

O'REILLY AUTO PARTS (INCLUDING INTERIOR BUILD-OUT)

DOLTON PLAZA

1317 E. SIBLEY BLVD., DOLTON, IL 60419

FOR: DEPARTMENT PROPERTY GROUP, LLC
200 W. MADISON ST. SUITE 4200 CHICAGO, IL 60606

SPECIFICATIONS

The drawings and specifications are intended to illustrate and describe a complete job in every respect. Contractors are cautioned to familiarize themselves with existing conditions on the premises as, after contracts are signed, no extras will be allowed for any labor and/or materials necessary to complete the work.

CONDITIONS

- I-1 THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENTS A-201, LATEST EDITION, ARE ADOPTED AS PART OF THE CONTRACT DOCUMENTS AND SHALL GOVERN ALL DIVISIONS AND SECTIONS OF THE SPECIFICATIONS AND THE WORK.
- I-2 THE WORK, INCLUDING LABOR AND MATERIALS, SHALL COMPLY WITH THE FOLLOWING:
 - THESE DRAWINGS & SPECIFICATIONS
 - ALL APPLICABLE CODES, ORDINANCE AND REGULATIONS, STATE AND LOCAL,
 - MANUFACTURER'S SPECS, AND TRADE ASSOCIATION RECOMMENDATIONS,
 - INDUSTRY ACCEPTED ENGINEERING AND CONSTRUCTION PRACTICES.
- I-3 DRAWINGS & SPECIFICATIONS ARE, AND SHALL BE CONSIDERED AS COOPERATIVE AND CONSONANT, WORK MENTIONED OR INDICATED ON ONE AND NOT THE OTHER SHALL BE INCLUDED AND SUPPLIED AS THOUGH FULLY COVERED BY BOTH. IN CASE OF OVERLAPPING OR CONFLICTING REQUIREMENTS, THE MOST STRINGENT (GENERALLY MOST COSTLY) APPLIES AND WILL BE ENFORCED. ONLY ITEMS DEFINITELY NOTED "NOT IN CONTRACT," "N.I.C." "BY OTHERS," OR "BY OWNER," ARE NOT INCLUDED IN THE CONTRACT.
- I-4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERINTENDENCE OF THE JOB AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL THE WORK OF ALL TRADES TO SEE THAT IT IS BEING PROVIDED IN STRICT ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ANY DISCREPANCIES OCCUR IN ANY OF THE WORK.
- I-5 THE CONTRACTOR SHALL SUBMIT A SWORN CONTRACTOR'S AFFIDAVIT INCLUDING THE NAMES OF ALL PARTIES FURNISHING MATERIALS AND LABOR, AND SHALL ALSO SUBMIT PARTIAL AND FINAL WAIVERS. SUB-CONTRACTORS SHALL SUBMIT PARTIAL WAIVERS OF LIEN, OR FINAL WAIVERS, IN AMOUNT AT LEAST EQUAL TO THE NET PAYOUT REQUEST.
- I-6 THE CONTRACTOR SHALL PURCHASE INSURANCE PRODUCTS IN THE FOLLOWING MANNER AND AMOUNTS:
 - GENERAL LIABILITY \$2,000,000 MIN. EA. OCCURENCE WITH A GENERAL AGGREGATE LIMIT OF \$4,000,000.
 - AUTO LIABILITY \$1,000,000 MIN.
 - EXCESS UMBRELLA LIABILITY \$3,000,000 MIN.
 - WORKMANS COMP. IN THE REQUIRED STATUTORY AMOUNT, NO LESS THAN \$500,000.
 - HOLD HARMLESS THE OWNER & ARCHITECT, FOR DAMAGE TO PROPERTY AND/OR PERSONNEL INJURIES ARISING FROM THE WORK, FROM ALL CLAIMS OR LOSSES.
 - IMMEDIATELY PROVIDE G & H WITH THREE COPIES OF EACH CERTIFICATE OF INSURANCE THAT NAMES G & H DEVELOPERS CORPORATION AND OWNER OF RECORD AS ADDITIONAL INSURED ON A PRIMARY, NON-CONTRIBUTORY BASIS, UNDER AN OCCURRENCE BASED POLICY IN THE AMOUNTS ABOVE AND WITH A WAIVER OF SUBROGATION ENDORSEMENT IN FAVOR OF SUCH ADDITIONAL INSURED, ALONG WITH DESIGNATING THE LOCATION AND NAME OF THE PROJECT UNDER DESCRIPTION ON THIS CERTIFICATE. PAYMENT FOR YOUR FIRST BILLING WILL NOT BE RELEASED UNTIL A CERTIFICATE AND COMPLETE CERTIFICATE IS RECEIVED. ALSO, YOU ARE REQUIRED TO DEFEND, INDEMNIFY AND HOLD HARMLESS G & H DEVELOPERS CORPORATION FROM ANY LOSS, DAMAGE, COST, OR EXPENSE (INCLUDING REASONABLE ATTORNEYS' FEES) DUE TO ANY BREACH OF YOUR SUBCONTRACT, OR NEGLIGENCE, BY YOU OR YOUR AGENTS, EMPLOYEES OR SUB-SUBCONTRACTORS.
- I-7 ON SITE VERIFICATION OF ALL DIMENSION & CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE DRAWINGS ARE REASONABLY ACCURATE FOR FIGURING PURPOSES ONLY. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR QUESTIONS ARISING FROM JOB CONDITIONS OR THESE DRAWINGS.
- I-8 DO NOT SCALE DRAWINGS
- I-9 COST OF WORK SHALL INCLUDE ALL SALES TAXES. CONTRACTOR SHALL PAY FOR PERMIT.
- I-10 SUBSTITUTIONS AND EXTRAS ONLY FOR WORK APPROVED IN WRITING BY OWNER AND ARCHITECT.
- I-11 THE OWNER WILL MAINTAIN A BUILDER'S RISK FIRE INSURANCE POLICY WITH EXTENDED COVERAGE PLUS VANDALISM AND MALICIOUS MISCHIEF COVERAGE.
- I-12 CONTRACTOR SHALL REMOVE ALL DEBRIS AND LEAVE THE JOB BROOM CLEAN.
- I-13 THE WORK SHALL BE GUARANTEED FOR ONE YEAR FROM COMPLETION AND APPROVAL DATE UNLESS NOTED OTHERWISE HEREIN.

GENERAL NOTES

1. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENT A-201, CURRENT EDITION, ARE ADOPTED AS PART OF THE CONTRACT DOCUMENTS AND SHALL GOVERN ALL DIVISIONS AND SECTIONS OF THE SPECIFICATIONS AND THE WORK.
2. THE CONTRACTOR SHALL INSPECT AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE AND REPORT ANY DISCREPANCIES FROM THESE DRAWINGS TO THE ARCHITECT.
3. THE MEASUREMENTS ON THESE DRAWINGS ARE REASONABLY ACCURATE FOR THE PURPOSE OF FIGURING. HOWEVER, IN THE EXECUTION OF WORK ON THE JOB, EACH CONTRACTOR IS TO VERIFY ALL DIMENSIONS WITH ACTUAL CONDITIONS.
4. DO NOT SCALE DRAWINGS.
5. INTERIOR PARTITIONS SHALL BE CONSTRUCTED OF METAL STUDS SIZE AND SPACING NOTED ON DRAWINGS WITH 3/8" FIRE CODE "C" GYPSUM BOARD BOTH SIDES OR CONCRETE BLOCK AS NOTED ON THE DRAWINGS.
6. ALL WALL DIMENSIONS SHOWN ON PLANS ARE NOMINAL DIMENSIONS UNLESS OTHERWISE NOTED.
7. PROVIDE Headers BLOCKING AND/OR FRAMING AS REQUIRED FOR SUPPORT OF ALL ELECTRICAL FIXTURES, SHELVING, DUCT REGISTERS AND MILLWORK.
8. ALL INTERIOR FINISHES SHALL COMPLY WITH CLASS 2 FLAME SPREAD OF 26-75.
9. NOT USED.
10. ALL EXIT DOOR HARDWARE TO BE KEYLESS IN THE DIRECTION OF EGRESS.
11. PROVIDE CONTROL JOINTS IN DRYWALL FURRING SYSTEMS WHERE CONTROL JOINTS OCCUR IN THE EXTERIOR WALL, AND AT MAXIMUM 30 FEET ON CENTER IN BOTH DRYWALL PARTITIONS AND FURRING SYSTEMS.

CONTRACTOR RESPONSIBILITY NOTES

1. PLUMBING CONTRACTOR IS RESPONSIBLE FOR GAS PIPING - SEE MECH. DRNGS.
2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY POWER

SPECIAL INSPECTIONS

1. THE GENERAL CONTRACTOR SHALL COORDINATE THE FIELD ACTIVITIES IN ORDER TO PERMIT THIRD PARTY INSPECTION / TESTING SERVICES ORGANIZATION TIMELY ACCESS TO THE CONSTRUCTION SITE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
2. THE TESTING SERVICE SHALL BE RETAINED BY THE CONTRACTOR TO PERFORM ALL INSPECTIONS AND TESTS REQUIRED, INCLUDING THE FOLLOWING:
 - A. FIELD TEST FOUNDATION SUBGRADES AND COMPAKTED FILL LAYERS.
 - B. PERFORM CONCRETE COMPRESSION STRENGTH TESTS, SLUMP TESTS, AND REVIEW CONCRETE MIX DESIGNS.
 - C. OBSERVE INSTALLATION OF FOOTINGS AND REINFORCING STEEL.
 - D. OBSERVE INSTALLATION OF STRUCTURAL STEEL COLUMNS, BEAMS, AND JOISTS, VERIFYING COMPLIANCE WITH BOLTING AND WELDING REQUIREMENTS.
 - E. OBSERVE INSTALLATION OF MASONRY CONSTRUCTION.
 - F. OBSERVE INSTALLATION OF AGGREGATE PIER SOIL ENHANCEMENT
3. APPROVED AGENCY TO PERFORM THESE INSPECTIONS SHALL BE:

EOS Midwest, LLC
4824 Industrial Drive, Unit C, Bridgeview, IL 60455
T: 708-430-1071
<http://www.eosimilited.com>
4. COPIES OF REPORTS SHALL BE DISTRIBUTED AS FOLLOWS:
 - A. ONE (1) COPY TO THE ARCHITECT
 - B. ONE (1) COPY TO THE OWNER
 - C. ONE (1) COPY TO THE CONTRACTOR
 - D. TWO (2) COPIES TO THE BUILDING DEPARTMENT

PROJECT DATA BUILDING INFORMATION

*2012 INTERNATIONAL BUILDING CODE	
*2014 ILLINOIS PLUMBING CODE	
*2011 NATIONAL ELECTRICAL CODE	
*2012 INTERNATIONAL FIRE CODE	
*2012 INTERNATIONAL MECHANICAL CODE	
*2010 INTERNATIONAL ENERGY CONSERVATION CODE	
ILLINOIS ACCESSIBILITY CODE	
*W/CITY AND/OR STATE CODE AMENDMENTS	
USE GROUP:	M-MERCANTILE
CONSTRUCTION TYPE:	SB
ALLOWABLE AREA PER SECTIONS 503 & 506 AND TABLE 506.2:	
ALLOWABLE AREA (100' x 900')	9,000 SF.
FRONTOAGE INCREASE (0.405 x 900')	436.5 SF.
TOTAL ALLOWABLE AREA	13,366 SF.
ACTUAL AREA:	7,200 SF.
ALLOWABLE HEIGHT PER SECTION 503, 504 AND TABLE 504.3:	
ALLOWABLE HEIGHT:	14'-0"
ACTUAL HEIGHT:	12'-5" @ FASCIA HIGH POINT
BUILDING VOLUME:	126,438 C.F.
OCCUPANCY LOAD PER TABLE 1004.1.2	
60 SF. (GROSS) PER PERSON = 120 OCCUPANT LOAD	
EXIT CAPACITY: 120 x .15 = 18.025" REQ'D/ 108" PROVIDED	

SITE & ZONING INFORMATION

SEE ARCHITECTURAL SITE PLAN

NO EXTRAS WILL BE ALLOWED FOR ANY LABOR AND/OR MATERIALS NECESSARY TO COMPLETE THE WORK.

IN CASE OF OVERLAPPING OR CONFLICTING REQUIREMENTS, THE MOST STRINGENT (GENERALLY MOST COSTLY) APPLIES AND WILL BE ENFORCED.

VERIFY ANY & ALL WORK WITH GENERAL CONTRACTOR

ARCHITECT / STRUCTURAL ENGINEER PLUMBING DESIGN

KMA & ASSOCIATES, INC. ARCHITECTS
1121 LAKE COOK ROAD, SUITE F
DEERFIELD, ILLINOIS 60015
(847) 945-6669
PRINCIPAL DESIGN PROFESSIONAL - DAVID I. MANGURIAN

CIVIL ENGINEER

MANHARD CONSULTING LTD.
One Overlook Point, Suite 210
LINCOLNSHIRE, ILLINOIS 60069
(847) 634-5550
PRINCIPAL DESIGN PROFESSIONAL - TRACY T. RICHARD

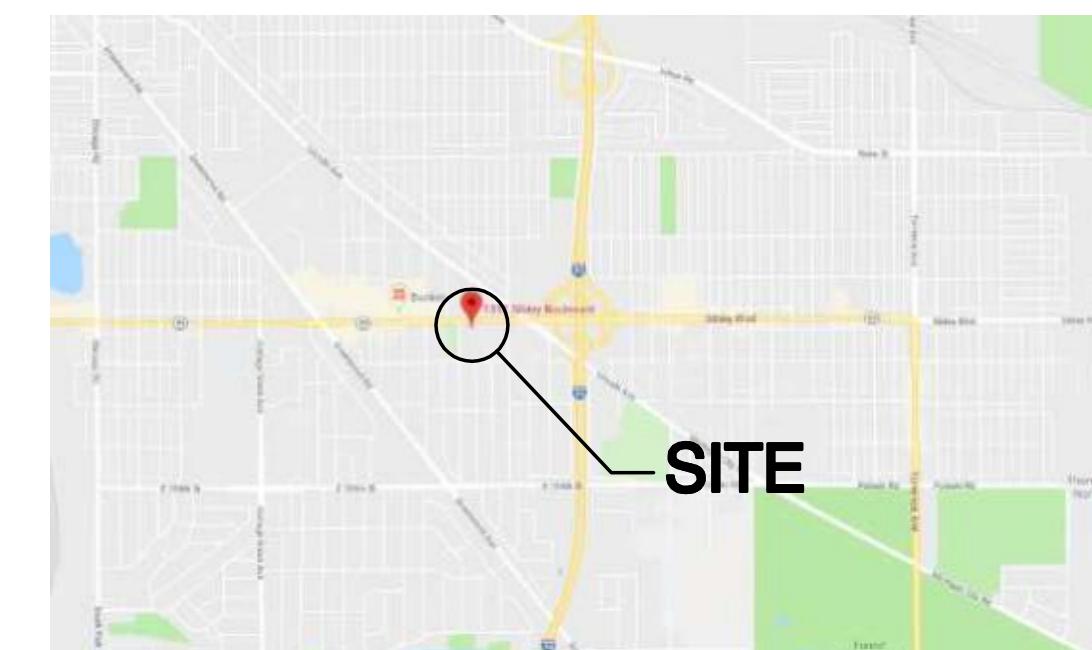
MECHANICAL ENGINEER

UNITED ENGINEERING
1006 GENEVA STREET
SHOREWOOD, ILLINOIS
(815) 744-1010
PRINCIPAL DESIGN PROFESSIONAL - GARY POWERS

ELECTRICAL DESIGN CONSULTANT

WOLF CONSULTING
505 ELM AVENUE
ELMHURST, ILLINOIS
(630) 833-6428
PRINCIPAL ELECTRICAL DESIGNER - MARK R. WIESEL

COORDINATE w/:
LEIGH SIDES
DIRECTOR OF FACILITY SECURITY-O'REILLY AUTO PARTS
P: (417) 829-5712 F: (417) 874-7294
ALARM SERVICES: (417) 829 5855 lsides@oreillyauto.com



LOCATION MAP
NO SCALE

LIST OF DRAWINGS

SITE DEVELOPMENT WORK, SITE ELECTRICAL, LANDSCAPING & BUILDING SHELL ARE PREVIOUSLY PERMITTED.

CURRENT REVISIONS NO. DATE SHEET DESCRIPTION

I	1/13/20	T1	PROJECT DATA, DRAWING INDEX, GENERAL NOTES, SPECIFICATIONS
I	1/13/20	AO	ARCHITECTURAL SITE PLAN, RETAINING WALL/FENCE, DETAILS, NOTES
I	1/13/20	EO1	ELECTRICAL SITE PLAN, SITE DETAILS
I	1/13/20	EC2	CIVIL TITLE SHEET ALTA-NPS LAND TITLE SURVEY BY OTHERS EXISTING CONDITIONS & DEMOLITION PLAN
I	1/13/20	C1	SITE DIMENSIONAL AND PAVING PLAN
I	1/13/20	C2	UTILITIES PLAN
I	1/13/20	C3	MARD EXHIBIT
I	1/13/20	C4	SOIL EROSION AND SEDIMENT CONTROL PLAN
I	1/13/20	C5	CONSTRUCTION DETAILS
I	1/13/20	C6	CONSTRUCTION DETAILS
I	1/13/20	C7	CONSTRUCTION DETAILS
I	1/13/20	C8	CONSTRUCTION SPECIFICATIONS
I	1/13/20	L1	LANDSCAPE PLAN & DETAILS
I	1/13/20	L2	LANDSCAPE SPECIFICATIONS
I	1/13/20	A1	FLOOR PLAN, DETAILS, NOTES
I	1/13/20	A2	ELEVATIONS, MASONRY NOTES, SCHEDULE
I	1/13/20	A3	MATERIALS
I	1/13/20	A4	WALL SECTION DETAILS, BLOCK/FLASH NOTES
I	1/13/20	A5	ROOF PLAN, ROOM FINISH & DOOR SCHEDULE
I	1/13/20	SI	FOUNDATION PLAN, DETAILS
I	1/13/20	S2	ROOF FRAMING PLAN
I	1/13/20	S2.1	DETAILS

INTERIOR BUILD-OUT DRAWINGS

I	1/13/20	P1	PLUMBING FLOOR PLAN, DETAILS, NOTES
I	1/13/20	M1	WATER PLUMBING
I	1/13/20	M2	GAS PLUMBING
I	1/13/20	M3	HVAC PLAN
I	1/13/20	E1	ELECTRICAL LIGHTING PLAN, SCHEDULES, NOTES
I	1/13/20	E2	ELECTRICAL POWER PLAN, DETAILS, NOTES
I	1/13/20	E3	ELECTRICAL DETAILS
I	1/13/20	E4	ELECTRICAL DETAILS
I	1/13/20	EM1.0	FULL SYSTEM MINUS LIGHTING/MOTION SENSORS
I	1/13/20	EM1.2	LIGHTING CONTROL AND MOTION SENSOR

*SITE DEVELOPMENT WORK, SITE ELECTRICAL, LANDSCAPING & BUILDING SHELL ARE PREVIOUSLY PERMITTED.

STATEMENT OF ADA COMPLIANCE

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH ACCESSIBILITY CODES.

Signed: *David I. Mangurian* Date: 1/13/20
Principal Architect : David I. Mangurian
KMA & ASSOCIATES, INC., ARCHITECTS

CERTIFICATION STATEMENT

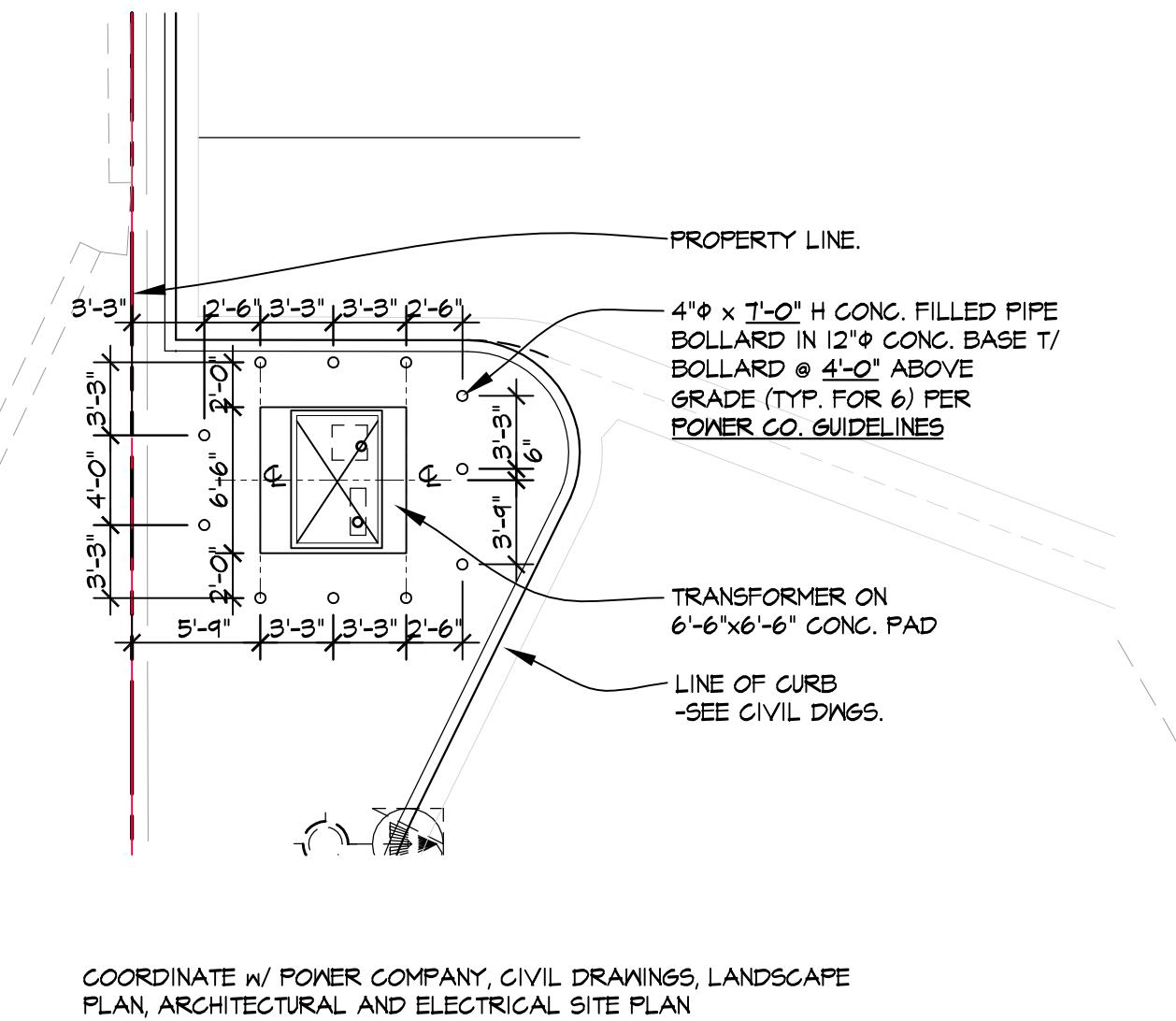
THIS IS TO CERTIFY THAT I AM A LICENSED ARCHITECT IN THE STATE OF ILLINOIS AND THAT THESE DRAWINGS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE CONFORM TO ALL MUNICIPAL BUILDING AND ZONING REGULATIONS.

Signed: *David I. Mangurian* Date: 1/13/20
Principal Architect : David I. Mangurian
KMA & ASSOCIATES, INC., ARCHITECTS

David I. Mangurian
SIGNED AND SEALED
DAVID I. MANGURIAN
LICENSED ARCHITECT
STATE OF ILLINOIS
EXPIRES 11-30-2020

SHEET TITLE
PROJECT DATA
DRAWINGS INDEX
NOTES & SPECIFICATIONS
NOTES

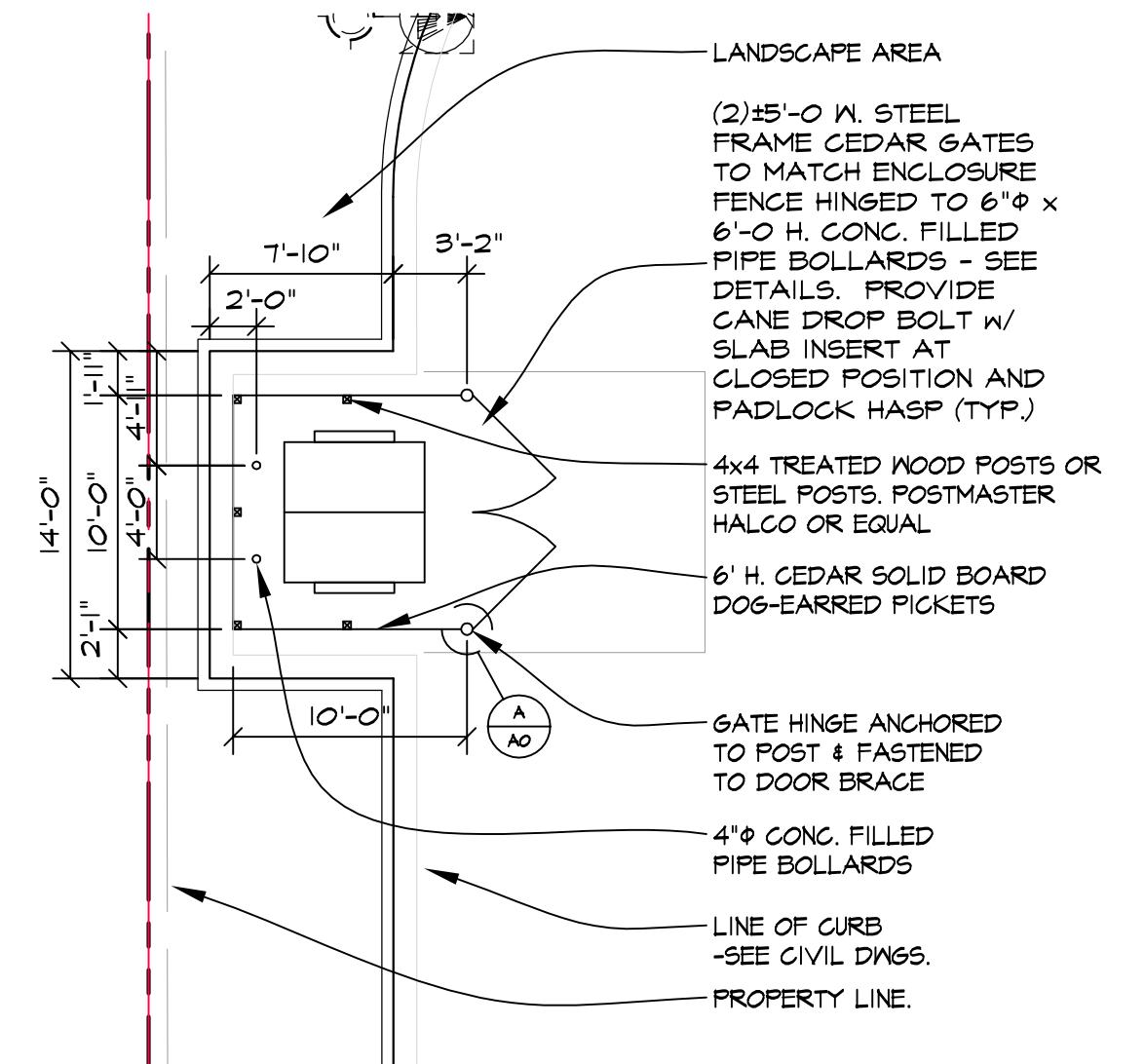
1906



TRANSFORMER PAD DETAIL 5

TRASH ENCLOSURE PLAN

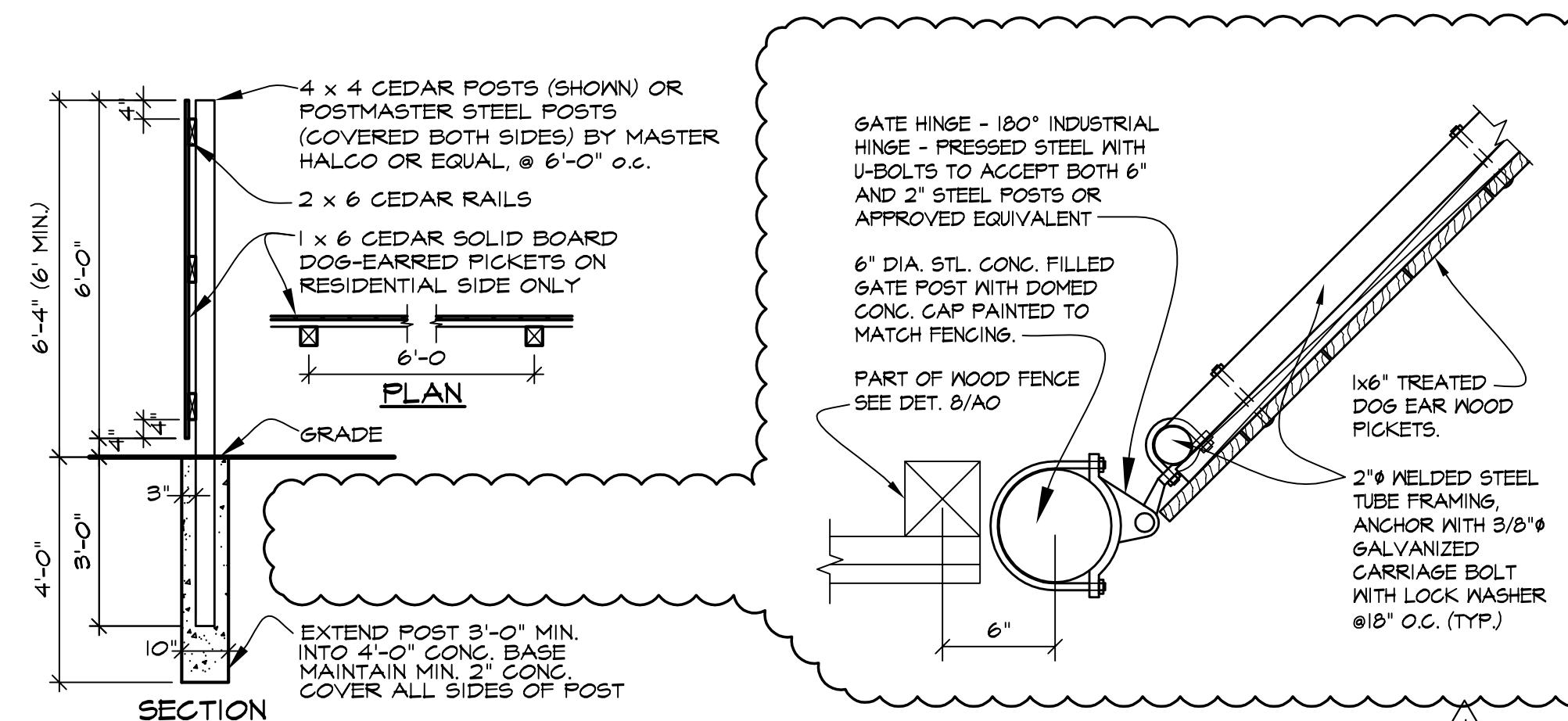
SCALE: 1/8" = 1'-0"



NOT USED

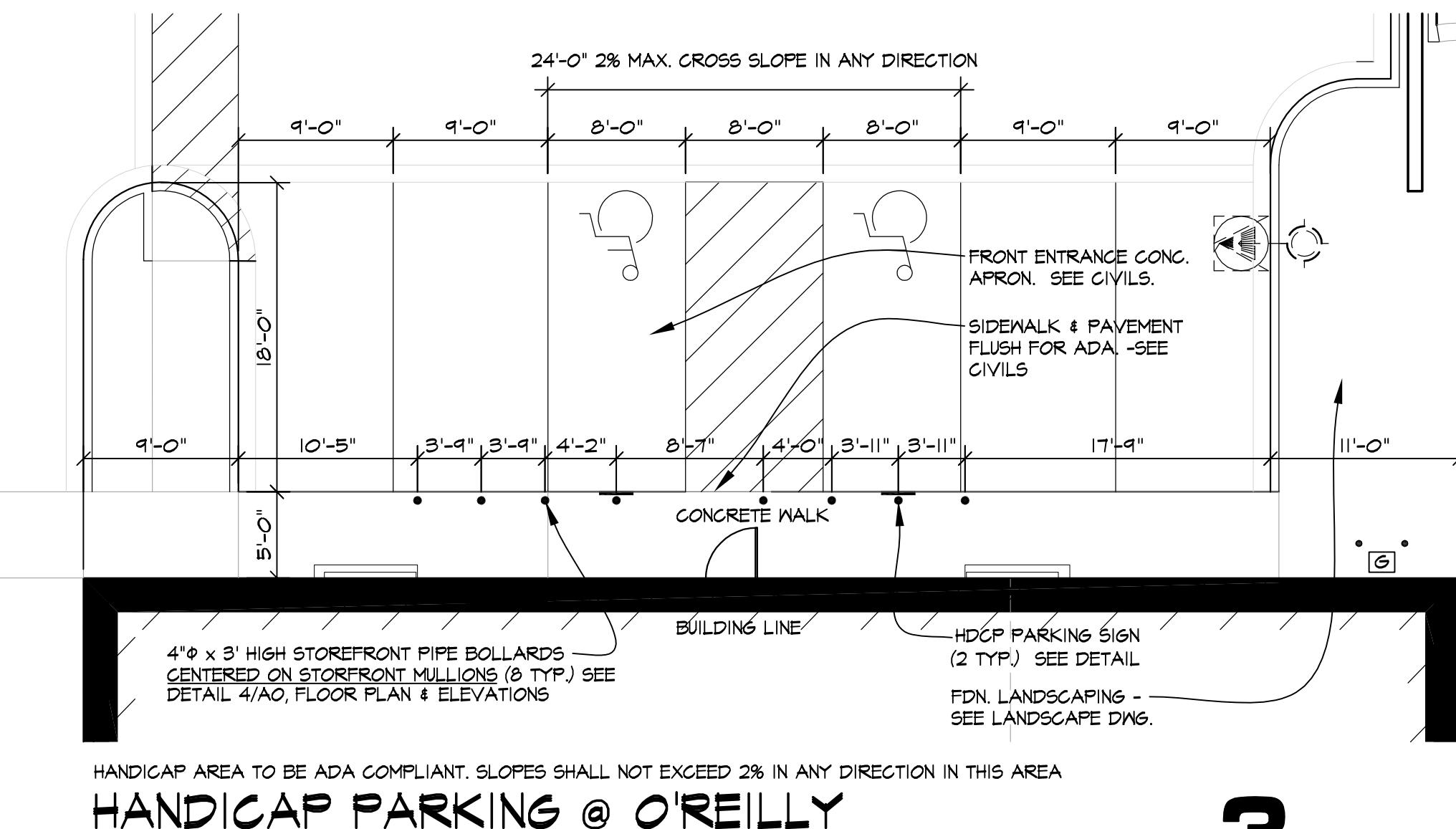
TRASH ENCLSR. FENCE DETAIL

SCALE: 1" = 1'-0"



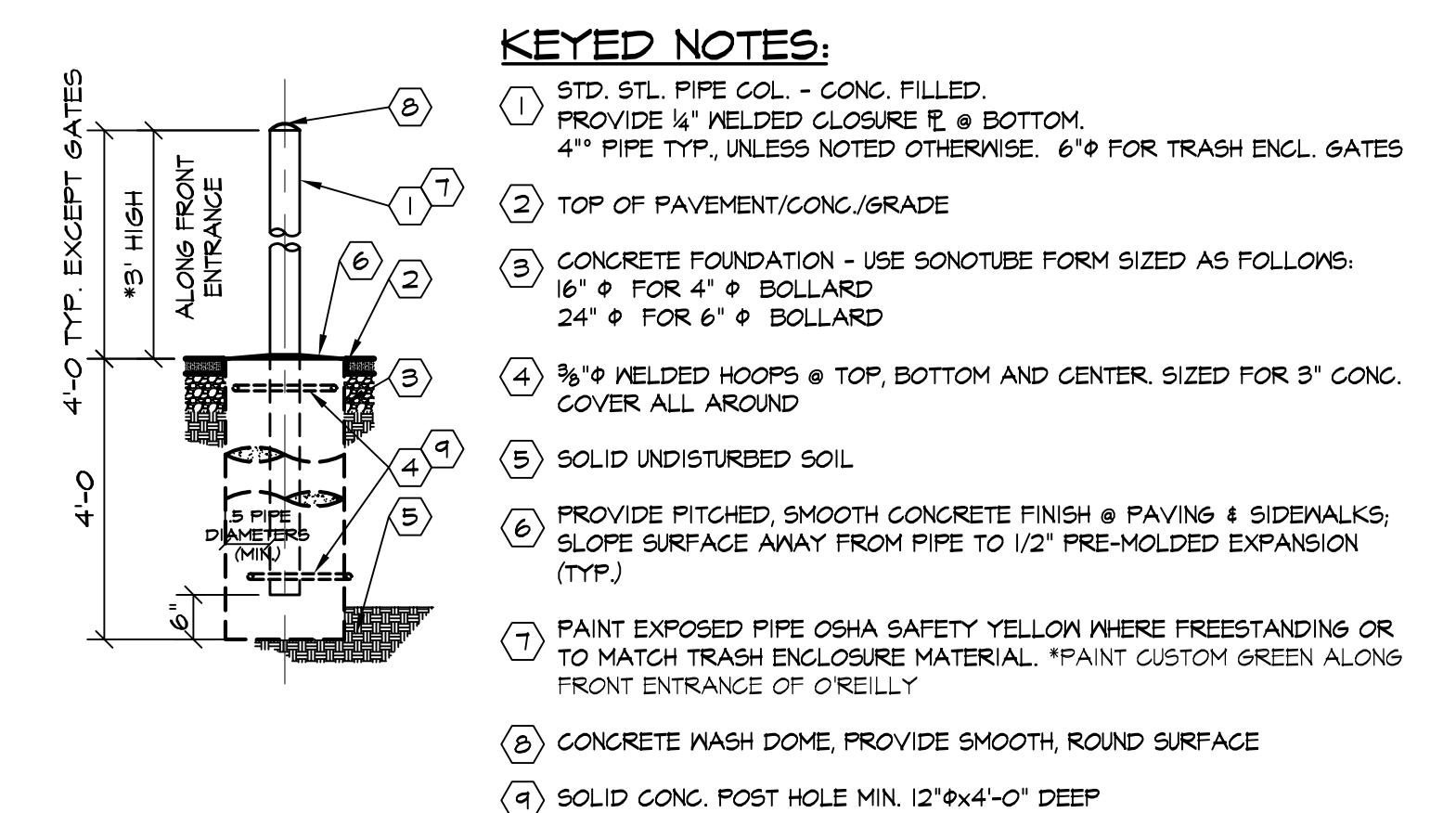
SECTION @ TRASH GATE POST

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



HANDICAP PARKING @ O'REILLY

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



TYPICAL PIPE BUMPER GUARDS

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

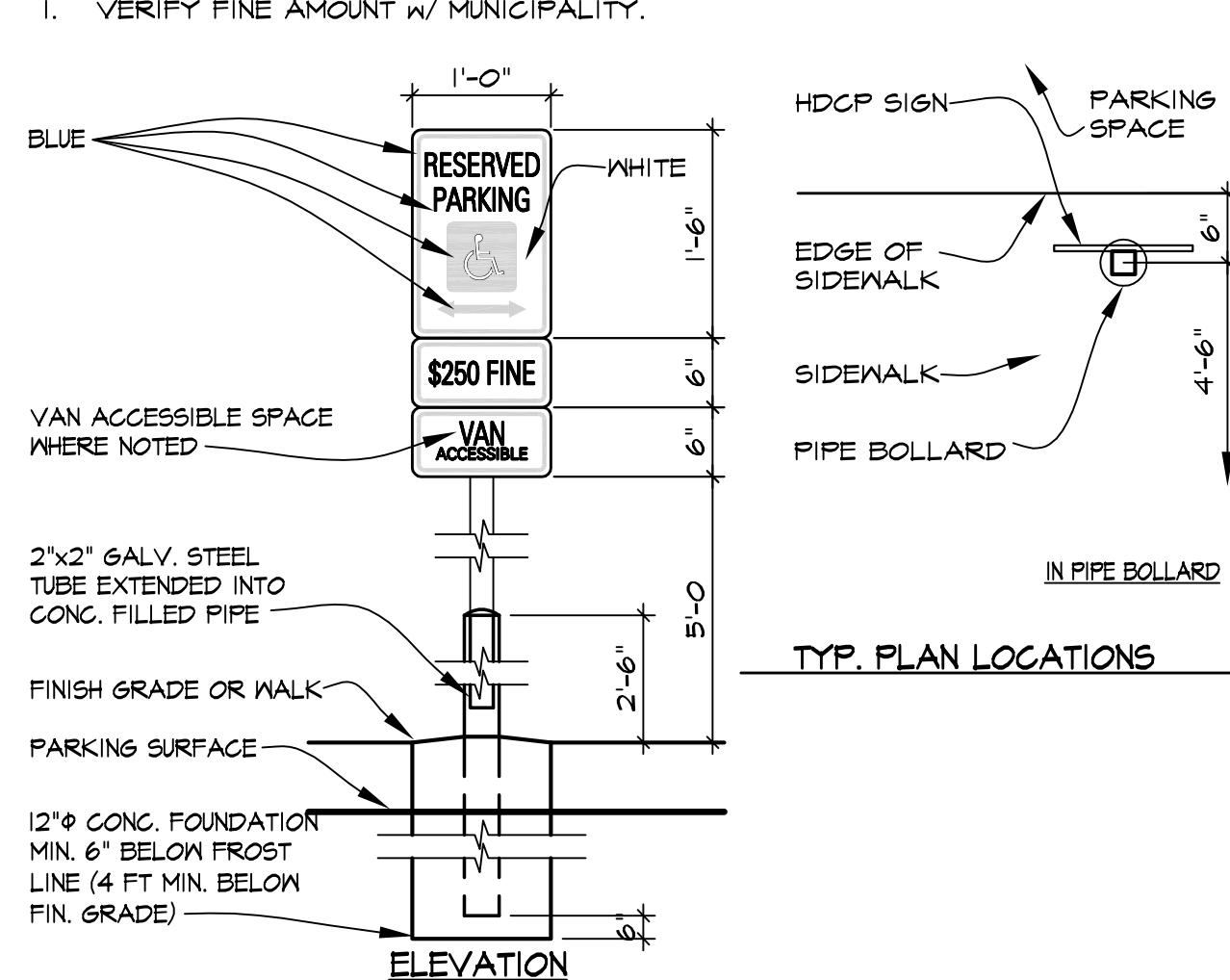
HANDICAPPED PARKING SIGN

Each parking space designated as reserved for environmentally limited persons shall be equipped with a sign which complies with Section 4.6.4 Signage of the Federal Register (Department of Justice Rules and Regulations, 28 CFR Part 36) and meets the requirements of Sign RT-8 (U.S. Department of Transportation Standard). At least one of such required signs shall have an additional sign "Van - Accessible" mounted below the symbol of accessibility. Signs shall be located on post within 5' of parking stall w/ bottom of 18" sign @ 6'-0" above top of pvtnt.

Provide a 6"x12" fine sign which complies with all applicable codes to be mounted directly below each handicapped parking sign. Verify fine amount with local authority.

NOTE:

i. VERIFY FINE AMOUNT w/ MUNICIPALITY.

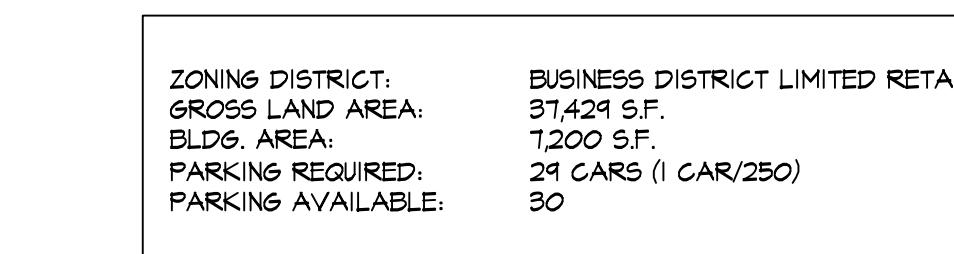


POLE SIGN ELEVATION

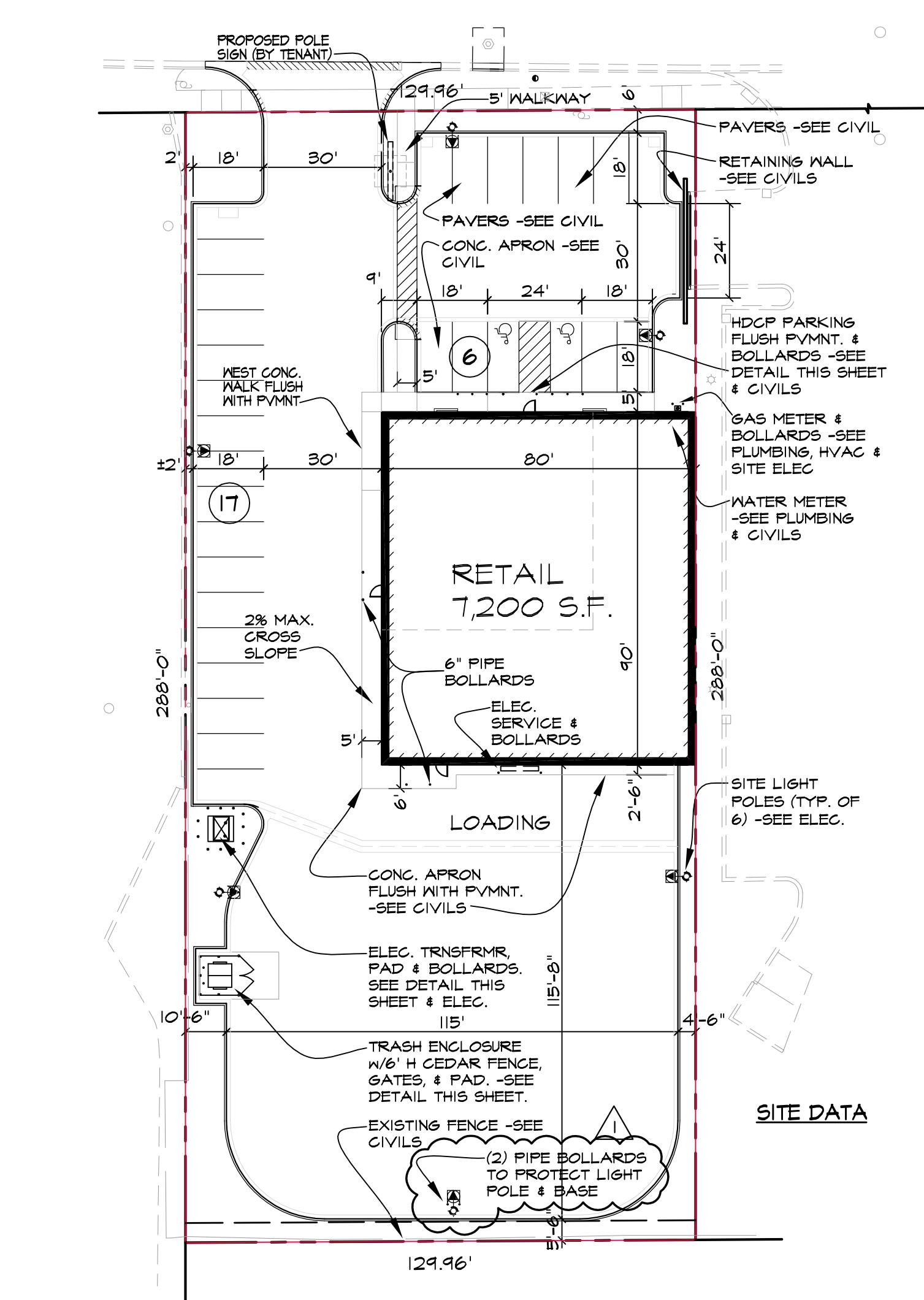
SCALE: 1/4" = 1'-0"

HDCP. PARKING SIGN

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



E. SIBLEY BLVD. (IL ROUTE 83)



SITE PLAN

SCALE: 1" = 30'-0"

O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD. DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
SPECIFIC SITE PLAN
DETAILS & NOTES

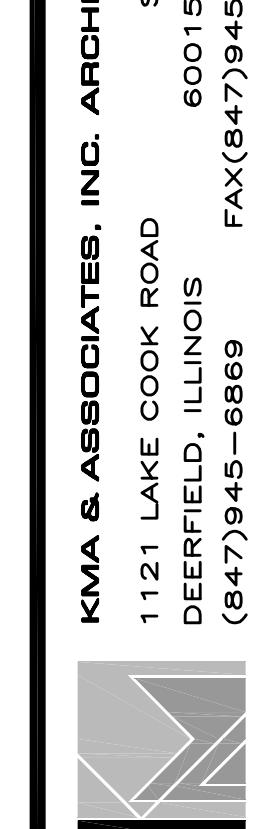
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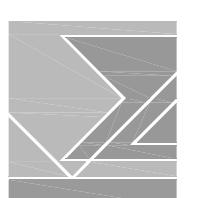
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O

1/13/20
REVISIONS

TH-115 DRAWING
NOT FOR CONSTRUCTION
NOT FOR BIDDING
NOT FOR CONTRACTING
NOT FOR CONSTRUCTION

KMA & ASSOCIATES, INC. ARCHITECTS
SUITE F
31429 S. DEERFIELD, ILLINOIS 60151-5235
FAX(847)945-0284

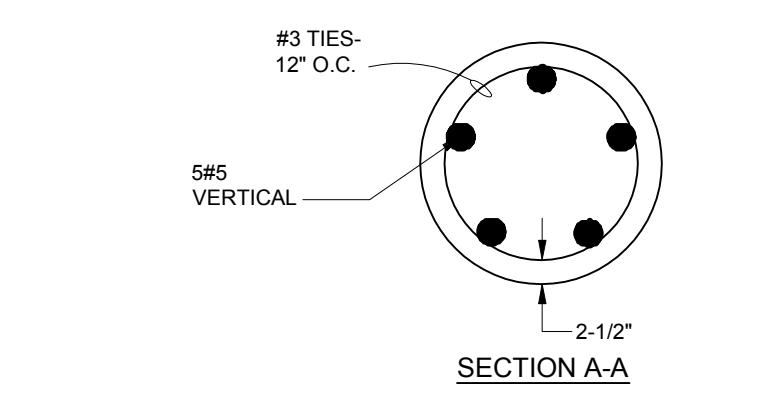




O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
ELECTRICAL SITE PLAN DETAILS
1906

1



SECTION A-A

ENLARGED CROWN DETAIL

SITE NOTE:
 ELECTRICAL TRADE SHALL COORDINATE THE INSTALLATION OF ALL NEW SITE & EXISTING WORK WITH CIVIL DRAWINGS AND PER APPROVAL OF POWER ENTRY DIAGRAM

GENERAL NOTES:

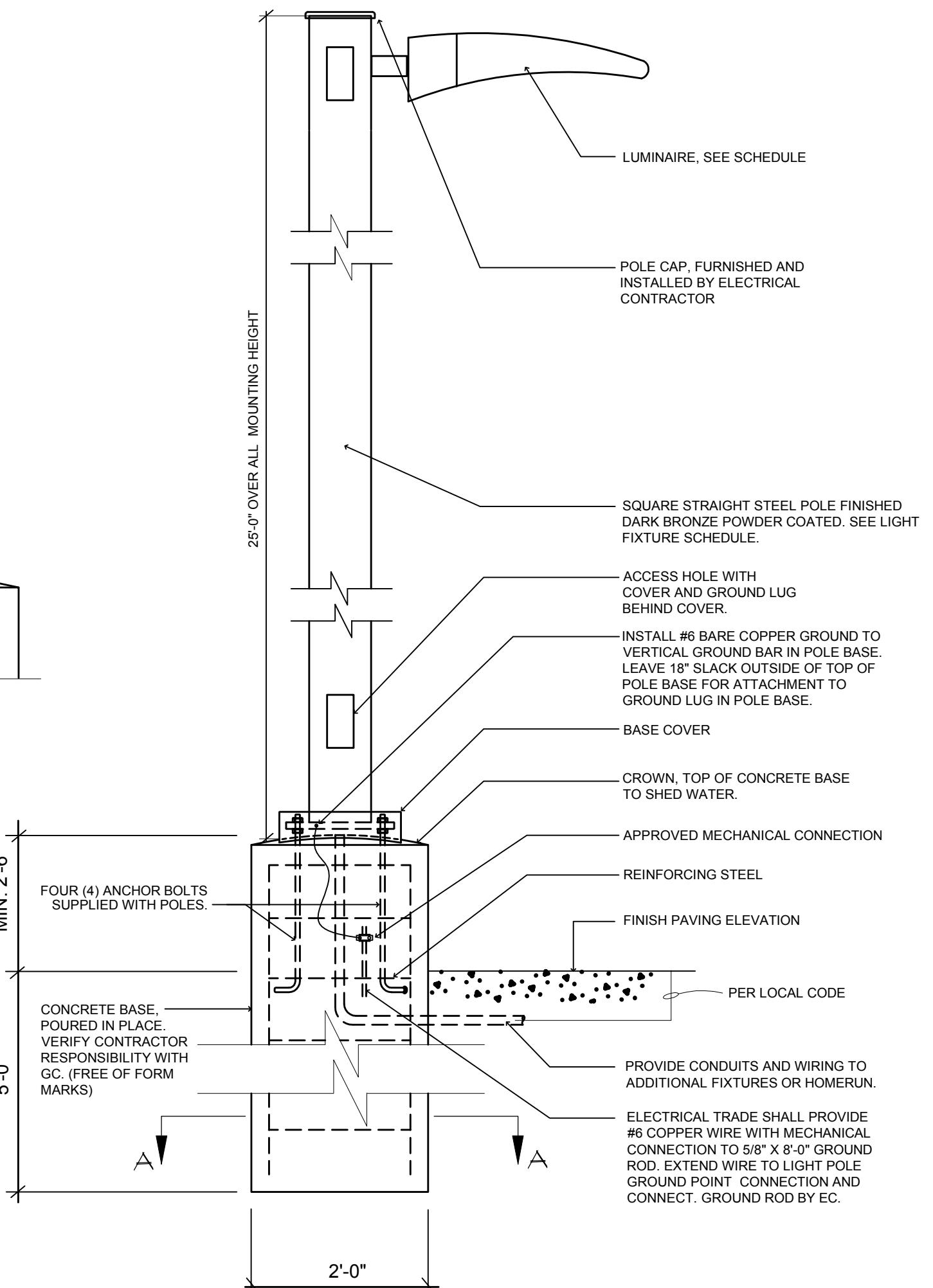
A. FOR UTILITY TRANSFORMER, TELEPHONE SERVICE, GAS, WATER, AND SANITARY SEWER LOCATIONS: REFER TO CIVIL PLANS.

B. ALL ELECTRICAL WIRING SHOWN ON THIS SHEET TO BE FED WITH #10 CU. MINIMUM U.N.O. VERIFY ACTUAL LENGTH WITH LOCAL CODE #10 CU.

C. ALL PVC CONDUIT MUST HAVE A MINIMUM OF #12 CU. GROUND CONDUCTOR.

D. ALL UNDERGROUND CONDUIT ROUTING, SIZES AND QUANTITIES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE EXACT REQUIREMENTS WITH THE SERVING UTILITY COMPANIES.

E. ALL CONDUIT EXTENDED UNDER DRIVEWAYS OR AREAS OF VEHICULAR USAGE SHALL BE GALVANIZED HEAVY WALL STEEL CONDUIT OR SCHEDULE 80 PVC NOMETALLIC CONDUIT. MINIMUM OF 30' BELOW GRADE OR PER UTILITY STANDARDS.



LIGHTING STANDARD ELEVATION

SCALE: NONE

ALL CONDUITS IN CONCRETE OR DIRECT BURIAL THAT ARE RIGID, PVC TYPE, MUST HAVE COMPRESSION CONNECTORS AND COUPLING FOR ALL OUTDOOR CONDUITS.

CONSTRUCTION NOTE:
 A METAL IDENTIFICATION TAG SHALL BE INSTALLED WHERE THE GROUNDING CONDUCTOR IS CONNECTED TO THE GROUNDING ELECTRODE WITH A APPROVED GROUND STRAP. ALL GROUNDING ELECTRIC CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING, RIGID HEAVY WALL CONDUIT, TYPICAL.

KEYED NOTES:

1. 1"-4" PRIMARY CONDUIT TO POWER COMPANY POINT OF PRESENCE TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE 1"-2" CONDUIT FROM NEW INTERIOR D-MARK LOCATION AND TERMINATE INSIDE OF BUILDING. EC SHALL EXTEND 1"-2" FROM ATT SERVICE TO NEW PEDESTAL LOCATION. VERIFY CONDUIT ELEVATION IN FIELD.

12. NEW PROPOSED ATT TELEPHONE AND COMCAST PEDESTAL LOCATION WITH NEW UNDERGROUND PRIMARY SERVICE. EC SHALL EXTEND FEED THRU CONDUITS TO THIS LOCATION AND TURN UP. TRENCH AS REQUIRED. COORDINATE WITH ATT AND COMCAST ENGINEER.

13. CONDUITS TO BE ROUTED AND CAPPED WITH NYLON PULL-STRING. THE ENDS OF THE CONDUITS ARE TO BE CLEARLY MARKED ABOVE GRADE WITH A STAKE. ALL ELBOWS SHALL BE HW CONDUIT.

14. NEW GROUND MOUNTED SIGN FURNISHED AND INSTALLED BY OTHER. EC SHALL PROVIDE NEW UNDERGROUND FEEDERS TO PANEL "MP". EXTEND CONDUIT AS REQUIRED FROM SIGN ACCESS LOCATION. EC SHALL PROVIDE TRENCHING AS REQUIRED FOR INSTALLATION. PROVIDE REQUIRED CONDUIT WITH FULL SIZE GROUND. PROVIDE GROUND ROD AT SIGN AND REQUIRED 120V. DISCONNECT.

15. 1"-2" UNDERGROUND CONDUIT WITH NYLON PULL-STRING TO COMCAST FEED THRU COMPANY POINT OF PRESENCE. ELECTRICAL SHALL PROVIDE 1"-2" CONDUIT FROM NEW INTERIOR D-MARK LOCATION AND TERMINATE INSIDE OF BUILDING. EC SHALL EXTEND 1"-2" CONDUIT FROM INTERIOR COMCAST SERVICE TO NEW PEDESTAL LOCATION. VERIFY CONDUIT ELEVATIONS IN FIELD.

16. PROVIDE 1"-2" UNDERGROUND CONDUIT FOR GAS SERVICE INSTALLED PER NICOR STANDARDS. EXTEND CONDUIT TO LANDSCAPE AREA AS SHOWN AND TURN UP ABOVE GRADE AND MAKE WATER TIGHT. PROVIDE NYLON PULL-STRING.

17. REMOVE EXISTING LIGHT POLE AND CONCRETE BASE. REMOVE ALL ASSOCIATED WIRE AND UNDERGROUND CONDUITS.

18. EXISTING UNDERGROUND COMED DIRECT BURIED ABANDONED SERVICE. EXISTING UNDERGROUND SERVICE SHALL BE REMOVED. COORDINATE WITH SITE SUPERVISOR. EXISTING UNDERGROUND SERVICE SHOWN FOR REFERENCE. EC SHALL REFER TO ON SITE MARKINGS FOR EXACT LOCATION.

INSTALLATION NOTES:

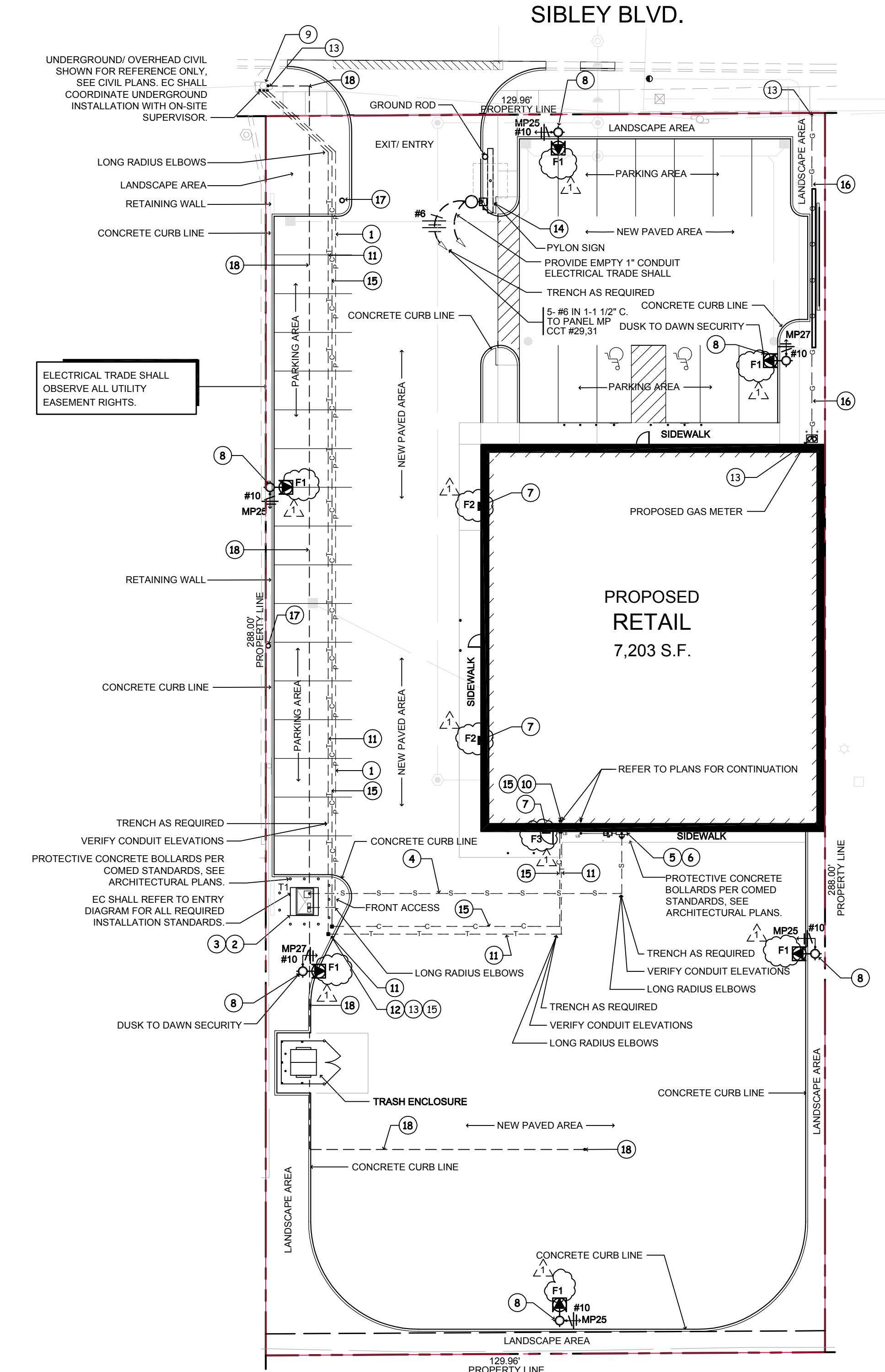
1. ELECTRICAL FACILITIES SHALL BE INSTALLED PURSUANT TO SECTION OF THE CITY MUNICIPAL CODE. CONSTRUCTION FEE TO BE PAID BY THE LANDLORD.

2. A MINIMUM 5'-0" OF SEPARATION BETWEEN ELECTRICAL FACILITIES AND ANY FIRE HYDRANT, STORM DRAINS, STORM SEWERS, WATER MAINS, GAS MAINS, ETC.

3. ELECTRICAL CONTRACTOR SHALL PROVIDE PVC CONDUITS FOR GROUND MONUMENT SIGNS AND LOT LIGHTING. APPROVAL OF PVC USAGE SHALL BE CONFIRMED WITH THE LOCAL OFFICIAL AND INSPECTORS DURING BIDDING. HW CONDUITS TO BE STUBBED UP TO EXIT OR ENTER J-BOXES. PROVIDE MINIMUM #12 CU GROUND IN ALL PVC PIPING.

4. ELECTRICAL CONTRACTOR SHALL PROVIDE AS PART OF THE BASE BID, VERIFICATION OF ALL SITE UTILITIES. ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND LOCATE THE EXISTING UTILITY COMPANY POWER SOURCE AND TELEPHONE. EXTEND UTILITY TO NEW EXTERIOR BUILDING METER SYSTEM.

5. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH LOCAL CITY OFFICIALS, THE BUILDING OWNER, COMED, TELEPHONE AND CABLE SERVICES FOR ANY EXISTING SERVICE RENOVATIONS REQUIRED HEREIN. BEFORE RENOVATION, NOTIFICATION SHALL BE GIVEN TO



ELECTRICAL SITE PLAN

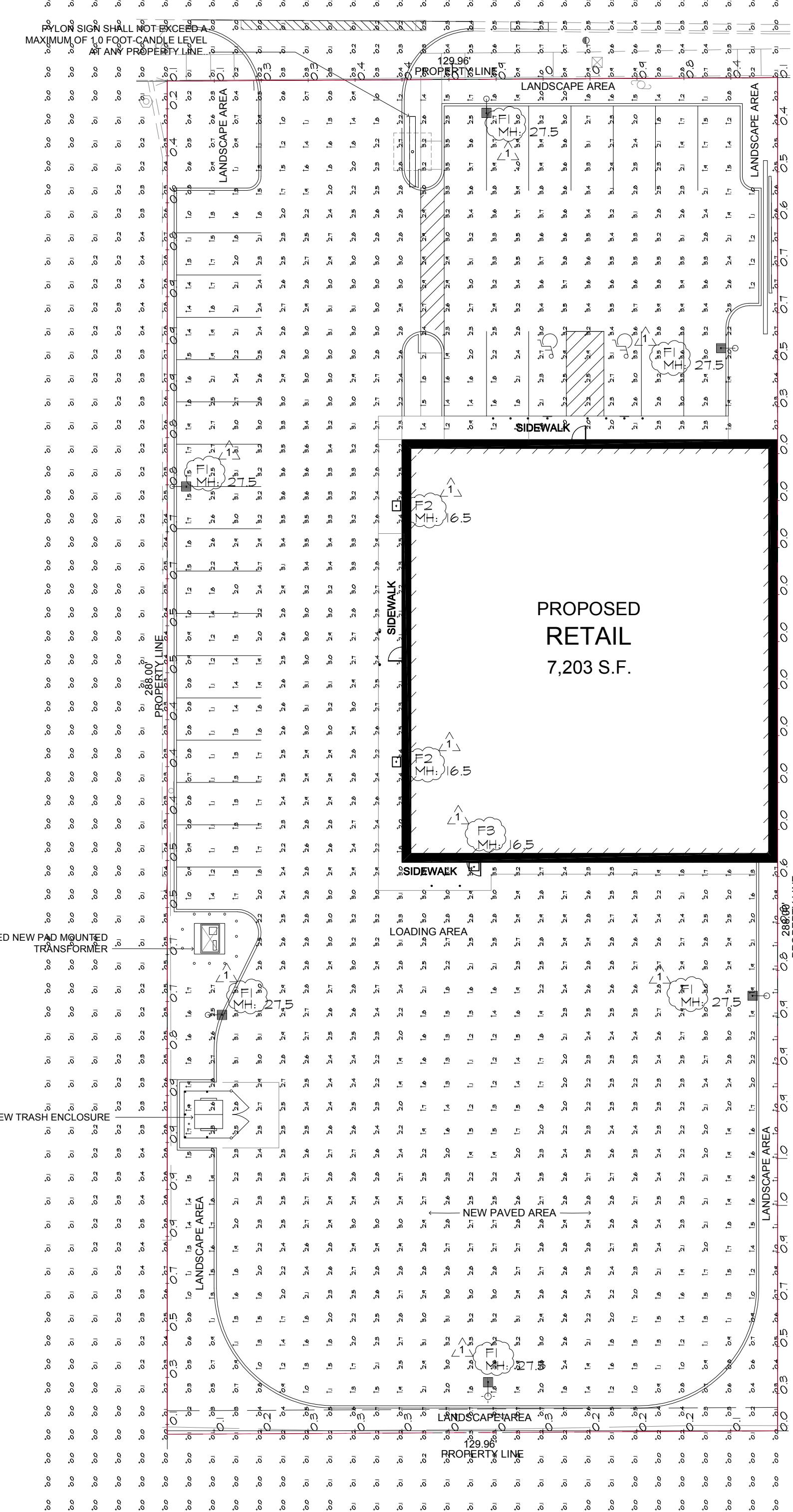
SCALE: 1" = 20'-0"

MARK	SYMBOL	MANUFACTURER	MODEL NUMBER	LAMPS PER FIXTURE				COLOR	MOUNTING	REMARKS
				TOTAL	HEADS	TYPE	WATTS			
F1	□ -	LSI INDUSTRIES	MRM-LED-18L-SIL-FT-40-UNV-70CRI-BRZ-IL	6	1	LED	150	120	DARK BRONZE	POLE MOUNT
F2	□	LSI INDUSTRIES	XWM-3-LED-03L-40-UE-BRZ	2	1	LED	23	120	DARK BRONZE	WALL MOUNT
F3	□	LSI INDUSTRIES	XWM-FT-LED-06L-40-UE-BRZ	1	1	LED	45	120	DARK BRONZE	WALL MOUNT
1	▲									

LUMINAIRE SCHEDULE NOTES:

- ELEC. SHALL FURNISH AND INSTALL ALL POLES, LUMINAIRES AND LAMPS AS SPECIFIED.
- ELEC. SHALL FURNISH AND INSTALL ALL CONCRETE POLE BASES AS NOTED.
- ALL POLES AND LIGHTING HEADS SHALL HAVE A SMOOTH FINISH.
- ELEC. SHALL PROVIDE ALL REQUIRED LIGHTING POLES AS MANUFACTURED BY LSI INDUSTRIES. POLE SHALL BE 5" SQUARE STRAIGHT STEEL. 25'-0" IN HEIGHT, #5SQB3-S11G-25-S-BRZ-LAB-5BC W/ARM MOUNT AS PER MFGR.
- FINAL SITE LIGHTING FIXTURE/POLE LAYOUTS AND CONFIGURATIONS SHALL BE COORDINATED WITH LOCAL EXTERIOR LIGHTING AND WIND LOADING REQUIREMENTS AND RESTRICTIONS.

SIBLEY BLVD.



ELECTRICAL PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

NOTES:
See schedule for luminaire specifications.
Luminaire Symbols are not to scale.
Varying the position, mounting height,
or orientation from what is specified in this
drawing will invalidate the calculation performed.

Calculation Summary							
Scene: L1							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING AREA	Illuminance	Fc	2.39	4.0	0.5	4.78	8.00
PROPERTY LINE	Illuminance	Fc	0.55	1.0	0.0	N.A.	N.A.

Luminaire Schedule							
Scene: L1							
Symbol	Qty	Label	Arrangement	Manufacturer	Description	Luminaire Watts	Arr. Lum. Lumens
	6	F1	SINGLE	LSI INDUSTRIES	MRM-LED-18L-SIL-FT-40-UNV-70CRI-BRZ-IL	150	12149
	2	F2	SINGLE	LSI INDUSTRIES	XWM-3-LED-03L-40-UE-BRZ	23	3144
	1	F3	SINGLE	LSI INDUSTRIES	XWM-FT-LED-06L-40-UE-BRZ	45	6057

PARKING LOT DESIGN GUIDE		BASIC	BASIC ENHANCED SECURITY	SECURITY PUBLIC SPACES	HIGH SECURITY PUBLIC SPACES
MAXIMUM HORIZONTAL ILLUMINATION MEASURED ON PARKING SURFACE W/ NO SHADOW		2.0/ 0.2	5.0/ 0.5	10.0/ 1.0	30.0-60.0/ 3.0-6.0
UNIFORMITY RATIO MAXIMUM - TO - MINIMUM		20:1	15:1	15:1	4:1 - AVG/ MIN
MINIMUM VERTICAL ILLUMINATION MEASURED AT 5' ABOVE PARKING SURFACE FOR FACIAL RECOGNITION		1.0/ 0.1	2.5/ 0.25	5.0-8.0/ 0.5-0.8	12.60/ 1.2-6.0

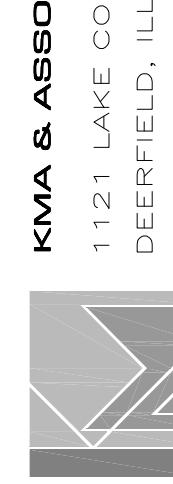
RECOMMENDED BASED ON RP-33-99, RP20-98 IESNA LIGHTING HANDBOOK

SHEET TITLE
ELECTRICAL SITE PLANS DETAILS
1906

O'REILLY AUTO PARTS

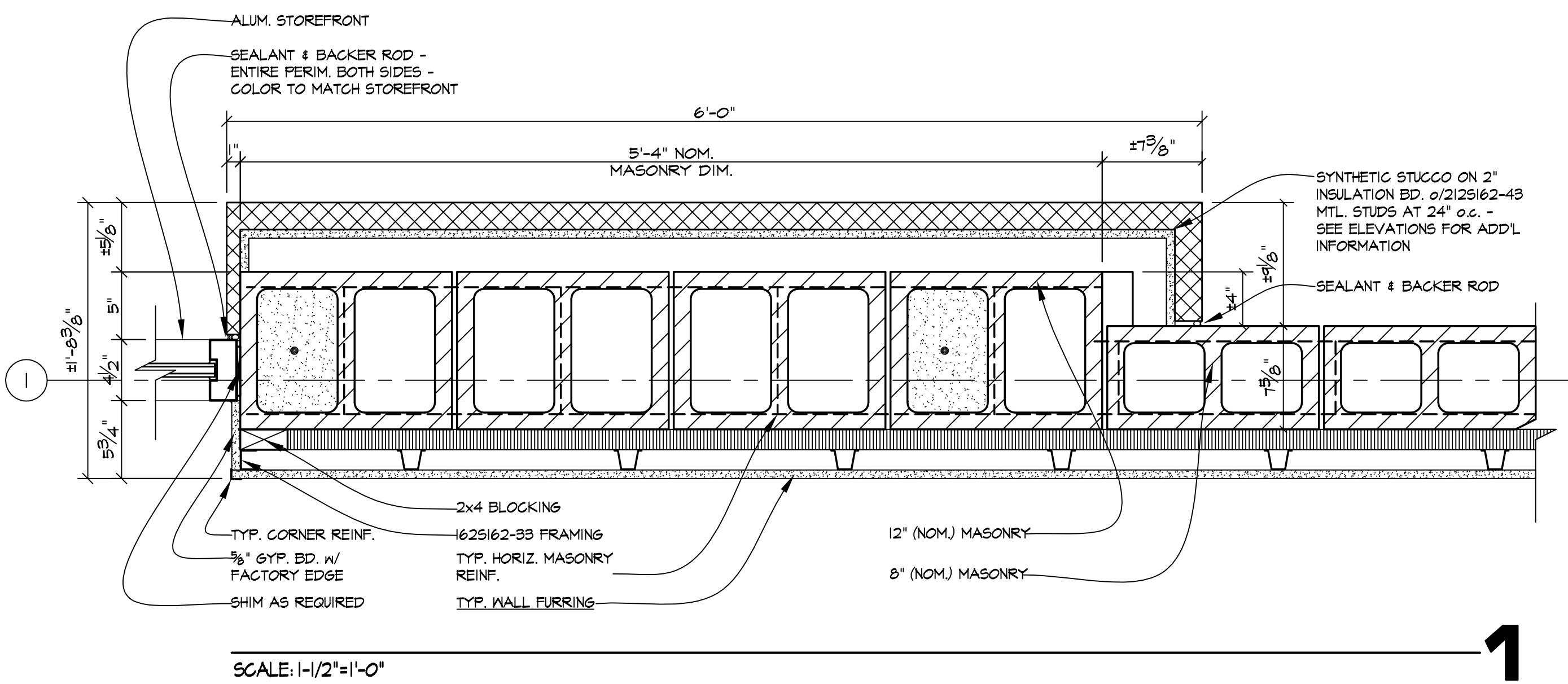
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

THIS DRAWING	NOT FOR COORDINATION
FOR BIDDING	1/1/21/21
FOR CONTRACTING	1/1/21/21
NOT FOR CONSTRUCTION	

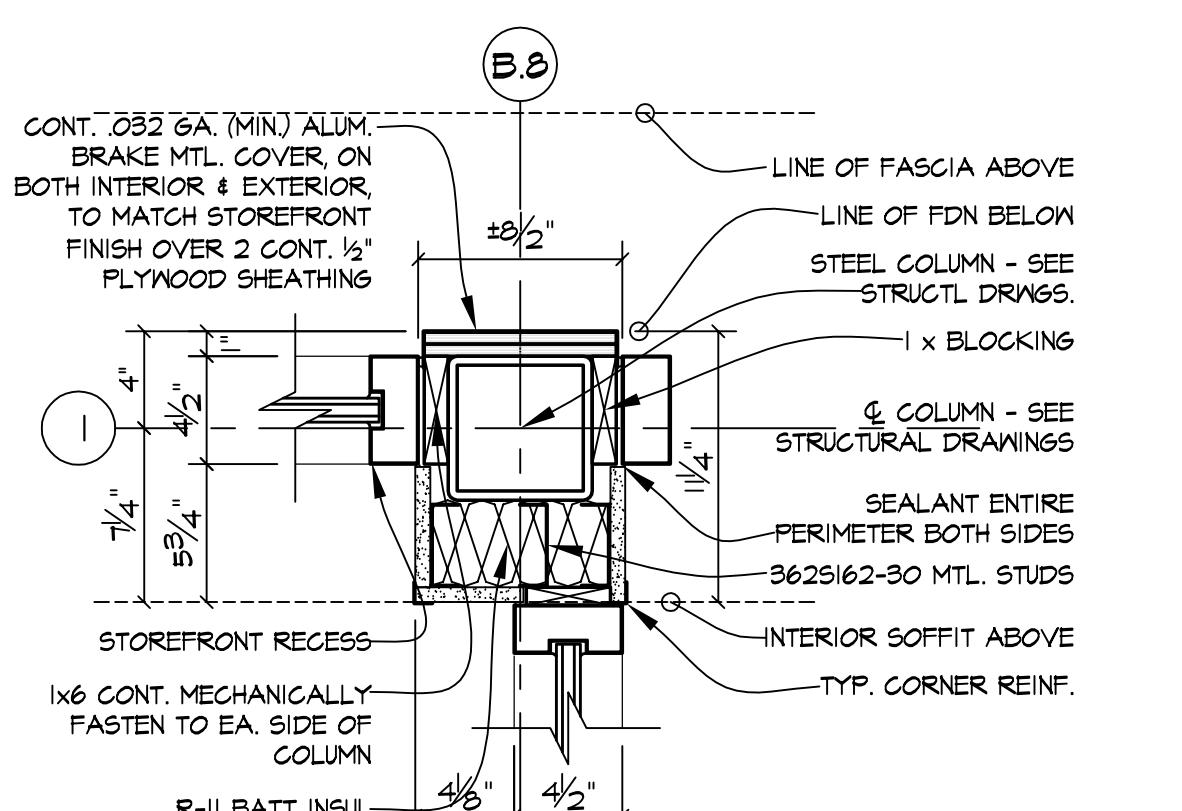


KMA & ASSOCIATES, INC. ARCHITECTS
11121 LAKE COOK ROAD SUITE F
DEERFIELD, ILLINOIS 60015-5235
(847)945-6869 FAX(847)945-0284

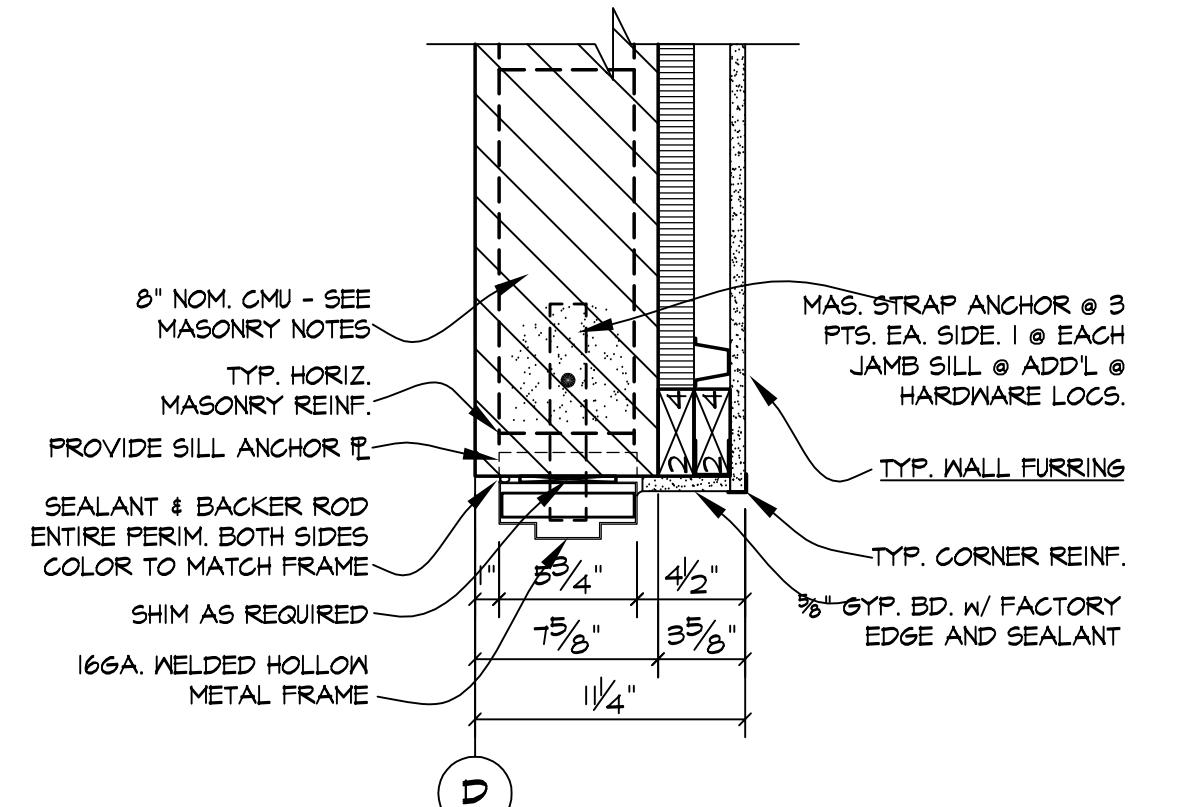
REVISIONS
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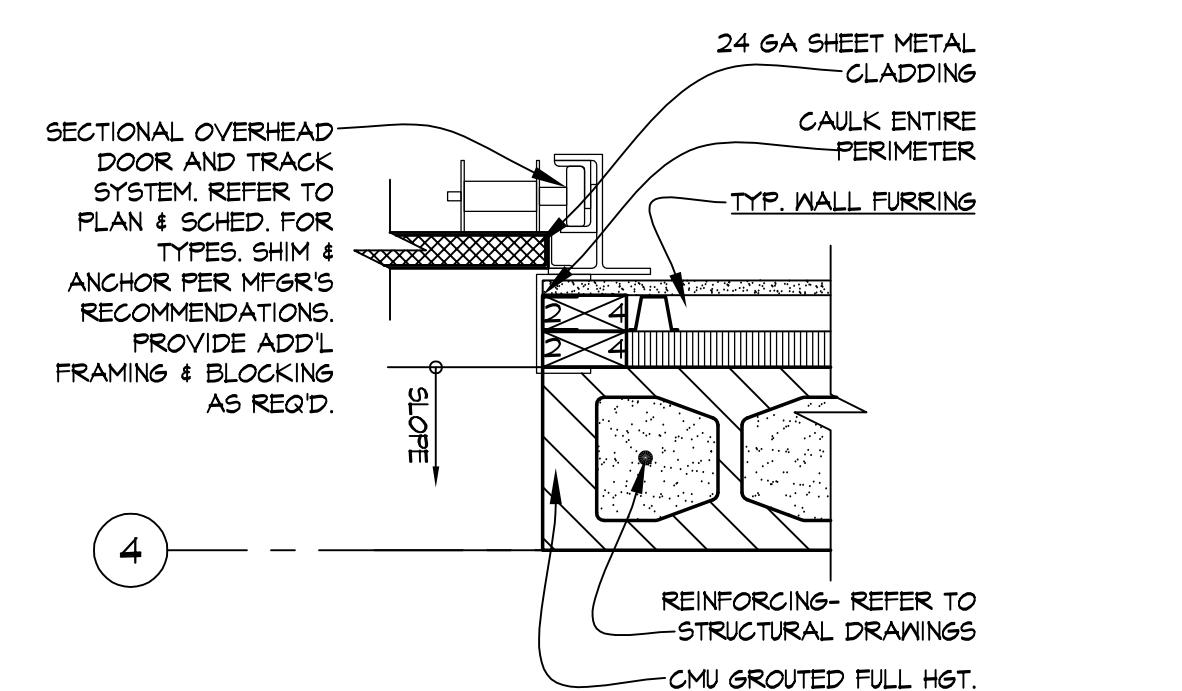
SCALE: 1-1/2"=1'-0"



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



SCALE: 1-1,



SCALE: |-|/2"=|-0"

CONCRETE APRON SEE CIVILS

HDCP PARKING SIGN MOUNTED ON BOLLARD - SEE SITE PL (TYP. FOR 2)

4"Φ (8) ENTRANCE BOLLARDS SEE SITE DETAILS

GAS METER W/ (2) PIPE BOLLARDS. FINAL LOCATION BY UTILITY CO. - SEE EXTERIOR ELEVS, ELEC & PLUMBING DWGS.

STEEL COLUMNS SEE STRUCTURAL DRAWINGS

SEE O'REILLY'S INTERIOR FINISH DRAWINGS FOR EXTENT OF POLISHED CONCRETE AND PROJECT MANUAL FOR SPECIFICATIONS.

O'REILLY AUTO PARTS 7,200 S.F. TOTAL

CLEANOUTS-SEE PLMG. DWGS. FOR ALL UNDERSLAB PLUMBING

**SEE TENANT INTERIOR BUILD-OUT ON BUDDY D. WEBB DRAWINGS.
NOTE: ALL INTERIOR DIMENSIONS SHOWN ARE TO FACE OF STUD.**

ELEC. PANELS - SEE ELEC. DWGS.

(2) 6"Φ PIPE BOLLARDS - SEE SITE DETAILS

CONC. APRON - SEE CIVILS

USE 12" MAS. @ PILASTER LOCATIONS

100 PARTS A

101 PARTS B

102 OFFICE

103 REST RM.

104 REST RM.

105 PARTS C

CLEANOUTS-SEE PLMG. DWGS. FOR ALL UNDERSLAB PLUMBING

ROOF HATCH & LADDER SEE DETAIL 1/A5

ELEC. GEAR W/ (2) PIPE BOLLARDS. SEE SITE DETAILS

INT. CLEAR

W.H.A.

100A VEST.

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FLOOR PLAN

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

- NOTES:

 1. INTERIOR BUILD-OUT LAYOUT FOR TENANT (N.I.C.) IS SHOWN FOR INFORMATION PURPOSES ONLY.
 2. SEE STRUCTURAL DRAWINGS FOR COLUMN SIZE.
 3. SEE ELEVATIONS FOR CONTROL JOINT LOCATIONS AND ADDITIONAL REQUIREMENTS
 4. PROVIDE PORTABLE FIRE EXTINGUISHERS TO BE PROVIDED BY TENANT. QUANTITY AND LOCATION AS REQUIRED BY LOCAL FIRE DEPARTMENT, IFC & NFPA 10.
 5. PROVIDE KNOX KEY LOCK BOX FOR FIRE DEPT. ACCESS AS REQUIRED BY LOCAL FIRE DEPARTMENT.

O'REILLY AUTO PARTS
DOLTON PLAZA
117 E. SIBLEY BLVD. DOLTON, IL 604
R: DEPARTMENT PROPERTY GROUP, L

SHEET TITLE

FLOOR PLAN

DETAILS

1906

**A
1**

MASONRY NOTES:

1. STANDARDS: COMPLY WITH RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICA (BIA), AND NATIONAL CONCRETE MASONRY ASSOC. (NCMA) AND THE REQUIREMENTS OF THE CURRENT BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530/ASCE 6).

ALL MASONRY TO HAVE INTEGRAL POLYMER WATER REPELLENT BY MANUFACTURER. PROVIDE POLYMER WATER REPELLENT ADMIXTURE ADDED TO THE MORTAR BY THE MASONRY CONTRACTOR, PER MANUFACTURER'S SPECIFICATIONS.

2. CONCRETE MASONRY UNITS (CMU): ASTM C 90, GRADE N-1. PROVIDE "MEDIUM WEIGHT" UNITS (MIN. 105 PCF) WITH A MINIMUM COMPRESSIVE STRENGTH, FM = 2000 PSI.

SELECTION: ELSION SPLIT & SMOOTH FACE, DISTRIBUTOR: RAMM BRICK & SUPPLY LLC. CONTACT: KIP RAMM - CELL (847)871-7183.

SIZES & TEXTURE:
A) 7/8" H. x 7/8" D. x 15/8" L. (NOM. 8 x 12 x 16 @ PILASTERS) SPLIT-FACE FINISH
B) 7/8" H. x 7/8" D. x 15/8" L. @ BEHIND EIFS, SMOOTH-FACE FINISH
C) MISCELLANEOUS SIZES AS REQ'D. SEE WALL SECTIONS, EXTERIOR DETAILS & EXTERIOR FINISH LIST.

3. FINISH: PAINTED PER EXTERIOR FINISH SCHEDULE.

4. MASONRY MORTAR: ASTM C 270, TYPE S, APPROXIMATELY 3:1:1 PORTLAND CEMENT LIME, SAND TO PORTLAND CEMENT, 20% NATURAL. PROVIDE POLYMER WATER REPELLENT ADMIXTURE (COMPATIBLE W/ MASONRY) ADDED TO THE MORTAR BY THE MASONRY CONTRACTOR, PER MANUFACTURER'S SPECIFICATIONS.

5. PORTLAND CEMENT: ASTM C 150, TYPE I, NON-STAINING, NO AIR ENTRAINMENT, WHITE IF NEEDED FOR COLOR MATCH.

6. LIME: HYDRATED LIME, ASTM C 207, TYPE S.

7. SAND: ASTM C 144 OR FINER IF NEED FOR JOINT SIZES LESS THAN 1/4".

8. INSTALL (LAY) THRU-WALL BRICK UNITS IN 1/2 RUNNING BOND PATTERN @ CMU. IN RUNNING BOND PATTERN.

9. CUT EXPOSED MASONRY UNITS, WHERE NECESSARY, WITH A POWER SAW. AVOID THE USE (BY PROPER LAYOUT) OF LESS-THAN-HALF-SIZE UNITS.

10. HOLD UNIFORM JOINT SIZES AS INDICATED, OR IF NOT INDICATED, HOLD JOINT SIZES TO SUIT MODULAR SIZE OF MASONRY UNITS.

11. CUT JOINTS FLUSH AND TOOL SLIGHTLY CONCAVE, UNLESS OTHERWISE INDICATED.

12. REINFORCE HORIZONTAL JOINTS WITH CONTINUOUS MASONRY WIRE REINFORCING SPACED 16" VERTICALLY, EXCEPT SPACED 8" IN PARAPET WALLS AND IMMEDIATELY ABOVE AND BELOW OPENINGS, FOR A DISTANCE OF 2 FEET BEYOND THE OPENING IN ALL FOUR DIRECTIONS. DO NOT BRIDGE CONTROL AND EXPANSION JOINTS IN THE WALL SYSTEM.

13. COMPLETELY FILL WITH MORTAR COLLAR JOINTS IN MULTI-WYTHE MASONRY WALLS, EXCEPT WHERE FLASHING AND/OR WEEPS ARE PRESENT.

14. FILL HEAD (VERTICAL) JOINTS WITH MORTAR @ INTERIOR AND EXTERIOR FACES ONLY IN ALL MASONRY WORK, EXCEPT WHERE FLASHING AND/OR WEEPS ARE PRESENT..

15. WHERE INDICATED, COMPLETELY FILL CORES OF MASONRY UNITS FOR FULL HEIGHT OF THE WALL WITH THE TYPE S MORTAR OR CONCRETE - SEE MASONRY REINFORCING NOTES.

16. PROVIDE CONTROL AND EXPANSION JOINTS AT LOCATIONS SHOWN, AND KEEP CLEAN OF MORTAR DROPPINGS/ SQUEEZE - OUT.

17. IF LOCATIONS ARE NOT SHOWN, SPACE CONTROL JOINTS 25'-0" (HORIZONTALLY) FOR CMU MASONRY.

18. THE CONTRACTOR SHALL BRACE WALLS ADEQUATELY DURING CONSTRUCTION UNTIL THE ROOF AND FLOOR STRUCTURE ARE IN PLACE.

19. THE WORK IN PROGRESS WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE IN ACCORDANCE WITH SECTION 1.5 OF ACI 530.1.

20. JOIST BEARINGS - USE A MINIMUM OF 3 CONCRETE BLOCK BRICK COURSES OR FILL ONE COURSE OF CONCRETE BLOCK SOLID WITH GROUT UNDER EACH JOIST.

21. BEAM BEARING - USE SOLID CONCRETE BLOCK 2 COURSES WIDE BY 3 COURSES DEEP UNDER EACH BEAM.

22. PILASTERS - FILL SOLID WITH GROUT (SEE BEAM BEARING NOTE # 21).

23. N/A

24. MASON IS RESPONSIBLE FOR KEEPING FLASHING/WEPP SYSTEM FUNCTIONING AND FREE OF MORTAR.

25. PROVIDE CONTROL JOINTS AT MAXIMUM 25'-0" O.C.

26. PRE-CONSTRUCTION MEETING REQUIRED PRIOR TO INSTALLATION OF THRU-WALL BRICK SYSTEM. PRE-CONSTRUCTION MEETING TO INCLUDE MANUFACTURER, MANUFACTURER'S REPRESENTATIVE, OWNER'S REPRESENTATIVE & ARCHITECT.

27. PROVIDE INTEGRAL POLYMER WATER REPELLENT RECOMMENDED BY MANUFACTURER. PROVIDE POLYMER WATER REPELLENT ADMIXTURE ADDED TO THE MORTAR BY THE MASONRY CONTRACTOR, PER MANUFACTURER'S SPECIFICATIONS.

28. CLEANING: DO NOT USE ACID WASH OR HARSH DETERGENT. MASONRY WALLS ARE TO BE CLEANED SEVEN DAYS AFTER COMPLETION WITH A MILD DETERGENT SOLUTION OR OTHER PROPRIETARY SOLUTION AS RECOMMENDED BY MASONRY MANUFACTURER, OR USE PROSOCO "LIGHT DUTY Concrete Cleaner". WALLS SHOULD BE THOROUGHLY SATURATED WITH CLEAR WATER BEFORE AND AFTER CLEANING SOLUTION IS APPLIED.

29. N/A

30. FLASHING: "BLOCKFLASH" BY MORTAR NET SOLUTIONS, AS SHOWN ON DRAWINGS. SEE BLOCKFLASH INSTALLATION NOTES. IN ADDITION, FLEXIBLE MEMBRANE FLASHING WITH END DAMS TO ALSO BE USED AND FULLY ADHERED TO ALL STEEL LINTELS.

MASONRY REINFORCING NOTES:

1. PROVIDE REINFORCED UNIT MASONRY WITH RUNNING BOND.

2. REINFORCED CONCRETE UNIT SYSTEM SHALL CONSIST OF THE FOLLOWING:

A. MEDIUM WEIGHT HOLLOW LOAD-BEARING CONCRETE MASONRY UNITS COMPLYING WITH ASTM C90, GRADE N TYPE I.
B. REINFORCING BARS SHALL BE ASTM A615-60 AND SHALL HAVE DEFORMATIONS IN ACCORDANCE TO ASTM SPECIFICATION A305.
C. TIE SHORTS WITH A MINIMUM COMPRESSIVE UNIT STRESS FOR THE MASONRY ASSEMBLY, FM = 2000 PSI.
D. GROUT SHALL BE USE GROUT CONFORMING TO ASTM C476 WITH A MINIMUM COMPRESSIVE ASSEMBLY, FM = 2000 PSI. STRENGTH OF 2000 PSI.

3. THE REINFORCED CONCRETE MASONRY UNITS SHALL BE ERECTED USING THE LOW LIFT METHOD.

4. PROVIDE ONE NUMBER FOUR (4) BAR MINIMUM AROUND ALL DOOR OPENINGS.

5. VERTICAL REINFORCING BARS SHALL BE AS SHOWN ON DRAWINGS WITH LADDER TYPE HORIZONTAL REINFORCING WITH FOUR(4) NO. 9 GAGE BARS AT 16" ON CENTER, U.N.O.

6. REINFORCING STEEL SHALL BE LAPPED 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER, WHERE SPLINED, AND SHALL BE SEPARATED BY ONE BAR DIAMETER OR WIRED TOGETHER.

7. VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 DIAMETERS OF REINFORCEMENT.

8. VERTICAL REINFORCING STEEL SHALL HAVE A CLEARANCE OF THREE QUARTERS OF AN INCH FROM MASONRY OR ADJACENT BARS, BUT NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.

9. ALL REINFORCING SHOWN ON DRAWINGS SHALL BE GROUTED FULL LENGTH.

10. ALL GROUT SHALL BE PUDDLED OR VIBRATED IN PLACE.

11. VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT LESS THAN 2" X 3".

12. CELLS CONTAINING REINFORCEMENT SHALL BE SOLIDLY FILLED WITH GROUT AND POURS SHALL BE STOPPED ONE AND ONE HALF INCHES BELOW THE TOP OF A COURSE TO FORM A KEY AT FOUR JOINTS.

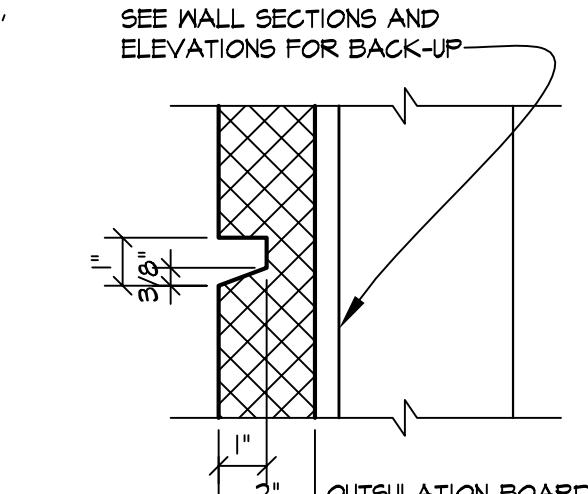
13. ALL BOLTS, ANCHORS, ETC. INSERTED IN THE WALL SHALL BE SOLIDLY GROUTED IN PLACE.

THRU-WALL MASONRY NOTES:

1. **MOCK-UP:** CONSTRUCT A MASONRY WALL PANEL AT LEAST

4 FEET LONG BY 4 FEET HIGH TO REPRESENT THE EXTERIOR MASONRY WALL (INCLUDING ACCENT BANDS). INCLUDE REINFORCING AND MINIMUM ONE CONTROL JOINT AND ONE OUTSIDE CORNER. INCLUDE JOINT PROFILE AND MORTAR COLOR. CLEAN DOWNSIDE OF MOCK-UP TO REPRESENT FINAL CLEAN DOWNSIDE MATERIALS IN ACCORDANCE WITH CLEAN DOWNSIDE REQUIREMENTS AND LEAVE REINFORCING WITHOUT FINAL CLEANING FOR COMPARISON. MOCK-UP TO BE APPROVED BY ARCHITECT/OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH MASONRY INSTALLATION. PROVIDE ON-SITE INSPECTION BY MASONRY MANUFACTURER/REPRESENTATIVE OF MOCK-UP CONSTRUCTION AND CLEANING AND SUBMIT MANUFACTURER'S LETTER OF APPROVAL OF THE WORK PROCEDURES AND THE COMPLETED MOCK-UP.

2. PRE-CONSTRUCTION MEETING REQUIRED PRIOR TO INSTALLATION OF THRU-WALL BRICK SYSTEM. PRE-CONSTRUCTION MEETING TO INCLUDE MANUFACTURER, MANUFACTURER'S REPRESENTATIVE, OWNER'S REPRESENTATIVE & ARCHITECT.

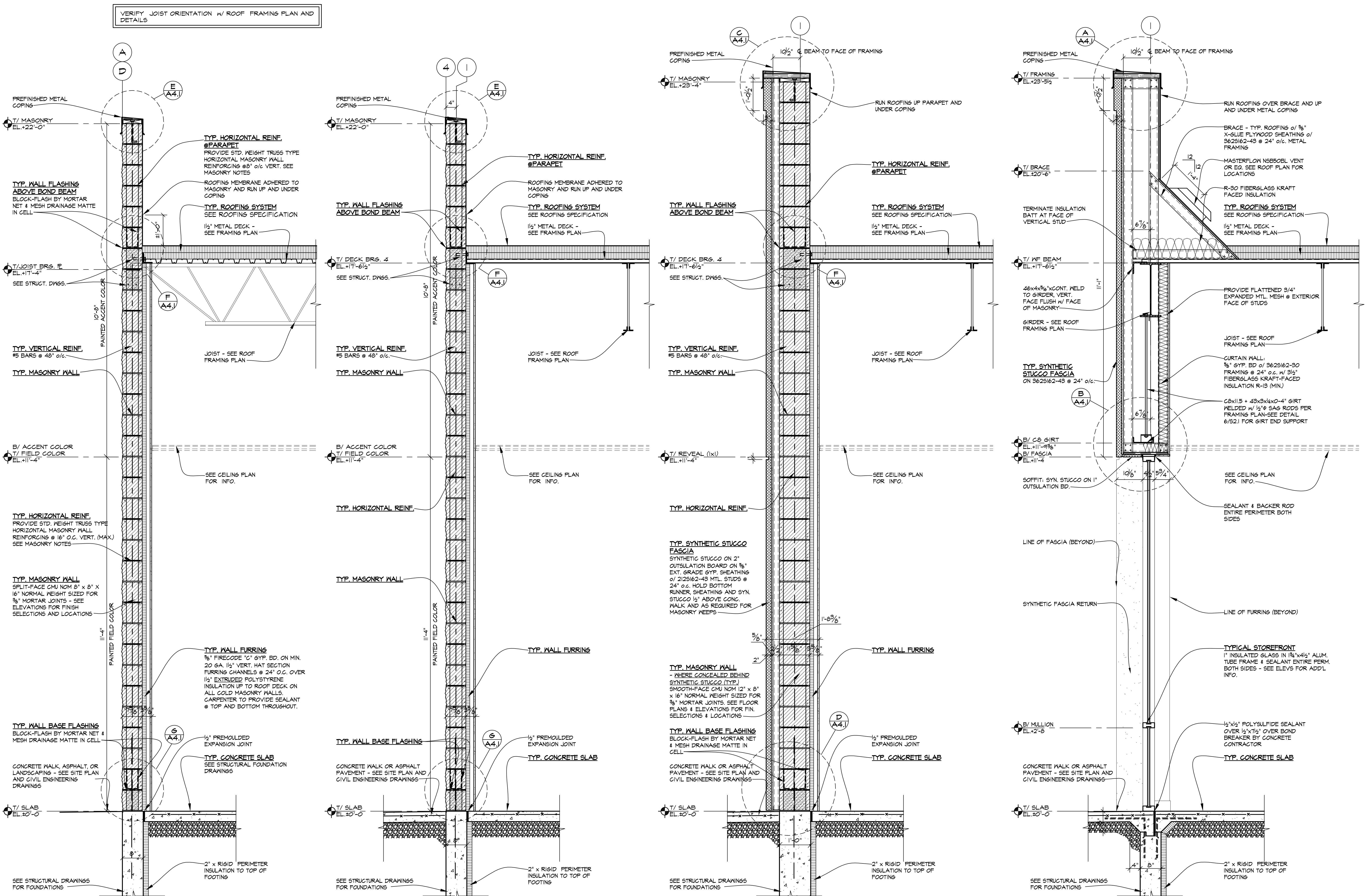


HORIZONTAL

SEE WALL SECTIONS AND ELEVATIONS FOR BACK-UP

OUTSULATION BOARD

1" 2"



**A
4**

O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
WALL SECTION

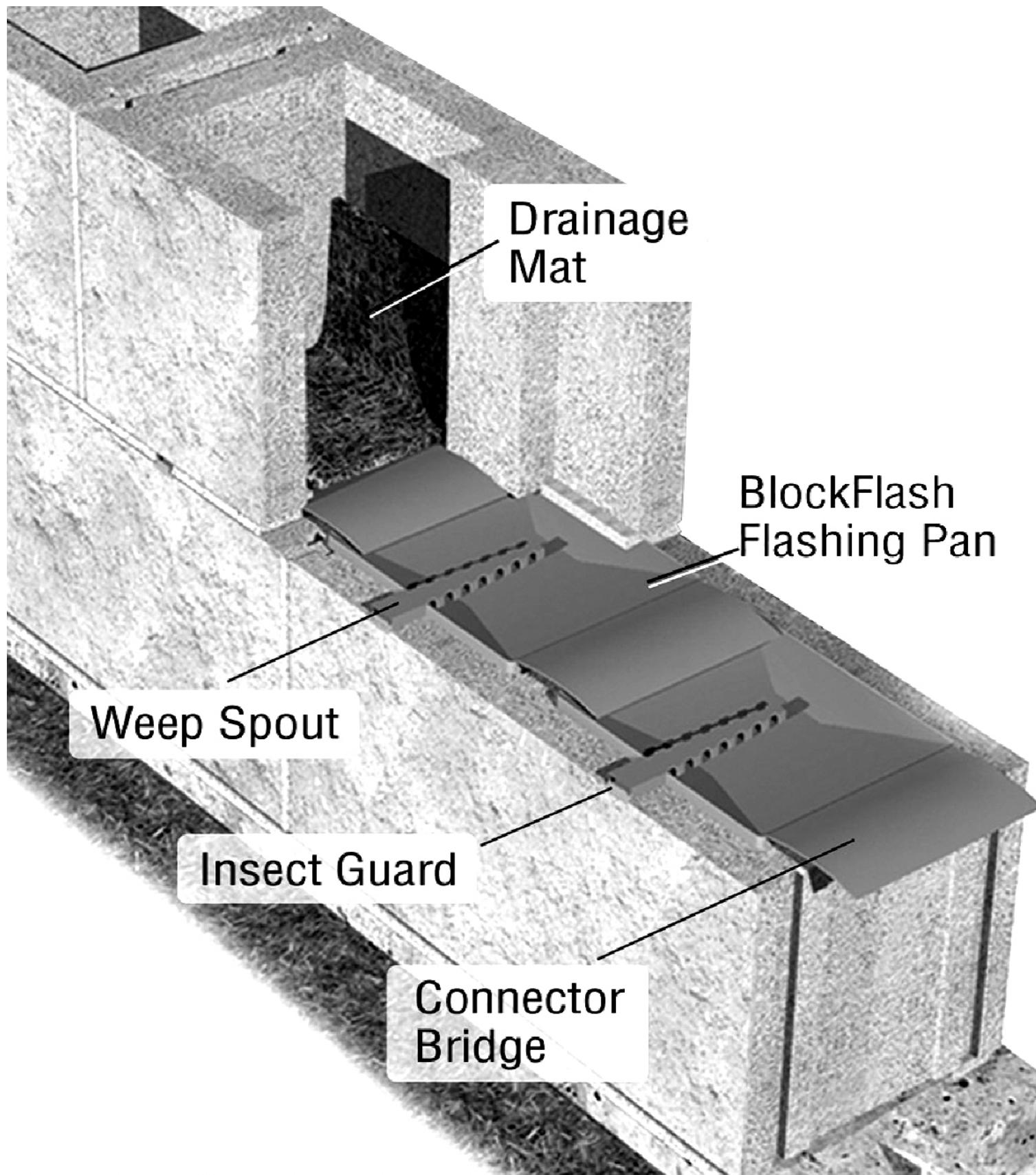
1906

REVISIONS

THIS DRAWING	NOT FOR COORDINATION
FOR BIDDING	1/1/21
FOR PERMIT	1/1/21
FOR CONTRACTING	NOT FOR CONSTRUCTION

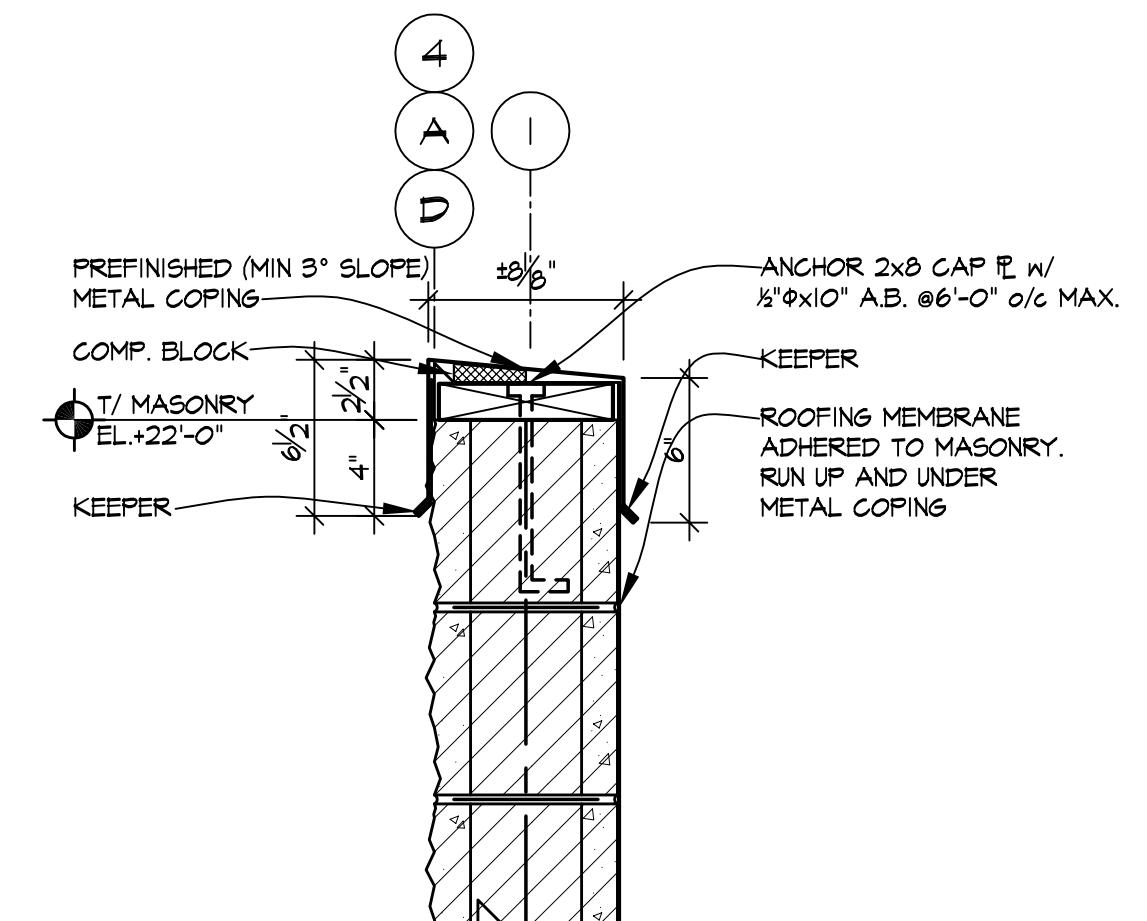
KMA & ASSOCIATES, INC. ARCHITECTS
SUITE F
60015-3235
FAX(847)945-6669

1121 LAKE COOK ROAD
DEERFIELD, ILLINOIS
(847)945-6669

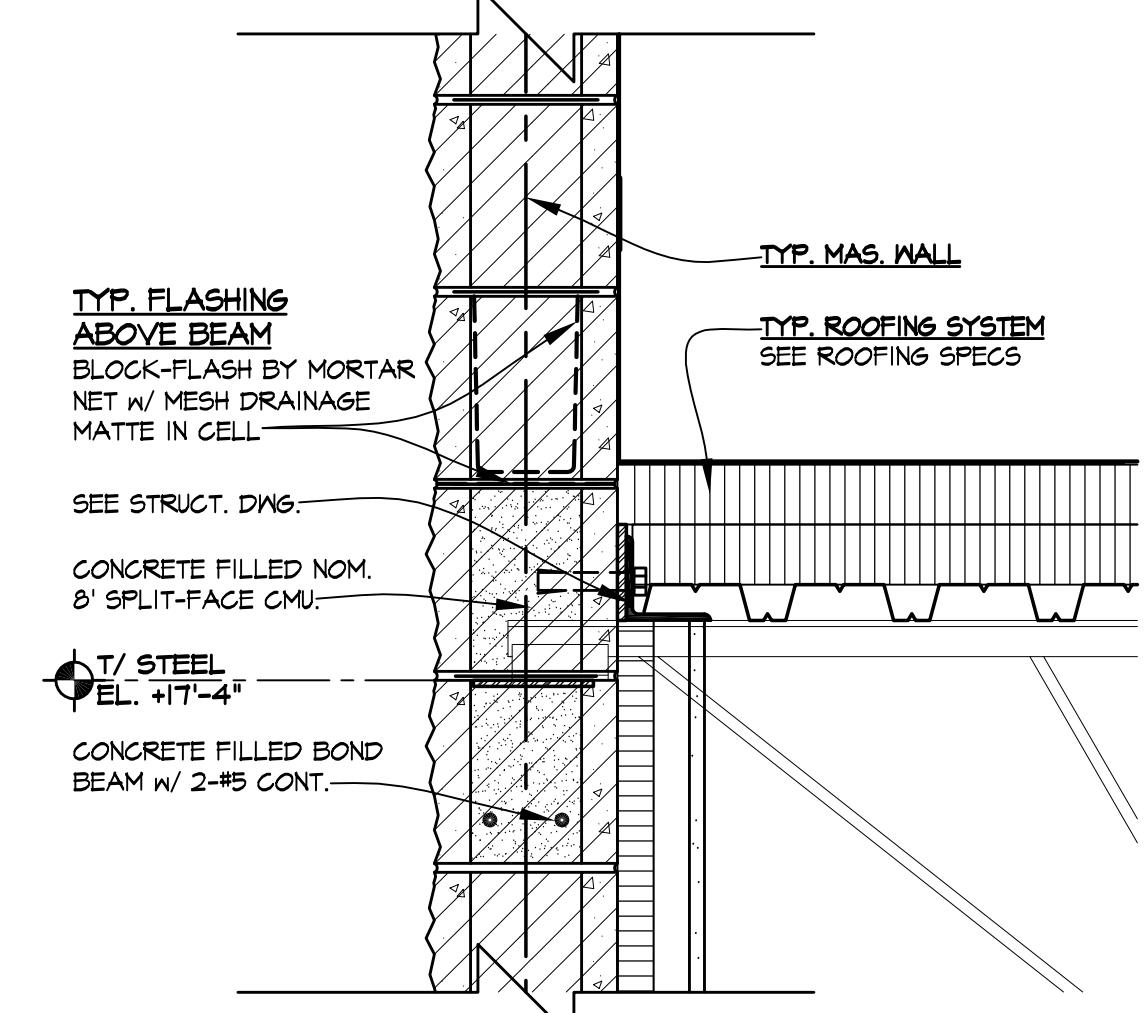


SINGLE NYTHE THRU-WALL MASONRY BLOCKFLASH INSTALLATION NOTES

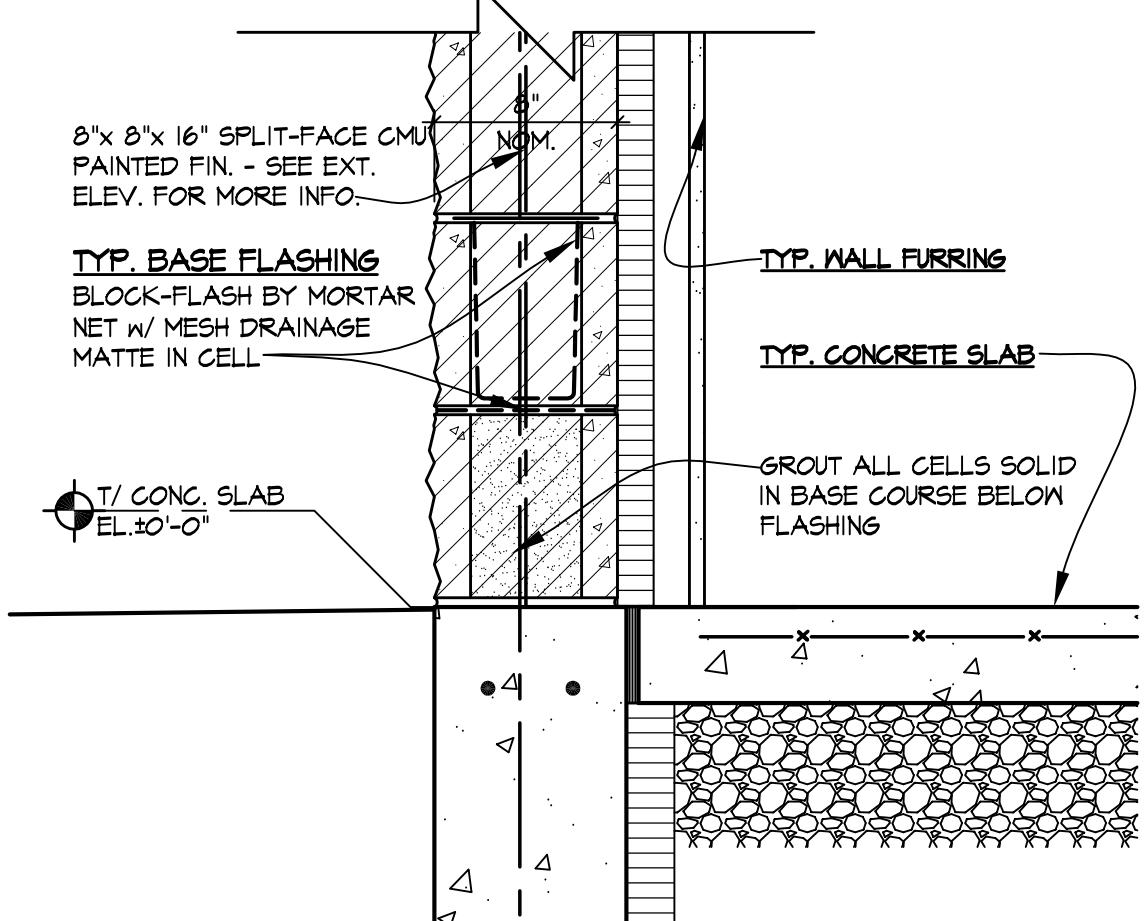
- BlockFlash is a product of Mortar Net Solutions. Provide BlockFlash near base of wall & above all lintels, steel beams, bond beams and above any multi-wythe.
- See all wall sections for complete information.
- BlockFlash is to be installed ABOVE GRADE ONLY.
 - Fully grout masonry cores / cells directly below BlockFlash, for one course minimum.
 - Install the BlockFlash course by spacing BlockFlash Pan units over the cores of each block.
 - Use the reference lip on bottom of the BlockFlash spout to position the pan against front of block. The drip edge on the weep spout will extend slightly. Make sure the connector bridges overlap the next pan this will divert water into adjoining BlockFlash pans.
 - Continue BlockFlash a minimum of one cell beyond edge of any intel opening.
- Vertical rebar/grouted cells/corners: Where walls are reinforced, eliminate the BlockFlash pan at the grouted core and detach the connector bridge from the adjoining pan by bending it back and forth a few times. You same technique for corners. Cross bed webs adjacent to the grouted core makingsure to overlap the BlockFlash flange. Use same technique for corners.
- Mortar spreading: Use standard mortar spreading techniques with mortar lapped first over the inner and second over the outer flanges of the BlockFlash pan. This will stabilize the pan during the installation and later help divert moisture into the BlockFlash pan. Cross bed mortar front to back on both sides of the grouted cells to prevent grout from flowing onto pan adjacent to grouted cells.
- Drainage: With 8, 10 and 12 inch pans install one 7" x 16" Drainage Mat in each CMU core in the course directly above the pan course. With 6 inch pans install one 7" x 14" Drainage Mat in each CMU core directly above the pan course. 6 inch pan should run continuously so the bridge of each pan overlaps onto the pan next to it as with other sizes, but the 6 inch size pan may not align perfectly over every CMU cell or structural brick core. The Drainage Mat for all sizes should be installed front and back of CMU cells not side to side, and should touch both walls of the CMU and the BlockFlash pan. Properly installed Drainage Mats catch and suspend mortar droppings above the pans and provide pathways for water to flow past the droppings to the pans.
- Tooling: Tool all head and bed joints and remove any obstruction from the weep spouts.



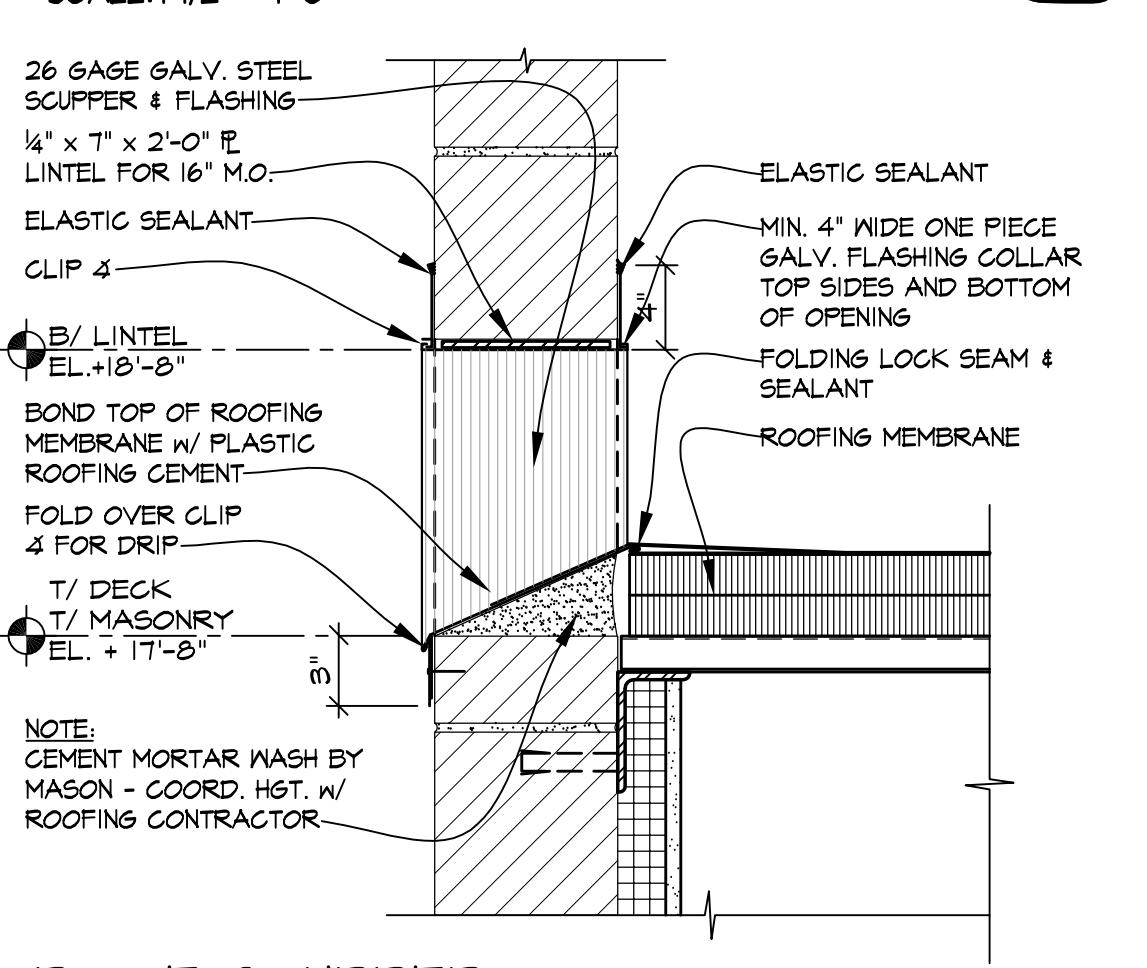
SCALE: 1 1/2" = 1'-0"



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

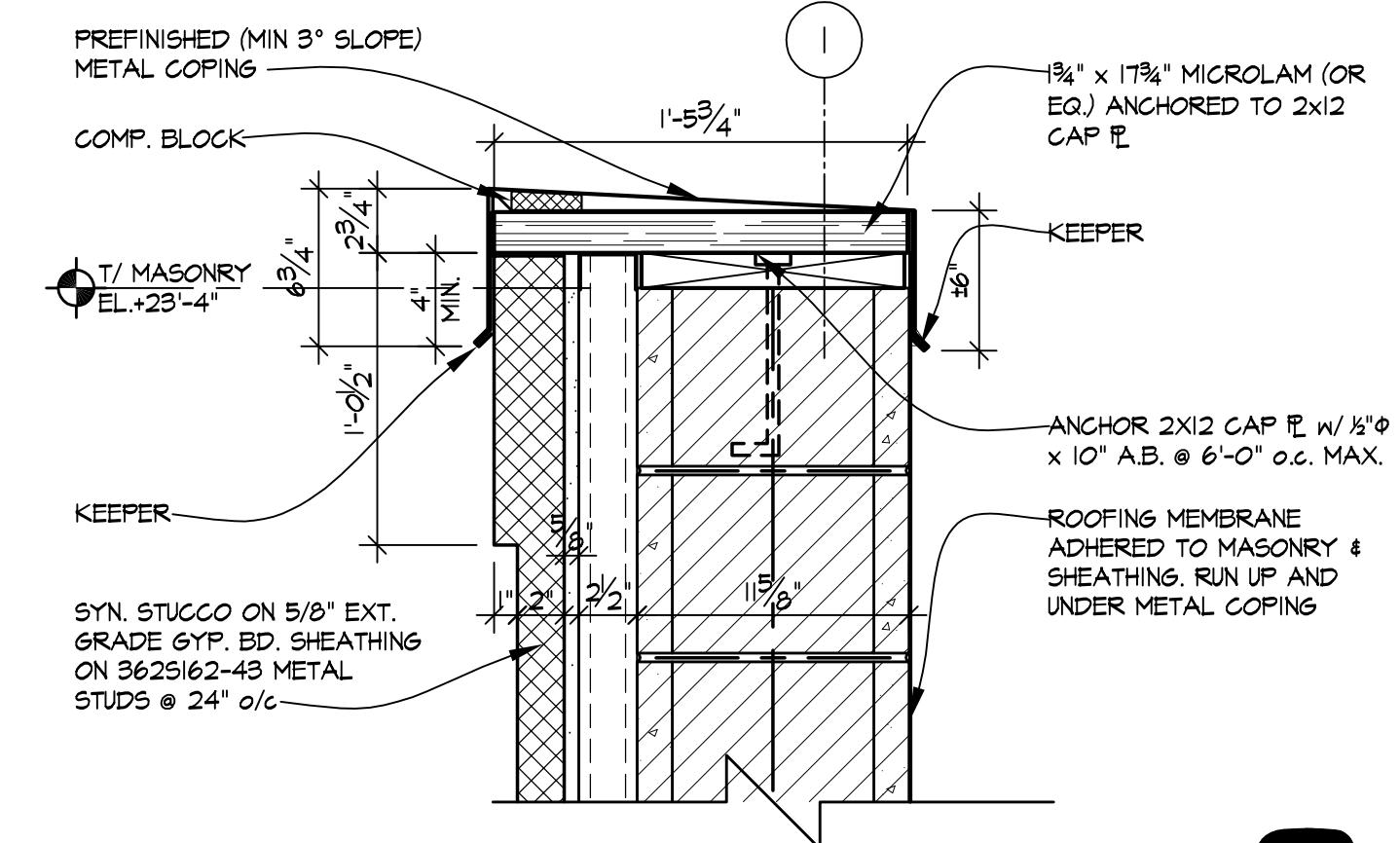


SCALE: 1 1/2" = 1'-0"



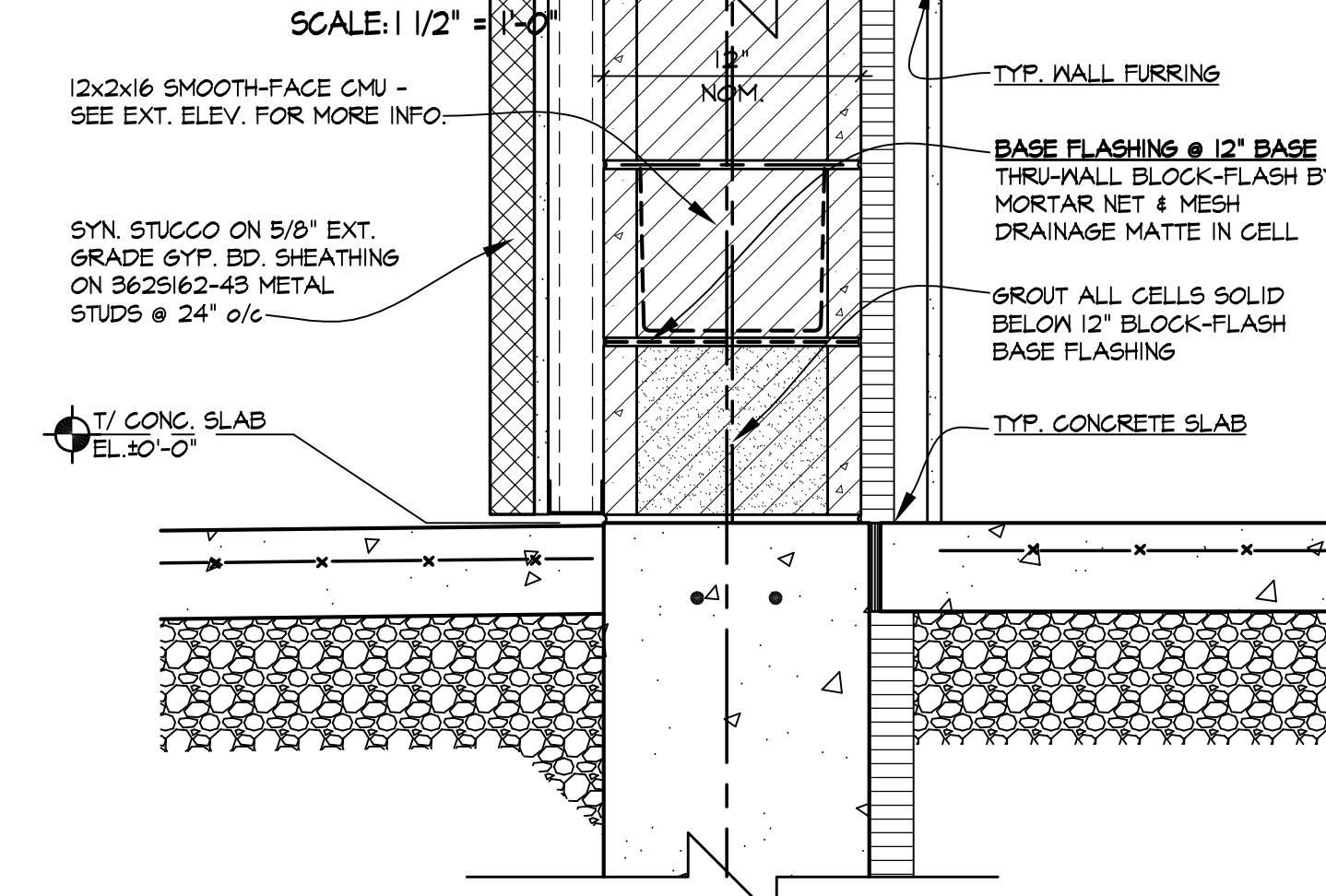
ROOF SCUPPER

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



E

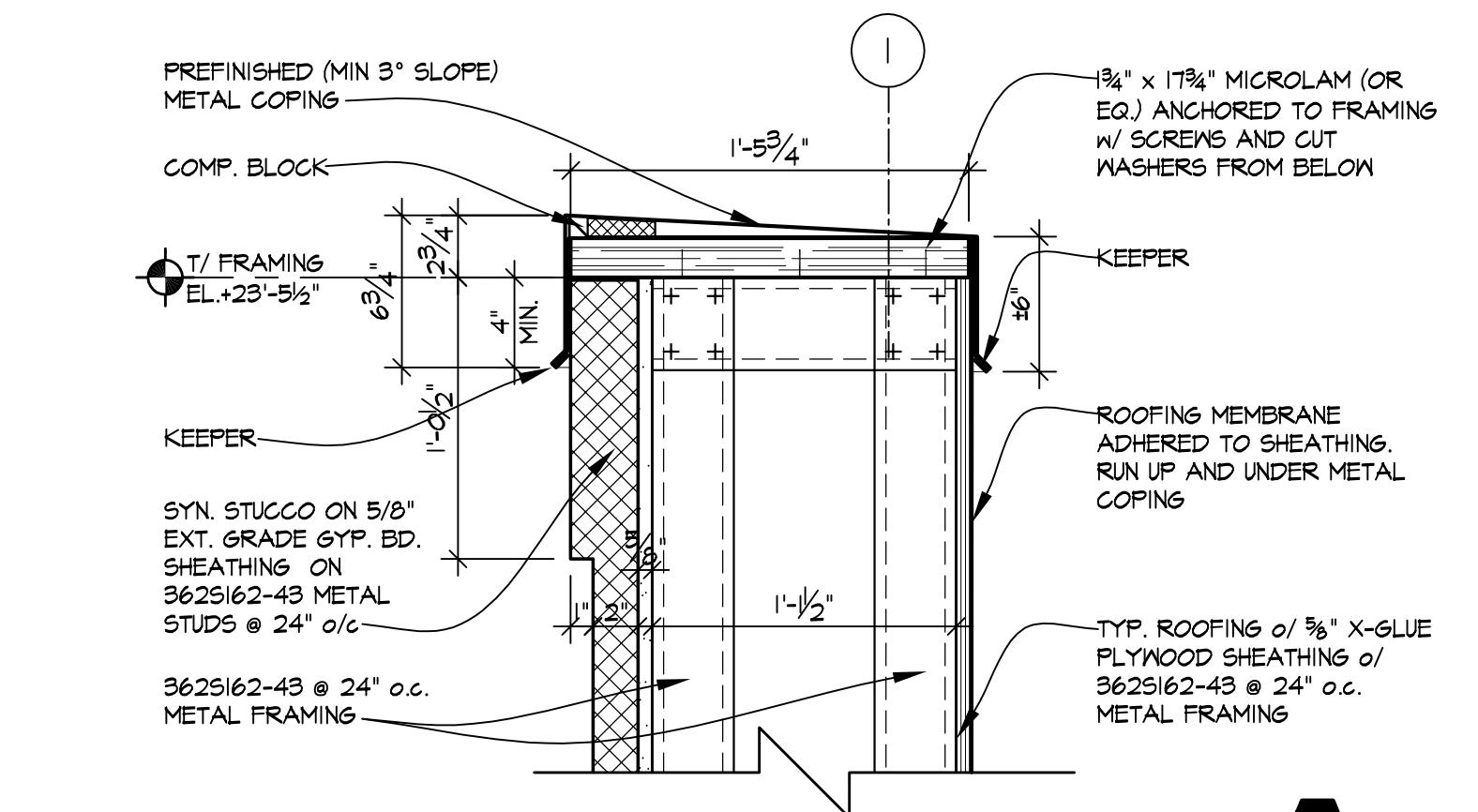
SCALE: 1 1/2" = 1'-0"



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

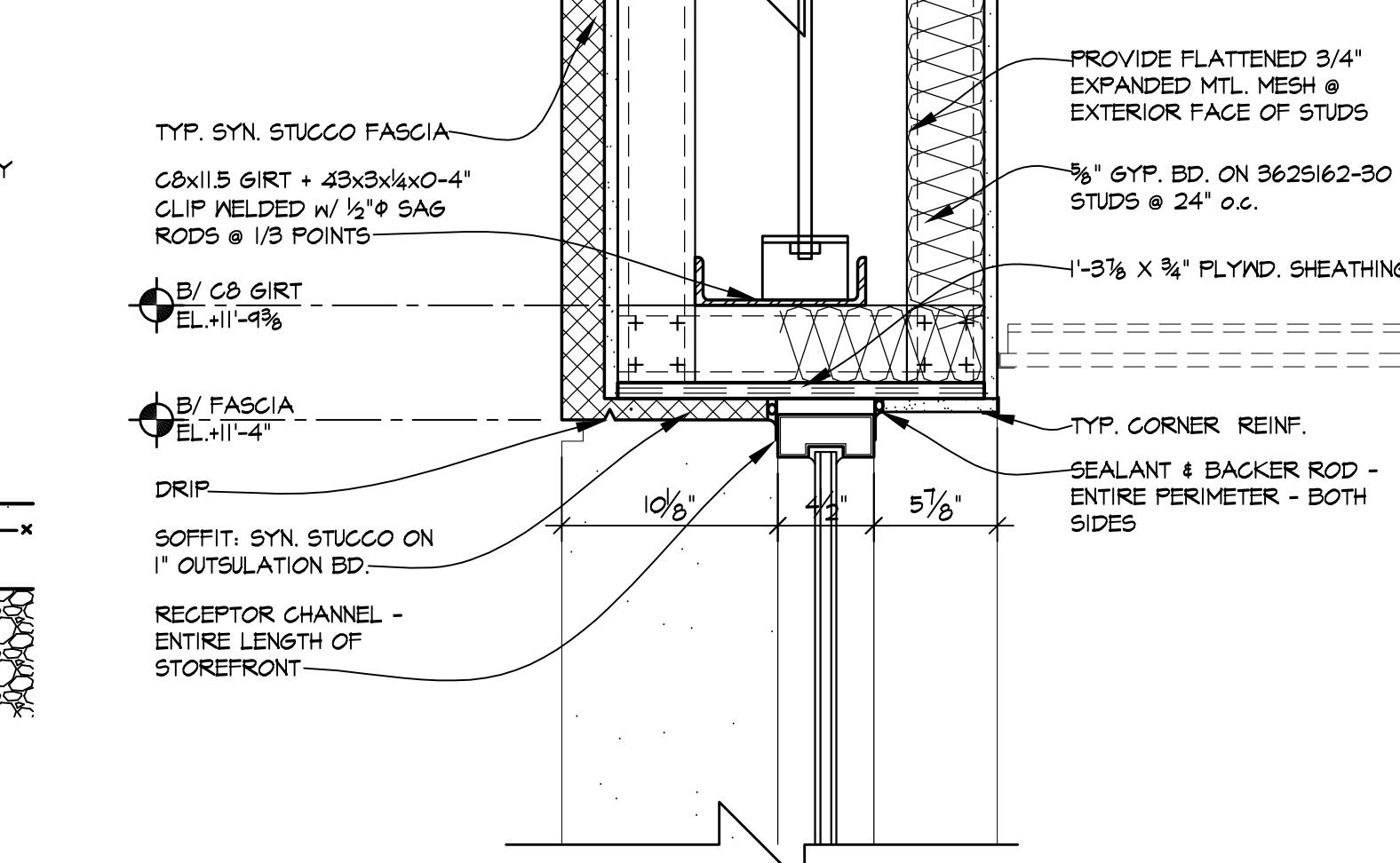
EXTRUDED POLYSTYRENE INSULATION BOARD
POLYSTYRENE BOARD INSULATION IS LIMITED TO A FLAME SPREAD OF 25 OR LESS (ACTUAL = 5) AND A SMOKE DEVELOPED RATING OF 450 OR LESS (ACTUAL = 165) PER ASTM E84. INSULATION AND STUDS TO BE FACED WITH A FACE LAYER OF 1/8" FIRECODE 'C' GYPSUM DRYWALL PROTECTION AS REQUIRED BY CODE.
FIBERGLASS INSULATION
FIBERGLASS INSULATION TO BE TYPE FLAME SPREAD 25 INSULATION, FACED WITH A VAPOR BARRIER OF MAX. 10 PERM RATING WHEN TESTED IN ACCORDANCE WITH ASTM E96. THE FLAME SPREAD INDEX OF 25 AND A SMOKE DEVELOPED INDEX OF 150 PER ASTM E84.
PLYWOOD SHEATHING
ALL PLYWOOD ROOF & WALL SHEATHING SHALL BE FASTENED #18 SCREWS @ 6" O.C. @ SUPPORTED PLYWOOD EDGES, AND 12" O.C. @ INTERMEDIATE SUPPORTS, UNO. ROOF & WALL PLYWOOD SHEATHING TO MEET DOC PS 1 OR 2 STANDARDS
GYPSUM BOARD & ACCESSORIES
ALL GYPSUM BOARD MATERIALS AND ACCESSORIES SHALL CONFORM TO THE APPROPRIATE STANDARDS LISTED BELOW:
ACCEESSORIES FOR GYPSUM BD.....ASTM C 1047 GYPSUM WALLBOARD.....ASTM C 74 JOINT REINF. TAPE & COMPOUND.....ASTM C 474; C 475 STEEL SCREWS.....ASTM C 454; C 1002 STEEL STUDS, NON-LOAD BEARING.....ASTM C 645 WATER RESISTANT GYP. BACKING BD.....ASTM C 650 REINFORCED GYPSUM PANELS.....ASTM C 1278 TESTING SYSTEM AND GYPSUM PRODUCTS.....ASTM C 22; C 412; C 413

A



C

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



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

KMA & ASSOCIATES, INC. ARCHITECTS
SUITE F 1121 LAKE COOK ROAD DEERFIELD, ILLINOIS (847)945-6569
60015-122-35 FAX(847)945-6569
1317 E. SIBLEY BLVD. DOLTON, IL 60419 FOR: DEPARTMENT PROPERTY GROUP, LLC
REVISIONS
THIS DRAWING NOT FOR COORDINATION NOT FOR BIDDING NOT FOR CONTRACTING NOT FOR CONSTRUCTION
1/1/21a 1/1/21a

SHEET TITLE
WALL SECTION DETAILS

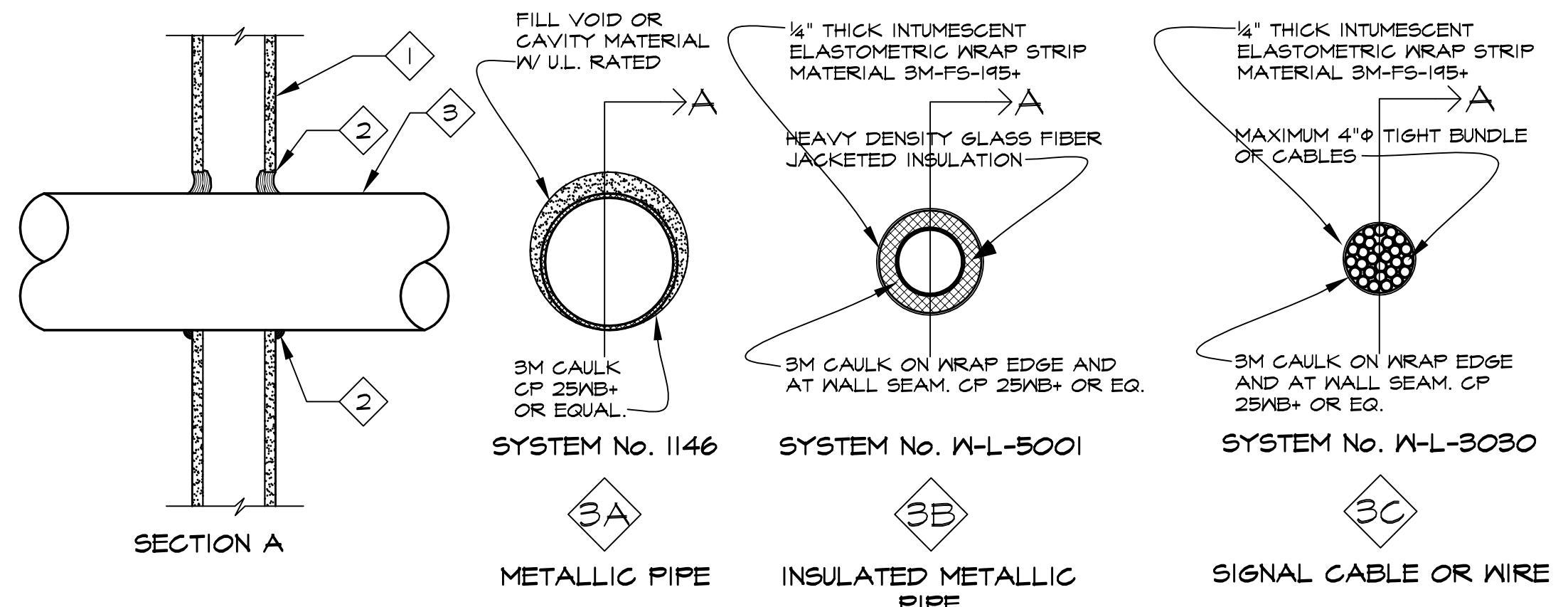
1906

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4.1

INTERIOR FINISH SCHEDULE

SEE BWCO DRAWINGS
FOR INTERIOR FINISHES



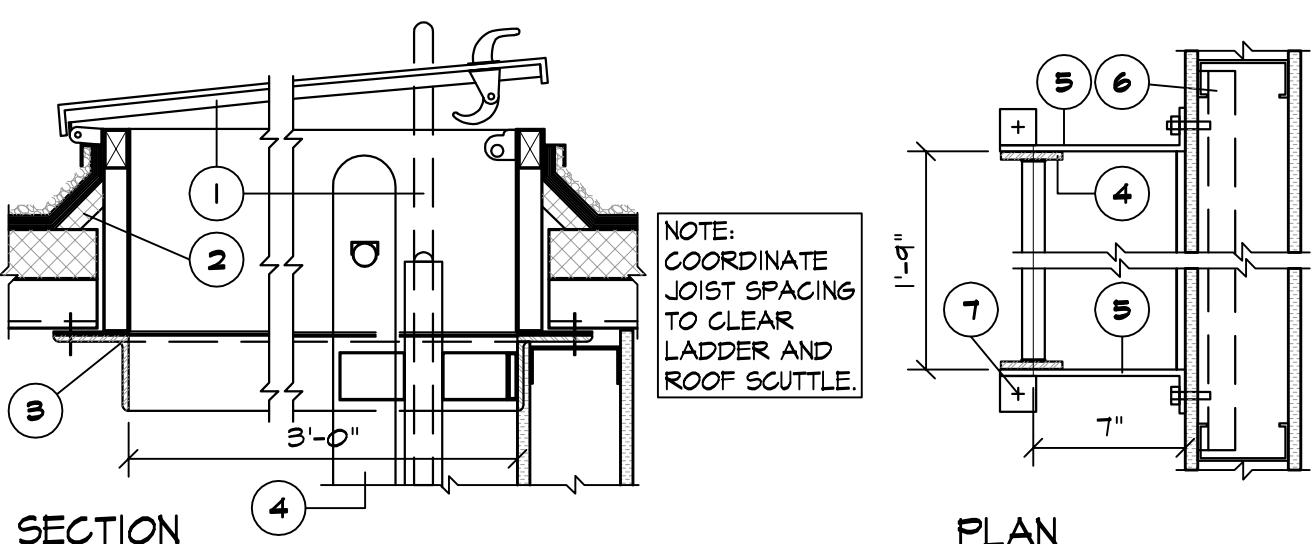
TYPICAL DEMISING WALL PENETRANT RESTORATION DETAIL

SCALE: 1/2" = 1'-0"
DRAWING LEGEND NOTES

- ① WALL ASSEMBLY
- ② 1/8" THICK MINIMUM CAULK 3M CP 25WB+ OR EQUAL
- ③ THROUGH WALL PENETRANT
- ④A METALLIC PIPE (SYSTEM W-L 1146)
 - 1. STEEL PIPE 12" (OR SMALLER) SCHED. 10 (OR HEAVIER)
 - 2. IRON PIPE 12" (OR SMALLER)
 - 3. CONDUIT 6" (OR SMALLER)
- ⑤C SIGNAL CABLE OR WIRE (SYSTEM W-L 5001)

NOTE:
CONSULT INDIVIDUAL PENETRATION SYSTEM
DESIGNS IN THE UL FIRE RESISTANCE
DIRECTORY FOR ADDITIONAL INFO.

4. COPPER TUBING, 6" (OR SMALLER) TYPE L (OR HEAVIER)
5. COPPER PIPE, 6" (OR SMALLER) REGULAR (OR HEAVIER)
- ⑥B INSULATED METAL PIPE (SYSTEM W-L 5001)
 1. STEEL PIPE 12" (OR SMALLER) SCHED. 10 (OR HEAVIER)
 2. COPPER TUBING 6" (OR SMALLER) TYPE L (OR HEAVIER)
 3. COPPER PIPE, 6" (OR SMALLER) REGULAR (OR HEAVIER)
- ⑦C SIGNAL CABLE OR WIRE (SYSTEM W-L 5001)



KEYED NOTES

1. ROOF SCUTTLE - 2'-6" x 3'-0" TYPE "S" WITH LADDER-UP SAFETY POST MODEL 2 BY BILCO CO. SECURE SCUTTLE TO ROOF STRUCTURAL STEEL WITH THRU BOLTS ACCORDING TO MANUFACTURER'S DIRECTIONS. HINGE PINS ARE TO BE WELDED NON-REMOVABLE.
2. STANDARD 1" FIBER CANT, BUILT UP ROOFING & COUNTER FLASHING.
3. 3/4" x 3/4" x 1/4" ANGLED WELDED FRAME, EXTEND AND SECURE TO BUILDING ROOF STRUCTURE AS REQUIRED.
4. 2 1/2" FLAT STL BAR SIDE RAILS, 8" DIA. STL. RINGS FURNISHED INTO RAILS 12" O.C. & WELDED W/ MTL. "MEAC" SLIP-RESISTANT RUNG COVERS W/ A FINISH COAT RUST INHIBITIVE PAINT.
5. PROVIDE 2 1/2" x 3/8" THICK FLAT BENT STEEL BRACKETS AT MAX. 4'-0" CENTERS, WELD TO SIDE RAILS, WELD TOP TO STEEL ANGLE FRAME.
6. AT METAL STUD WALL, PROVIDE 1 1/2" O.R. STEEL REINFORCING CHANNELS WITH WELDED 3/8" THRU BOLTS TO RECEIVE BRACKETS, CUT STUD FLANGES TO RECEIVE REINFORCING CHANNEL. AT MASONRY, FASTEN BRACKETS WITH 3/8" x 2 1/2" WEDGE "RED HEAD" OR "MOLLY" ANCHOR BOLTS.
7. PROVIDE 2 1/2" x 2 1/2" x 3/8" WELDED CLIP ANGLES SECURED TO CONCRETE FLOOR WITH 1/2" x 3/8" WEDGE "RED HEAD" OR "MOLLY" ANCHOR BOLTS.

LADDER & SCUTTLE DETAIL

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

1

DOOR SCHEDULE

MK	DOOR				DOOR HARDWARE		FRAME			DETAILS			FIRE RATING	REMARKS (REFER NOTES)	
	SIZE (W X H X D)	TYPE	SWING	MATERIAL	GLAZ. TYPE	SET #	KEYED	TYPE	MATERIAL	HEAD HEIGHT	HEAD	JAMB	SILL		
1	3'-0" X 7'-0" X 1-3/4" (STOREFRONT ENTRY DOOR)	A	REFER TO FLOOR PLAN	ALUMINUM		1	A	1	ALUMINUM						1, 2
2	3'-0" X 7'-0" X 1-3/4" (DELIVERY DOOR)	B	REFER TO FLOOR PLAN	INSULATED METAL		2	A	2	INSULATED METAL	4"	SEE 3/A1				1, 2, 3
3	6'-0" X 8'-0" (STAIRHEAD DELIVERY DOOR)	D	SECTIONAL OVERHEAD	INSULATED METAL		3			MANUFACTURER'S STANDARDS		SEE 4/A1				1

SEE BWCO DRAWINGS FOR INTERIOR DOORS

7	3'-0" X 7'-0" X 1-3/4" (SHOWROOM EGGS EXIT DOOR)	B	REFER TO FLOOR PLAN	INSULATED METAL	6		2	INSULATED METAL	4"	SEE 3/A1					1, 3
8	3'-0" X 7'-0" X 1-3/4" (INTERIOR VESTIBULE DOOR)	A	REFER TO FLOOR PLAN	ALUMINUM	7		1	ALUMINUM							1

NOTES:

1. ALL DOORS SHALL BE SHOP PREPARED FOR HARDWARE.
2. ALL EXTERIOR DOORS TO BE KEYED ALIKE. CONTRACTOR TO FIELD VERIFY AND MATCH CORE OF DOOR MARKED "2".
3. EXTERIOR DOOR, FRAME AND HARDWARE OWNER FURNISHED AND CONTRACTOR INSTALLED. VERIFY WITH G.C.
4. CONTRACTOR'S OPTION TO PURCHASE INTERIOR DOORS, FRAMES, AND HARDWARE THROUGH PREFERRED VENDOR. REFER TO SCOPE OF WORK SCHEDULE.

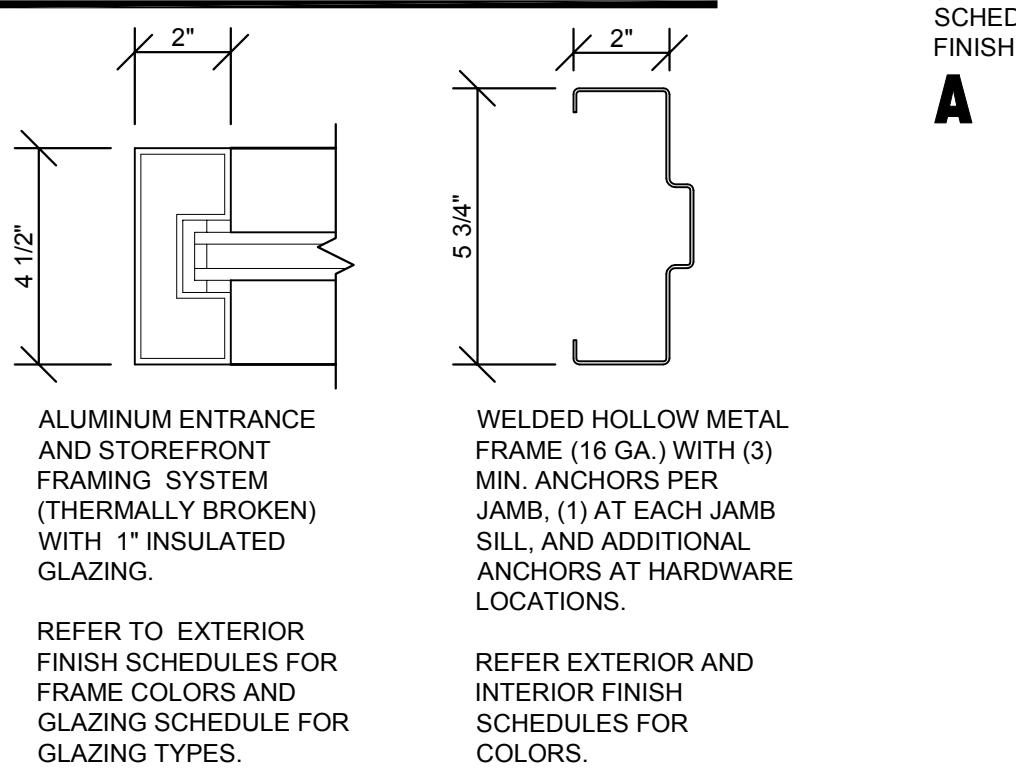
LOCKNET
100 COURCHELLE DRIVE
NICHOLSVILLE, KY 40356
CONTACT: PAM PEEL
PHONE: 800-887-4307 EXT 133
FAX: 859-881-5499
EMAIL: construction@locknet.com

SPECIAL NOTE:
UNLESS OTHERWISE INDICATED, KNOCK
DOWN (KD) TYPE DOOR FRAMES ARE NOT
PERMITTED.

GENERAL NOTES

- Ⓐ N/A
- Ⓑ N/A
- Ⓒ REFER TO FLOOR PLAN, ELEVATIONS, AND SECTIONS FOR ADDITIONAL REQUIREMENTS.
- Ⓓ REFER TO EXTERIOR SCHEDULES FOR COLORS. PERIMETER SEALANT COLOR TO MATCH FRAME COLOR UNLESS OTHERWISE INDICATED.

FRAME TYPES (SCALE 3" = 1'-0")



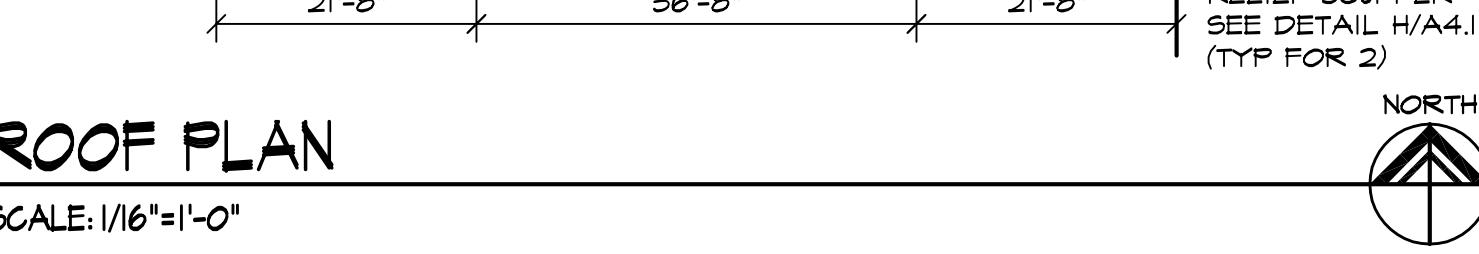
1 2

ROOFING SYSTEM SPECIFICATIONS:

1. BASE BID - TYP. EPDM ROOF SYSTEM, FULLY-ADHERED MIN. 45 MIL BLACK EPDM ROOFING MEMBRANE OVER POLYISOCYANURATE INSULATION.
2. ALTERNATE BID - TYP. TPO SINGLE PLY ROOFING SYSTEM; MIN. 45 MIL WHITE TPO THERMOPLASTIC POLYOLEFIN SINGLE-PLY ROOFING MEMBRANE (MEETING ASTM STANDARDS D3141, D2176, D312, D3409 FOR MATERIAL USED), OVER POLYISOCYANURATE INSULATION.
3. PROVIDE MINIMUM 2 LAYERS OF POLYISOCYANURATE INSULATION MECHANICALLY FASTENED TO 1/2" METAL ROOF DECK. MINIMUM INSULATION "R" VALUE SHALL BE 30. (SINGLE LAYER WILL NOT ACHIEVE REQUIRED R-VALUE & THICKNESS). TOTAL ROOF SYSTEM SHALL HAVE 90 MPH WIND RESISTANCE, PHYSICAL INTEGRITY AND IMPACT RESISTANCE IN ACCORDANCE WITH ASTM G55, D3746 AND D4272. ALL ROOF COMPONENTS TO BE INSTALLED PER MANUFACTURER'S WRITTEN TECHNICAL SPECIFICATIONS. PROVIDE ROOFING SYSTEM BY THE FOLLOWING APPROVED MANUFACTURERS OR APPROVED EQUAL:
 - FIRESTONE BUILDING PRODUCTS (800)428-4442
 - CARLISLE, INC. (717)245-1000
 - JOHNS MANVILLE (800)654-3103
4. ROOFING SYSTEM SHALL HAVE FIFTEEN (15) YEAR WARRANTY FROM DATE OF SUBSTANTIAL COMPLETION. ROOFING SYSTEM SHALL BE INSTALLED BY A QUALIFIED CONTRACTOR, APPROVED BY ROOFING SYSTEM MANUFACTURER, TO INSTALL MANUFACTURER'S PRODUCTS. ROOFING SYSTEM TO BE INSTALLED IN STRICT ACCORDANCE WITH THE ROOFING SYSTEM MANUFACTURER'S WRITTEN TECHNICAL SPECIFICATIONS. PROVIDE ROOFING SYSTEM BY THE FOLLOWING APPROVED MANUFACTURERS OR APPROVED EQUAL:
 - FIRESTONE BUILDING PRODUCTS (800)428-4442
 - CARLISLE, INC. (717)245-1000
 - JOHNS MANVILLE (800)654-3103

ROOF PLAN

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



SHEET TITLE
ROOF PLAN

1906

DOOR HARDWARE SCHEDULE

ARE NOTES:
1. ALL HARDWARE TO BE ADA AND ANSI COMPLIANT.
2. VERIFY COMPATIBILITY OF HARDWARE SPECIFIED. NOTIFY ARCHITECT OF INCOMPATIBILITY ISSUES PRIOR TO ORDERING AND INSTALLATION.

SET NO. 1 (DR. 1) - EXTERIOR STOREFRONT DOOR
1 CYLINDER: 20-062 X US26D - "E" KEYWAY (REMOVABLE CORE)..... SCHLAGE

(FOLLOWING REQUIRED HARDWARE FURNISHED WITH WINDOW FRAMING DOOR SYSTEM)

- 1 PAIR OFFSET PIVOTS: 195/188 X 626..... RIXON
- 1 DEADLOCK: MS1850 S X 626..... ADAMS RITE
- 1 STRIKE: MS1040 S X 626..... ADAMS RITE
- 1 SET PUSH/PULLS: 86-151 ULTRALINE W/ OFFSET PULL X 626..... EFCO
- 1 CLOSER: 4041-3077-187J-TB X 689 (ADJ. TO 8.5 LBS.)..... LCN
- 1 SET PERIMETER GASKETS: QEBD-500 X LENGTH REQUIRED..... PEMKO
- 1 SWEEP: 345AP X LENGTH REQUIRED..... PEMKO
- 1 THRESHOLD: 270A X LENGTH REQUIRED (OFFSET PIVOT COMPATIBLE)..... PEMKO

SET NO. 2 (DR. 2) - EXTERIOR VESTIBULE DOOR

- 1 CONTINUOUS HINGE: 780-112HD X LENGTH REQUIRED X 628..... HAGER
- 1 CYLINDER: 20-057 X 626 - "E" KEYWAY (REMOVABLE CORE)..... SCHLAGE
- 1 PANIC LOCK: 9300B X 486 X 689 - PRT03 X 630 (THROUGH SEX BOLT MOUNTING)..... DORMA
- 1 CLOSER: 8616DST X SNB1 X 689 (ADJ. TO 8.5 LBS.)..... DORMA
- 1 SET PERIMETER GASKETS: QEBD-500 X LENGTH REQD..... SCHLEGEL
- 1 LATCH GUARD: LG100Z/SF X 626 (STRAIGHT W/ PIN W/ SEX BOLTS)..... LATCHGUARD
- 1 DOOR VIEWER: 698 - 190 DEGREE X 626..... Ives
- 1 KICK PLATE: 190S X 8" X 34" X 630..... HAGAR
- 1 DOOR BOTTOM SEAL: 31321 X LENGTH REQUIRED..... GLOBAL
- 1 THRESHOLD: 31206 X LENGTH REQUIRED..... GLOBAL

SET NO. 3 (DR. 3) - OVERHEAD DELIVERY DOOR
REQUIRED HARDWARE FURNISHED WITH OVERHEAD DOOR SYSTEM (LOCKING FROM INSIDE ONLY)

SEE BWCO DRAWINGS FOR INTERIOR DOORS

THIS DRAWING
FOR COORDINATION
FOR BIDDING
FOR PERMITTING
FOR CONTRACTING
NOT FOR CONSTRUCTION

KMA & ASSOCIATES, INC. ARCHITECTS
1121 LAKE COOK ROAD
DEERFIELD, ILLINOIS
(847)945-6699



O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

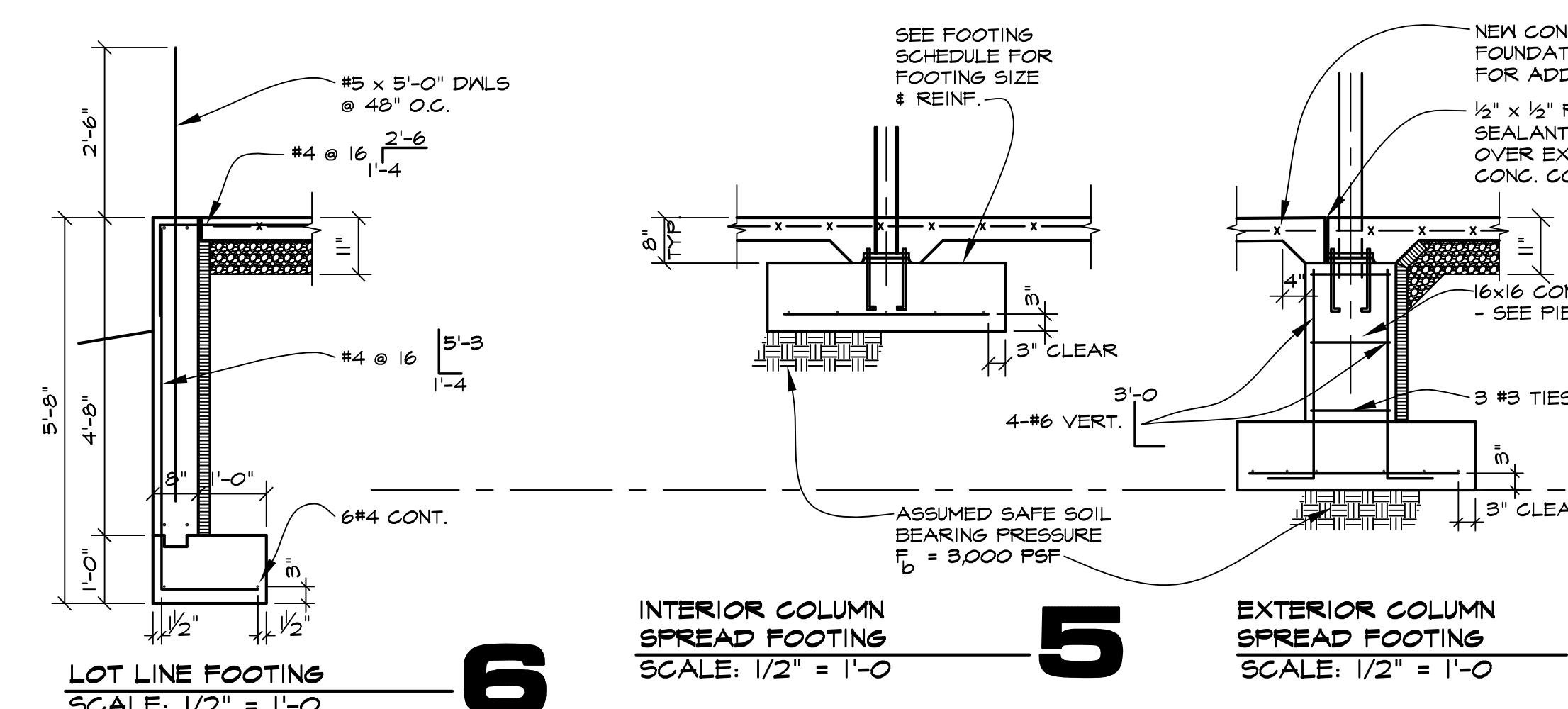
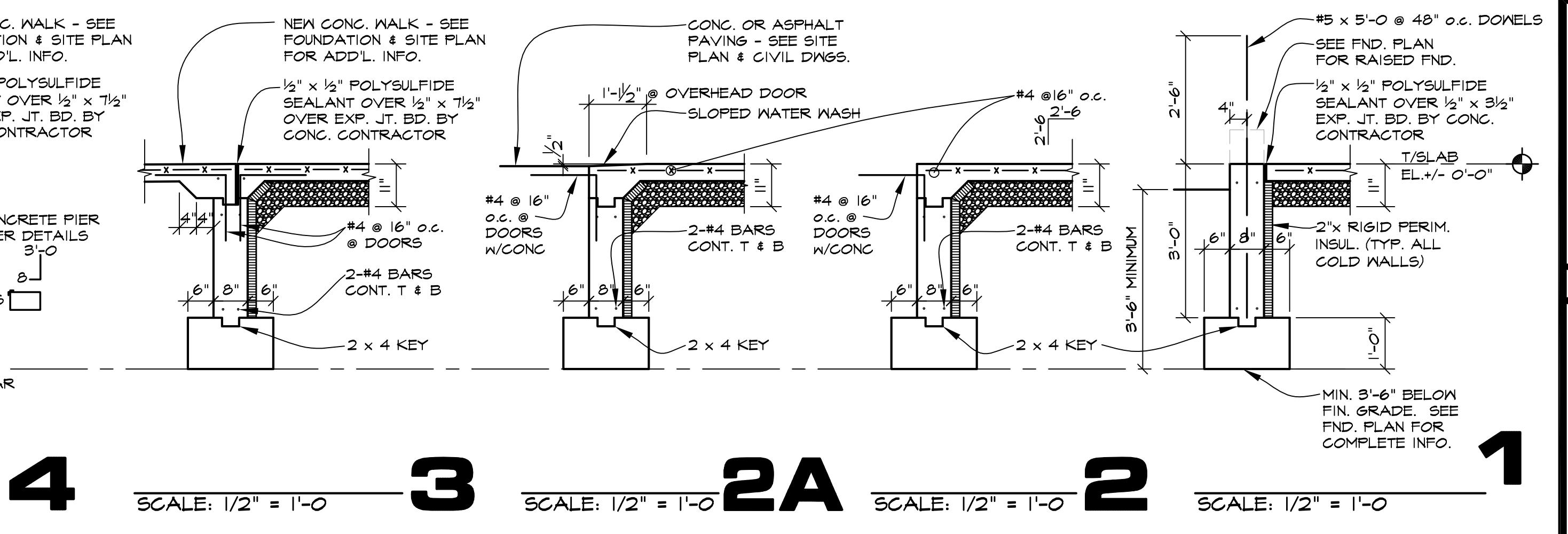
SHEET TITLE
ROOF PLAN

1906

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FOUNDATION PLAN

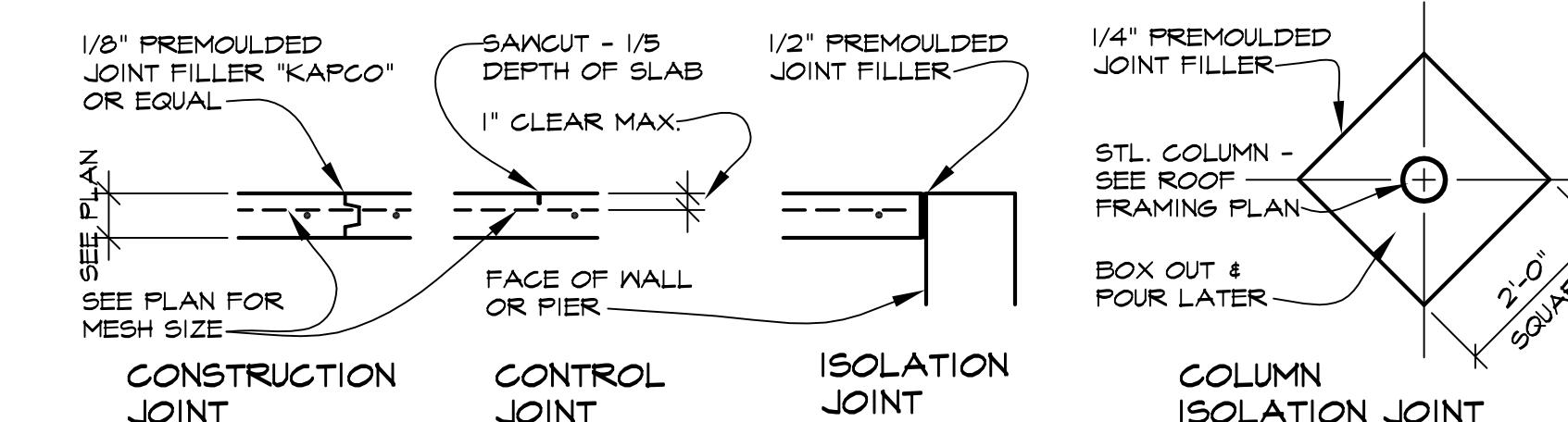
SCALE: 1/8" = 1'-0"



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

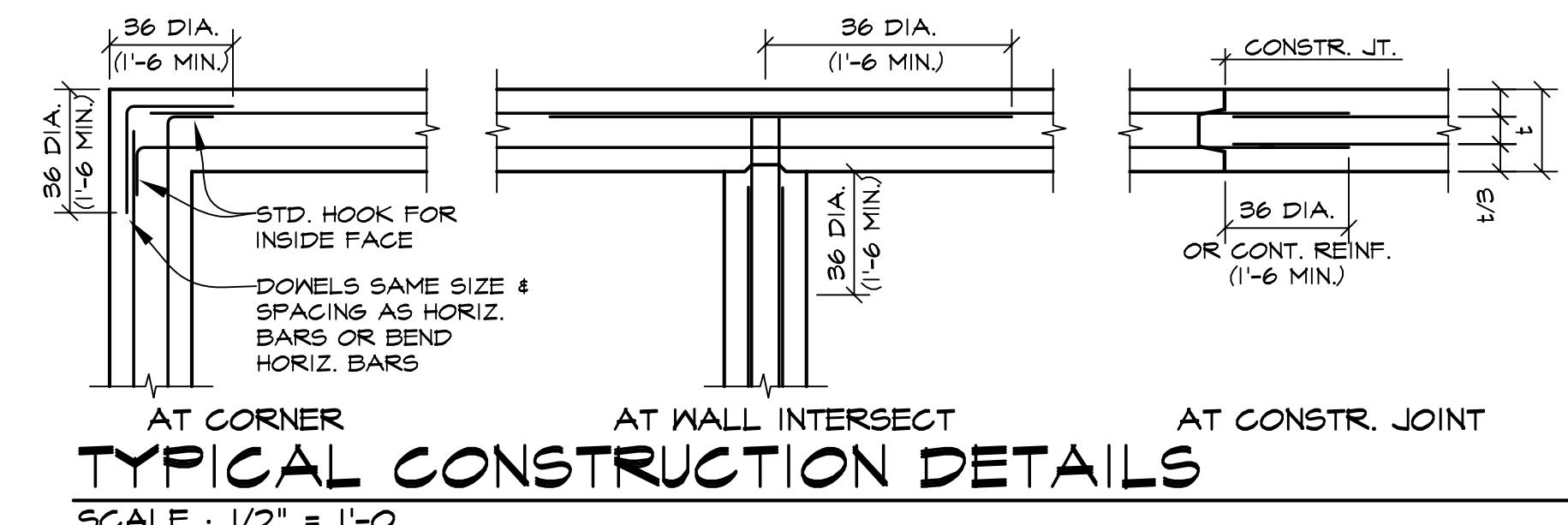
FOOTING SCHEDULE						
PAD			PIER			
MARK	SIZE	REINF. EA. WAY	BOTTOM ELEV.	SIZE	VERT. REINF.	TIES
F1	4'-6" X 4'-6" X 1'-0"	9 #4 EW	(-)-0			
F2	3'-6" X 3'-6" X 1'-0"	6 #4 EW	(-4)-6	16 x 16	4 #6	#3 @ 12
						-0'-0"
						PI
						SEE PIER DETAILS

FLOOR CONSTRUCTION NOTES:
1. PROVIDE A CONTROL OR CONSTRUCTION JOINT ON ALL COLUMN LINES
2. CONTROL JOINTS SHALL BE CUT WITHIN 48 HOURS OF FLOOR POUR
3. POUR FLOOR IN CHECKERBOARD FASHION
4. WELDED WIRE MESH TO BE WITHIN 1" OF TOP OF SLAB



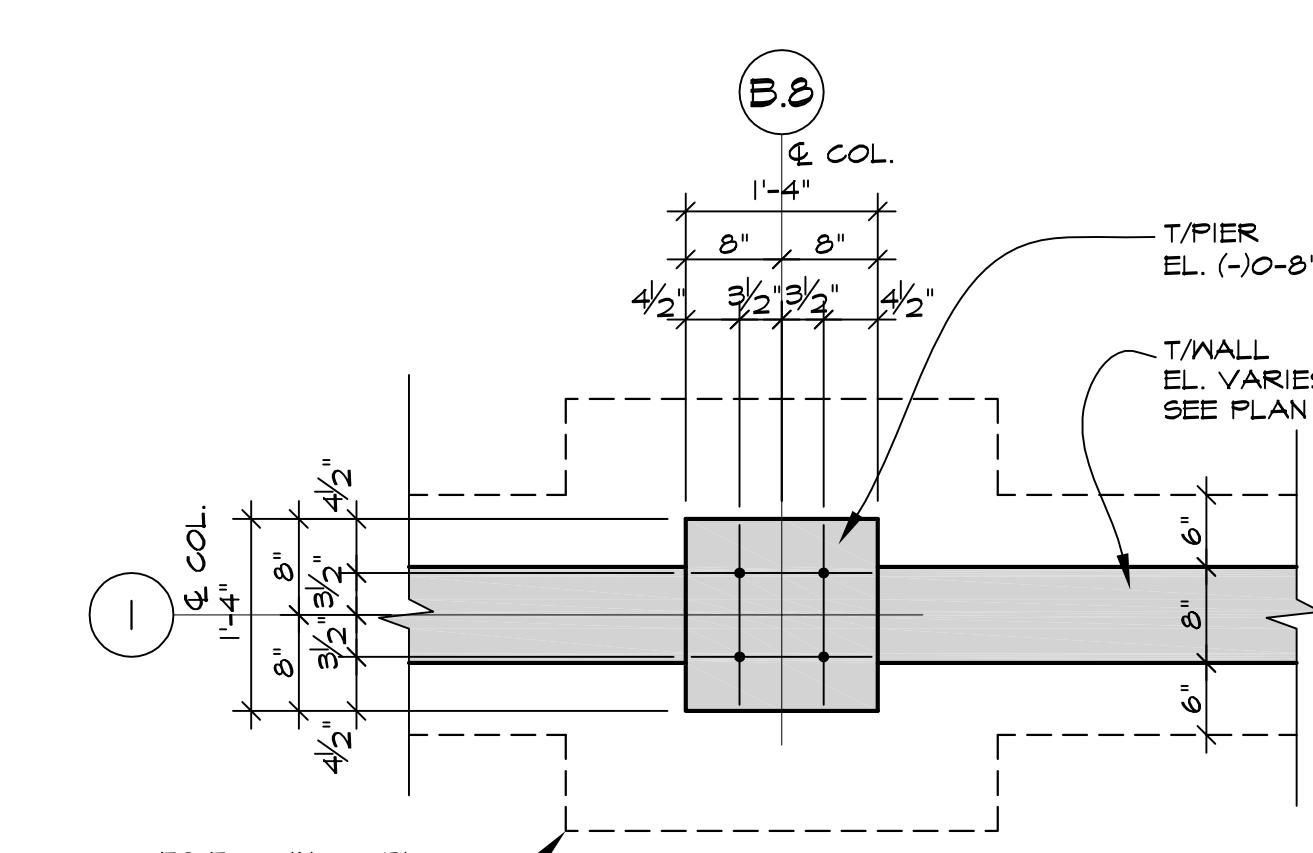
FLOOR CONSTRUCTION DETAILS

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



TYPICAL CONSTRUCTION DETAILS

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



CONCRETE NOTES

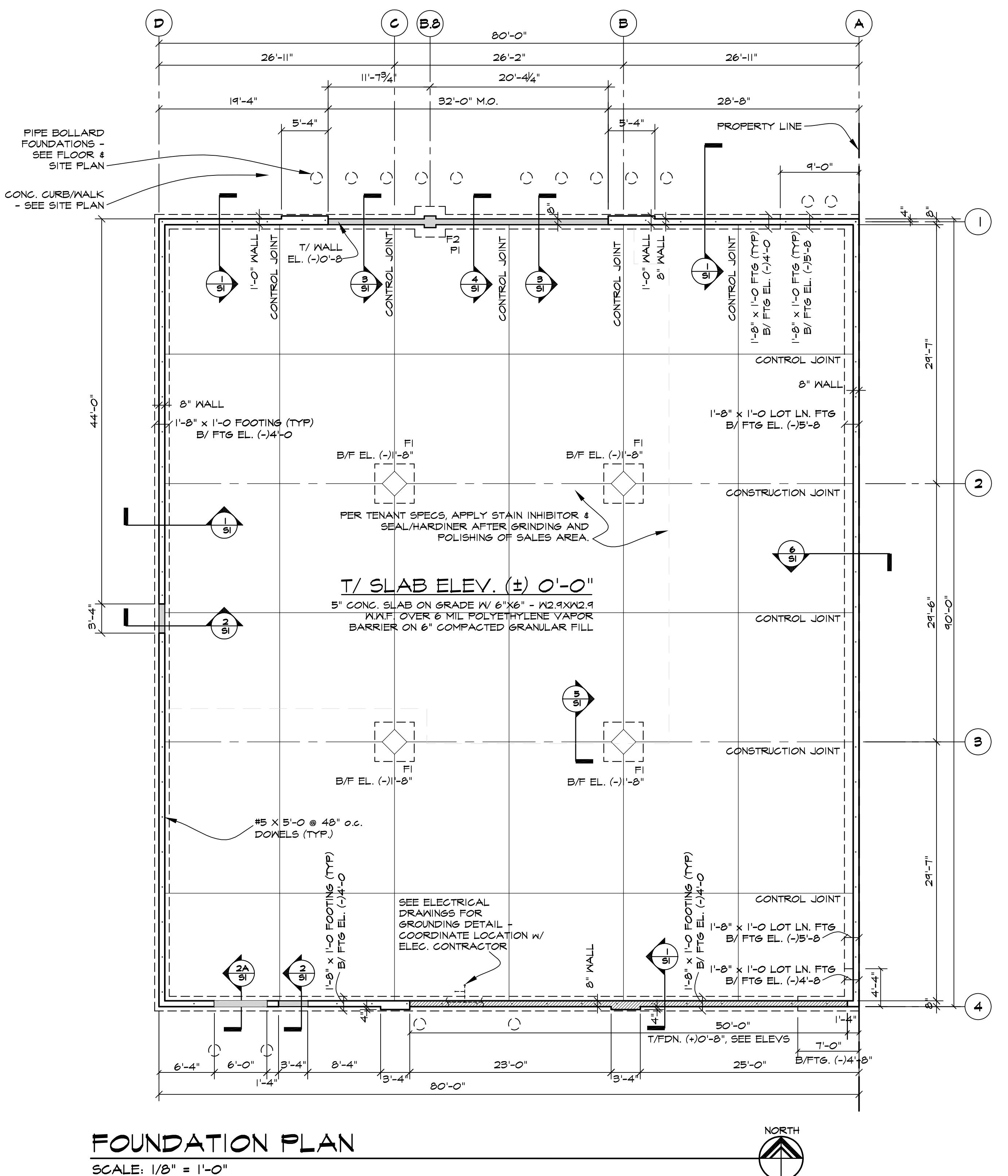
- ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. DRIVEWAYS AND SIDEWALKS SHALL BE 4000 PSI COMPRESSIVE STRENGTH.
- ALL REINFORCING BARS SHALL BE ASTM A615-60 AND SHALL HAVE DEFORMATIONS IN ACCORDANCE TO ASTM SPECIFICATIONS A-305 AND A-402 LATEST EDITIONS.
- ALL WELDED WIRE FABRIC SHALL BE ASTM A162. ALL FLATWALL SHALL BE REINFORCED WITH 6 X 6 IN. 4 X 4 IN. WELDED WIRE FABRIC UNLESS NOTED OTHERWISE. ALL WWF SHALL BE SET 1" DOWN FROM TOP OF SLAB.
- ALL REINFORCING BARS SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS, AND SECURED IN PLACE IN ACCORDANCE WITH PROCEDURES AND REQUIREMENTS OUTLINED IN THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI-318, LATEST EDITION AND THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 318-85".
- Mechanical equipment pads, openings, etc. shown on the structural drawings are for configuration only. Their final location size, etc. shall be as per approved shop drawings for the equipment or as required by the architect.
- See architectural, mechanical, and electrical drawings for additional openings, sleeves, equipment pads, depression, curbs, floor finishes, inserts, other embedded items and details.
- Fabricators shall submit checked shop drawings for reinforcing steel and other details to the architect-engineer and obtain approval prior to fabrication.
- All details and sections shown on the drawings are intended to be construed to apply to any similar situation elsewhere on the project except where a different detail is shown.
- Concrete floor shall have hardener and sealer.
- Concreting control joints as shown on the foundation plan.
- All interior concrete slabs shall have hard trowel finish. All exterior sidewalks shall be broom finished with control joints at a minimum of 5' feet on center in each direction unless noted otherwise.
- Concrete contractor is responsible for electrical transformer pad, pylon sign foundation & light pole bases.

GENERAL SUBSTRUCTURE NOTES

- FOOTINGS ARE DESIGNED TO BEAR ON FIRM UNDISTURBED SOIL CAPABLE OF SUPPORTING A LOAD OF 3000 P.S.F., IF SOIL IS NOT CAPABLE OF SUPPORTING THIS LOAD AT ELEVATIONS SHOWN, DROP FOOTINGS TO REQUIRED STRATA.
- ALL FLOOR AND PAVEMENT SLABS SHALL REST ON WELL-COMPACTED FILL.
- TOP AND BOTTOM BARS SHOWN ARE TO BE CONTINUOUS IN ALL WALLS. PROVIDE CORNER BARS AT ALL OUTSIDE CORNERS.
- LAP WIRE MESH ONE FULL MESH AT SIDES AND ENDS.
- FOUNDATION WALL POUR SHALL BE A MAXIMUM OF 6' BETWEEN CONSTRUCTION JOINTS. PROVIDE CONTROL JOINTS AT SAME LOCATION AS MASONRY CONTROL JOINTS.
- FILL ALL COLUMN POCKETS WHEN FLOOR SLAB IS Poured.
- FOOTINGS ARE TO PROJECT A MINIMUM OF 8" BEYOND FACE OF WALL OR PIER UNLESS NOTED.
- WALL FLOORING WHICH STEP DOWN ON ELEVATION SHALL DO SO AT A MAXIMUM SLOPE OF ONE DOWN TO TWO HORIZONTAL.
- NO CONCRETE SHALL BE Poured IN EXCAVATION CONTAINING WATER OR ON FROZEN GROUND.
- SEE OTHER DRAWINGS FOR CURBS, PAVEMENT AND SIDEWALKS.
- SEE "CONCRETE NOTES" FOR ADDITIONAL INFORMATION.
- GENERAL MACHINE EXCAVATIONS FOR FOOTINGS SHALL STOP AT LEAST 6' ABOVE SCHEDULED ELEVATION OF BOTTOM OF FOOTING. THE FINAL EXCAVATIONS TO BE DONE BY HAND NOT MORE THAN 24 HOURS BEFORE THE CONCRETE IS PLACED.
- SOIL REPORT WAS PREPARED BY ECS LTD, BUFFALO GROVE, IL. ECS PROJ.#16-18014 TITLED GEOTECHNICAL ENGINEERING REPORT SIBLEY LINCOLN PLAZA, SNC OF SIBLEY BOULEVARD & LINCOLN AVENUE, DOLTON, IL. AUGUST 22, 2014.

PIER DETAILS

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



GENERAL STEEL NOTES

- ALL STEEL SHALL BE NEW AND SHALL BE ASTM A992 (FY=50 KSI) EXCEPT TUBE COLUMNS SHALL BE ASTM A500 GRADE B WITH FY=46KSI.
- STEEL DETAILING, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH CODES AND SPECIFICATIONS OF THE A.I.S.C. MANUAL OF STEEL CONSTRUCTION.
- UNLESS OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS, ALL CONNECTIONS SHALL BE STANDARD FRAMED BEAM CONNECTIONS WITH 3/4" DIAMETER HIGH STRENGTH BOLTS AS SHOWN IN TABLE II OF THE CURRENT A.I.S.C. MANUAL OF STEEL CONSTRUCTION. THE CONNECTION SHALL BE DESIGNED FOR A REACTION EQUAL TO THE VALUE "R" TABULATED AT THE BOTTOM OF THE UNIFORM LOAD BEAM TABLES.
- NO CONNECTION SHALL CONSIST OF LESS THAN 2-3/4" DIAMETER HIGH STRENGTH BOLTS OR WELDS DEVELOPING NOT LESS THAN 10,000 POUNDS.
- ALL WELDING SHALL BE ETOXX ELECTRODES AND IN ACCORDANCE WITH A.W.S. SPECIFICATIONS.
- FIELD WELD BAR JOISTS TO BEAMS & ANCHOR PLATES.
- IN ADDITION TO WEB CONNECTION, PROVIDE 4X4X3/8" ANGLE SEAT FOR ALL GIRDERS FRAMING INTO COLUMNS.
- ALL STEEL JOISTS SHALL CONFORM TO STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS.
- EXTEND BOTTOM CHORD OF BAR JOISTS AND CONNECT TO COLUMNS AT ALL COLUMN LINES AND WHERE SHOWN BY "X".
- PROVIDE STANDARD MASONRY ANCHORS FOR BEAMS BEARING ON MASONRY EXCEPT AS NOTED.
- ALL ELEVATIONS ARE TO TOPS OF STEEL BEAMS UNLESS NOTED. SLOPE BEAMS UNIFORMLY BETWEEN ELEVATIONS SHOWN.
- SEE OTHER DRAWINGS FOR MISCELLANEOUS ANGLES, HOLES ETC.
- SEE FOUNDATION PLAN FOR ANCHOR BOLTS & SETTING PLATES.
- ALL STRUCTURAL STEEL INCLUDING BAR JOISTS SHALL HAVE ONE SHOP COAT OF RUST-INHIBITIVE PAINT.
- PROVIDE A 1/4" STIFFENER PLATE IN WEB OF GIRDERS WHERE THEY FRAME OVER COLUMNS, ONE SIDE ONLY.
- SIZE OF STRUCTURAL STEEL CANNOT BE VARIED FROM THOSE SHOWN ON THE DRAWINGS WITHOUT THE CONSENT OF THE ARCHITECT/ENGINEER.
- PROVIDE ALL LOOSE ANGLE LINTELS FOR MASONRY OPENINGS WHERE REQUIRED. LINTELS SHALL BE AS FOLLOWS: (UNLESS NOTED OTHERWISE). FOR OPENINGS IN 4" WALLS PROVIDE WT4 X 7.5 WITH 6" BEARING EACH END, FOR OPENINGS IN 6" WALLS PROVIDE WT4 X 8.5 WITH 8" BEARING EACH END. FOR WALLS 8" OR GREATER PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS, THESE ANGLES SHALL BE 4 X 3 1/2 X 5/16 WITH 6" BEARINGS EACH END FOR OPENINGS LESS THAN 5'-0" WIDE; FOR OPENINGS 5'-0" OR WIDER, 5 X 3 1/2 X 3/8 ANGLES WITH 8" BEARING EACH END.
- PROVIDE MECHANICAL, ROOFTOP EQUIPMENT SUPPORT ANGLE FRAMING. COORDINATE EXACT LOCATION AND SIZE OF OPENINGS WITH HVAC CONTRACTOR.

ROOF DECK NOTES

- ROOF DECK SHALL BE TYPE "B" WIDE RIB, 22 GAUGE, PAINTED METAL DECK.
- THE DECK SHALL BE WELDED TO THE SUPPORTS BY 5/8" DIAMETER WELDS WITH A FREQUENCY OF 4 WELDS PER 3 FEET.
- PROVIDE TWO INTERMEDIATE SIDELAP CONNECTION WITH #12 TEK FASTENER AT THE CENTER OF EACH DECK SPAN.

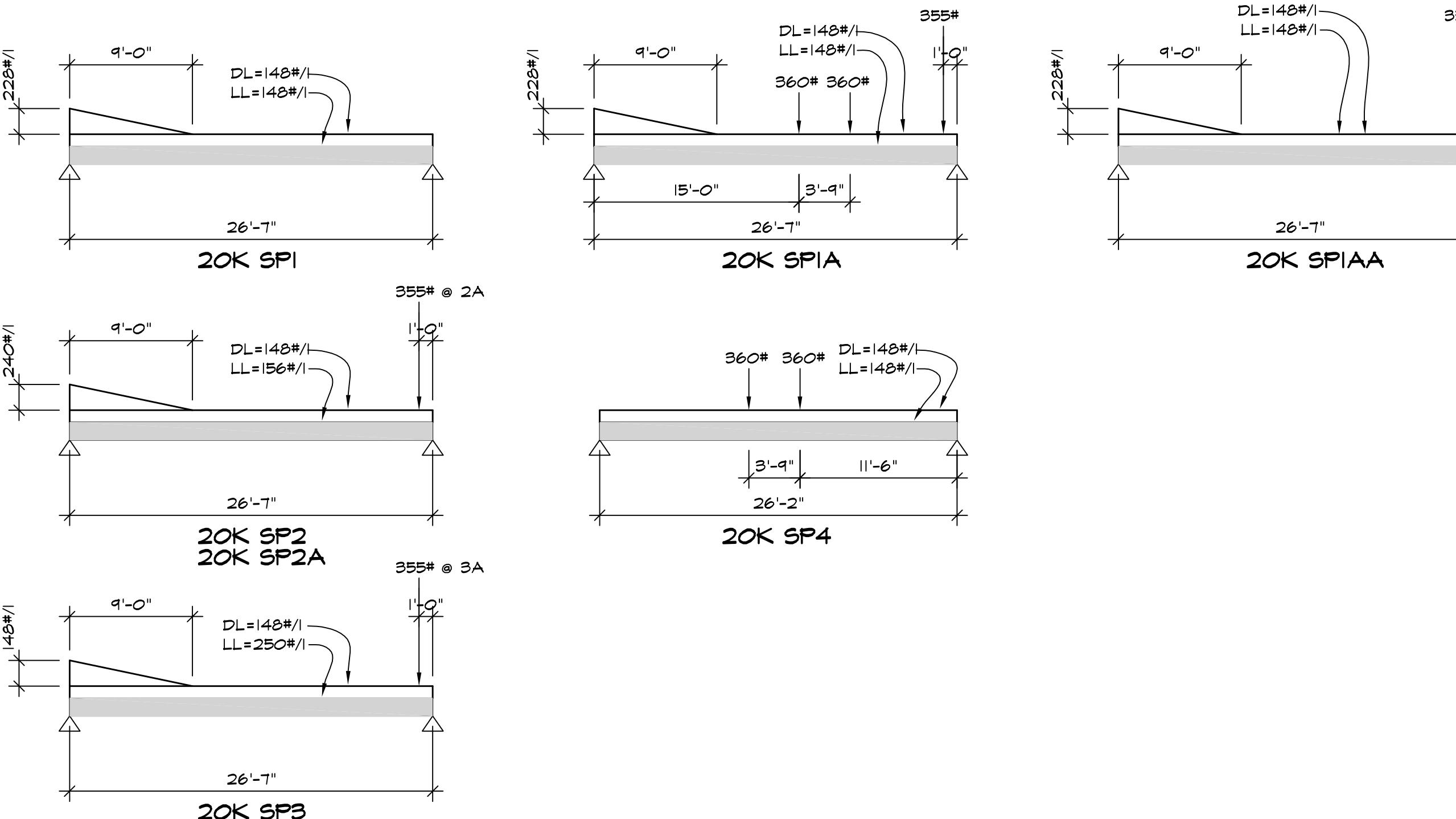
DESIGN LOADS

ROOF LOAD	6 PSF
ROOFING	2
INSULATION	3
METAL DECK	5
MECHANICAL	4
JOISTS	5
CEILING	5
TOTAL DEAD LOAD	25
LIVE LOAD	25
TOTAL LOAD	50 PSF

DESIGN LOADS

2012 INTERNATIONAL BUILDING CODE
A. FLOOR (RETAIL FIRST FLOOR)

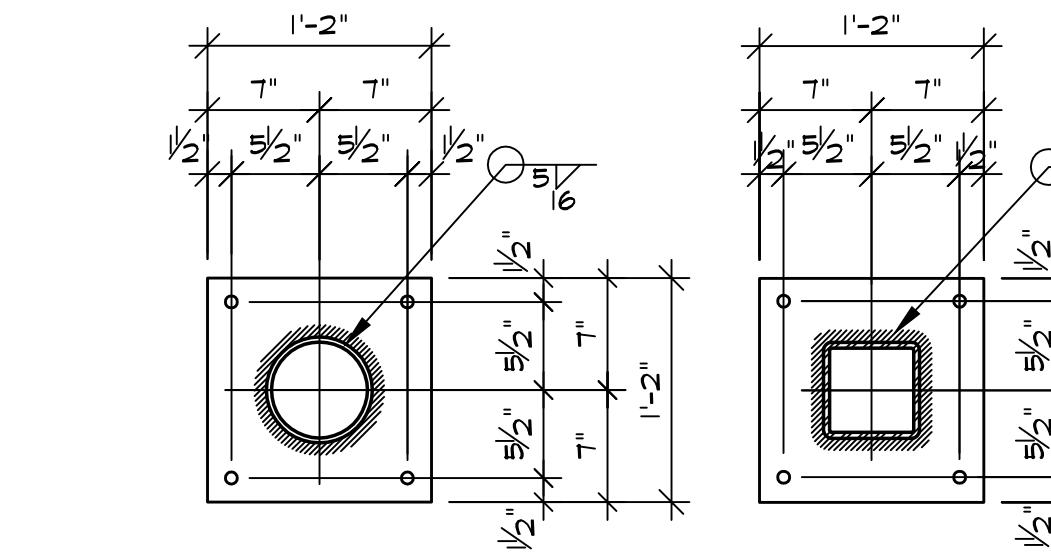
	100 PSF
B. ROOF SNOW LOADS	25 PSF
GROUND SNOW LOAD	1.0
EXPOSURE FACTOR (C_e)	1.0
IMPORTANCE FACTOR (I)	1.0
Thermal Factor (C_t)	1.0
C. DEAD LOADS	ACTUAL MATERIAL WEIGHTS
D. WIND LOADS	90 MPH
3 SECOND GUST	1.0
Importance Factor	B
EXPOSURE CATEGORY (MAFRG)	EXPOSURE CATEGORY (C&C/C)
MAIN WIND FORCE PRESSURE	WIND PRESSURE (MAFPNP)
COMPONENTS & CLADDING VARIES	WALL
E. SEISMIC LOADS	II
SEISMIC USE GROUP	D
SITE CLASS	
SPECTRAL RESPONSE COEFF.	
SHORT PERIODS (SDS)	.148
1 SECOND PERIODS (SD1)	.104
BASIC STRUCTURAL SYSTEM	
ORDINARY REINFORCED MASONRY SHEAR WALLS	
RESPONSE MOD FACTOR (R)	2.0
DESIGN BASE SHEAR (V)	0739W
ANALYSIS BY EQUIV. LATERAL FORCE PROCEDURE	
SEISMIC DESIGN CATEGORY	B
F. HANDRAILS & GUARDS	
UNIFORM LOAD IN ANY DIRECTION	50 LB/FT
CONCENTRATED LOAD IN ANY DIRECTION	200 LB/FT



NOTE: JOIST MANUFACTURER SHALL DESIGN FOR THE LOADING SHOWN IN THE DIAGRAMS SHOWN HEREIN

JOIST DIAGRAMS

NO SCALE



C1

6" STD. PIPE COL.
14" x 1/4" x 1'-2" SET PE
14" x 1" x 1'-2" BASE PE
ON 3/8" GROUT BED
w/ 4-3/8" x 1'-6" A.B.
w/ 4-3/8" x 1'-6" A.B.

C2

HSS 6 x 6 x 14" COL.
w/ 14" x 1/4" x 1'-2" SET PE
14" x 1" x 1'-2" BASE PE
ON 3/8" GROUT BED
w/ 4-3/8" x 1'-6" A.B.

LINTEL SCHEDULE

L1 24s 3 1/2 x 3 1/2 x 5/16

L2 C8 x 11.5 + 7 x 5/16 PE

NOTES:
PROVIDE MIN. 8" BEARING EACH END. INSTALL w/
LINTEL FLASHING COMPLETE w/ END DAMS.

BEARING PLATES

BPI 8 x 3 1/4 x 0'-10 PE w/ (2) 1/2"Φ x 4 HEADED ANCHORS
BP2 9 x 1/2 x 0'-9 PE w/ (2) 1/2"Φ x 4 HEADED ANCHORS

1/13/20

REVISIONS

KMA & ASSOCIATES, INC. ARCHITECTS

1121 LAKE COOK ROAD
DEERFIELD, ILLINOIS
(847)945-6899

SUITE F
60015-5235
FAX(847)945-0284

O'REILLY AUTO PARTS

DOLTON PLAZA

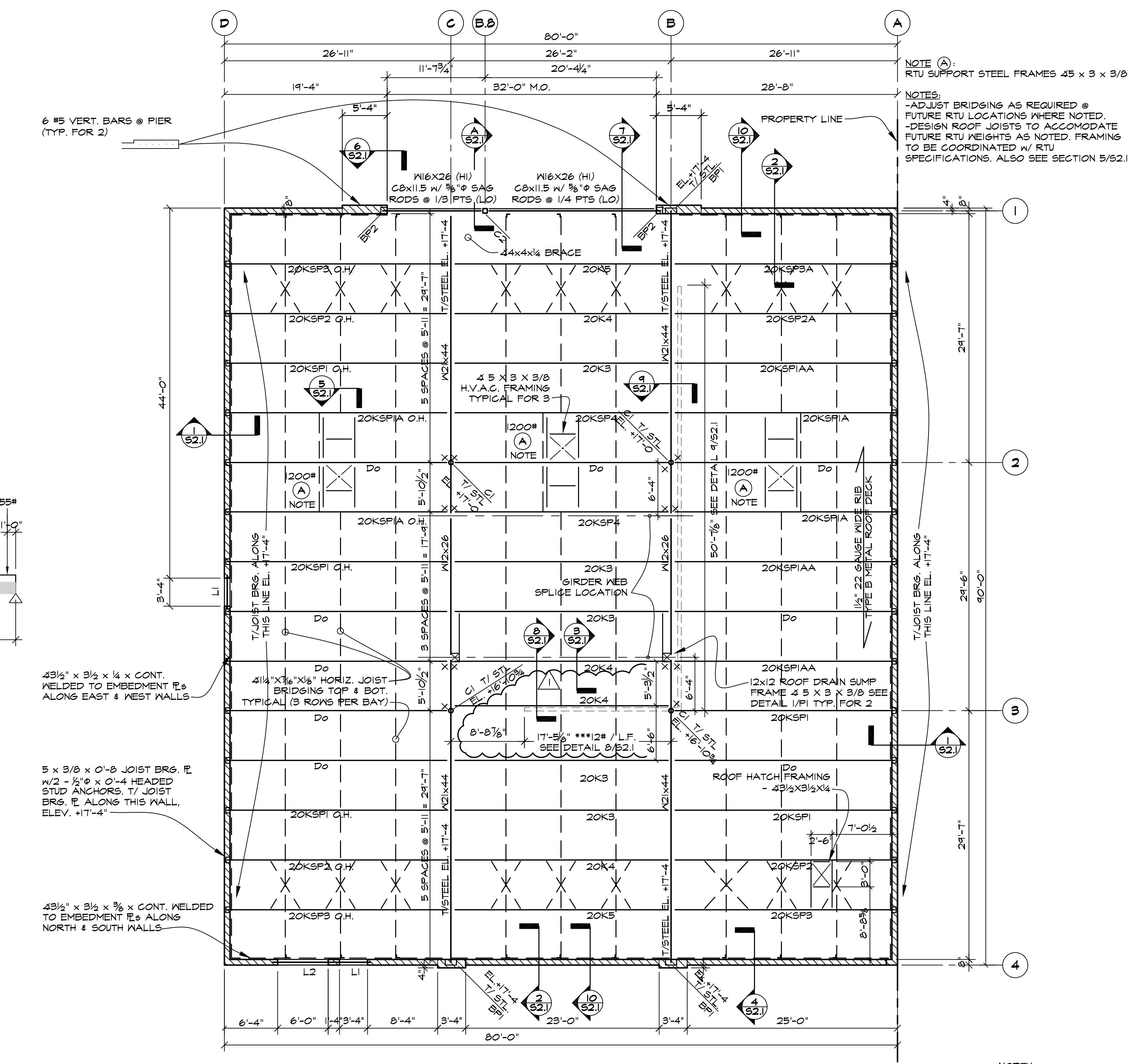
131 E. SIBLEY BLVD. DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
ROOF FRAMING PLAN, JOIST
DIAGRAMS & NOTES

1906

COLUMN BASE PLATE DETAILS

SCALE: 1" = 1'-0"



REVISIONS

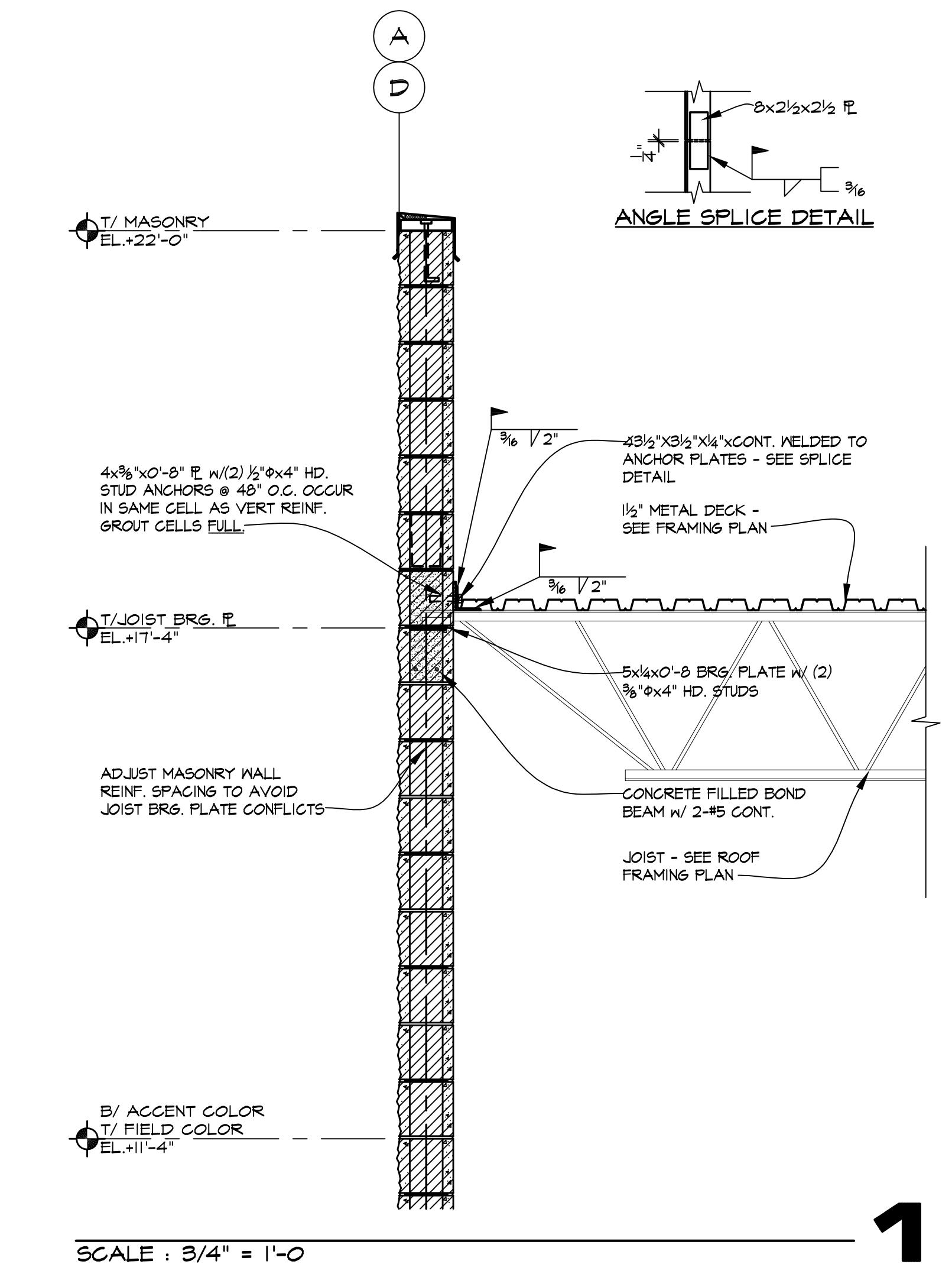
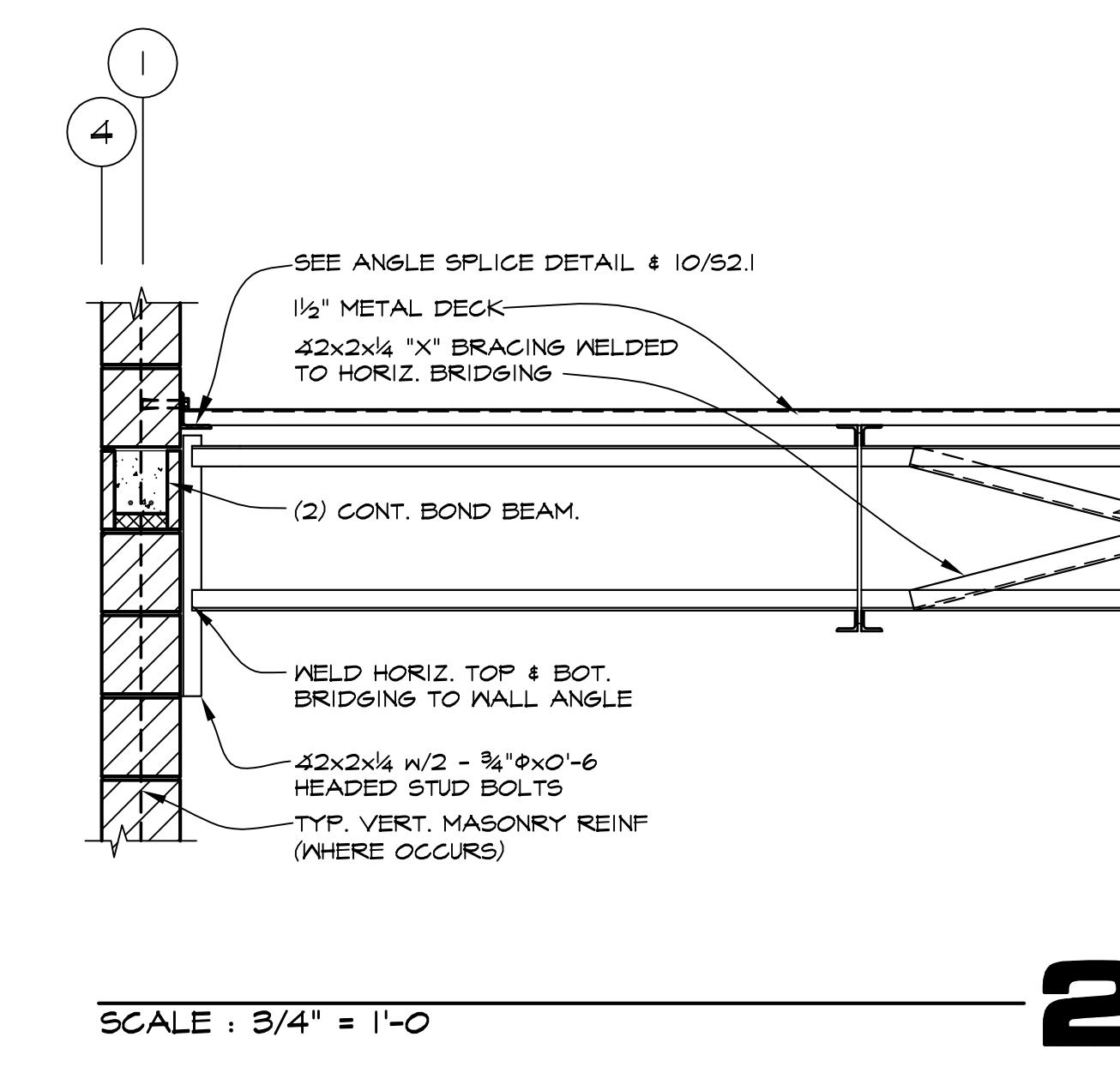
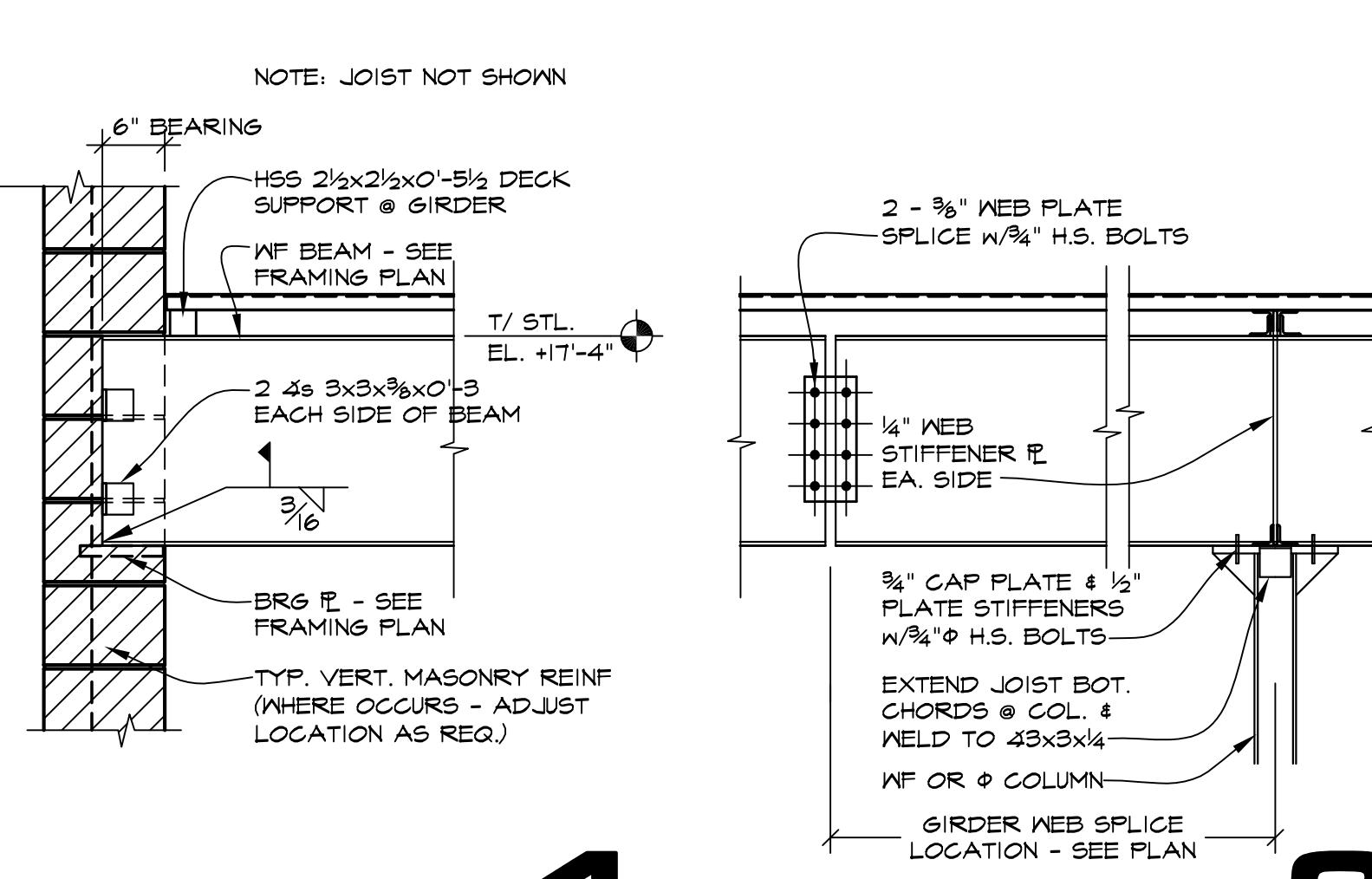
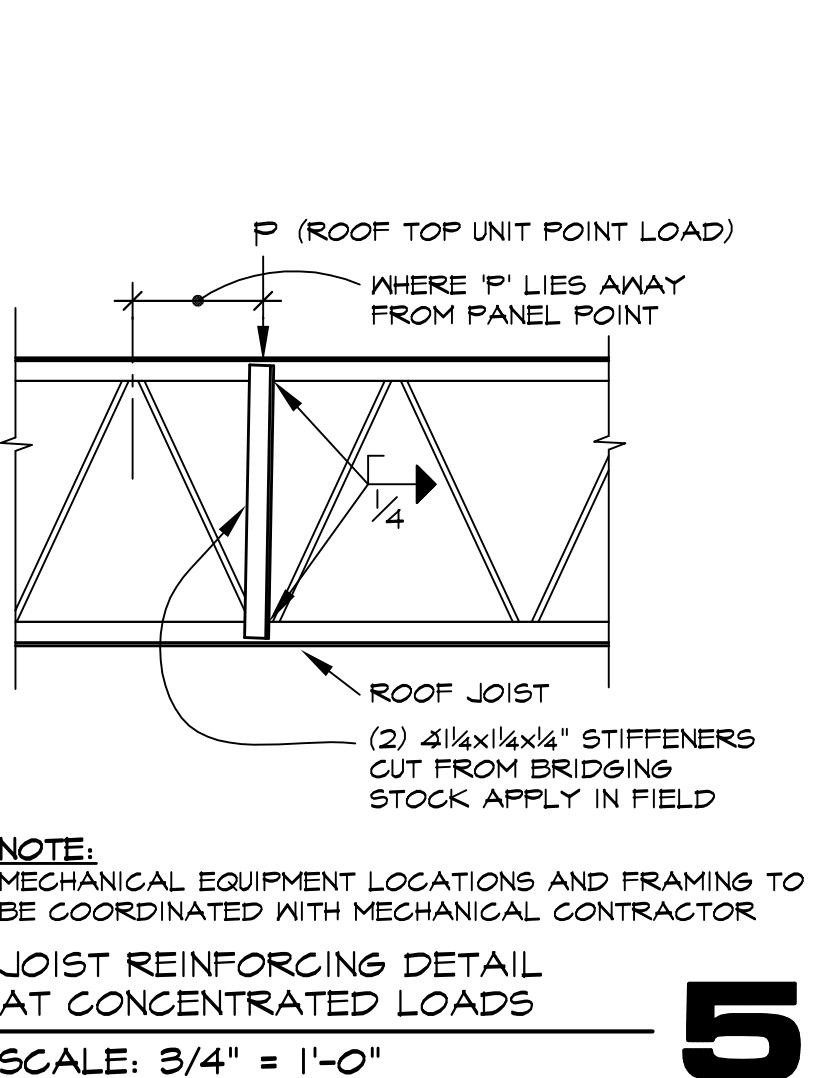
THIS DRAWING	FOR COORDINATION	1/1/20
NOT FOR BIDDING	1/1/20	
FOR CONTRACTING	1/1/20	
NOT FOR CONSTRUCTION	1/1/20	

O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE

1906

2.1



1

4

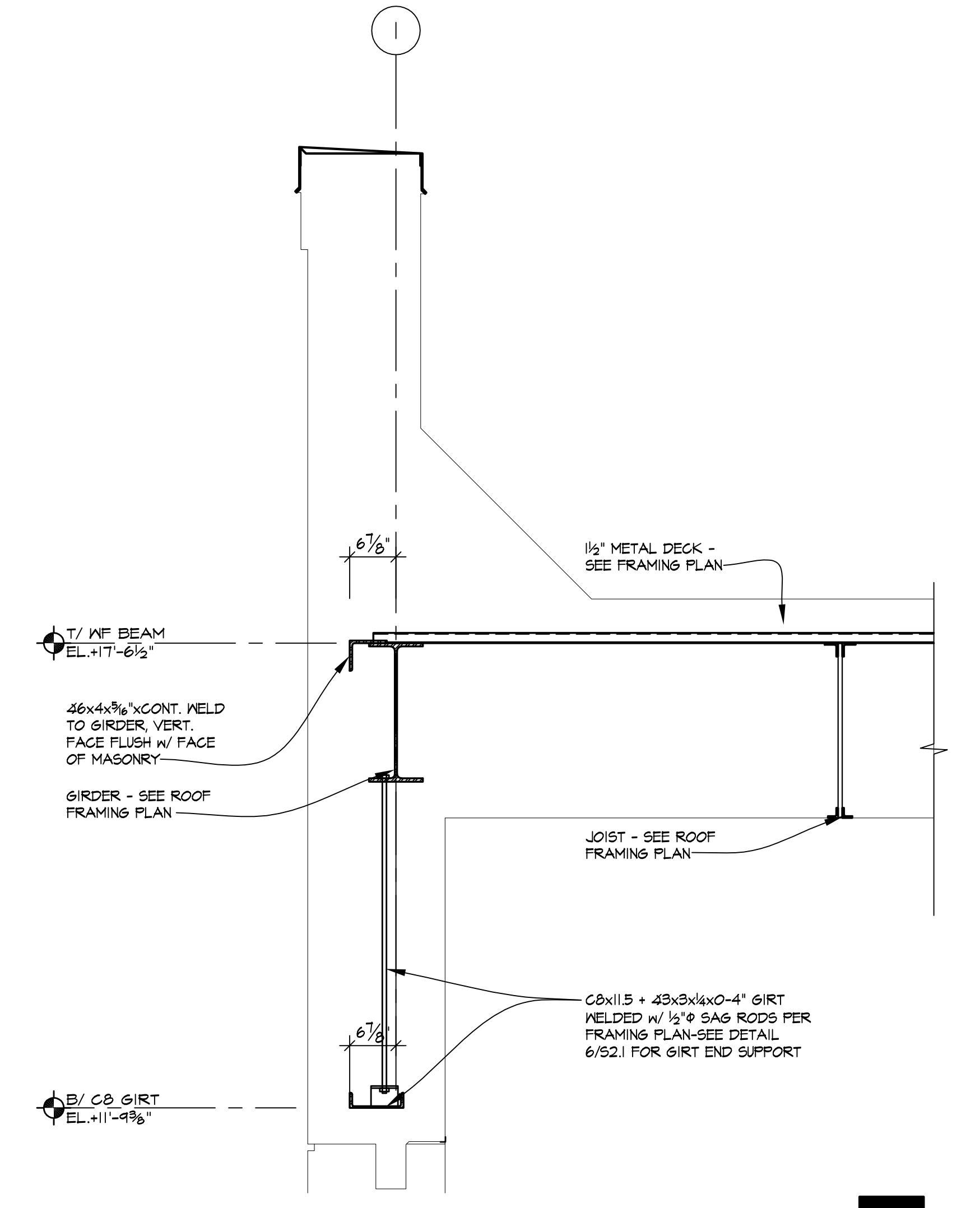
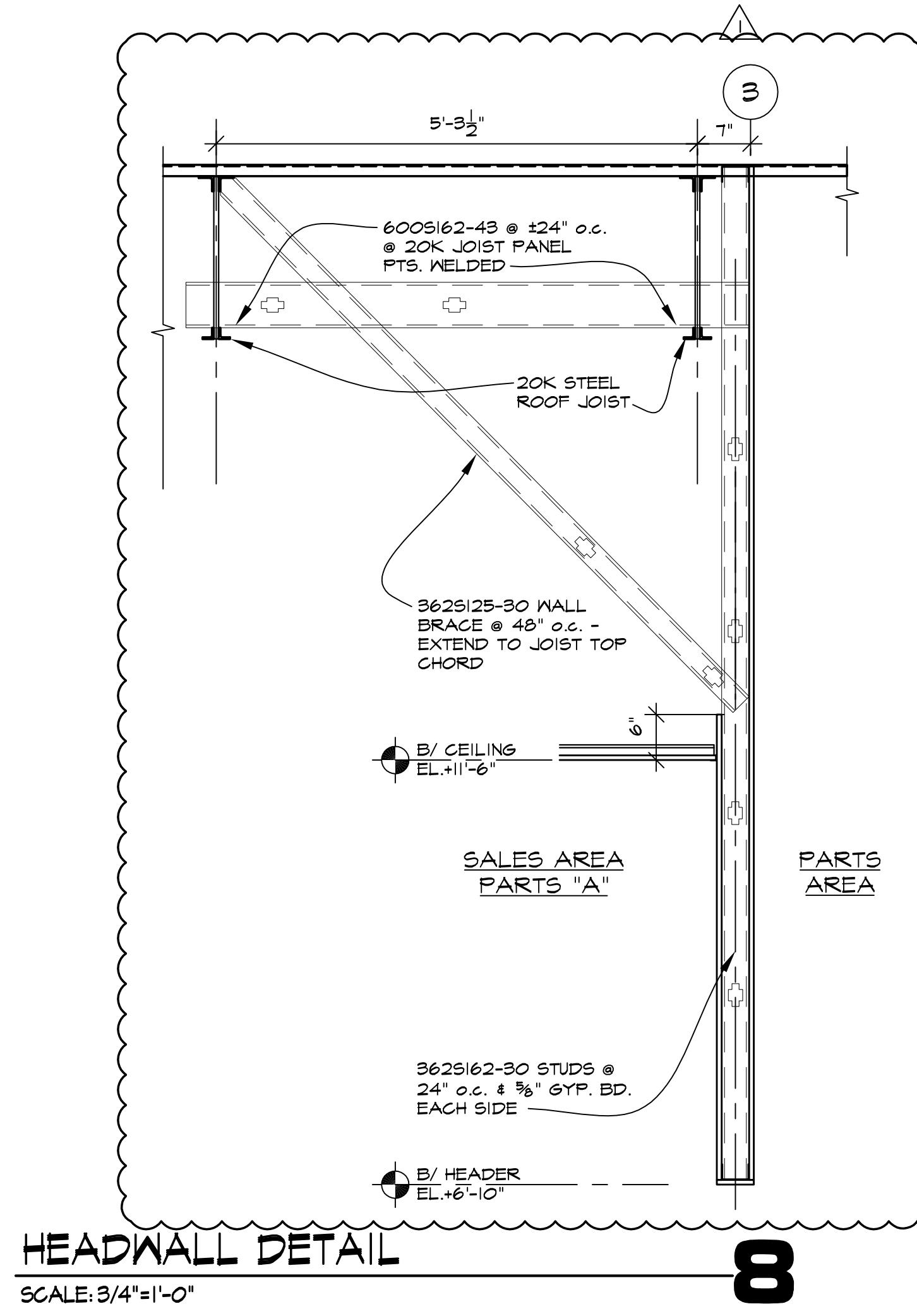
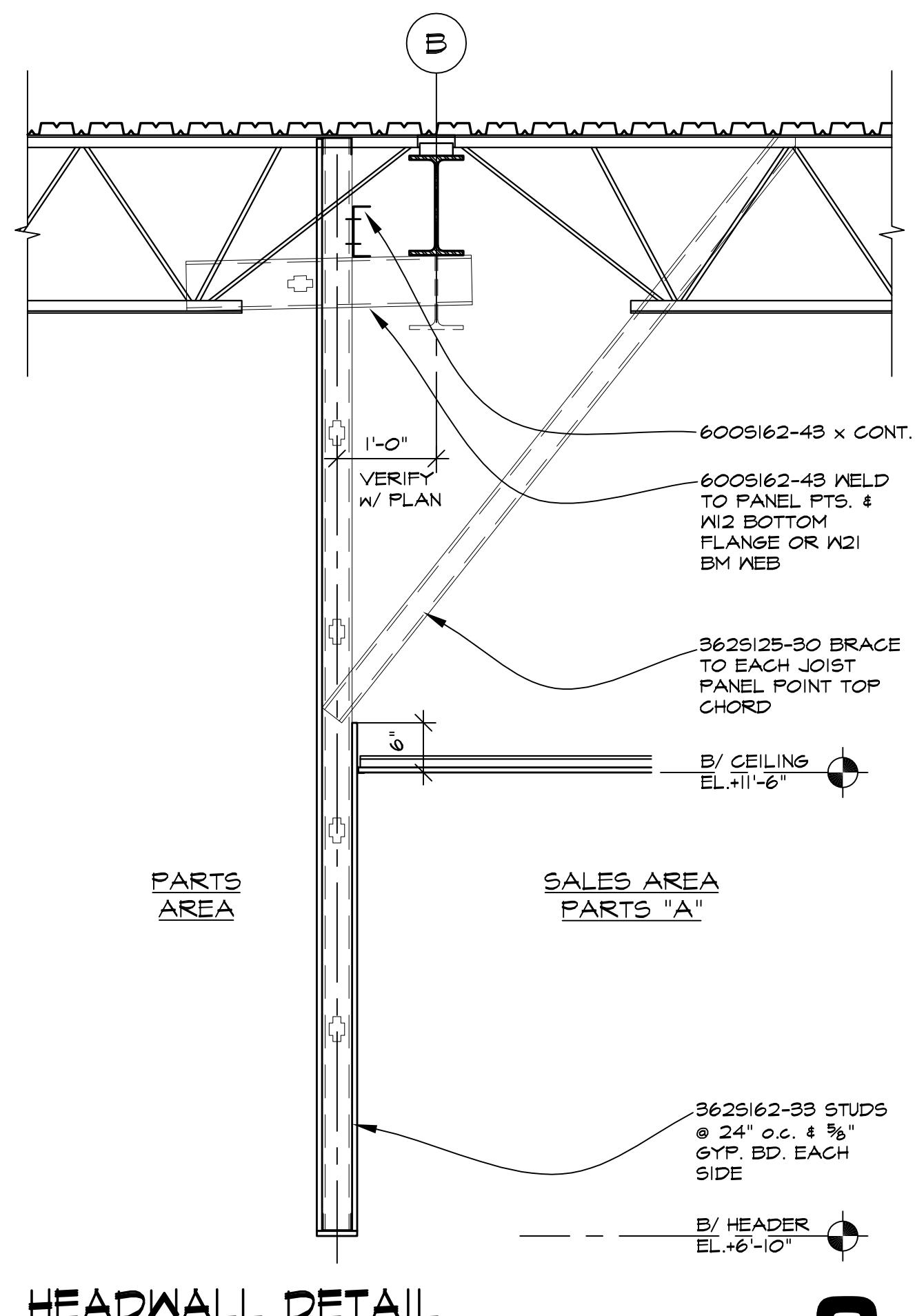
3

2

6

10

A



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

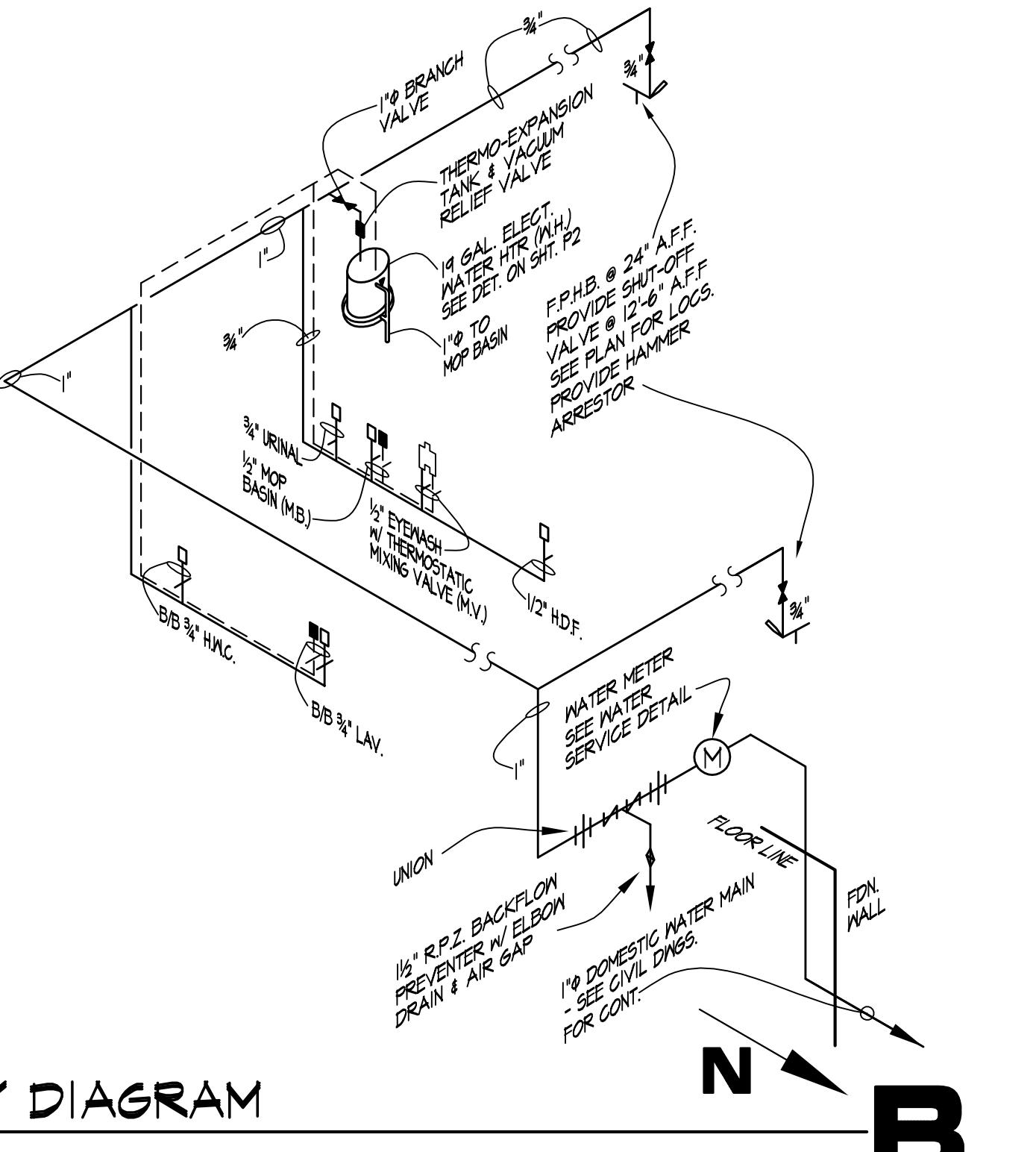
HEADWALL DETAIL

9

HEADWALL DETAIL

8

2.1



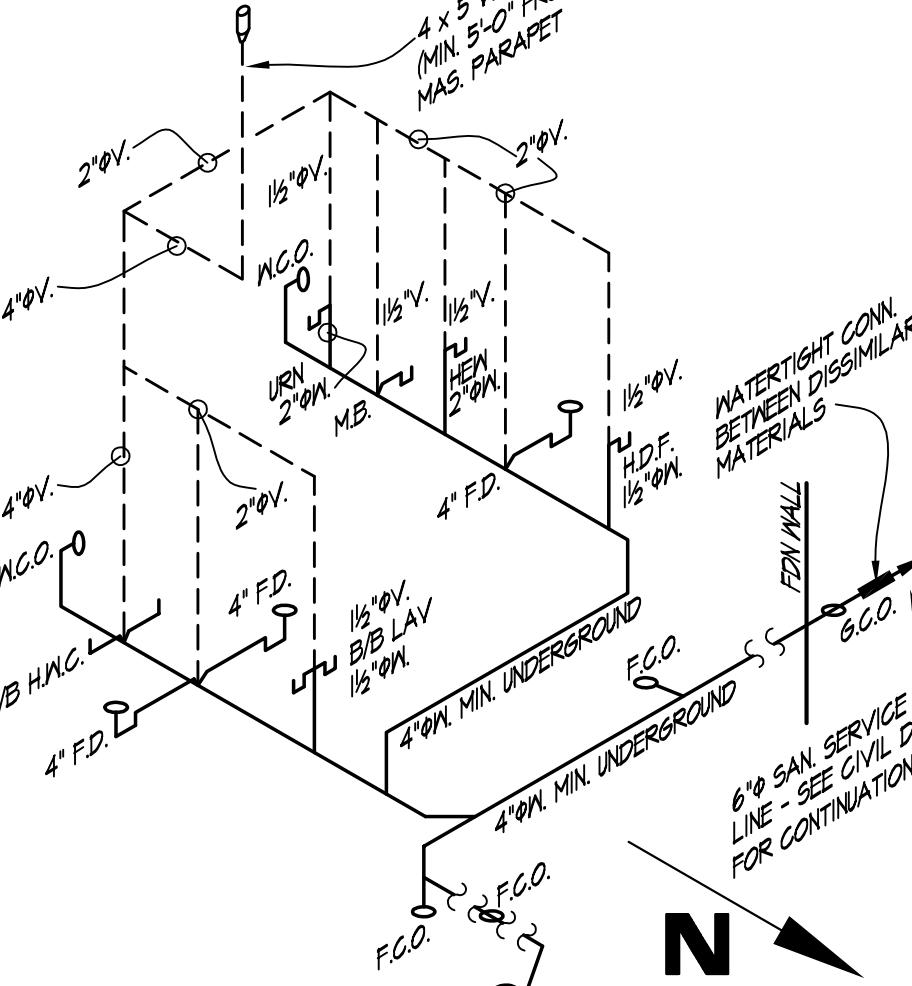
SCHEMATIC SUPPLY DIAGRAM

SCALE: NONE

NOTE:
MINIMUM UNDERGRND. WASTE LINE TO
BE 4"φ. CLEANOUT SIZE TO MATCH
WASTE PIPE SIZE UP TO AND INCLUDING
6"φ.

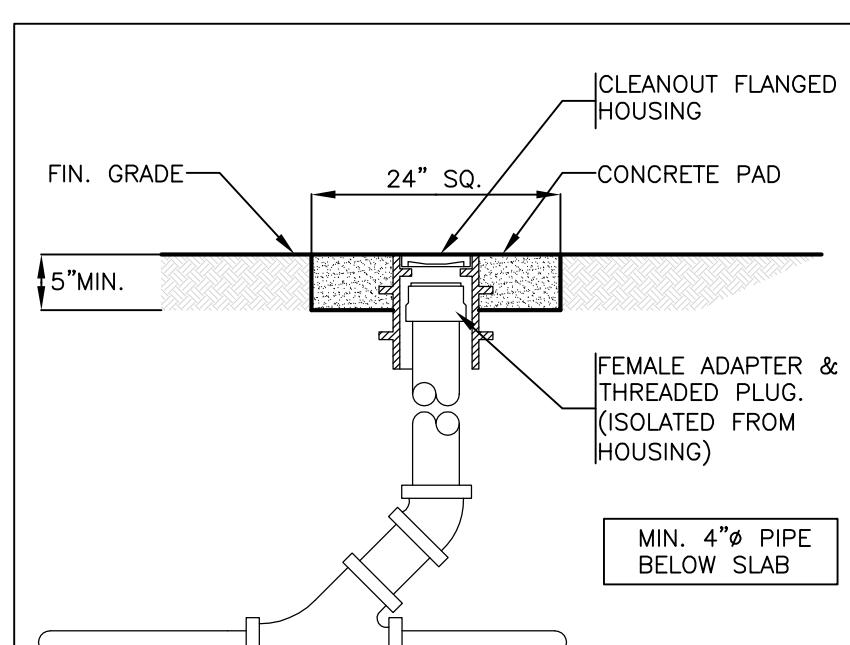
GENERAL WASTE/VENT NOTES

1. ALL UNDERGROUND WASTE PIPING TO BE 4" MIN. CAST IRON OR SCHED. 40 SOLID WALL PVC AS LOCAL CODE ALLOWS & ALL INTERIOR ABOVE-GRND WASTE & VENT PIPING SHALL BE SCHED. 40 SOLID WALL PVC. CELLULAR CORE PVC IS NOT ALLOWED. ALL CLEANOUTS SHALL BE SAME SIZE AS PIPE SERVED.
 2. ALL P-TRAPS TO BE THE SAME SIZE AS THE FIXTURE OPENING.
 3. ALL UNDERGROUND SANITARY & STORM PIPING SHALL BE CAST IRON.
 4. DOUBLE COMBO WYE 1/8 BENDS SHALL BE LIMITED WHERE AND HOW TO BE INSTALLED. CONSULT PLUMBING INSPECTOR BEFORE STARTING WORK.



SCHEMATIC WASTE/VENT DIAGRAM

SCALE: NONE



TYPICAL EXTERIOR CLEANOUT DETAIL

WATER SERVICE DETAIL

N

1

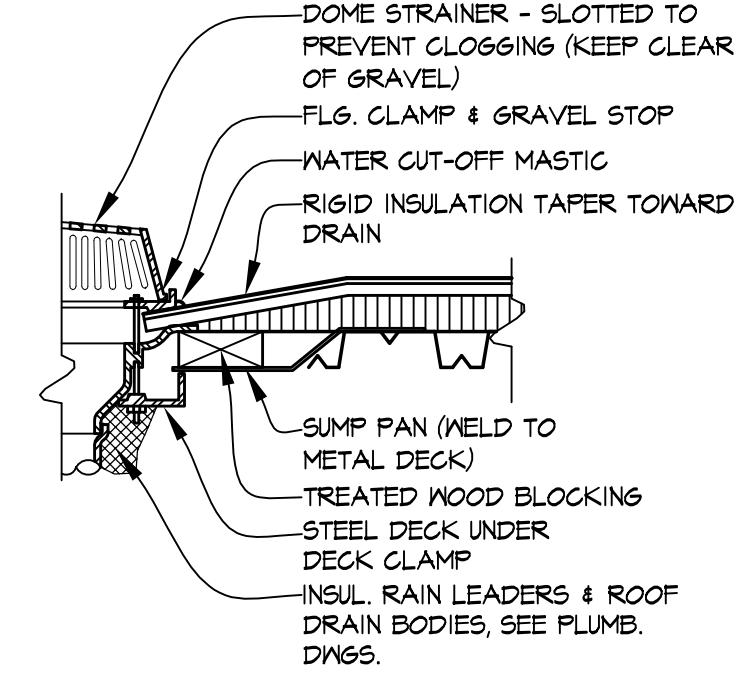
PIPING INSULATION NOTES

SCOPE:

FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BID. PROVIDE PIPING INSULATION ON NEW PIPING AS REQUIRED BY CONSTRUCTION DOCUMENTS INCLUDING: INTERIOR ROOF DRAIN BODY, INTERIOR HORIZONTAL AND VERTICAL ROOF DRAIN PIPING, CONDENSATE LINES/DRAINS, EXPOSED DOMESTIC COLD WATER, DOMESTIC COLD WATER AGAINST AN EXTERIOR WALL, DOMESTIC HOT WATER HEATER (FIRST 8' FROM WATER HEATER ONLY), AND HVAC PIPING.

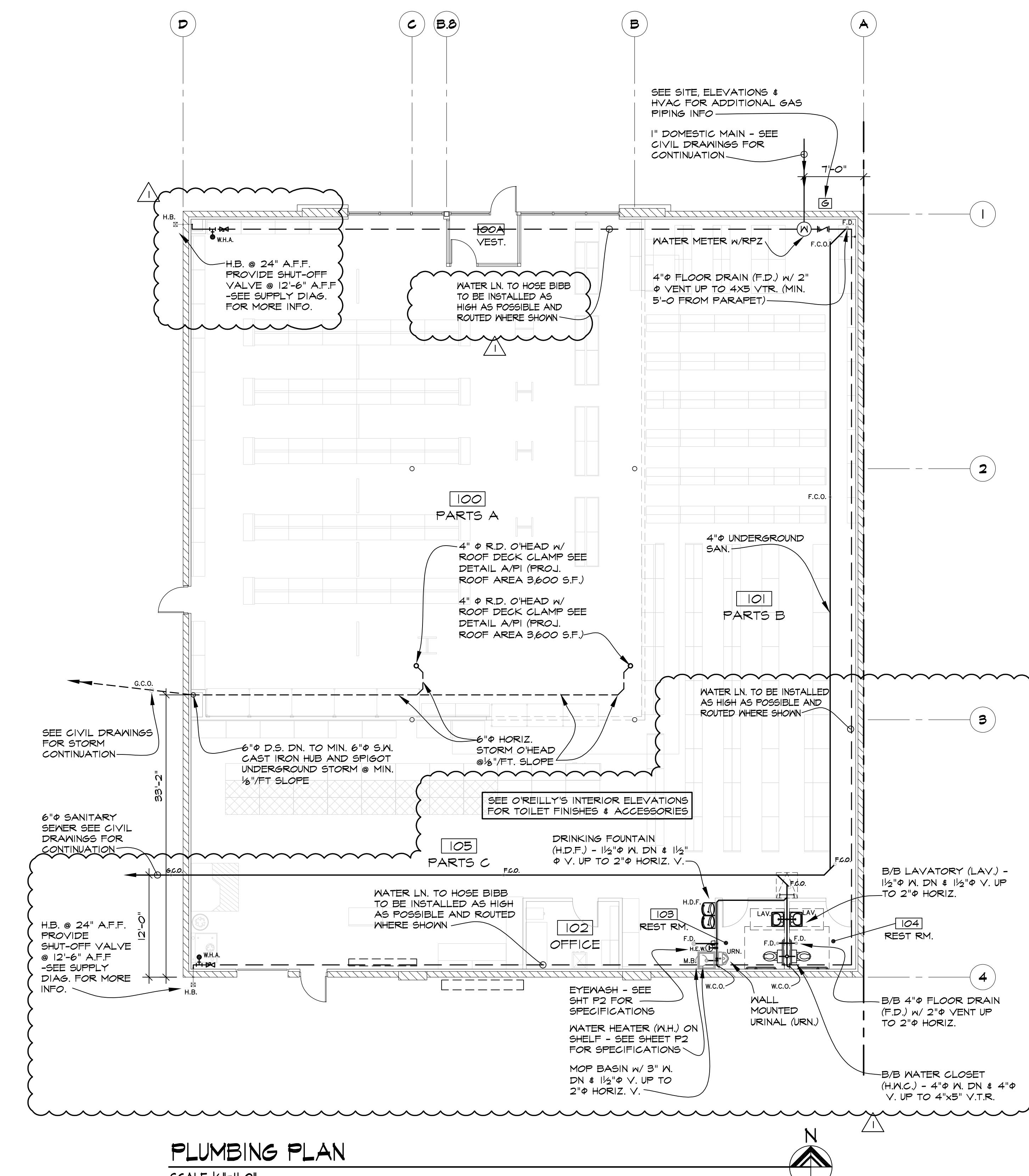
SPECIFICATIONS:

- A. PIPING (ABOVE FINISHED FLOOR) SHALL BE COVERED WITH ARMACELL AP/ARMAFLEX PIPE INSULATION 1/2" THICK IN ACCORDANCE WITH ASTM C-534, GRADE I, TYPE I FOR TUBULAR MATERIALS AND GRADE I, TYPE II FOR SHEET MATERIAL.
 - B. ALL JOINTS SHALL BE SEALED WITH APPROVED MANUFACTURER'S ADHESIVE.
 - C. ACCEPTABLE ALTERNATE MANUFACTURER: KOOLPHEN K CFC FREE PHENOLIC FOAM, OR AEROCEL (BY AEROFLEX INTERNATIONAL CO.) CLOSED CELL ELASTOMERIC THERMAL INSULATION.
 - D. FIBERGLASS PIPE INSULATION, RIGID (NOT WRAP TYPE), ONE INCH THICK WITH BUILT-IN VAPOR BARRIER MAY BE USED IN LIEU OF ARMACELL PRODUCT SPECIFIED ON INTERIOR STORM LINES, INTERIOR DOMESTIC WATER LINES, INTERIOR CONDENSATE DRAIN PIPING FROM HVAC UNITS AND INTERIOR WATER WASTE PUMP DISCHARGE LINES. ACCEPTABLE MANUFACTURERS ARE ARMSTRONG, CERTAINEED, JOHNS-MANVILLE, KNAUF, AND OWENS-CORNING.
 - E. FLAME SPREAD SHALL BE 25 OR LESS. SMOKE DEVELOPED SHALL BE 50 OR LESS.
 - F. INSTALL MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.



ROOF DRAIN

SCALE: 1-1/2"



PLUMBING PLAN

SCALE: 1"-0"

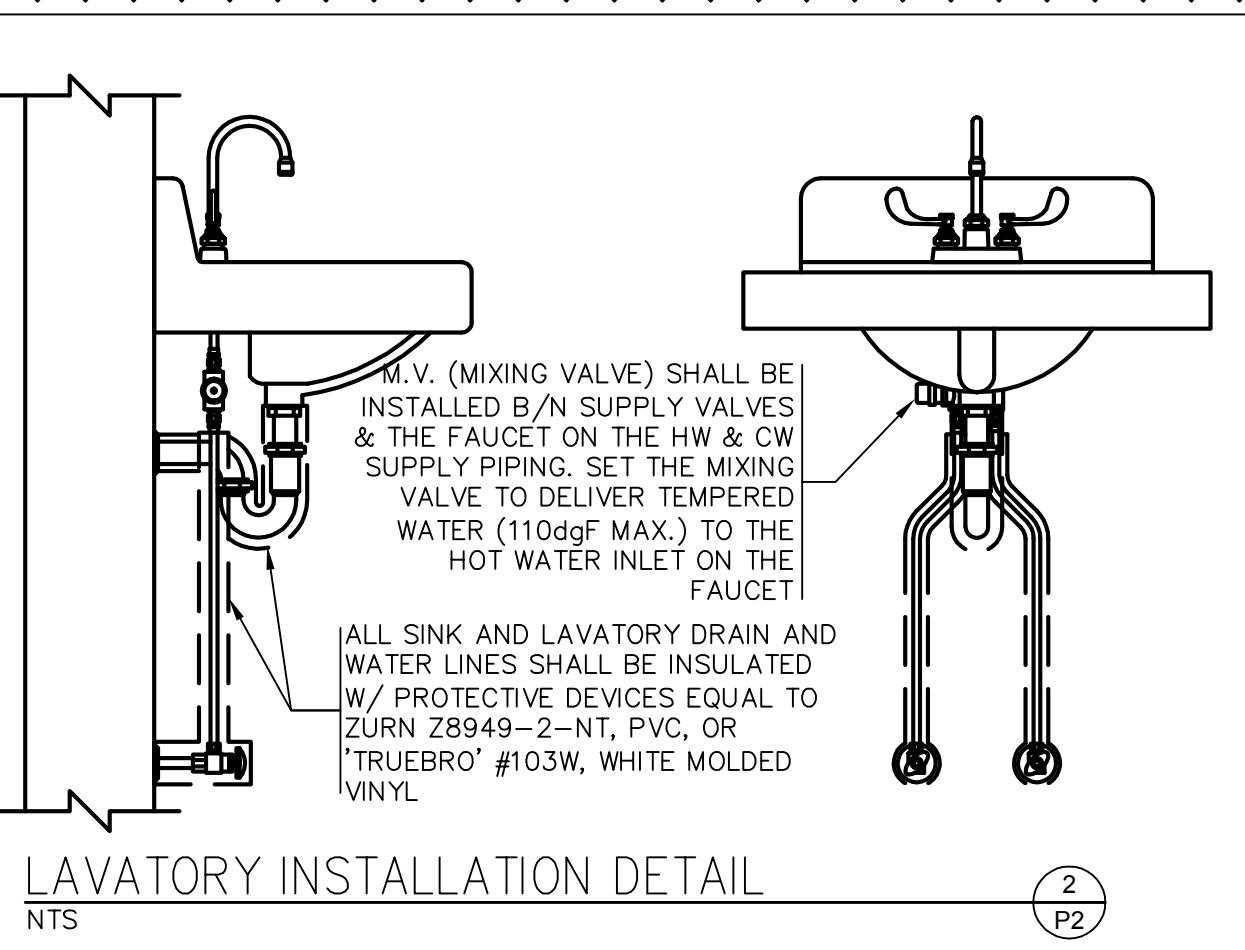
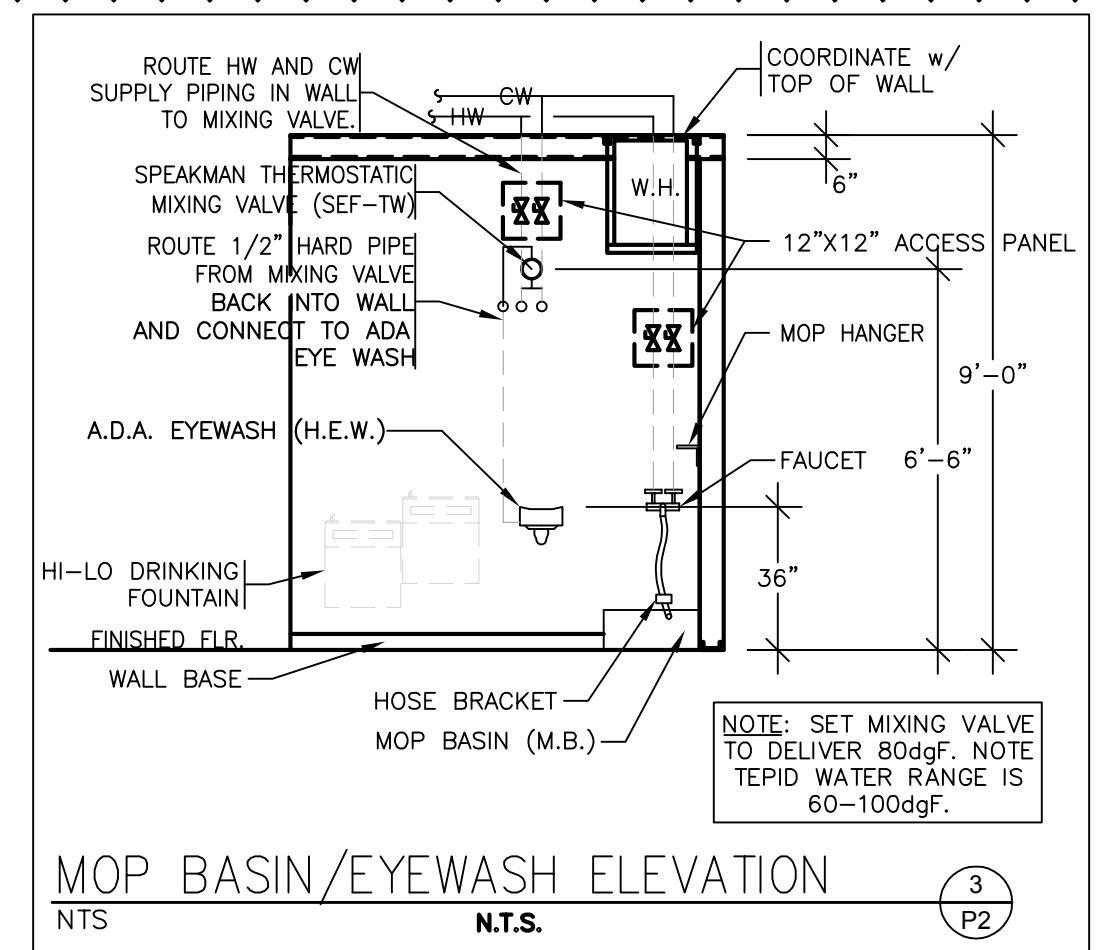
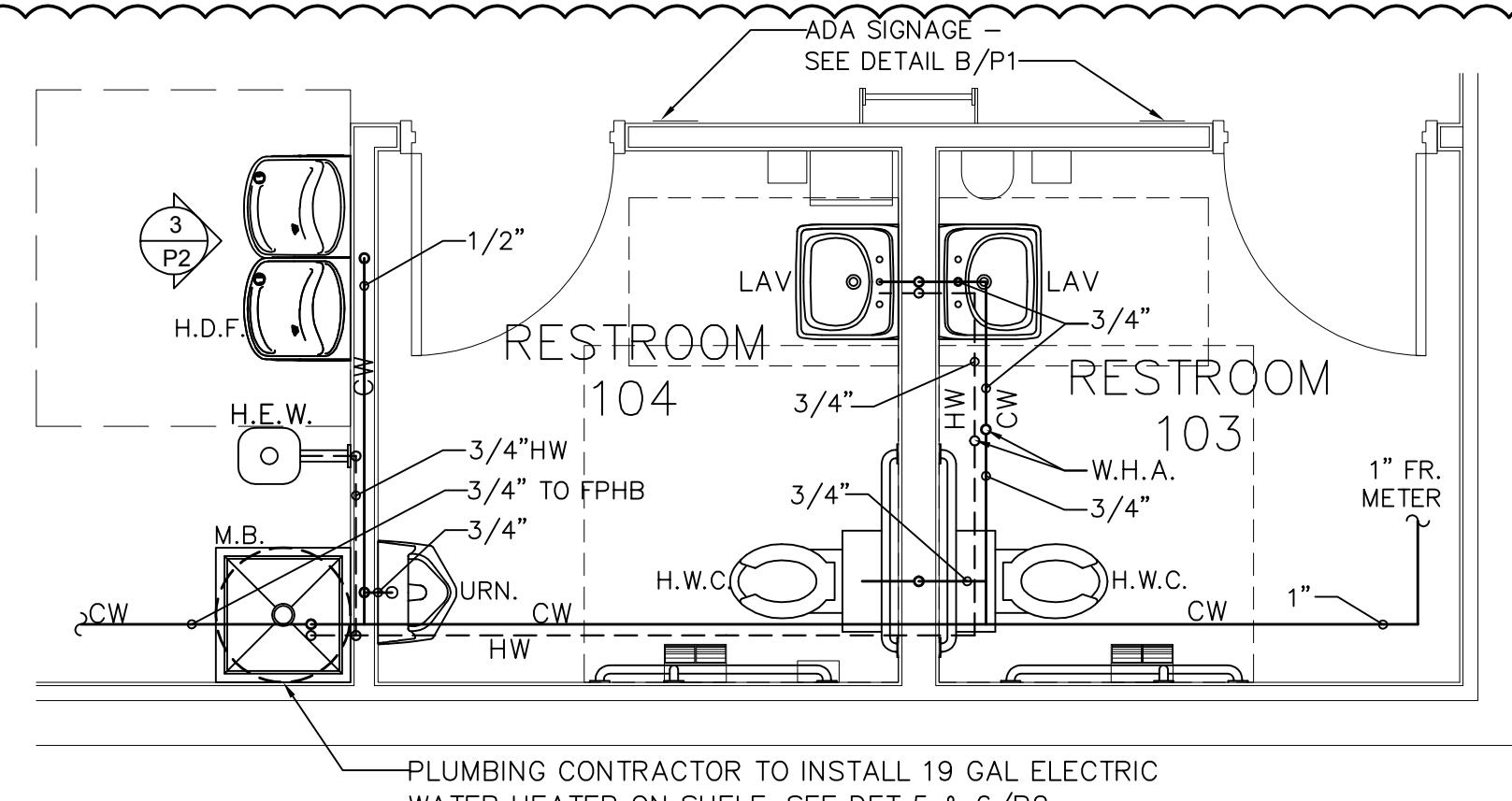
O'REILLY AUTO PARTS
DOLTON PLAZA
317 E. SIBLEY BLVD. DOLTON, IL 604
OR: DEPARTMENT PROPERTY GROUP, L

HEET TITLE DUMBING PLAN TESTS TAILS

1906

1

P
1



NO FLAT VENTING ALLOWED. DRY VENTS SHALL RISE VERTICALLY TO 6" MIN. ABOVE FLOOR LEVEL RIM OF HIGHEST TRAP OR TRAPPED FIXTURE BEING VENTED.

1/13/20

REVISIONS

THIS DRAWING
FOR COORDINATION 6/14/19
FOR REVIEW 11/12/19
FOR CONTRACTING 11/12/19
NOT FOR CONSTRUCTION

WASTE & VENT PIPING
RISER DIAGRAM NTS P2

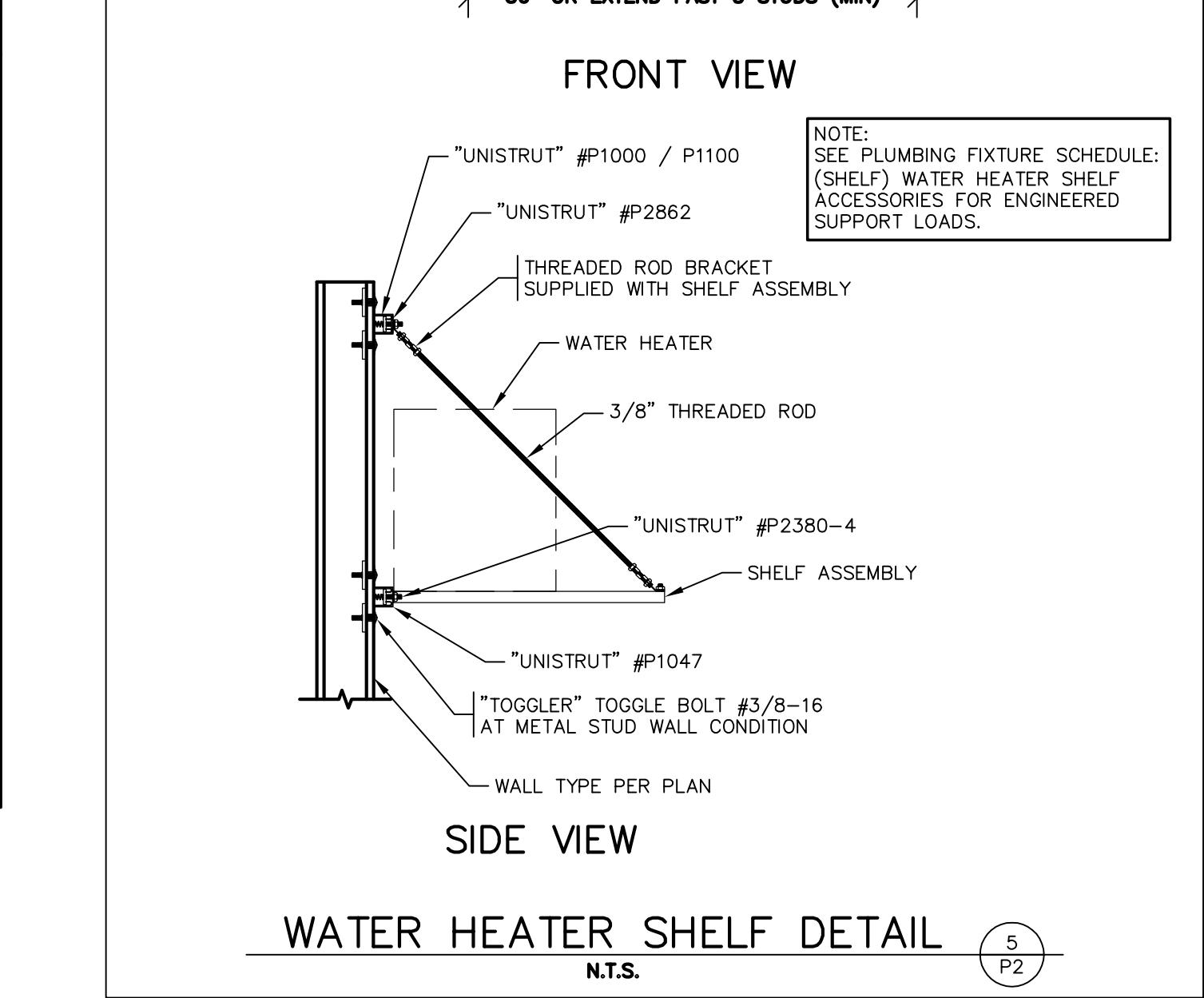
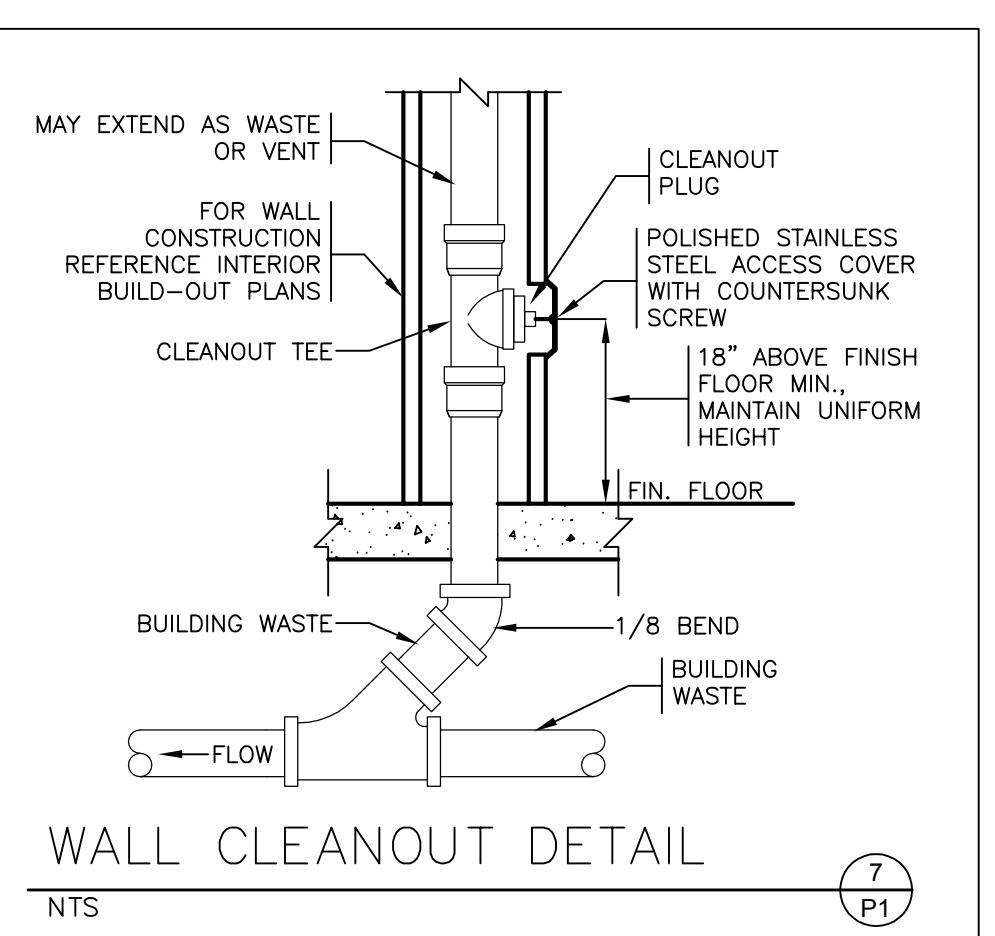
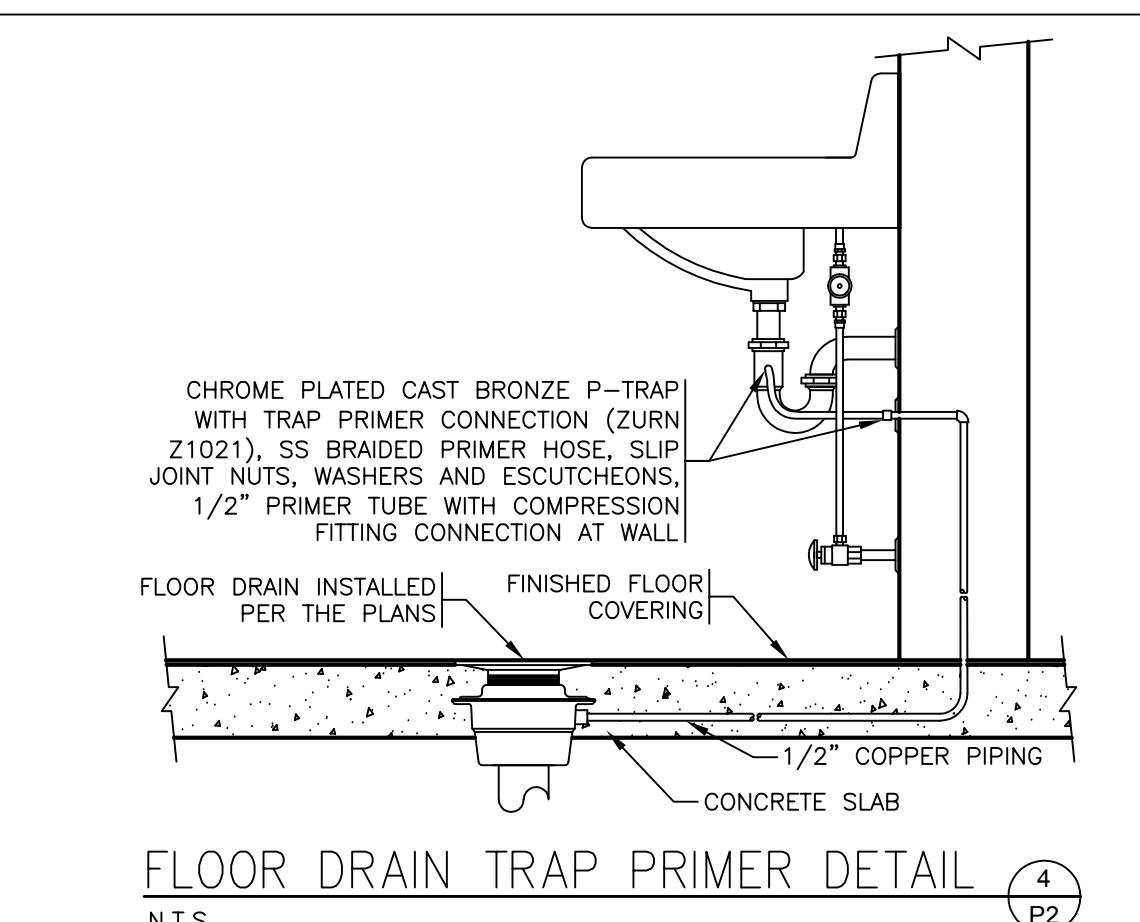
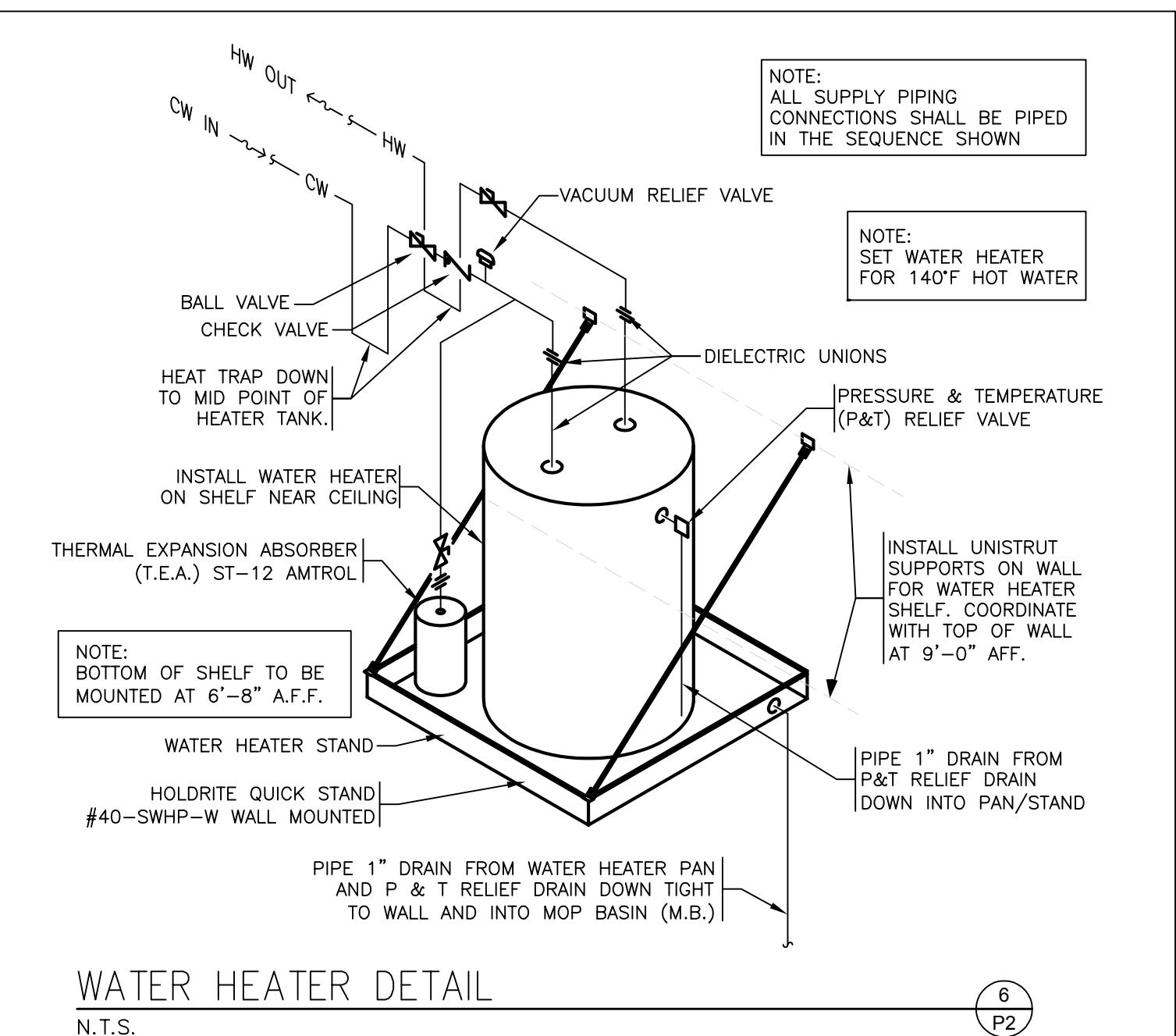
MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	ACCESSORIES	PIPING REQUIREMENTS			REMARKS	APPROVED MANUFACTURER'S	CODE APPROVALS
					WASTE	VENT	SUPPLY			
H.W.C.	HANDICAP ACCESSIBLE WATER CLOSET (TANK TYPE)	AMERICAN STANDARD	CADET RIGHT HEIGHT BOWL RIM Ø 16-1/2" H PRESSURE-ASSISTED TOILET 2467.016	CHURCH 9500CT WHITE OPEN FRONT SEAT COMPLETE W/BOLT CAPS	4"	2"	1/2"	LOW-CONSUMPTION 1.6 GPF MAX. MEETS ADA GUIDELINES	ZURN	ANSI A117.1, ADA COMPLIANT
LAV.	HANDICAP ACCESSIBLE LAVATORY (WALL MOUNTED)	AMERICAN STANDARD	LUCERNE 0355.012 4" CENTERS	ZURN #Z8737 FLAT GRID SINK STRAINER, DELTA #501-DST CLASSIC CENTERSET FAUCET, JAY R. SMITH #0700-M31 FLOOR MOUNTED LAVATORY SUPPORTS IN WALL	2"	2"	3/4"	SEE NOTE 2. 1.5 GPM MAX.	ZURN	ANS A117.1 ASME A112.18.1, A112.18.2, ADA COMPLIANT
M.V.	THERMOSTATIC MIXING VALVE	WATTS	#LFMMV-M1-US-1/2"	THERMOSTATIC MIXING VALVE	-	-	1/2"	SEE DETAIL 2/P2 & NOTE #4 110°F MAXIMUM WATER TEMP.	WILKINS, POWERS	ASSE 1070, IAPMO, ADA COMPLIANT, CUPC, NSF/ANSI 61
H.D.F.	BARRIER-FREE TWO STATION HI-LO DRINKING FOUNTAIN	ELKAY	EZSTL8LC	ACCESSORY APRON #LKAPREZL	2"	2"	1/2"	REFER TO ARCHITECTURAL SHEETS FOR MOUNTING HEIGHTS	HALSEY TAYLOR	ADA COMPLIANT
F.D.	FLOOR DRAIN	ZURN	ZN415-B-P	1/2" TRAP PRIMER CONNECTION	2"	2"	-	COMBINATION WASTE VENT	WADE & JAY R. SMITH	ASSE 1019-B
C.O.	CLEANOUT (INTERIOR)	JAY R. SMITH	4100	W/CARPET CLAMPING RING WHERE REQUIRED	SEE PLAN	-	-	SAME SIZE AS LINE	WADE & ZURN	-
C.O.1	CLEANOUT (EXTERIOR)	JAY R. SMITH	4250	-	SEE PLAN	-	-	SAME SIZE AS LINE SEE DETAILS 2/P2 & 8/P2	WADE & ZURN	-
WCO	WALL CLEANOUT	ZURN	Z1441 STAINLESS STEEL	-	2"	-	-	SEE DETAIL 7/P2	WADE & JAY R. SMITH	-
W.H.A.	WATER HAMMER ARRESTER	SIOUX CHIEF	652-A	-	-	-	-	WILLIAMS	-	-
H.B.	HOSE BIBB	WOODFORD	MODEL 65	W/WALL CLAMP	-	-	3/4"	W/VACUUM BREAKER OPERATING PROP ASSISTED MUST BE ORDERED PER WALL WIDTH	-	-
M.B.	MOP BASIN	FIAT	FIAT MSB-2424	FIAT #832-AA HOSE & BRACKET, FIAT #889-CC-24" MOP HANGER, ZURN #Z842M4-WHK-5H SERVICE FAUCET	3"	2"	3/4"	W/VACUUM BREAKER ON FAUCET. ALSO ADD HOSE CONNECTION VACUUM BREAKER (WATTS #8) ON FAUCET'S SPOUT	STERN-WILLIAMS	-
H.E.W.	HANDICAP ACCESSIBLE EYE WASH	SPEAKMAN	SE-1000-PT	P-TRAP, SPEAKMAN THERMOSTATIC MIXING VALVE (SEF-TW)	-	-	3/4"	SET MIXING VALVE TO DELIVER 80dgF. NOTE: TEPID WATER RANGE IS 60-100dgF	HAWS	ASME A112.18.1-2000, CSA B125-98, ANSI Z358.1, ASSE 1011
URN.	URINAL (WALL MOUNTED)	ZURN	Z5755-U OMNI-FLO	SLOAN ROYAL #186-1 FLUSH VALVE, ZURN #Z1222 FLOOR MOUNTED URINAL SUPPORT	2"	2"	3/4"	BACK OF URINAL TO BE MOUNTED FLUSH WITH THE FACE OF FINISHED WALL. SEE DETAIL 9/P2	AMERICAN STANDARD	ASME A112.19.2, ANSI A117.1, ADA COMPLIANT
NOTES:										
1. COORDINATE ROUGH-IN OF ALL PLUMBING FIXTURES W/ARCHITECTURAL DRAWINGS.										
2. SINKS & LAVATORIES FOR HANDICAPPED ACCESS SHALL BE INSTALLED W/OFFSET TAILPIECES. ALL SINK & LAVATORY DRAIN & WATER LINES SHALL BE INSULATED W/PROTECTIVE DEVICES EQUAL TO "MC GUIRE" #PW 2150 WC, WHITE MOLDED CLOSED CELL VINYL, OR "TRUEBRO" #103W, WHITE MOLDED VINYL.										
3. FOR HANDICAPPED-ACCESSIBLE WATER CLOSET, FURNISH & INSTALL W/ THE FLUSH HANDLE ON THE WIDE SIDE OF THE RESTROOM.										
4. ALL LAVATORIES SHALL BE INSTALLED WITH A THERMOSTATIC MIXING VALVE.										
OWNER SUPPLIED, CONTRACTOR INSTALLED										
W.H.	WATER HEATER (ELECTRIC)	A.O. SMITH	EJCS-20	(19 GALLONS) 120V, 1.65 KW ELEMENT WITH T & P RELIEF VALVE	-	-	3/4"	PIPE DRAIN LINE FROM P & T RELIEF VALVE DOWN IN SHELF PAN SEE DETAIL 5/P2 & 6/P2	NO SUBSTITUTIONS	CSA, ASME RATED, NAECA
SHELF	WATER HEATER SHELF	HOLDRITE	#40-SWHP-WM	SUPPORTS WATER HEATERS UP TO 20 GALLON OR 300 LBS	-	-	-	PIPE DRAIN LINE FROM SHELF PAN SEE DETAIL 5/P2 & 6/P2	NO SUBSTITUTIONS	-
T.E.A.	THERMAL EXPANSION ABSORBER	AMTROL	ST-12	-	-	-	-	-	NO SUBSTITUTIONS	-
NOTE: WATER HEATER, SHELF & T.E.A. SHALL BE DIRECT ORDERED AND OR RELEASED FROM THE LISTED ELECTRICAL EQUIPMENT DISTRIBUTOR.										
GRAYBAR ELECTRIC CO. INC. 11885 LACKLAND ROAD ST. LOUIS, MO 63146 EMAIL: oreilly@graybar.com TOLL FREE: (314) 573-2080										

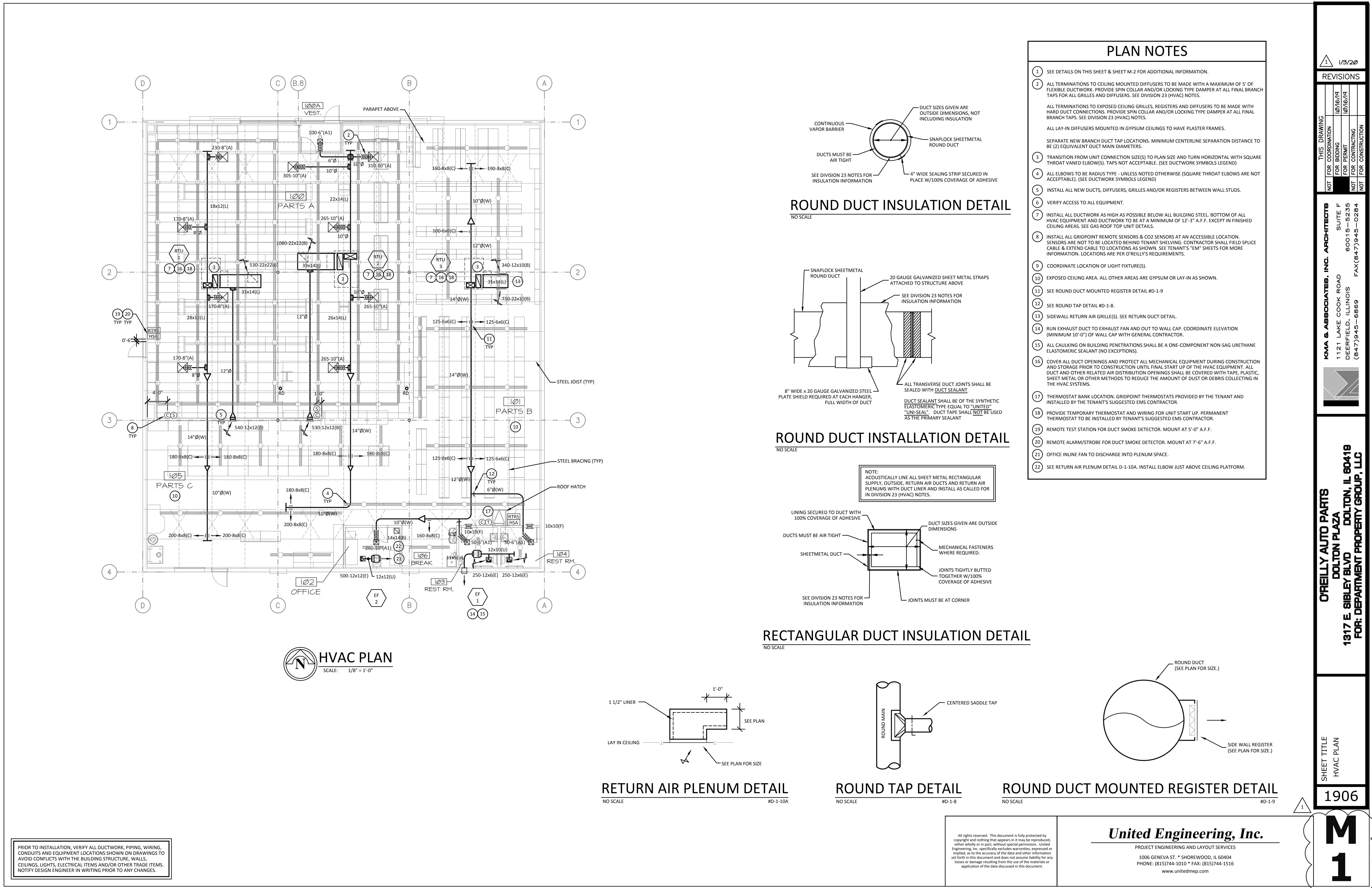
PLUMBING NOTES

- DRAWING IS DIAGRAMMATIC & IS NOT TO BE SCALED. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS.
- ALL PLUMBING WORK IS TO BE DONE IN ACCORDANCE WITH THE APPLICABLE CODE(S) NOTED ON THE CODE SUMMARY SHEET.
- VALVES ON WATER LINES SHALL BE BRONZE BALL VALVES. DO NOT SUBSTITUTE GATE OR GLOBE VALVES. VALVES SHALL BE SAME SIZE AS THEIR INLET PIPING. (SPEC 20 05 00)
- ALL PLUMBING FIXTURES ARE TO BE FURNISHED COMPLETE WITH NECESSARY STOPS, TRAPS, TAILPIECES, TRIM, ETC. (SPEC 22 40 00)
- THE CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS & SUBCONTRACTORS IN LAYING HIS OUT & INSTALLING HIS WORK. COOPERATION DOES NOT MEAN "I WAS HERE FIRST."
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A COMPLETE & FUNCTIONAL SYSTEM IN ACCORDANCE WITH THE INTENT OF THE PLANS, WHETHER OR NOT EVERY ELEMENT THEREOF IS SPECIFICALLY CALLED OUT.
- DO NOT INSTALL CAPPED AIR CHAMBERS AT FIXTURES. INSTALL WATER HAMMER ARRESTERS AS CALLED FOR ON PLAN. ARRESTERS ARE TO BE ORDERED FROM CONCEALED LOCATIONS (SPEC 22 00 00)
- ALL PLUMBING & WATER SUPPLY PIPING CONNECTIONS TO FIXTURES ARE TO BE 1/2" UNLESS NOTED OTHERWISE.
- PLUMBING PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS. PROVIDE REQUIRED CLEARANCES PER "N.E.C." COORDINATE ELECTRICAL PANEL LOCATIONS WITH THE ELECTRICAL CONTRACTOR.
- INSTALL PIPE INSULATION ON ALL DOMESTIC WATER LINES ABOVE FINISH FLOOR. (SPEC 22 07 19)
- CONTRACTOR SHALL COORDINATE WITH ALL STATE & LOCAL BUILDING REGULATION AGENCIES & UTILITY COMPANY(S) IN THE PROCUREMENT OF & PAYMENT OF ALL PERMITS, LICENSES, FEES & CHARGES REQUIRED FOR THE PERFORMANCE OF THE WORK.
- PROVIDE CHROME ESCUTCHEON COVERPLATES AT ALL PIPE PENETRATIONS OF FINISHED WALL SURFACES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ROUTE ALL WATER PIPING AROUND SPACES WITH TEMPERATURES BELOW FREEZING (i.e. ATTICS, CHASES, EXTERIOR WALLS, ETC.). IF FREEZING OF ANY WATER PIPE OCCURS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DRAIN THE PIPING THRU A NON-FREEZING SPACE TO THE FIXTURE/APPLIANCE ORIGINALLY SERVED BY THE FREEZEN PIPING.
- ALL CAULKING ON BUILDING PENETRATIONS SHALL BE A 1-COMPONENT NON-SAG URETHANE SEALANT. ANY CONTRACTOR WHO USED SILICONE OR ANY OTHER CAULKING WILL BE REQUIRED TO REMOVE & REPLACE WITH A SPECIFIED SEALANT. (SPEC 07 92 00)
- PLUMBING SUB-CONTRACTOR SHALL INFORM THE ELECTRICAL SUB-CONTRACTOR OF THE VOLTAGE & POWER REQUIREMENTS OF ALL PLUMBING EQUIPMENT TO BE INSTALLED.
- ALL GAS PIPING INSTALLATIONS SHALL COMPLY WITH "NFPA-54" NATURAL GAS OR "NFPA-58" LP GAS (latest edition).
- ALL WATER HEATERS & HOT WATER STORAGE TANKS SHALL HAVE A DRAIN VALVE INSTALLED AT THE BOTTOM OF THE TANK AS REQUIRED BY CODE.

PLUMBING PIPE MATERIALS (SEE SPEC SECTION 22 00 00 FOR ADDITIONAL INFO)

- A. The following applications are for inside, below & above the building slab and ending at a point 5'-0" outside the perimeter building walls.
- Domestic Water Distribution Piping Below Ground: All interior domestic water piping shall be type "K" hard drawn copper tubing (SIL-FOS 2, FOS-FLO 7 or other silver brazing material). This is required for the water service line from the shut-off valve in the building to a point 5 feet outside the building.
 - Domestic Water Distribution Piping Above Ground: Hard copper tube, Type L
 - Soil, Waste, and Vent Piping Below Ground: Schedule 40 poly vinyl chloride (PVC) plastic DWV pipe;
 - Soil, Waste, and Vent Piping Above Ground: Hubless cast-iron soil pipe or Poly vinyl chloride (PVC) plastic DWV pipe
 - Note: PVC piping is not permitted in air-handling ceiling spaces, use only cast-iron or ductile iron pipe in these locations.
- B. The following applications are for only from 5'-0" outside the building to the utility point of connection (POC).
- Underground domestic water service piping from a point 5 feet outside the building to the POC. (See Site Utilities Plan for which piping material (Copper or PVC) is required).
 - 3"-4" - 1-1/4", Schedule 40 PVC pipe with solvent-welded joints.
 - 1-1/2" - 3", SDR-21, PVC pipe (ASTM D2241) Class 200, Bell and Spigot with rubber gasketed joints.
 - 3/4" - 3", Type "K" hard drawn copper tubing (SIL-FOS 2, FOS-FLO 7 or other silver brazing material).
 - 4" & larger, SDR-18 PVC pipe (AWWA C-900) Class 150 Bell and Spigot with rubber gasketed joints.
 - Underground sanitary sewer piping from a point 5 feet outside the building to the POC.
 - Polyvinyl chloride (PVC) sewer pipe shall conform to ASTM D3034 (SDR-35).
 - Cast iron or ductile iron pipe shall conform to USASI #A-21 class 50.
- C. GAS pipe material:
Low-Pressure Gas Systems, above Ground within or outside Building:
Use the following:
1. 2" and Smaller: Steel pipe, malleable-iron, threaded fittings, and threaded joints.
2. 2-1/2" and Larger: Steel pipe, butt-welding fittings, and welded joints.





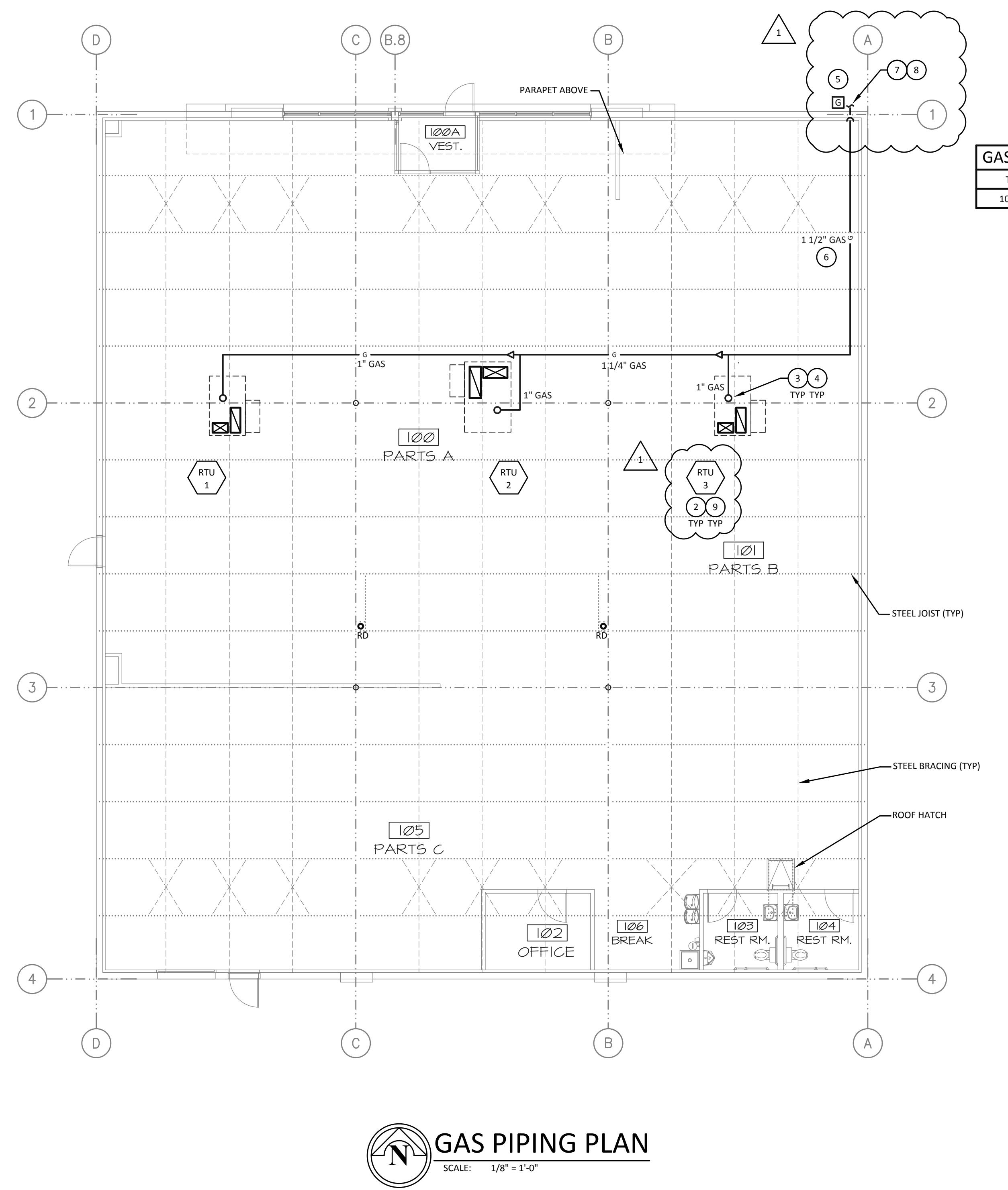
PRIOR TO INSTALLATION, VERIFY ALL DUCTWORK, PIPING, WIRING, CONDUITS AND EQUIPMENT LOCATIONS SHOWN ON DRAWINGS TO AVOID CONFLICTS WITH THE BUILDING STRUCTURE, WALLS, CEILINGS, LIGHTS, ELECTRICAL ITEMS AND/OR OTHER TRADE ITEMS. NOTIFY DESIGN ENGINEER IN WRITING PRIOR TO ANY CHANGES.

1957-1 United Engineering, Inc., 1006 Geneva Street, Shorewood IL 60404, 815-744-1010

HEET TITLE HVAC PLAN

1906
M
1

O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD **DOLTON, IL 60418**
FOR: DEPARTMENT PROPERTY GROUP, LLC





GAS PIPING PLAN

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

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

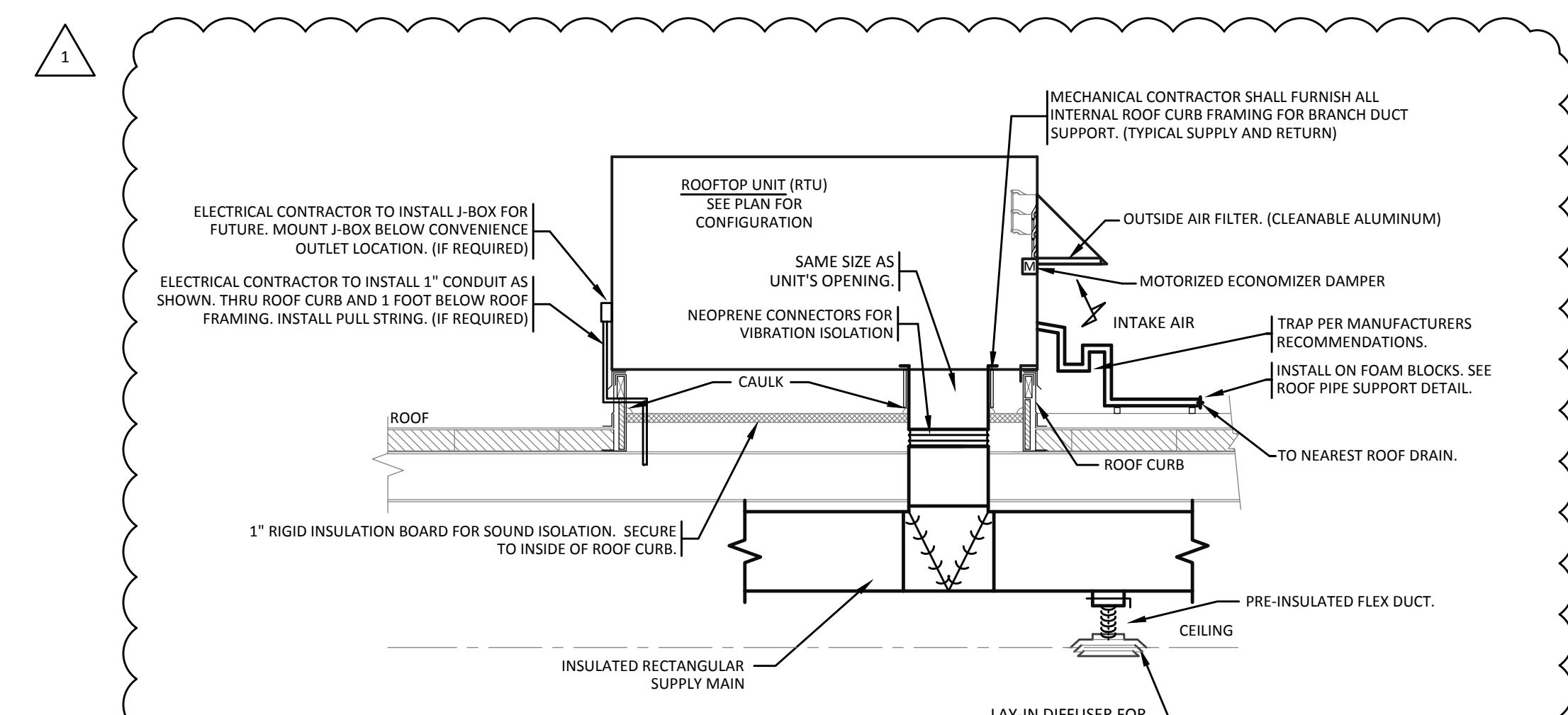
PRIOR TO INSTALLATION, VERIFY ALL DUCTWORK, PIPING, WIRING, CONDUITS AND EQUIPMENT LOCATIONS SHOWN ON DRAWINGS TO AVOID CONFLICTS WITH THE BUILDING STRUCTURE, WALLS, CEILINGS, LIGHTS, ELECTRICAL ITEMS AND/OR OTHER TRADE ITEMS. NOTIFY DESIGN ENGINEER IN WRITING PRIOR TO ANY CHANGES.

S METER LOAD SCHEDULE		
TENANT	CFH	PRESSURE
LOO-RETAIL	480 (ALT)	6" W.C.

TENANT	CFH	PRESSURE
100-RETAIL	480 (ALT)	6" W.C.

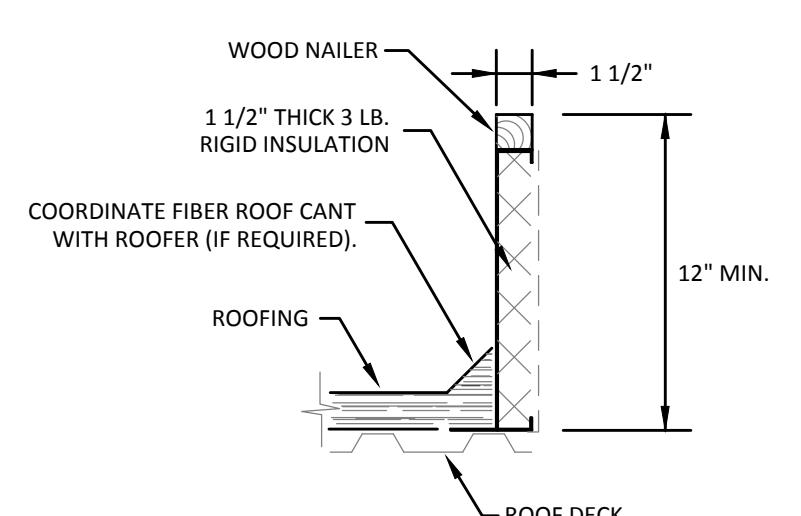
PLAN NOTES

- 1 SEE DETAILS ON THIS SHEET FOR ADDITIONAL INFORMATION.
 - 2 TYPICAL EQUIPMENT MOUNTED ON CURB. SEE ROOF CURB DETAIL #D-1-11A.
 - 3 GAS PIPE UP IN CURB AND THRU UNIT BASE.
 - 4 SEE GAS ROOF TOP UNIT DETAIL FOR GAS PIPING TRIM.
 - 5 GAS METER LOCATION. COORDINATE METER SIZE AND LOCATION WITH GAS COMPANY. SEE GAS METER LOAD SCHEDULE.
 - 6 RUN GAS PIPING BELOW ROOF. GAS PIPING TO BE INSTALLED ABOVE BOTTOM OF JOISTS WHEN POSSIBLE.
 - 7 RUN GAS PIPING UP EXTERIOR WALL. GAS PIPING TO ENTER BUILDING ABOVE THE BOTTOM OF THE JOISTS. VERIFY ELEVATION OF GAS PIPE INTO BUILDING WITH CITY.
 - 8 PAINT ALL EXTERIOR GAS PIPING TO MATCH COLOR OF EXTERIOR WALL.
 - 9 REPLACE ALL RTU FILTERS FOR RETURN AND OUTSIDE AIR PRIOR TO STORE OPENING. PROVIDE ADDITIONAL SET OF FILTERS TO OWNER AT JOB COMPLETION. CONTRACTOR TO SHOW THE STORE MANAGER THE LOCATION OF FILTERS AND INSTRUCT MANAGER HOW TO CHANGE ALL UNIT FILTERS.



GAS ROOF TOP UNIT (SUPPLY DUCT) DETAIL

(LOW PRESSURE) GAS PIPE INSIDE

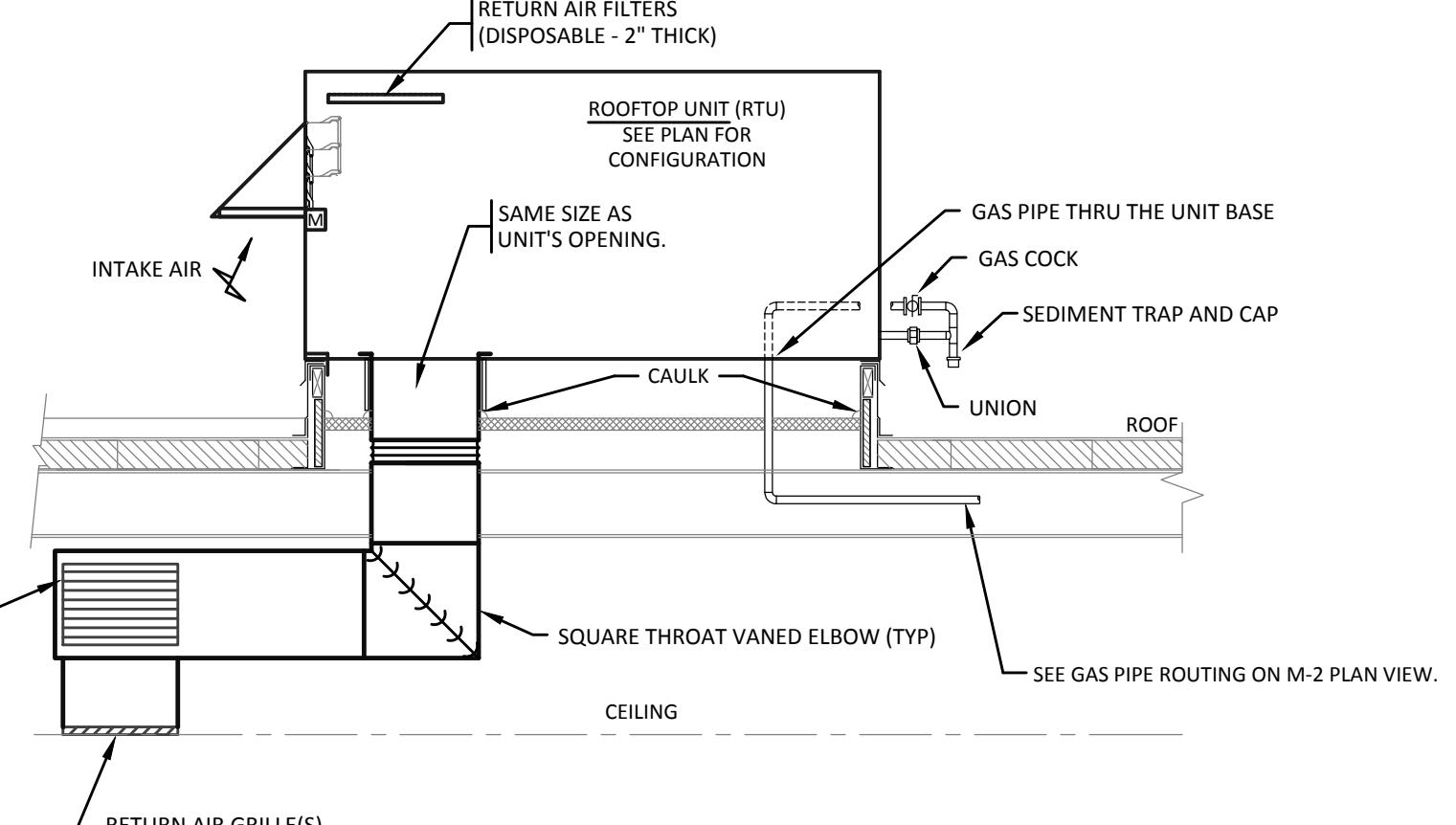


RPS CORPORATION, MODEL: RC-2 OR EQUAL

- * 18 GAUGE GALVANIZED STEEL
- * WOOD NAILER
- * UNITIZED CONSTRUCTION
- * SLOPED CURB AS REQUIRED FOR ROOF PITCH
- * INTERIOR LINING
- * DAMPED SHELF (IF REQUIRED)

ROOF CURB DETAIL

NO SCALE #D-1-11A



GAS ROOF TOP UNIT (RETURN DUCT) DETAIL

(LOW PRESSURE) GAS PIPE INSIDE

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1006 GENEVA ST. * SHOREWOOD, IL 60404
PHONE: (815)744-1010 * FAX: (815)744-1516
www.unitedmep.com

S PIPING PLAN

M 2

STANDARD SYMBOLS LEGEND

	EQUIPMENT TAG		POINT OF NEW CONNECTION
	REVISION TAG		PHOTO VIEW POINT
	COLUMN LINE TAG		SECTION/DETAIL IDENTIFIER
N.I.C.		NOT IN CONTRACT	U.N.O.
U.N.O.		UNLESS NOTED OTHERWISE	

DUCTWORK SYMBOLS LEGEND

	S/A DIFFUSER	EX - EXISTING
	R/A DIFFUSER	BV - B-VENT
	SLOT DIFFUSER	PV - PLUMBING VENT
	FLEXIBLE DUCT	RD - ROOF DRAIN
	SPIN COLLAR	MOD - MOTOR OPERATED DAMPER
	① THERMOSTAT	FD - FIRE DAMPER
	⑤ REMOTE SENSOR	OBD - OPPOSED BLADE DAMPER
	⑥ VEHICLE EXHAUST SENSOR	PBD - PARALLEL BLADE DAMPER
	⑦ HUMIDISTAT	BDD - BACK DRAFT DAMPER
	⑧ CO2 SENSOR	SP - STATIC PRESSURE SENSOR
	QUANTITY CFM	SD - SMOKE DETECTOR
	NECK SIZE	SC - SPEED CONTROLLER
	GRD MODEL TAG	L - LINER W - WRAPPED U - UNINSULATED
	OUTSIDE DUCT DIMENSION	AxByC X-X'
	L LOUVRED COIL GUARDS	
	8 STAINLESS STEEL HEAT EXCHANGER	
	9 SEPARATELY WIRED CONVENIENCE OUTLET	
	10 CO2 SENSOR WITH LED DISPLAY AND NO OVERRIDE	
	11 MEDIUM STATIC	
	12 TENANT PROVIDED AND FIELD INSTALLED ACCESSORIES: NON-FUSED DISCONNECT SWITCH, GRIDPOINT THERMOSTAT	
	13 RTU RESPONSIBILITIES:	
A) ALL HVAC UNITS ARE OWNER SUPPLIED BY O'REILLY AUTOMOTIVE.		
B) MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL HVAC UNITS.		
C) MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE FIRST YEAR LABOR WARRANTY ON ALL OWNER SUPPLIED EQUIPMENT.		
D) MECHANICAL CONTRACTOR MUST CALL "CARRIER CORPORATION'S NATIONAL ACCOUNTS" DEPARTMENT FOR CONFIRMATION OF ORDERS ONLY! CUSTOMER SERVICE REP, MARIA CAMPANELLO, PH: 315-432-3946, Maria.campanello@carrier.utc.com or StrategicAccounts2@carrier.utc.com		
E) MECHANICAL CONTRACTOR IS RESPONSIBLE FOR SCHEDULING, SHIPPING & RECEIVING OF ALL CARRIER UNITS FROM CARRIER NATIONAL ACCOUNTS. CONTACT CUSTOMER SERVICE REP.		
F) VERIFY ALL RESPONSIBILITIES WITH THE G.C.		
14 RETURN SMOKE DETECTOR		
15 REMOTE TEST/RESET STATION (#SD-TRM4, CRSDTEST001A00)		
16 ALARM/STROBE (H6536-G5, CRSDHNSB001A00)		
17 CONDENSATE OVERFLOW SWITCH		
18 THRU THE BOTTOM ELECTRIC AND GAS		
19 THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRING AND CONNECTIONS REQUIRED BETWEEN THE SMOKE DETECTOR AND THE UNIT, AND SHALL PROVIDE SMOKE TESTING TO VERIFY PROPER OPERATION AND UNIT SHUT DOWN PRIOR TO OCCUPANCY.		
20 2 SPEED FAN CONTROL		
21 DRIVE (BELT)		
22 PROVIDE ALTERNATE HEAT IF ACCEPTABLE BY LOCAL CODE		

ROOFTOP UNIT SCHEDULE

TAG	RTU-1	RTU-2	RTU-3	
	LOCATION SERVING	SALES/STOCK	STOCK	
MANUFACTURER	CARRIER	CARRIER	CARRIER	
MODEL	48GCTM06	48HCS08	48GCTM06	
TONS (NOMINAL)	5	5	5	
COOLING ENERGY EFFICIENCY	16 SEER	12 EER	16 SEER	
REFRIGERANT TYPE	R-410A	R-410A	R-410A	
SUPPLY FAN DATA	CFM	1,500	2,250	1,500
	ESP (DUCT ONLY)	1	1	1
	RPM	1895	846	1895
BHP	0.72	1.08	0.72	
COOLING COIL DATA	MBH	61	90	61
	EAT (DB/WB)	81.5/67	81.5/67	81.5/67
	COIL LAT (DB/WB)	54/53.5	54/53.5	54/53.5
UNIT LAT (DB/WB)	55.5/54.5	55.5/54.5	55.5/54.5	
STAGES	1	2	1	
INPUT (MBH) (MAX)	115	125	115	
OUTPUT (MBH) (MAX)	93	103	93	
STAGES	2	2	2	
INPUT (MBH) (MAX)	150	180	150	
OUTPUT (MBH) (MAX)	120	150	120	
STAGES	2	2	2	
MCA / MCP	29/40	41/50	29/40	
VOLT	208	208	208	
PHASE	3	3	3	
OUTDOOR AIR (CFM)	430	640	430	
UNIT WEIGHT (LBS)	1,000	1,350	1,000	
REMARKS / ACCESSORIES	1-19, 22	1,2,4-21,22	1-19, 22	

DIVISION 23 (HVAC)

1) GENERAL:

- JOB SPECIFICATIONS ARE AS FOLLOWS:
- CODE - CONTRACTOR TO LOCATE, REVIEW AND COMPLY WITH ALL LOCAL, STATE AND/OR NATIONAL CODES. CONTRACTOR TO SPECIFICALLY LOCATE, REVIEW AND COMPLY WITH ALL LOCAL CODE AMENDMENTS.
- WORKMANSHIP/WARRANTY - CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, MATERIALS, METHODS, TECHNIQUES, SEQUENCES AND DETAILS TO PERFORM ITS WORK. ALL MATERIALS, EQUIPMENT AND WORKMANSHIP, SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE THE EQUIPMENT/SYSTEMS ARE PLACED INTO OPERATION AND ACCEPTED BY THE OWNER. WARRANTY TO INCLUDE LABOR & MATERIALS REQUIRED FOR WARRANTY ISSUES.
- EQUIPMENT MANUFACTURER INSTRUCTIONS - CONTRACTOR TO FOLLOW EQUIPMENT MANUFACTURER'S INSTALLATION, OPERATION AND MAINTENANCE (IOM) MANUALS FOR ALL NEW EQUIPMENT. EQUIPMENT MANUFACTURER'S IOM INSTRUCTIONS SUPERSEDE ANY CONFLICTS WITH THESE DRAWINGS.
- SCHEDULED EQUIPMENT - CONTRACTOR PRICING TO BE BASED ON THE SCHEDULED EQUIPMENT. SUBSTITUTIONS TO BE SUBMITTED AS DEDUCTS (OR ADDS) TO THE BASE CONTRACT ALONG WITH A DESCRIPTION OF THE DIFFERENCES. ALL SUBSTITUTIONS WILL REQUIRE THE CONTRACTOR TO SUBMIT REVISED DIGITAL DRAWINGS FOR APPROVAL FOR SUBSTITUTION. THE REVISED DRAWINGS TO INCLUDE (BUT ARE NOT LIMITED TO) THE REVISED EQUIPMENT SPECIFICATION SCHEDULE, LOCATIONS, WEIGHTS, MARK, PIPING, WIRING, BREAKERS (ETC.). THE REVISED DRAWINGS TO SHOW THE ENTIRE SYSTEM AS THE SYSTEM WILL BE INSTALLED BY THE CONTRACTOR.
- SUBMITTALS - CONTRACTOR TO COORDINATE SUBMITTAL SCHEDULE WITH OWNER IMMEDIATELY AFTER ACCEPTANCE OF CONTRACT. AS SOON AS POSSIBLE BEFORE CONSTRUCTION, CONTRACTOR TO EMAIL NEW EQUIPMENT, FIXTURES AND/OR SHOP DRAWING SUBMITTALS (INCLUDING ALL ACCESSORIES), NO NEW EQUIPMENT, FIXTURES AND/OR SHOP DRAWING ITEMS ARE TO BE INSTALLED UNTIL SUBMITTED INFORMATION IS APPROVED.
- SHOP DRAWINGS - BEFORE INSTALLATION, PROVIDE 1/4" SCALE 'SHOP DRAWINGS' FOR COORDINATION AND APPROVAL. 'SHOP DRAWINGS' TO SHOW DIMENSIONS, ELEVATIONS AND LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING, WIRING AND CONDUIT. INSTALLATION TO START ONLY AFTER WRITTEN APPROVAL FROM ENGINEER. ALL CONTRACTOR PROVIDED DRAWINGS TO BE MADE WITH 'AUTO CAD' DRAFTING SOFTWARE AND SUBMITTED IN BOTH AUTOCAD AND ADOBE DIGITAL FORMAT. [NOTE: DESIGN DRAWINGS, NOTES AND/OR ADDENDUMS ARE NOT TO BE COPIED OR REPRODUCED IN ANY WAY FOR US AS CONTRACTOR SUBMITTED DRAWINGS] PROVIDE (4) PAPER HARD COPIES OF SHOP DRAWINGS.
- AS BUILT DRAWINGS - UPON COMPLETION OF THE INSTALLATION WORK, PROVIDE 'AS BUILT' CHANGES CLEARLY SHOWING THE FINAL DIMENSIONS, ELEVATIONS AND LOCATIONS OF ALL EQUIPMENT, DUCTWORK, PIPING, WIRING AND CONDUIT. ALL AS BUILT DRAWING CHANGES TO BE MADE WITH 'AUTO CAD' DRAFTING SOFTWARE AND SUBMITTED IN BOTH AUTOCAD AND ADOBE DIGITAL FORMAT. [NOTE: DESIGN DRAWINGS, NOTES AND/OR ADDENDUMS ARE NOT TO BE COPIED OR REPRODUCED IN ANY WAY FOR US AS CONTRACTOR SUBMITTED DRAWINGS]
- POST CONSTRUCTION DOCUMENTS - CONTRACTOR TO EMAIL A MICROSOFT WORDS FORMAT FOLDER INCLUDING ALL REQUIRED PROJECT CLOSE OUT DOCUMENTS. THE WORDS FORMAT FOLDER TO INCLUDE SUB-FOLDERS AND TO BE LABELLED AS PER BELOW. [ALSO PROVIDE (3) EXACT PRINTED COPIES IN SECURE HARD BINDERS.]

- o TRADE NAME
 1. WARRANTY - WARRANTY LETTER INCLUDING THE AGREED UPON START DATE
 2. EQUIPMENT - COMPLETE LIST OF MODEL NUMBERS AND SERIAL NUMBERS FOR EACH PIECE OF EQUIPMENT
 3. IOM - INSTALLATION, OPERATION AND/OR MAINTENANCE (IOM) MANUALS. INCLUDE PARTS LIST FOR EACH PIECE OF EQUIPMENT
 4. VENDORS LIST - LIST OF CONTACT INFORMATION INCLUDING CONTACT NAME, PHONE NUMBER AND EMAIL ADDRESS FOR EQUIPMENT.
 5. AS BUILT DRAWING - AS BUILT DRAWINGS INCLUDING FINAL LOCATION FOR EACH PIECE OF EQUIPMENT
 6. TEST & BALANCE REPORT - REPORT OF ALL FINAL TESTED AND BALANCED AIR AND WATER SYSTEMS. SEE DIVISION 23 NOTES.

- ACCESS DOORS - CONTRACTOR TO FURNISH AND INSTALL ACCESS DOORS AS REQUIRED. EACH TRADE TO COORDINATE WITH CARPENTRY CONTRACTOR THE LOCATION OF ACCESS DOORS IN ALL CEILINGS, SOFFITS AND WALLS FOR ACCESS TO EQUIPMENT, VALVES, DAMPERS, CLEAN OUTS, SWITCHES, CONTROLS, ETC.

- STRUCTURE PROTECTION - THE BUILDING OR STRUCTURE SHALL NOT BE WEAKENED BY THE INSTALLATION OF ANY NEW SYSTEMS. WHERE FLOORS, WALLS, CEILINGS OR ANY OTHER PORTION OF THE BUILDING OR STRUCTURE ARE REQUIRED TO BE ALTERED OR REPLACED IN THE PROCESS OF INSTALLING OR REPAIRING ANY SYSTEM, THE BUILDING OR STRUCTURE SHALL BE LEFT IN A SAFE STRUCTURAL CONDITION IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR NATIONAL CODES.

- FIRE RESISTANT ASSEMBLIES - PENETRATIONS OF WALL/FLOOR/CEILING ASSEMBLIES AND ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL BE PROTECTED IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR NATIONAL CODES.

- ACCESSIBILITY - MANUAL ACCESSIBLE ITEMS IN OCCUPIED SPACES (SUCH AS CONTROLS, THERMOSTATS, SWITCHES AND ELECTRICAL OUTLETS) TO BE LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" PER THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. VERIFY LOCAL ACCESSIBILITY CODE REQUIREMENTS OVER AND ABOVE THE ADA REQUIREMENTS. COORDINATE FINAL MOUNTING HEIGHTS WITH OWNER.

2) GENERAL HVAC CONDITIONS:

- KEEP OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" AWAY FROM CONTAMINANT SOURCES.
- KEEP B-VENTS A MINIMUM OF 3'-0" ABOVE ROOF PENETRATION AND/OR 2'-0" ABOVE ANY PART OF THE BUILDING WITHIN 10'-0". B-VENTS TO CLEAR COMBUSTIBLES BY 3".
- TERMOSTATS, SENSORS AND CONTROL PANELS FOR HVAC EQUIPMENT SHALL BE LOCATED IN ACCORDANCE WITH THE MECHANICAL PLANS. FURNISH AND INSTALL CLEAR LOCKING COVERS FOR ALL T-SLOTS. ALL COVERS TO BE KEYED THE SAME.
- PROVIDE ENGRAVED TAGS FOR ALL HVAC EQUIPMENT.
- PROVIDE FACTORY START UP FOR ALL EQUIPMENT.

3) CURBS:

- CURBS TO BE INSULATED AND A MINIMUM 12" HIGH. CURBS TO BE PITCHED TO MATCH SLOPE OF ROOF.

4) PIPING:

- ALL HVAC PIPING AND PIPE MATERIALS TO MEET ASTM AND ASME STANDARDS AS LISTED IN THE INTERNATIONAL MECHANICAL CODE AND LOCAL CODES. CONTACT THE CITY/TOWNSHIP FOR THE PROPER EDITIONS AND AMENDMENTS OF THE ALL RELATIVE CODE PUBLICATIONS. ALL GAS PIPING AND MATERIALS TO MEET ASTM STANDARDS AS LISTED IN THE INTERNATIONAL GAS CODE.
- PRESSURE RATINGS - PIPE, FITTING AND VALVE PRESSURE RATINGS TO EXCEED MAXIMUM SYSTEM OPERATING PRESSURE BY A MINIMUM OF 20%. VERIFY EACH PIPE SYSTEM OPERATING PRESSURE BEFORE INSTALLATION.

5) GAS PIPING:

- ALL ABOVE GROUND GAS PIPING TO BE SCH. 40 BLACK STEEL WITH SCREWED MALLEABLE FITTINGS FOR 2" AND SMALLER PIPING AND WELDED FOR 2 1/2" AND LARGER PIPING.

6) DRAIN PIPING:

- ALL DWV PIPING TO BE PLAIN END SCH. 40 DWV PVC WITH SOCKET TYPE DWV PVC FITTINGS.

6) ANCHORING, SUPPORT & ISOLATION (EQUIPMENT, PIPING & DUCTWORK):

- ANCHORING & SUPPORT:
 - ANCHOR ALL EQUIPMENT, DUCTWORK AND PIPING TO APPROVED STRUCTURES WITH UL LISTED AND FACTORY MUTUAL APPROVED ANCHORING AND SUPPORT PRODUCTS. APPROVED ANCHORING SYSTEMS INCLUDE CONCRETE DROP IN ANCHORS, TOP CHORD MOUNTED C-CLAMPS AND TOP CHORD MOUNTED BEAM CLIP DUCTWORK STRAP HANGERS. APPROVED SUPPORT SYSTEMS INCLUDE MINIMUM 3/8" THREADED ROD, MINIMUM 1" 20 GAUGE SHEET METAL DUCT STRAPS, U-CHANNEL, ANGLE IRON AND/OR PIPE CLEVIS HANGERS. FOLLOW THE ABOVE REQUIREMENTS UNLESS NOTED OTHERWISE BY EQUIPMENT MANUFACTURER OR STAMPED STRUCTURAL SUPPORT DRAWINGS.
 - PIPING SUPPORT:
 - PIPING TO BE SUPPORTED WITH CLEVIS HANGERS AND INSULATION PROTECTORS WHERE INSULATED. ALLOW FOR EXPANSION AND DO NOT DIRECTLY ATTACH PIPE BETWEEN ANY TWO FIXED STRUCTURES.
 - ROOF MOUNTED PIPING SUPPORT TO BE CLOSED CELL MEDIUM DENSITY POLYETHYLENE FOAM BLOCK PIPE PIER (TOLCO BY NIBCO OR EQUAL).
 - MAXIMUM PIPE SUPPORT SPACING SHALL BE AS FOLLOWS:
 - STEEL PIPE - 12' HORIZONTAL, 15' VERTICAL
 - COPPER PIPE - 12' HORIZONTAL, 15' VERTICAL
 - PVC PIPE - 4' HORIZONTAL, 10' VERTICAL (MID-STORY GUIDE)
 - DUCTWORK SUPPORT:
 - DUCTWORK TO BE SUPPORTED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS. MAXIMUM OF 32' O.C. SUPPORT INTERVALS.

7) SMOKE DETECTORS AND REMOTE TEST STATIONS:

- SMOKE DETECTORS TO BE PLACED IN ACCORDANCE WITH LOCAL CODES. SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS, WITH A DESIGN CAPACITY GREATER THAN 2000 CFM. IN THE RETURN AIR DUCT OR PLenum UPSTREAM OF ANY FILTERS, EXHAUST AIR CONNECTIONS, OUTDOOR AIR CONNECTIONS OR DECONTAMINATION EQUIPMENT AND APPLIANCES. SAMPLING TUBES TO MATCH LONG DIMENSION OF DUCT PLenum. Duct SMOKE DETECTOR TO SHUT UPS DOWN UPON ALARM. SMOKE DETECTORS TO BE 4-WIRE PHOTOELECTRIC TYPE (SYSTEM SENSOR INNOVAIRLEX SERIES OR EQUAL). REMOTE TEST STATION(S) TO BE EQUAL TO EDWARDS SIGNALING PRODUCTS MODEL SD-TRK4. FINAL MAKE AND MODEL TO BE COORDINATED WITH SMOKE DETECTORS FOR ALL UNITS.

8) FIRE DAMPERS:

- FIRE DAMPERS TO BE PROVIDED AS PER NFPA AND LOCAL CODES. MINIMUM 18x18 ACCESS DOOR TO BE PROVIDED AT EVERY FIRE DAMPER NOT LOCATED DIRECTLY BEHIND A REMOVABLE GRILLE, REGISTER OR DIFFUSER. FIRE DAMPERS TO BE "B" STYLE", U.L. 555 LISTED, 1.5 HOUR DAMPERS (SAFE AIR DOWCO 150 SERIES OR EQUAL) UNLESS NOTED OTHERWISE.

9) TESTING & BALANCING:

- TEST AND BALANCE CONTRACTOR TO BE COMPLETELY INDEPENDENT OF THE MECHANICAL CONTRACTOR AND NOT TO BE A SUB TO THE MECHANICAL CONTRACTOR. BALANCE ALL EQUIPMENT, GRILLES, REGISTERS AND DIFFUSERS TO FLOW RATES SHOWN ON THE PLANS. FURNISH AND INSTALL ALL NECESSARY DRIVES, SHEAVES & BELTS AS REQUIRED TO PROVIDE COMPLETE AND OPERABLE SYSTEMS. VARIABLE FREQUENCY DRIVES NOT TO BE RAISED ABOVE 60 Hz FOR ANY REASON UNLESS APPROVED IN WRITING BY THE ENGINEER. FINAL TEST AND BALANCE REPORT TO INCLUDE FLOWRATES (CFM/GPM/LBS PER HOUR), Pressures (FAN STATIC/PUMP HEAD), RPM (FAN/PUMP), MOTOR RPM/VOLTS/PHASE/AMPS/POWER FACTOR). ALL TESTING AND BALANCING TO BE PERFORMED BY N.E.B.B. AND/OR A.B.C. CERTIFIED TECHNICIANS. PROVIDE 'PDF' FORMAT AND (3) PAPER COPIES OF FINAL REPORT.

DIVISION 23 (HVAC-CONTROLS)

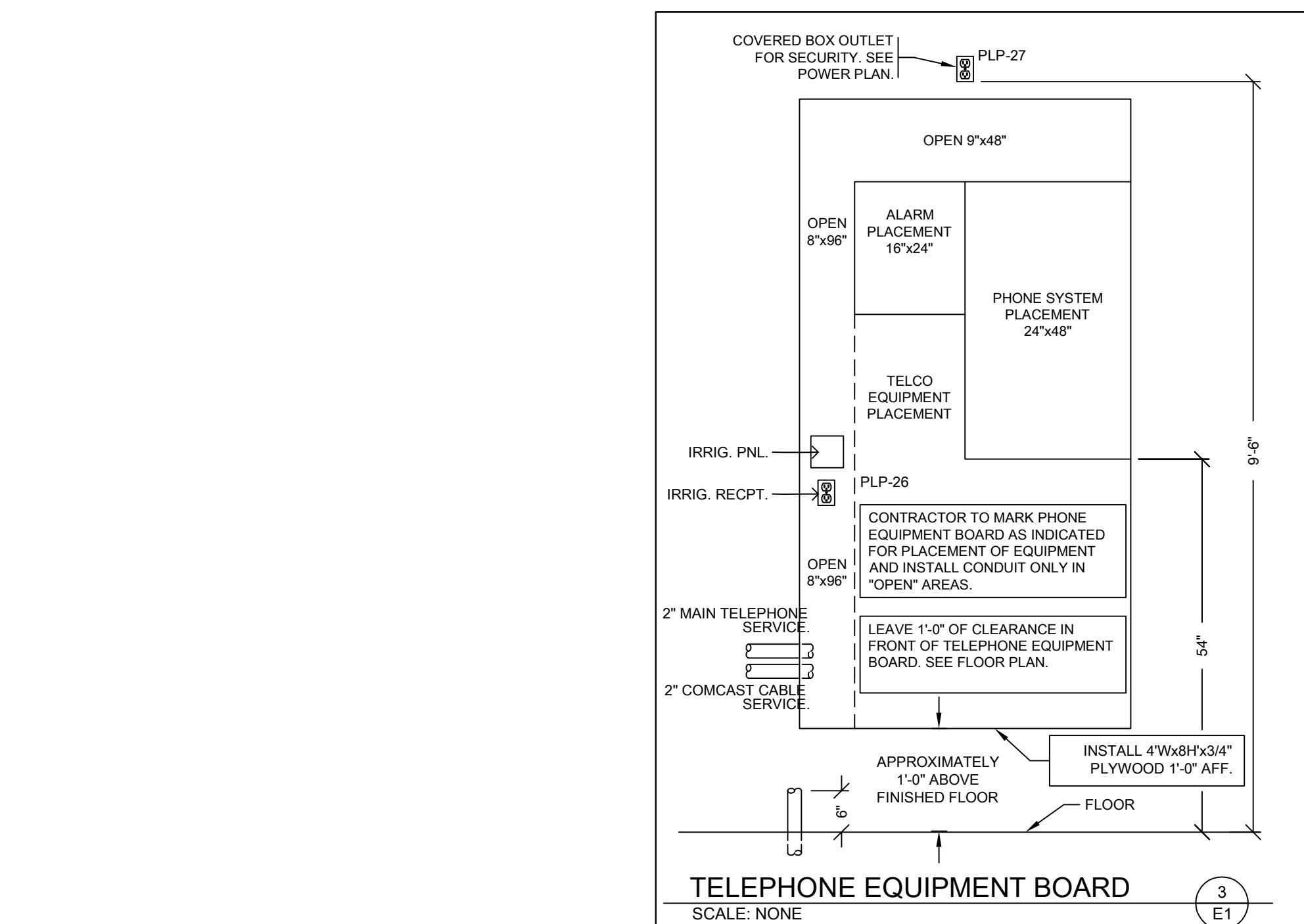
1) GENERAL:

- THE FOLLOWING ARE CONTROL SEQUENCES ONLY. CONTROLS DESIGN AND INSTALLATION TO BE BY

LIGHT FIXTURE SCHEDULE													
MARK	MFR.	CATALOG NUMBER	SUPPLY VOLTAGE	FINISH	MOUNTING		LAMPS			TOTAL			
					RECESSED	SURFACE	CEILING	FLUORESCENT	H.I.D.	INCANDESCENT	LAMP QUANTITY		
LED DIMMABLE LIGHTS - ALL INDOOR LIGHT FIXTURES SHALL HAVE DISCONNECTING MEANS TO COMPLY WITH NEC 410.130. (G)													
A	LSI	SDL 8 LED 80L FL UNV DIMI 40 80CRI OR NO SUBSTITUTIONS	120	WHITE		X				X	---	62	GRID HANGER (648480) (CEILING GRID ONLY) 0-10 VOLT DIMMING DRIVER STANDARD (1 PER FIXTURE)
B	LSI	SDL 4 LED 40L FL UNV DIMI 40 80CRI OR NO SUBSTITUTIONS	120	WHITE		X				X	---	30	GRID HANGER (648480) (CEILING GRID ONLY) 0-10 VOLT DIMMING DRIVER STANDARD (1 PER FIXTURE)
C	LSI	SDL 8 LED 80L FL UNV DIMI 40 80CRI OR NO SUBSTITUTIONS	120	WHITE			X			X	---	62	5' CHAIN HANGING KIT (1 PER FIXTURE) HANG TOP OF FIXTURE AT 12' AFF. WITH CHAIN HANGERS AND LENGTH OF CHAIN AS REQUIRED 0-10 VOLT DIMMING DRIVER STANDARD
D	LSI	SDL 4 LED 40L FL UNV DIMI 40 80CRI OR NO SUBSTITUTIONS	120	WHITE			X			X	---	30	5' CHAIN HANGING KIT (1 PER FIXTURE) HANG TOP OF FIXTURE AT 12' AFF. WITH CHAIN HANGERS AND LENGTH OF CHAIN AS REQUIRED 0-10 VOLT DIMMING DRIVER STANDARD
COMBINATION EXIT/EMERGENCY LIGHTS, EMERGENCY LIGHTS & EXTERIOR EMERGENCY REMOTE HEADS													
XR	COOPER	APCH7R (RED LETTERS)	120	WHITE	X	X			X	2	LED EXIT + (2) 3.6V	2.34	UNIVERSAL WALL/CLG. SINGLE OR DOUBLE FACE
EM	COOPER	APEL	120	WHITE	X	X			X	2	3.6V.	0.33	UNIVERSAL WALL/CLG.
RH2	COOPER	APWR2 Dual Voltage (IFC 1003.2.10.5.)	6V DC	WHITE	X			X	2	LED REMOTE HEAD	0	WALL MOUNT	POWERED BY EMERGENCY "XR" FIXTURE
LED EXTERIOR LIGHTS													
PC	INTERMATIC	PHOTOCELL #4251	120	DARK BRONZE	X					---	-	---	MOUNT ABOVE WALL PACK LOCATED NEAR FREIGHT DOOR.
L	LSI	LAD6 41 LED 40 75 UE TR6R SFHAZ	120	CLEAR	X			X	1	---	45	---	RECESSED CAN.
WP1	LSI	XWM-FT-LED-06L-40-UE-BRZ	120	DARK BRONZE	X			X	1	---	59	---	FULL CUT-OFF. MOUNT 12' A.F. TO CENTERLINE OF FIXTURE.
WS1	LSI	XWM-FT-LED-DBL-40-UE-BRZ	120	DARK BRONZE	X			X	1	---	59	---	FULL CUT-OFF. PARAPET WALL
F4	LSI	XWM-FT-LED-06-40-UE-BRZ	120	DARK BRONZE	X			X	1	---	59	---	FULL CUT-OFF.

GENERAL NOTES

- A. LIGHTING AND EQUIPMENT BRANCH CIRCUIT BREAKERS ARE SERIES RATED WITH REMOTE MAIN BREAKERS IN ACCORDANCE WITH UL 489.
- B. PANELBOARD COMPONENTS INCLUDING OVERCURRENT PROTECTION DEVICES SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT.
- C. NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER AND THE ELECTRICAL INSPECTOR.
- D. A.I.C. RATING SHOWN AT THE PANEL BOARD IS MINIMUM RATING FOR OVERCURRENT PROTECTION DEVICES. EACH DEVICE SHALL BE FULLY RATED WITH UPSTREAM DEVICES AT AFC AS SHOWN ON PANEL SCHEDULE.
- E. ELECTRICAL BOXES AND/OR CONDUIT INSTALLED IN SUSPENDED CEILINGS SHALL NOT EXCEED 100 CUBIC INCHES IN SIZE, AND THEY SHALL EITHER BE FASTENED TO FRAMING MEMBERS BY BOLTS, SCREWS, RIVETS OR APPROVED CLIPS, OR SECURED TO CEILING SUPPORT.



LIGHTING - KEYNOTES

1 MOUNT J-BOX INSIDE BUILDING & FLEX CONDUIT THRU WALL FOR POWER SUPPLY TO ILLUMINATED SIGN. EXACT LOCATIONS OF PENETRATIONS SHALL BE COORDINATED WITH SIGN COMPANY. PENETRATIONS SHALL BE SHIELDED. WATERPROOF WI ELASTOMERIC POLYURETHANE. (NO EXCEPTIONS) EQUAL TO "VULKEM 110" WIRE TO SIGN. 15' OF WIRING "WHIP" (SHALL BE FLEX OR TYPE MC CABLE). COIL AND "CABLE TIE" WIRING "WHIP" TO WALL ABOVE CEILING. TYPICAL.

2 TO "OPEN" SIGN. SEE SHEET E2.

3 SEE "E" PANEL TRANSFER SWITCH SCHEDULE FOR POSITION OF CIRCUIT WIRES THROUGH TRANSFER SWITCH.

4 VIA LIGHTING CONTROL PANEL. SEE EM SHEET.

5 DIMMER LIGHTING CONTROL SWITCHES LOCATED ON OFFICE WALL OF OFFICE. SEE LIGHTING PLAN FOR QUANTITY. SEE DETAILS ON SHEET E4 FOR MORE INFORMATION.

6 SUSPEND 8'-0" A.F. THIS FIXTURE ONLY.

7 ROUTE THE OFFICE AND RESTROOM'S LIGHTING CIRCUIT THRU THE LOCAL OCCUPANCY SENSORS AND DIRECTLY TO THE CIRCUIT BREAKER. THESE FIXTURES SHALL NOT BE SWITCHED BY THE LIGHTING CONTROL PANEL. SEE "E" PANEL TRANSFER SWITCH SCHEDULE FOR POSITION OF CIRCUIT WIRES THROUGH TRANSFER SWITCH.

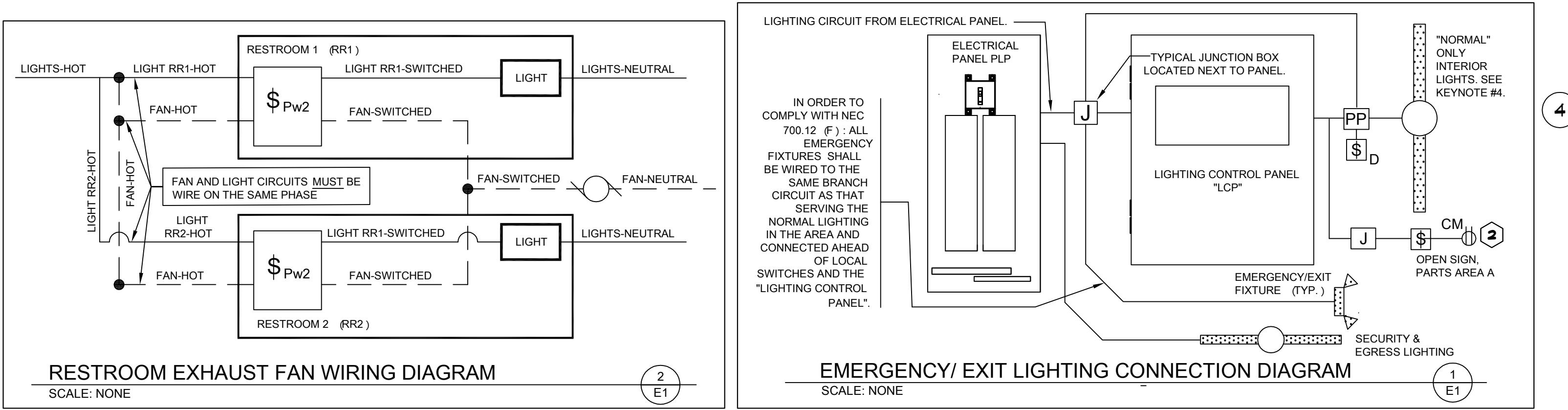
8 WALL MOUNTED FIXTURES TO BE ROUTED TO GRIDPOINT SYSTEM AS NOTED. PROVIDE BACK BOXES. FIXTURES MOUNTED AT 16'-0".

9 SECURITY & EGESS FIXTURE TO BE AS CLOSE AS POSSIBLE BUT NOT OVER THE OVERHEAD DOOR WHEN OPEN.

10 ROUTE SECURITY & EGESS LIGHTING CIRCUIT DIRECTLY TO THE ELECTRICAL PANEL.

11 EC SHALL PROVIDE CEILING SUPPORT AS REQUIRED FOR EXIT AND EMERGENCY INSTALLATION.

12 EC SHALL PROVIDE ADDITIONAL SUPPORT AT STRUCTURAL AS REQUIRED FOR EXIT AND EMERGENCY INSTALLATION.



INTERIOR LIGHTING ZONES

ALL ITEMS LISTED ON THE "LIGHT FIXTURE SCHEDULE" WILL BE SUPPLIED BY THE OWNER (O'REILLY). ITEMS SHALL BE DIRECT ORDERED AND OR RELEASED FROM THE LISTED ELECTRICAL EQUIPMENT DISTRIBUTOR:

GRAYBAR ELECTRIC CO. INC.
11885 LACKLAND ROAD
ST. LOUIS, MO 63146
EMAIL: oreilly@graybar.com
TOLL FREE: (314) 573-2080
NO SUBSTITUTES

AUTOMATIC LIGHTING CONTROL

COMPLIANCE WITH ENERGY CODE IS ACHIEVED BY:

1. ONCE THE EMS HAS BEEN PROGRAMMED, THE INTERIOR AND EXTERIOR LIGHTS WILL TURN ON AND OFF USING THE FOLLOWING LOGIC: SEE EM SHEETS.

ALL INTERIOR LIGHTING WITH PARTS AREA "A" SHALL BE CONSIDERED "SALES" ZONE (ON ONLY WHEN STORE IS OPEN FOR BUSINESS).

INTERIOR WORK LIGHTS WILL TURN ON FIRST MOTION IN THE STORE AND WILL TURN OFF 15 MINUTES AFTER LAST MOTION ONCE THE STORE IS CLOSED.

INTERIOR SALES LIGHTS WILL TURN ON AT STORE OPENING AND TURN OFF 15 MINUTES AFTER STORE CLOSING.

EXTERIOR SITE LIGHTS WILL TURN ON WHEN IT IS DARK ENOUGH OUTSIDE ANYTIME DURING STORE HOURS, AND WILL TURN OFF AT STORE CLOSING.

EXTERIOR SITE LIGHTS WILL TURN ON WHEN IT IS DARK ENOUGH OUTSIDE ANYTIME DURING STORE HOURS OR THERE IS MOTION IN THE STORE. THEY WILL TURN OFF 30 MINUTES AFTER LAST MOTION ONCE THE STORE IS CLOSED.

FOR NEW CONSTRUCTION LOCATIONS ONLY, THERE IS A TEMPORARY PROGRAM TO KEEP SIGN AND SITE LIGHTS ON UNTIL MIDNIGHT RATHER THAN THE TIMES INDICATED ABOVE. O'REILLY WILL DISABLE THIS PROGRAM ONE YEAR AFTER STORE OPENING.

2. RESTROOMS AND OFFICES: ALL LIGHTING IN THESE AREAS SHALL BE CONTROLLED BY OCCUPANT-SENSING DEVICES.

CONDUIT REQUIREMENTS

ALL WIRING SHALL BE IN CONDUIT, EXCEPT THAT MC-CABLE MAY BE SUBSTITUTED ONLY AS FOLLOWS:

- MC-CABLE (MAXIMUM CABLE LENGTH OF 6'-0") MAY BE INSTALLED ONLY FOR BRANCH CIRCUIT WIRING TO LIGHT FIXTURES.
- MC-CABLE (MAXIMUM CABLE LENGTHS SHOWN ON DETAIL 2/E2) MAY BE INSTALLED ONLY ABOVE SLAB AND ONLY AT LOCATIONS INDICATED ON E2 SHEET. SEE SHEET E4 FOR MORE REQUIREMENTS

1/13/20
REVISIONS

THIS DRAWING	FOR COORDINATION	FOR BIDDING	FOR CONTRACTING	NOT FOR CONSTRUCTION
1/13/20	1/13/20	1/13/20	1/13/20	1/13/20

KMA & ASSOCIATES, INC. ARCHITECTS
1121 LAKE COOK ROAD
DEERFIELD, ILLINOIS 60015-5235
(847) 945-6569 FAX (847) 945-6569

O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
ELECTRICAL LIGHTING PLAN
ELECTRICAL EQUIPMENT
ELECTRICAL NOTES
ELECTRICAL

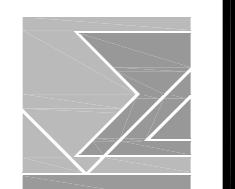
1906
E
1

ELECTRICAL LIGHTING PLAN

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

PROJ. NORTH

REST RM.



O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
 ELECTRICAL DETAILS

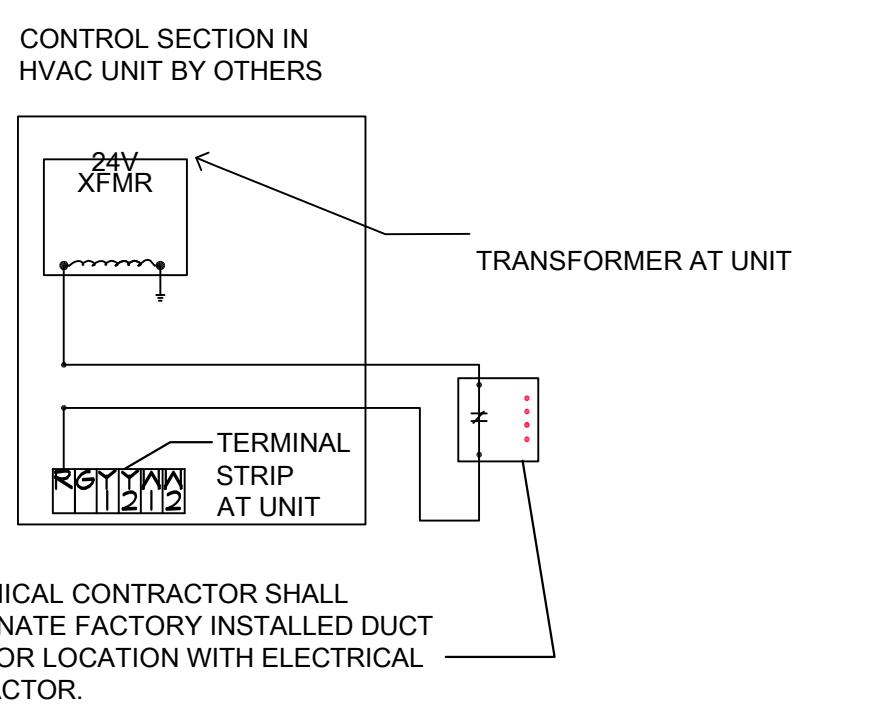
MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE													
DESCRIPTION	VOLTAGE AND PHASE	MCA	HP/WATT	CONNECTION		PANEL	CIRCUIT NO.	CIRCUIT BREAKER SIZE	DISC. SWITCH	GFI RECEPTACLE	CIRCUIT NO.	SMOKE DETECTOR	NOTES
				DIRECT CONNECTION	CONDUIT AND WIRE SIZE								
RTU-1	208V-3Ø	29.0	-	●	3#8, 1#10 (G), 1°C.	MP	2,4,6	40A/3P	60A-NF-3R	YES	PLP-12	YES	1,2,3,5,6,8
RTU-2	208V-3Ø	41.0	-	●	3#8, 1#10 (G), 1°C.	MP	8,10,12	50A/3P	60A-NF-3R	YES	PLP-12	YES	1,2,3,5,6,8
RTU-3	208V-3Ø	29.0	-	●	3#8, 1#10 (G), 1°C.	MP	14,16,18	40A/3P	60A-NF-3R	YES	PLP-12	YES	1,2,3,5,6,8

1. THE E.C. SHALL VERIFY ALL EQUIPMENT SPECIFICATIONS (VOLTAGE, OVERCURRENT PROTECTION, FUSE SIZES, ETC.) WITH M.C. PRIOR TO DISTRIBUTION OF EQUIPMENT AND ROUGH-IN. THE E.C. SHALL ALSO BE RESPONSIBLE FOR PROVIDING ALL CONNECTIONS, DEVICES, SAFETY SWITCHES, ETC. LISTED ON THIS SCHEDULE UNLESS NOTED ON THIS SCHEDULE AS BEING PROVIDED BY OTHERS.
 2. EC SHALL PROVIDE INTEGRAL STARTER AND/OR DISCONNECT SWITCH. E.C. SHALL BRANCH TO FINAL CONNECTION VIA LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT.
 3. ROUTE CONDUIT THRU EQUIPMENT CURB OR PROVIDE SEPARATE ROOT CONDUIT BOOT. COORDINATE WITH M.C.
 4. CONNECT TO LOCAL LIGHTING CIRCUIT FOR FAN SERVICE.
 5. GFCI RECEPTACLE IS PROVIDED WITH RTU UNIT.
 6. ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR SHAFTS SHALL BE SEALED IN ACCORDANCE WITH WALL TYPE AS SHOWN ON SHEET A1.0.
 7. PROVIDE 120V TOGGLE SWITCH FOR DISCONNECTING MEANS.
 8. PROVIDE SMOKE DETECTOR CONTROL CIRCUIT AND WIRING CONTROL, SEE DETAIL.

* NOT ALL NOTES MAY APPLY

GENERAL NOTES

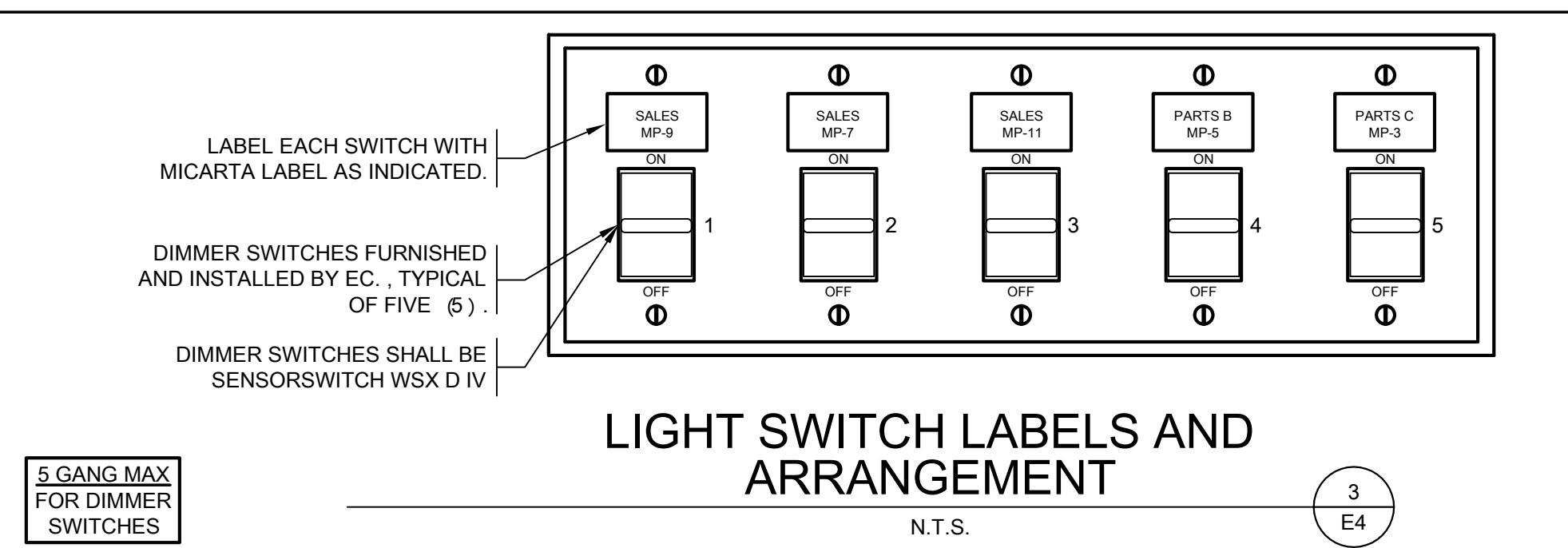
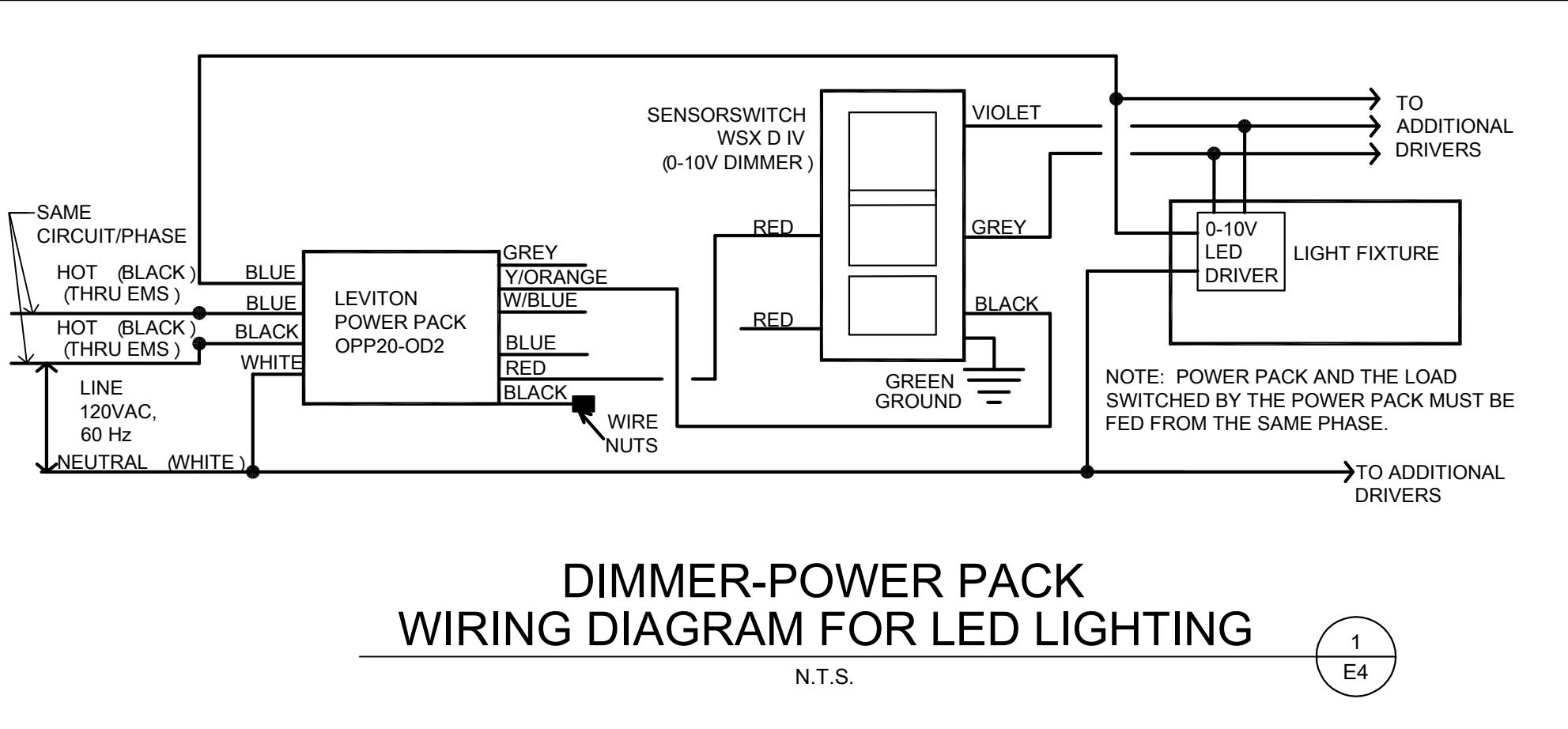
- COORDINATE ALL RECEPTACLE LOCATIONS & HEIGHTS WITH EQUIPMENT MANUFACTURER CUTSHEETS PRIOR TO ROUGH-IN.
- COORDINATE ALL NON-EQUIPMENT RELATED RECEPTACLE LOCATIONS AND HEIGHTS WITH ARCHITECTURAL DRAWINGS.

**HVAC CONTROL WIRING SCHEMATIC**

SCALE: NONE

NOTES:

- A. DUCT DETECTOR SHALL BE FURNISHED BY RTU SUPPLIER AND MOUNTED BY M.C., WIRED BY THE E.C.
- B. ALL EQUIPMENT & WIRING SHALL BE IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.

**LIGHT SWITCH LABELS AND ARRANGEMENT****EQUIPMENT LABELS CHART**

EQUIPMENT	LABELS					
	SERVICE DISCONNECT	OPTIONAL STANDBY SOURCE	STANDBY SOURCE	SERIES RATING	GENERATOR POWER INLET	AVAILABLE FAULT CURRENT
DISCONNECT	X	X				
MP						
PLP						
E					X	
GENERATOR POWER INLET						
CT CABINET						

SERVICE DISCONNECT LABEL

THE SERVICE DISCONNECTING MEANS SHALL BE PROPERLY MARKED "SERVICE DISCONNECT". REFER TO SPEC SECTION 26_00_20 FOR FURTHER IDENTIFICATION PLATE REQUIREMENTS.

OPTIONAL STANDBY SOURCE LABEL

PERMANENT LABEL SHALL BE 2 x 3 IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. LABEL TO BE PLACED ON DISCONNECT DOOR.

CAUTION**TWO SOURCES OF SUPPLY**

STANDBY POWER SOURCE: PORTABLE 6kw GENERATOR LOCATION: OVERHEAD DOOR.

EXAMPLE OF OPTIONAL STANDBY SOURCE LABELING ABOVE.

GENERATOR POWER INLET LABEL

PERMANENT LABEL SHALL BE 2 x 3 IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. LABEL TO BE PLACED 6 INCHES ABOVE GENERATOR RECEPTACLE.

WARNING:
 FOR CONNECTION OF A NONSEPARATELY DERIVED (FLOATING NEUTRAL) SYSTEM ONLY (MAX. 6000 WATT GENERATOR)

EXAMPLE OF LABELING ABOVE.

ELECTRICAL BIDDERS NOTES:

- A. EXISTING CONDITIONS SHALL BE VERIFIED IN FIELD BEFORE SUBMITTING BID. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- B. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL TRADES WORK PRIOR TO BIDDING AND START OF WORK. CONTRACTOR IS RESPONSIBLE TO COORDINATE AS REQUIRED FOR INSTALLATION OF NEW WORK AND IN COMPLIANCE WITH NEC CODES.
- C. MAINTAIN CONTINUITY OF ALL NEW CIRCUITS AS NEEDED TO PROVIDE POWER/LIGHTING TO DEVICES BEING USED AS TEMPORARY.
- D. SEE ADDITIONAL SHEETS FROM CIVIL/ARCHITECTURAL MECHANICAL PLANS AND COORDINATION WITH NEW WORK REQUIRED UNDER BASE BID.
- E. PROVIDE CADDIE ADJUSTABLE FAR SIDE SUPPORTS OR EQUIVALENT ON ALL ELECTRICAL BOXES IN THE WALLS TO ASSURE TIGHT FITTING, SECURE BOXES. SECTION 21.107 (A) (8).
- F. ALL ELECTRICAL WORK SHALL COMPLY WITH ADOPTED AMENDMENTS OF THE LOCAL AUTHORITY AND THE NATIONAL ELECTRICAL CODE.
- G. THE USE OF ALUMINUM SHALL NOT BE ACCEPTED IN ANY FORM.
- H. CONDUIT RUN UNDER THE ROOF SHALL COMPLY WITH NEC 300.14 (E).
- I. GARVIN COVER OUTLETS SHALL HAVE A BONDING JUMPER INSTALLED TO BOX.
- J. MOGUL L.B. SHALL BE USED FOR ALL CONDUCTORS LARGER THAN #8.
- K. NO TANDEM, BUDDY, DUPLEX, PIGGYBACK CIRCUIT BREAKERS.
- L. ALL CONDUIT SYSTEMS AND RACEWAYS AND ETC. SHALL HAVE A GREEN GROUNDING CONDUCTOR PER NEC 250.122.
- M. FLEXIBLE METAL CONDUIT, TYPE FMC, IS PERMITTED ONLY FOR INDOOR USE AND LIMITED TO A MAXIMUM OF 6'0" IN LENGTH.
- N. WIRE TERMINATED ON RECEPTACLES OR SWITCHES SHALL BE UNDER THE SCREW OF DEVICE. BACKSTABBING NOT ALLOWED.
- O. ALL VOLTAGE OVER 24 VOLTS SHALL BE IN CONDUIT WHERE NOT ACCESSIBLE.

1/13/20

REVISIONS

T-HIS DRAWING

FOR COORDINATION

1/1/21

FOR BIDDING

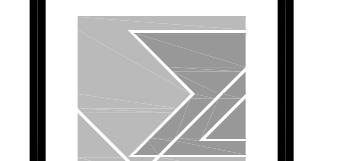
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FOR PERMIT

1/1/21

NOT FOR CONTRACTING

NOT FOR CONSTRUCTION



KMA & ASSOCIATES, INC. ARCHITECTS

SUITE F

60015-5235

FAX(847)945-6869

(847)945-6869

1121 LAKE COOK ROAD

DEERFIELD, ILLINOIS

60015-945-0284

1317 E. SIBLEY BLVD.

DOLTON, IL 60419

FOR: DEPARTMENT PROPERTY GROUP, LLC

O'REILLY AUTO PARTS

DOLTON PLAZA

1317 E. SIBLEY BLVD.

DOLTON, IL 60419

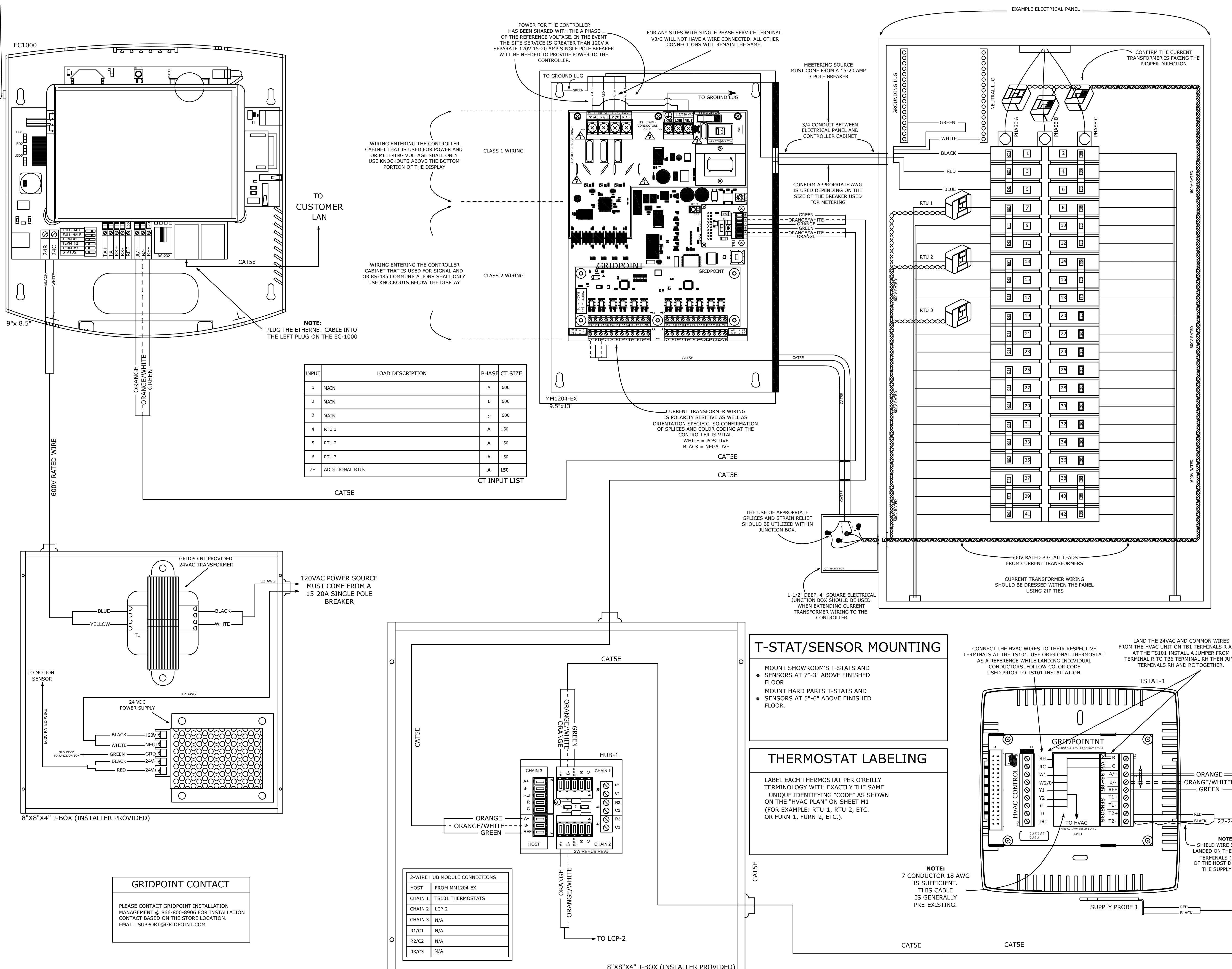
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE

FULL SYSTEM MINUS
LIGHTING/MOTION SENSORS

1906

EM
1.0



T-STAT/SENSOR MOUNTING

- MOUNT SHOWROOM'S T-STATS AND
- SENSORS AT 7'-3" ABOVE FINISHED FLOOR
- MOUNT HARD PARTS T-STATS AND
- SENSORS AT 5'-6" ABOVE FINISHED FLOOR.

THERMOSTAT LABELING

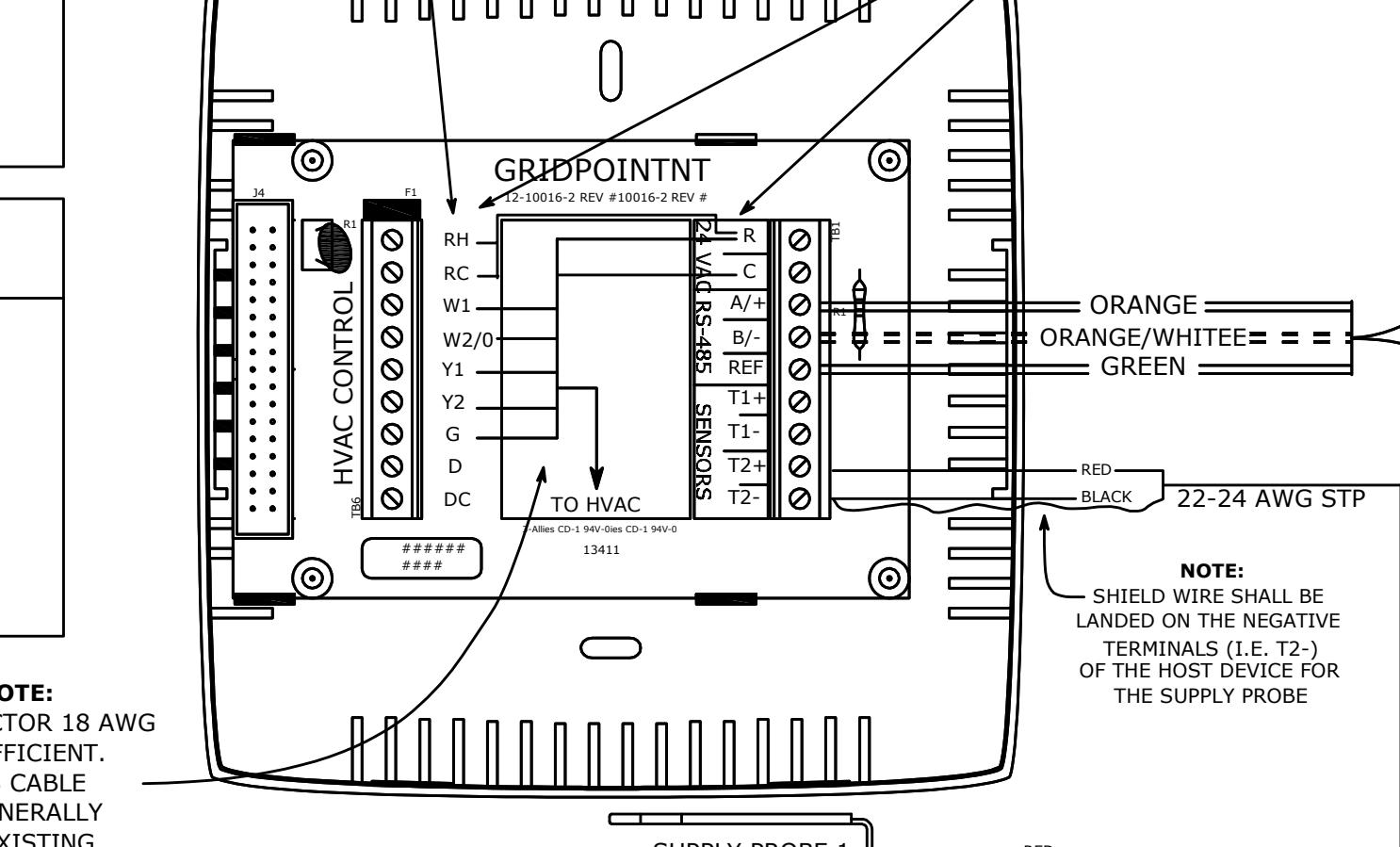
LABEL EACH THERMOSTAT PER O'REILLY TERMINOLOGY WITH EXACTLY THE SAME UNIQUE IDENTIFYING "CODE" AS SHOWN ON THE "HVAC PLAN" ON SHEET M1 (FOR EXAMPLE: RTU-1, RTU-2, ETC. OR FURN-1, FURN-2, ETC.).

NOTE:
7 CONDUCTOR 18 AWG IS SUFFICIENT.
THIS CABLE IS GENERALLY PRE-EXISTING.

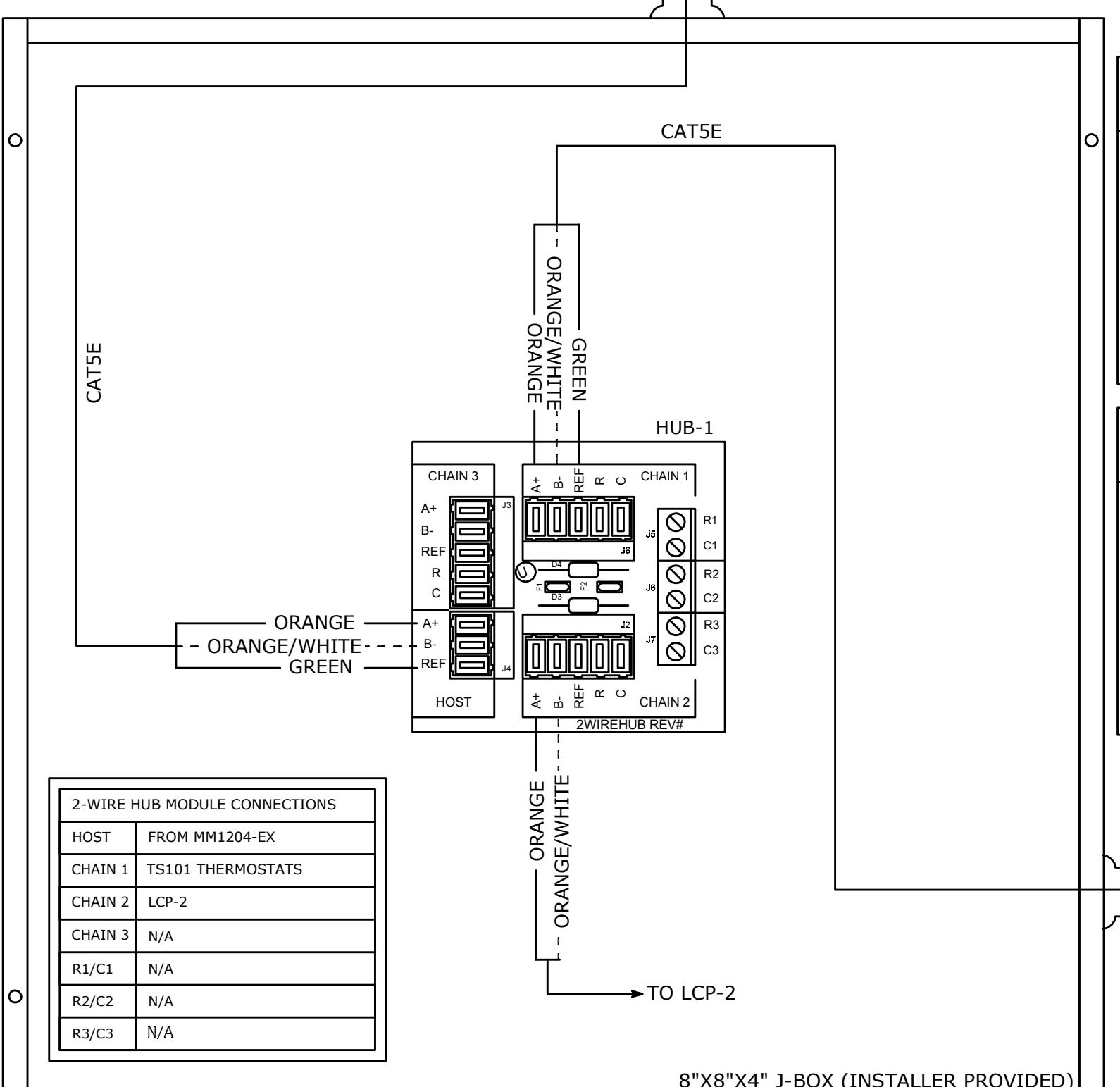
CONNECT THE HVAC WIRES TO THEIR RESPECTIVE TERMINALS AT THE TS101. USE ORIGINAL THERMOSTAT AS A REFERENCE WHEN DRESSING INDIVIDUAL CONDUCTORS. FOLLOW COLOR CODE USED PRIOR TO TS101 INSTALLATION.

LAND THE 24VAC AND COMMON WIRES FROM THE TS101 ON THE TS101 R, S, AND C. AT THE TS101 INSTALL A JUMPER FROM TERMINAL R TO T86 TERMINAL RH THEN JUMP TERMINALS RH AND RC TOGETHER.

TSTAT-1



8"X8"X4" J-BOX (INSTALLER PROVIDED)

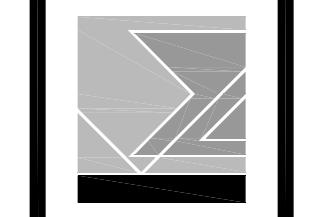


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REVISIONS

TH-1B DRAWING

NOT FOR COORDINATION	1/1/21
FOR BIDDING	1/1/21
FOR PERMIT	1/1/21
NOT FOR CONTRACTING	1/1/21
NOT FOR CONSTRUCTION	1/1/21



O'REILLY AUTO PARTS
DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
LIGHTING CONTROL
AND MOTION SENSOR

1906

EM
1.1

PHOTO DIODE SENSOR

a) **LOCATION/MOUNTING**
A PHOTO DIODE SENSOR SHALL BE MOUNTED IN A WATERTIGHT ENCLOSURE ON THE NORTHERN MOST SIDE OF THE BUILDING.
THE PHOTO DIODE MUST BE MOUNTED IN THE PROPER ORIENTATION. THE WATERTIGHT ENCLOSURE SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS. ANY EXTERIOR WALL PENETRATION SHALL BE SEALED PROPERLY WITH WEATHER-TIGHT CAULK/SILICON.

b) **CONNECTIONS**
THE PHOTO DIODE LEADS MUST BE EXTENDED USING 18-24 AWG SHIELDED TWISTED PAIR CABLE, AND ROUTED BACK TO THE LCA/LCP JS PS+/- TERMINALS. TERMINALS ARE POLARITY SENSITIVE.

LCP-2 (LOAD CONTROL PANEL) – NOT APPLICABLE FOR SITES CONTAINING EXISTING SMART LIGHTING CONTROLS

- a) **LOCATION/MOUNTING**
(1) LCP-2 SHALL BE MOUNTED WITHIN THE ELECTRICAL ROOM
THE LCP-2 SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS.
- b) **POWER REQUIREMENTS**
THE 120 VAC POWER SOURCE FOR THE LCP-2 MUST BE OBTAINED FROM A DEDICATED 15-20 AMP SINGLE POLE BREAKER.
HIGH VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE SIDE/BOTTOM OF THE CABINET ENCLOSURE. WHEN USING SIDE KNOCKOUTS THE INSTALLER SHALL ONLY UTILIZE KNOCKOUTS BELOW THE GROUNDING BAR WITHIN THE LCP-2 CABINET.
LOW VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE TOP OF THE CABINET ENCLOSURE.
- c) **CONNECTIONS**
THE LCP-2 SHALL CONTROL THE FOLLOWING:
 - o EXTERIOR SIGNS AND BUILDING LIGHTING
 - o EXTERIOR PARKING LOT LIGHTS
 - o INTERIOR LIGHTINGTHE LIGHTING ZONES SHALL BE SEPARATED PER THE SOW.
LINE AND LOAD WIRING SHALL BE ROUTED FROM THE ELECTRICAL PANEL CONTAINING THE CIRCUITS TO BE CONTROLLED BACK TO THE LCP-2. SINCE THE LCP-2 DOES NOT REQUIRE NEUTRAL WIRES, LINE AND LOAD WIRING MUST ENTER AND EXIT THE LCP-2 THROUGH THE SAME CONDUIT. LINE SIDE WIRING IS ON THE LEFT SIDE OF THE CONTACTORS AND LOAD SIDE WIRING IS ON THE RIGHT SIDE OF THE CONTACTORS.
DO NOT BREACH CONDUIT WIRING CAPACITY, AND INSTALL ADDITIONAL CONDUIT IF NEEDED TO CONTAIN LINE AND LOAD PAIRS.
- d) **COMMUNICATION**
RS-485 CONNECTIONS SHALL BE OBTAINED USING THE A+/B- TERMINALS USING CAT5E CABLE AND WIRED BACK TO AN OPEN CHAIN OF THE HUB.
- e) **LABELING**
THE LCP-2 SHALL BE LABELED PER POWER SOURCE. THE LABEL SHALL BE APPLIED TO THE FRONT CABINET DOOR.

Terminal	Load Description
K2	
	Signs (Building and Pole)
K4	Exterior Lighting
K5	Spare

CONTACTOR SCHEDULE

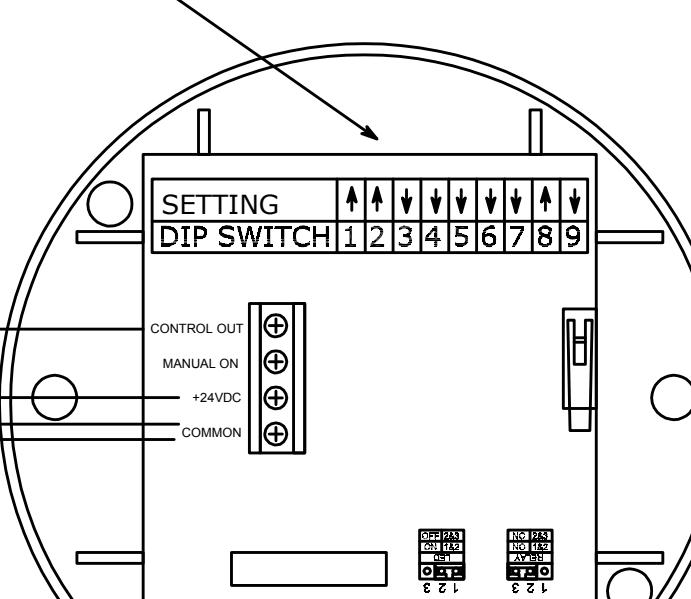
FOR ANY SITES THAT REQUIRE MORE THAN 6 CONTACTORS A SECOND LCP-2 WILL BE REQUIRED.

GRIDPOINT CONTACT
PLEASE CONTACT GRIDPOINT INSTALLATION MANAGEMENT @ 866-800-8906 FOR INSTALLATION CONTACT BASED ON THE STORE LOCATION.
EMAIL: SUPPORT@GRIDPOINT.COM

FIRE ALARM COORDINATION PER NFPA 2015

IF THE LCP IS OFF, THEN ALL THE LIGHTS WILL TURN ON. IF THE LCP IS ON AND THE FIRE ALARM TRIGGERS, THEN GRIDPOINT WILL MONITOR THE FIRE ALARM SIGNAL AND TURN LIGHTS ON. NOTE: THE FIRE ALARM SIGNAL NEEDS TO STAY ACTIVE FOR AT LEAST 1 MINUTE.

NOTE:
DIPSWITCH TABLE HAS BEEN MOVED AND ENLARGED FOR EASE OF VIEWING



A DEDICATED 24 VDC POWER SUPPLY HAS BEEN SUPPLIED TO POWER THE MOTION SENSOR.

MOTION SENSOR
MOUNT SENSOR AT 12' AFF. THE COVERAGE AREA AT THIS HEIGHT IS 26'.

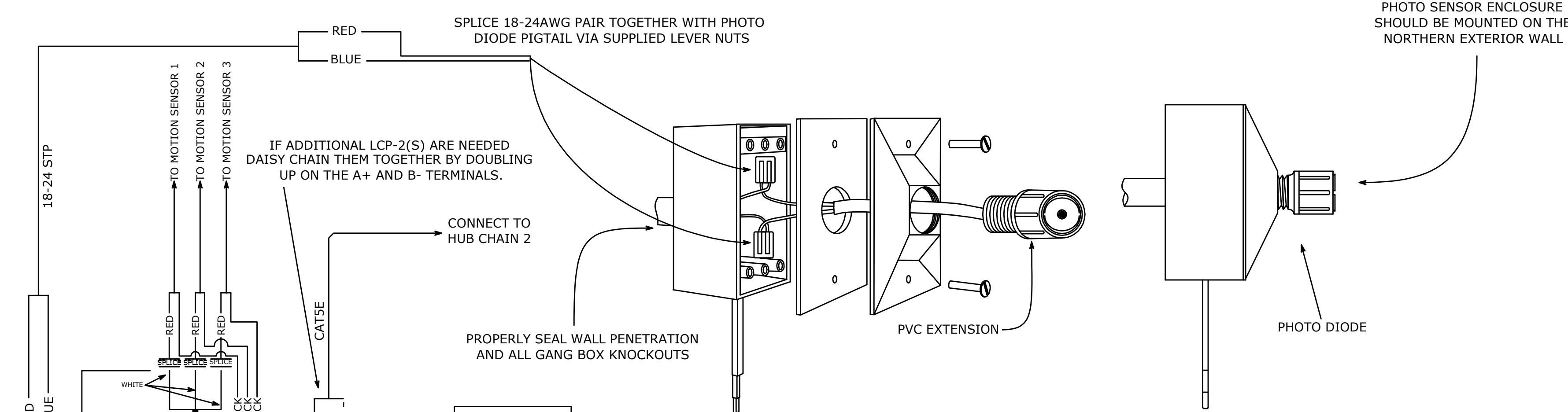
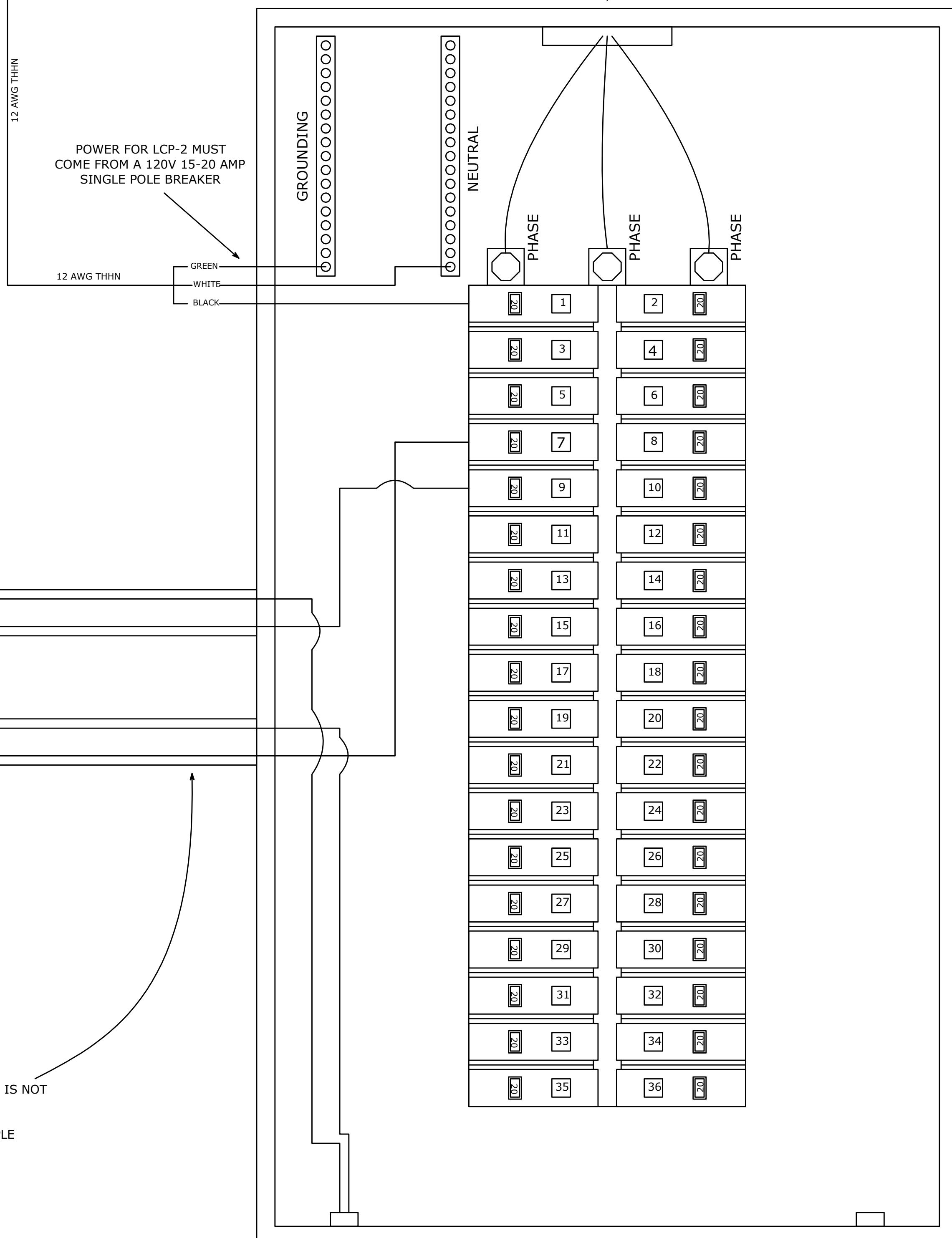


PHOTO SENSOR ENCLOSURE SHOULD BE MOUNTED ON THE NORTHERN EXTERIOR WALL

ELECTRICAL PANEL EXAMPLE LAYOUT



LINE AND LOAD WIRING MUST BE NO GREATER THAN 10 AWG.
ANY CIRCUIT ABOVE 30 AMPS WILL NOT BE RATED FOR LCP CONTROL, AND AN EXTERNAL CONTACTOR RATED FOR 30 AMPS WILL HAVE TO BE INSTALLED OUTSIDE OF THE LCP-2.

LINE AND LOAD WIRING MUST ENTER AND EXIT THROUGH THE SAME CONDUIT FROM THE ELECTRICAL PANEL. NEUTRAL WIRING IS NOT UTILIZED.

USE APPROPRIATE CONDUIT SIZE WHEN WORKING WITH MULTIPLE CIRCUITS FOR LIGHTING.

GridPoint - EMS Installation
1. Scope

- The EMS shall control/monitor the following:
1. Total electrical load (Main Load)
 2. Additional Loads - HVAC
 3. Control all HVAC units
 4. Control all interior and exterior lights and signs
 5. Monitor Rear Entrance Motion

Note: The EMS Controller must be installed and communicating with the GridPoint server before moving forward with any other part of the installation.

2. Controller (See EM1.0)M 1.0)

EC1000 Controller (Mounting on MM1204-EX Door) with Transformer Power

- A. Location/Mounting: (1) EC1000 Controller shall be mounted on the door of the MM1204-EX at an appropriate eye level.
B. Power Requirements: The 24 VAC power source for the controller must be obtained from a provided dedicated 120 to 24 VAC transformer, obtained from 15-20 amp single pole breaker.
C. Communication: LAN communication shall be obtained via the client's network/switch gear. RS-485 connections to peripheral devices shall be obtained using the T14 terminal block using Cat5e cable.
D. Labeling: Labeled per power source and site name on the front cover.

3. Sub-metering (See EM 1.0)

All current transformer wiring shall be routed through an existing trough or raceway where feasible. If no trough/raceway is available, then the wiring shall be run through conduit to the sub-metering panel. Splicing shall take place inside junction boxes/troughs and not inside breaker panels.

MM1204-EX Metering Module

- A. Location/Mounting: (1) MM1204-EX shall be mounted within the electrical area at an appropriate eye level using correct wall anchors.
B. Power Requirements: 120V Power (15-30A single pole breaker) and site metering voltage (15-30A 3-pole breaker) must be pulled to the module. If metering voltage is 120/208V, power and neutral may be jumped.
C. Current Transformer Connections: Connect the supplied current transformers to the TB1/TB2 terminals. These terminals are polarity sensitive. Use wire meeting the 6 twists per foot ratio for extension wire (i.e. Cat5e).
D. Communication: RS-485 connections shall be obtained using the TB1 (orange punch-down) terminals using Cat5e cable.
E. Labeling: Labeled per metering and power source on the front door.

Current Transformer Schedule

CT INPUT / CT SIZE / PHASE / LOAD DESCRIPTION
1 / 600A / A / Main Load
2 / 600A / B / Main Load
3 / 600A / C / Main Load
4 / 50A / A / AC 1
5 / 50A / A / AC 2
6 / 50A / A / AC 3
7-12 / 50A / A / Additional RTUs as needed

4. HUB's/Peripherals/Power Supplies

- A. Location/Mounting: (2) Installer provided NEMA-1 enclosures shall be installed to house the peripherals and power supplies provided. The NEMA-1 enclosures shall be used to separate the HV/LV wires to the transformers/power supplies and peripherals. 300-600 volt rated wire is required when extending LV output to the EMS.
B. Connections: Cat5e cable will be used to connect each set of peripherals.
C. Communication: RS-485 connections to the EMS controller shall be run to the HUB.
D. Labeling: Each wire cable must be identified / labeled per peripherals connected.

5. HVAC Controls (See EM 1.0)

The HVAC units shall be added to the GridPoint system one at a time, confirming proper operation before moving on to the next unit.

TS101 Wired (Thermostat in the Zone – TSTAT and Supply Combination) and RTU Power

- A. Location/Mounting: (3) TS101 thermostats shall be placed in an appropriate position as to monitor the associated zone.
B. Power/Communications: The 24 VAC power source for the TS101 thermostats shall be obtained from the existing 24 VAC transformer within the HVAC unit via HVAC control cabling. RS-485 connections for the TS101 thermostats shall be made using the daisy chain method back to the HUB using cat5e cable.
C. Connections: The installer shall re-use existing thermostat cable and store the old thermostats in a box to leave with the manager on site.
a. (3) Supply duct sensors shall be located as close to the plenum/roof penetration of the supply duct as practical and routed back to their respective thermostat T2+/- terminal using 18-24 AWG STP cable.
D. Labeling: The thermostats shall be labeled to accurately describe the zone controlled.
Note: For each additional RTU the following parts are needed: 1 TS101, 1 temperature probe, 1 50A CT.

6. Lighting Controls and Motion Sensors (See EM 1.1) Photo Diode Sensor with Water-Tight Enclosure Kit 002

- A. Location/Mounting: A photo diode sensor shall be mounted in the included watertight enclosure kit on the northern most side of the building. Follow all included directions for the kit installation. Any exterior wall penetration shall be sealed properly with weather-tight caulk/silicon.
B. Connections: The photo diode leads must be extended using 18-24 AWG shielded twisted pair cable and routed back to the LCP 2.0 IOM6160 I1+/- terminals. Terminals are polarity sensitive.

LCP 2.0(Load Control Panel)

- A. Location/Mounting: (1) LCP 2.0 shall be mounted near the MM1204-EX.
B. Power Requirements: The 120 VAC power source for the LCP 2.0 must be obtained from a dedicated 15-20 amp single pole breaker. High voltage knockouts for the LCP 2.0 are located on the side/bottom of the cabinet enclosure and must remain below the grounding bar within the LCP 2.0. Low voltage knockouts for the LCP 2.0 are located on the top of the cabinet enclosure.
C. Connections: The LCP 2.0 shall control the following: All interior and exterior lights except for the manager lights, which is independently controlled via switch. (the below load descriptions may change per site)

Lighting Schedule:

- Contactor 1 - Work/Stock Room Lights
- Contactor 2 - Sales Lights
- Contactor 3 - Signs (Building and Pole)
- Contactor 4 - Exterior Lighting
- Contactor 5 - Spare
- Contactor 6 - Spare

a. Line and Load wiring shall be routed from the electrical panel containing the circuits to be controlled back to the LCP 2.0. Since the LCP 2.0 does not require neutral wires, line and load wiring must enter and exit the LCP through the same conduit. Line side wiring = left side and load side wiring = right side of the contactors. Do not breach conduit wiring capacity and install additional conduit if needed to contain line and load pairs.

D. Communication: RS-485 connections shall be obtained using the A+/B- terminals on the top din rail of the LCP 2.0 using Cat5e cable.

E. Labeling: The LCP 2.0 shall be labeled on the front cabinet per power source. The LCP 2.0 panel schedule inside the door shall be completed showing contactor use with a description of the zone controlled.

Motion Sensors

- A. Mount motion sensor by rear building entrance as shown on the Power Plan 2/E-1 of the construction plans. Mount sensor directly on ceiling facing down. Avoid placement near moving items (i.e. hanging banners). Placement should provide best coverage of employees entering the store and working late.
a. Power the motion sensor from the dedicated 24VDC power supply in the power box via homerun using plenum rated wire. See EM 1.1.
b. Wire the motion sensor alarm signals using 18-24 AWG Shielded Twisted Pair cable back to the IOM6160 module as shown in EM 1.0.
c. Label the motion sensor wire rear entrance.

7. Inventory

- EC1000 x 1
- MM-1204EX x 1
- 600A Current Transformer x 3
- *50A Current Transformer x 3
- LCP 2.0 x 1
- Water Resistant Photo-Cell 002 x 1
- Motion Sensor x 2
- *TS101 x 3
- *Temperature Probe x 3
- HVAC Supply temperature (model used is the Aprilaire 8052 probe temperature sensor) x 3
- 24VAC Transformer x 1
- 24VDC Power Supply x 1
- 1.2 K Ohm Resistor x 2
- HUB x 1

Note: *For each additional RTU the following parts are needed: 1 TS101, 1 temperature probe, 1 50A CT.

Installation/Commissioning Prerequisites

I. Class 1 Wiring

It is the installer's responsibility to make sure all class 1 wiring is properly installed using EMT/Rigid conduit. Flexible conduit is only acceptable within electrical rooms and/or above customer visibility per GridPoint standards.

II. Class 2 Wiring

It is the installer's responsibility to make sure all class 2 wiring is properly installed. Any class 2 wiring that pertains to the GridPoint system must be contained within EMT/Rigid conduit and out of customer view. Class 2 wiring can run freely while secured to the building structure above ceiling grids. For electrical rooms with open ceilings, class 2 wiring must be contained within EMT/Rigid conduit within 10 feet from the finished floor. Class 2 wiring above 10 feet can be secured to the building structure using appropriate anchors. The patch cable from the LAN jack to the EMC is the only exception.

LOCAL LIGHTING CONTROL

MANAGER OFFICE, RESTROOMS, SECURITY, AND EXIT/EMERGENCY.

1/13/20

REVISIONS

THIS DRAWING	FOR CONSTRUCTION	1/1/21
NOT FOR BIDDING	FOR CONTRACTING	1/1/21
NOT	NOT	

KMA & ASSOCIATES, INC. ARCHITECTS	SUITE F
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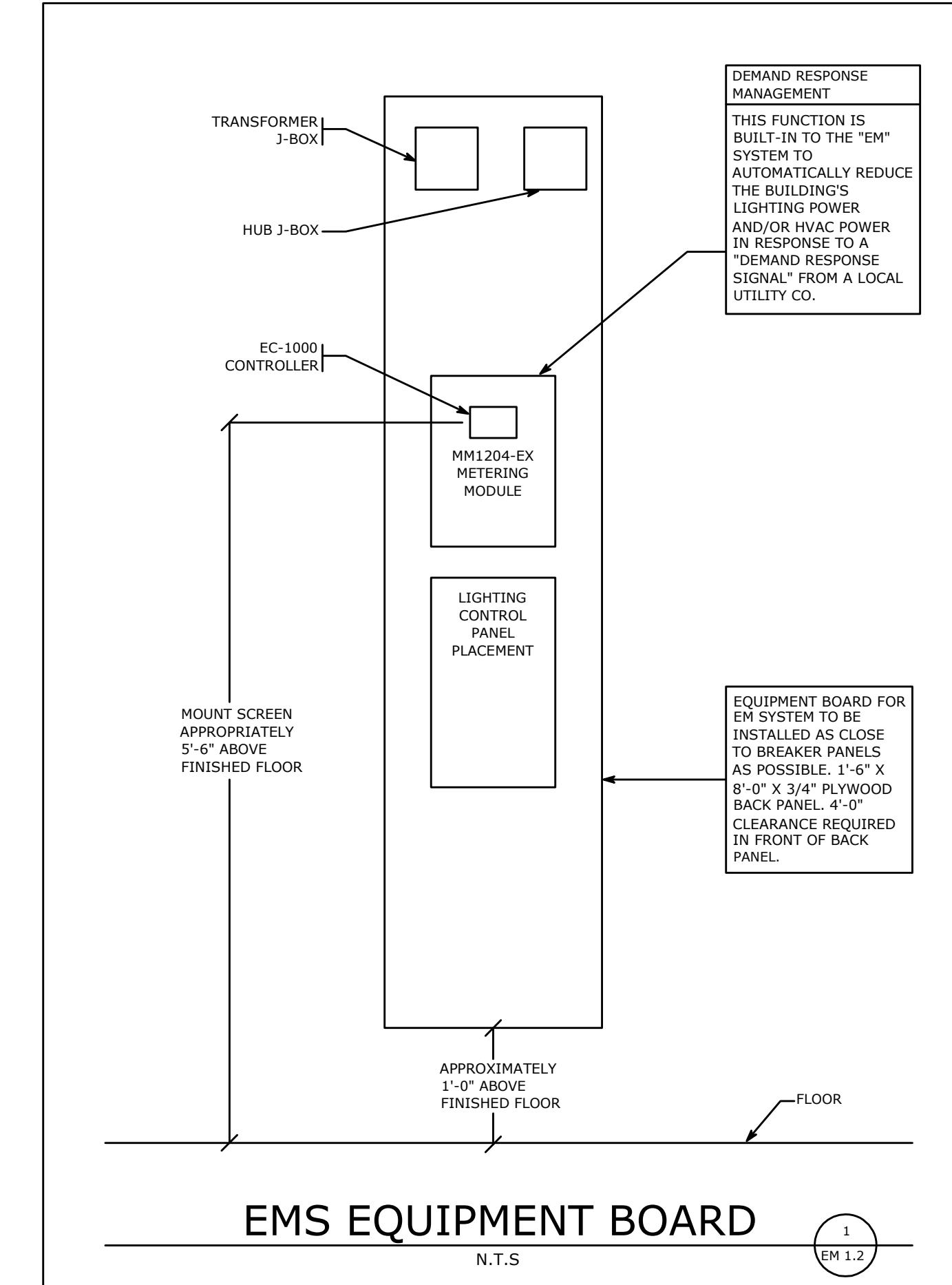


O'REILLY AUTO PARTS

DOLTON PLAZA
1317 E. SIBLEY BLVD., DOLTON, IL 60419
FOR: DEPARTMENT PROPERTY GROUP, LLC

SHEET TITLE
O'REILLY PREFERRED
SCOPE OF WORK

1906



THERMOSTAT LABELING

LABEL EACH THERMOSTAT PER O'REILLY TERMINOLOGY WITH EXACTLY THE SAME UNIQUE IDENTIFYING "CODE" AS SHOWN ON THE "HVAC PLAN" ON SHEET M1 (FOR EXAMPLE: RTU-1, RTU-2, ETC. OR FURN-1, FURN-2, ETC.).

T-STAT/SENSOR MOUNTING

- MOUNT SHOWROOM'S T-STATS AND
- SENSORS AT 7'-3" ABOVE FINISHED FLOOR
- MOUNT HARD PARTS T-STATS AND
- SENSORS AT 5"-6" ABOVE FINISHED FLOOR.

GRIDPOINT CONTACT

PLEASE CONTACT GRIDPOINT INSTALLATION MANAGEMENT @ 866-800-8906 FOR INSTALLATION CONTACT BASED ON THE STORE LOCATION. EMAIL: SUPPORT@GRIDPOINT.COM