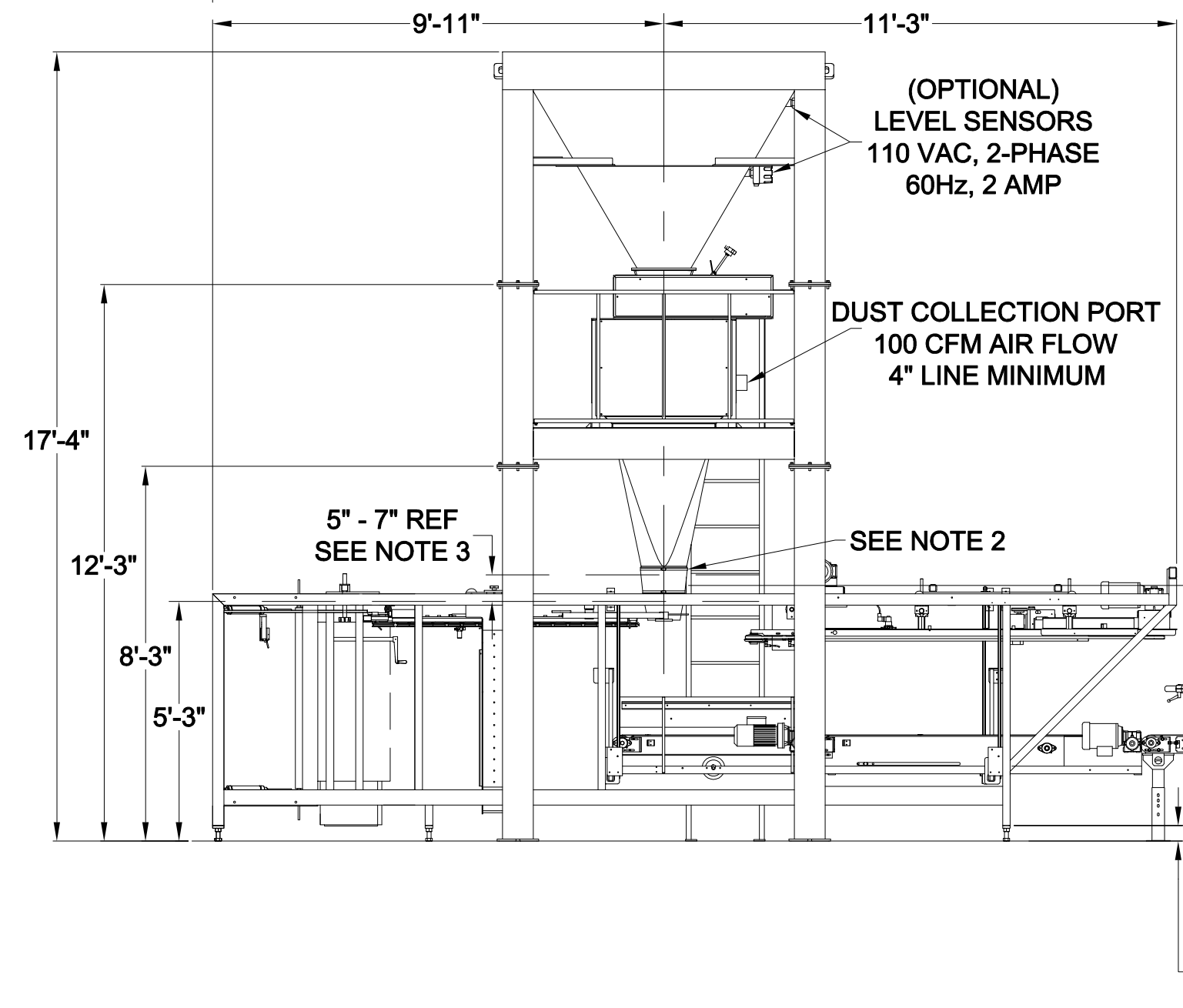
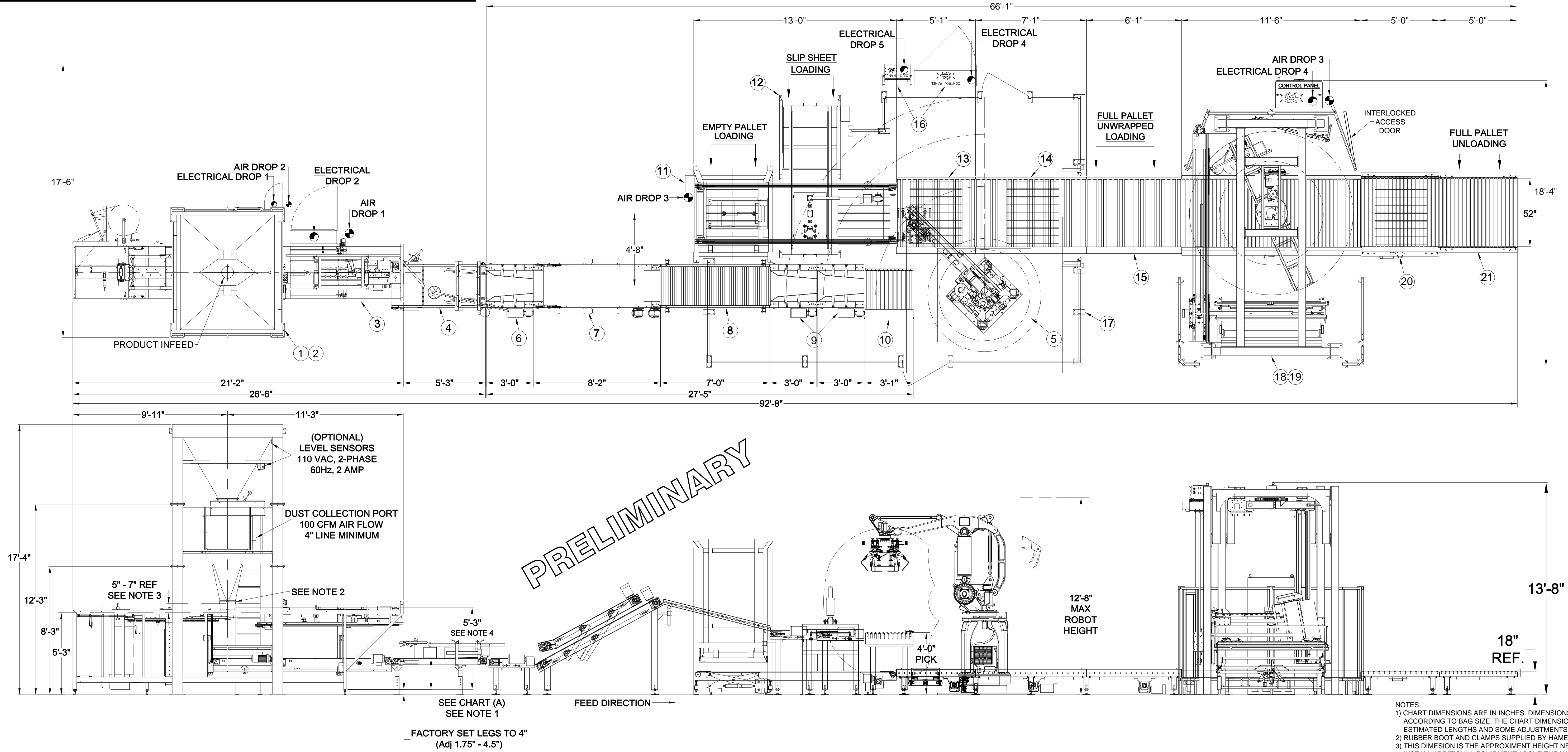
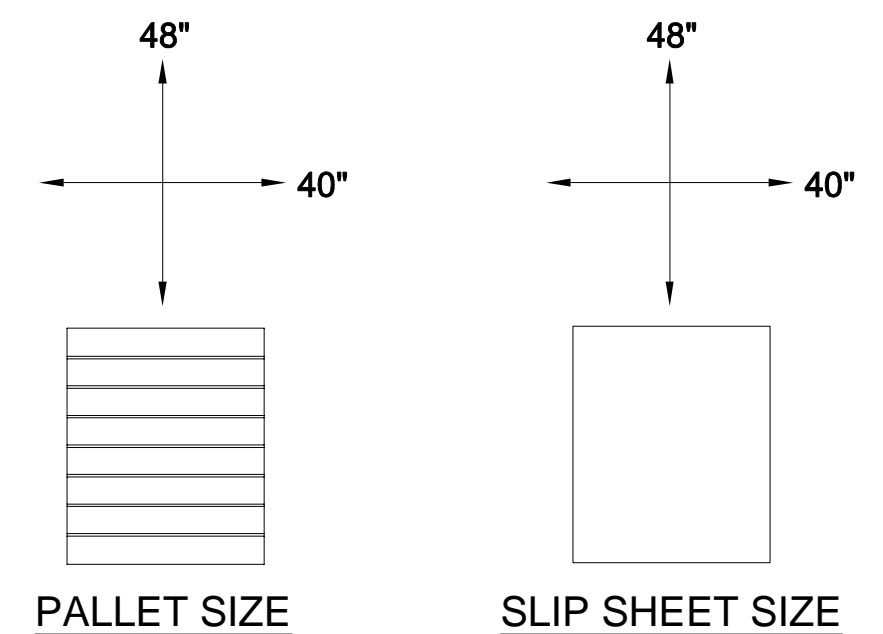
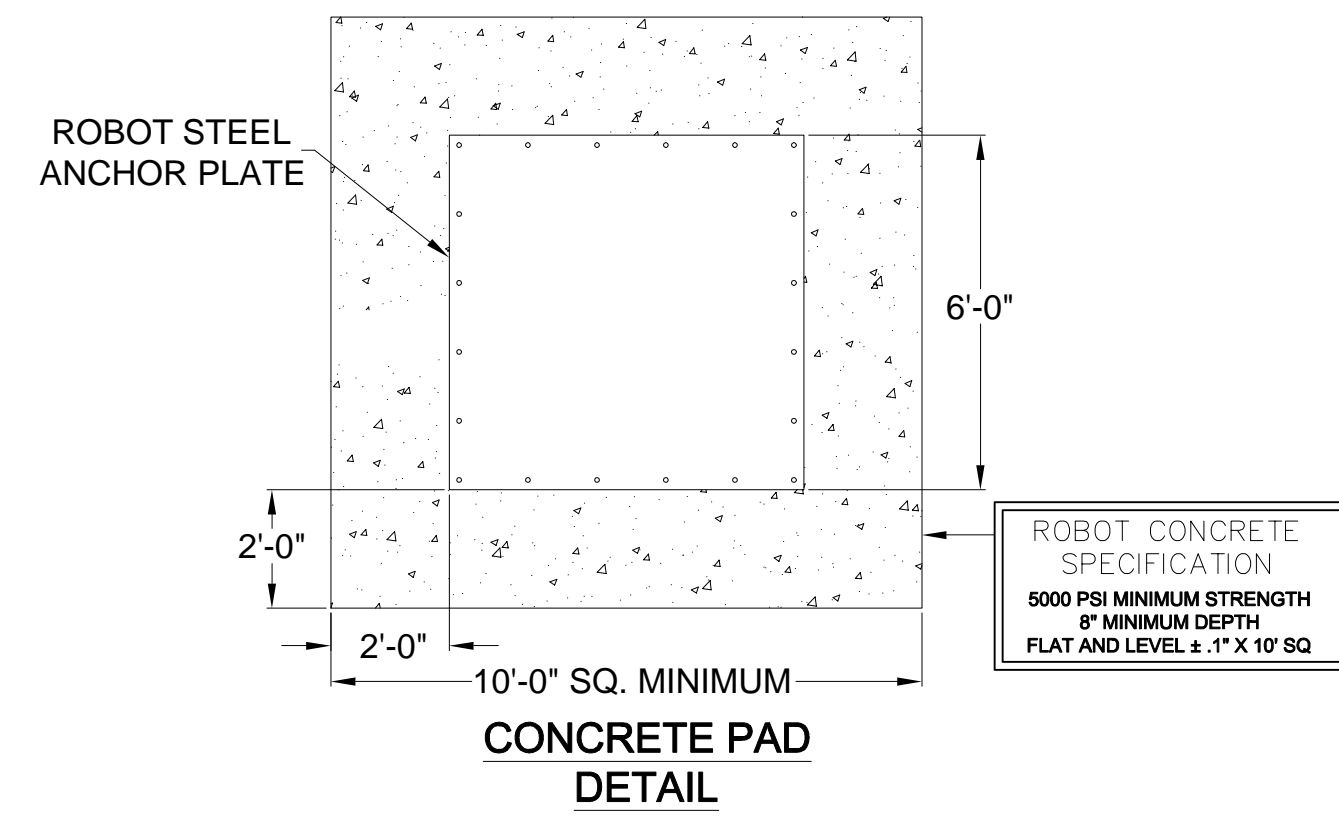


| * HAMER BAG AND CONVEYOR CHART | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| FLAT BAG LENGTH (INCLUDING HEADER) | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| BAG BOTTOM LENGTH (A) (DISCHARGE HEIGHT) | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 |

| REVISIONS | | | DWG. NO. |
|-----------|----------------|----------|----------------|
| REV. | DESCRIPTION | DATE | PLANTLAYOUT 23 |
| 01 | CREATED LAYOUT | 10/30/09 | |



PRELIMINARY



HAMER FFS SYSTEM / ROBOTIC PALLETIZER SPECIFICATIONS:

******* (CUSTOMER TO CONFIRM) *******

BAG TYPE: FFS POLY BAGS OF WOOD PELLETS

EMPTY BAG SIZES: 40 LB BAG - *******PLEASE CONFIRM FULL BAG SIZE *******

FULL BAG SIZES: 40 LB BAG - *******PLEASE CONFIRM FULL BAG SIZE *******

PATTERNS: 5 BAGS PER LAYER, 10 LAYERS HIGH 3 X 2 INTERLOCKED *******PLEASE CONFIRM FULL BAG SIZE *******

PALLET SIZE: 48" X 40" X 5" - (4-WAY WOOD PALLET)

SLIP SHEET SIZE: 48" X 40" - (CORRUGATE)

AIR SUPPLY: **MINIMUM 3/4" AIR LINES REQUIRED**
 AIR DROP 1, MINIMUM 35 CFM AT 80 PSI, 2090A
 AIR DROP 2, MINIMUM 10 CFM AT 80 PSI, 600NW
 AIR DROP 3, MINIMUM 8 CFM AT 80 PSI CONVEYORS & ROBOT
 AIR DROP 4, MINIMUM 3 CFM AT 80 PSI STRETCH WRAPPER

UTILITIES: ELECTRICAL DROPS
 ELECTRICAL DROP 1, 110 VAC, 1-PHASE, 60 Hz, 3 AMPS 600NW SCALE CONTROLLER
 ELECTRICAL DROP 2, 230 VAC, 3-PHASE, 60 Hz, 40.3 FLA 2090A CONTROL PANEL
 ELECTRICAL DROP 3, 460 VAC, 3-PHASE, 60 Hz, 60 FLA PASCO MCC
 ELECTRICAL DROP 4, 460 VAC, 3-PHASE, 60 Hz, 30 FLA ROBOT CONTROL PANEL
 ELECTRICAL DROP 5, 460 VAC, 1-PHASE, 60 Hz, 30 FLA STRETCH WRAPPER CONTROL PANEL
 CONTROL VOLTAGE 24 VDC

DUST COLLECTION: **FORM FILL AND SEAL**
 MINIMUM 4" LINES REQUIRED
 DUST DROP #1 100 CFM AIR FLOW PER SCALE, 600NW
 ROBOTIC CELL 6' TALL WITH A 12" SWEEP (FLOOR TO BOTTOM OF GUARDING)
 STRETCH WRAPPER CELL 7' - 6" TALL WITH A 4" SWEEP (FLOOR TO BOTTOM OF GUARDING)

GUARDING: SUPPLIED BY CUSTOMER

ANCHOR BOLTS: CONCRETE: NEEDS TO BE 8" MINIMUM THICK UNDER ROBOT (SEE SPEC)
 OPERATING TEMP: 40° - 105° - F

NOTES:

- 1) CHART DIMENSIONS ARE IN INCHES. DIMENSIONS CHANGE ACCORDING TO BAG SIZE. THE CHART DIMENSIONS ARE ESTIMATED LENGTHS AND SOME ADJUSTMENTS MAY BE REQUIRED.
- 2) RUBBER BOOT AND CLAMPS SUPPLIED BY HAMER INC.
- 3) THIS DIMENSION IS THE APPROXIMATE HEIGHT NEEDED TO INSTALL ADDITIONAL EQUIPMENT ABOVE THE HAMER FFS. (NOT THE RUBBER BOOT)
- 4) MACHINE SHOULD BE LOCATED WITH A MINIMUM OF 3 FT. CLEARANCE ON ALL FOUR SIDES
- 5) ALL AIR INPUTS REQUIRE CLEAN DRY AIR.
- 6) IN ACCORDANCE WITH LOCAL, COUNTY, STATE OR FEDERAL FIRE SAFETY CODES, THE CUSTOMER MAY BE RESPONSIBLE FOR THE INSTALLATION OF A FIRE SUPPRESSION/SPRINKLER SYSTEM UNDER THE SCALE PLATFORM. PLATFORM DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY.
- 7) SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

● AIR DROPS
 ● ELECTRICAL DROPS

HAMER LLC
 MINNEAPOLIS, MINNESOTA

TITLE: 2090A & 600NW-GG-DUPLEX WITH STRUCTURAL SUPPORT (100 CU FT HOPPER), 4200 KNOCKDOWN CONVEYOR AND PALLETIZING SYSTEM FOR:

| | | | |
|---------------|----------------|-------------------------|---------------|
| SCALE: B | N/A | DWG NO: PLANT LAYOUT 23 | REV: 01 |
| DRAWN BY: WMN | DATE: 10/30/09 | ENG: | SHEET: 1 OF 1 |