Paul Reed Construction & Supply, Inc.

2970 N 10th St, Gering, NE 69341
(308) 635-2213 FAX (308) 635-0182

Web: www.paulreedconstruction.com
E-mail: prc@paulreedconstruction.com

Inland Truck Parts Company
New Truck Service Center, North Platte NE

Addendum #1

Location: Inland Truck Service Center
3820 South Newberry Access,
North Platte, NE

Issue Date; April 10, 2012

Description;

1. The hydronic in-floor heating system has been eliminated in the North Platte facility. This will also eliminate the Boiler Room that is immediately adjacent to the Fluid Storage Room.
2. All Bidders are required to submit a Subcontractor & Supplier List with their bid.
3. All Bidders will submit bids on their own company letterhead, with a detailed scope of work. A Bid Form will not be issued.

SEE ATTACHED "REVISED PLANS & SPECIFICATIONS"

SECTION 15891 – DUCTWORK, FLUES & ACCESSORIES

PART 1 - GENERAL

PART 2 - PRODUCTS

PART 3 - EXECUTION

SECTION 15891 - DUCTWORK & ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specifications, apply to this section.

B. The requirements as set forth in Section 15000, "BASIC MECHANICAL REQUIREMENTS" shall apply to this part of the work.

1.2 DESCRIPTION OF WORK:

A. The extent of work by this section includes ductwork, liner, accessories, and flues.

1.3 QUALITY ASSURANCE:

A. Codes and Standards:

1. SMACNA Standards: Comply with SMACNA's "HVAC Duct Construction Standards", latest edition, for fabrication and installation of metal ductwork, liner, and accessories.

2. NFPA Compliance: Comply with NFPA 90A "Standard for the Installation of Air Conditioning and Ventilating Systems" and NFPA 90B "Standard for the Installation of Warm Air Heating and Air Conditioning Systems".

3. UL Compliance: Construct, test, and label fire dampers in accordance with UL Standard 555 "Fire Dampers and Ceiling Dampers".

4. ARI Compliance: Test and rate diffusers, registers, and grilles in accordance with ARI 650 "Standard for Air Outlets and Inlets".

5. ASHRAE Compliance: Test and rate diffusers, registers, and grilles in accordance with ASHRAE 70 "Method of Testing for Rating the Air Flow Performance of Outlets and Inlets".

6. Diffusers, registers, and grilles shall be tested and rated in accordance with ADC 1062 "Certification, Rating and Test Manual".

1.4 SHOP DRAWINGS:

A. Submit the following information in accordance with, and in addition to other requirements of Section 15000, "BASIC MECHANICAL REQUIREMENTS".

1. Performance data including noise criteria ratings, throw, pressure drop, etc. for the rated air flow.

2. Submit scaled layout drawings of metal ductwork and fittings including, but not limited to, duct sizes, locations, elevations, slopes of horizontal runs, wall and floor penetrations, and types of connections. Scaled drawings shall be drawn at not less than 1/4" = 1'-0". Show

interface and spatial relationship between ductwork and proximate equipment. Show modifications of indicated requirements, made to conform to local shop practice, and how these modifications ensure that free area, materials, and rigidity are not reduced.

3. Record Drawings: At project closeout, submit record drawings of installed metal ductwork and accessories, in accordance with requirements of Section 15000, "BASIC MECHANICAL REQUIREMENTS".

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. Subject to compliance with requirements, provide one of the following manufacturers:

1. Factory-fabricated duct and fittings:

a) Semco Mfg., Inc.
b) United Sheet Metal Div. United McGill Corp.
c) Wesco, Inc.

2. Flexible duct:

a) Wiremold
b) Thermoflex
c) Clevaflex

3. Canvas connectors:

a) Ventglass by Ventfabrics
b) Elcen

4. Manual, backdraft, fire, and automatic dampers:

a) Ruskin Mfg. Co.
b) Safe-Aire Inc.
c) Air balance Inc.

5. Louvers:

a) Ruskin Mfg. Co.
b) American Warming & Ventilating Inc.
c) Construction Specialties, Inc.
d) Louvers & Dampers, Inc.
e) Safe-Aire Inc.
f) Carnes

6. Diffusers, registers and grilles:

a) Titus
b) E.H. Price
c) Amemostat

7. Flues:

   a) Metalbestos
   b) Metal-Fab

2.2 DUCTWORK MATERIALS:

A. Exposed Ductwork Materials: Where ductwork is indicated to be exposed to view in occupied spaces, provide materials which are free from visual imperfections including pitting, seam marks, roller marks, stains and discolorations, and other imperfections.

B. Sheet Metal: Except as otherwise indicated, fabricate ductwork from galvanized sheet steel complying with ASTM A 527, lock forming quality, with G 90 zinc coating in accordance with ASTM A 525; and mill phosphatized for exposed locations.

2.3 DUCTWORK:

A. Except as otherwise indicated on the drawings, ductwork, metal gauges, reinforcing, etc. shall be constructed in accordance with SMACNA "HVAC Duct Construction Standards," latest edition for a 2 inch water gauge static pressure.

B. All fittings shall be constructed in accordance with SMACNA "HVAC Duct Construction Standards," latest edition.

1. Rectangular Duct:

   a) Elbows, unless indicated otherwise shall be constructed with centerline radius of not less than 1.5 duct width or square elbow with double wall streamline vanes.

   b) Return air acoustical elbows shall be a square elbow with no turning vanes.

   c) Slopes for transitions or other changes in dimensions shall be minimum 1 to 3.

2. Round and Oval Spiral Seam Duct:

   a) Provide radius type fittings fabricated of multiple sections with maximum 15 degree change of direction per section. Unless specifically detailed otherwise, use 45 degree laterals for branch takeoff connections. Where 90 degree branches are indicated provide conical type tees.

   b) As an option, provide factory-fabricated duct and fittings, in lieu of shop-fabricated duct and fittings. All round ductwork shown exposed shall be factory-fabricated.

      1) Elbows: One piece construction for 90 degrees and 45 degree elbow 14" and smaller. Provide multiple gore construction for larger diameters with standing seam circumferential joint.

      2) Divided Flow Fittings: 90 degree tees, constructed with saddle tap spot welded and bonded to duct fitting body.

C. All ductwork shall be sealed with a heavy mastic type sealant in accordance with "HVAC Duct Construction Standards," latest edition, seal class A.

D. Duct sizes shown on the drawings are sheet metal sizes; allowance for duct liner has been made where applicable.

E. Duct sizes shown on the drawings for exposed double wall round ducts are the outer casing size.

2.4 DUCT LINER:

A. No duct lining is allowed on this project.

2.5 MISCELLANEOUS DUCTWORK MATERIALS:

A. Duct Sealant: Non-hardening, non-migrating mastic sealant, as recommended for sealing joints and seams in ductwork. Oil base caulking and glazing compounds shall not be acceptable.

B. Ductwork Support Materials: Except as otherwise indicated, provide hot-dipped galvanized steel fasteners, anchors, rods, straps, trim, and angles for support of ductwork.

C. Flexible Duct: Pre-insulated CPE liner bonded to a coated spring steel helix. Joints to be sealed per Manufacturer's UL approved recommendations. Insulation shall have a "C" factor of .23 at 60 degrees F with an outer fiberglass reinforced metalicized film moisture barrier. Maximum 6" WC positive pressure, 25 flame spread, 50 smoke rating per NFPA, UL 181 Class I duct. Technaflex series WK.

D. Canvas connectors: UL labeled flexible duct connections, constructed of 30 oz./square yard neoprene-coated flame proof fiberglass fabric crimped onto duct flanges for attachment to duct and equipment.

E. Duct access doors: Constructed of same or thicker gauge sheet metal as duct in which it is installed. All access doors shall be constructed in accordance with SMACNA, "HVAC Duct Construction Standards," latest edition with two layers of sheet metal and a rigid glass fiber filler between. All doors shall be gasket air tight for the appropriate pressure class.

F. Manual Dampers:

1. Fabricated of same material as duct, two metal gauges heavier than duct and hammered 1" all around, mounted on 3/8" square rod with saw slot position indicator. Pivot bearing, locking position regulator, Young Regulator Co., series 443. Regulator shall be positioned with sheet metal bracket beyond duct covering. Where positioning regulator is not accessible, provide coupling and extension rod with regulator for ceiling or wall installation, as required. Young series 301 and 315 for ceiling or walls.

2. Manual dampers for rectangular ducts greater than 6 inches high shall be Ruskin, type CD-35. Opposed blade, polyurethane foam seals on all blade edges. Operating shaft shall extend beyond frame and duct to a locking quadrant, adjustable lever.

G. Air Extractor: E.H. Price, Model AE-1 or AE-2 with No. 2 or 4 operator as applicable. Synchronized curved blades, with manual externally controlled adjusting rod complete with set screw lock or operator arm linkage with Young Regulator Series 443, as applicable to the installation.

H. Splitter damper: Fabricated of same material as duct, two metal gauges heavier than duct and hammered 1" all around, mounted with hinges, provide Young Regulator Co., Series No. S-900 air-split regulator mounted on duct. Where positioning regulator is not accessible, provide Young

Series No. 912 or No. 914 air split regulator with Series 301 or 315 concealed regulator, as applicable.

I. Hangers for exposed round ductwork: As detailed on the drawings.

2.6 DUCTWORK FABRICATION:

A. Shop fabricate ductwork in standard lengths, unless otherwise indicated or required to complete runs.

B. Fabricate duct fittings to match adjoining ducts, and to comply with duct requirements as applicable to fittings.

C. Fabricate ductwork with duct liner in each section of duct where indicated. Laminate liner to internal surfaces of duct in accordance with instructions by manufacturers of lining and adhesive, and fasten with mechanical fasteners.

2.7 FIRE DAMPERS:

A. Fire Dampers: Provide fire dampers of the size required for the duct sizes indicated on the drawings. Fire dampers shall be of the curtain type, suitable for vertical or horizontal installation as required for the location shown. Dampers shall be UL labeled.

B. Fire dampers shall be Ruskin IBD2, style C, CO, or CR enclosure as applicable, with field fabricated sleeve.

C. Where fire dampers are located directly behind surface mounted register, grille, etc. damper shall be Ruskin IBD20, style G.

2.8 AUTOMATIC DAMPERS:

A. Automatic Dampers: Provide AMCA certified low leakage control damper with air foil blades operating opposed blade configuration. Blades shall be extruded aluminum with extruded vinyl blade seal. Conceal linkage in frame. Bearings shall be non-corrosive two piece molded synthetic. Axles shall be square or hexagonal in cross section. Provide blade edge seals. Operators shall be provided by the Temperature Control Section 15973. Dampers shall be equal to a Ruskin CD 50.

2.9 LOUVERS:

A. Provide manufacturer's standard louvers of size, shape capacity, and type indicated on the drawings; constructed of materials and components as indicated, and as required for a complete installation.

B. Louvers shall exceed the minimum free area, and shall have a pressure drop less than the maximum indicated on the drawings.

C. Compatibility: Provide louvers with frame and sill styles that are compatible with adjacent construction, and that are specifically manufactured to fit into construction openings with accurate fit and adequate support, for weatherproof installation. Refer to general construction drawings and specifications for types of material which will contain each type of louver.

D. Materials: Construct of aluminum extrusions, ASTM B 221, Alloy 6063-T52. Weld units or use stainless steel fasteners.

E. Louver Screens: On inside face of exterior louvers, provide 1/2" square mesh anodized aluminum wire bird screens mounted in removable extruded aluminum frames, unless indicated otherwise.

F. Finish shall be as indicated on the drawings or as required by the Architect after award of contract.

2.10 DIFFUSERS, REGISTERS, & GRILLES:

A. Provide manufacturer's standard diffusers, registers, and grilles of size, shape, capacity and type indicated on the drawings; constructed of materials and components as indicated, and required for a complete installation.

B. Diffusers, register, and grilles shall have as a minimum, temperature and velocity traverses, throw and drop, and noise criteria ratings for each size device as listed in manufacturer's current data.

2.11 FLUES:

A. Flues for gas fired condensing furnaces and water heaters shall be as recommended by the furnace manufacturer. Flues shall be schedule 40, CPVC pipe.

B. Flues for gas fired equipment other than condensing furnaces shall be double wall gas vent, UL listed for type B service consisting of an aluminized steel inner liner and aluminized coated steel outer jacket

C. Provide manufacturer's standard accessory items including barometric damper, bird proof top, storm collar, roof thimble, etc. as required for a complete installation. Roof thimbles through the metal building roof shall be suitable for use with the metal building roof provided. Metal roof manufacturer shall provide flashing for the flue as required. All stack supports, roof penetrations, terminations, appliance adapters, drain fittings and expansion joints required to install the stack shall be included.

D. The stack shall terminate three feet above the roof or as required by local codes.

PART 3 - EXECUTION

3.1 INSTALLATION OF METAL DUCTWORK:

A. General: Assemble and install ductwork in accordance with recognized industry practices which will achieve air-tight systems (maximum 5% leakage), with no objectionable noise, and capable of performing indicated service. Install each run with minimum number of joints. Align ductwork accurately with internal surfaces smooth. Support ducts rigidly with suitable straps, braces, hangers and anchors in accordance with SMACNA "HVAC Duct Construction Standards" latest edition. Duct hangers shall be of the type which will hold ducts true-to-shape and to prevent buckling. Support vertical ducts at every floor.

B. Auxiliary steel: Provide auxiliary steel as required to adequately support ductwork.

C. Routing: Locate ductwork runs, except as otherwise indicated, vertically and horizontally and avoid diagonal runs wherever possible. Locate runs as indicated by diagrams, details and notations or, if not otherwise indicated, run ductwork in shortest route which does not obstruct usable space or block access for servicing building and its equipment. Hold ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building. Wherever possible in finished and occupied spaces, conceal ductwork from view, by locating in mechanical shafts, hollow wall construction or above suspended ceilings. Do not encase horizontal runs in solid partitions, except as specifically shown. Coordinate layout with suspended ceiling and lighting layouts and similar finished work.

D. Electrical Equipment Spaces: Do not route ductwork through transformer vaults and other electrical equipment spaces and enclosures, unless indicated otherwise.

E. Penetrations:

1. Where ducts pass through interior partitions or exterior walls, and are exposed to view, conceal space between opening and duct or duct insulation with sheet metal flanges of same gage as duct. Overlap opening on 4 sides by at least 1-1/2". Fasten to duct and wall.

2. Where ducts pass through fire-rated floors, walls, or partitions, provide firestopping between duct and wall.

F. Coordination: Coordinate duct installations with installation of accessories, dampers, coil frames, equipment, controls, and other associated work of the ductwork system.

G. Installation: Install metal ductwork in accordance with SMACNA "HVAC Duct Construction Standards", latest edition.

H. Access doors: Provide access doors at all fire dampers, control dampers, backdraft dampers, and other equipment mounted in the ductwork for access to maintain the equipment.

3.2 INSTALLATION OF FLEXIBLE DUCTS:

A. Maximum Length for any flexible duct shall not exceed 6'-0" extended length.

B. Installation: Install in accordance with SMACNA's, "HVAC Duct Construction Standards", latest edition. The flexible duct core shall be secured by the use of a metal clamp or non-metallic drawband, suitable for the pressures encountered. Duct tape shall not be acceptable. Secure the insulation over the drawband with an additional drawband. Round metal duct 12" and larger shall incorporate a bead on end of sheet metal to prevent flexible duct from sliding off. Sheet metal collars for attachment of flexible duct shall be a minimum of 2" in length. Flexible duct shall not be crimped and turns shall be made with a minimum of 2 diameter radius. Provide minimum 2" collar for diffuser and duct connection.

3.3 DIFFUSERS, REGISTERS, AND GRILLES:

A. Locate diffusers, registers, and grilles, as indicated on Architectural reflected ceiling plans.

3.4 SPARE PARTS:

A. Furnish to the owner, with receipt, 3 operating keys for each type of diffuser or register requiring them.

B. Furnish to the owner, with receipt, 1 extra fusible link for every 5 installed, of each temperature-range.

3.5 EQUIPMENT CONNECTIONS:

A. Connect metal ductwork to equipment as indicated; provide flexible connection for each ductwork connection to equipment mounted on vibration isolators, and/or equipment containing rotating machinery. Provide access doors as required.

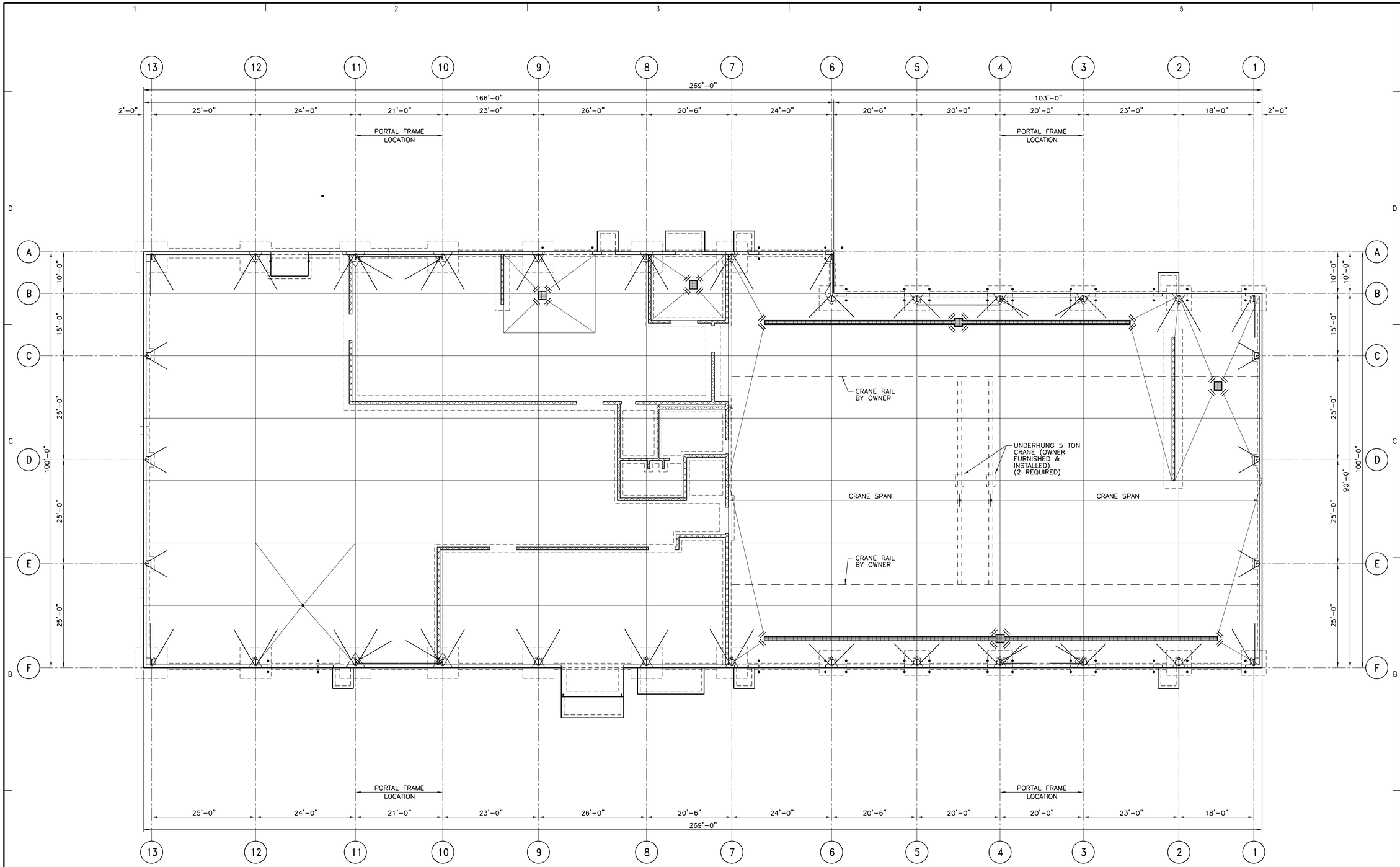
3.6 START-UP:

A. Clean ductwork internally, unit by unit as it is installed, of dust and debris. Clean external surfaces of foreign substances which might cause corrosive deterioration of metal or where duct is to be painted.

B. Temporary Closure: At ends of ducts which are not connected to equipment or air distribution devices at time of ductwork installation, provide temporary closure of polyethylene film or other covering which will prevent entrance of dust and debris until connections are to be completed.

C. Refer to Section "15990, "TESTING, ADJUSTING, AND BALANCING" for air distribution balancing. Seal any leaks in ductwork that become apparent in balancing process.

END OF SECTION -- 15891



A OVERALL FOUNDATION PLAN

SCALE: 3/32"=1'-0"

Tran Systems

2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MISSOURI 64108
PHONE: 816-329-8600
FAX: 816-329-8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:			
MARK	DATE	DESCRIPTION	
	03/28/2012	PERMIT SUBMITTAL	

PROJ NO:	P101120013
SCALE:	AS SHOWN
DATE:	4/10/2012
DESIGNED BY:	DJS
DRAWN BY:	MDG
CHECKED BY:	DJS

SHEET TITLE:

OVERALL FOUNDATION PLAN

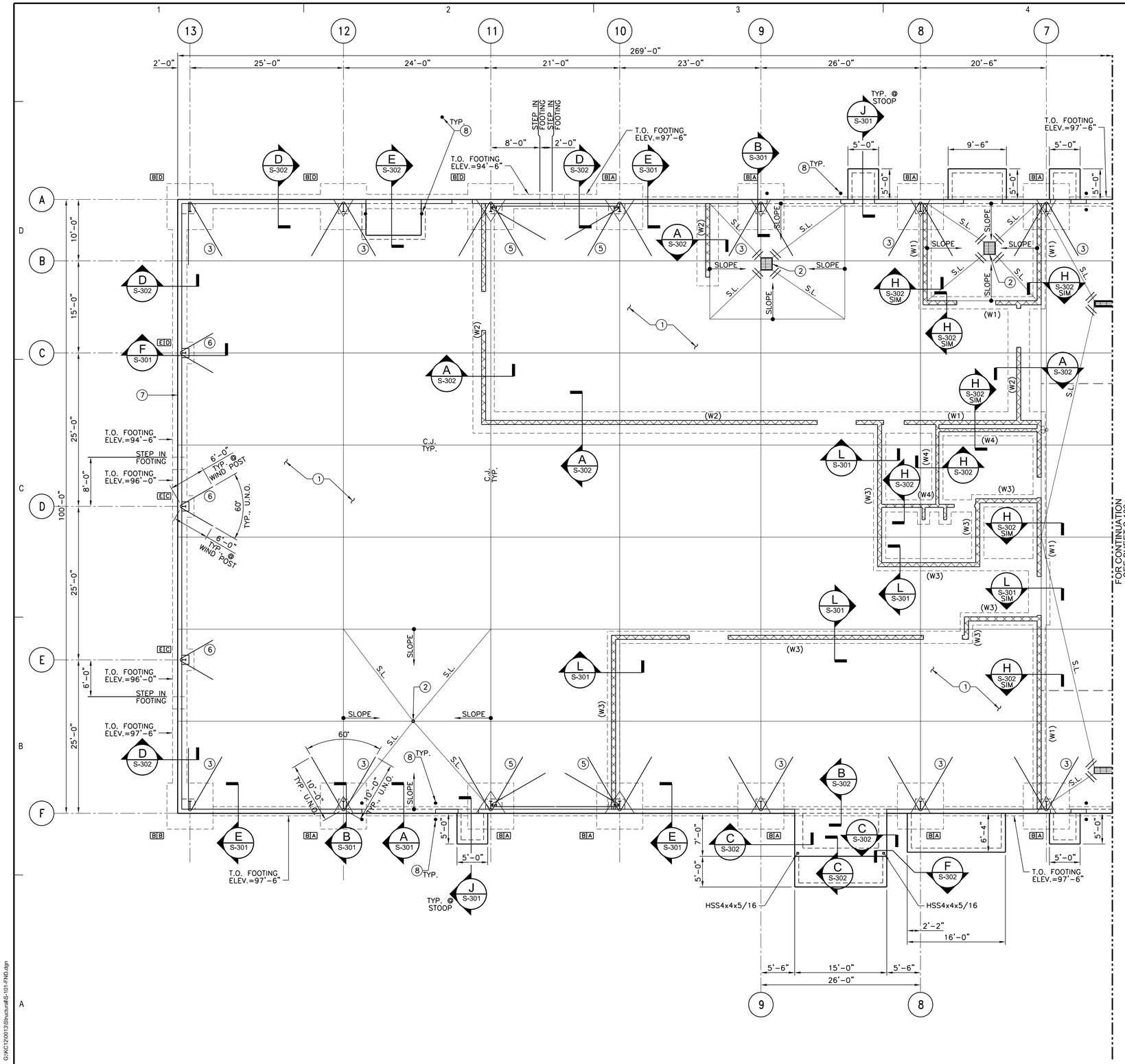
SHEET NO.

S-100

SHEET OF

MODEL:BLAND
4/10/2012 - 3:19:57 PM - G:\KC12\00133\Structural\S-100-FND.dgn

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING



A PARTIAL FOUNDATION PLAN (SOUTH)
SCALE: 1/8"=1'-0"

FOUNDATION PLAN NOTES

1. PLAN ELEVATION 100'-0" = ELEVATION OF 2792.30'.
2. "C.J." DENOTES CONSTRUCTION JOINT OR SAWN CONTROL JOINT IN SLAB-ON-GRADE PER TYPICAL DETAILS. DO NOT USE C.J. AS A DIMENSION LINE OR TO LOCATE BUILDING ELEMENTS.
3. REFER TO ARCHITECTURE AND CIVIL DRAWINGS FOR SIDEWALK LOCATIONS AROUND BUILDING.
4. "S.L." DENOTES SLOPE LINE.
5. SEE SHEET S-101 FOR FOOTING AND TOP OF FOOTING ELEVATION SCHEDULES
6. FOOTING INFORMATION ARE NOTED ON THE PLANS AS FOLLOWS:

   [1|2] BOX 1 – SCHEDULED FOOTING MARK
   BOX 2 – TOP OF FOOTING ELEVATION

7. DENOTES MASONRY WALL. REFERENCE SECTIONS AND DETAILS FOR REINFORCING AND LINTEL REQUIREMENTS.
8. • DENOTES INTERIOR OR EXTERIOR BOLLARD. SEE ARCH'L. FOR DETAIL.

PLAN KEY NOTES

(1) SLAB-ON-GRADE SHALL BE 6" THICK ON PREPARED SUBGRADE OVER 10 MIL. POLY. VAPOR BARRIER AND 18" OF LVC MATERIAL OF WHICH THE UPPER 6" IS CRUSHED LIMESTONE SILTY GRAVEL SIMILAR TO KDOT AB-3 TYPE MATERIAL PER TYPICAL DETAILS, UNLESS NOTED OTHERWISE ON THE PLANS. REINFORCE SLAB WITH #4 @ 12" ON CENTER, EACH WAY, 2" FROM TOP SURFACE OF SLAB. REINFORCING SHALL BE SUPPORTED BY CHAIRS. SLOPE SLAB TO DRAINS PER ARCH'L. DRAWINGS.

(2) DRAIN, REFER TO MEP DRAWINGS FOR INFORMATION. PROVIDE (2) #4 x 3'-0" CORNER BARS @ EACH CORNER OF DRAIN STRUCTURES.

(3) (1) #7 HAIRPIN BAR, TYPICAL AT ALL RIGID FRAME COLUMNS, U.N.O.

(4) (2) #6 HAIRPIN BARS, TYPICAL AT TRENCH DRAIN COLUMNS.

(5) (2) #7 HAIRPIN BARS REQUIRED AT BRACED FRAMES LOCATION, TYP.

(6) (1) #5 HAIRPIN BAR, TYPICAL AT WIND POSTS.

(7) METAL BUILDING NOTE: END WALL TO BE DESIGNED AS "EXPANDABLE END WALL FRAME" CAPABLE OF SUPPORTING A FUTURE 25 FT. STRUCTURAL BAY.

(8) INSTALL BOLLARDS, SEE ARCH'L. PLANS FOR EXACT LOCATION AND DETAILS.

REINFORCED MASONRY WALL SCHEDULE

WALL MARK	WALL THICKNESS	VERTICAL REINFORCING	NOTES
W1	8"	#4 @ 8" O.C.	
W2	8"	#4 @ 8" O.C.	
W3	8"	#4 @ 32" O.C.	
W4	6"	#4 @ 16" O.C.	

FOOTING SCHEDULE

FOOTING MARK	FOOTING SIZE	REINFORCING	NOTES
A	6'-0"x6'-0"x2'-0"	(7) #6 E.W. TOP & BOTT.	
B	7'-6"x7'-6"x2'-0"	(8) #6 E.W. TOP & BOTT.	
C	3'-2"x3'-2"x2'-0"	(4) #6 E.W. TOP & BOTT.	
D	2'-8"x2'-8"x1'-0"	(4) #5 E.W. BOTT.	
E	3'-6"x3'-6"x2'-0"	(4) #5 E.W. TOP & BOTT.	

TOP OF FOOTING SCHEDULE

FOOTING MARK	TOP OF FOOTING ELEVATION	NOTES
A	98'-6"	
B	97'-6"	
C	96'-0"	
D	94'-6"	

Tran Systems
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MISSOURI 64108
PHONE: 816-329-8600
FAX: 816-329-8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
'An Employee Owned Company'

REVISIONS:

MARK	DATE	DESCRIPTION
	03/28/2012	PERMIT SUBMITTAL

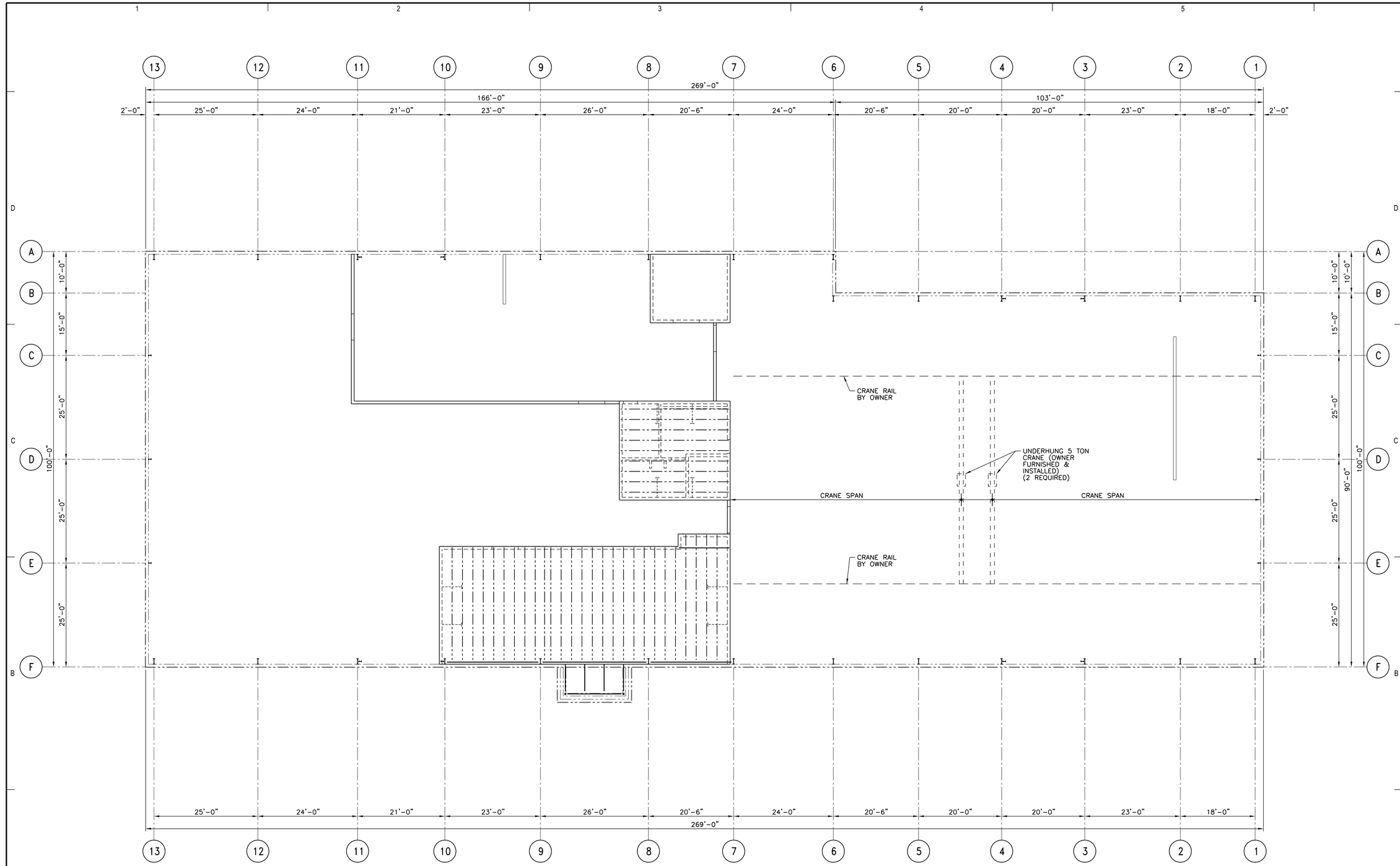
PROJ NO: P101120013
SCALE: AS SHOWN
DATE: 4/10/2012
DESIGNED BY: DJS
DRAWN BY: MDG
CHECKED BY: DJS

SHEET TITLE:
PARTIAL FOUNDATION PLAN (SOUTH)

SHEET NO.
S-101
SHEET OF

MODEL:BLAND
4/10/2012 - 3:20:00 PM - G:\KC\120\013\Structural\S-101-FND.dgn

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING



A OVERALL MEZZANINE FRAMING PLAN

SCALE: 3/32"=1'-0"

N

TranSystems
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MISSOURI 64108
PHONE: 816-329-8600
FAX: 816-329-8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
	03/28/2012	PERMIT SUBMITTAL

PROJ NO: P101120013
SCALE: AS SHOWN
DATE: 4/10/2012
DESIGNED BY: DJS
DRAWN BY: MDG
CHECKED BY: DJS

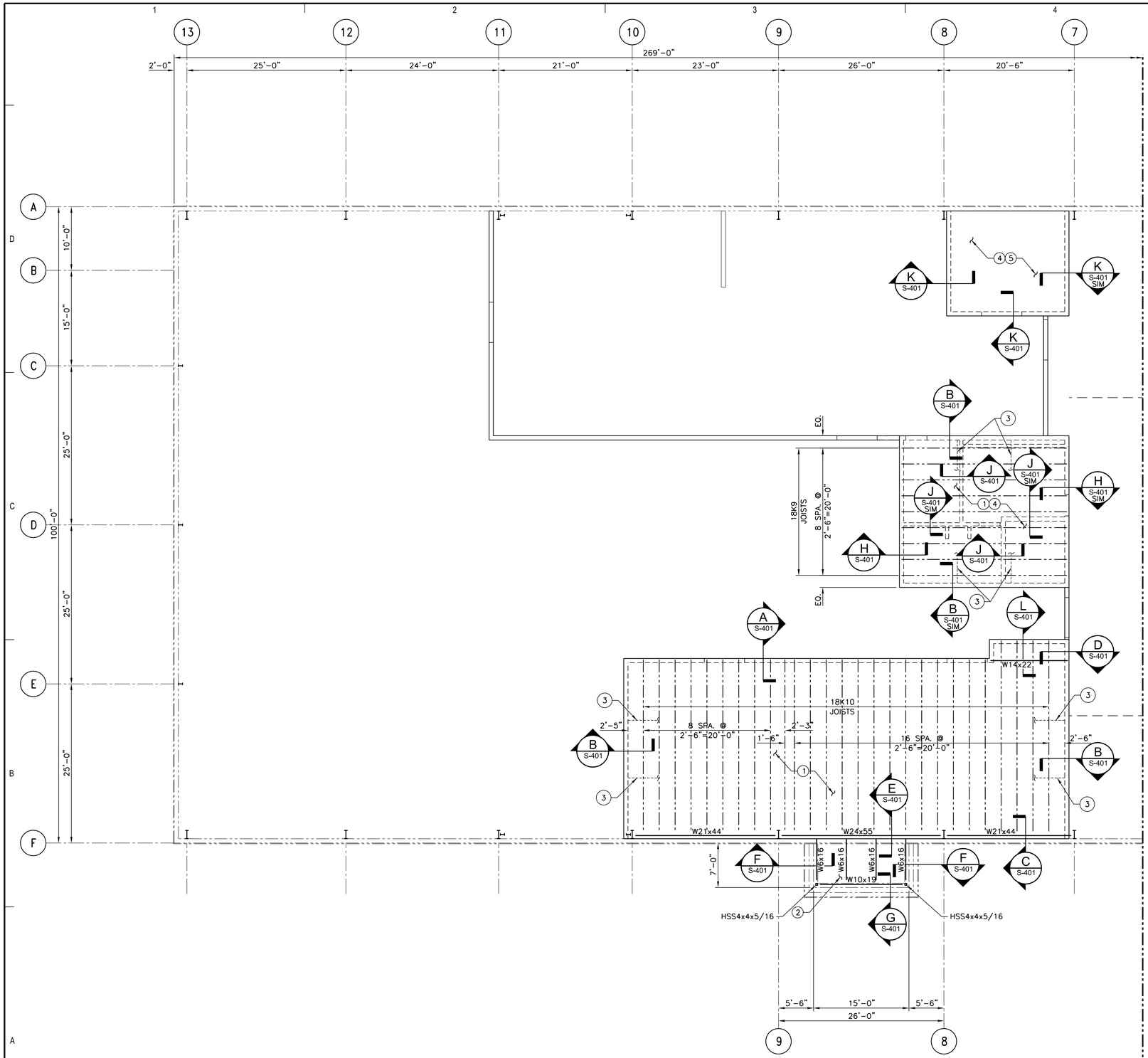
SHEET TITLE:
OVERALL MEZZANINE FRAMING PLAN

SHEET NO.
S-200

SHEET OF

MODEL:BLAND
4/10/2012 - 3:20:07 PM - G:\KC12\00133\Structural\S-200-FND.dgn

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING



MEZZANINE FRAMING PLAN NOTES

1. T.O. STEEL ELEVATION = BOTTOM OF METAL DECK U.N.O.

PLAN KEY NOTES

(1) 2 1/2" CONCRETE ON 1.0 C22 METAL DECK (3 1/2" TOTAL THICKNESS) REINFORCE W/ 6x6x W2.9 x W2.9 W.W.F. ATTACHMENT OF NON COMPOSITE DECK TO THE SUPPORTING BEAMS AND JOISTS SHALL BE PUDDLE WELD UTILIZING STANDARD 5/8" DIAMETER WELD WASHERS AT 12" O.C. SPACING. MAXIMUM SIDELAP CONNCETION BETWEEN DECK PANELS SHALL BE (1) #10 TEK SCREW PER SPAN.

(2) 1.5 B 20 STEEL METAL DECK FASTEN TO SUPPORTING STRUCTURE PER GENERAL NOTES.

(3) BRIDGING REQUIRED FOR JOISTS, PER JOIST MANUFACTURER.

(4) FLUID STORAGE ROOM ROOF AND MEN'S TOILET/LOCKER ROOM ROOF DESIGNED FOR 60 PSF LIVE LOAD.

(5) 10" THICK CAST-IN-PLACE CONCRETE SLAB. REINFORCE W/ #5 @ 6" E.W. TOP & BOTTOM.

A PARTIAL MEZZANINE FRAMING PLAN (SOUTH)
SCALE: 1/8"=1'-0"

Tran Systems
2400 PERSHING ROAD
SUITE 400
KANSAS CITY, MISSOURI 64108
PHONE: 816-329-8600
FAX: 816-329-8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
	03/28/2012	PERMIT SUBMITTAL

PROJ NO: P101120013
SCALE: AS SHOWN
DATE: 4/10/2012
DESIGNED BY: DJS
DRAWN BY: MDG
CHECKED BY: DJS

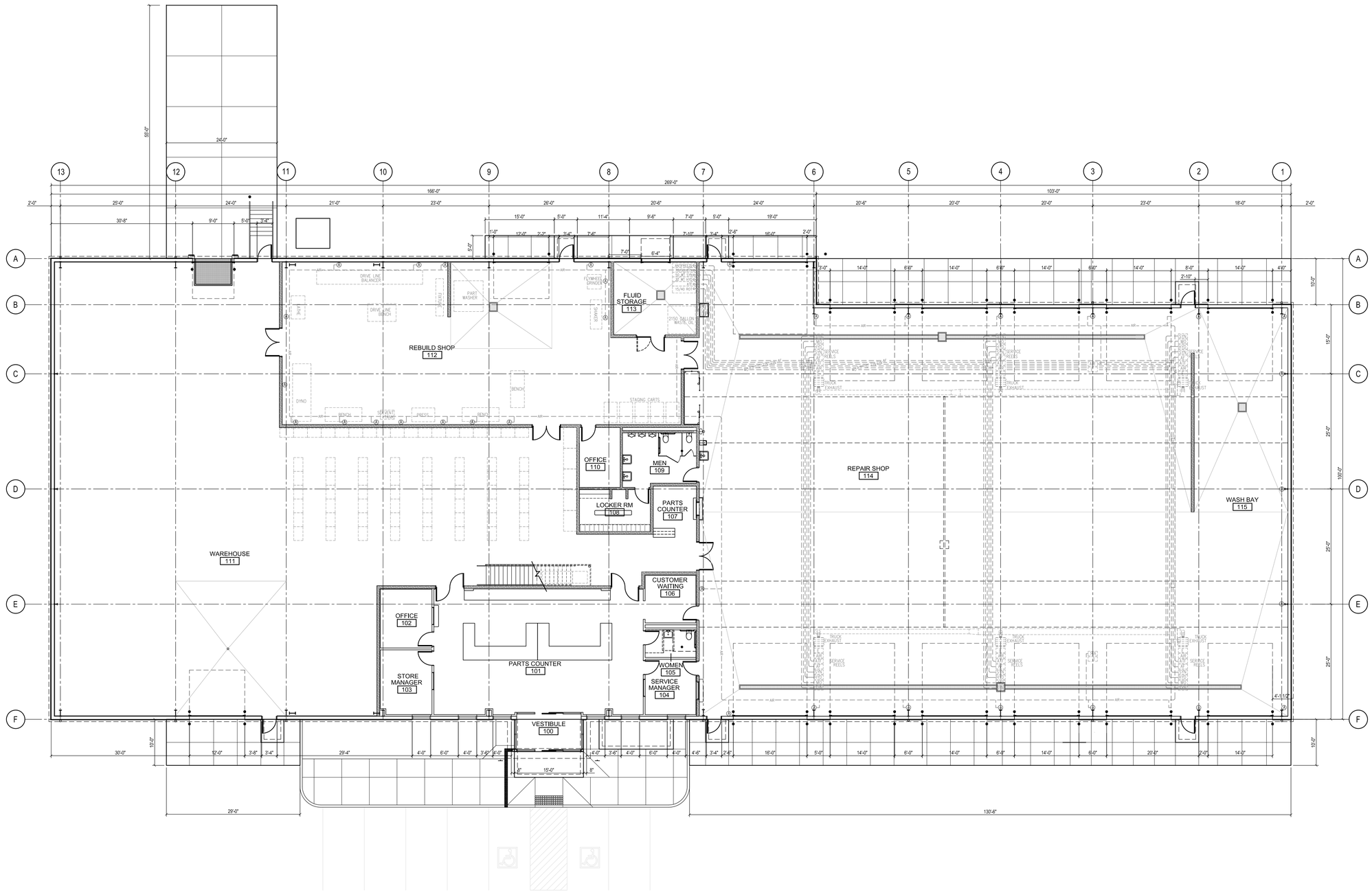
SHEET TITLE:
PARTIAL MEZZANINE FRAMING PLAN (SOUTH)

SHEET NO.
S-201

SHEET OF

MDGILBLAND
4/10/2012 - 3:20:10 PM - G:\KC\12\0013\Structural\S-201-MEZ.dgn

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING



1 A-101 OVERALL FLOOR PLAN
SCALE: 3/32" = 1'-0"

NORTH

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING

G:\KC12\0013\Architectural\A-100 Overall Floor Plan.dwg, Plotted: Apr 04, 2012 - 8:54am

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, MO. 64108
PHONE:816.329.8600
FAX:816.329.8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
"An Employee Owned Company"

REVISIONS:

MARK	DATE	DESCRIPTION
	3/28/2012	PERMIT SUBMITTAL

PROJ NO:	P101120013
SCALE:	AS NOTED
DATE:	3/28/2012
DESIGNED BY:	MFP
DRAWN BY:	MFP/MON
CHECKED BY:	MFP

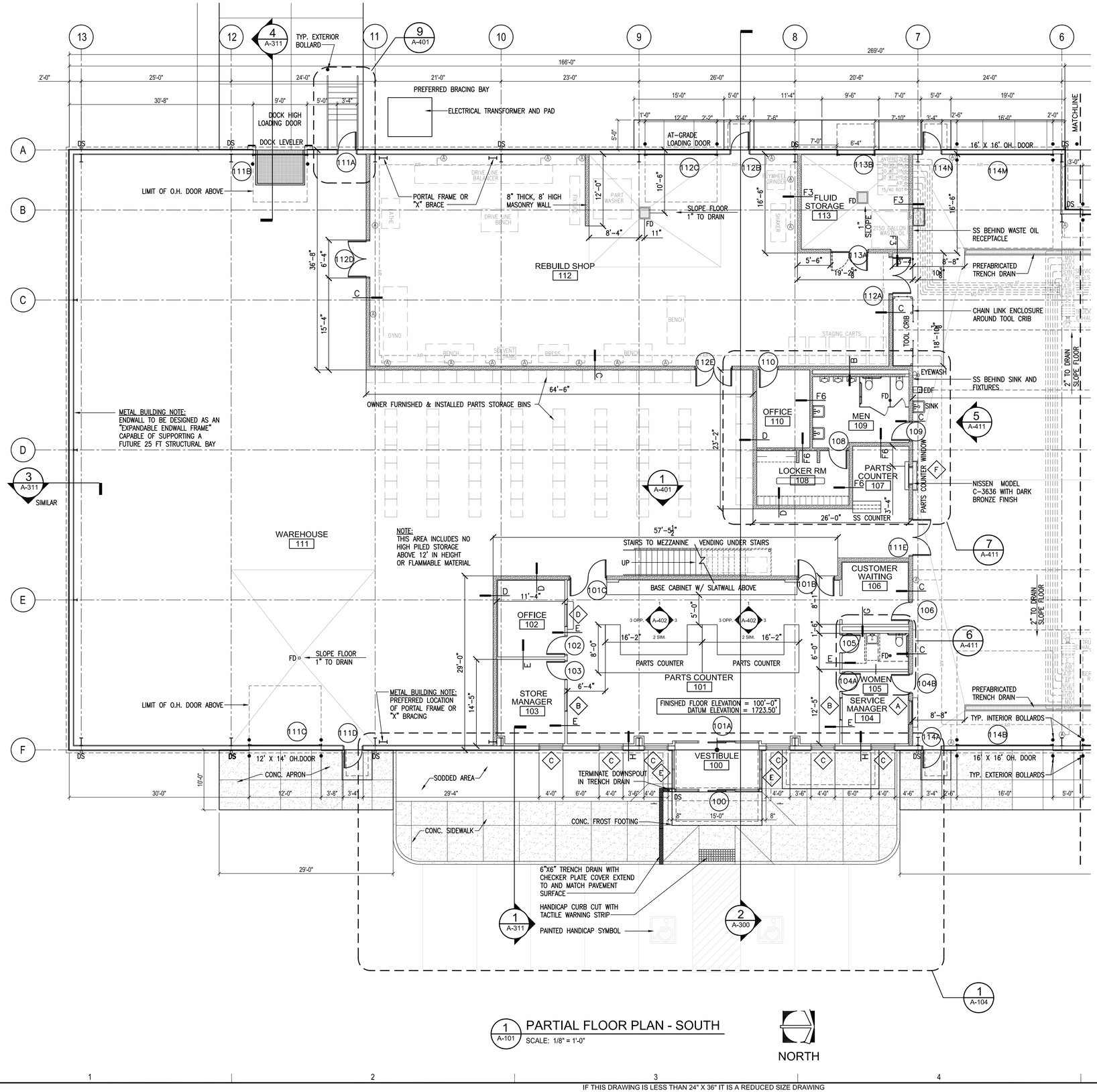
SHEET TITLE:
OVERALL FIRST FLOOR PLAN

SHEET NO.
A-100

SHEET OF

GENERAL NOTES

1. METAL BUILDING "STEEL LINE" MATCHES THE EXTERIOR FACE OF FOUNDATION WALL IN ALL AREAS EXCEPT AS OTHERWISE NOTED.
2. ALL INTERIOR PARTITIONS ARE DIMENSIONED TO FACE OF WALL
3. REFER TO SHEET A-000 FOR ALL ABBREVIATIONS, NOTES, AND SYMBOLS.
4. REFER TO SHEET A-001 FOR ALL BUILDING CODE CRITERIA, EXITING REQUIREMENTS AND EGRESS INFORMATION.
5. REFER TO SHEET A-002 FOR ALL WALL TYPES.
6. REFER TO SHEET A-003 FOR ALL METAL STUD WALL FRAMING DETAIL AND FOR GENERAL FRAMING NOTES.



1 A-101 PARTIAL FLOOR PLAN - SOUTH
SCALE: 1/8" = 1'-0"

NORTH

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING

G:\KC12\0013\Architectural\A-101-102-104 Partial Floor Plans.dwg, Plotted: Apr 04, 2012 - 8:49am

TranSystems
2400 Pershing Road
Suite 400
Kansas City, MO. 64108
PHONE:816.329.8600
FAX:816.329.8602

CONSULTANTS:

INLAND TRUCK PARTS COMPANY
"An Employee Owned Company"

INLAND TRUCK PARTS
NEW SERVICE CENTER
NORTH PLATTE, NEBRASKA

REVISIONS:

MARK	DATE	DESCRIPTION
	3/28/2012	PERMIT SUBMITTAL

PROJ NO:	P101120013
SCALE:	AS NOTED
DATE:	3/28/2012
DESIGNED BY:	MFP
DRAWN BY:	MFP/MON
CHECKED BY:	MFP

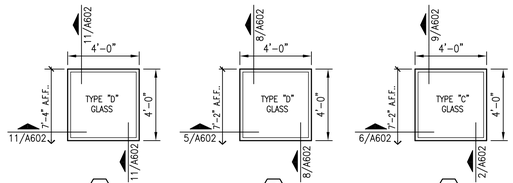
SHEET TITLE:

PARTIAL FIRST FLOOR PLAN SOUTH

SHEET NO.
A-101

SHEET OF

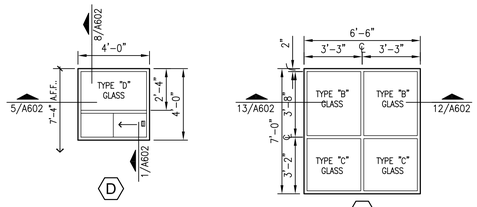
WINDOW TYPES



INTERIOR FIXED PANE H.M. WINDOW IN MASONRY WALL

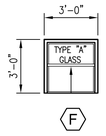
INTERIOR FIXED PANE H.M. WINDOW IN GYP BD. PARTITION WALL

THERMALLY BROKEN EXTERIOR FIXED PANE ALUMINUM WINDOW IN PEMB EXTERIOR WALL



INTERIOR HM FRAMED WINDOW IN GWB WALL WITH FIXED UPPER UNIT AND HORIZ. SLIDER IN LOWER UNIT

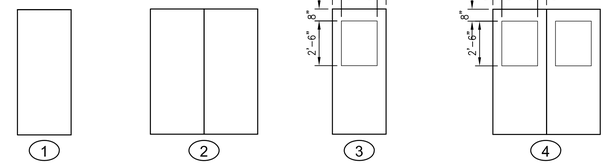
THERMALLY BROKEN, FIXED PANE, EXTERIOR ALUMINUM STOREFRONT WINDOW



GLAZING TYPES

TYPE "A" GLASS TO BE 1/4" FLOAT GLASS
TYPE "B" GLASS TO BE 1" INSULATED DOUBLE GLAZING
TYPE "C" GLASS TO BE 1" INSULATED TEMPERED DOUBLE GLAZING
TYPE "D" GLASS TO BE 1/4" CLEAR TEMPERED GLASS

DOOR TYPES

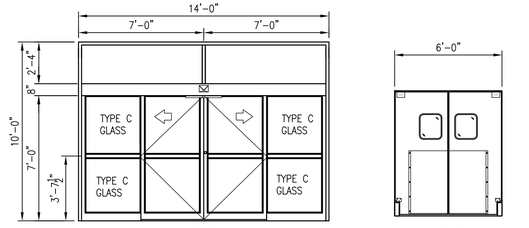


1 3/4" H.M. FLUSH STEEL DOOR. SEE SCHEDULE FOR INSULATION AND FIRE RATING REQUIRREMENTS.

1 3/4" H.M. FLUSH STEEL PAIR OF DOORS. SEE SCHEDULE FOR INSULATION AND FIRE RATING REQUIRREMENTS.

1 3/4" H.M. FLUSH STEEL DOORS W/TEMPERED GLASS. SEE SCHEDULE FOR INSULATION REQUIREMENTS.

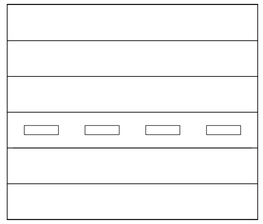
1 3/4" H.M. FLUSH STEEL PAIR OF DOORS W/TEMPERED GLASS. SEE SCHEDULE FOR INSULATION REQUIREMENTS.



TYPE C GLASS

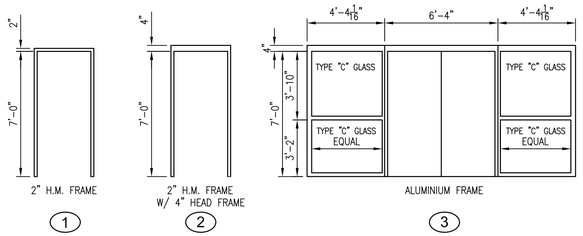
BI-PARITING AUTOMATIC ALUMINUM ENTRANCE DOORS W/ TEMPERED GLASS AND MOTION SENSORS WITH EMERGENCY RELEASE

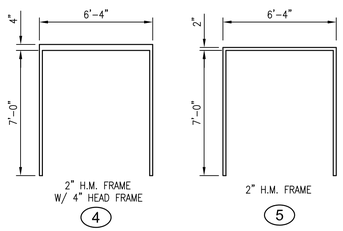
DOUBLE ACTING IMPACT TRAFFIC DOORS WITH VISION PANEL, IMPACT BUMPERS AND GASKET TYPE SEALS



UPWARD ACTING, INSULATED SECTIONAL OVERHEAD DOOR, POWER OPERATED, WITH VISION PANELS

FRAME TYPES





DOOR SCHEDULE

NO.	DOOR			FRAME			DETAILS				REMARKS
	SIZE (WxHxTx)	TYPE	MATERIAL	TYPE	MATERIAL	FINISH	JAMB	HEAD	SILL	HDWARE SET	
100	14'-0" x 7'-0" x 1-3/4"	5	AL	3	AL	ANOD.	17/A601	8/A601	3/A601		2. AUTOMATIC BI-PARTING DOOR
101A	14'-0" x 7'-0" x 1-3/4"	5	AL	3	AL	ANOD.	16/A601	8/A601	3/A601		2. AUTOMATIC BI-PARTING DOOR
101B	PR 3'-0" x 7'-0" x 1-3/4"	6	FF	4	HM	PAINT	5/A601	10/A601	-	NA	DBL. ACTING IMPACT TRAFFIC DOOR
101C	PR 3'-0" x 7'-0" x 1-3/4"	6	FF	4	HM	PAINT	5A601	10/A601	-	NA	DBL. ACTING IMPACT TRAFFIC DOOR
102	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601	-	3	-
103	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601	-	3	-
104A	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601	-	3	-
104B	3'-0" x 7'-0" x 1-3/4"	1	HM	2	HM	PAINT	9/A601	14A601	-	4	
105	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601	-	5	
106	3'-0" x 7'-0" x 1-3/4"	1	HM	2	HM	PAINT	9/A601	14/A601	-	4	
108	3'-0" x 7'-0" x 1-3/4"	3	HM	2	HM	PAINT	4/A601	13/A601	-	6	
109	3'-0" x 7'-0" x 1-3/4"	1	HM	2	HM	PAINT	4/A601	13/A601	-	4	
110	3'-0" x 7'-0" x 1-3/4"	1	HM	2	HM	PAINT	4/A601	13/A601	-	4	
111A	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
111B	9'-0" x 10'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	11/A601	15/A601	NA		2, POWER OPERATED DOOR
111C	12'-0" x 14'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	11/A601	15/A601	1/A601		2, POWER OPERATED DOOR
111D	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
111E	PR 3'-0" x 7'-0" x 1-3/4"	2	HM	4	HM	PAINT	4A601	13/A601	-	7	
112A	PR 3'-0" x 7'-0" x 1-3/4"	2	HM	4	HM	PAINT	4/A601	13/A601	-	7	
112B	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
112C	12'-0" x 14'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	11/A601	15/A601	1/A601		2, POWER OPERATED DOOR
112D	PR 3'-0" x 7'-0" x 1-3/4"	2	HM	4	HM	PAINT	4/A601	13/A601	-	7	
112E	PR 3'-0" x 7'-0" x 1-3/4"	2	FF	4	HM	PAINT	5/A601	10/A601	-	7	
113A	PR 3'-0" x 7'-0" x 1-3/4"	2	HM	4	HM	PAINT	4/A601	13/A601	-	7	
113B	6'-4" x 8'-2" x 1-3/4"	2	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114A	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
114B	16'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114C	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114D	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114E	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114F	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114G	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
114H	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
114I	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114J	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114K	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114L	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114M	16'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
114N	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	7/A601	12/A601	2/A601	2	
115A	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
115B	14'-0" x 16'-0" x 1-3/4"	7	FF	NA	MTL	PAINT	6/A601	15/A601	1/A601		2, POWER OPERATED DOOR
MEZZANINE LEVEL DOORS											
201	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601		4	
202	3'-0" x 7'-0" x 1-3/4"	1	HM	1	HM	PAINT	16/A601	17/A601		4	
203	3'-0" x 7'-0" x 1-3/4"	3	HM	1	HM	PAINT	16/A601	17/A601		4	

DOOR SCHEDULE NOTES:

1. ALL EXTERIOR HOLLOW METAL DOORS SHALL BE GALVANIZED.
2. ALL DOOR HARDWARE EXCEPT CYLINER TO BE PROVIDE BY MANUFACTURER.
3. ALL GLASS IN DOORS SHALL BE TEMPERED
4. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED, AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC DEVICES, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARWARE.
5. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED THE FOLLOWING:
   INTERIOR DOORS - 5 LBS
   EXTERIOR DOORS - 15 LBS.
   FIRE DOORS - 15 LBS. PER IBC.
6. ALL HARDWARE SHALL MEET THE REQUIREMENTS OF AMERICANS WITH DISABILITIES ACT. IF ANY SPECIFIED ITEM DOES NOT MEET THESE REQUIREMENT, THE HARDWARE SUPPLIER SHALL SUBMIT SIMILAR PRODUCETS WHICH ARE IN COMPLIANCE WITH ADA.
7. ALL EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
8. KEYING SHALL INCORPORATE A GRAND MASTER SYSTEM, AND SHALL BE COORDINATED WITH THE LOCAL MANAGER.

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, MO. 64108
PHONE:816.329.8600
FAX:816.329.8602

CONSULTANTS:

INLAND TRUCK PARTS
NEW SERVICE CENTER

NORTH PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
"An Employee Owned Company"

REVISIONS:

MARK	DATE	DESCRIPTION
	3/28/2012	PERMIT SUBMITTAL

PROJ NO: P101120013
SCALE: AS NOTED
DATE: 3/28/2012
DESIGNED BY: MFP
DRAWN BY: MFP/MON
CHECKED BY: MFP

SHEET TITLE:

DOOR & WINDOW TYPES AND SCHEDULES

SHEET NO.
A-502
SHEET OF

G:\KC12\0013\Architectural\A-502.dwg, Plotted: Apr 04, 2012 - 8:45am

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING

MECHANICAL SYMBOLS

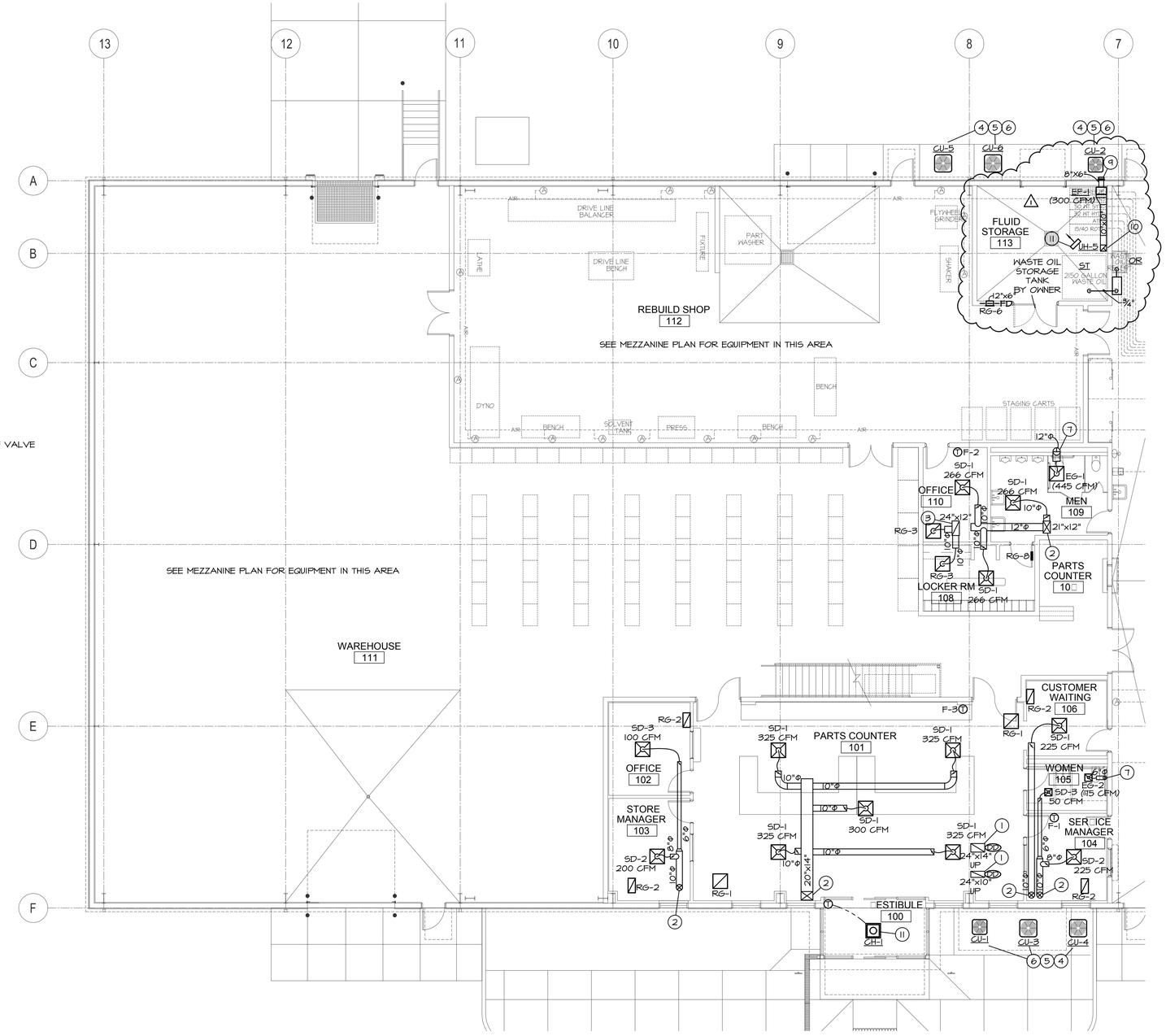
SUPPLY DIFFUSER	MANUAL VOLUME DAMPER
RETURN AIR GRILLE	PIPING TURNING DOWN
EXHAUST GRILLE	PIPING TURNING UP
THERMOSTAT, MOUNTED AT 48" AFF	TEE TOP CONNECTION
DUCT-MOUNTED SMOKE DETECTOR	HS HYDRONIC SUPPLY PIPING
AQ AIR QUALITY SENSOR - CO/ NO2	HR HYDRONIC RETURN PIPING
HOA HAND/OFF/AUTO SWITCH	OIL WASTE OIL PIPING
S REMOTE SENSOR	CONTROL WIRING
ZV HYDRONIC ZONE VALVE	REFRIGERANT PIPING
MOTORIZED DAMPER/LOUVER	UNION
HYDRONIC HEATING MANIFOLD	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DUCTWORK	VALVE
32"x14" SIZE OF RECTANGULAR DUCT	BALANCING VALVE
6"Φ SIZE OF ROUND DUCT	CHECK VALVE
FLEXIBLE DUCTWORK	THERMOMETER
FLEXIBLE CONNECTION TO FAN	PRESSURE GUAGE
(3) FLOOR PLAN NOTE DESIGNATION	TEMPERATURE AND PRESSURE RELIEF VALVE
TRANSITION IN DUCT SIZE	PETE'S PLUG
ELBOW WITH TURNING VANES	Y STRAINER
MANUAL VOLUME DAMPER	
XX-X SCHEDULED EQUIPMENT	

MECHANICAL PLAN NOTES:

1. OPEN RETURN AIR DUCT ABOVE CEILING ROUTED DOWN FROM MEZZANINE LEVEL. SEE SHEET M-201 FOR CONTINUATION.
2. SUPPLY AIR DUCT DOWN FROM MEZZANINE LEVEL. SEE SHEET M-201 FOR CONTINUATION.
3. RETURN AIR DUCT ABOVE CEILING ROUTED DOWN FROM MEZZANINE LEVEL. SEE SHEET M-201 FOR CONTINUATION.
4. REFRIGERANT PIPING THROUGH EXTERIOR WALL AT 18" ABOVE GRADE. SEAL WALL PENETRATION WEATHERTIGHT. ROUTE PIPE UP INSIDE WALL TO AS HIGH AS POSSIBLE AND ROUTE TO UNITS.
5. CONNECT REFRIGERANT PIPING TO CONDENSING UNIT & COIL AS REQUIRED. PROVIDE REFRIGERANT PIPING FOR CONDENSING UNIT AS REQUIRED BY MANUFACTURER. INSTALL PIPING AS RECOMMENDED BY MANUFACTURER.
6. PROVIDE PREFABRICATED PAD FOR CONDENSING UNITS.
7. EXHAUST DUCT ROUTED UP TO MEZZANINE LEVEL. SEE SHEET M-201 FOR CONTINUATION.
8. -
9. ROUTE 8"x6" EXHAUST DUCT THROUGH WALL TO WALL CAP AS REQUIRED. SEAL PENETRATION WEATHER TIGHT.
10. ROUTE 10"x10" EXHAUST DUCT DOWN TO 12" AFF. COORDINATE WITH OWNER FOR EXACT LOCATION OF STORAGE TANKS AND EQUIPMENT.
11. SUPPORT UNIT FROM STRUCTURE AS REQUIRED BY THE MANUFACTURER. PROVIDE PROVIDE ADDITIONAL SUPPORT STEEL AND VIBRATION ISOLATION AS REQUIRED.
12. -
13. -

OUTDOOR AIR CALCULATIONS

UNIT	CLASS	SQ. FT.	PEOPLE/ SQ. FT.	CFM/ SQ. FT.	CFM/ PERSON	CFM
REPAIR SHOP	AUTOMOTIVE	9513		1.5		14270
					TOTAL	14,270
WAREHOUSE	WAREHOUSE	7840		0.05		345
					TOTAL	345
F-1	OFFICE	541	7/1000		20	76
					TOTAL	76
F-2	OFFICE	114	7/1000		20	16
	LOCKER ROOM	134		0.5		70
					TOTAL	85
F-3	RETAIL	1236		0.3		371
					TOTAL	371
F-4	STORAGE	1870		0.15		281
					TOTAL	281
F-5, F-6	WORKROOM	2296		0.5		1148
					TOTAL	1,148



MECHANICAL PARTIAL GROUND LEVEL FLOOR PLAN SOUTH

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

Tran Systems
2400 Pershing Road
Suite 401
Kansas City, Missouri 64108
(p) 816-329-4600
(f) 816-329-4602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
'An Employee Owned Company'

REVISIONS: MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
PARTIAL GROUND LEVEL MECHANICAL PLAN SOUTH

SHEET NO.
M-101
SHEET ____ OF ____

REVDATE:

MECHANICAL PLAN NOTES:

1. TRUCK EXHAUST SYSTEM PROVIDED BY OTHERS. COORDINATE AS REQUIRED FOR MOUNTING CLEARANCES AROUND RADIANT HEATERS. SEE SHEET A-300 FOR BUILDING SECTIONS.
2. MAINTAIN PROPER CLEARANCE TO COMBUSTIBLES AND ANY MATERIALS THAT CAN BE DAMAGED BY HEAT PER THE RADIANT HEATER MANUFACTURERS REQUIREMENTS.
3. SUPPORT RADIANT HEATERS AT 18' AFF PER THE MANUFACTURERS REQUIREMENTS. SEE SHEET A-300 FOR ELEVATION VIEW. PROVIDE LOWER CLEARANCE SHIELD IF REQUIRED FOR CLEARANCE TO COMBUSTIBLES.
4. SUPPORT RADIANT HEATERS AT 20' AFF PER THE MANUFACTURERS REQUIREMENTS. SEE SHEET A-300 FOR ELEVATION VIEW. PROVIDE LOWER CLEARANCE SHIELD IF REQUIRED FOR CLEARANCE TO COMBUSTIBLES.
5. PROVIDE MANUFACTURERS REQUIRED FLUE TERMINATION KIT FOR RADIANT TUBE HEATERS. PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & WEATHERHEAD. LOCATE WEATHERHEAD 36" ABOVE EVERYTHING WITHIN 10'. VERIFY 10'-0" FROM ALL OUTDOOR AIR INTAKES.
6. PROVIDE MANUFACTURERS REQUIRED FRESH AIR INTAKE KIT FOR RADIANT TUBE HEATERS. PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & WEATHERHEAD.
7. ROUTE DUCTWORK UP THROUGH ROOF AND CONNECT TO EXHAUST FAN AS REQUIRED BY THE MANUFACTURER. COORDINATE WITH METAL BUILDING MANUFACTURER FOR CURB AND ALL ROOFING WORK. INTERLOCK FANS WITH GAS SENSOR CONTROL PANEL AND LOUVERS AS DETAILED AND IN CONTROL SEQUENCE.
8. MOUNT BOTTOM OF DAMPER AT 16'. INTERLOCK AS DETAILED IN CONTROL SEQUENCE.
9. VERIFY EXACT SPECIFICATIONS OF THE OWNER SUPPLIED PRESSURE WASHER UNIT. PROVIDE FLUE PIPING SIZED PER THE MANUFACTURERS REQUIREMENTS AND PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & APPROVED WEATHERHEAD. LOCATE WEATHERHEAD 36" ABOVE EVERYTHING WITHIN 10'. VERIFY 10'-0" FROM ALL OUTDOOR AIR INTAKES. SEAL PENETRATION WEATHER TIGHT.
10. COORDINATE WITH THE G.C. TO PROVIDE AN ALUMINUM HEAT SHIELD WITH A 1" AIR GAP ON THE CRANE BEAM AND ALL COMBUSTIBLE COMPONENTS WITHIN THE RADIANT HEATERS SPECIFIED CLEARANCE TO COMBUSTIBLE ZONE.
11. LOCATION OF AIR QUALITY SENSOR FOR GAS SENSING SYSTEM. INSTALL PER THE MANUFACTURERS REQUIREMENTS. INTERLOCK WITH EXHAUST FANS AND LOUVERS AS DETAILED ON SHEET M-202.
12. MOUNT HORN STROBE FOR GAS SENSING SYSTEM PER THE MANUFACTURERS REQUIREMENTS.
13. INSTALL CONTROL PANEL FOR GAS SENSING SYSTEM PER THE MANUFACTURERS REQUIREMENTS.

CONTROL SEQUENCE FOR EXHAUST FANS AND LOUVERS

EXHAUST FAN EF-1 IN THE FLUID STORAGE ROOM IS TO RUN CONTINUOUSLY.

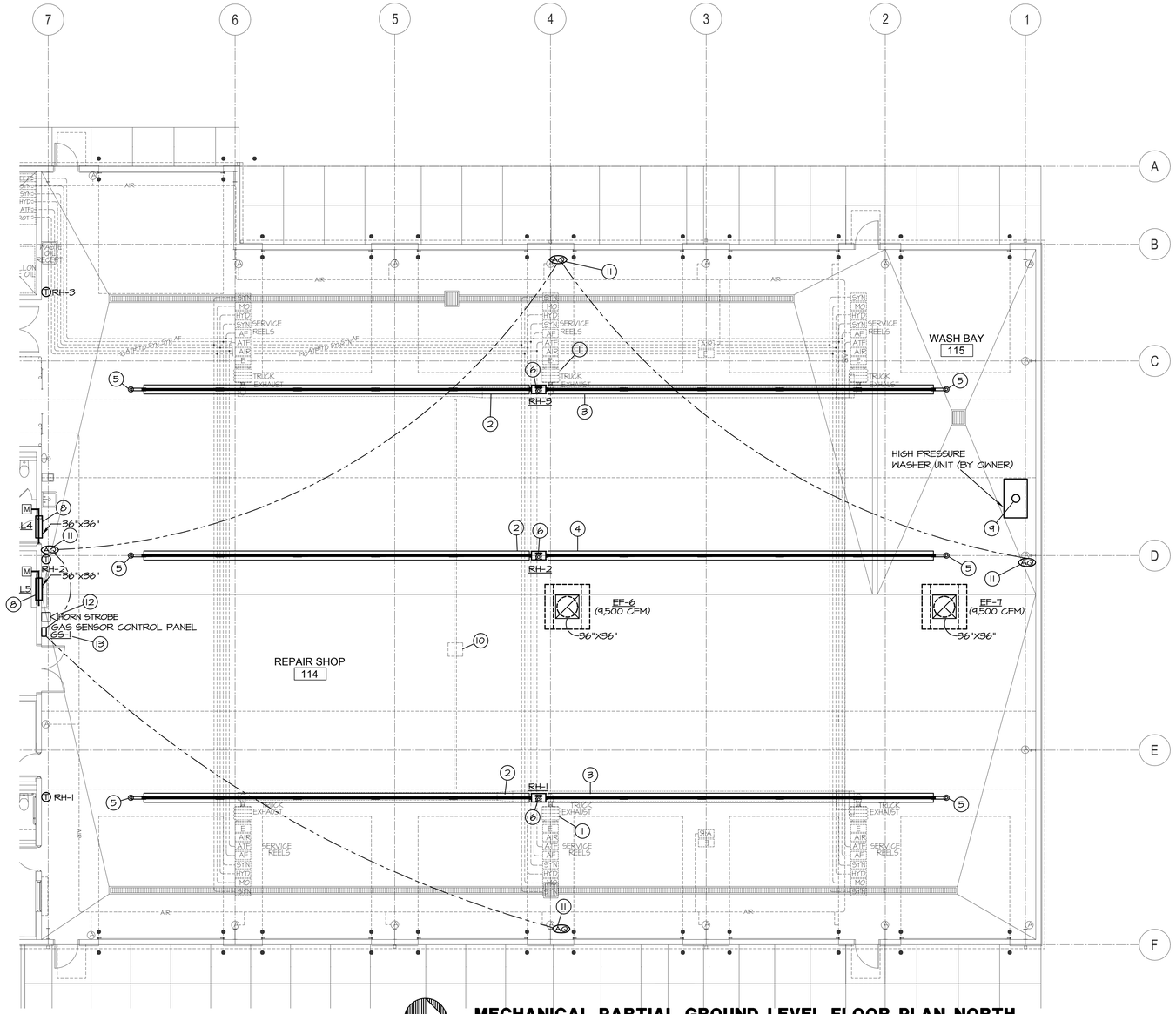
EXHAUST FAN EF-2 IS OPERATED MANUALLY WITH AN ON/OFF SWITCH FOR AREA VENTILATION AND COOLING. WHEN THE SWITCH IS ACTUATED, LOUVER L-1 SHALL OPEN, AND THE LOUVER ACTUATORS END TRAVEL SWITCH SHALL ACTIVATE THE MOTOR STARTER FOR EF-2 WHEN THE LOUVER IS FULLY OPEN.

EXHAUST FAN EF-3 IS OPERATED MANUALLY WITH AN ON/OFF SWITCH FOR AREA VENTILATION AND COOLING. WHEN THE SWITCH IS ACTUATED, LOUVER L-3 SHALL OPEN, AND THE LOUVER ACTUATORS END TRAVEL SWITCH SHALL ACTIVATE THE MOTOR STARTER FOR EF-3 WHEN THE LOUVER IS FULLY OPEN.

EXHAUST FANS EF-4 AND EF-5 ARE TO RUN CONTINUOUSLY DURING OCCUPIED HOURS.

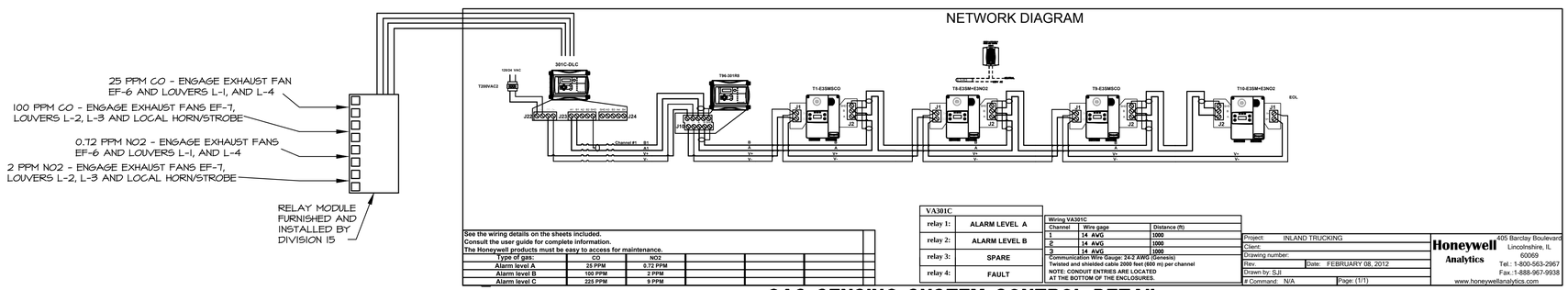
WHEN THE GAS SENSING CONTROL PANEL CALLS FOR EF-6 TO OPERATE AND VENTILATE THE SPACE, LOUVERS L-1 AND L-4 SHALL OPEN. THE FAN SHALL BE WIRED TO THE LOUVER ACTUATORS END TRAVEL SWITCH SO THAT THE FAN IS ENGAGED WHEN THE LOUVERS ARE FULLY OPEN.

WHEN THE GAS SENSING CONTROL PANEL CALLS FOR EF-7 TO OPERATE AND VENTILATE THE SPACE, LOUVERS L-2 AND L-3 SHALL OPEN. THE FAN SHALL BE WIRED TO THE LOUVER ACTUATORS END TRAVEL SWITCH SO THAT THE FAN IS ENGAGED WHEN THE LOUVER IS FULLY OPEN.



MECHANICAL PARTIAL GROUND LEVEL FLOOR PLAN NORTH

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



See the wiring details on the sheets included.
Consult the user guide for complete information.
The Honeywell products must be easy to access for maintenance.

Type of gas:	CO	NO2
Alarm level A	25 PPM	0.72 PPM
Alarm level B	100 PPM	2 PPM
Alarm level C	225 PPM	9 PPM

VA301C:	
relay 1:	ALARM LEVEL A
relay 2:	ALARM LEVEL B
relay 3:	SPARE
relay 4:	FAULT

Wiring VA301C

Channel	Wire gage	Distance (ft)
1	14 AWG	1000
2	14 AWG	1000
3	14 AWG	1000

Communication Wire Gauge: 24-2 AWG (Genesis)
Twisted and shielded cable 2000 feet (600 m) per channel
NOTE: CONDUIT ENTRIES ARE LOCATED AT THE BOTTOM OF THE ENCLOSURES.

Project: INLAND TRUCKING
Client:
Drawing number:
Rev. Date: FEBRUARY 08, 2012
Drawn by: SJI
Command: N/A Page: (1/1)

Honeywell Analytics
405 Barclay Boulevard
Lincolnshire, IL 60069
Tel.: 1-800-563-2967
Fax.: 1-888-967-9938
www.honeywellanalytics.com

GAS SENSING SYSTEM CONTROL DETAIL

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-4600
(f) 816-329-4602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:			
MARK	DATE	DESCRIPTION	
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM	

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

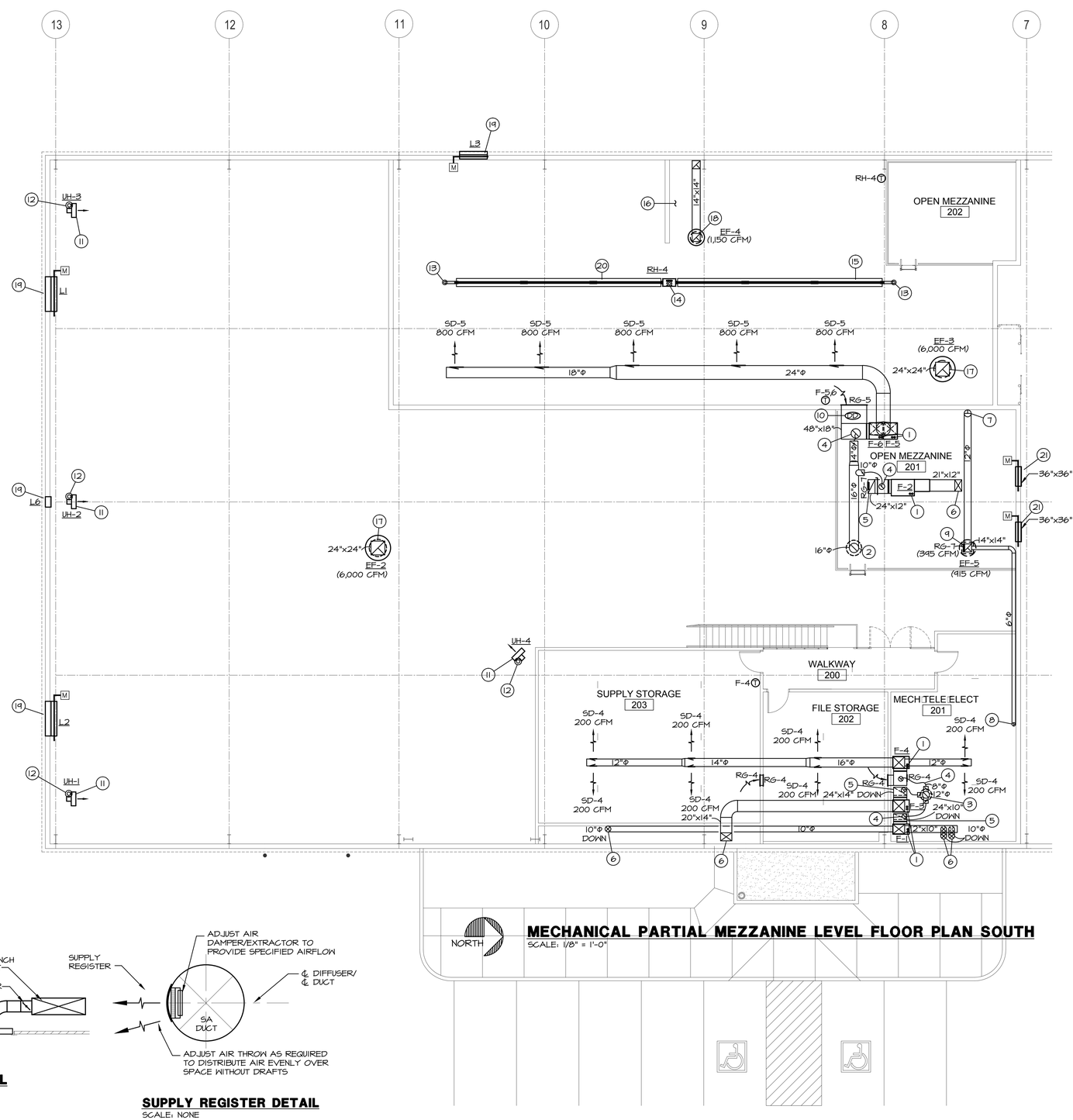
SHEET TITLE:
PARTIAL GROUND LEVEL MECHANICAL PLAN NORTH

SHEET NO.
M-102
SHEET ____ OF ____

REVDATE:

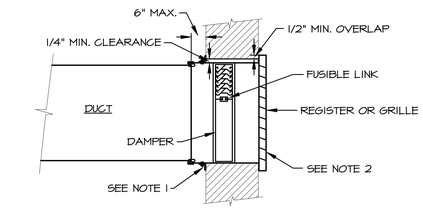
MECHANICAL PLAN NOTES:

1. 3"Φ CPVC FLUE & COMBUSTION AIR INTAKE UP THROUGH ROOF TO MANUFACTURE'S VENT TERMINATION AS REQUIRED. OFFSET AS REQUIRED TO MAINTAIN 10' CLEARANCE FROM ALL OUTDOOR AIR INTAKES. SEAL PENTRATIONS WEATHER TIGHT.
2. ROUTE 16"Φ OUTDOOR AIR INTAKE DUCT UP THROUGH ROOF TO ROOF CAP. FLASH AND SEAL AS REQUIRED BY METAL BUILDING MANUFACTURER.
3. ROUTE 12"Φ OUTDOOR AIR INTAKE DUCT UP THROUGH ROOF TO ROOF CAP. FLASH AND SEAL AS REQUIRED BY METAL BUILDING MANFUACTURER.
4. CONNECT OUTDOOR AIR DUCT WITH BALANCING DAMPER TO RETURN AIR DUCT. REFER TO OUTDOOR AIR CALCULATIONS FOR MINIMUM OUTDOOR AIR.
5. R.A. DUCT DOWN THROUGH MEZZANINE TO LOWER LEVEL. SEE SHEET M-101 FOR CONTINUATION.
6. SUPPLY AIR DUCT DOWN THROUGH MEZZANINE TO LOWER LEVEL. SEE SHEET M-101 FOR CONTINUATION.
7. 12"Φ EXHAUST DUCT UP FROM LOWER LEVEL. ROUTE UP AND CONNECT TO EXHAUST FAN ON ROOF.
8. 8"Φ EXHAUST DUCT UP FROM LOWER LEVEL. ROUTE UP AND CONNECT TO EXHAUST FAN ON ROOF.
9. 14"x14" EXHAUST DUCT ROUTED UP THROUGH ROOF TO EXHAUST FAN. TRANSITION AND CONNECT TO FAN PER THE MANUFACTURERS REQUIREMENTS. INSTALL RG-7 IN DUCT WITH CONTROL DAMPER FOR WAREHOUSE EXHAUST.
10. LOCATION OF DUCT MOUNTED SMOKE DETECTOR. DETECTOR PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
11. SUPPORT UNIT FROM STRUCTURE AS REQUIRED BY THE MANUFACTURER. PROVIDE PROVIDE ADDITIONAL SUPPORT STEEL AND VIBRATION ISOLATION AS REQUIRED.
12. 6"Φ TYPE 'B' DOUBLE WALL FLUE UP THROUGH ROOF. PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & WEATHERHEAD. LOCATE WEATHERHEAD 36" ABOVE EVERYTHING WITHIN 10'. VERIFY 10'-0" FROM ALL OUTDOOR AIR INTAKES.
13. PROVIDE MANUFACTURERS REQUIRED FLUE TERMINATION KIT FOR RADIANT TUBE HEATERS. PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & WEATHERHEAD. LOCATE WEATHERHEAD 36" ABOVE EVERYTHING WITHIN 10'. VERIFY 10'-0" FROM ALL OUTDOOR AIR INTAKES.
14. PROVIDE MANUFACTURERS REQUIRED FRESH AIR INTAKE KIT FOR RADIANT TUBE HEATERS. PROVIDE ROOF THIMBLE, FLASHING, COUNTER FLASHING & WEATHERHEAD.
15. A REFLECTOR SHIELD WILL BE REQUIRED TO BE MOUNTED ON ANY COMBUSTIBLE MATERIALS WITHIN THE CLEARANCE ZONE SPECIFIED BY THE RADIANT TUBE HEATER MANUFACTURER. COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE ALUMINUM SHIELD WITH A 1" AIR GAP..
16. COORDINATE WITH OWNER FOR VENTING REQUIREMENTS OF PART WASHER/DIP TANK. PROVIDE AND INSTALL AS NECESSARY.
17. CONNECT DUCTWORK TO FAN AS REQUIRED BY THE MANUFACTURER AND EXTEND 24" DOWN INTO THE SPACE. COORDINATE WITH METAL BUILDING MANUFACTURER FOR CURB AND ALL ROOFING WORK.
18. CONNECT DUCTWORK TO FAN AS REQUIRED BY THE MANUFACTURER. ROUTE DOWN WALL AND TERMINATE AT 12" AFF. COORDINATE WITH METAL BUILDING MANUFACTURER FOR CURB AND ALL ROOFING WORK.
19. MOUNT BOTTOM OF LOUVER AT 16'. INTERLOCK AS DETAILED IN CONTROL SEQUENCE.
20. SUPPORT RADIANT HEATERS AT 20' AFF PER THE MANUFACTURERS REQUIREMENTS. PROVIDE LOWER CLEARANCE SHIELD IF REQUIRED FOR CLEARANCE TO COMBUSTIBLES.
21. SEE SHEET M-102 FOR LOUVER DETAILS.



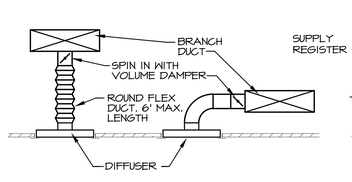
MECHANICAL PARTIAL MEZZANINE LEVEL FLOOR PLAN SOUTH

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



1. MOUNTING ANGLES SHALL BE A MINIMUM OF 1-1/2"x 1-1/2"x 16 GAGE, BOLTED WITH 1/4"x 20 BOLTS, WELDED, OR SCREWED WITH NO. 10 SCREWS TO DAMPER FRAME. USE MINIMUM OF 2 FASTENERS PER SIDE, ONE FASTENER 1/2" FROM EACH CORNER WITH A MAXIMUM FASTENER SPACING OF 8-1/2".
2. GRILLE IS TO BE SCREWED TO 3/4"x 3/4"x 20 GAGE ANGLES PROVIDED WITH DAMPER. DO NOT SCREW GRILLE TO WALL.

FIRE DAMPER AT WALL REGISTER DETAIL
SCALE: NONE



DIFFUSER DETAIL
SCALE: NONE

SUPPLY REGISTER DETAIL
SCALE: NONE

Tran Systems
2400 Pershing Road
Suite 401
Kansas City, Missouri 64108
(p) 816-329-4600
(f) 816-329-4602
www.transystems.com

CONSULTANTS
BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:			
MARK	DATE	DESCRIPTION	
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM	

PROJECT NO:	11699
SCALE:	AS SHOWN
DATE:	03-28-12
DESIGNED BY:	BQ-DS
DRAWN BY:	BQ-DS
CHECKED BY:	EK-RWC

SHEET TITLE:
PARTIAL MEZZ LEVEL MECHANICAL PLAN SOUTH

SHEET NO.
M-201

SHEET ____ OF ____

REVDATE:

EXHAUST FAN SCHEDULE

MARK	MFGR	MODEL	CFM	EXTERNAL STATIC P. IN. WG.	RPM	ELECTRICAL		FAN TYPE	REMARKS
						VOLT/Φ/HZ	PWR		
EF-1	COOK	GN-520	300	0.25	1129	120/1/60	126 W	INLINE	FLUID STORAGE
EF-2	↓	225 ACEB	6,000	↓	884	208/3/60	1-1/2 HP	ROOF EXHAUST	WAREHOUSE COOLING
EF-3	↓	↓	↓	↓	↓	↓	↓	↓	REBUILD SHOP COOLING
EF-4	↓	ACED 120C15D	1,150	0.5	1237	120/1/60	1/4 HP	↓	REBUILD SHOP O/A
EF-5	↓	↓	915	↓	1212	↓	↓	↓	RESTROOMS/ WAREHOUSE O/A
EF-6	↓	30HXEM8B	9,500	0.375	808	208/3/60	1-1/2 HP	ROOF EXHAUST	REPAIR SHOP
EF-7	↓	↓	↓	↓	↓	↓	↓	↓	REPAIR SHOP

NOTES:
1. PROVIDE INSULATED 18" HIGH (AT LOWEST POINT) ROOF CURB BY METAL BUILDING CONTRACTOR, BACKDRAFT DAMPER, BIRD SCREEN, AND NON-FUSED DISCONNECT FOR EF-2, EF-3, EF-4, EF-5, EF-6, AND EF-7.
2. PROVIDE INTEGRAL BACK DRAFT DAMPER, VARI-SPEED CONTROLLER, NON-FUSED DISCONNECT, AND WALL CAP FOR EF-1.
3. PROVIDE VARIABLE SPEED CONTROLLER FOR EF-4, AND EF-5.
4. PROVIDE MAGNETIC MOTOR STARTERS AND INTERLOCK EF-6 AND EF-7 TO OPERATE WHEN ENGAGED BY GAS SENSING CONTROL PANEL. SEE SEQUENCE OF OPERATION OF GAS SENSING PANEL. FANS ARE TO BE WIRED TO OPERATE WHEN LOUVERS L-1, L-2, L-4, AND L-5 ARE OPEN.
5. PROVIDE MAGNETIC STARTER WITH ON/OFF SWITCH FOR EF-2. COORDINATE WITH OWNER FOR SWITCH LOCATION. FAN IS TO OPERATE WHEN LOUVERS L-1 AND L-2 ARE OPEN.
6. PROVIDE MAGNETIC STARTER WITH ON/OFF SWITCH FOR EF-3. COORDINATE WITH OWNER FOR SWITCH LOCATION. FAN IS TO OPERATE WHEN LOUVER L-3 IS OPEN.
7. EF-4, AND EF-5 ARE TO RUN CONTINUOUSLY WHEN THE BUILDING IS OCCUPIED.
8. EF-1 IS TO RUN CONTINUOUSLY.

LOUVER/DAMPER SCHEDULE

MARK	MFGR	MODEL	CFM	SIZE	FREE AREA	NOTES
L-1	RUSKIN	ELC6375DAX	12,500	72"x60"	14.22 sq ft	1,2,3,5
L-2	↓	↓	↓	↓	↓	1,2,3,5
L-3	↓	↓	6,000	48"x52"	8.52 sq ft	1,2,4,5
L-4	↓	CD40	9,500	36"x36"	7.08 sq ft	2,7
L-5	↓	↓	↓	↓	↓	↓
L-6	-	-	-	-	-	-
L-7	↓	ELBD812	275	18"x12"	0.48 sq ft	1,5

NOTES:
1. PROVIDE WITH BIRDSCREEN.
2. PROVIDE WITH RLH-120-S, 120V MOTORIZED, TWO POSITION, SPRING RETURN ACTUATOR WITH INTERNAL END SWITCHES. INTERLOCK WITH EXHAUST FANS TO ENERGIZE FAN WHEN DAMPER IS FULLY OPEN.
3. INTERLOCK TO OPEN DAMPER UPON ACTIVATION OF EF-2, EF-6, OR EF-7
4. INTERLOCK TO OPEN DAMPER UPON ACTIVATION OF EF-3
5. LOUVERS ARE TO BE FIELD PAINTED TO MATCH THE BUILDING EXTERIOR.
6.
7. INTERLOCK TO OPEN DAMPER UPON ACTIVATION OF EF-6, OR EF-7

DIFFUSER SCHEDULE

MARK	MFGR	MODEL	NECK SIZE	FACE SIZE	FINISH	REMARKS
SD-1	TITUS	TMS/3	10"Φ	24"x24"	WHITE	-
SD-2	↓	↓	8"Φ	↓	↓	-
SD-3	↓	TMS/1	6"Φ	12"x12"	↓	-
SD-4	↓	S301FL	12"x6"	-	CLEAR ANNODIZED	WITH AIR SCOOP DAMPER
SD-5	↓	↓	24"x10"	-	↓	↓
RG-1	↓	50F	-	24"x24"	WHITE	-
RG-2	↓	↓	-	12"x24"	↓	-
RG-3	↓	PAR/3	10"Φ	24"x24"	↓	-
RG-4	↓	350RL	18"x14"	-	↓	-
RG-5	↓	↓	36"x14"	-	↓	WITH O.B. DAMPER
RG-6	↓	↓	12"x6"	-	↓	-
RG-7	↓	↓	12"x12"	↓	↓	WITH O.B. DAMPER
RG-8	↓	T-700	12"x12"	-	↓	WITH AUXILIARY FRAME
EG-1	↓	PAR/3	12"Φ	24"x24"	↓	↓
EG-2	↓	↓	6"Φ	12"x24"	↓	↓

GAS SENSING SYSTEM SCHEDULE

GS-1 HONEYWELL ANALYTICS CARBON MONIXIDE AND NITROGEN DIOXIDE GAS SENSING AND ALARM SYSTEM. PROVIDE AND INSTALL (1) VA301C-DLC CONTROLLER WITH DATALOGGER, RELAY MODULE WITH 4 RELAYS, (4) E3SM5CO E3POINT WITH CO SENSOR, WALL MOUNT, MODBUS 24VAC/DC, (4) E3SM E3POINT WITHOUT SENSOR, WALL MOUNT MODBUS 24VAC/DC, (4) E3NO2 NITROGEN DIOXIDE (NO2) -40° TO 50°C E3POINT SENSOR CARTRIDGE, (1) P2W-P 2-WIRE HORN STROBE, STANDARD CANDELA 12 OR 24VDC, (1) MPI20K 120VAC ADAPTER MOUNTING PLATE, (1) LENS-B WALL MOUNT LENS ATTACHMENT, (1) T200VAC2 CLASS 2 TRANSFORMER 200VA, (1) 1304K0002 CAL KIT 58-103L CYLINDERS, (1) M-501054 CAL GAS 58L CYLINDER 5PPM NO2 BAL N2, (1) M500488 CAL GAS 103L CYLINDER 200PPM CO BAL N2.
ANDY SMITH - COMMERCIAL MIDWEST 952-491-1903

GAS FIRED INFRARED HEATER SCHEDULE

MARK	MFGR	MODEL	HEATING (GAS)	ELECTRICAL	LENGTH	REMARKS
			BTUH INPUT	VOLT/Φ/HZ		
RH-1	ROBERTS GORDON	CTH TF-250	250,000	120/1/60	100'-0"	TWIN FIRE, CENTER BURNER
RH-2	↓	↓	↓	↓	↓	↓
RH-3	↓	↓	↓	↓	↓	↓
RH-4	↓	CTH TF-200	200,000	↓	60'-0"	↓

NOTES:
1. PROVIDE ALL UNITS WITH CONTROL VOLTAGE TRANSFORMER, THERMOSTAT, 4"Φ COMBUSTION AIR INTAKE & WEATHERPROOF CAP, (2) 4"Φ FLUES & WEATHERPROOF CAPS, HANG CHAINS, ETC., REQUIRED FOR A COMPLETE SYSTEM

GAS FIRED UNIT HEATER SCHEDULE

MARK	MFGR	MODEL	CFM	HEATING (GAS)		ELECTRICAL		REMARKS
				BTUH INPUT	BTUH OUTPUT	VOLT/Φ/HZ	HP	
UH-1	LENNOX	LF24-250A	4,400	250,000	201,250	120/1Φ/60	1/8	-
UH-2	↓	↓	↓	↓	↓	↓	↓	↓
UH-3	↓	↓	↓	↓	↓	↓	↓	↓
UH-4	↓	↓	↓	↓	↓	↓	↓	↓

NOTES:
1. PROVIDE EACH UNIT ELECTRONIC PILOT IGNITION & ALUMINIZED STEEL HEAT EXCHANGER.
2. PROVIDE EACH UNIT WITH UNIT MOUNTED THERMOSTAT & CONTROL VOLTAGE TRANSFORMER.

ELECTRIC UNIT HEATER SCHEDULE

MARK	MFGR	MODEL NO.	BTUH	ELECTRICAL		NOTES
				VOLT/Φ/HZ	WATTS	
UH-5	RAYHALL	F2F5103N	11,200	208/3/60	3,300	NOTE 1
UH-6	-	-	-	-	-	-

NOTES:
1. PROVIDE MOUNTING BRACKET, INTEGRAL DISCONNECT & INTEGRAL THERMOSTAT FOR EACH UNIT.

ELECTRIC CEILING MOUNTED CABINET HEATER SCHEDULE

MARK	MFGR	MODEL NO.	BTUH	ELECTRICAL		NOTES
				VOLT/Φ/HZ	WATTS	
CH-1	MARKEL	F3484	13,600	208/1/60	4,000	1, 2

NOTES:
1. PROVIDE INTEGRAL DISCONNECT & WALL MOUNTED THERMOSTAT FOR EACH UNIT.
2. PROVIDE APPROPRIATE MOUNTING BRACKET TO RECESS MOUNT UNIT.

GAS FURNACE SCHEDULE

MARK	MFGR	MODEL NO.	CFM	EXT. STATIC P. IN. WG.	HEATING (GAS)		ELECTRICAL		OUTSIDE AIR (CFM)	REMARKS
					BTUH INPUT	BTUH OUTPUT	VOLT/Φ/HZ	HP		
F-1	LENNOX	ML193UH070P24B	800	0.6	66,000	62,000	115/1/60	1/5	76	-
F-2	↓	↓	↓	↓	↓	↓	↓	↓	85	-
F-3	↓	ML193UH110P48C	1,600	0.5	110,000	104,000	↓	1/2	371	-
F-4	↓	↓	↓	↓	↓	↓	↓	↓	281	-
F-5	↓	ML193UH135P60D	2,000	0.8	132,000	123,000	↓	1	445	TWINNED
F-6	↓	↓	↓	↓	↓	↓	↓	↓	445	TWINNED

NOTES:
1. PROVIDE 1" THICK THROWAWAY TYPE FILTER WITH HOLDING FRAME FOR EACH UNIT.
2. PROVIDE EACH UNIT WITH 7-DAY PROGRAMMABLE HEAT/COOL/AUTO CHANGEOVER THERMOSTAT.
3. CONDENSING UNITS, COOLING COILS, AND FURNACES SHALL ALL BE OF THE SAME MANUFACTURER.
4. UNITS F-5 AND F-6 ARE TWINNED. PROVIDE TWINING KIT AS NECESSARY.
5. EXTERNAL STATIC PRESSURE LISTED REPRESENTS STATIC PRESSURE REQUIRED FOR DUCTWORK AND DIFFUSERS OUTSIDE THE HVAC UNIT COMPLETELY INDEPENDENT OF ANY PRESSURE DROP THROUGH THE HVAC EQUIPMENT INCLUDING BUT NOT LIMITED TO FILTERS AND COILS.
6. PROVIDE GALVANIZED WATERTIGHT DRAIN PAN AND CONDENSATE FLOAT SWITCH TO DE-ENERGIZE THE FURNACE IF THE DRAIN PAN FILLS WITH WATER.

CONDENSING UNIT SCHEDULE

MARK	MFGR	MODEL NO.	COOLING				ELECTRICAL	EVAP. COIL MODEL NO.	REMARKS
			TOTAL BTUH	SENS. BTUH	AMB.	EVAP. EAT DB/WB	VOLT/Φ/HZ		
CU-1	LENNOX	13ACX024	24,000	17,500	105	80/67	208/1/60	C33-25B	-
CU-2	↓	↓	↓	↓	↓	↓	↓	CH33-25B	-
CU-3	↓	TSA048	48,000	35,000	↓	↓	208/3/60	C33-49C	-
CU-4	↓	↓	↓	↓	↓	↓	↓	↓	-
CU-5	↓	TSA060	60,000	43,800	↓	↓	↓	C33-60D	-
CU-6	↓	↓	↓	↓	↓	↓	↓	↓	-

NOTES:
1. PROVIDE TIME DELAY ON COMPRESSOR RE-START, CRANKCASE HEATER, AND COMPRESSOR LOCK-OUT WITH AMBIENT BELOW 35 °F.
2. PROVIDE FUSED DISCONNECT FOR EACH UNIT.
3. PROVIDE CONCRETE OR PRE-MAUFACTURED POLYOLEFIN PAD FOR EACH UNIT.

REVDATE:

Tran Systems
2400 Pershing Road
Suite 401
Kansas City, Missouri 64108
(p) 816-329-4600
(f) 816-329-4602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

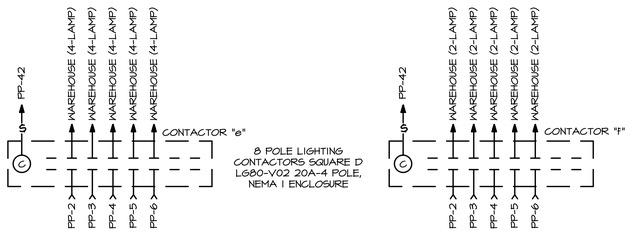
INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:			
MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

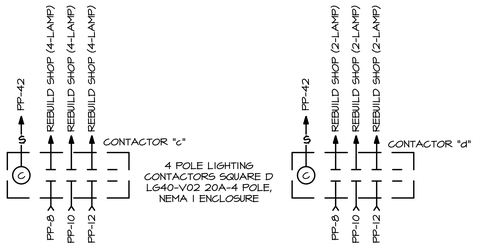
SHEET TITLE:
MECHANICAL EQUIPMENT SCHEDULES

SHEET NO.
M-402
SHEET ____ OF ____



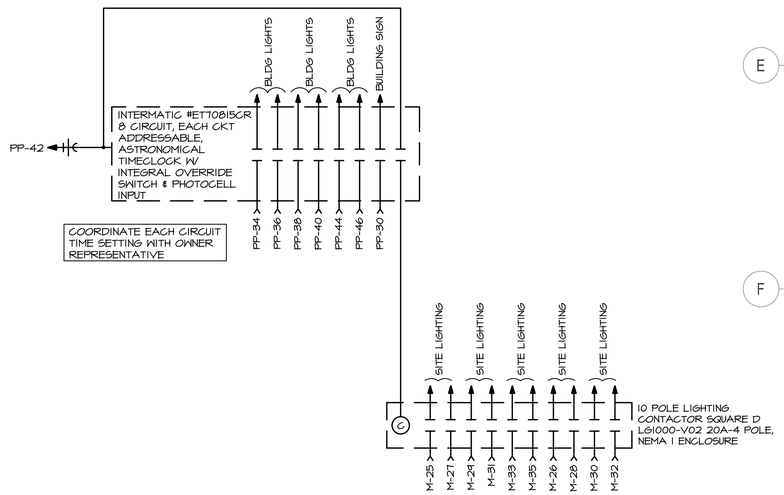
WAREHOUSE LIGHTING CONTROL DIAGRAM

SCALE: NONE



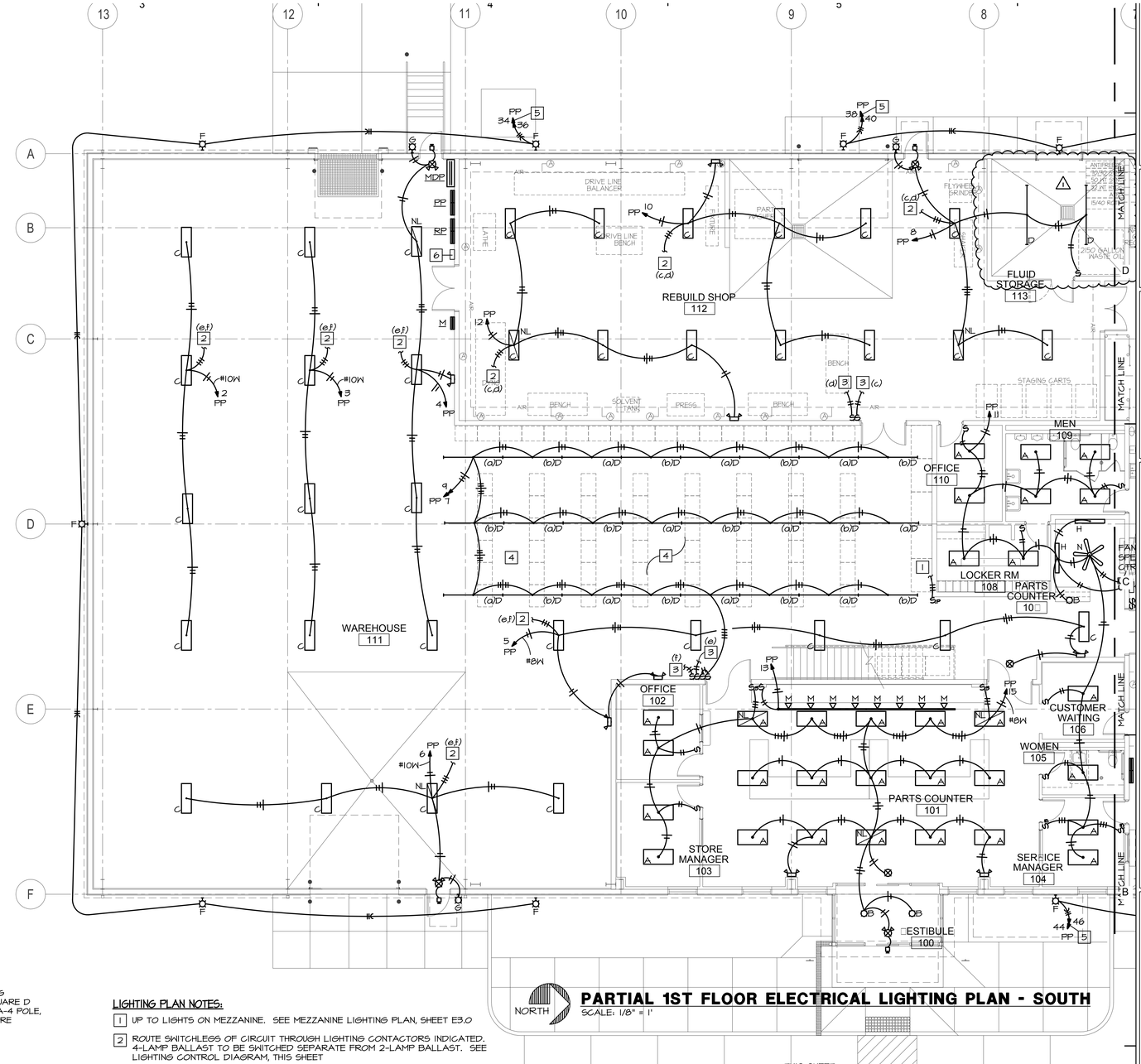
REBUILD SHOP LIGHTING CONTROL DIAGRAM

SCALE: NONE



EXTERIOR LIGHTS/SIGNAGE CONTROL DIAGRAM

SCALE: NONE

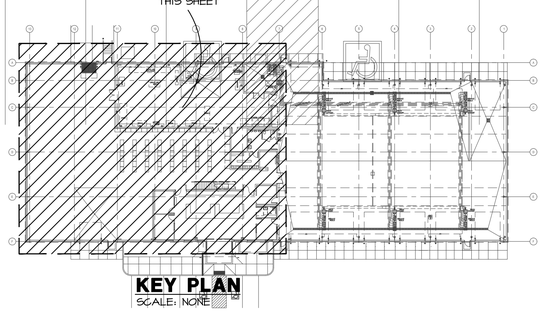


LIGHTING PLAN NOTES:

1. UP TO LIGHTS ON MEZZANINE. SEE MEZZANINE LIGHTING PLAN, SHEET E3.0
2. ROUTE SWITCHLEGS OF CIRCUIT THROUGH LIGHTING CONTACTORS INDICATED. 4-LAMP BALLAST TO BE SWITCHED SEPARATE FROM 2-LAMP BALLAST. SEE LIGHTING CONTROL DIAGRAM, THIS SHEET
3. CONNECT SWITCHES TO LIGHTING CONTACTORS INDICATED. SEE LIGHTING CONTROL DIAGRAM, SHEET E4.0
4. LIGHT FIXTURES IN THIS AREA TO BE WIRED FOR "EVERY-OTHER-FIXTURE" SWITCHING AS DESIGNATED BY (a) AND (b). ALL FIXTURES DESIGNATED (a) TO BE ON ONE 20A/1P BREAKER, ALL FIXTURES DESIGNATED (b) TO BE ON A SEPARATE 20A/1P BREAKER.
5. ROUTE CIRCUIT TO PANEL INDICATED VIA EXTERIOR LIGHTING CONTROLLER, SEE DETAIL, THIS SHEET.
6. LOCATION OF LIGHTING CONTACTORS c, d, e AND f AND EXTERIOR LIGHTING CONTROLLER.

PARTIAL 1ST FLOOR ELECTRICAL LIGHTING PLAN - SOUTH

SCALE: 1/8" = 1'



KEY PLAN

SCALE: NONE

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

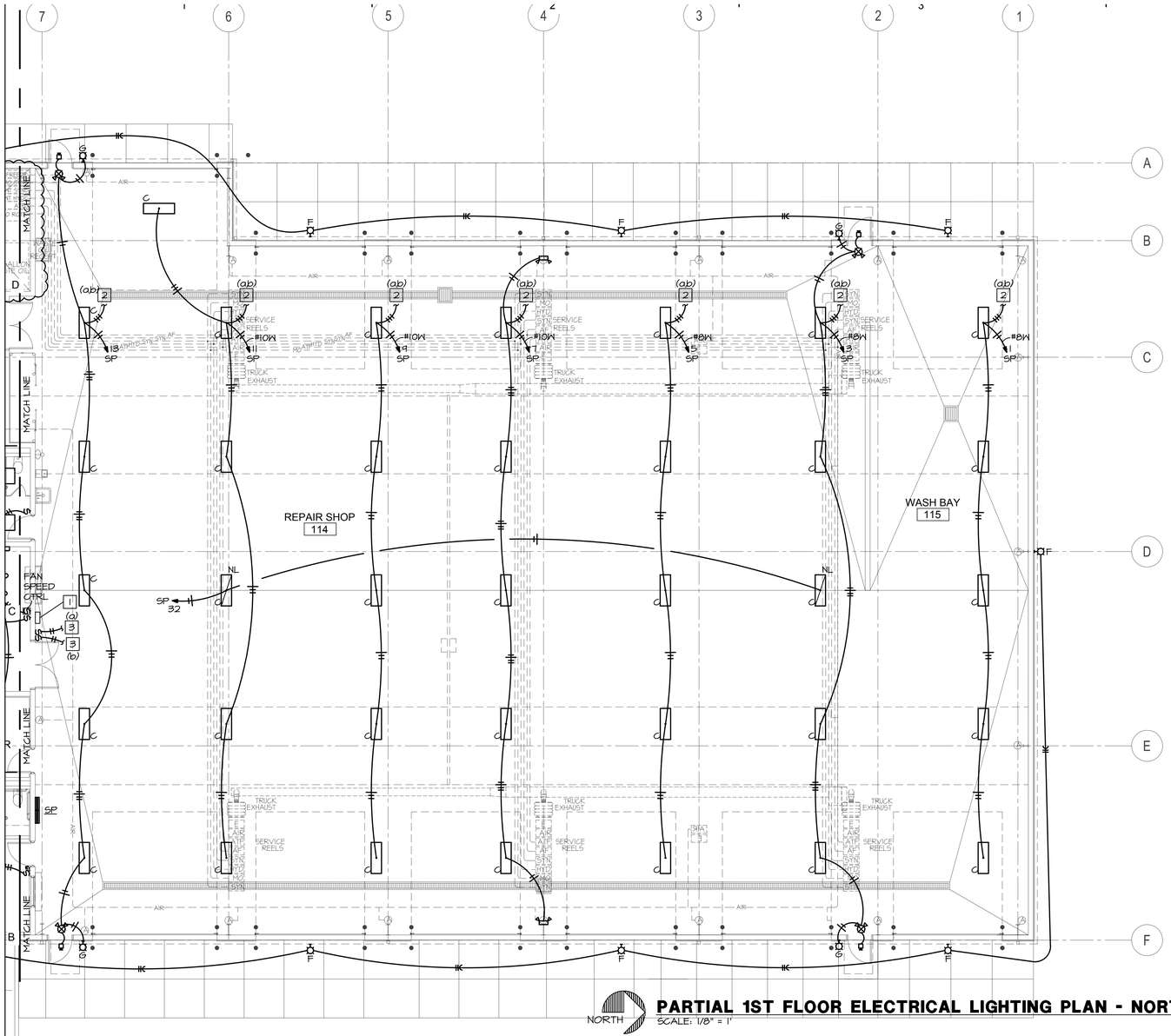
PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
ELECTRICAL LIGHTING PLAN SOUTH

SHEET NO.
E-101
SHEET ____ OF ____

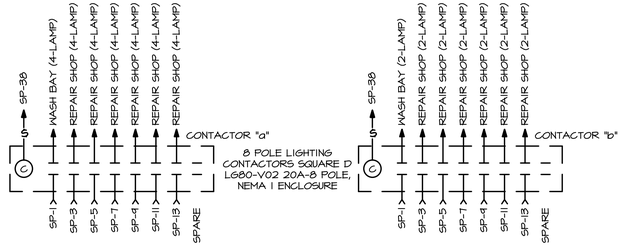
REVDATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING



PARTIAL 1ST FLOOR ELECTRICAL LIGHTING PLAN - NORTH

SCALE: 1/8" = 1'

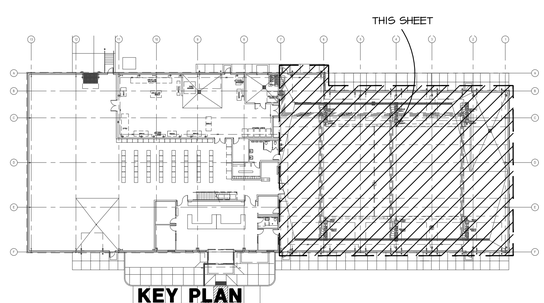


REPAIR SHOP LIGHTING CONTROL DIAGRAM

SCALE: NONE

LIGHTING PLAN NOTES:

1. REPAIR SHOP LIGHTING CONTACTORS. SEE CONTROL DETAIL, THIS SHEET.
2. ROUTE SWITCHLESS OF CIRCUIT THROUGH LIGHTING CONTACTORS INDICATED. 4-LAMP BALLAST TO BE SWITCHED SEPARATE FROM 2-LAMP BALLAST. SEE LIGHTING CONTROL DIAGRAM, THIS SHEET
3. CONNECT SWITCHES TO LIGHTING CONTACTORS INDICATED. SEE LIGHTING CONTROL DIAGRAM, SHEET E4.0



KEY PLAN

SCALE: NONE

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Bender, Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
ELECTRICAL LIGHTING PLAN NORTH

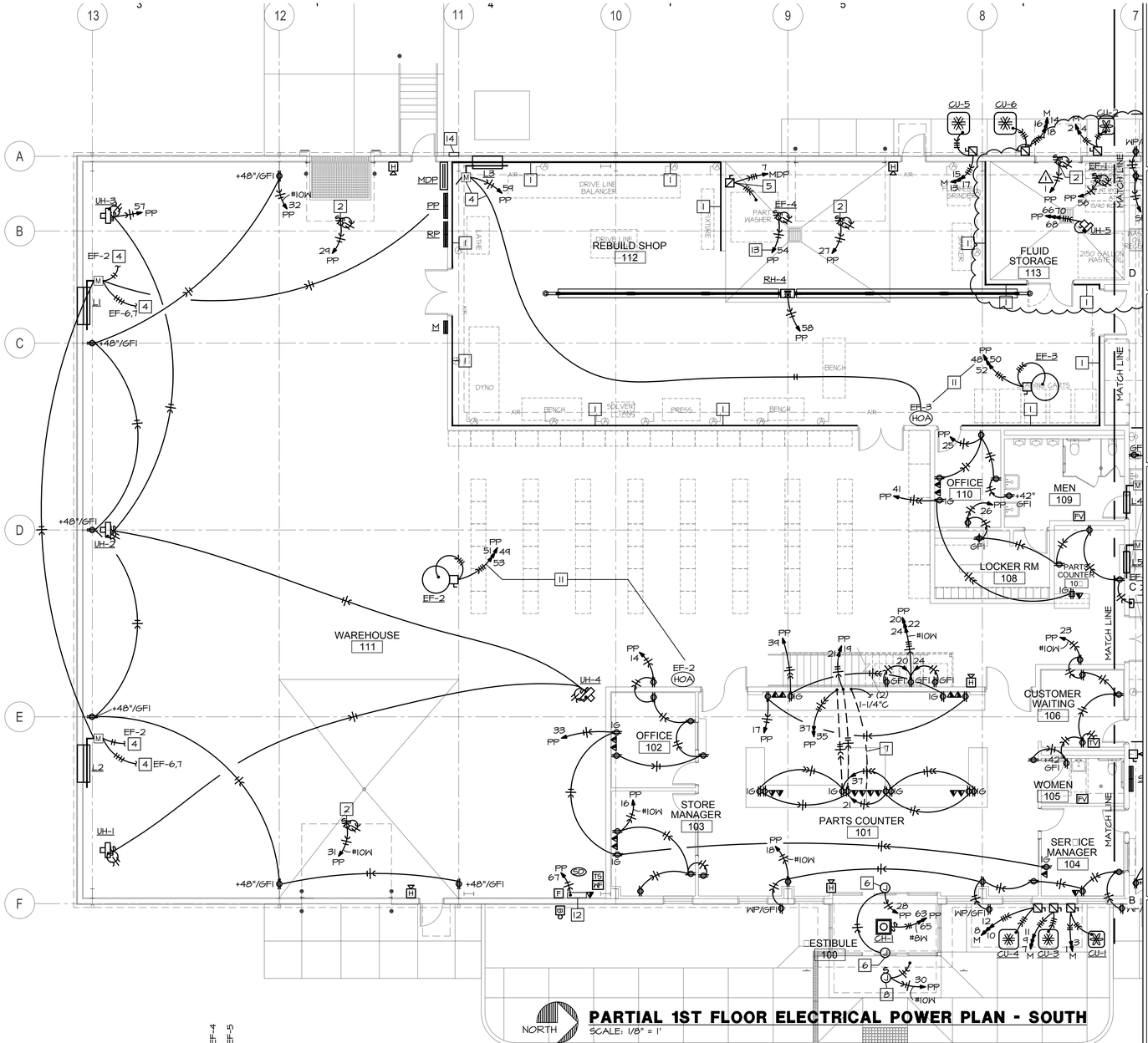
SHEET NO.
E-102
SHEET ____ OF ____

REVDATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING

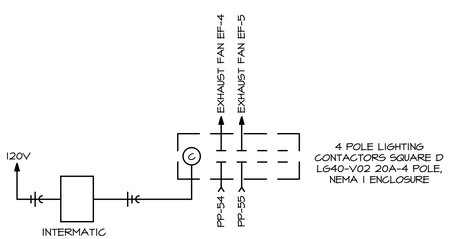
ELECTRICAL PLAN NOTES:

1. PROVIDE WIREMOLD #66000 OR EQUAL TWO-PIECE SURFACE METAL RACEWAY IN LENGTH INDICATED. MOUNT RACE WAY 48" AFF. PROVIDE ALL NECESSARY FITTINGS, END CAPS, AND HARDWARE FOR A COMPLETE INSTALLATION.
2. JUNCTION BOX FOR CONNECTION TO OVERHEAD DOOR OPERATOR. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. PROVIDE CONTROL WIRING AND FINAL TERMINATION TO LOCATION DIRECTED BY OWNER.
3. NOT USED
4. PROVIDE RELAY(S) AS REQUIRED TO INTERLOCK LOUVER WITH EXHAUST FAN INDICATED. WHEN VENTILATION IS CALLED FOR, MOTORIZED LOUVER DAMPER IS TO OPEN. LOUVER IS EQUIPPED WITH END-TRAVEL SWITCHES, WHICH CLOSE WHEN DAMPER IS FULLY OPEN. ONCE DAMPER IS FULLY OPEN, EXHAUST FAN MAY START. PROVIDE CONTROL WIRING BETWEEN END-TRAVEL SWITCHES AND EXHAUST FAN STARTER FOR OPERATION AS INDICATED.
5. FUSED DISCONNECT FOR PARTS WASHER. VERIFY EXACT LOCATION & ELECTRICAL REQUIREMENTS, CONNECT TO PARTS WASHER PER MANUFACTURER'S INSTRUCTIONS.
6. PROVIDE POWER FOR AUTOMATIC DOOR OPENER. COORDINATE EXACT LOCATION & REQUIREMENTS WITH DOOR SUPPLIER.
7. PROVIDE (2) 1-1/4"C UNDER SLAB FOR PHONE & DATA CABLING TO SALES DESK. VERIFY EXACT STUB-UP LOCATION.
8. JUNCTION BOX WITH TOGGLE DISCONNECT PER NEC FOR CONNECTION TO BUILDING MOUNTED INTERNALLY ILLUMINATED SIGNAGE. VERIFY EXACT LOCATION & ELECTRICAL REQUIREMENTS. CONNECT TO SIGN PER SUPPLIER'S INSTRUCTIONS. ROUTE CIRCUIT TO PANEL INDICATED VIA EXTERIOR LIGHTING/SIGNAGE CONTROL, SEE DETAIL ON SHEET E101.
9. NOT USED
10. NOT USED
11. ROUTE CIRCUIT TO PANEL VIA STARTER. STARTER PROVIDED BY MECHANICAL CONTRACTOR.
12. FIRE ALARM CONTROL PANEL.
13. ROUTE CIRCUIT TO PANEL VIA EXHAUST CONTACTOR, CONTROLLED BY TIMECLOCK, SEE DETAIL, SHEET E201. FANS ROUTED THROUGH THIS CONTACTOR TO RUN CONTINUOUSLY WHILE THE BUILDING IS OCCUPIED.
14. GENERATOR CONNECTION BOX - SEE RISER DIAGRAM.



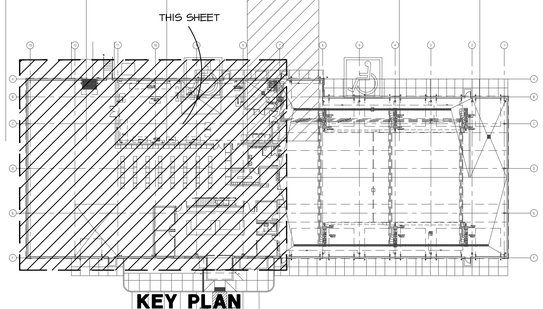
PARTIAL 1ST FLOOR ELECTRICAL POWER PLAN - SOUTH

SCALE: 1/8" = 1'



EXHAUST FAN CONTACTOR DETAIL

SCALE: NONE



KEY PLAN

SCALE: NONE

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)268-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS: MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

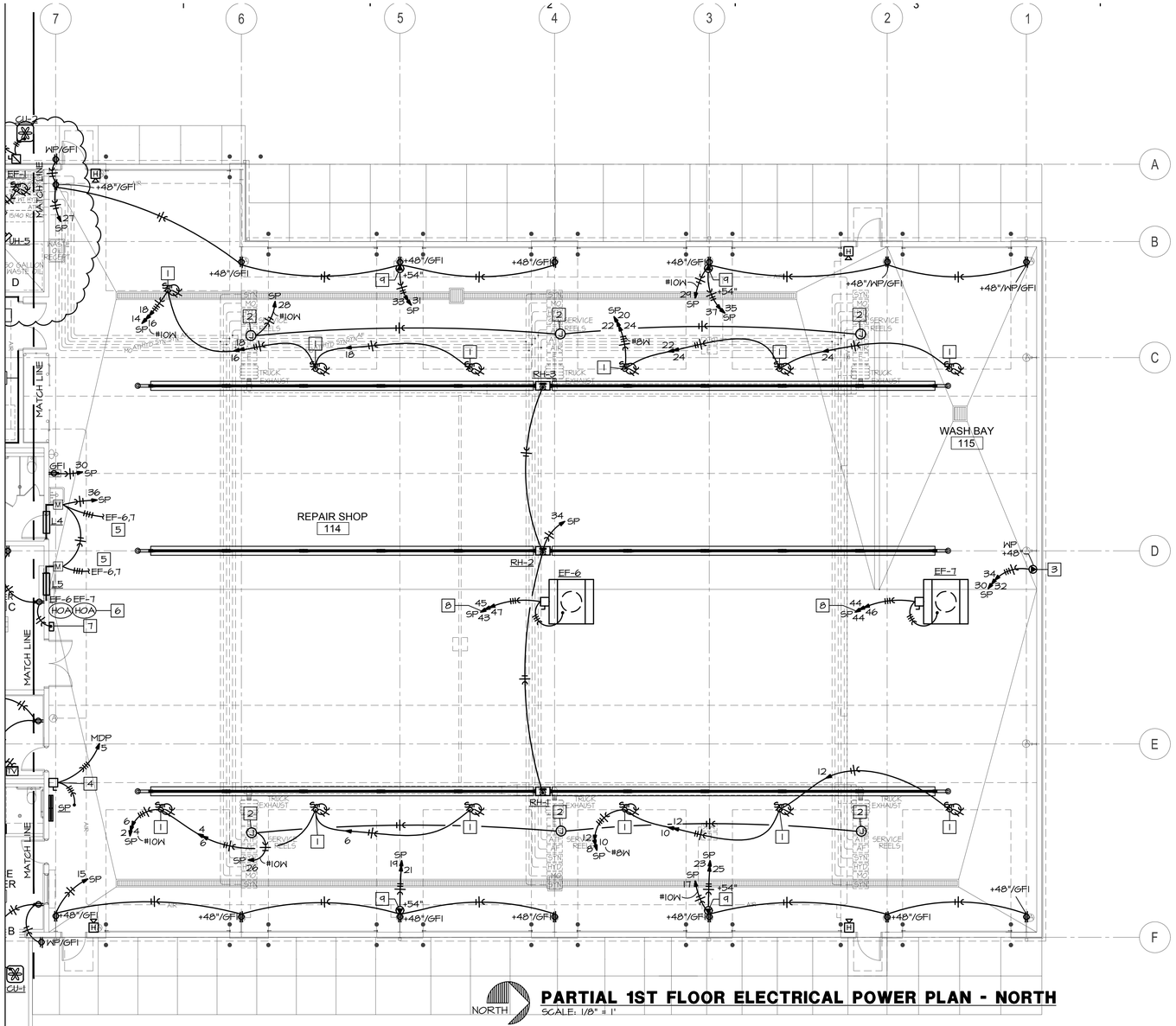
PROJECT NO:	11699
SCALE:	AS SHOWN
DATE:	03-28-12
DESIGNED BY:	BQ-DS
DRAWN BY:	BQ-DS
CHECKED BY:	EK-RWC

SHEET TITLE:
ELECTRICAL POWER PLAN SOUTH

SHEET NO.
E-201
SHEET ____ OF ____

REVDATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING



PARTIAL 1ST FLOOR ELECTRICAL POWER PLAN - NORTH

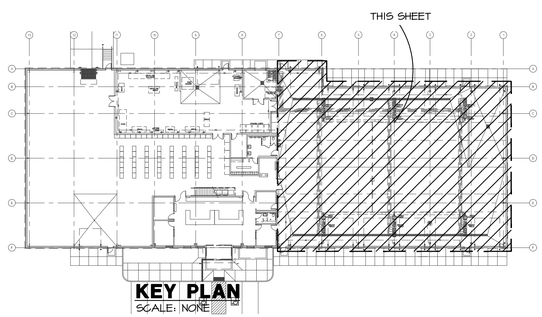
SCALE: 1/8" = 1'

ELECTRICAL PLAN NOTES:

1. JUNCTION BOX FOR CONNECTION TO OVERHEAD DOOR OPERATOR. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. PROVIDE CONTROL WIRING AND FINAL TERMINATION TO LOCATION DIRECTED BY OWNER.
2. JUNCTION BOX FOR CONNECTION TO OVERHEAD CORD DROP REEL. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
3. HEAVY DUTY OUTLET FOR STEAM WASHER. VERIFY EXACT LOCATION & NEMA CONFIGURATION.
4. CONNECT TO OVERHEAD BRIDGE CRANE PER MANUFACTURER'S SPECIFICATIONS. VERIFY LOCATION & ALL ELECTRICAL REQUIREMENTS WITH SUPPLIER.
5. PROVIDE RELAY(S) AS REQUIRED TO INTERLOCK LOUVER WITH EXHAUST FAN INDICATED. WHEN VENTILATION IS CALLED FOR, MOTORIZED LOUVER DAMPER IS TO OPEN. LOUVER IS EQUIPPED WITH END-TRAVEL SWITCHES, WHICH CLOSE WHEN DAMPER IS FULLY OPEN. ONCE DAMPER IS FULLY OPEN, EXHAUST FAN MAY START. PROVIDE CONTROL WIRING BETWEEN END-TRAVEL SWITCHES AND EXHAUST FAN STARTER FOR OPERATION AS INDICATED.
6. MAGNETIC STARTERS PROVIDED BY HVAC CONTRACTOR. ROUTE EXHAUST FAN CIRCUIT TO PANEL INDICATED VIA RESPECTIVE STARTER. VERIFY EXACT LOCATION.
7. GAS SENSOR CONTROL PANEL, CONNECT TO AUXILLARY CONTACTS ON RESPECTIVE MAGNETIC STARTER WITH HOA SWITCH, WHEN CO DETECTOR IS IN ALARM CONDITION RESPECTIVE EXHAUST FAN SHALL ENERGIZE.
8. ROUTE CIRCUIT TO PANEL VIA TO STARTER, SEE PLAN NOTE 6.
9. HEAVY DUTY OUTLET FOR WELDER. VERIFY NEMA CONFIGURATION & ELECTRICAL REQUIREMENTS WITH OWNER.

GENERAL NOTES:

1. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
2. IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN THE PHASES OF THE SYSTEM. REGARDLESS OF CIRCUITING INDICATED.
3. ALL EXPOSED SURFACE WALL MOUNTED RACEWAYS SHALL BE IN EMT CONDUIT WITH COMPRESSION FITTINGS AS REQUIRED.
4. DISCONNECTS FOR CONDENSING UNITS TO BE PROVIDED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR. ALL OTHER DISCONNECTS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
5. ALL CONDUITS IN REPAIR SHOP AND WASH BAY SHALL BE ROUTED OVERHEAD. ANY CONDUITS RUN UNDERGROUND TO EQUIPMENT IN REPAIR OR REBUILD SHOP MUST BE RIGID STEEL. COORDINATE CONDUIT HANGERS WITH STRUCTURAL MEMBERS, RIGID INSULATION, AND WORK OF OTHER TRADES.
6. ALL 120 VOLT RECEPTACLES IN REPAIR SHOP AND WASH BAY SHALL BE GFI TYPE OR PROTECTED BY GFI TYPE CIRCUIT BREAKERS.



KEY PLAN

SCALE: NONE

REVDATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)262-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
ELECTRICAL POWER PLAN NORTH

SHEET NO.
E-202
SHEET OF

ELECTRICAL SYMBOLS LIST

CIRCUITING & NOTES

+48"	SPECIAL MOUNTING HEIGHT FOR ASSOCIATED DEVICE. (CENTERLINE OF DEVICE)
GFI	GROUND FAULT INTERRUPTER DEVICE.
WP	WEATHERPROOF ENCLOSURE ON DEVICE.
IG	ISOLATED GROUND DEVICE.
[X]	ELECTRICAL FLOOR PLAN NOTE WITH DESIGNATION.
2 LP	CONDUIT CONCEALED WHERE POSSIBLE OR AS NOTED, ARROWS INDICATE HOME RUN TO PANEL. CIRCUIT NUMBERS INDICATED.
	#12 WIRE IN CONDUIT, UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION.
	GROUNDING CONDUCTOR, #12 WIRE UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION.
	CONDUIT ROUTED UNDER SLAB.

LIGHTING

	EMERGENCY TWIN HEAD LIGHT FIXTURE.
	EXIT LIGHT WITH DIRECTIONAL ARROWS INDICATED.
A	FLUORESCENT STRIP FIXTURE WITH TYPE DESIGNATION.
A	FLUORESCENT FIXTURE WITH TYPE DESIGNATION.
A NL	NIGHT LIGHT, CONNECT TO UNSWITCHED CIRCUIT.
A	CEILING OR RECESSED FIXTURE WITH TYPE DESIGNATION.

POWER DEVICES

	DUPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE.
	FOURPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE.
	DEVICE MOUNTED ABOVE COUNTER AND/OR SPLASH GUARD.
	HEAVY DUTY OUTLET - NEMA CONFIGURATION SIZE PER EQUIPMENT MANUFACTURER'S RECOMMENDATION.
	PANEL BOARD, TOP OF BOX 6'-0" AFF.
J	JUNCTION BOX.
	NON-FUSED DISCONNECT SWITCH.
	FUSED DISCONNECT SWITCH.
	MOTOR WITH DESIGNATION.
	MAGNETIC STARTER PROVIDED BY MECHANICAL CONTRACTOR.

CONTROLS

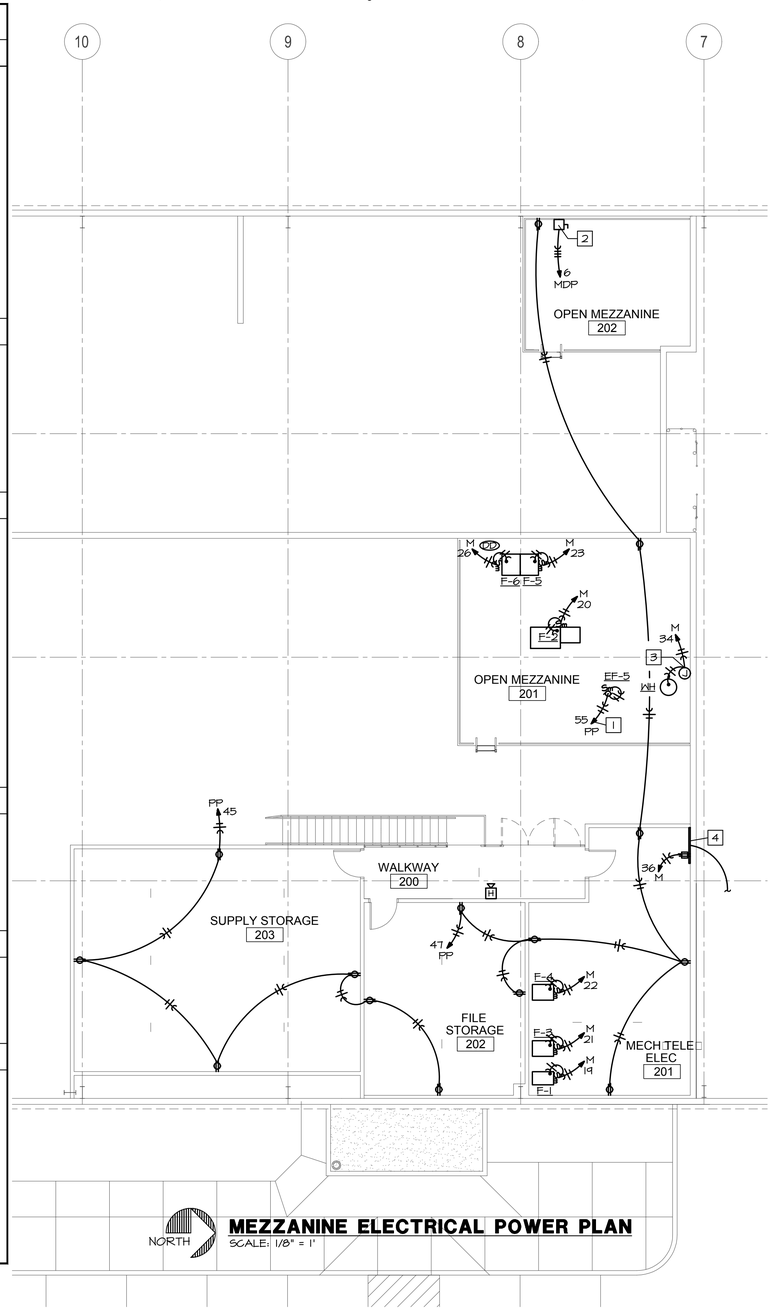
S	SINGLE POLE WALL SWITCH, TOP OF BOX AT 48" AFF.
S_2	TWO POLE WALL SWITCH.
S_3	THREE-WAY WALL SWITCH.
S_O	INFRARED OCCUPANCY SENSOR, WATT STOPPER #WS-200.
S_m	MANUAL MOTOR STARTER WITH OVERLOADS.

COMMUNICATIONS

	COMMUNICATIONS OUTLET WITH ¾" CONDUIT STUBBED UP TO ABOVE ACCESSIBLE CEILING, BOTTOM OF BOX AT 16", UNLESS NOTED OTHERWISE. PROVIDE WITH PULL STRING.
▼	DATA/TELEPHONE

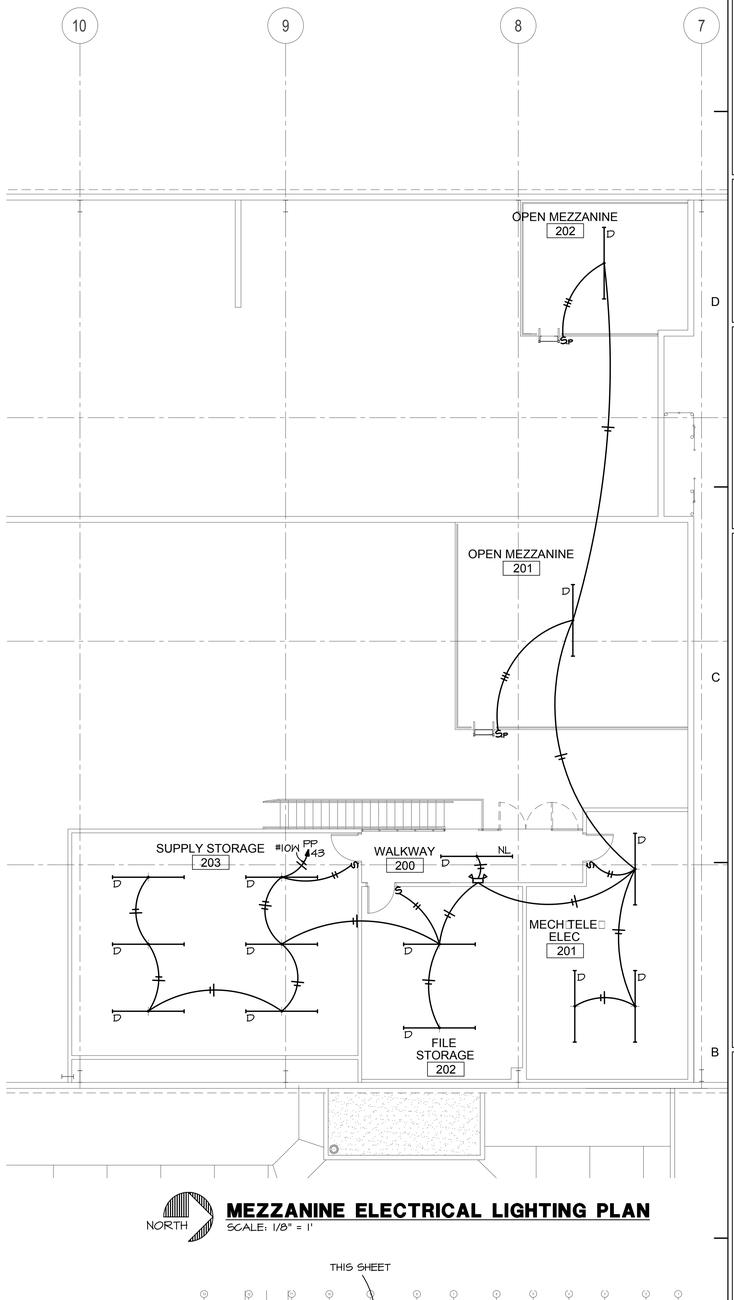
FIRE ALARM

SD	CEILING MOUNTED SMOKE DETECTOR.
DD	DUCT MOUNTED SMOKE DETECTOR.
F	FIRE ALARM PULL STATION, TOP OF BOX AT 48" AFF.
HK	FIRE ALARM HORN/STROBE COMBINATION SIGNAL, CENTERLINE 6'-8" AFF.
FV	FIRE ALARM VISUAL STROBE, CENTERLINE 6'-8" AFF.
BD	EXTERIOR FIRE ALARM BELL, CENTERLINE 11'-8".
WF	WATERFLOW SWITCH.
TS	TAMPER SWITCH.



MEZZANINE ELECTRICAL POWER PLAN

SCALE: 1/8" = 1'

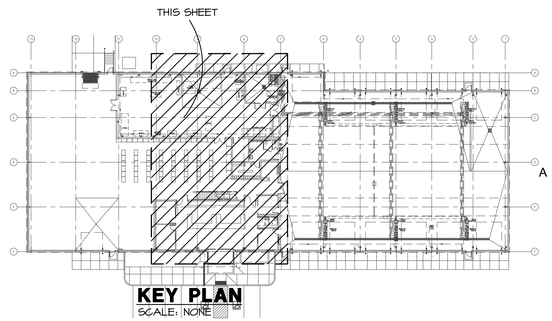


MEZZANINE ELECTRICAL LIGHTING PLAN

SCALE: 1/8" = 1'

ELECTRICAL PLAN NOTES:

1. ROUTE CIRCUIT TO PANEL VIA EXHAUST CONTACTOR, CONTROLLED BY TIMECLOCK, SEE DETAIL, SHEET E201. FANS ROUTED THROUGH THIS CONTACTOR TO RUN CONTINUOUSLY WHILE THE BUILDING IS OCCUPIED.
2. CONNECT TO AIR-COMPRESSOR PER MANUFACTURER'S INSTRUCTIONS. VERIFY EXACT LOCATION & ELECTRICAL REQUIREMENTS.
3. CONNECT TO WATER HEATER CONTROLS PER MANUFACTURER'S INSTRUCTIONS.
4. 4'x8'x3/4" PLYWOOD TELEPHONE BACKBOARD WITH SIEMENS #EGBB-5 GROUND BAR AND #6CU BOND TO BUILDING ELECTRODE SYSTEM. PROVIDE (2) 3"C TO PROPERTY LINE FOR BUILDING TELEPHONE SERVICE. TERMINATE AT LOCATION DIRECTED BY LOCAL SERVICE PROVIDER. VERIFY ROUTING & DISTANCE.



KEY PLAN

SCALE: NONE

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder, Shawnee, Ks. 66203 (913)268-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO:	11699
SCALE:	AS SHOWN
DATE:	03-28-12
DESIGNED BY:	BQ-DS
DRAWN BY:	BQ-DS
CHECKED BY:	EK-RWC

SHEET TITLE:
MEZZANINE ELECTRICAL PLAN

SHEET NO.
E-301
SHEET ____ OF ____

REV/DATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING

PANEL: PP		VOLTS/PHASE/WIRE: 120/208V/3Φ/4W						LOCATION: WAREHOUSE WALL			MOUNTING: SURFACE		
BUS: 225A		MAIN: MLO						IC: 10,000 RMS SYM. AMPS			FEEDER: SEE RISER DIAGRAM		
CKT NO	DESCRIPTION	BRKR AMPS	BRKR POLE	WIRE SIZE	ΦA	ΦB	ΦC	ΦA	ΦB	ΦC	WIRE SIZE	BRKR POLE	BRKR AMPS	DESCRIPTION	CKT NO
1	OVERHEAD DOOR	20	1	12	1200			1460			10	1	20	WAREHOUSE LIGHTING	2
3	WAREHOUSE LIGHTING	20	1	10		1460			1460		12	1	20	WAREHOUSE LIGHTING	4
5	WAREHOUSE LIGHTING	20	1	8			1825			1456	10	1	20	WAREHOUSE LIGHTING	6
7	WAREHOUSE LIGHTING	20	1	10	1520			1825			12	1	20	REBUILD SHOP LIGHTING	8
9	WAREHOUSE LIGHTING	20	1	10		1520			1825		12	1	20	REBUILD SHOP LIGHTING	10
11	PARTS/LOCKER/OFC LTS	20	1	10			1284			1045	10	1	20	REBUILD SHOP LIGHTING	12
13	PARTS COUNTER TRACK	20	1	12	600			900			12	1	20	OFFICE RECEPTACLES	14
15	PARTS COUNTER LIGHTS	20	1	8		1615			720		12	1	20	OFFICE RECEPTACLES	16
17	PARTS COUNTER RECS	20	1	12			360			1260	10	1	20	PARTS COUNTER RECS	18
19	PARTS COUNTER RECS	20	1	12	360			800			10	1	20	VENDING MACHINES	20
21	PARTS COUNTER RECS	20	1	12		360			800		10	1	20	VENDING MACHINES	22
23	RESTRM/CUST WAIT REC	20	1	12			1260			800	10	1	20	VENDING MACHINES	24
25	OFFICE RECEPTACLES	20	1	12	720			900			12	1	20	PARTS/OFFICE RECEPTS	26
27	OVERHEAD DOOR	20	1	12		1200			850		12	1	20	AUTOMATIC DOOR	28
29	OVERHEAD DOOR	20	1	12			1200			1200	12	1	20	BUILDING SIGN	30
31	OVERHEAD DOOR	20	1	10	1200			720			12	1	20	WAREHOUSE RECEPTS	32
33	OFFICE 16 RECEPTACLES	20	1	12		900			1145		10	2	20	BUILDING LIGHTS	34
35	OFFICE 16 RECEPTACLES	20	1	12			900			1145					36
37	OFFICE 16 RECEPTACLES	20	1	12	900			1145			10	2	20	BUILDING LIGHTS	38
39	OFFICE 16 RECEPTACLES	20	1	12		900			1145						40
41	OFFICE 16 RECEPTACLES	20	1	12			900			50	12	1	20	LTG CONTACTORS	42
								SECTION 2							
43	MEZZANINE LIGHTS	20	1	10	1210				1145		10	2	20	BUILDING LIGHTS	44
45	MEZZANINE RECEPTS	20	1	10		1080				1145					46
47	MEZZANINE RECEPTS	20	1	10			1080			828					48
49	EXHAUST FAN EF-2	20	3	12	828			828			12	3	20	EXHAUST FAN EF-3	50
51						828			828						52
53							828			480	12	1	20	EXHUAST FAN EF-4	54
55	EXHAUST FAN EF-5	20	1	12	480			126			12	1	20	EXHAUST FAN EF-1	56
57	WAREHOUSE UNIT HTRS	20	1	12		960			480		12	1	20	~~RADIANT HEATER~~	58
59	MOTORIZED LOUVERS	20	1	12			500								60
61	BOILER CONTROLS	20	1	12	500							3	20	SPARE	62
63	CEILING HEATER CH-1	30	2	8		2000									64
65							2000			1100					66
67	FIRE ALARM PANEL	20	1	12	50			1100			12	3	20	UNIT HEATER UH-5	68
69	PUMP P-1	20	1	12		864			1100						70
71	UNDERFLOOR CNTRL PNL	20	1	12			500						20	~~SPARE~~	72
73	PUMPS P-3 & P-4	20	3	12	1152							1	20	SPARE	74
75						1152						1	20	SPARE	76
77							1152					1	20	SPARE	78
79	SPARE	20	1									1	20	SPARE	80
81	SPARE	20	1									1	20	SPARE	82
83	SPARE	20	1									1	20	SPARE	84
NOTES: PROVIDE ISOLATED GROUND BUS					10520	14694	13134	10944	11448	4414	TOTAL VA				70,754
					21464		26197		25353						
											AMPS @	208	3Φ		196.41

PANEL: SP		VOLTS/PHASE/WIRE: 120/208V/3Φ/4W						LOCATION: REPAIR SHOP			MOUNTING: SURFACE		
BUS: 225A		MAIN: MLO						IC: 10,000 RMS SYM. AMPS			FEEDER: SEE RISER DIAGRAM		
CKT NO	DESCRIPTION	BRKR AMPS	BRKR POLE	WIRE SIZE	ΦA	ΦB	ΦC	ΦA	ΦB	ΦC	WIRE SIZE	BRKR POLE	BRKR AMPS	DESCRIPTION	CKT NO
1	REPAIR SHOP LIGHTING	20	1	8	1460			1200			12	1	20	OVERHEAD DOOR	2
3	REPAIR SHOP LIGHTING	20	1	8		1460			1200		12	1	20	OVERHEAD DOOR	4
5	REPAIR SHOP LIGHTING	20	1	8			1460			1200	12	1	20	OVERHEAD DOOR	6
7	REPAIR SHOP LIGHTING	20	1	10	1460			1200			8	1	20	OVERHEAD DOOR	8
9	REPAIR SHOP LIGHTING	20	1	10		1460			1200		8	1	20	OVERHEAD DOOR	10
11	REPAIR SHOP LIGHTING	20	1	10			1460			1200	8	1	20	OVERHEAD DOOR	12
13	REPAIR SHOP LIGHTING	20	1	12	1460			1200			10	1	20	OVERHEAD DOOR	14
15	REPAIR SHOP RECEPTS	20	1	12		540			1200		10	1	20	OVERHEAD DOOR	16
17	REPAIR SHOP RECPETS	20	1	10			540			1200	10	1	20	OVERHEAD DOOR	18
19	WELDER	50	2	6	3450			1200			8	1	20	OVERHEAD DOOR	20
21						3450			1200		8	1	20	OVERHEAD DOOR	22
23	WELDER	50	2	6			3450			1200	8	1	20	OVERHEAD DOOR	24
25					3450			1080			10	1	20	CORD REEL DROPS	26
27	REPAIR SHOP RECEPTS	20	1	12		720			1080		10	1	20	CORD REEL DROPS	28
29	REPAIR SHOP RECEPTS	20	1	12			540			800	12	1	20	SHOP DRINKING FOUNTAIN	30
31	WELDER	50	2	6	3450			780			12	1	20	NIGHT LIGHTS	32
33						3450			1500		12	1	20	RADIANT HEATERS	34
35	WELDER	50	2	6			3450			500	12	1	20	MOTORIZED LOUVERS	36
37					3450			50			12	1	20	LIGHTING CONTACTORS	38
39	SPARE	20	1									1	20	SPARE	40
41	SPARE	20	1									1	20	SPARE	42
								SECTION 2							
43					828			828							44
45	EXHAUST FAN EF-6	20	3	12		828			828		12	3	20	EXHAUST FAN EF-7	46
47							828			828					48
49	SPARE	20	1									1	20	SPARE	50
51	SPARE	20	1									1	20	SPARE	52
53	SPARE	20	1									1	20	SPARE	54
55	SPARE	20	1									1	20	SPARE	56
57	SPARE	20	1									1	20	SPARE	58
59	SPARE	20	1									1	20	SPARE	60
61	SPARE	20	1									1	20	SPARE	62
63	SPARE	20	1									1	20	SPARE	64
65	SPARE	20	1									1	20	SPARE	66
67	SPARE	20	1									1	20	SPARE	68
69	SPARE	20	1									1	20	SPARE	70
71	SPARE	20	1									1	20	SPARE	72
73	BUSSED SPACE													BUSSED SPACE	74
75	BUSSED SPACE													BUSSED SPACE	76
77	BUSSED SPACE													BUSSED SPACE	78
79	BUSSED SPACE													BUSSED SPACE	80
81	BUSSED SPACE													BUSSED SPACE	82
83	BUSSED SPACE													BUSSED SPACE	84
NOTES:					14008	11408	11728	7488	8208	6428	TOTAL VA				65,268
					26496		20116		18656						
											AMPS @	208	3Φ		181.17

LIGHT FIXTURE SCHEDULE

MARK NO.	MANUFACTURER & CATALOG NUMBER	VOLTS WATTS	LAMPS	DESCRIPTION	EQUIVALENT MANUFACTURERS
A	METALUX 2G68-332A-UNV-EB81	120 85	3-32W F32T8	2'x4' FLUORESCENT GRID TROFFER WITH PRISMATIC ACRYLIC LENS AND ELECTRONIC BALLAST FOR (3) 32W F32T8 LAMPS.	WILLIAMS LITHONIA OR EQUAL
B	PORTFOLIO PD6-V142E-6VC	120 46	1-42W PLT/4PIN	6"ø RECESSED DOWNLIGHT WITH CLEAR SEMI-SPECULAR REFLECTOR AND ELECTRONIC BALLAST FOR (1) 42W TRIPLE-TUBE COMPACT FLUORESCENT LAMP.	WILLIAMS LITHONIA OR EQUAL
C	METALUX HBL-654T5-M-UNV-EHT2-FH-I	120 364	6-54W F54T5HO	4' LINEAR FLUORESCENT HIGH-BAY WITH MEDIUM BEAM DISTRIBUTION AND (1) 2-LAMP ELECTRONIC BALLAST AND (1) 4-LAMP ELECTRONIC BALLAST FOR DUAL-LEVEL SWITCHING OF (6) 54W F54T5HO LAMPS.	WILLIAMS LITHONIA OR EQUAL
D	METALUX 8T-IGF-232-UNV-EB81	120 110	4-32W F32T8	8' FLUORESCENT INDUSTRIAL (TANDEM 4' SECTIONS) WITH ELECTRONIC BALLAST FOR (4) 32W F32T8 LAMPS (2 LAMPS IN CROSS SECTION)	WILLIAMS LITHONIA OR EQUAL
F	LUMARK MPIP-TM-400-4-MT-LL	208 458	1-400W PSMH	WALL MOUNTED AREA LIGHT WITH FLAT GLASS LENS AND TYPE IV DISTRIBUTION FOR (1) 400W PULSE-START METAL HALIDE LAMP. MOUNT FIXTURES 20'-0" AFG.	HUBBELL LITHONIA OR EQUAL
G	LUMARK MPIP-T-70-120-LL-PE	120 90	1-70W MH	WALL MOUNTED AREA LIGHT WITH FLAT GLASS LENS AND INTEGRAL PHOTOCELL FOR (1) 70W METAL HALIDE LAMP. MOUNT FIXTURES 9'-6" AFG.	HUBBELL LITHONIA OR EQUAL
H	METALUX BC-232-UNV-EB81	120 59	2-32W F32T8	4' FLUORESCENT WALL BRACKET WITH WHITE OPAL ACRYLIC LENS AND ELECTRONIC BALLAST FOR (2) 32W F32T8 LAMPS. WALL MOUNT FIXTURE 7'-6" AFF.	WILLIAMS LITHONIA OR EQUAL
L	MCGRAW-EDISON (2)GSM-AM-400-MP-MT- 45-FG-BZ ON GSS-SM-30-S-F-M3	208 916	2-400W PSMH	TWIN (90°) POLE MOUNTED AREA LIGHT WITH FLAT GLASS LENS AND SEGMENTED TYPE IV REFLECTOR FOR (1) 400W PULSE-START METAL HALIDE LAMP EACH. MOUNT ON 30' SQUARE STRAIGHT STEEL POLE ON 2.5' HIGH CONCRETE BASE. SEE DETAIL ON SHEET E5.	KIM LITHONIA OR EQUAL
M	JUNO T4351WH ON (2)T12-WH TRACK	120 75	1-75W PAR30	TRACK MOUNTED LINE VOLTAGE LAMPHOLDER FOR (1) 75W PAR30 LAMP. MOUNT ON WHITE SINGLE-CIRCUIT TRACK, LENGTH AS INDICATED. PROVIDE ALL NECESSARY ENDS, FEEDERS, JOINERS, ETC AS REQUIRED FOR A COMPLETE INSTALLATION	PRESCOLITE CON-TECH OR EQUAL
N	CON-TECH CTF48-W-40-KIT-QT-1	120 80	NA	48" CEILING FAN WITH FAN MOUNTING BRACKET, WHITE FINISH, 4 SPEED QUITE FAN CONTROL	OR EQUAL
E	SURE-LITE CC8-MRT	120 1.2	INCL	EMERGENCY LIGHT WITH TWIN ADJUSTABLE 9W HEADS AND SEALED LEAD CALCIUM BATTERY	DUAL-LITE LITHONIA OR EQUAL
⊗	SURE-LITE LPX-70-R-WH	120 4.9	INCL	EXIT LIGHT WITH LED LAMPS, RED LETTERS ON WHITE BACKGROUND, UNIVERSAL MOUNT, BATTERY BACKUP	DUAL-LITE LITHONIA OR EQUAL
	SURE-LIE LPXH-70-R-WH-DH W/ 6T6-WAH REMOTE	120 4.9	INCL	COMBINATION EMERGENCY/EXIT LIGHT WITH LED LAMPS, RED LETTERS ON WHITE BACKGROUND, TWIN 6W EMERGENCY LIGHT HEADS, UNIVERSAL MOUNT, HIGH CAPCITY BATTERY BACKUP AND WEATHERPROOF EXTERIOR REMOTE HEAD	DUAL-LITE LITHONIA OR EQUAL

NOTES:
1. ALL FLUORESCENT LAMPS SHALL BE 3500° KELVIN AND A MINIMUM CRI OF 82.

PANEL: MDP	VOLTS/PHASE/WIRE: 120/208V/3Φ/4W	LOCATION: WAREHOUSE WALL
BUS: 1200A	IC: 35,000 RMS SYM AMPS	FEEDER: SEE RISER DIAGRAM

CKT NO	DESCRIPTION	FRAME	POLE	TRIP	KVA LOAD	FEEDER SIZE
M	MAIN CIRCUIT BREAKER (KIRK-KEY) Ⓚ	-	3	1200		
1	PANEL PP	-	3	225	74.4	4#4/0, 1#4G, 2-1/2"C
2	PANEL SP	-	3	225	65.3	4#4/0, 1#4G, 2-1/2"C
3	PANEL RP	-	3	400	112.5	4#500KCMIL, 1#3G, 3-1/2"C
4	PANEL M	-	3	225	58.1	4#4/0, 1#4G, 2-1/2"C
5	BRIDGE CRANE (VERIFY REQUIREMENTS)	-	3	100	30.0	3#3, 1#8G, 1-1/4"C
6	AIR COMPRESSOR (VERIFY REQUIREMENTS)	-	3	100	30.0	3#3, 1#8G, 1-1/4"C
7	PARTS WASHER	-	3	200	60.0	3#3/0, 1#6G, 2"C
8	SPARE	-	3	200	0	-
9	PROVISIONS W/ MTG HARDWARE	225	2	-	0	-
10	PROVISIONS W/ MTG HARDWARE	225	2	-	0	-
11	REVERSE-FEED BREAKER (KIRK-KEY) Ⓚ	-	3	1200	0	-
NOTES:				TOTAL KVA:		425.3
				AMPS @	208	1180.51

Ⓚ— —Ⓚ

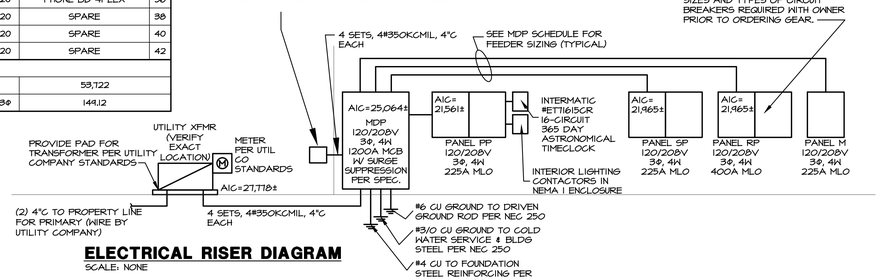
KIRK KEY SYSTEM SHALL BE INSTALLED ON 1200A 3P MAIN BREAKER FOR INCOMING UTILITY POWER AND ON 1200A 3P REVERSE FEED BREAKER FOR INCOMING GENERATOR POWER. KIRK KEY SYSTEM SHALL PREVENT UTILITY MAIN AND GENERATOR MAIN FROM BEING CLOSED SIMULTANEOUSLY. ONLY ONE BREAKER CAN BE IN CLOSED POSITION AT ANY TIME.

PANEL: M	VOLTS/PHASE/WIRE: 120/208V/3Φ/4W	LOCATION: WAREHOUSE WALL	MOUNTING: SURFACE
BUS: 225A	MAIN: MLO	IC: 10,000 RMS SYM. AMPS	FEEDER: SEE RISER DIAGRAM

CKT NO	DESCRIPTION	BRKR AMPS	BRKR POLE	WIRE SIZE	ΦA	ΦB	ΦC	ΦA	ΦB	ΦC	WIRE SIZE	BRKR POLE	BRKR AMPS	DESCRIPTION	CKT NO
1	CU-1	30	2	10	1820			1820			10	2	30	CU-2	2
3						1820			1820						4
5	BUSSED SPACE													BUSSED SPACE	6
7	CU-3	30	3	10	2256			2256			10	3	30	CU-4	8
9						2256			2256						10
11							2256			2256					12
13	CU-5	35	3	8	2616			2616			8	3	35	CU-6	14
15						2616			2616						16
17							2616			2616					18
19	F-1	20	1	12	600			600			12	1	20	F-2	20
21	F-3	20	1	12		1200			1200		12	1	20	F-4	22
23	F-5	30	1	10			1420			1420	10	1	30	F-6	24
25	SITE LIGHTING	20	2	8	916			916			8	2	20	SITE LIGHTING	26
27						916			916						28
29	SITE LIGHTING	20	2	8			916			916	8	2	20	SITE LIGHTING	30
31					916			916							32
33	SITE LIGHTING	20	2	8		916				250	12	1	20	WATER HEATER CNTRL	34
35							916			360	12	1	20	PHONE BD 4PLEX	36
37	SPARE	20	1									1	20	SPARE	38
39	SPARE	20	1									1	20	SPARE	40
41	SPARE	20	1									1	20	SPARE	42
NOTES:					9124	9724	8624	9124	9058	8068	TOTAL VA				53,722
					18248		18782		18642						
											AMPS @	208	3Φ		149.12

NEMA 3R JUNCTION BOX WITH HINGED LOCKABLE COVER FOR TEMPORARY GENERATOR CONNECTION MOUNTED AT 36" AFF. PROVIDE WBACK PANEL, ILSCO TYPE PDB SERIES POWER DISTRIBUTION BLOCKS, GROUND BAR TERMINAL AND TERMINAL STRIP FOR GENERATOR CONTROLS. PROVIDE ENGRAVED LAMINATED NAMEPLATE MOUNTED ON FRONT COVER READING "GENERATOR CONNECTION 1200A 120/208V 3Φ/4W. PHASE ROTATION MUST BE ---" (PHASE ROTATION TO BE DETERMINED BY CONTRACTOR AFTER NEW SERVICE IS ENERGIZED). PROVIDE (2) 4" INSULATED CHASE NIPPLES IN BOTTOM OF BOX WITH BLANK KO COVERS FOR GENERATOR CABLES.

PANEL 'RP' IS FOR FUTURE CONNECTION OF OWNER-FURNISHED REBUILD-SHOP EQUIPMENT. PROVIDE 400S 84-CIRCUIT PANEL AND COORDINATE QUANTITIES, SIZES AND TYPES OF CIRCUIT BREAKERS REQUIRED WITH OWNER PRIOR TO ORDERING GEAR.



ELECTRICAL RISER DIAGRAM
SCALE: NONE

TranSystems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS: MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
ELECTRICAL SCHEDULES □ DETAILS

SHEET NO.
SHEET E-401 OF

REVDATE:

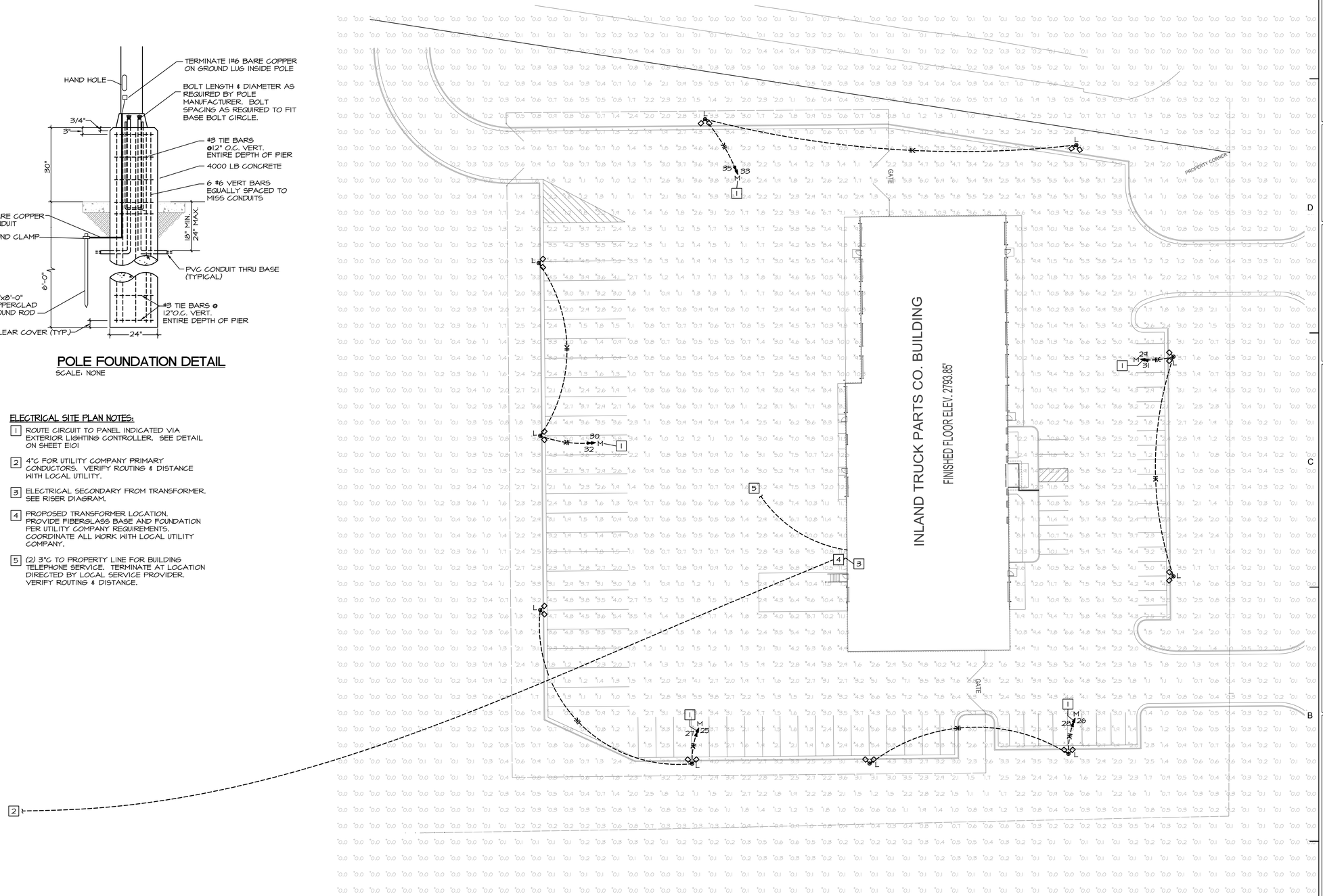
IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING

POLE FOUNDATION DETAIL

SCALE: NONE

ELECTRICAL SITE PLAN NOTES:

1. ROUTE CIRCUIT TO PANEL INDICATED VIA EXTERIOR LIGHTING CONTROLLER. SEE DETAIL ON SHEET E101
2. 4"C FOR UTILITY COMPANY PRIMARY CONDUCTORS. VERIFY ROUTING & DISTANCE WITH LOCAL UTILITY.
3. ELECTRICAL SECONDARY FROM TRANSFORMER. SEE RISER DIAGRAM.
4. PROPOSED TRANSFORMER LOCATION. PROVIDE FIBERGLASS BASE AND FOUNDATION PER UTILITY COMPANY REQUIREMENTS. COORDINATE ALL WORK WITH LOCAL UTILITY COMPANY.
5. (2) 3"C TO PROPERTY LINE FOR BUILDING TELEPHONE SERVICE. TERMINATE AT LOCATION DIRECTED BY LOCAL SERVICE PROVIDER. VERIFY ROUTING & DISTANCE.



NORTH

ELECTRICAL SITE PLAN

SCALE: 1" = 30'

REVDATE:

IF THIS DRAWING IS LESS THAN 24" X 36", IT IS A REDUCED SIZE DRAWING

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-8600
(f) 816-329-8602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9720 Reeder Shawnee, Ks. 66203 (913)262-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
An Employee Owned Company

REVISIONS:

MARK	DATE	DESCRIPTION
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
ELECTRICAL SITE PLAN

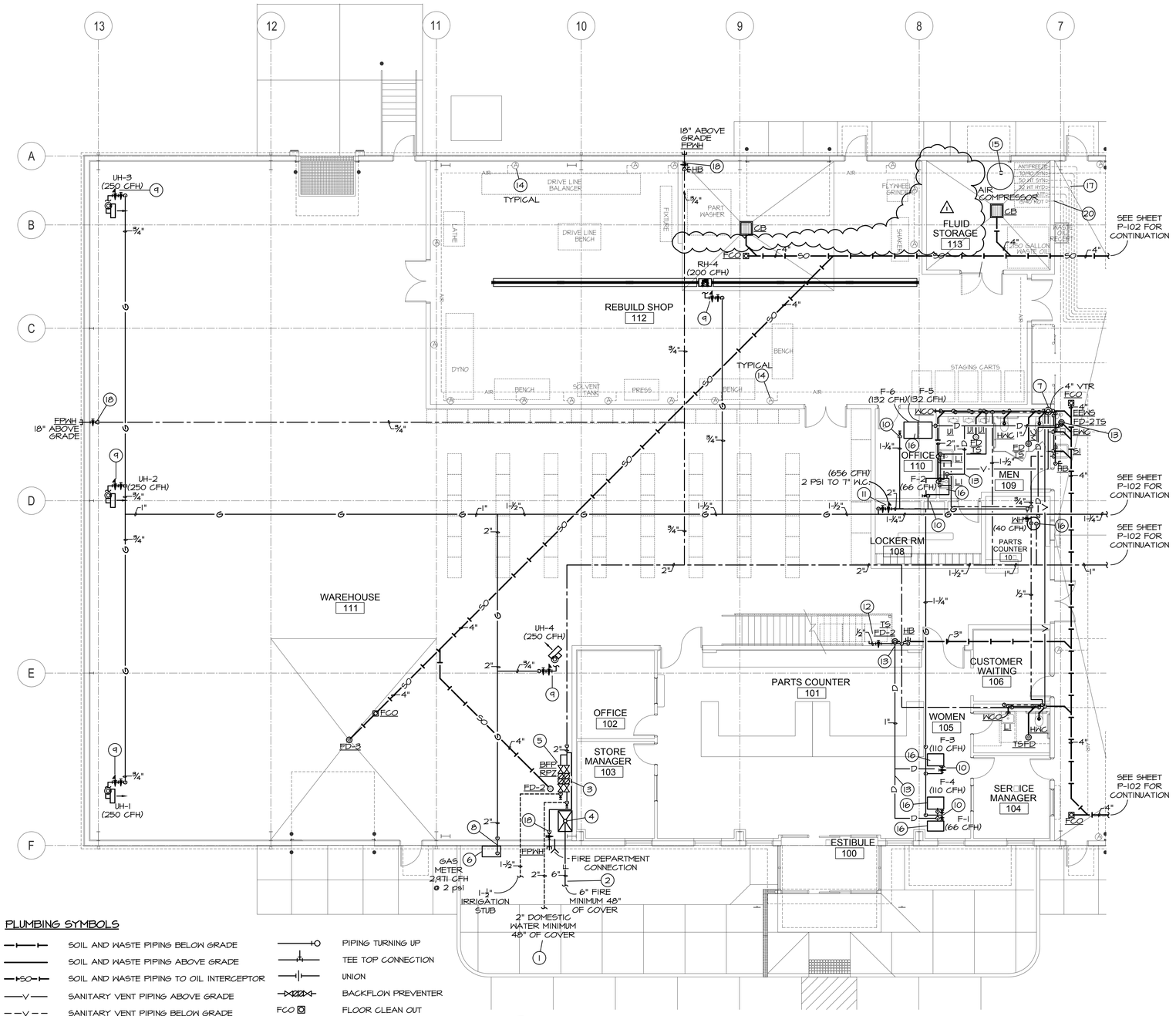
SHEET NO.
E-501
SHEET OF

PLUMBING GENERAL NOTES:

1. INSTALL ALL PIPE, ETC. AS HIGH AS PSOSIBLE.
2. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES.
4. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING PIPING, EQUIPMENT, ETC. FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.
5. PROVIDE 1" SCHEDULE 40 PVC CONDENSATE DRAIN PIPE FOR EACH FURNACE AND AIR CONDITIONING COIL TO A HUB DRAIN WITH AN AIR GAP AS DETAILED.
6. NO PIPING SHALL BE ROUTED OVER THE TOP OF ELECTRICAL PANELS.
7. ALL MATERIALS EXPSOED WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.

PLUMBING PLAN NOTES:

1. SEE CIVIL PLAN FOR CONTINUATION OF 2" DOMESTIC WATER. MAINTAIN A MIN. 48" OF GROUND COVER.
2. SEE CIVIL PLAN FOR CONTINUATION OF 6" FIRE LINE. MAINTAIN A MIN. 48" OF GROUND COVER.
3. PROVIDE 2" RPZ BFP AND INSTALL 24" A.F.F. & 6" FROM WALL. ROUTE DRAIN FROM RPZ BFP TO FLOOR DRAIN WITH AIR GAP.
4. 6" FIRE LINE THRU FLOOR. VERIFY SIZE WITH SPRINKLER CONTRACTOR. PROVIDE USG CERTIFIED DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) AND THE MAIN DRAIN VENTED TO DAYLIGHT. SEAL EXTERIOR WALL PENETRATION WEATHER TIGHT AS REQUIRED. COORDINATE WITH SPRINKLER CONTRACTOR FOR PROPER INSTALLATION. COORDINATE WITH WATER DEPARTMENT FOR SERVICE FLUSHING REQUIREMENTS. CAP LINE FOR FUTURE CONTINUATION BY SPRINKLER CONTRACTOR.
5. PROVIDE 1-¼" RPZ BFP AND INSTALL 48" A.F.F. & 6" FROM WALL. PROVIDE 1-¼" CAPPED STUB UNDERGROUND FOR CONTINUATION BY IRRIGATION CONTRACTOR. ROUTE DRAIN FROM RPZ BFP TO FLOOR DRAIN WITH AIR GAP.
6. LOCATION OF GAS METER. COORDINATE WITH GAS COMPANY FOR A CAPACITY OF 2,971 CFH @ 2 PSI. CONNECT 2" GAS PIPE TO METER AS REQUIRED BY THE LOCAL GAS COMPANY.
7. LOCATION OF 4" VTR. VERIFY 10' CLEARANCE FROM ALL OUTDOOR AIR INTAKES. SEAL PENETRATION WEATHERTIGHT.
8. ROUTE 2" GAS PIPING THROUGH WALL AND CONNECT TO GAS METER AS REQUIRED BY THE UTILITY COMPANY. ALL CONCEALED JOINTS ARE TO BE WELDED, OR USE FITTINGS APPROVED FOR CONCEALED INSTALLATION. SEAL PENETRATION WEATHER TIGHT.
9. CONNECT GAS PIPING TO EQUIPMENT WITH REGULATOR AS DETAILED AND AS REQUIRED BY THE MANUFACTURER. PROVIDE GAS REGULATOR SIZED TO REDUCE 2 PSI. PRESSURE TO 7" WATER COLUMN AT THE EQUIPMENT FLOW RATE. ROUTE VENT PIPING FULL SIZE FROM REGULATOR VENT UP THROUGH ROOF OR WALL TO THE EXTERIOR AND TERMINATE WITH TURN DOWN AND BUG SCREEN TO PREVENT WATER AND ANIMAL INFILTRATION. SEAL PENETRATION WEATHER TIGHT.
10. CONNECT GAS PIPING TO EQUIPMENT AS DETAILED AND PER THE MANUFACTURERS REQUIREMENTS.
11. PROVIDE GAS REGULATOR SIZED TO REDUCE 2 PSI. PRESSURE TO 7" WATER COLUMN AT THE COMBINED EQUIPMENT FLOW RATE. ROUTE VENT PIPING FULL SIZE FROM REGULATOR VENT UP THROUGH ROOF OR WALL TO THE EXTERIOR AND TERMINATE WITH TURN DOWN AND BUG SCREEN TO PREVENT WATER AND ANIMAL INFILTRATION. SEAL PENETRATION WEATHER TIGHT.
12. CONNECT COLD WATER AND DRAINS TO VENDING EQUIPMENT AS REQUIRED BY THE MANUFACTURER. ROUTE DRAIN PIPING FROM EQUIPMENT TO FLOOR DRAIN WITH AIR GAP. COORDINATE WITH OWNER FOR EXACT REQUIREMENTS.
13. ROUTE CONDENSATE DRAINS FROM FURNACE FLUES, WATER HEATER FLUES, AND AIR CONDITIONER COILS ON MEZZANINE TO THE FLOOR DRAIN WITH AIR GAP.
14. AIR PIPING SUPPLIED AND INSTALLED BY OTHERS. COORDINATE WITH OWNER FOR TERMINATION AND EQUIPMENT HOOK UP REQUIREMENTS.
15. AIR PIPING BY OTHERS TO OWNER SUPPLIED AIR COMPRESSOR LOCATED ON MEZZANINE. CONNECT AS REQUIRED BY THE MANUFACTURER.
16. GAS FIRED EQUIPMENT LOCATED ON MEZZANINE LEVEL.
17. FLUID PIPING INSTALLED BY OTHERS. COORDINATE AS REQUIRED FOR EXACT LOCATIONS.
18. ¾" C.W. DOWN TO WALL HYDRANT. PROVIDE SHUTOFF VALVE IN ACCESSIBLE LOCATION. ROUTE PIPING ON INTERIOR SIDE OF INSULATION FOR FREEZE PROTECTION.
19. -
20. FIRE CAULK ALL PIPING PENETRATIONS INTO BOILER/FLUID STORAGE ROOM TO MAINTAIN LISTED RATING.
21. PROVIDE ½" AIR LINE INTO BOILER ROOM FOR CONNECTION TO THE BOILER PER THE MANUFACTURERS REQUIREMENTS.



PLUMBING SYMBOLS

SOIL AND WASTE PIPING BELOW GRADE	PIPING TURNING UP
SOIL AND WASTE PIPING ABOVE GRADE	TEE TOP CONNECTION
SOIL AND WASTE PIPING TO OIL INTERCEPTOR	UNION
SANITARY VENT PIPING ABOVE GRADE	BACKFLOW PREVENTER
SANITARY VENT PIPING BELOW GRADE	FCO FLOOR CLEAN OUT
DOMESTIC COLD WATER PIPING	WCO WALL CLEAN OUT
DOMESTIC HOT WATER PIPING	FD FLOOR DRAIN
EQUIPMENT DRAIN LINE	VALVE
GAS PIPING	GAS REGULATOR
AIR COMPRESSED AIR PIPING	CHECK VALVE
PIPING TURNING DOWN	MATCH MARKS ON PLUMBING RISER DIAGRAM
FIRE SERVICE PIPING	INV. EL. INVERT ELEVATION OF PIPE

NORTH

PLUMBING PARTIAL GROUND LEVEL FLOOR PLAN SOUTH

SCALE: 1/8" = 1'-0" FFE = 2793.85'

Tran Systems
2400 Pershing Road
Suite 400
Kansas City, Missouri 64108
(p) 816-329-4600
(f) 816-329-4602
www.transystems.com

CONSULTANTS

BC ENGINEERS INCORPORATED
9200 Reeder Shawnee, Ks. 66203 (913)962-1772

INLAND TRUCK PARTS COMPANY
NEW SERVICE CENTER
N PLATTE, NEBRASKA

INLAND TRUCK PARTS COMPANY
'An Employee Owned Company'

REVISIONS:			
MARK	DATE	DESCRIPTION	
1	04-06-12	REMOVED UNDERFLOOR HEATING SYSTEM	

PROJECT NO: 11699
SCALE: AS SHOWN
DATE: 03-28-12
DESIGNED BY: BQ-DS
DRAWN BY: BQ-DS
CHECKED BY: EK-RWC

SHEET TITLE:
PARTIAL GROUND LEVEL PLUMBING PLAN SOUTH

SHEET NO.
P-101
SHEET ____ OF ____

REVDATE: