



HEALTH SCIENCE CENTER
TEXAS A & M UNIVERSITY

PRELIMINARY PRICING DOCUMENTS

1020 Holcombe Campus – 23-10256

Parking Garage Lighting Retrofit

September 21, 2018



PROJECT SCOPE

1020 Holcombe Campus – 23-10256 Parking Garage Lighting Retrofit

General – The HSC EnMed 1020 Holcombe, Houston Texas Campus, is soliciting bids for the retrofit of the existing parking garage lighting. This scope outlines the required electrical scope that needs to be completed to support this work, along with several bid alternates. Pricing shall include all submittals, demo work, disposal, re-work of existing pathway systems and supports, and new lighting fixtures, included in this scope of work.

The HSC Project Manager will be Joe Fix P.E. 979-436-0557.

Project scope shall include but is not limited to the following:

General Construction Project Scope

1. None anticipated at this time.

Plumbing Scope of work

1. None anticipated at this time.

Mechanical Scope of Work

1. None anticipated at this time

Controls Scope of Work

1. None anticipated at this time.

Electrical Scope of Work

1. Refer to existing lighting drawings: E-1, E-1A, E-2, and E-3. Contractor shall verify quantities, layout, and circuiting.
2. Provide pricing for each of the following:
 - a. One-for-one replacement of existing fluorescent strip fixtures with new 2-lamp, T8 fluorescent strip fixtures with wire guards (Lithonia Z-series or approved equal).
 - b. One-for-one replacement of existing fluorescent strip fixtures with new LED strip lights (Lithonia ZL-series or approved equal).
 - c. Replacement of alternating existing fixtures with new LED strip lights (Lithonia ZL-series or approved equal). Remainder of existing fixtures shall remain in operation after installation of new fixtures. Stairwell and support areas (pump room, etc) shall be priced as one-for-one replacement.
 - d. Revised lighting layout using parking garage LED fixture (such as Visionaire Lighting Bow-series or approved equal). All removal of existing fixtures and re-



work of existing conduit systems and branch circuits shall be included in the price. Motion-sensors are expected to be included in this pricing option.

3. Contractor shall evaluate existing conduit systems, to include conduit, fittings, boxes, supports, etc and repair/replace any deficiencies while completing the associated work.
4. Contractor shall repair/replace any deficient fixture supports (chains, etc) to properly support lighting fixtures.
5. Contractor shall properly dispose of any lighting fixtures, conduit systems, supports, and conductors off-site.
6. Contractor shall submit point-by-point lighting analysis for pricing option 2d above. Desired average foot-candles level is 15 fc.
7. Stairwells and support areas (pump room, etc) shall be included in all pricing options.
8. Existing branch circuits should be adequate to supply the proposed work. Contractor shall verify.

General Requirements:

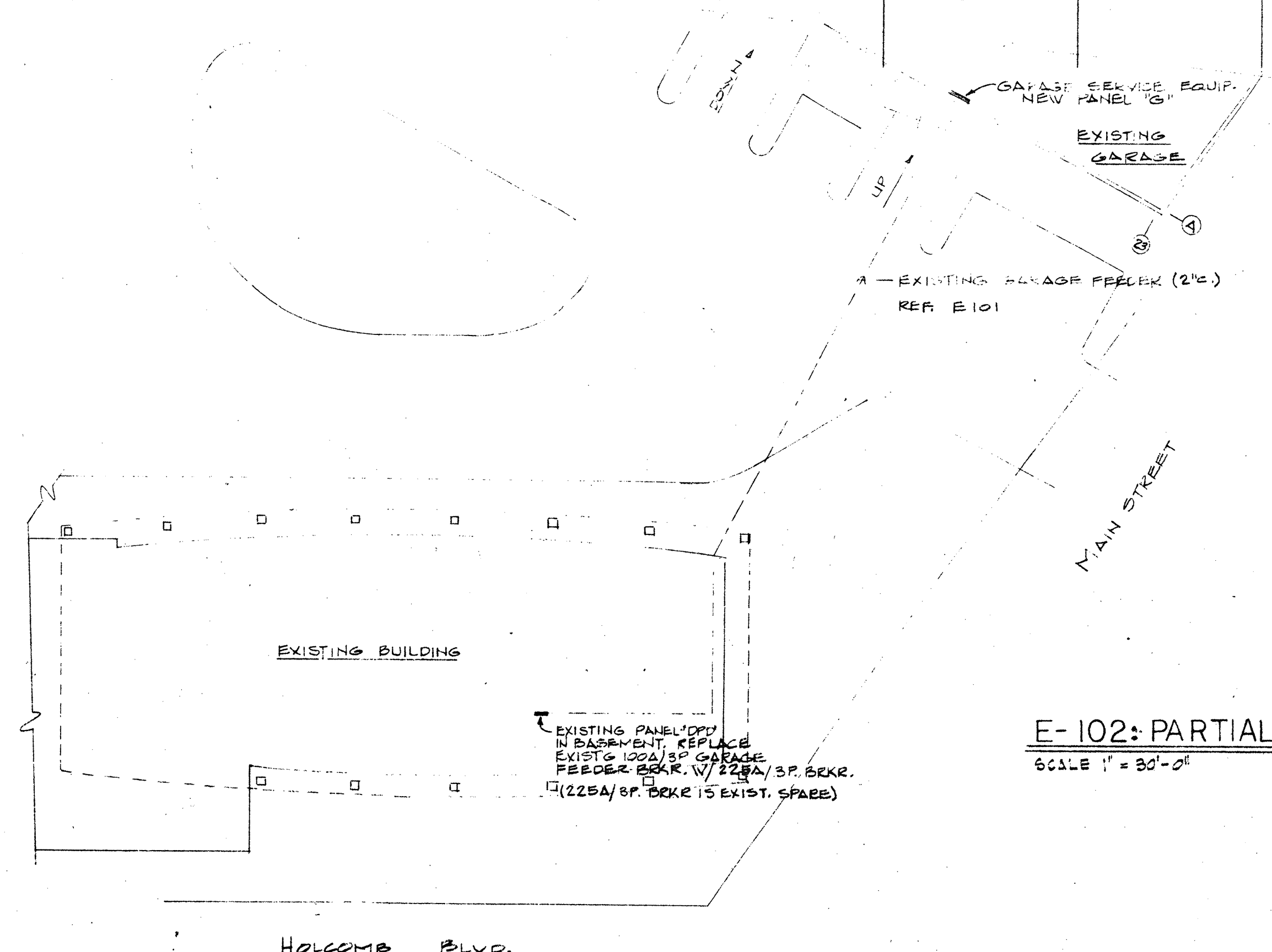
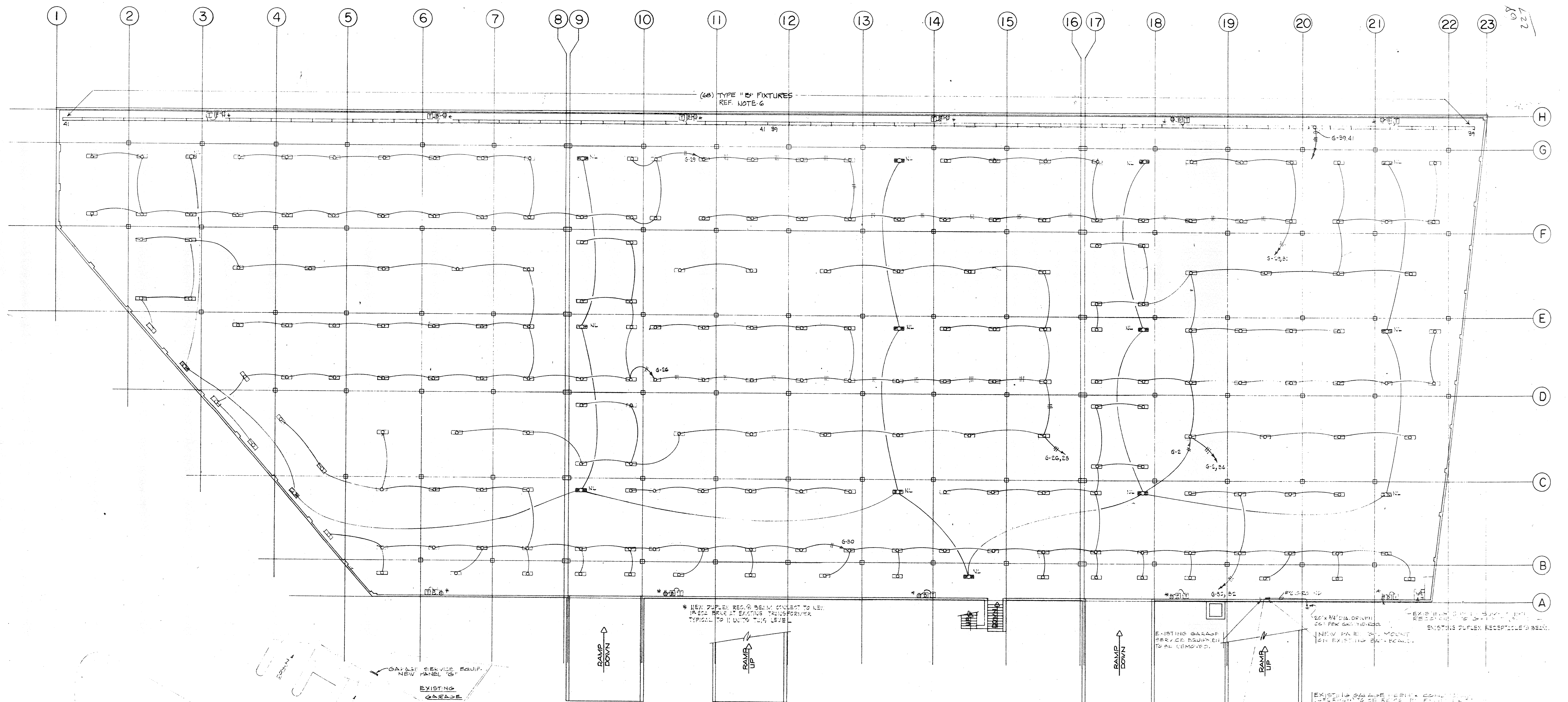
1. All work shall be in conformance with the existing local and state building codes and the NEC. A City of Houston Permit is not required. The Health Science Center engineers and Fire Marshal will be the AHJ.
2. All electrical devices shall be UL or CSA listed.
3. All utility connections and or outages shall be coordinated with the HSC Director of Utilities, Mr. Richard Lynn, P.E., 979-450-6621.

Implementation

The successful bidder will be issued a PO from TAMU purchasing.

Schedule

Contractor shall provide a detailed schedule within 5 days of notice to proceed for approval.



E-101 EXISTING BASEMENT LEVEL

SCALE: 1/16" = 1'-0"

NOTES: 1. LIGHTING FIXTURE TYPE "A" SHALL BE WRIGHT LIGHT "FCB-240-7" WITH STYKENS DIFF. 2-FLUOR LAMPS AND 277V. BALLAST.
2. ALL LIT. FIXTURES IN BASEMENT LEVEL SHALL BE TYPE "A" STEIN MOUNTED UNLESS OTHERWISE NOTED. SEE DETAIL E-103.

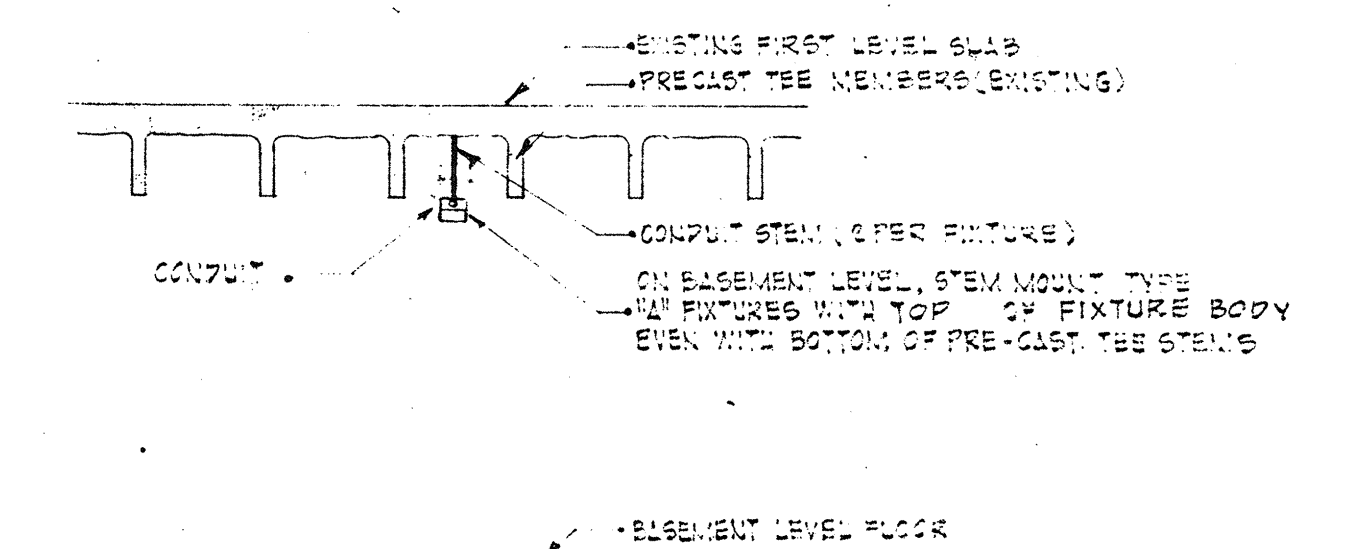
3. EXIT LIGHT FIXTURES SHALL BE MARCO "X225-277V."

4. ALL EXISTING VISIBLE CONDUIT AND FIXTURES TO BE REMOVED AND STORED PER OWNER'S DIRECTION.

5. LIGHTING FIXTURE TYPE "B" SHALL BE WRIGHT LIGHT "S-2-140-RE" WITH 50-140 SYMMETRICAL REFLECTOR 2-FLUOR LAMPS & 277V. BALLAST. FIXTURES 24" OUT FROM WALL & UPTIGHT TO STRUCTURAL BEAMS. FIXTURE MOUNTING SHALL BE ADJUSTABLE IN HANGING ANGLE FROM VERTICAL TO HORIZONTAL. FIELD ADJUST ANGLE FOR MOST EVEN ILLUMINATION OF WALL WITH MINIMUM LIGHT ON CEILING STRUCTURE.

E-102: PARTIAL PLOT PLAN ELECTRICAL

SCALE: 1" = 30'-0"



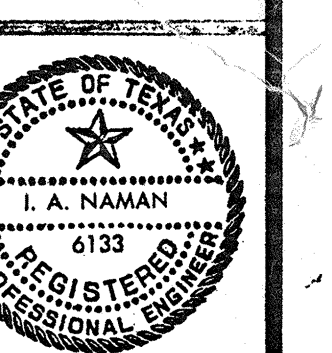
E-103 DETAIL: TYPE "A" FIXTURE - BASEMENT

NOT TO SCALE

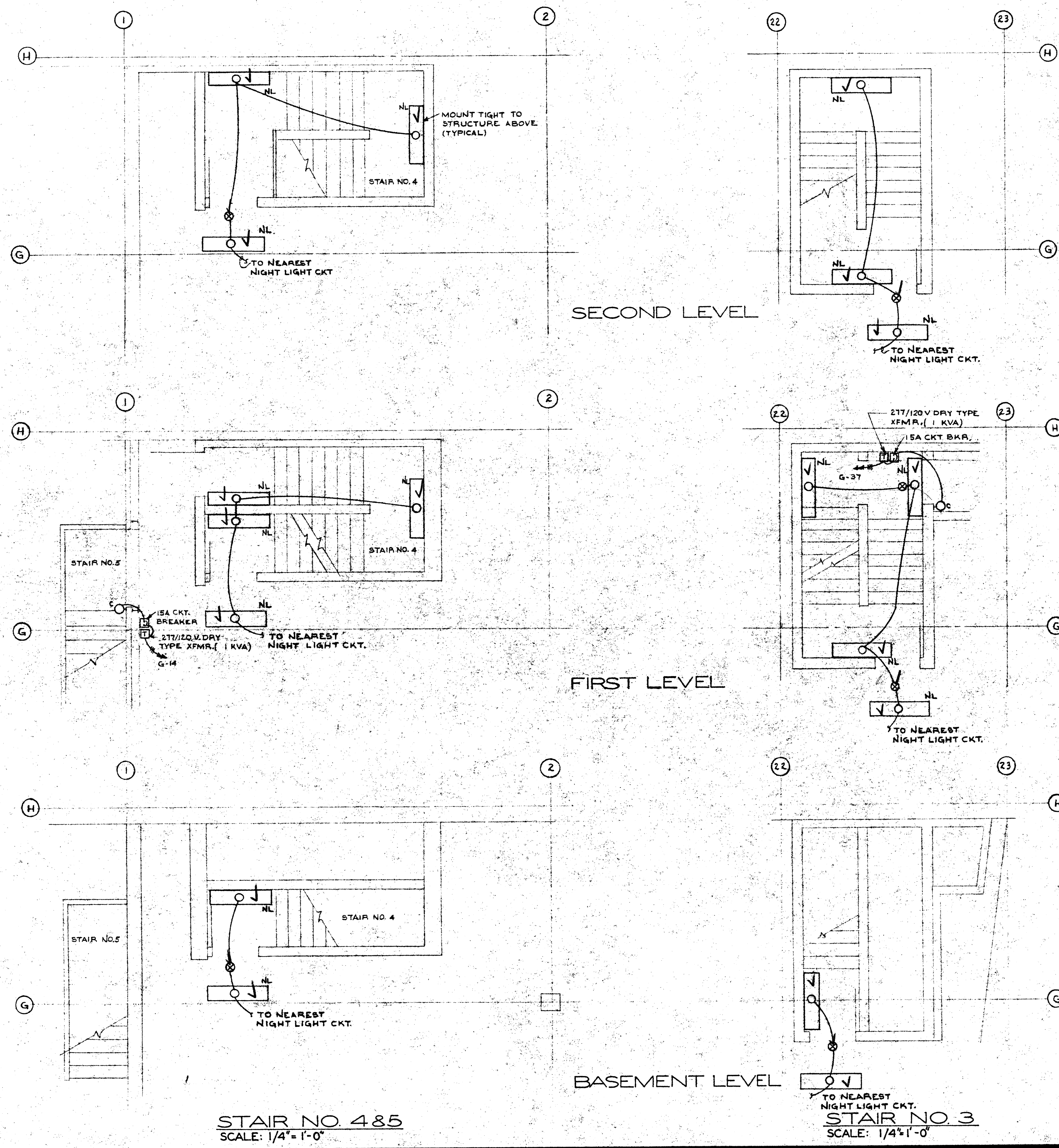
LLOYD, MORGAN & JONES A.I.A.
ARCHITECTS HOUSTON, TEXAS

FANNIN BANK GARAGE ADDITION
HOUSTON TEXAS

m+a I.A. NAMAN + ASSOCIATES, INC.
CONSULTING ENGINEERS
TWO GREENWAY PLAZA EAST HOUSTON, TEXAS 77046
2444 WILSHIRE BOULEVARD SANTA MONICA, CALIFORNIA 90403



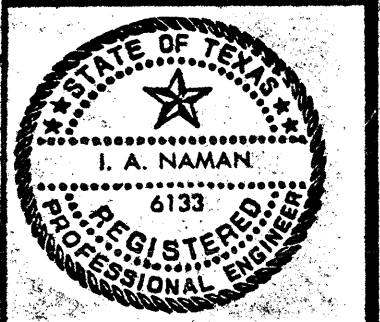
PROJECT
1224 E-1
22 JAN 78



- NOTES:
1. ALL FIXTURES TYPE A UNLESS NOTED OTHERWISE.
 2. TYPE C FIXTURE SHALL BE PERFECTLITE "VCSIGD" WALL MOUNTED WITH CAST GUARD.
 3. SEE NOTE 3 DRAWING E-1 FOR EXIT LIGHT.

ALSO REVISES DRAWINGS NO. E-2/E-3

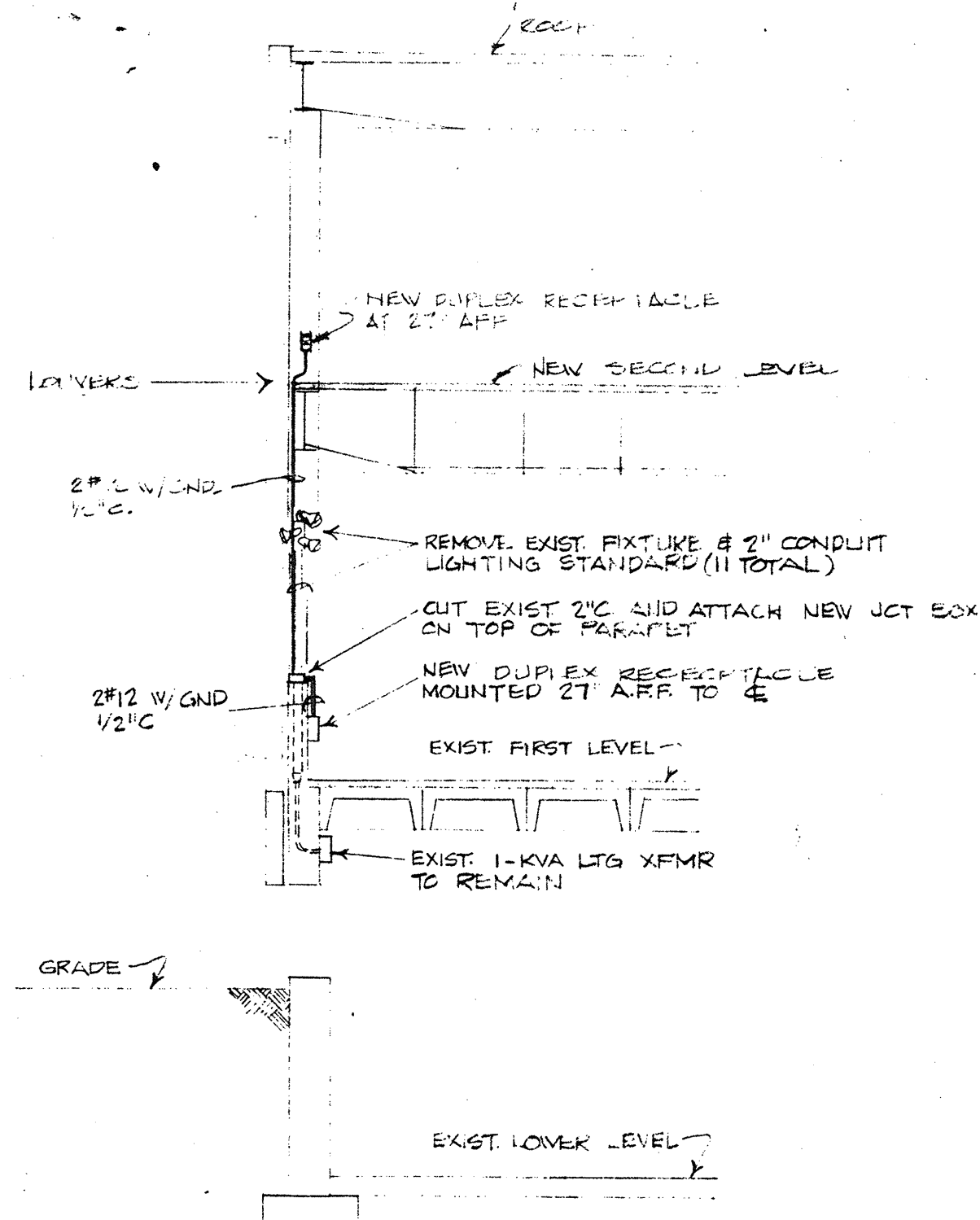
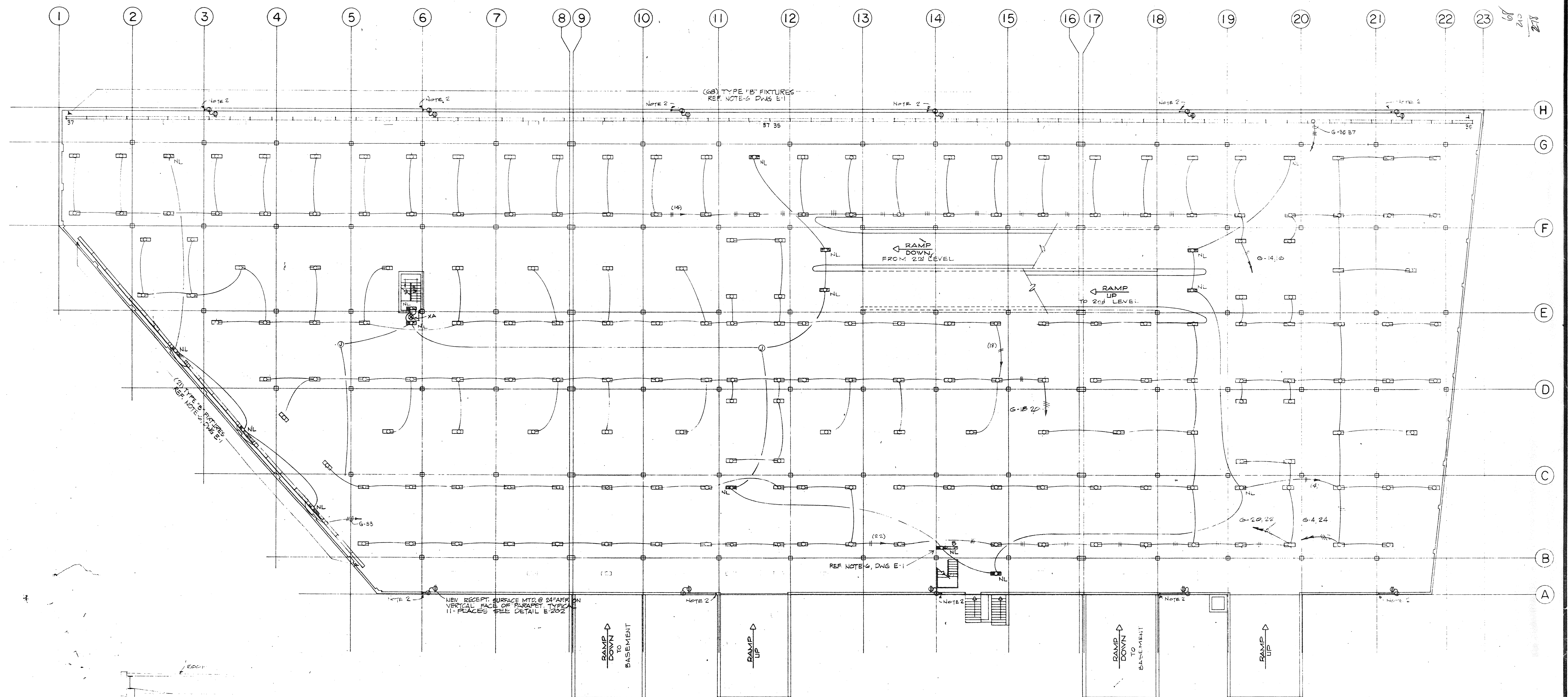
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PROJECT
1224 E-1A
5 APR 73



E- 201 EXISTING FIRST LEVEL PLAN

SCALE: 1/16"=1'-0"

NOTES: 1. ALL LIGHTING FIXTURES SHALL BE TYPE "A" UNLESS OTHERWISE NOTED.
2. CIRCUIT UP TO RECEPTACLE ON SECOND LEVEL.

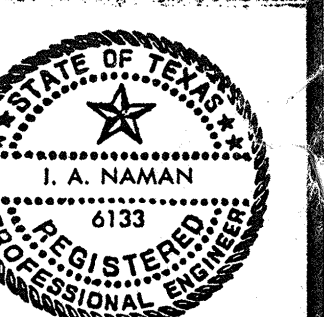
ELECTRICAL LOAD ANALYSIS

SERVICE VOLTAGE 277/480 VOLTS, 3Ø, 4 WIRE WYE					
OCCUPANCY AUTOMOBILE PARKING GARAGE					
AREA 254,300 SQUARE FEET					
LOAD DESCRIPTION	CODE LOAD (KVA)	CONNECTED LOAD (KVA)	DIVERSITY (%)	DESIGN LOAD (KVA)	REMARKS
LIGHTING	1.0	7.7	0	12.0	(254,300) x 12W/3 + 25%
RECEPTACLES		11.9	0	11.9	
SUMP PUMPS 2Ø 1 HP 25% LARGEST MOTOR		2.4	0	2.7	
				17.6	
176 KVA (1000) = 210 AMPS. 3(277)					

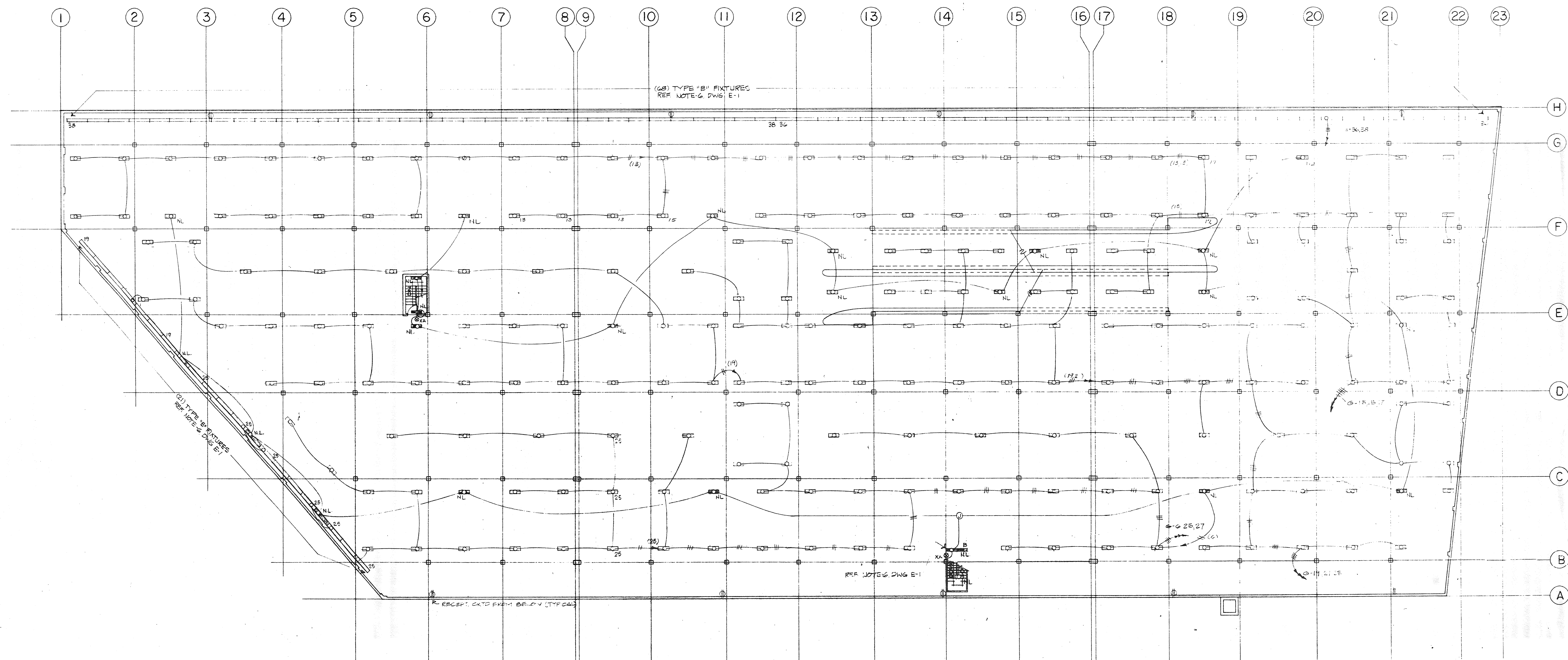
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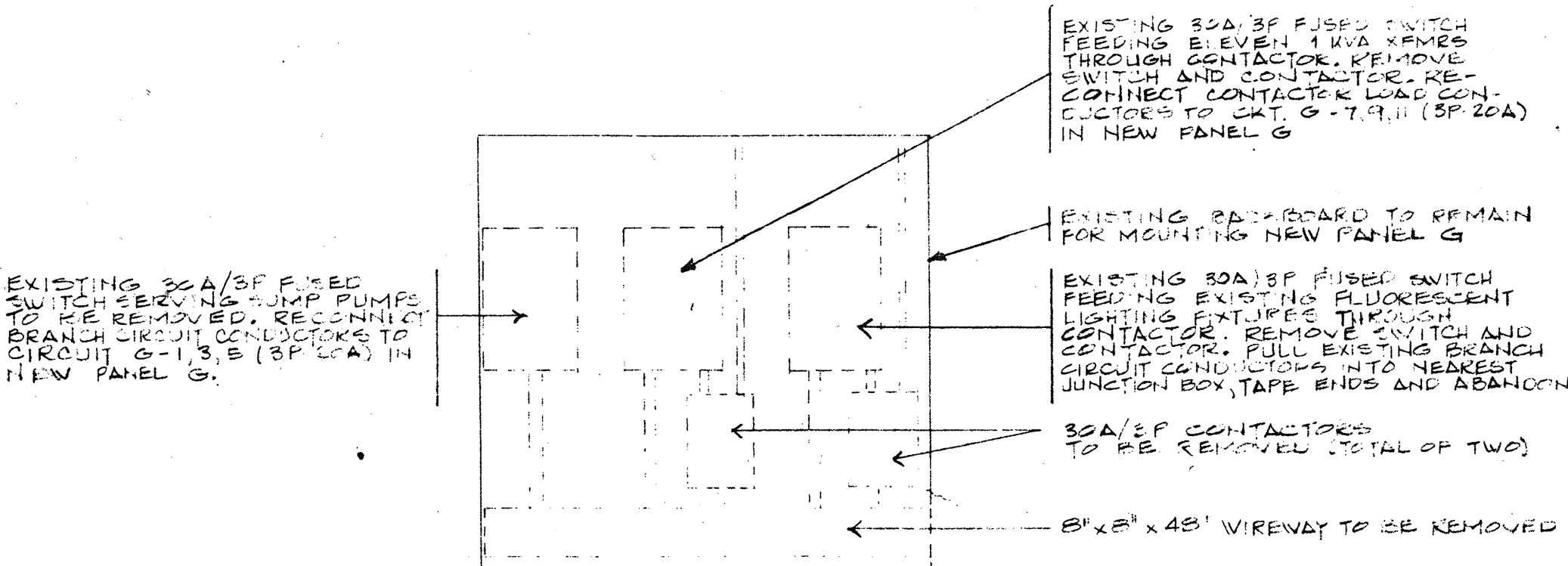


PROJECT
1224 E-2
22 JAN '78

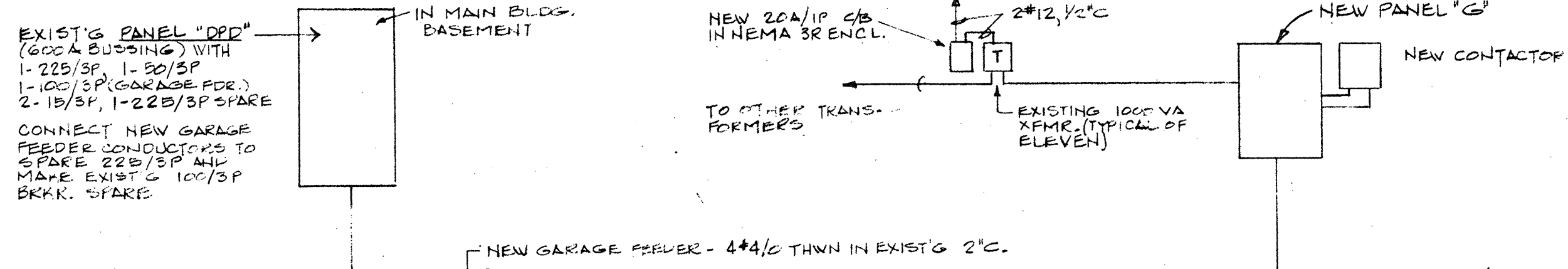


E-301 NEW SECOND LEVEL PLAN
SCALE: 1/16"=1'-0"

NOTES: 1. ALL LIGHTING FIXTURES SHALL BE TYPE "A" UNLESS OTHERWISE NOTED.




E-302 DETAIL DISPOSAL OF EXISTING GARAGE SERVICE EQUIPMENT
NOT TO SCALE



E-303 ELECTRICAL RISER DIAGRAM
NOT TO SCALE

NEMA 3R ENCLOSURE SUITABLE FOR SERVICE ENTRANCE				PANEL G				30-4W-277/480V. 225 AMP BUS			
LOAD AMPS	WIRE SIZE	SERVING	MAIN BREAKER	WIRE SIZE	SERVING	MAIN BREAKER	WIRE SIZE	LOAD AMPS	WIRE SIZE	SERVING	MAIN BREAKER
4	EXIST.	SUMP PUMPS	3P	1	2	NIGHT LTS	#10	10	4	EXIST.	SUMP PUMPS
4	EXIST.	2 @ 1 HP ea.	2P	3	4	NIGHT LTS	#12	10	4	EXIST.	2 @ 1 HP ea.
4	EXIST.	DRY-TYPE	3P	7	8	SPARE	#10	10	4	EXIST.	DRY-TYPE
12	EXIST.	XEMES.	2P	9	10	SPARE	#10	10	12	EXIST.	XEMES.
12	EXIST.			11	12	SPARE	#10	10	12	EXIST.	

WIRE SIZE	SERVING	WIRE SIZE	SERVING
#8	2ND LEVEL LIT.	#13	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#14	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#15	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#16	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#17	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#18	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#19	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#20	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#21	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#22	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#23	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#24	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#25	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#26	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#27	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#28	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#29	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#30	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#31	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#32	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#33	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#34	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#35	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#36	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#37	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#38	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#39	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#40	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#41	1ST LEVEL LIT.
#8	2ND LEVEL LIT.	#42	1ST LEVEL LIT.


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