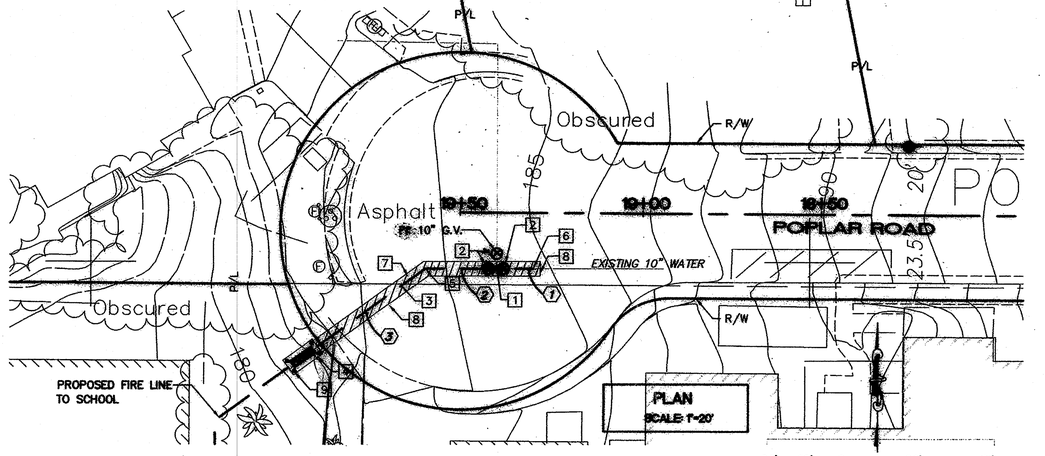
2. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS AND ELECTRIC COMPANY, PACIFIC TELEPHONE AND TELEGRAPH COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. ALL TELEPHONE SERVICES WITHIN THIS SUBDIVISION ARE UNDERGROUND INSTALLATION. FOR LOCATION OF ELECTRIC CABLE, GAS PIPING AND TELEPHONE CABLES AND APPURTENANCES, CONTACT UNDERGROUND SERVICE ALERT: 1-800-227-2600. ALSO REFER TO CITY STANDARD.
2. A PERMIT SHALL BE OBTAINED FROM THE CITY ENGINEERING DEPARTMENT FOR WORK WITHIN EXISTING CITY RIGHTS-OF-WAY.
3. THE CONTRACTOR SHALL NOTIFY THE CITY OF OCEANSIDE ENGINEERING DEPARTMENT 48 HOURS PRIOR TO STARTING WORK SO THAT INSPECTION MAY BE PROVIDED. (TELEPHONE NUMBER: (760) 966-4750).
4. ALL WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, WITH SUPPLEMENTS (A.P.W.A. SPECIFICATIONS), THE SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS AND CITY OF OCEANSIDE ENGINEER'S MANUAL.
5. PAVEMENT SECTIONS SHOWN, ARE TO BE VERIFIED BY "R" VALUE TESTS (TEST METHOD NO. CALIFORNIA 301) AND PAVEMENT DESIGN REPORT; TO BE SUBMITTED BY SOILS ENGINEER AFTER UNDERGROUND UTILITIES CONSTRUCTION IS COMPLETE, FOR CITY ENGINEER'S APPROVAL.
6. ALL METALS PLACED IN THE GROUND SHALL BE ENCASED IN 6" OF NEUTRAL SAND.
7. CONSTRUCTION EXPANSION JOINTS IN CURB AND GUTTER AT RETURNS AND AT DRIVEWAY INTERSECTIONS IS REQUIRED PER G-9 AND G-10 (S.D.R.S.D.).
8. ALL UNDERGROUND UTILITIES LATERALS SHALL BE INSTALLED BEFORE CONSTRUCTION OF CURBS, CROSS GUTTERS, OR SURFACING OF THE STREETS AND SHALL BE MARKED FOR EASY LOCATION. THE ENGINEER OF WORK SHALL CERTIFY ALL IMPROVEMENTS TO WITHIN .1' OF THE DESIGN.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY AND ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
10. SOILS REPORTS ON ALL TRENCHES SHALL BE SUBMITTED TO THE ENGINEER OF WORK AND THE CITY ENGINEER BY THE SOILS ENGINEER OF RECORD, WHICH CERTIFIES THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH EARTH WORK SPECIFICATIONS AND CITY OF OCEANSIDE SPECIFICATIONS AND GRADING ORDINANCE.
11. BLUE FIRE HYDRANT MARKERS SHALL BE PLACED ON THE PAVEMENT PER CITY OF OCEANSIDE STANDARD DRAWING M-13.
12. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF CALIFORNIA MANUAL OF TRAFFIC CONTROLS. TRAFFIC CONTROL OPERATIONS SHALL BE BETWEEN 8:00 A.M. AND 3:30 P.M. UNLESS OTHERWISE APPROVED.
13. CENTERLINE MONUMENTS SHALL BE INSTALLED AT THE EC AND BC OF ALL CURVES, AT THE CENTERLINE INTERSECTION OF ALL STREETS WHERE MANHOLES ALLOW, AT THE RADIUS POINT OF CONCENTRIC CUL-DE-SACS, AND AT THE ANGLE POINT OF OFFSET CUL-DE-SACS, PER S.D.R.S.D. M-10 AND M-11.
14. ALL EXISTING IMPROVEMENTS INCLUDING CURB AND GUTTERS, SIDEWALKS, ASPHALT CONCRETE OR P.C.C. PAVING, WHICH ARE BEING JOINED OR MATCHED IN CONNECTION WITH THIS PROJECT, SHALL BE JOINED OR MATCHED IN A MANNER SATISFACTORY TO THE CITY ENGINEER, INCLUDING NECESSARY SAWCUTTING, REMOVAL, REPLACEMENT, AND CAPPING.
15. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE, OR RUNNING OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT, AND ANY OTHER ASSOCIATED EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 6:00 P.M. EACH DAY, MONDAY THROUGH FRIDAY, AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON THE PREMISES ON SATURDAYS OR SUNDAYS OR LEGAL HOLIDAYS, UNLESS WAIVED BY THE CITY ENGINEER. HAULING OPERATIONS SHALL BE BETWEEN 8:00 A.M. AND 3:30 P.M. UNLESS OTHERWISE APPROVED.
16. STRIPING SHALL BE DONE BY THE CONTRACTOR AT DEVELOPER'S EXPENSE UNLESS OTHERWISE DIRECTED.
17. TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL NOT BE APPLIED OVER EXISTING STRIPES THAT ARE TO BE REMOVED. EXISTING STRIPES SHALL BE FIRST REMOVED BY SANDBLASTING BEFORE ANY NEW APPLICATION.
18. REFLECTIVE PAVEMENT MARKERS TO BE INSTALLED BY CONTRACTOR ON PERMANENT STRIPING. ALL STREET SIGNS SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. SIGN SPECIFICATIONS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF OCEANSIDE STANDARD DRAWING T-3 AND THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION SPECIFICATION FOR REGULATORY, WARNING AND GUIDE SIGNS.
19. PATCHING OF SIDEWALK IS NOT PERMITTED.
20. DAMAGED, GOUGED, BROKEN, OR GRAFFITI-MARKED SECTIONS, OF CURB, GUTTER OR SIDEWALK SHALL BE REMOVED AND REPLACED.
21. A MINIMUM REPLACEMENT SECTION TO BE AT LEAST EQUAL TO SCORE MARK TO SCORE MARK (TYPICALLY 5' X 5'). FOR SIDEWALKS EXCEEDING 5' WIDTH, REPLACEMENT IS TO BE FULL WIDTH SQUARED TO THE NEXT SCORE MARK.
22. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR IMPLEMENTING, ADMINISTERING AND MAINTAINING A CONFINED SPACE ENTRY PROGRAM IN ACCORDANCE WITH SECTIONS 5156, 5157, AND 5157 TITLE 8, CALIFORNIA CODE OF REGULATIONS (CCR).
23. INDIVIDUAL LOT OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE UTILITY EASEMENTS WITHIN THEIR RESPECTIVE LOT BOUNDARIES.

WATER NOTES

1. A "W" SHALL BE INSCRIBED ON CURB DIRECTLY ABOVE ALL WATER SERVICES. SERVICES SHALL BE SHOWN ON AS-BUILTS PLANS AND SHALL BE LOCATED BY A CENTERLINE STATION.
2. NO DISRUPTION TO EXISTING WATER DISTRIBUTION MAINS WILL BE ALLOWED ON MONDAYS OR FRIDAYS. ALL SHUTDOWNS FOR SYSTEM TIE-INS WILL BE SCHEDULED BETWEEN TUESDAY, WEDNESDAY AND THURSDAY, AND WILL BE CONFINED TO NORMAL WORKING HOURS.
3. NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR BLOW-OFF STRUCTURE WITHOUT FIRST OBTAINING A CONSTRUCTION WATER PERMIT FROM THE CITY OF OCEANSIDE WATER UTILITIES DEPT.
4. THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND SERVICE ALERT TWO WORKING DAYS PRIOR TO STARTING EXCAVATION SO THAT EXISTING WATER FACILITIES SHALL BE MARKED IN THE FIELD PRIOR TO START OF CONSTRUCTION. UNDERGROUND SERVICE ALERT NUMBER: (800) 422-4133.
5. LOCATION AND ELEVATION OF EXISTING WATER FACILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS AND EXCAVATION EXPLORATION BY THE CONTRACTOR.
6. THE EXISTENCE AND LOCATION OF WATER FACILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE CITY RECORDS. TO THE BEST OF OUR KNOWLEDGE, THE EXISTING WATER FACILITIES ARE AS SHOWN ON THE PLANS. THE CITY OF OCEANSIDE SHALL NOT BE HELD RESPONSIBLE FOR ANY ERROR IN THE LOCATION AND ELEVATION OF THE EXISTING WATER FACILITIES.
7. NO REVISION SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY ENGINEER.
8. NUTS AND BOLTS ON ALL FLANGE FITTINGS SHALL BE CADMIUM PLATED AND COATED WITH A NON-OXIDE GREASE EXCEPT FOR BURIED SERVICE, WHICH SHALL BE TYPE 316 STAINLESS STEEL. ALL NUTS AND BOLTS WILL BE INSTALLED TO THE PROPER TORQUE REQUIREMENTS OF THE MANUFACTURER. VALVES AND FLANGE FITTINGS SHALL BE COATINGS: ALL VALVES AND THE FLANGED FITTINGS SHALL BE PRIME COATED WITH A BLEND OF PETROLATUM, PLASTICIZER, INERT FILLERS, AND CORROSION INHIBITOR HAVING A PASTE-LIKE CONSISTENCY. THE FLANGE COVERING MATERIAL SHALL BE SYNTHETIC FELT TAPE SATURATED WITH A BLEND OF PETROLATUM, PLASTICIZER AND CORROSION INHIBITORS THAT IS EASILY FORMABLE OVER IRREGULAR SURFACES. PRIMER SHALL BE TRENTON WAX-TAPE OR EQUAL. WAX-TAPE, THE FLANGE COVERING OVER IRREGULAR SURFACES SHALL BE TRENTON #1 WAX-TAPE OR EQUAL. THE OUTER COVERING, THE PRIMED AND WAX-TAPE WRAPPED FLANGE AS A SINGLE SHEET SHALL BE TRENTON POLY-PLY OR EQUAL.
9. WATER SERVICE LATERALS ARE NOT PERMITTED IN DRIVEWAY.
10. THE CITY INSPECTOR SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO ANY INSPECTION. TO ARRANGE FOR INSPECTION, CALL (760) 435-5909.
11. BEDDING AND BACKFILL: TRENCH BACKFILL SHALL CONFORM TO SAN DIEGO REGIONAL STANDARD DRAWING W-21, EXCEPT THAT COMPACTION SHALL BE 95%. THE PIPE SHALL BE LAID ON 6 INCH MINIMUM SAND BED WITH SAND EQUIVALENT OF SE-30 OR MORE. THE BACKFILL MATERIAL FOR THE PIPE ZONE SHALL BE SAND OR NATIVE MATERIAL WITH AN S.E. OF 30 OR MORE, FREE FROM STONES, CLODS AND OTHER DELETERIOUS MATERIALS. ALL METALLIC PIPE AND FITTINGS SHALL BE ENCASED WITH 6 INCHES OF NEUTRAL SAND.
12. PIPE DEFLECTIONS FOR SHORT RADIUS CURVES AND ANGLE POINTS SHALL NORMALLY BE ACCOMPLISHED BY MEANS OF STANDARD FITTINGS, THE LOCATIONS OF WHICH SHALL BE DETAILED ON THE PLANS.
13. ALL WATER USED ON A CONSTRUCTION PROJECT MUST BE PAID FOR AND WILL BE METERED AND PROTECTED BY A REDUCED PRESSURE BACKFLOW ASSEMBLY. THIS INCLUDES WATER FOR LOADING OF NEW WATERLINES, FLUSHING OF LINES, PRESSURE TESTING, ETC. CITATIONS WILL BE ISSUED TO PARTIES TAKING WATER FROM UNMETERED FACILITIES. A CONSTRUCTION WATER METER PERMIT MAY BE OBTAINED FROM THE WATER UTILITIES DEPARTMENT.
14. QUALITY TEST SHALL INCLUDE BAC-T AND GP WITH A MAXIMUM ODOR OF 1 TON. 2-DAY NOTICE PRIOR TO ANY TESTING. NO TESTS SHALL BE TAKEN ON MONDAYS OR TUESDAYS FOLLOWING A MONDAY HOLIDAY.



POPLAR RD.
10" FIRELINE
PROFILE
SCALE
HORZ: 1"=20'
VERT: 1"=4'



CONSTRUCTION NOTES:

1. INSTALL 10"x 10" FLANGE TEE w/THRUST BLOCK (OSD DWG W-4); Remove 90° Bend, Ex 6.V. & T.S.
2. INSTALL 10" FLANGE GATE VALVE (OSD DWG W-6, W-24)
3. INSTALL 10" PVC C 900 WATER MAIN CLASS 150
4. 8" D.C.D.A. (OSD DWG W-17)
5. INSTALL 10"x 45° BEND w/THRUST BLOCK (OSD DWG W-4)
6. CONNECT TO EXISTING AC PIPE AT NEAREST JOINT
7. TRENCH RESURFACING (OSD M-3A)
8. SAWCUT LINE
9. PROTECTION POSTS, 4 REQUIRED (SDRSD W-16)

REGISTERED PROFESSIONAL ENGINEER STEVEN J. BARGER 034318 exp. 9/30/05 CIVIL STATE OF CALIFORNIA

WATER DATA			
(#)	DELTA/BEARING	RADIUS	LENGTH
(1)	N89°52'13"W	-	10.00'
(2)	N89°52'13"W	-	20.00'
(3)	N53°48'10"E	-	38.00'

APPROVED CHANGES:

NO.	DESCRIPTION	APPROVED	DATE

CORNERSTONE ENGINEERING INC.
2101 EL CAMINO REAL, SUITE 205
OCEANSIDE, CA 92054
TEL: (760) 722-7480
FAX: (760) 722-7486
CONSULTING CIVIL ENGINEERING AND LAND SURVEYING

BENCHMARK:
Description:
Location:
Record From:
Elev: Datum:

E-30-04 T-2

SHEET 2 | CITY OF OCEANSIDE ENGINEERING DEPARTMENT | 2 SHEETS

POPLAR DRIVE IMPROVEMENTS
CONSTRUCTION NOTES PLAN AND PROFILE

APPROVED 1/21/05
MARLA DOYLE R.C.E. 35088 CITY ENGINEER

ENGINEER OF WORK
Steven J. Barger
STEVEN J. BARGER R.C.E. 34318

Checked By:
Approval Date: - -05

PLAN NUMBER W-2157