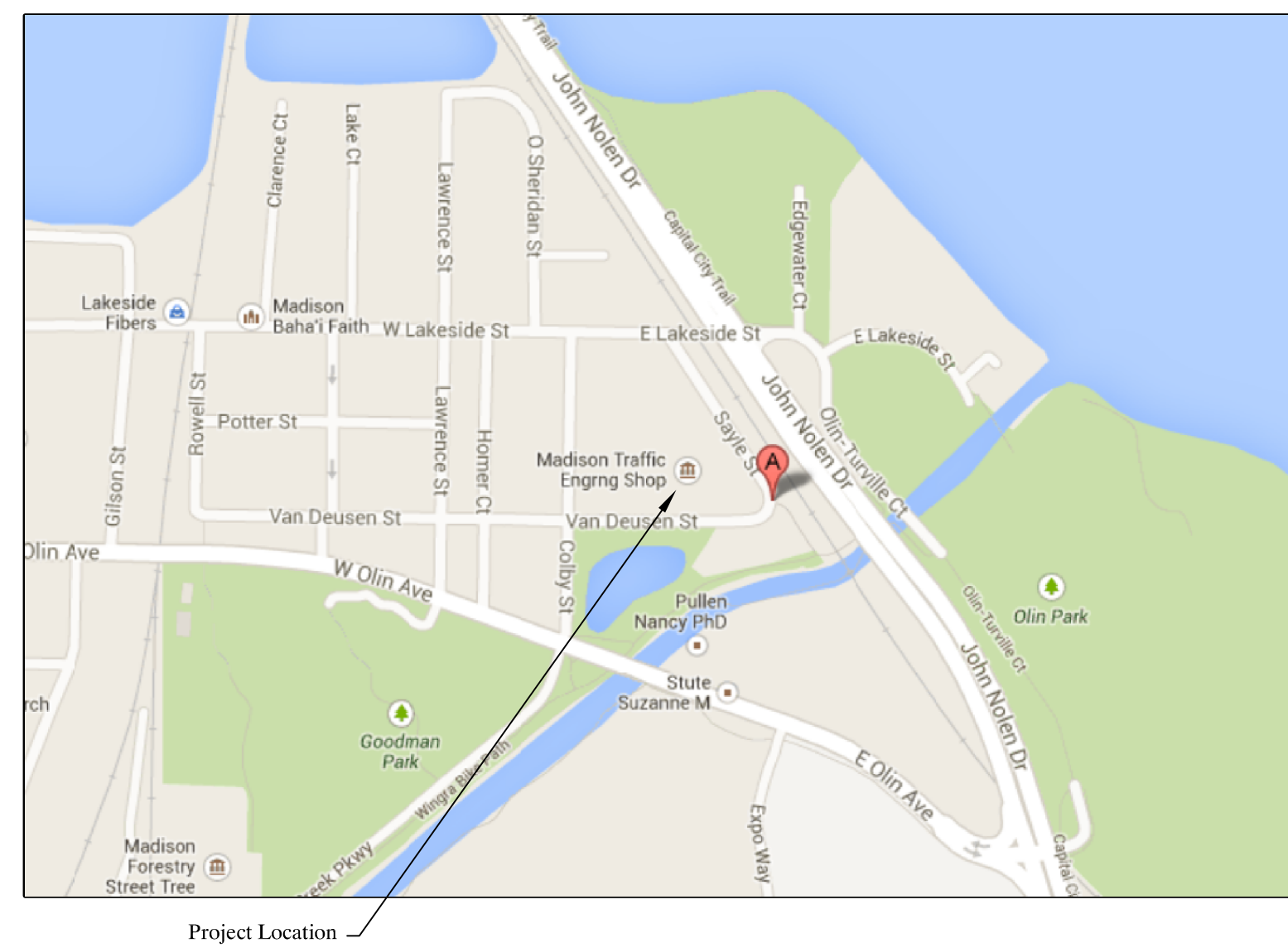


Traffic Engineering Electrical Upgrades - 2013 1120 Sayle St. Madison, Wisconsin

City of Madison Department of Engineering

City of Madison Project Number - 53W1671
City of Madison Contract Number - 7172



PROJECT LOCATION KEY
NO SCALE



PUBLIC IMPROVEMENT PROJECT APPROVED
RES-13-00667, ID; FILE ID 31140
September 3, 2013
BY THE COMMON COUNCIL OF MADISON,
WISCONSIN

PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

CITY ENGINEER

DATE

Project Manager: Kay Schindel, P.E.
City of Madison
Department of Engineering
Madison, Wisconsin

Project Engineer: Paul Zouski, P.E.
Clark Dietz, Inc. - Engineers
Wausau, Wisconsin

SHEET INDEX

SHEET	CONTENTS
T001	COVER SHEET AND INDEX
E001	OVERALL SITE PLAN
E101	ENLARGED BUILDING PLAN WITH EXISTING ELECTRICAL EQUIPMENT
E102	ENLARGED BUILDING PLAN WITH EXISTING ELECTRICAL EQUIPMENT
E201	ENLARGED BUILDING PLAN WITH NEW ELECTRICAL EQUIPMENT
E202	ENLARGED BUILDING PLAN WITH NEW ELECTRICAL EQUIPMENT
E501	EXISTING ONE LINE DIAGRAM
E502	NEW ONE LINE DIAGRAM

STAMP



PROJECT TITLE
**Traffic Engineering
Electrical Upgrades - 2013
1120 Sayle St.
Madison, WI**

DESIGNED BY: PLZ
DRAWN BY: PLZ
CHECKED BY: LMZ
DATE CHECKED: 9/3/13
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DATE REVISION

DRAWING TITLE
COVER SHEET AND INDEX

MADISON PROJECT No. 53W1671
MADISON CONTRACT No. 7172

DRAWING No.

T001

SHEET 1 OF 8 SHEETS

Traffic Engineering Operations Center

NOTES (THIS SHEET)

1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.
2. OVERALL SITE PLAN PROVIDED BY OTHERS. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL MEASUREMENTS AND DISTANCES.

Clark Dietz
ENGINEERS
510 N. 17TH AVE.
WAUSAU, WI 54401
PHONE : 715.845.1333
FAX : 715.848.9156



PROJECT TITLE
**Traffic Engineering
Electrical Upgrades - 2013**
1120 Sayle St.
Madison, WI

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DRAWING TITLE
OVERALL SITE PLAN

MADISON PROJECT No.
53W1671
MADISON CONTRACT No.
7172

DRAWING No.

E001

SHEET 2 OF 8 SHEETS



1 OVERALL SITE PLAN
1/16"=1'-0"

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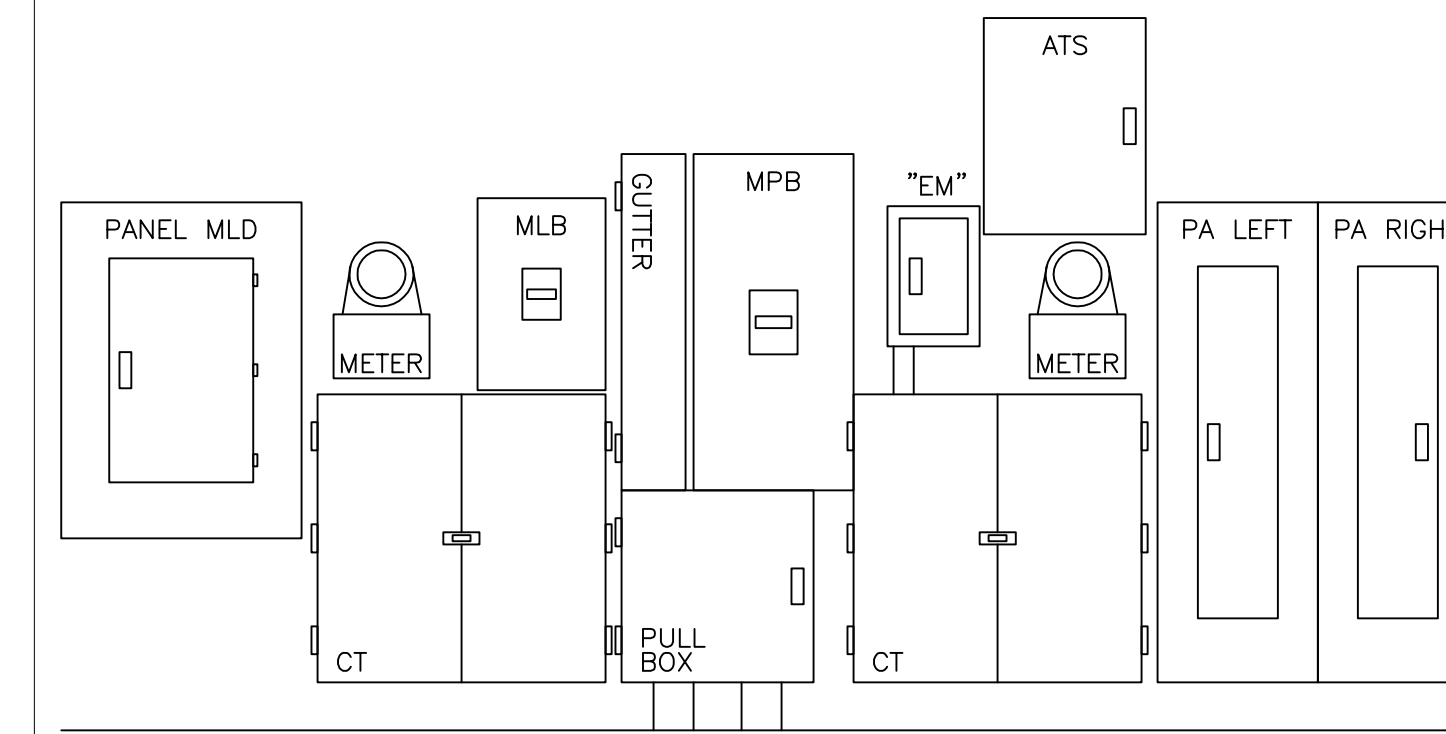
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NOTES (THIS SHEET)

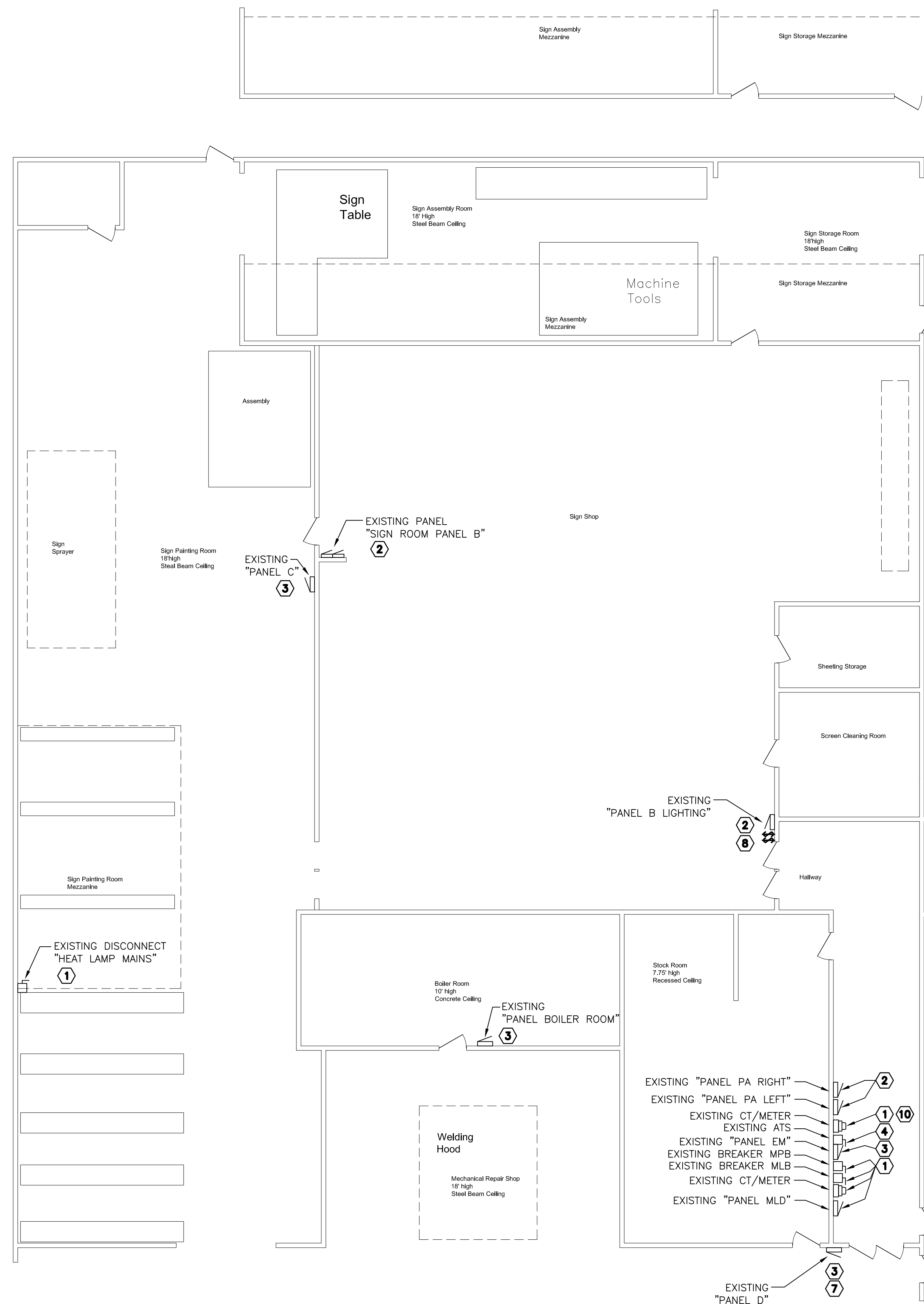
1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.

KEYNOTES (THIS SHEET)

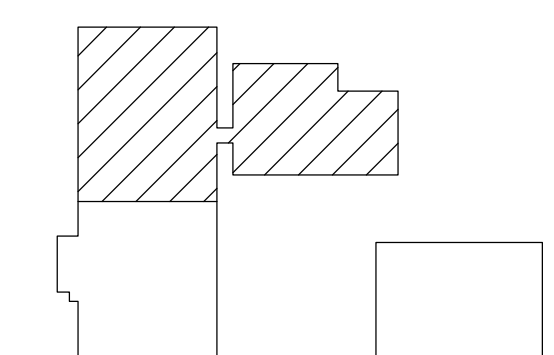
- EXISTING EQUIPMENT TO BE REMOVED COMPLETELY.
- EXISTING PANEL TO BE REMOVED AND REPLACED IN WHOLE AT THE SAME LOCATION.
- EXISTING PANEL TO BE REMOVED AND REPLACED IN WHOLE AT A NEW LOCATION.
- EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED TO A NEW LOCATION.
- EXISTING PANEL INTERIORS AND COVERS TO BE REMOVED AND REPLACED USING MANUFACTURED RETROFIT STYLE INTERIOR AND COVER.
- EXISTING PANEL TO REMAIN.
- REMOVE AND RELOCATE (2) EXISTING PRIVATE ELECTRICAL METERS CURRENTLY LOCATED ADJACENT TO PANEL D.
- DISCONNECT EXISTING SURFACE MOUNT LIGHT SWITCHES CONNECTED TO EXISTING SURFACE MOUNT PANEL.
- EXISTING GENERATOR DISCONNECT TO BE REMOVED AND REPLACED AT NEW LOCATION.
- SEE 2/E101 FOR ELEVATION OF EXISTING SERVICES.



2 EXISTING SERVICES ELEVATION
NTS



1 ENLARGED BUILDING PLAN WITH EXISTING ELECTRICAL EQUIPMENT
1/8"=1'-0"



KEY PLAN

Clark Dietz
ENGINEERS

510 N. 17TH AVE.
WAUSAU, WI 54401
PHONE : 715.845.1333
FAX : 715.848.9158



PROJECT TITLE
**Traffic Engineering
Electrical Upgrades - 2013**
1120 Sayle St.
Madison, WI

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DATE	REVISION

DRAWING TITLE
**ENLARGED BUILDING PLAN
WITH EXISTING ELECTRICAL
EQUIPMENT**

MADISON PROJECT No.
53W1671
MADISON CONTRACT No.
7172

DRAWING No.

E101

SHEET 3 OF 8 SHEETS

1

2

3

4

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D

C

B

A

NOTES (THIS SHEET)

- 1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.

KEYNOTES (THIS SHEET)

- 1. EXISTING EQUIPMENT TO BE REMOVED COMPLETELY.
- 2. EXISTING PANEL TO BE REMOVED AND REPLACED IN WHOLE AT THE SAME LOCATION.
- 3. EXISTING PANEL TO BE REMOVED AND REPLACED IN WHOLE AT A NEW LOCATION.
- 4. SECTION REMOVED TO FIT PLAN SHEET. SEE OVERALL SITE PLAN FOR ACCURATE DEPICTION OF DISTANCE.

Clark Dietz
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PHONE : 715.845.1333
FAX : 715.848.9158



PROJECT TITLE
**Traffic Engineering
Electrical Upgrades - 2013
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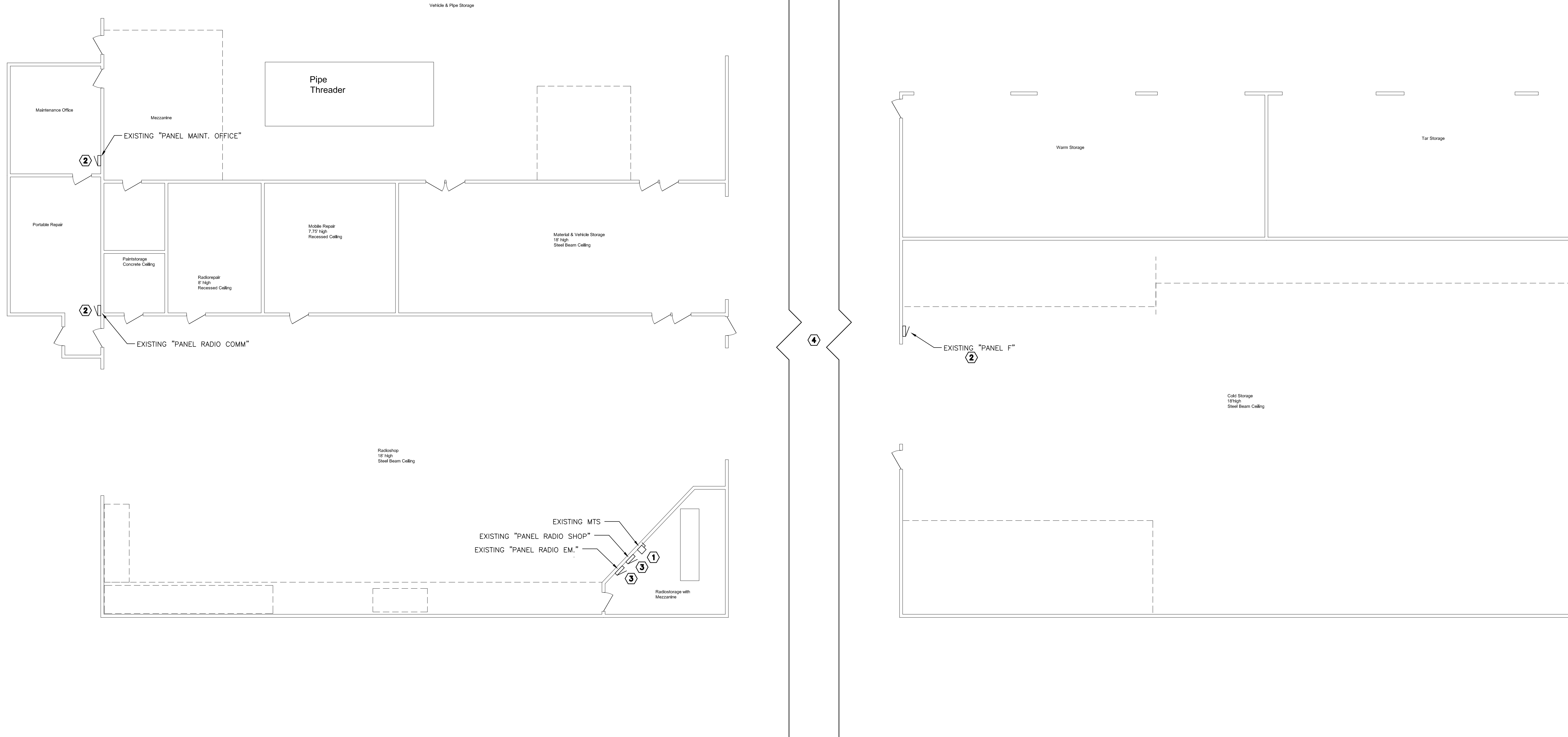
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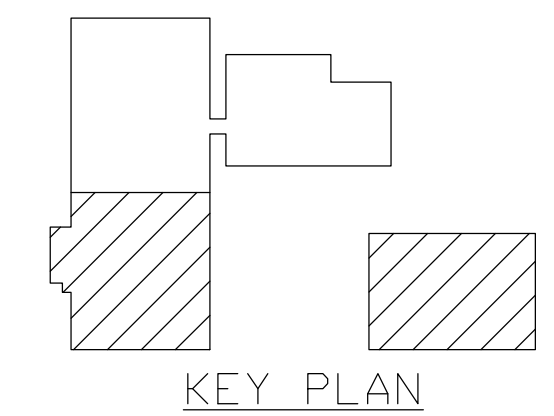
DRAWING TITLE
**ENLARGED BUILDING PLAN
WITH EXISTING ELECTRICAL
EQUIPMENT**

MADISON PROJECT No.
53W1671
MADISON CONTRACT No.
7172

DRAWING No.
E102
SHEET 4 OF 8 SHEETS



1 ENLARGED BUILDING PLAN WITH EXISTING ELECTRICAL EQUIPMENT
1/8"=1'-0"



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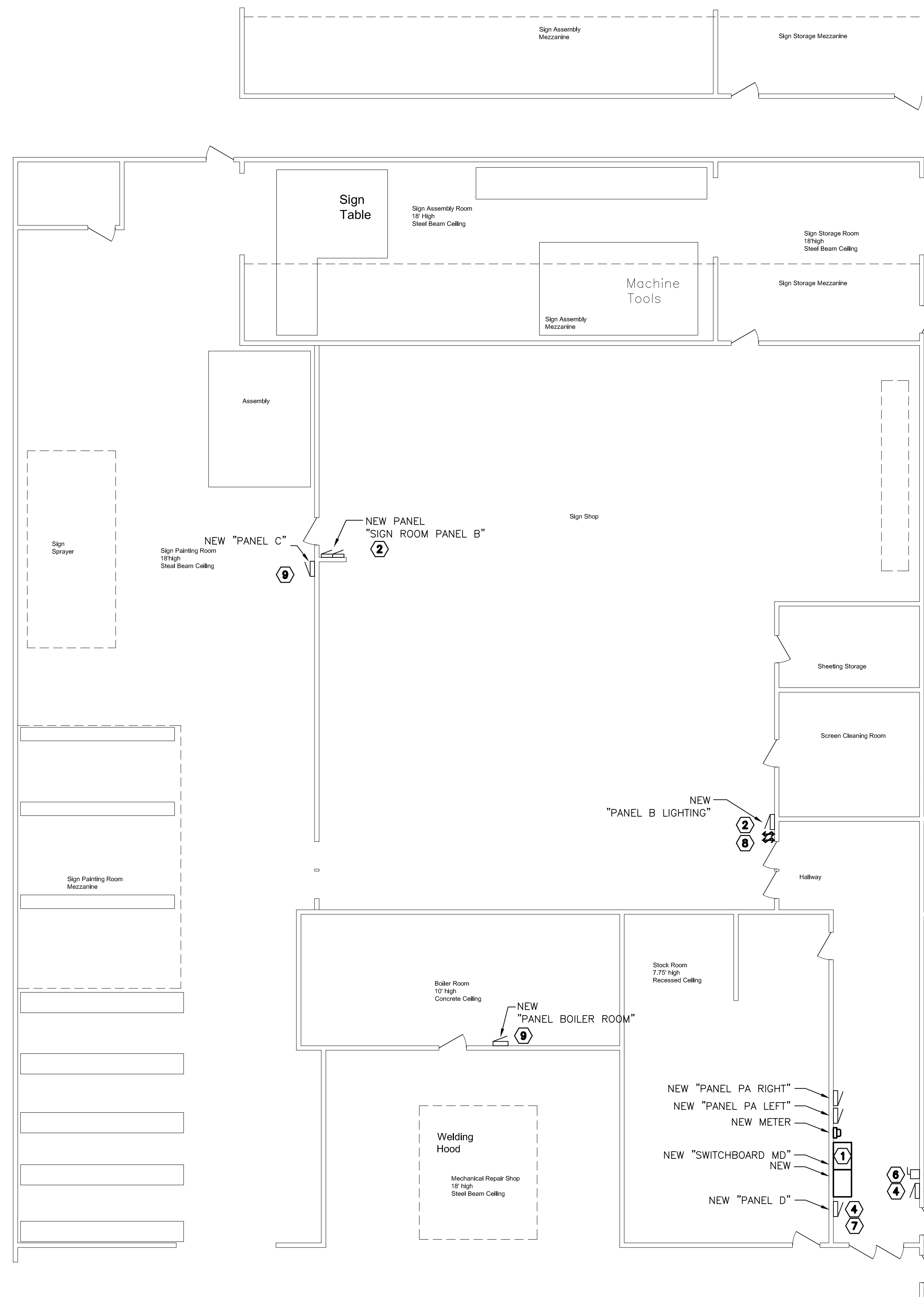
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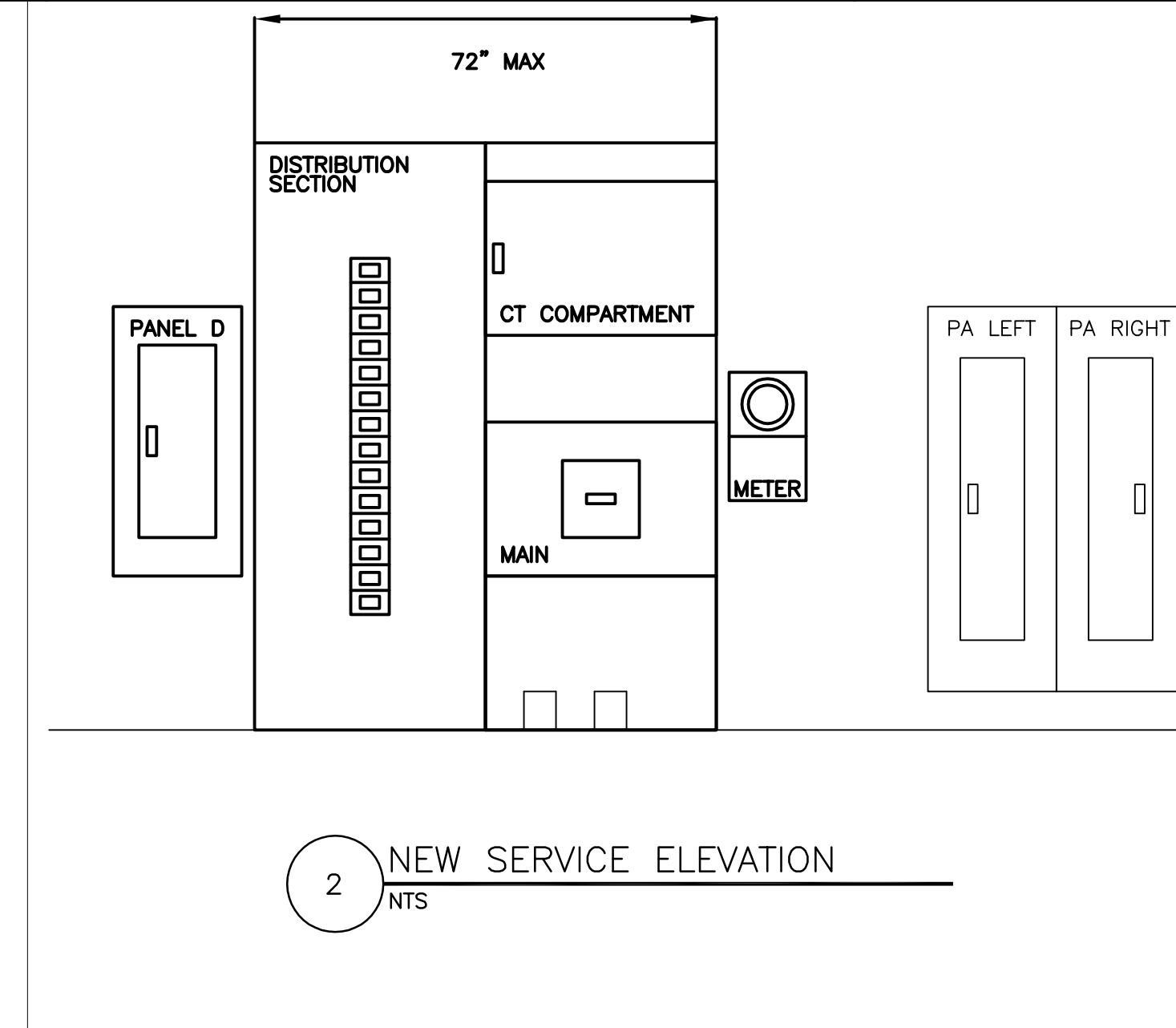
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1 ENLARGED BUILDING PLAN WITH NEW ELECTRICAL EQUIPMENT
1/8"=1'-0"



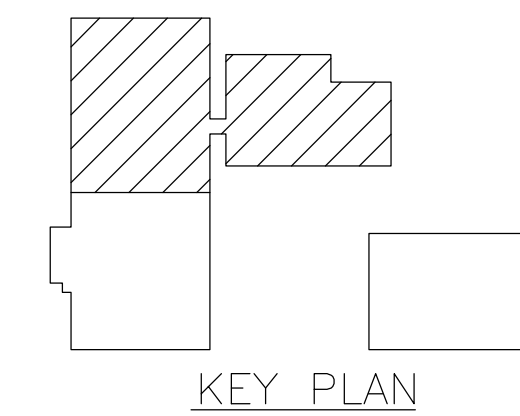
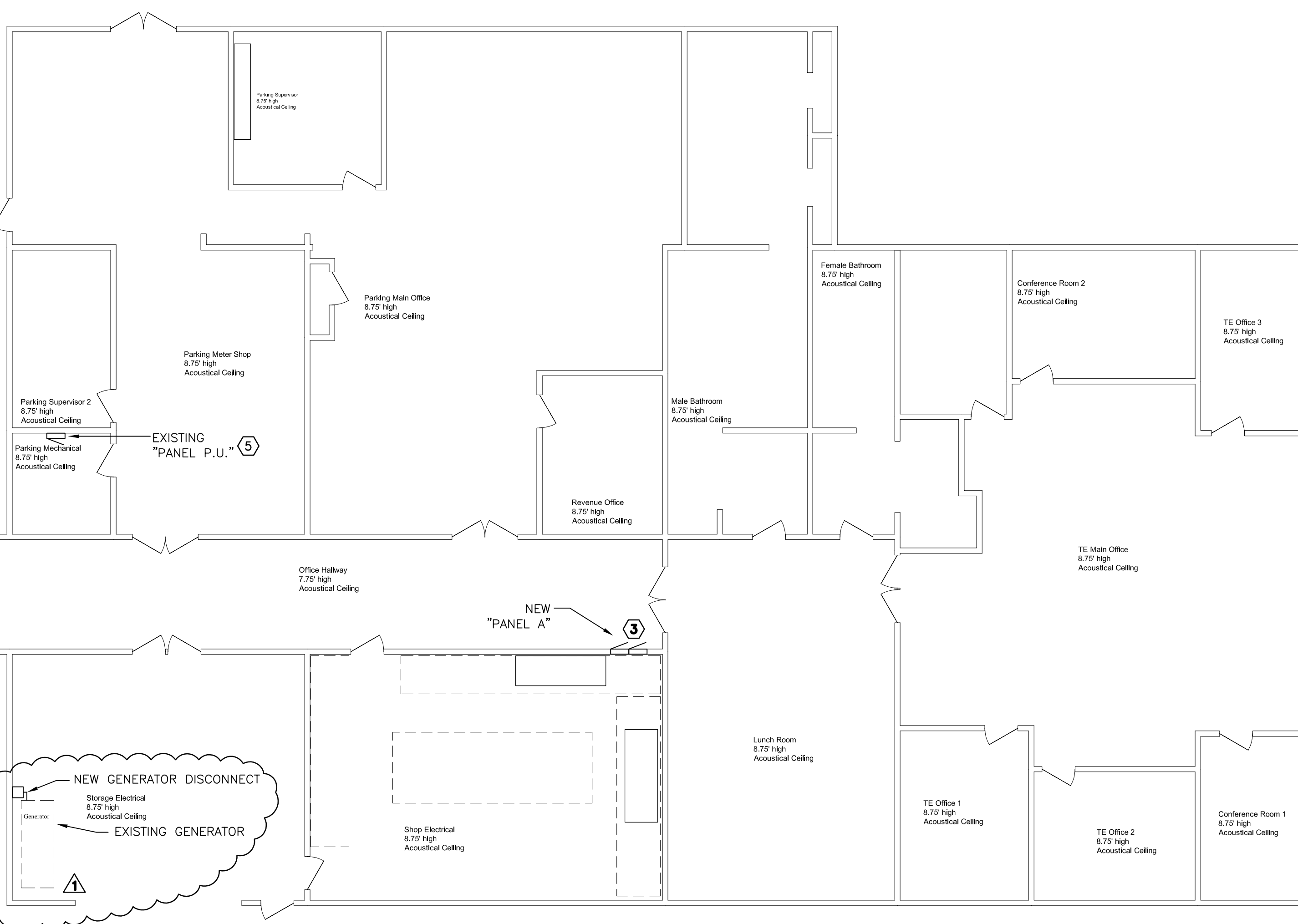
2 NEW SERVICE ELEVATION
NTS

NOTES (THIS SHEET)

1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.

KEYNOTES (THIS SHEET)

1. NEW TWO SECTION SERVICE ENTRANCE SWITCHBOARD. SEE 2/E201 FOR NEW SERVICE ELEVATION.
2. NEW PANEL LOCATED IN THE SAME LOCATION AS THE EXISTING PANEL. SEE SHEET E502 FOR DETAILS OF THE NEW PANEL INSTALLATION.
3. INSTALL NEW PANEL A USING A MANUFACTURED RETROFIT STYLE PANELBOARD INTERIORS AND TRIMS TO REUSE EXISTING FLUSH MOUNT TUBS. ELECTRICAL CONTRACTOR TO REMOVE EXISTING BLOCK AS REQUIRED TO PROVIDE NEW OVERHEAD FEED TO EXISTING TUBS. WALL PATCH WILL BE PERFORMED UNDER A SEPARATE CONTRACT.
4. INSTALL NEW PANEL AT NEW LOCATION SHOWN. SEE SHEET E502 FOR DETAILS OF THE NEW PANEL INSTALLATION.
5. EXISTING PANEL AND FEEDER TO REMAIN. EXTEND FEEDER TO NEW DISTRIBUTION. SEE SHEET E502 FOR ADDITIONAL INFORMATION.
6. NEW LOCATION OF EXISTING AUTOMATIC TRANSFER SWITCH.
7. RELOCATE (2) EXISTING PRIVATE ELECTRICAL METERS ADJACENT TO NEW PANEL D LOCATION.
8. RECONNECT EXISTING SURFACE MOUNT LIGHT SWITCHES TO NEW PANEL.
9. INSTALL NEW PANEL ADJACENT TO THE LOCATION OF THE EXISTING PANEL. SEE SHEET E502 FOR DETAILS OF THE NEW PANEL INSTALLATION.



PROJECT TITLE
**Traffic Engineering
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9/13/13 **ADDENDUM 1**

DATE	REVISION

DRAWING TITLE
**ENLARGED BUILDING PLAN
WITH NEW ELECTRICAL
EQUIPMENT**

MADISON PROJECT No.
53W1671
MADISON CONTRACT No.
7172

DRAWING No.
E201
SHEET 5 OF 8 SHEETS

1

2

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NOTES (THIS SHEET)

- 1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.
- 2. NEW CONDUITS AND TERMINATIONS AT BUILDING C TO BE RATED FOR WET LOCATIONS.

KEYNOTES (THIS SHEET)

- 1. NEW PANEL LOCATED IN THE SAME LOCATION AS THE EXISTING PANEL. SEE SHEET E502 FOR DETAILS OF THE NEW PANEL INSTALLATION.
- 2. INSTALL NEW PANEL AT NEW LOCATION SHOWN. SEE SHEET E502 FOR DETAILS OF THE NEW PANEL INSTALLATION.
- 3. SECTION REMOVED TO FIT PLAN SHEET. SEE OVERALL SITE PLAN FOR ACCURATE DEPICTION OF DISTANCE.
- 4. INSTALL NEW OVERHEAD FEEDER FOR PANEL F FROM NEW DISTRIBUTION TO RADIO STORAGE. RUN NEW CONDUIT DOWN THE INTERIOR OF THE MAIN BUILDING. PENETRATE THE WALL MINIMUM 24" ABOVE EXTERIOR GRADE AND TRANSITION TO UNDERGROUND CONDUIT. PROVIDE PULL BOXES OR CONDULETS SIZED PER NEC. SEAL BUILDING PENETRATION PER SPECIFICATIONS.
- 5. TRENCH FOR NEW FEEDER SHALL BE LOCATED OUTSIDE THE EXISTING CHAIN LINK FENCE. ASPHALT CHOP AND PATCH, EXCAVATION, BACKFILL, AND COMPACTION TO BE PERFORMED BY THE CITY OF MADISON. ELECTRICAL CONTRACTOR TO INSTALL NEW CONDUIT AND CONDUCTORS. FINAL LOCATION TO BE SELECTED BY THE CITY TO ALLOW REGULAR TRAFFIC ENGINEERING OPERATIONS.
- 6. NEW UNDERGROUND FEEDER FOR PANEL F TO PENETRATE THE EXTERIOR WALL OF THE BUILDING MINIMUM 24" ABOVE EXTERIOR GRADE AND TRANSITION TO OVERHEAD FEEDER INSIDE OF THE BUILDING. PROVIDE PULL BOXES OR CONDULETS SIZED PER NEC. SEAL BUILDING PENETRATION PER SPECIFICATIONS.
- 7. DISCONNECT AND REMOVE EXISTING JUNCTION BOXES, DEVICES, AND DISCONNECTS ATTACHED TO THE EXISTING PANEL. PROVIDE AND INSTALL NEW EQUIPMENT AS REQUIRED TO MEET WET LOCATION REQUIREMENTS.



PROJECT TITLE
**Traffic Engineering
 Electrical Upgrades - 2013**
 1120 Sayle St.
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9/13/13 **ADDENDUM 1**

DATE	REVISION

DRAWING TITLE
**ENLARGED BUILDING PLAN
 WITH NEW ELECTRICAL
 EQUIPMENT**

MADISON PROJECT No. 53W1671
 MADISON CONTRACT No. 7172

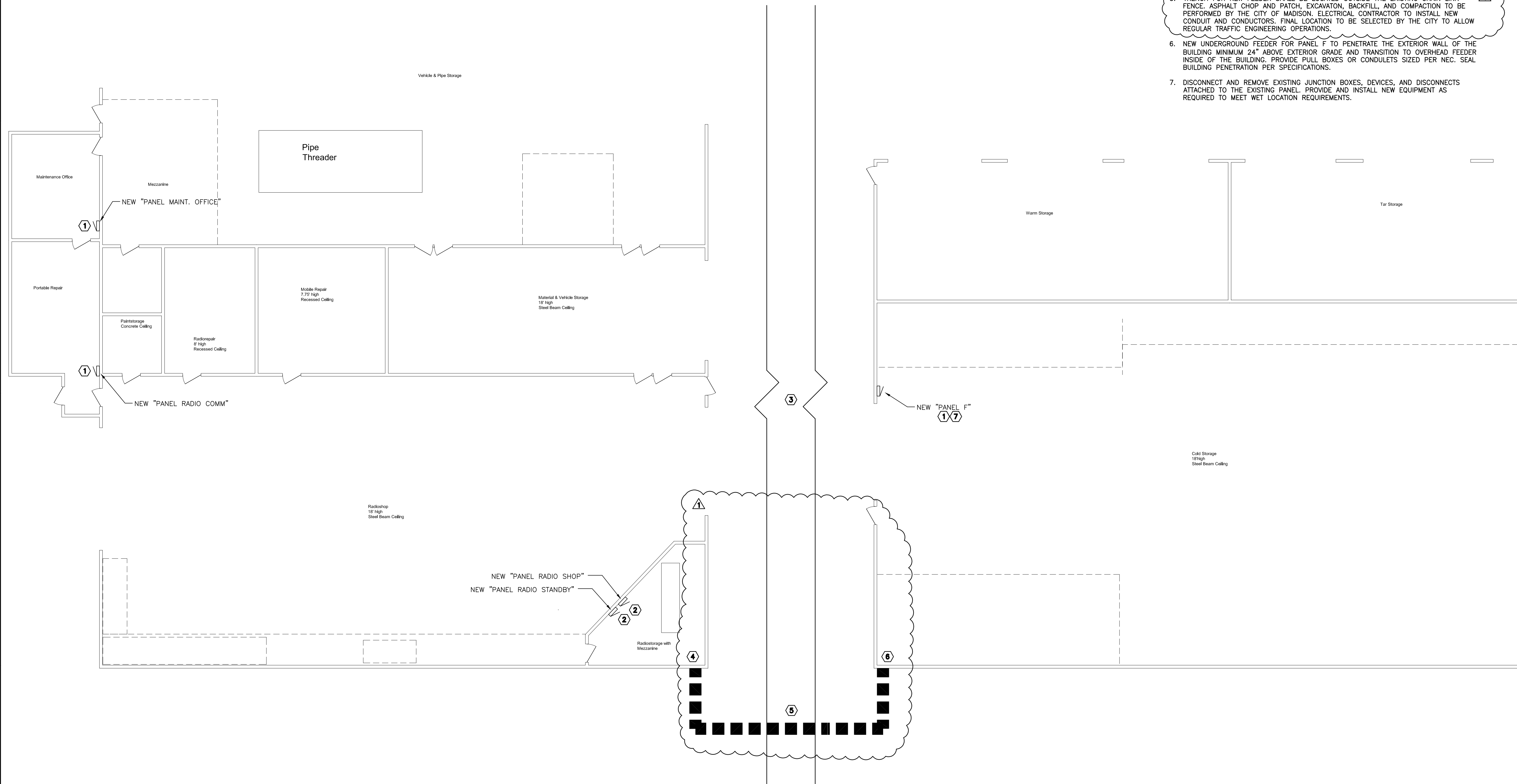
DRAWING No.
E202
 SHEET 6 OF 8 SHEETS

D

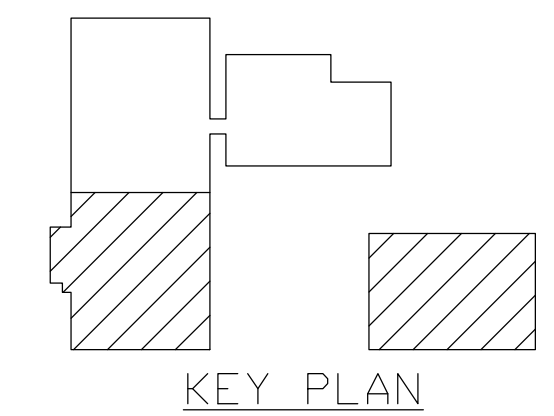
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1 ENLARGED BUILDING PLAN WITH NEW ELECTRICAL EQUIPMENT
 1/8"=1'-0"

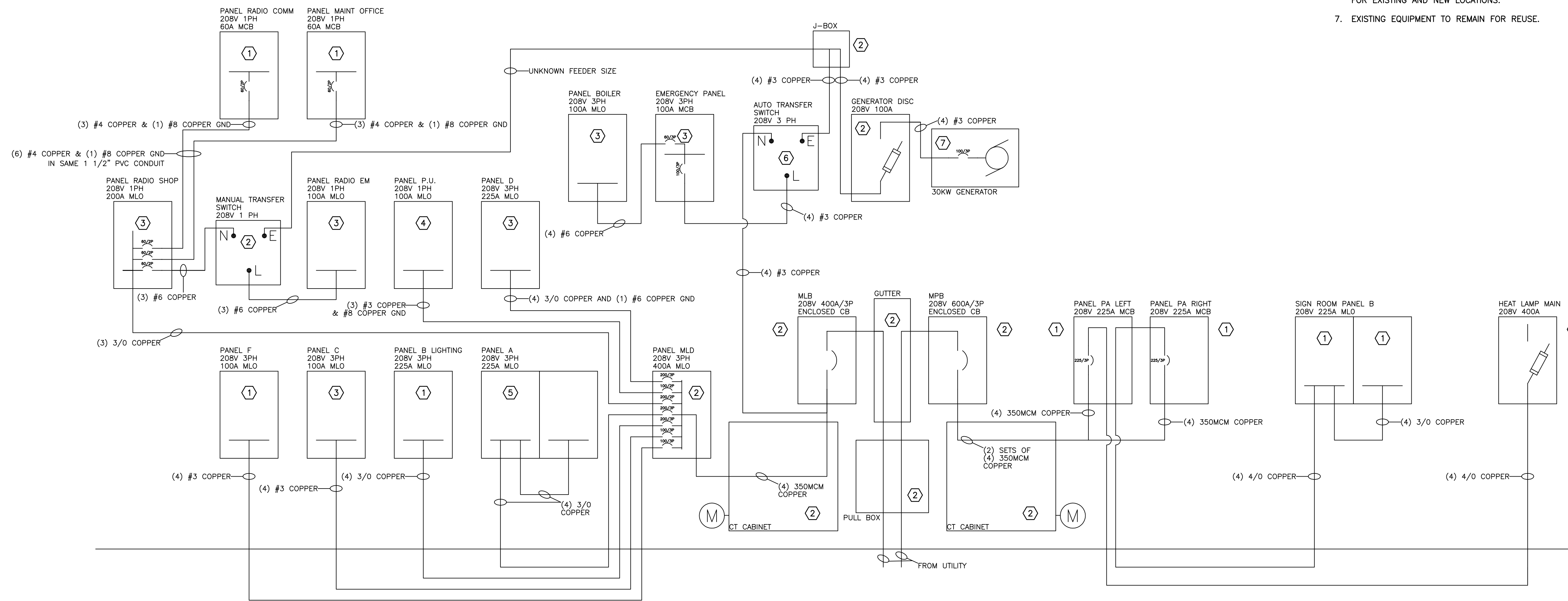


NOTES (THIS SHEET)

- 1. REFER TO SPECIFICATION SECTION 26 05 01 FOR DETAILS ON SCOPE OF WORK, POWER OUTAGES, AND OVERTIME REQUIREMENTS.
- 2. THE CONDITION AND CONTINUITY OF THE EXISTING GROUNDING SYSTEM IS UNVERIFIED. USE APPROPRIATE PRECAUTION WHEN CONTACTING ALL EXISTING ELECTRICAL EQUIPMENT.
- 3. ALL EXISTING EQUIPMENT AND FEEDERS SHOWN TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED. ALL REMOVED COPPER CONDUCTORS SHALL BE TURNED OVER TO THE CITY. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL OTHER REMOVED EQUIPMENT AND MATERIALS.

KEYNOTES (THIS SHEET)

- 1. COMPLETELY REMOVE EXISTING PANELBOARD INTERIOR, TUB, FEEDER WIRE, AND CONDUIT. CAREFULLY PROTECT EXISTING BRANCH CIRCUITS FOR RECONNECTION AT THE NEW PANELBOARD TO BE INSTALLED AT THE SAME LOCATION.
- 2. COMPLETELY REMOVE EXISTING EQUIPMENT, ASSOCIATED FEEDER WIRE, AND CONDUIT.
- 3. COMPLETELY REMOVE EXISTING PANELBOARD INTERIOR, TUB, FEEDER WIRE, AND CONDUIT. INSTALL NEW JUNCTION BOX(ES) AS REQUIRED TO EXTEND EXISTING CIRCUITS TO THE NEW PANEL LOCATION. EXISTING TUB SHALL NOT BE USED AS A JUNCTION BOX. SEE SHEETS E102 AND E502 FOR ADDITIONAL DETAILS.
- 4. EXISTING PANELBOARD AND FEEDER TO REMAIN. INSTALL JUNCTION BOX AND EXTEND EXISTING FEEDER TO NEW DISTRIBUTION. SEE SHEETS E102 AND E502 FOR ADDITIONAL DETAILS.
- 5. COMPLETELY REMOVE EXISTING PANELBOARD INTERIOR AND FEEDER WIRE. CAREFULLY PROTECT EXISTING BRANCH CIRCUITS FOR RECONNECTION AT THE NEW PANELBOARD TO BE INSTALLED UTILIZING EXISTING FLUSH MOUNT TUBS.
- 6. REMOVE AND REINSTALL EXISTING AUTOMATIC TRANSFER SWITCH. SEE FLOOR PLANS FOR EXISTING AND NEW LOCATIONS.
- 7. EXISTING EQUIPMENT TO REMAIN FOR REUSE.



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DRAWING TITLE
EXISTING ONE LINE DIAGRAM

MADISON PROJECT No. 53W1671
 MADISON CONTRACT No. 7172
 DRAWING No.

E501

