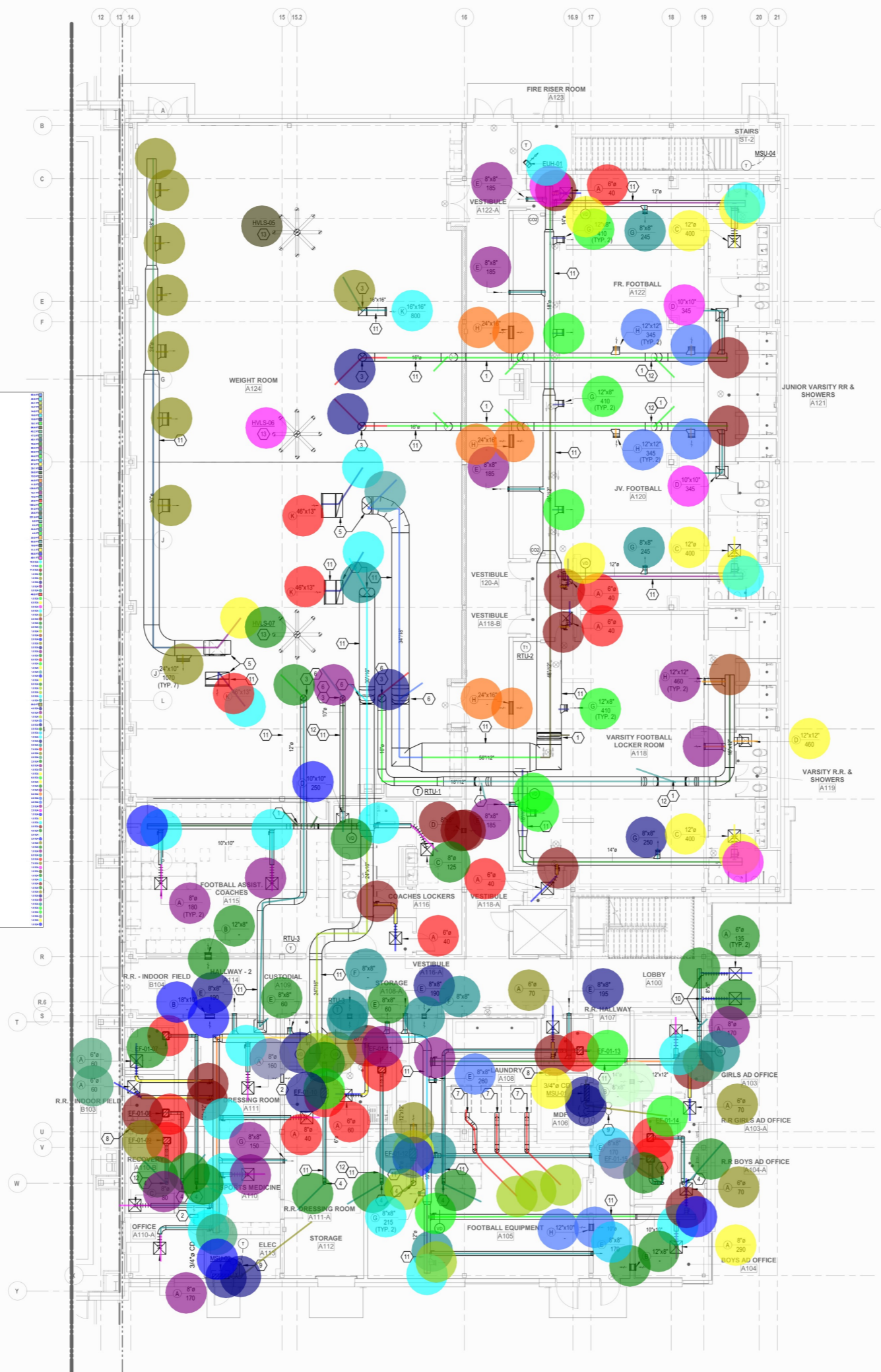


90% CONSTRUCTION DOCUMENTS - GMP

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CHECKED BY: Mital Patel
DRAWN BY: Cody Blocker
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100	1" DIA. RIGID DUCT



MECHANICAL GENERAL NOTES:

1. ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE.
2. ALL DUCTWORK, AIR DEVICES, PIPES, ETC. SHALL BE MOUNTED AS TIGHT TO STRUCTURE AS POSSIBLE. THESE ITEMS SHALL NOT BE INSTALLED BELOW 10'-0" A.F.F. NO EXCEPTIONS.
3. ALL EXPOSED DUCTWORK SHALL BE EITHER SPIRAL, ROUND OR RECTANGULAR OVAL INTERNALLY LINED, RECTANGULAR DUCT AND WRAPPED INSULATION SHALL NOT BE INSTALLED IN EXPOSED AREAS.

MECHANICAL KEYED NOTES:

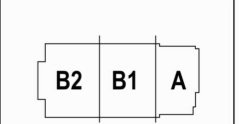
1. DUCT TO BE ROUTED ABOVE/BELOW STRUCTURAL FRAMING. COORDINATE EXACT ROUTING WITH STRUCTURAL. PROVIDE TRANSITIONS AS REQUIRED.
2. 16" x 16" WALL OPENING ABOVE CEILING.
3. EXHAUST DUCT UP TO FAN ON ROOF. PROVIDE TRANSITIONS AS REQUIRED.
4. EXHAUST DUCT ROUTED UP THROUGH ROOF. TERMINATE WITH ROOF CAP.
5. RETURN/SUPPLY DUCT UP THROUGH ROOF. COORDINATE FRAMING REQUIREMENTS WITH STRUCTURAL. RE. M-301.
6. ROUTE DUCT TIGHT TO WALL AND THROUGH LOW CEILING PLENUM. COORDINATE ROUTING WITH STRUCTURAL FRAMING. PROVIDE TRANSITIONS AS REQUIRED. DUCT SHALL NOT PENETRATE ANY LOCATIONS WHERE WALL GRAPHICS ARE PRESENT.
7. PROVIDE 8" DRYER EXHAUST. ROUTE UP THROUGH ROOF, AND TERMINATE WITH MANUFACTURER RECOMMENDED ROOF CAP. INSTALL DUCT AS TIGHT TO STRUCTURE AS POSSIBLE. FILL ANNULAR SPACE AT WALL PENETRATION WITH FIRE CAULK.
8. ROUTE 3/4" Ø CONDENSATE PIPE TO LAVATORY TAILPIECE. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL DETAILS.
9. ROUTE REFRIGERANT LINES UP TO THE ROOF. SIZE PER MANUFACTURER'S RECOMMENDATION. PROVIDE ALUMINUM JACKETING ON ALL EXPOSED AND OUTDOOR PIPING.
10. ROUTE 8"Ø DUCT UP AND OVER STRUCTURAL FRAMING TO BULKHEAD ADJACENT TO VESTIBULE. TAP FLEX DUCT DIRECTLY OFF 8"Ø DUCT. FLEX DUCT TO TAP INTO PLENUM BOX ABOVE AIR DEVICE. PROVIDE TRANSITIONS AS REQUIRED.
11. ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE.
12. ALL EXHAUST DUCT WITHIN LOCKER/SHOWER ROOMS SHALL BE OF ALUMINUM CONSTRUCTION. ALL BRANCH DUCTS SHALL SLOPE DOWN TOWARD AIR DEVICE.
13. PROVIDE HIGH VOLUME LOW SPEED FAN IN APPROXIMATE LOCATION SHOWN. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION. FAN SHALL BE MOUNTED ABOVE LIGHTS, PROVIDED WITH EXTENSION TUBE AS REQUIRED. JOIST/BEAM MOUNTING BRACKET AND WALL MOUNTED CONTROLLER. PROVIDE 2" AIRFOL CLEARANCE IN ALL DIRECTIONS.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
CLIENT	510 CENTRAL EXPRESSWAY, SUITE 300 DALLAS, TX 75201	T (214) 759-8100
MECHANICAL ENGINEERING	111 West Main St Austin, Texas 78701	T (877) 359-1710
STRUCTURAL ENGINEERING	11 Greenway Plaza, Suite 1910 Houston, TX 77046	T 1.800.249.3474
MECHANICAL ENGINEERS	11 Greenway Plaza, 15th Floor Houston, TX 77046	T (713) 940-3300



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
510 STADIUM DR
GARLAND, TX 75040
90% CONSTRUCTION DOCUMENTS - GMP



KEY PLAN
NORTH: PLAN TRUE

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF DONALD CLARK RICHARDS, P.E., (P.E. LICENSE No. 61525). IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, PERMIT, OR REGULATORY PURPOSES.
LEAF ENGINEERS
F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PBK PROJECT NUMBER	230485	
CLIENT		
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

90% CONSTRUCTION DOCUMENTS - GMP
1ST LEVEL AREA A MECHANICAL FLOOR PLAN

1 1ST LEVEL FIELD HOUSE PLAN- MECHANICAL
SCALE: 1/8" = 1'-0"

90% CONSTRUCTION DOCUMENTS - GMP

MECHANICAL GENERAL NOTES:

- ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE.
- ALL DUCTWORK, AIR DEVICES, PIPES, ETC. SHALL BE MOUNTED AS TIGHT TO STRUCTURE AS POSSIBLE. THESE ITEMS SHALL NOT BE INSTALLED BELOW 10'-0" A.F.F. NO EXCEPTIONS.
- ALL EXPOSED DUCTWORK SHALL BE EITHER SPIRAL ROUND OR RECTANGULAR OVAL INTERNALLY LINED. RECTANGULAR DUCT AND WRAPPED INSULATION SHALL NOT BE INSTALLED IN EXPOSED AREAS.
- REFER TO SHEET M-102B FOR PLAYING FIELD EQUIPMENT.

MECHANICAL KEYED NOTES:

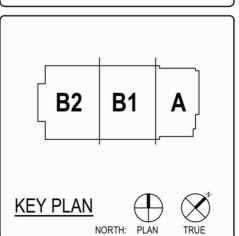
- 24"x18" INTAKE LOUVER INTERLOCKED WITH VF-03. PROVIDE 1/4" HARDWARE CLOTH OVER INTERIOR OPENING. LOUVER TO BE CENTERED ABOVE DOOR AND MOUNTED ABOVE BRICK REVEAL. REFER TO ARCHITECT FOR ADDITIONAL DETAILS.
- WALL MOUNTED PROP FAN. FAN TO BE CENTERED ABOVE DOOR AND MOUNTED ABOVE BRICK REVEAL.
- GAS FIRED UNIT HEATER. RECOMMENDED MOUNTING HEIGHT: 12' A.F.F. FIELD COORDINATE EXACT MOUNTING HEIGHT. PROVIDE CEILING MOUNTING BRACKETS AND HANGER RODS. ROUTE 4" FLUE THROUGH ROOF AND TERMINATE WITH CAP AS SHOWN IN DETAIL.
- MOUNT UNIT HEATER MANUFACTURER SUPPLIED THERMOSTAT 4' A.F.F. PROVIDE WITH PROTECTIVE ENCLOSURE. FINALIZE EXACT LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
MECHANICAL ENGINEER	5001 N CENTRAL EXPRESSWAY, SUITE 300 DALLAS, TX 75207 T (214) 758-8100	
MECHANICAL ENGINEER	111 West Main St Austin, Texas 78701 T (877) 359-1710	
STRUCTURAL ENGINEER	11 Greenway Plaza, Suite 1910 Houston, TX 77046 T 1-800-248-3614	
MECHANICAL ENGINEER	11 Greenway Plaza, 15th Floor Houston, TX 77046 T (713) 940-3300	



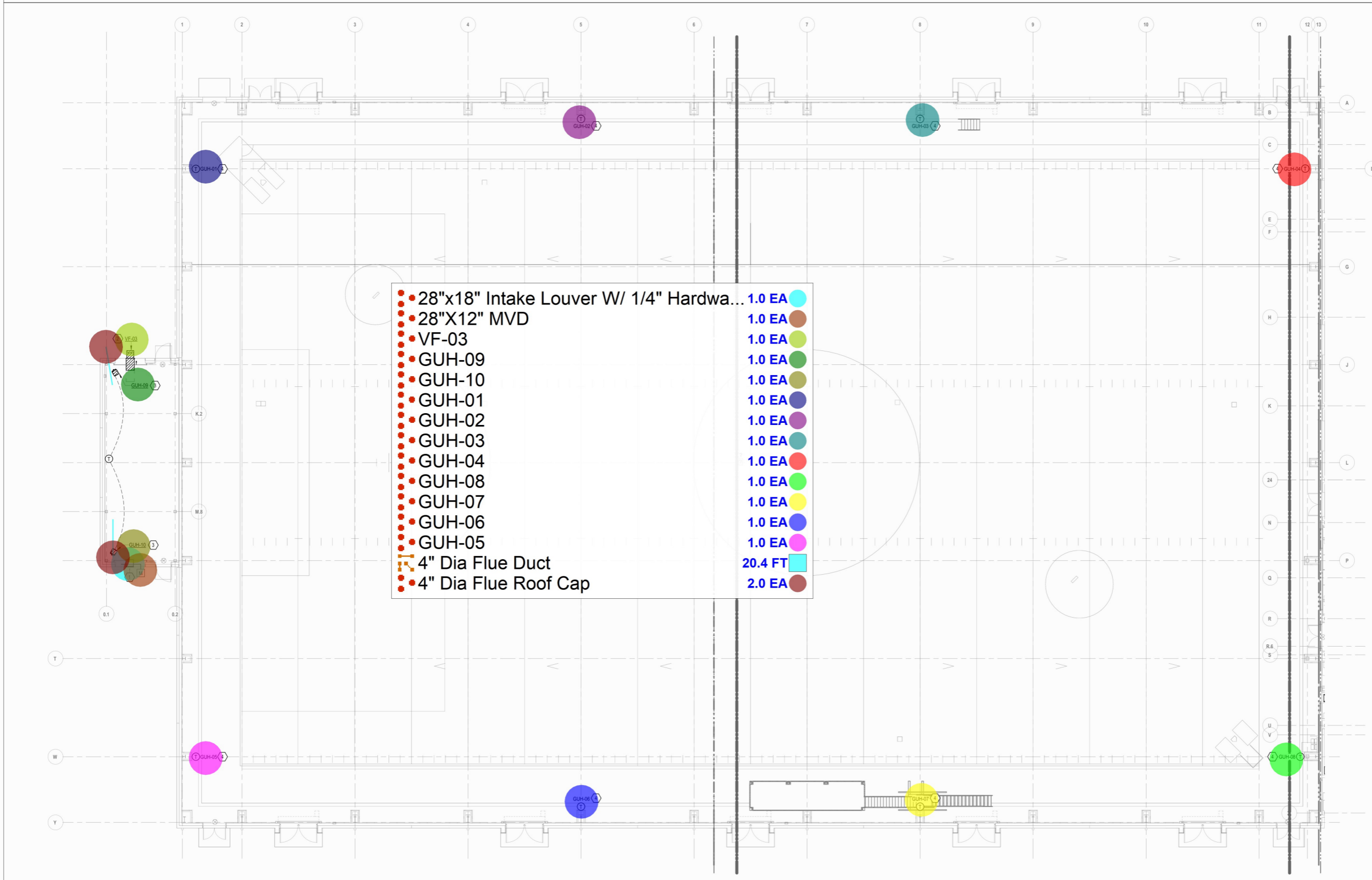
PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
610 STADIUM DR
GARLAND, TX 75040
90% CONSTRUCTION DOCUMENTS - GMP



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LEAF ENGINEERS
F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PBK PROJECT NUMBER	230485	CLIENT
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

90% CONSTRUCTION DOCUMENTS - GMP
1ST LEVEL AREA B MECHANICAL FLOOR PLAN

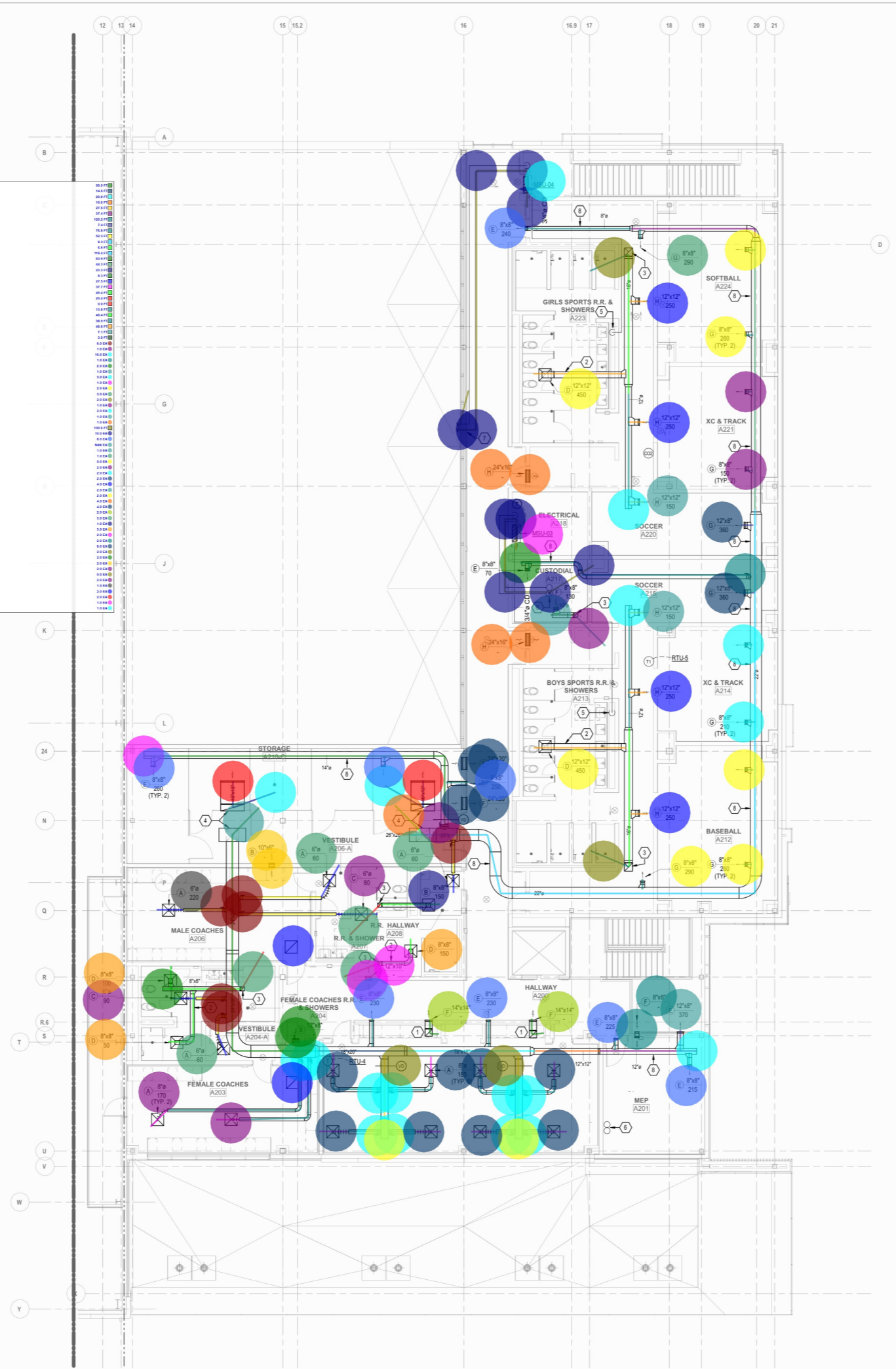


• 28"x18" Intake Louver W/ 1/4" Hardwa...	1.0 EA	
• 28"X12" MVD	1.0 EA	
• VF-03	1.0 EA	
• GUH-09	1.0 EA	
• GUH-10	1.0 EA	
• GUH-01	1.0 EA	
• GUH-02	1.0 EA	
• GUH-03	1.0 EA	
• GUH-04	1.0 EA	
• GUH-08	1.0 EA	
• GUH-07	1.0 EA	
• GUH-06	1.0 EA	
• GUH-05	1.0 EA	
• 4" Dia Flue Duct	20.4 FT	
• 4" Dia Flue Roof Cap	2.0 EA	

1 1ST LEVEL MECHANICAL PLAN - FIELD
SCALE: 3/32" = 1'-0"

90% CONSTRUCTION DOCUMENTS - GMP

- MECHANICAL
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MECHANICAL GENERAL NOTES:

- ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE. THESE ITEMS SHALL NOT BE INSTALLED BELOW 10'-0" A.F.F. NO EXCEPTIONS.
- ALL DUCTWORK, AIR DEVICES, PIPES, ETC. SHALL BE MOUNTED AS TIGHT TO STRUCTURE AS POSSIBLE. THESE ITEMS SHALL NOT BE INSTALLED BELOW 10'-0" A.F.F. NO EXCEPTIONS.
- ALL EXPOSED DUCTWORK SHALL BE EITHER SPIRAL, ROUND, OR RECTANGULAR OVAL INTERNALLY LINED. RECTANGULAR DUCT AND WRAPPED INSULATION SHALL NOT BE INSTALLED IN EXPOSED AREAS.

MECHANICAL KEYED NOTES:

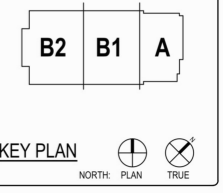
- PROVIDE SEEWALL TRANSFER GRILLE WITH ACOUSTICALLY LINED BOOT IN LOCATION SHOWN. GRILLE SHALL BE INSTALLED A MINIMUM OF 10' A.F.F.
- ALL EXHAUST DUCT WITHIN LOCKER/SHOWER ROOMS SHALL BE OF ALUMINUM CONSTRUCTION. ALL BRANCH DUCTS SHALL SLOPE DOWN TOWARD AIR DEVICE.
- EXHAUST DUCT UP TO FAN ON ROOF. PROVIDE TRANSITIONS AS REQUIRED.
- RETURN SUPPLY DUCTS UP THROUGH ROOF. COORDINATE FRAMING REQUIREMENTS WITH STRUCTURAL. RE: M-301 FOR CONTINUATION.
- ROUTE 3/4" CONDENSATE PIPE TO LAVATORY TAILPIECE. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL DETAILS.
- ROUTE REFRIGERANT LINES UP TO THE ROOF. SIZE PER MANUFACTURER'S RECOMMENDATION. PROVIDE ALUMINUM JACKETING ON ALL EXPOSED AND OUTDOOR PIPING.
- ROUTE REFRIGERANT LINES TIGHT TO ROOF FRAMING. PENETRATE EXTERIOR WALL AT APPROXIMATE LOCATION SHOWN AND DROP DOWN ALONG EXTERIOR WALL TO WEIGHT ROOM ROOF. SIZE PER MANUFACTURER'S RECOMMENDATION. PROVIDE ALUMINUM JACKETING ON ALL EXPOSED AND OUTDOOR PIPING. RE: M-301 FOR CONTINUATION.
- ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1658	PKK SPORTS PKK.com
Civil	5001 N CENTRAL EXPRESSWAY, SUITE 300 DALLAS, TX 75247	T (214) 758 - 8100
MECHANICAL	111 West Main St Austin, Texas 78701	T (877) 358 - 1713
STRUCTURAL	11 Greenway Plaza, Suite 510 Houston, TX 77046	T (847) 248-3474
MECHANICAL	11 Greenway Plaza, 15th Floor Houston, TX 77046	T (713) 940 - 3300



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL GARLAND INDEPENDENT SCHOOL DISTRICT
610 STADIUM DR
GARLAND, TX 75040
90% CONSTRUCTION DOCUMENTS - GMP



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LEAF ENGINEERS
F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PKK PROJECT NUMBER	230485	CLIENT
DATE	07/29/2024	
DRAWING HISTORY	No. Description Date	

90% CONSTRUCTION DOCUMENTS - GMP
MEZZANINE AREA A MECHANICAL FLOOR PLAN

1 2ND LEVEL FIELD HOUSE PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"

90% CONSTRUCTION DOCUMENTS - GMP

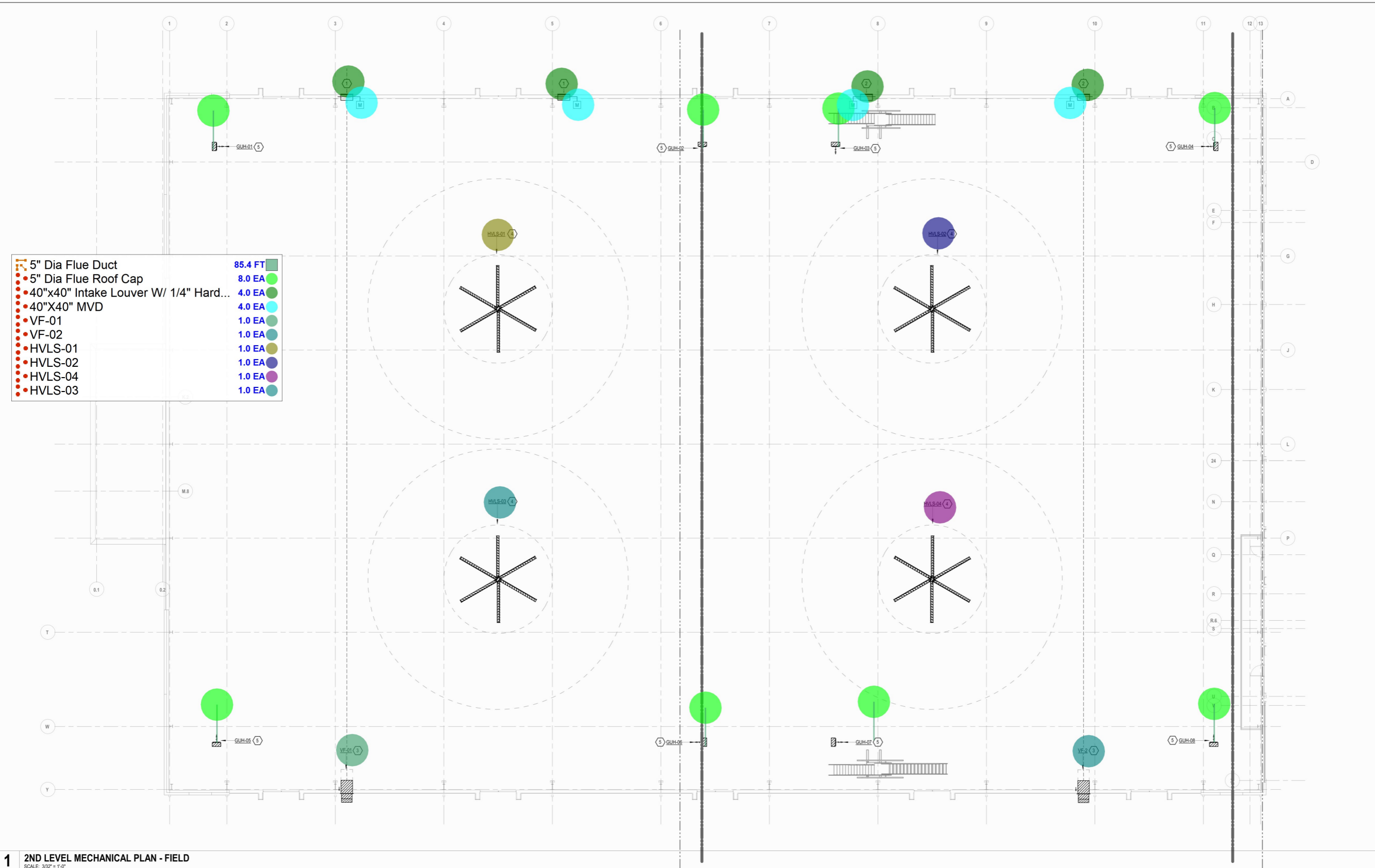
MECHANICAL GENERAL NOTES:

1. ALL EXPOSED DUCTWORK SHALL BE OF "PAINT GRIP" STEEL CONSTRUCTION, PAINTED PER ARCHITECTURAL SPECIFICATIONS, AND INSTALLED AS TIGHT TO STRUCTURE AS POSSIBLE.
2. ALL DUCTWORK, AIR DEVICES, PIPES, ETC. SHALL BE MOUNTED AS TIGHT TO STRUCTURE AS POSSIBLE. THESE ITEMS SHALL NOT BE INSTALLED BELOW 10'-0" A.F.F. NO EXCEPTIONS.
3. ALL EXPOSED DUCTWORK SHALL BE EITHER SPIRAL ROUND OR RECTANGULAR OVAL INTERNALLY LINED. RECTANGULAR DUCT AND WRAPPED INSULATION SHALL NOT BE INSTALLED IN EXPOSED AREAS.
4. REFER TO SHEET M-102B FOR PLAYING FIELD EQUIPMENT.

MECHANICAL KEYED NOTES:

1. 40"x40" INTAKE LOUVER INTERLOCKED WITH VF-01. PROVIDE 1/4" HARDWARE CLOTH OVER INTERIOR OPENING. LOUVER TO BE CENTERED BETWEEN DOWNSPOUT AND EDGE OF ADJACENT PLASTER. REFER TO ARCHITECT FOR ADDITIONAL DETAILS.
2. 40"x40" INTAKE LOUVER INTERLOCKED WITH VF-02. PROVIDE 1/4" HARDWARE CLOTH OVER INTERIOR OPENING. LOUVER TO BE CENTERED BETWEEN DOWNSPOUT AND EDGE OF ADJACENT PLASTER. REFER TO ARCHITECT FOR ADDITIONAL DETAILS.
3. WALL MOUNTED PROP FAN. FAN TO BE CENTERED BETWEEN DOWNSPOUT AND EDGE OF ADJACENT PLASTER. REFER TO ARCHITECT FOR ADDITIONAL DETAILS.
4. MOUNT HVLS FAN CENTERED IN ITS RESPECTIVE QUADRANT. PROVIDE STEEL FRAME MOUNTING BRACKET, EXTENSION TUBE, AND GUY WIRES AS REQUIRED BY MANUFACTURER. MAINTAIN A MINIMUM OF 2' CLEARANCE ON ALL SIDES OF AIRFOLDS. FAN AIRFOLDS SHALL BE MOUNTED AT A HIGHER ELEVATION AND A MINIMUM OF 1x THE FAN DIAMETER FROM UNIT HEATERS. PROVIDE WALL MOUNTED CONTROLLER FOR EACH FAN. COORDINATE CONTROLLER LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
5. MOUNT GAS FIRED UNIT HEATER BENEATH HVLS AIRFOLDS WITH A MINIMUM CLEARANCE OF 1x THE HVLS FAN DIAMETER. RECOMMENDED MOUNTING HEIGHT: 20' A.F.F. FIELD. COORDINATE EXACT MOUNTING HEIGHT. PROVIDE CEILING MOUNTING BRACKETS AND HANGER RODS. ROUTE 8" Ø FLUE THROUGH ROOF AND TERMINATE WITH CAP AS SHOWN IN DETAIL.

5" Dia Flue Duct	85.4 FT
5" Dia Flue Roof Cap	8.0 EA
40"x40" Intake Louver W/ 1/4" Hard...	4.0 EA
40"x40" MVD	4.0 EA
VF-01	1.0 EA
VF-02	1.0 EA
HVLS-01	1.0 EA
HVLS-02	1.0 EA
HVLS-04	1.0 EA
HVLS-03	1.0 EA



1 2ND LEVEL MECHANICAL PLAN - FIELD
SCALE: 3/32" = 1'-0"

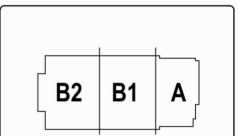
CHECKED BY: Mital Patel
DRAWN BY: Cody Blocker
Plot Stamp: 7/25/2024 4:28:31 PM



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
OWNER	5100 N CENTRAL EXPRESSWAY, SUITE 300 DALLAS, TX 75247	T (214) 758-8100
MECHANICAL ENGINEERING	111 West Main St Garland, Texas 75040	T (972) 359-1710
STRUCTURAL ENGINEERING	11 Greenway Plaza, Suite 1910 Houston, TX 77046	T 1.800.248.3614
MECHANICAL ENGINEERS	11 Greenway Plaza, 15th Floor Houston, TX 77046	T (713) 940-3300



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
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510 STADIUM DR
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KEY PLAN
NORTH: PLAN TRUE

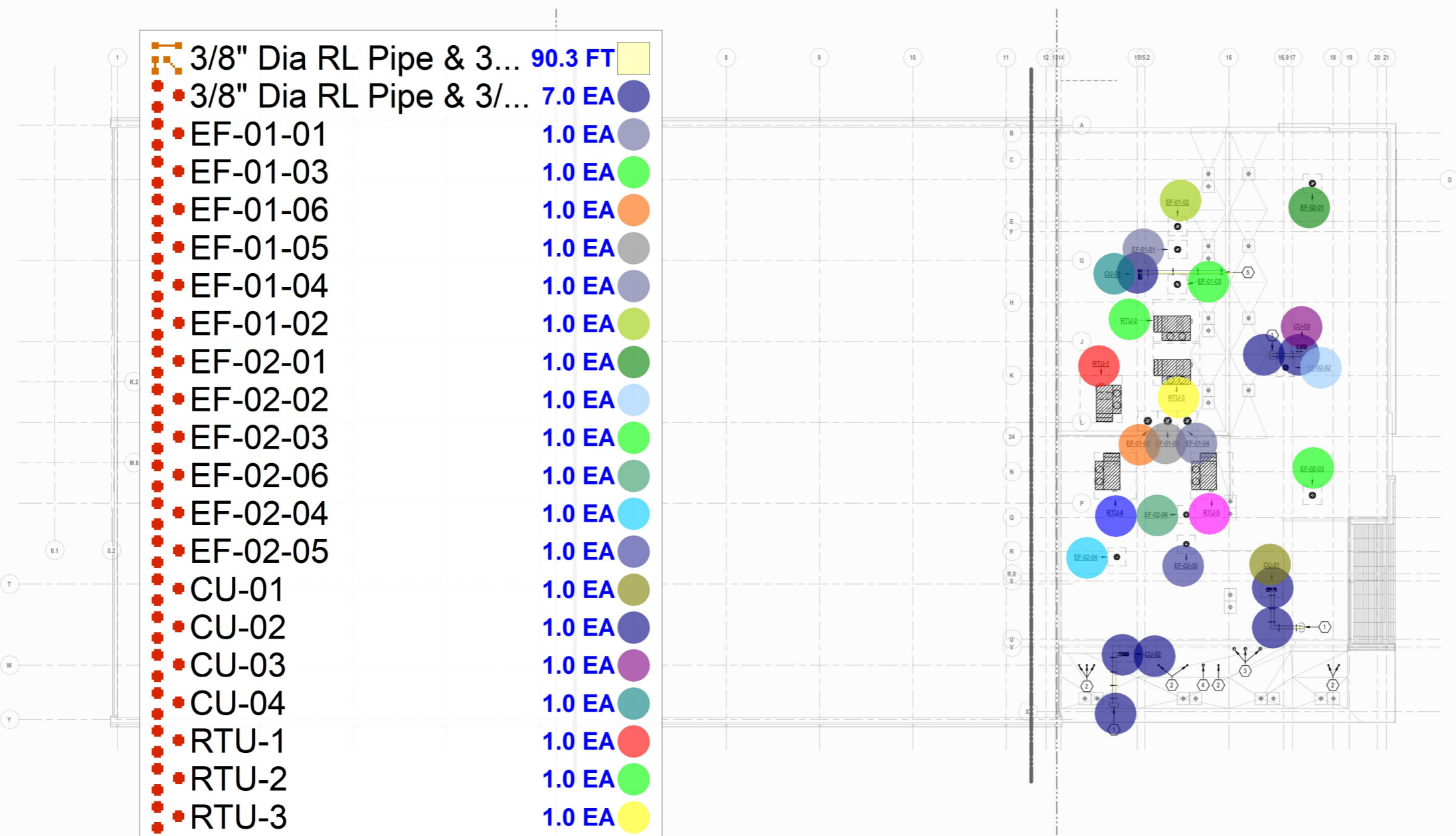
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LEAF ENGINEERS
F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PBK PROJECT NUMBER	230485	
CLIENT		
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

90% CONSTRUCTION DOCUMENTS - GMP
MEZZANINE AREA B MECHANICAL FLOOR PLAN

M-102B

90% CONSTRUCTION DOCUMENTS - GMP



3/8" Dia RL Pipe & 3...	90.3 FT	
3/8" Dia RL Pipe & 3/...	7.0 EA	
EF-01-01	1.0 EA	
EF-01-03	1.0 EA	
EF-01-06	1.0 EA	
EF-01-05	1.0 EA	
EF-01-04	1.0 EA	
EF-01-02	1.0 EA	
EF-02-01	1.0 EA	
EF-02-02	1.0 EA	
EF-02-03	1.0 EA	
EF-02-06	1.0 EA	
EF-02-04	1.0 EA	
EF-02-05	1.0 EA	
CU-01	1.0 EA	
CU-02	1.0 EA	
CU-03	1.0 EA	
CU-04	1.0 EA	
RTU-1	1.0 EA	
RTU-2	1.0 EA	
RTU-3	1.0 EA	
RTU-4	1.0 EA	
RTU-5	1.0 EA	

- MECHANICAL KEYED NOTES:**
- REFRIGERANT PIPING TO PENETRATE ROOF THROUGH HOODED CURB. PROVIDE PORTABLE PIPE SUPPORTS FOR ALL REFRIGERANT PIPING SPACED NO MORE THAN 8'-0" O.C.
 - 6"Ø EXHAUST DUCT ROOF CAP. REFER TO DETAIL.
 - 8"Ø DRYER EXHAUST DUCT GOOSNECK. NO DAMPERS, SCREENS, OR ANY OTHER SUCH OBSTRUCTIONS SHALL BE PLACED OVER OPENING. REFER TO DETAIL.
 - 10"Ø EXHAUST DUCT TO ROOF CAP. REFER TO DETAIL.
 - REFRIGERANT PIPING TO PENETRATE WALL. PROVIDE PORTABLE PIPE SUPPORTS FOR ALL REFRIGERANT PIPING SPACED NO MORE THAN 8'-0" O.C.

PKK Sports

ARCHITECT: HOUSTON
11 GREENWAY PLAZA, 22ND FLOOR
HOUSTON, TX 77046
T 713.965.0608
F 713.961.4571
TX Firm: BR 1958

PKK SPORTS
PKK.com

MECHANICAL ENGINEERING
111 West Main St
Houston, Texas 77002
T (832) 359-1733

STRUCTURAL
5100 GARDEN GROVE
11 Greenway Plaza, Suite 1910
Houston, TX 77046
T 1-800-248-3674

MECHANICAL ENGINEERS
11 Greenway Plaza, 15th Floor
Houston, TX 77046
T (713) 940-3300

LEAF ENGINEERS

PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
610 STADIUM DR
GARLAND, TX 75040
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GISD
GARLAND INDEPENDENT SCHOOL DISTRICT

KEY PLAN
NORTH: PLAN TRUE

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PROJECT NUMBER	230485	CLIENT
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MECHANICAL ROOF PLAN

<p>ROOF MOUNTED AIR COOLED CONDENSING UNIT PIPING AND SUPPORT DETAIL NOT TO SCALE</p>	<p>ELECTRIC UNIT HEATER DETAIL NOT TO SCALE</p>	<p>IN-LINE EXHAUST FAN DETAIL NOT TO SCALE</p>	<p>HORIZONTAL GAS UNIT HEATER DETAIL NOT TO SCALE</p>	<p>SNAP 'N' SHIELD REFRIGERANT PIPING SUPPORT DETAIL NOT TO SCALE</p>	<p>RAIN CAP DETAIL NOT TO SCALE</p>	<p>VERTICAL FIRE DAMPER DETAIL NOT TO SCALE</p>	<p>CONDENSATE TRAP PIPING DETAIL NOT TO SCALE</p>	<p>CONDENSATE TO SINK TAILPIECE DETAIL NOT TO SCALE</p>	<p>REFRIGERANT PIPING - ROOF ACCU DETAIL NOT TO SCALE</p>	<p>PIPE HANGER TRAPEZE DETAIL NOT TO SCALE</p>	<p>CEILING MOUNTED EXHAUST FAN DETAIL NOT TO SCALE</p>										
<table border="1"> <tr> <td data-bbox="549 955 964 1018"> <p>HOOD CURRENTLY NOT TO SCALE</p> </td> <td data-bbox="964 955 1350 1018"> <p>EXTERIOR WALL PIPE DETAIL</p> </td> <td data-bbox="1350 955 1765 1018"> <p>CONDENSATE TRAP PIPING DETAIL</p> </td> <td data-bbox="1765 955 2181 1018"> <p>CONDENSATE TO SINK TAILPIECE DETAIL</p> </td> <td data-bbox="2181 955 2597 1018"> <p>CEILING MOUNTED EXHAUST FAN DETAIL</p> </td> </tr> <tr> <td colspan="5" data-bbox="549 1018 2671 1449"> <p>5/8" Dia Refrigerant... 1.0 EA</p> <p>3/8" Dia Refrigerant... 2.0 EA</p> <p>3/8" Dia Sight Glass 1.0 EA</p> <p>3/8" Dia Filter Dryer 1.0 EA</p> <p>5/8" Dia Services V... 1.0 EA</p> <p>3/5" Dia Service Val... 1.0 EA</p> <p>3/8" Solenoid Valve 1.0 EA</p> <p>3/8" Dia Expansion ... 1.0 EA</p> </td> </tr> </table>												<p>HOOD CURRENTLY NOT TO SCALE</p>	<p>EXTERIOR WALL PIPE DETAIL</p>	<p>CONDENSATE TRAP PIPING DETAIL</p>	<p>CONDENSATE TO SINK TAILPIECE DETAIL</p>	<p>CEILING MOUNTED EXHAUST FAN DETAIL</p>	<p>5/8" Dia Refrigerant... 1.0 EA</p> <p>3/8" Dia Refrigerant... 2.0 EA</p> <p>3/8" Dia Sight Glass 1.0 EA</p> <p>3/8" Dia Filter Dryer 1.0 EA</p> <p>5/8" Dia Services V... 1.0 EA</p> <p>3/5" Dia Service Val... 1.0 EA</p> <p>3/8" Solenoid Valve 1.0 EA</p> <p>3/8" Dia Expansion ... 1.0 EA</p>				
<p>HOOD CURRENTLY NOT TO SCALE</p>	<p>EXTERIOR WALL PIPE DETAIL</p>	<p>CONDENSATE TRAP PIPING DETAIL</p>	<p>CONDENSATE TO SINK TAILPIECE DETAIL</p>	<p>CEILING MOUNTED EXHAUST FAN DETAIL</p>																	
<p>5/8" Dia Refrigerant... 1.0 EA</p> <p>3/8" Dia Refrigerant... 2.0 EA</p> <p>3/8" Dia Sight Glass 1.0 EA</p> <p>3/8" Dia Filter Dryer 1.0 EA</p> <p>5/8" Dia Services V... 1.0 EA</p> <p>3/5" Dia Service Val... 1.0 EA</p> <p>3/8" Solenoid Valve 1.0 EA</p> <p>3/8" Dia Expansion ... 1.0 EA</p>																					
<p>ROOF MOUNTED AIR COOLED CONDENSING UNIT PIPING AND SUPPORT DETAIL NOT TO SCALE</p>	<p>ELECTRIC UNIT HEATER DETAIL NOT TO SCALE</p>	<p>IN-LINE EXHAUST FAN DETAIL NOT TO SCALE</p>	<p>HORIZONTAL GAS UNIT HEATER DETAIL NOT TO SCALE</p>	<p>SNAP 'N' SHIELD REFRIGERANT PIPING SUPPORT DETAIL NOT TO SCALE</p>	<p>RAIN CAP DETAIL NOT TO SCALE</p>																

ARCHITECT HOUSTON
11 GREENWAY PLAZA, 22ND FLOOR
HOUSTON, TX 77046
T 713.965.0608
F 713.961.4571
TX Firm: BR 1958

CLIENT GARLAND INDEPENDENT SCHOOL DISTRICT
510 STADIUM DR
GARLAND, TX 75040

PROJECT NUMBER 230485
DATE 07/29/2024

DRAWING HISTORY

No.	Description	Date

90% CONSTRUCTION DOCUMENTS - GMP

PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS

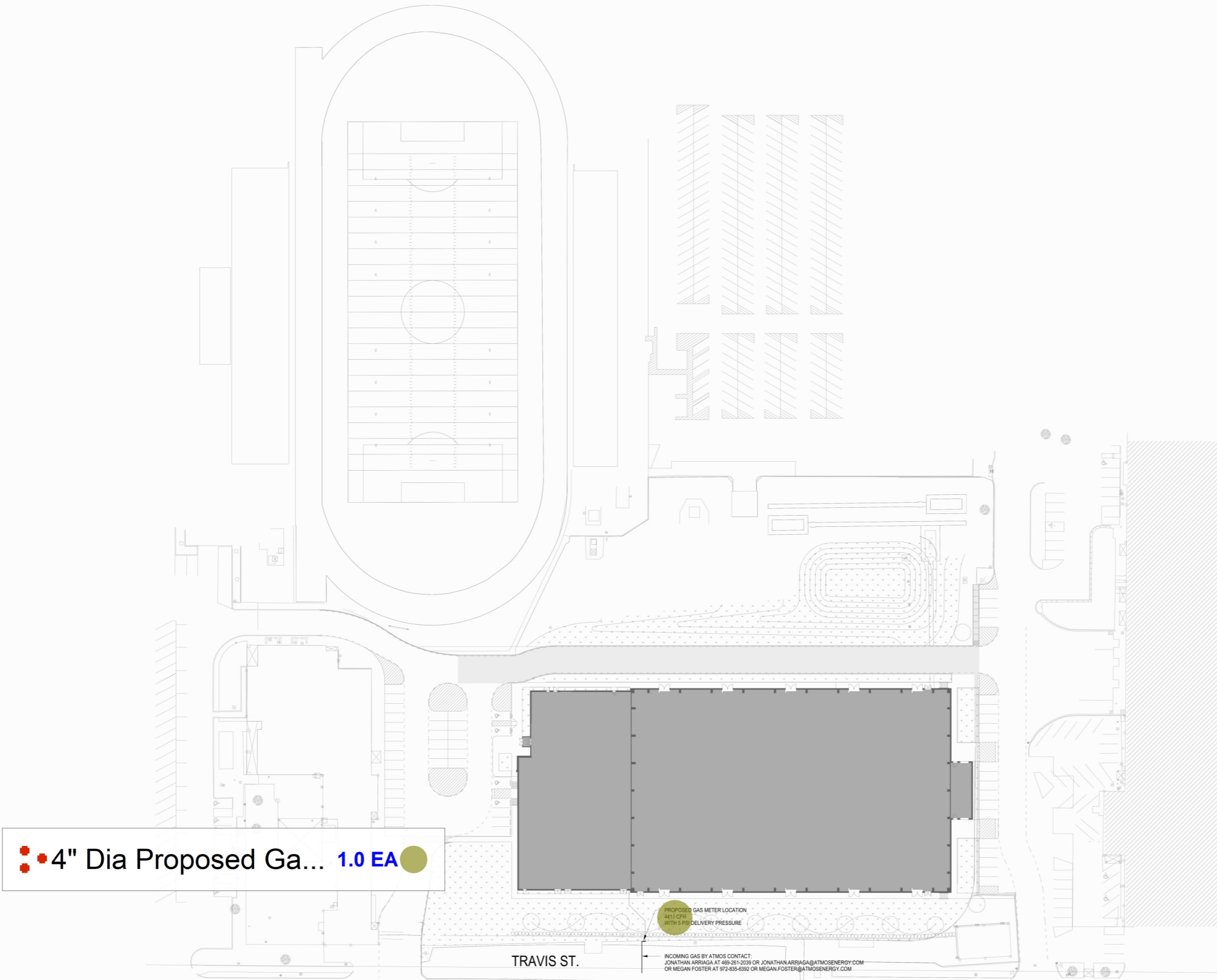
GARLAND HIGH SCHOOL GARLAND INDEPENDENT SCHOOL DISTRICT

GISD
GARLAND INDEPENDENT SCHOOL DISTRICT

MECHANICAL DETAILS

M-602

90% CONSTRUCTION DOCUMENTS - GMP



■ ■ ■ **4" Dia Proposed Ga...** 1.0 EA ●

TRAVIS ST.

PROPOSED GAS METER LOCATION
 4" DIA
 WITH 4 PSI DELIVERY PRESSURE

INCOMING GAS BY ATMOS CONTACT
 JONATHAN ARRAGA AT 409-251-3035 OR JONATHAN.ARRAGA@ATMOSENERGY.COM
 OR MEGAN FOSTER AT 972-635-6392 OR MEGAN.FOSTER@ATMOSENERGY.COM

1 PLUMBING SITE PLAN
 SCALE: 1" = 40'-0"

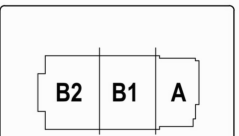
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 Checker
 DRAWN BY:
 Author
 Plot Stamp:
 7/25/2024 7:59:56 PM



ARCHITECT PBK SPORTS
 HOUSTON
 11 GREENWAY PLAZA, 22ND FLOOR
 HOUSTON, TX 77046
 T 713.965.0608
 F 713.961.4571
 TX Firm: BCR 1608



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GARLAND HIGH SCHOOL
 GARLAND INDEPENDENT SCHOOL DISTRICT
 610 STADIUM DR
 GARLAND, TX 75040
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KEY PLAN
 NORTH: PLAN TRUE

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 LEAF ENGINEERS
 F-18672

CLIENT		
GARLAND INDEPENDENT SCHOOL DISTRICT		
PBK	PROJECT NUMBER	CLIENT
230485		
DATE		
07/29/2024		
DRAWING HISTORY		
No.	Description	Date

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PLUMBING SITE PLAN


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DON RICHARDS
DRAWN BY:
RANDY APPLING
Plot Stamp:
7/25/2024 4:18:32 PM

1 1ST LEVEL PLUMBING UNDERGROUND PLAN - COMPOSITE

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


1" Dia CW Pipe 299.8 FT
1" Dia C Pipe 90 ... 7.0 EA



GENERAL NOTES - PLUMBING PLAN

- A. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
- B. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
- C. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
- D. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
- E. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
- F. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
- G. PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
- H. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.
- I. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
- J. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
- K. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
- L. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
- M. CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.
- N. CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.
- O. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
- P. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYNOTES - PLUMBING PLAN

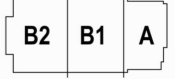
- P31 1" COLD WATER UP WITH ISOLATION VALVE AT 3'-0" ABOVE FINISHED FLOOR.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
MECHANICAL	1111 West Main St Houston, TX 77002 T (872) 991-1713	
STRUCTURAL	11 Greenway Plaza, Suite 1910 Houston, TX 77046 T 1.800.248.3614	
MECHANICAL	11 Greenway Plaza, 15th Floor Houston, TX 77046 T (713) 940-3300	



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
610 STADIUM DR
GARLAND, TX 75040
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F-18672

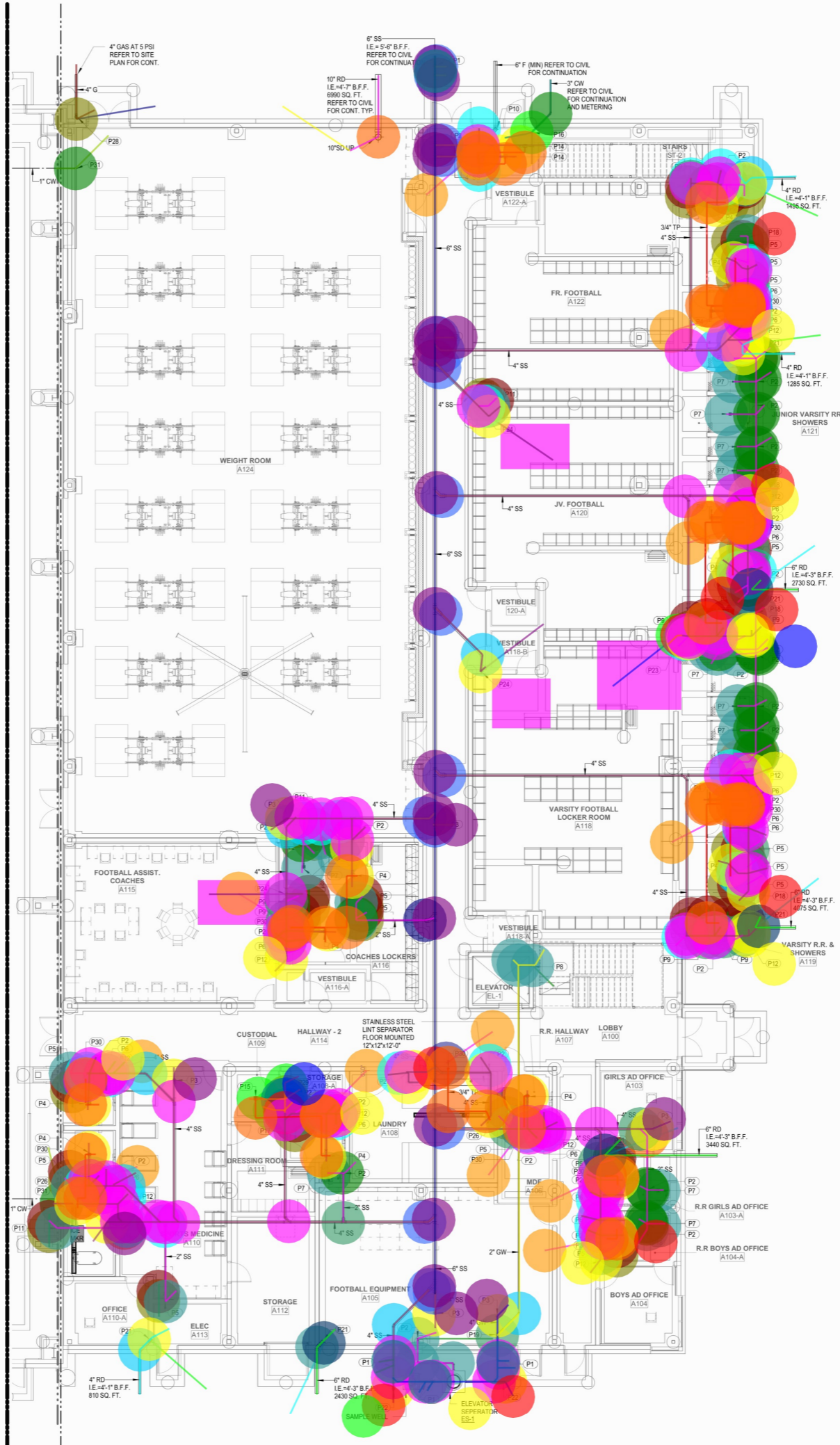
CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PBK PROJECT NUMBER	230485	CLIENT
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

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1ST LEVEL PLUMBING UNDERGROUND PLAN - COMPOSITE

PU-101

90% Construction Documents - GMP

6" Dia SS Pipe	190.2 FT
4" Dia SS Pipe	918.9 FT
2" Dia SS Pipe	329.9 FT
3" Dia SS Pipe	23.6 FT
6" Dia CA Pipe Wye	16.0 EA
4" Dia CA Pipe Wye	104.0 EA
2" Dia CA Pipe Wye	32.0 EA
3" Dia CA Pipe Wye	4.0 EA
6" / 4" Dia CA Pipe Double Wye	1.0 EA
6" / 4" Dia CA Pipe Reducer	16.0 EA
4" / 2" Dia CA Pipe Reducer	51.0 EA
3" / 2" Dia CA Pipe Reducer	2.0 EA
6" / 2" Dia CA Pipe Reducer	1.0 EA
4" / 3" Dia CA Pipe Reducer	2.0 EA
4" / 2" Dia CA Pipe Wye	24.0 EA
4" Dia C Pipe 90 Deg Elbow	52.0 EA
3" Dia C Pipe 90 Deg Elbow	4.0 EA
10" Dia C Pipe 90 Deg Elbow	1.0 EA
6" Dia C Pipe 90 Deg Elbow	4.0 EA
6" Dia C Pipe 45 Deg Elbow	1.0 EA
4" Dia C Pipe 45 Deg Elbow	14.0 EA
2" Dia C Pipe 90 Deg Elbow	36.0 EA
2" Dia C Pipe 45 Deg Elbow	6.0 EA
4" Dia GW Pipe	40.8 FT
2" Dia GW Pipe	64.8 FT
10" Dia SD Pipe	14.3 FT
4" Dia RD Pipe	34.4 FT
6" Dia RD Pipe	49.3 FT
2" Dia PVC Pipe Wye	35.0 EA
2" Dia SS Pipe	161.8 FT
2" Dia PVC Pipe 90 Deg Elbow	35.0 EA
4" Dia SS Pipe	36.2 FT
4" Dia RD Pipe	35.9 FT
6" Dia RD Pipe	48.3 FT
10" Dia SD Pipe	12.4 FT
3" Dia SS Pipe	12.6 FT
3" Dia CW Pipe	13.6 FT
3/4" Dia TP Pipe	231.1 FT
3" Dia CW Pipe 90 Deg Elbow	1.0 EA
3/4" Dia TP Pipe 90 Deg Elbow	49.0 EA
3" Dia CW Pipe 45 Deg Elbow	1.0 EA
3/4" Dia TP, 2 Connection	4.0 EA
3/4" Dia TP, 3 Connection	3.0 EA
3/4" Dia TP	5.0 EA
3/4" Dia Isolation Valve	12.0 EA
1" Dia Isolation Valve	2.0 EA
3/4" Dia TP Pipe	121.3 FT
1" Dia CW Pipe	20.7 FT
3" Dia CW Pipe	4.9 FT
4" Dia Gas Pipe	11.6 FT
4" Dia Gas Pipe 90 Deg Elbow	1.0 EA
4" Dia Gas Pipe	12.3 FT
4" Dia FCO	8.0 EA
4" Dia WCO	9.0 EA
2" Dia WCO	6.0 EA
3" Dia WCO	1.0 EA
4" Dia 2-Way Grade Cleanout	4.0 EA
4" Dia GCO	2.0 EA
Sample Well	1.0 EA
ES-1	1.0 EA
ESP-1, In 2'X2'X2' Deep Sump Piy	1.0 EA



GENERAL NOTES - PLUMBING PLAN

- THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
- ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
- ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
- ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
- REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
- ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
- PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
- ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.
- FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
- ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
- FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
- CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
- CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.
- CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.
- ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
- ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

KEYNOTES - PLUMBING PLAN

- 4" WASTE UP TO 2-WAY GRADE CLEAN-OUT IN CONCRETE PAD, REFER TO DETAILS.
- 2" VENT UP.
- 4" WASTE UP TO FLOOR CLEAN OUT, REFER TO DETAILS.
- 4" WASTE UP TO 4" FLOOR DRAIN WITH TRAP PRIMER.
- 2" WASTE UP TO LAVATORY OR SINK.
- 4" WASTE UP TO WALL MOUNTED WATER CLOSET.
- 2" WASTE UP TO SHOWER DRAIN, WITH TRAP GUARD.
- ESP-1 ELEVATOR SUMP PUMP IN 2'X2'X2' DEEP SUMP PIT, REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATION.
- 2" WASTE UP TO URINAL.
- 6" FIRE WATER UP, MINIMUM SIZE.
- 2" WASTE UP TO ELECTRIC DRINKING FOUNTAIN.
- 4" WASTE UP TO WALL CLEAN-OUT ABOVE FLOOR RIM OF WATER CLOSET, TYPICAL.
- 4" WASTE UP TO FLOOR SINK WITH TRAP PRIMER.
- 3" WASTE UP TO FLOOR SINK WITH TRAP PRIMER.
- 3" DOMESTIC WATER UP.
- 3" WASTE UP TO MOP SINK.
- 2" WASTE UP TO WALL CLEAN-OUT.
- 2" WASTE FROM SUMP PUMP, TIE-INTO TOP OF 4" WASTE LINE.
- STORM DRAIN UP, SIZE AS NOTED.
- 4" WASTE UP TO GRADE CLEAN-OUT IN CONCRETE PAD, REFER TO DETAILS.
- 3" WASTE UP TO ABOVE CEILING.
- 4" WASTE UP TO ABOVE CEILING.
- 4" WASTE UP TO TRENCH DRAIN WITH TRAP PRIMER.
- 4" WASTE UP TO FLOOR MOUNTED TROUGH DRAIN LINT INTERCEPTOR.
- INCOMING 4" GAS UP AT 5 PSI, REFER TO ROOF PLAN AND SITE PLAN FOR CONTINUATION.
- 3" WASTE UP TO WALL CLEAN-OUT.
- 3/4" TRAP PRIMER LINE(S) UP TO TRAP PRIMER.
- 1" COLD WATER UP WITH ISOLATION VALVE AT 3" ABOVE FINISHED FLOOR.



ARCHITECT HOUSTON
11 GREENWAY PLAZA, 22ND FLOOR
HOUSTON, TX 77046
T 713.965.0608
F 713.961.4571
TX Firm: BR 1958

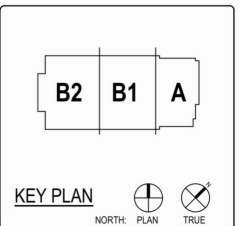
CLIENT
GARLAND INDEPENDENT SCHOOL DISTRICT
111 West Main St
Garland, Texas 75042
T (972) 269-1713

ENGINEERING
111 West Main St
Garland, Texas 75042
T 1-800-248-2674

STRUCTURAL
111 West Main St
Garland, Texas 75042
T (713) 940-3300

LEAF ENGINEERS

PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
510 STADIUM DR
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F-18672

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PROJECT NUMBER	230485	CLIENT
DATE	07/29/2024	
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No.	Description	Date

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1ST LEVEL PLUMBING UNDERGROUND PLAN - FIELD HOUSE

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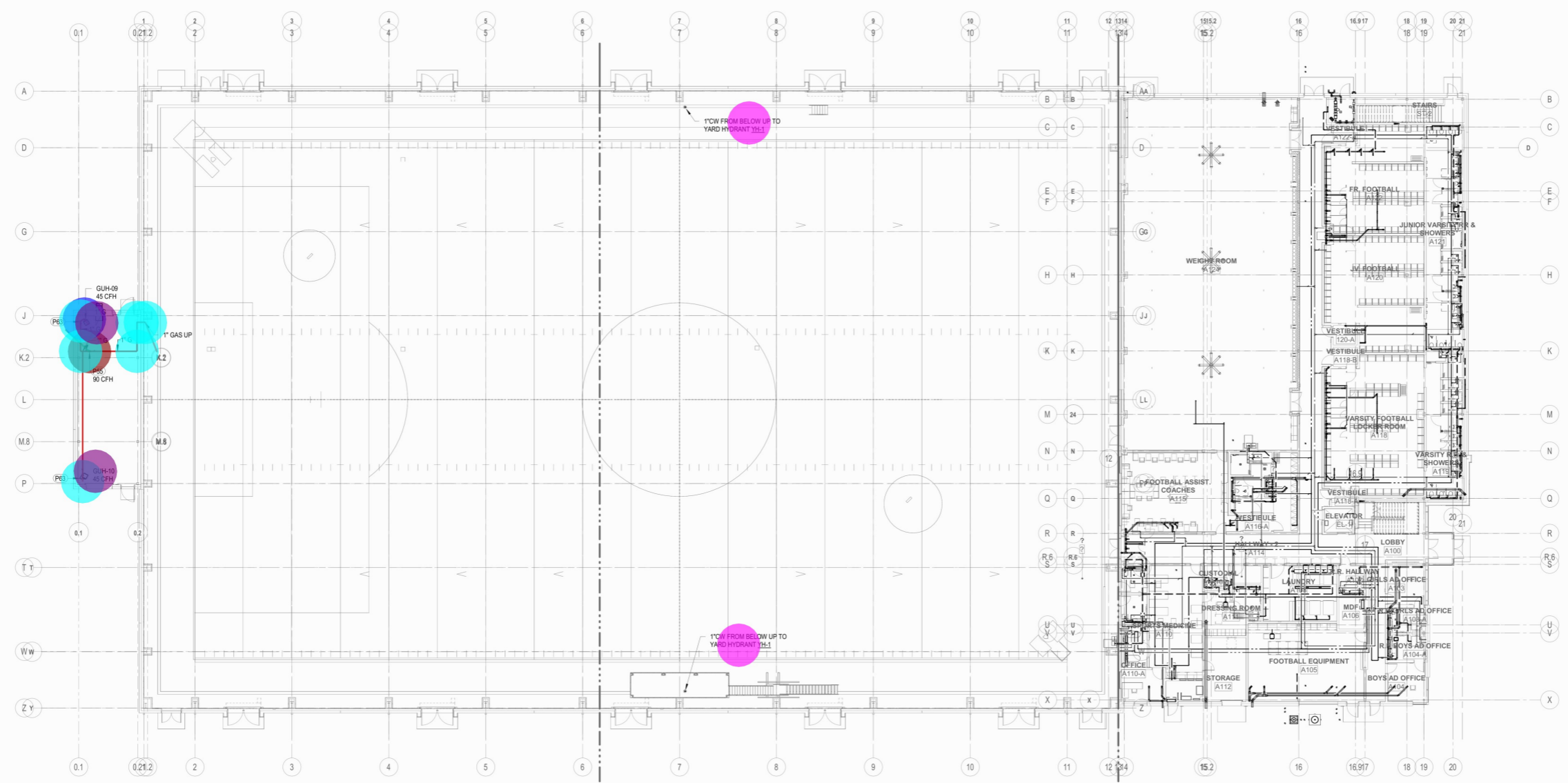
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CHECKED BY:
DON RICHARDS
DRAWN BY:
RANDY APPLING
Plot Stamp:
7/25/2024 4:16:24 PM

	1" Dia YH-1	2.0 EA	
	1" Dia Gas Pipe	92.2 FT	
	1" Dia S Pipe 90 De...	6.0 EA	
	1" Dia S Pipe 45 De...	1.0 EA	
	1" Dia GV Pipe 90 ...	1.0 EA	
	1" Dia GV Pipe	10.1 FT	
	1" Dia Gas Elbow D...	1.0 EA	
	1" Dia Gas Regulator	1.0 EA	
	1" Connection Detai...	2.0 EA	

- GENERAL NOTES - PLUMBING PLAN**
- A. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
 - B. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
 - C. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
 - D. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
 - E. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
 - F. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
 - G. PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
 - H. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.
 - I. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
 - J. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
 - K. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 8" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
 - L. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
 - M. CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.
 - N. CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.
 - O. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
 - P. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

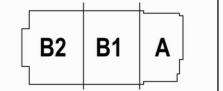
- KEYNOTES - PLUMBING PLAN**
- PS5 GAS REGULATOR TO REDUCE PRESSURE DOWN FROM 5 PSI TO 1/2" WC. ROUTE FULL SIZE VENT TO EXTERIOR WALL WITH LEAK-DOWN AND INSECT SCREEN. MUST BE MINIMUM OF 10'-0" AWAY FROM OPERABLE DOORS AND WINDOWS.
 - PS3 GAS CONNECTION TO GAS FIRED UNIT HEATER WITH GAS COCK, DRIP LEG AND UNION. REFER TO DETAILS.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
MECHANICAL	111 West Main St Houston, Texas 77002 T (872) 959-1713	
STRUCTURAL	11 Greenway Plaza, Suite 1910 Houston, TX 77046 T 1.800.248.3614	
PLUMBING	11 Greenway Plaza, 15th Floor Houston, TX 77046 T (713) 940-3300	



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
 GARLAND INDEPENDENT SCHOOL DISTRICT
 510 STADIUM DR
 GARLAND, TX 75040
 90% Construction Documents - GMP



KEY PLAN
 NORTH PLAN TRUE

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 LEAF ENGINEERS
 F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PBK PROJECT NUMBER	230485	CLIENT
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

90% Construction Documents - GMP

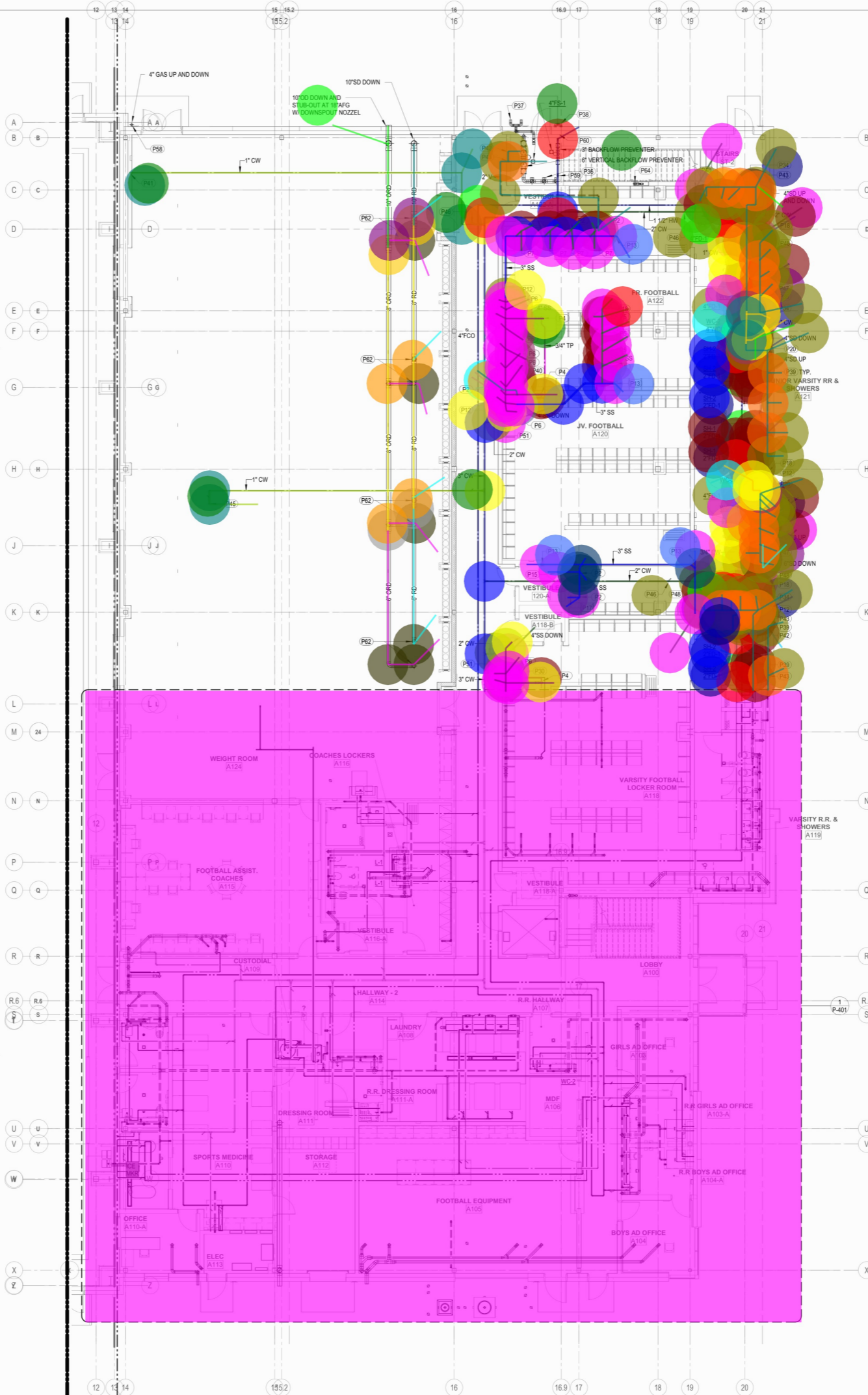
1ST LEVEL PLUMBING PLAN - COMPOSITE

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File Path: Autocad Docs:\Garland ISD_230485_Indoor MACs\23_Garland ISD_Indoor MACs_R23.rvt

CHECKED BY:
DON RICHARDS
DRAWN BY:
RANDY APPLING
Plot Stamp:
7/25/2024 4:28:47 PM

4" Dia SS Pipe	96.2 FT
3" Dia SS Pipe	109.9 FT
2" Dia SS Pipe	65.5 FT
2" Dia V Pipe	264.3 FT
4" Dia V Pipe	25.8 FT
2" Dia PVC Pipe 90 Deg Elbow	48.0 EA
6" Dia PVC Pipe 90 Deg Elbow	6.0 EA
3" Dia PVC Pipe 90 Deg Elbow	18.0 EA
4" Dia PVC Pipe 90 Deg Elbow	10.0 EA
4" Dia PVC Pipe 45 Deg Elbow	1.0 EA
2" Dia PVC Pipe 45 Deg Elbow	1.0 EA
3" Dia PVC Pipe 45 Deg Elbow	2.0 EA
2" Dia PVC Pipe Tee	23.0 EA
4" Dia PVC Pipe Tee	2.0 EA
4" / 2" Dia PVC Pipe Reducer	13.0 EA
4" / 3" Dia PVC Pipe Reducer	1.0 EA
4" / 3" Dia PVC Pipe Wye	1.0 EA
3" Dia PVC Pipe Wye	6.0 EA
10" / 6" Dia PVC Pipe Wye	2.0 EA
10" / 6" Dia PVC Pipe Reducer	2.0 EA
8" / 6" Dia PVC Pipe Wye	4.0 EA
8" / 6" Dia PVC Pipe Reducer	2.0 EA
3" / 2" Dia PVC Pipe Wye	6.0 EA
2" Dia PVC Pipe Wye	12.0 EA
4" Dia PVC Pipe Wye	22.0 EA
4" Dia WCO	2.0 EA
3" Dia FCO	4.0 EA
2" Dia WCO	1.0 EA
10" Dia RD Pipe	13.4 FT
10" Dia ORD Pipe	29.9 FT
6" Dia ORD Pipe	63.9 FT
8" Dia RD Pipe	47.8 FT
6" Dia RD Pipe	66.8 FT
10" Dia SD Pipe	46.4 FT
4" Dia RD Pipe	15.6 FT
10" Dia Stub-Out W/ Downspout Nozzel	13.6 FT
3" Dia CW Pipe	106.8 FT
2" Dia CW Pipe	193.4 FT
1-1/2" Dia CW Pipe	11.7 FT
1-1/2" Dia HW Pipe	202.6 FT
3/4" Dia HW Pipe	137.1 FT
3/4" Dia CW Pipe	175.4 FT
1" Dia CW Pipe	141.7 FT
3/4" Dia TP Pipe	46.8 FT
1" Dia C Pipe 90 Deg Elbow	6.0 EA
3" Dia C Pipe 90 Deg Elbow	3.0 EA
3" / 2" Dia C Pipe Tee	2.0 EA
2" Dia C Pipe 90 Deg Elbow	4.0 EA
3" / 3/4" Dia C Pipe Tee	12.0 EA
3/4" Dia C Pipe 90 Deg Elbow	1.0 EA
3/4" Dia C Pipe 45 Deg Elbow	78.0 EA
2" Dia C Pipe Tee	2.0 EA
2" / 1-1/2" Dia C Pipe Tee	3.0 EA
2" / 1-1/2" Dia C Pipe Reducer	5.0 EA
1-1/2" Dia C Pipe 90 Deg Elbow	2.0 EA
3/4" Dia C Pipe Tee	6.0 EA
1-1/2" / 3/4" Dia C Pipe Tee	14.0 EA
2" / 3/4" Dia C Pipe Tee	10.0 EA
2" / 3/4" Dia C Pipe Reducer	2.0 EA
2" / 1" Dia C Pipe Reducer	1.0 EA
1" / 3/4" Dia C Pipe Reducer	1.0 EA
1" / 3/4" Dia C Pipe Tee	1.0 EA
3" Dia Backflow Preventer	1.0 EA
1" Dia Isolation Valve	4.0 EA
2" Dia Isolation Valve	4.0 EA
3/4" Dia Isolation Valve	3.0 EA
2" Dia Shock Absorber With Access Panel	4.0 EA
3/4" Dia Kemper KHS Flow Splitter Unit 6500-06 SERIES	2.0 EA
Access Panel	6.0 EA
U-1	2.0 EA
U-2	2.0 EA
L-1	6.0 EA
SH-2	6.0 EA
WC-1	2.0 EA
WC-2	2.0 EA
SH-1	2.0 EA
4" Dia FS-1	1.0 EA
4" Dia FD-1	4.0 EA
2" Dia FD-1	8.0 EA



- GENERAL NOTES - PLUMBING PLAN**
- THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
 - ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
 - ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
 - ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
 - REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
 - ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
 - PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
 - ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.
 - FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
 - ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
 - FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NO LESS THAN 8" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
 - CONTRACTOR SHALL DETERMINE ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
 - CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.
 - CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.
 - ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
 - ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

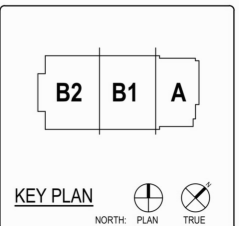
- KEYNOTES - PLUMBING PLAN**
- 2" VENT UP.
 - 4" WASTE UP TO 4" FLOOR DRAIN WITH TRAP PRIMER.
 - 2" WASTE UP TO LAVATORY OR SINK.
 - 4" WASTE UP TO WALL MOUNTED WATER CLOSET.
 - 2" WASTE UP TO SHOWER DRAIN, WITH TRAP GUARD.
 - 4" WASTE UP TO WALL CLEAN-OUT, ABOVE FLOOR RIM OF WATER CLOSET, TYPICAL.
 - 3" WASTE UP TO FLOOR CLEAN-OUT.
 - 3" WASTE UP TO FLOOR SINK WITH TRAP PRIMER.
 - 3" WASTE UP TO MOP SINK.
 - 2" WASTE UP TO WALL CLEAN-OUT.
 - 4" VENT UP.
 - 3/4" TRAP PRIMER LINE(S) UP TO TRAP PRIMER.
 - SHOCK ABSORBER WITH ACCESS PANEL AND ISOLATION VALVE BELOW FOR EASE OF MAINTENANCE. OMIT ACCESS PANEL IF ABOVE ACCESSIBLE CEILING.
 - TRAP PRIMER WITH DISTRIBUTION BOX, ISOLATION VALVE AND ACCESS PANEL.
 - SPRINKLER ALARM VALVES AND ACCESSORIES, PROVIDE DRAIN LINE TO FLOOR SINK.
 - 4" FN TO FIRE DEPARTMENT CONNECTION VERIFY EXACT LOCATION AND TYPE WITH LOCAL FIRE DEPARTMENT. PROVIDE SIGNAGE TO INDICATE 'AUTOSPKR AND STANDPIPE'.
 - WATER MOTOR GONG OR ALARM BELL PER LOCAL FIRE DEPARTMENT.
 - 3/4" COLD WATER, 3/4" HOT WATER AND 2" VENT DOWN TO FIXTURE.
 - 2" VENT, 3/4" CW DOWN TO ELECTRIC DRINKING FOUNTAIN.
 - 1" COLD WATER DOWN TO BELOW FLOOR WITH ISOLATION VALVE AND ACCESS PANEL AT 3'-0" ABOVE FINISHED FLOOR.
 - 2" VENT DOWN.
 - 2" VENT DOWN COMBINE MULTIPLE 2" VENTS AT 42" AFF, TYPICAL.
 - 1" CW UP TO NON-FREEZE ROOF HYDRANT (NFRH).
 - ISOLATION VALVES ABOVE ACCESSIBLE CEILING. DO NOT PROVIDE ABOVE HARD CEILING. PLACE IN WALL WITH ACCESS PANEL OR ACCESSIBLE LOCATION, NO MORE THAN 12" ABOVE CEILING OR WITH-IN 6" OF WALL ACCESS PANEL.
 - 2" / 3/4" HW DOWN TO LAVS, PROVIDE KEMPER KHS VENTURI FLOW SPLITTER UNIT 6500-06 SERIES. TO PROVIDE HOT WATER LOOP TO WITHIN 24" OF HAND WASH STATIONS TO MEET THE REQUIREMENTS 2021 IECC.
 - 2" COLD WATER DOWN TO CHASE AND BRANCH TO FIXTURES.
 - 2" COLD WATER UP TO SECOND FLOOR.
 - PROVIDE A FLOW METER FOR THE GAS ENTERING THE BUILDING FOR CONNECTION TO THE 'BAS' BUILDING AUTOMATION SYSTEM. 'EMS' ENERGY MANAGEMENT SYSTEM TO MONITOR NATURAL GAS USAGE.
 - PROVIDE A FLOW METER FOR THE DOMESTIC WATER ENTERING THE BUILDING FOR CONNECTION TO THE 'BAS' BUILDING AUTOMATION SYSTEM. 'EMS' ENERGY MANAGEMENT SYSTEM TO MONITOR NATURAL GAS USAGE.
 - PROVIDE A VALVE TAG CHART IN SPRINKLER VALVE ROOM. CHART SHALL BE IN A PICTURE FRAME AN MOUNTED SECURELY TO WALL.
 - 6" SD AND 6" OD UP TO ROOF DRAINS.
 - STANDPIPE CONNECTION CLASS I TYPE, WITH 2-1/2" x 1-1/2" REDUCER WITH CAP AND CHAIN. FIRE SPRINKLER STANDPIPES SYSTEMS SHALL BE EQUIPPED WITH A WATER FLOW DETECTOR FOR EACH FLOOR TAP AND CAUSE AN ALARM UPON DETECTION OF WATER FLOW. THESE VALVES SHALL BE ELECTRONICALLY SUPERVISED, PER CITY OF GARLAND, SACHSE AND ROWLETT FIRE DEPARTMENT REQUIREMENTS. PROVIDE IN VALVE CABINET IF REQUIRED TO MAINTAIN STAIRWELL CLEARANCES.



ARCHITECT	HOUSTON	PKK SPORTS
11 GREENWAY PLAZA, 22ND FLOOR	HOUSTON, TX 77046	
T 713.965.0608	F 713.961.4571	
TX Firm: BR 1958		
CLIENT	11 GREENWAY PLAZA, SUITE 300	T (713) 759-8100
1111 West Main St	Houston, TX 77002	T (872) 289-1713
MECHANICAL ENGINEERS	11 Greenway Plaza, Suite 1910	T 1-800-248-2614
MECHANICAL ENGINEERS	11 Greenway Plaza, 19th Floor	T (713) 940-3300
Houston, TX 77046		



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
 510 STADIUM DR
 GARLAND, TX 75040
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 LEAF ENGINEERS
 F-18672

CLIENT	GARLAND INDEPENDENT SCHOOL DISTRICT	
PKK PROJECT NUMBER	230485	
CLIENT		
DATE	07/29/2024	
DRAWING HISTORY		
No.	Description	Date

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1ST LEVEL PLUMBING PLAN - FIELD HOUSE

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2-1/2" Dia Gas Pipe	0.0 FT
2" Dia Gas Pipe	455.4 FT
1-1/4" Dia Gas Pipe	572.2 FT
1" Dia Gas Pipe	87.6 FT
2" Dia S Pipe 90 Deg Elbow	2.0 EA
2" / 1-1/4" Dia S Pipe Tee	4.0 EA
1-1/4" Dia S Pipe Tee	3.0 EA
1-1/4" / 1" Dia S Pipe Reducer	1.0 EA
2" / 1-1/4" Dia S Pipe Reducer	2.0 EA
1" Dia S Pipe 90 Deg Elbow	3.0 EA
1-1/4" Dia S Pipe 90 Deg Elbow	29.0 EA
1-1/4" Dia Gas Valve	12.0 EA
1-1/4" Dia Gas Regulator	6.0 EA
1" Dia Gas Elbow Down W/ Insect Screen	6.0 EA
1" Dia GV Pipe 90 Deg Elbow	6.0 EA
1" Dia GV Pipe	61.6 FT
1-1/4" Connection Details Heater	8.0 EA

GENERAL NOTES - PLUMBING PLAN

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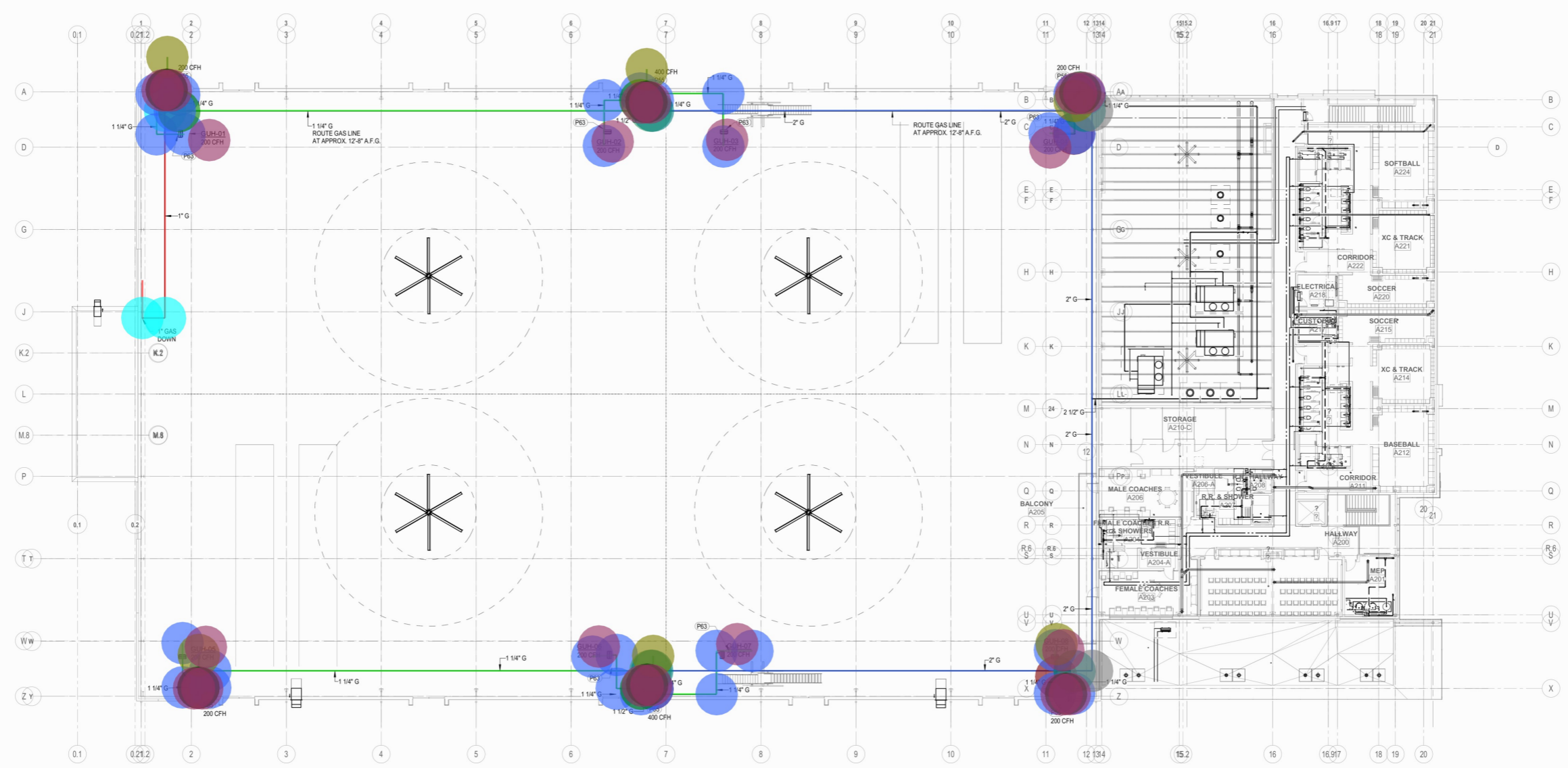
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KEYNOTES - PLUMBING PLAN

P55 GAS REGULATOR TO REDUCE PRESSURE DOWN FROM 5 PSI TO 14"WC. ROUTE FULL SIZE VENT TO EXTERIOR WALL WITH ELBOW DOWN AND INSECT SCREEN. MUST BE MINIMUM OF 10'-0" AWAY FROM OPERABLE DOORS AND WINDOWS.

P63 GAS CONNECTION TO GAS FIRED UNIT HEATER WITH GAS COCK, DRIP LEG AND UNION. REFER TO DETAILS.



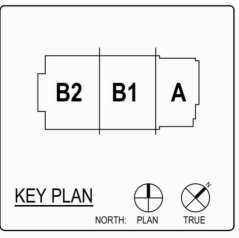
1 MEZZANINE LEVEL PLUMBING PLAN - COMPOSITE
 SCALE: 1/16" = 1'-0"



ARCHITECT	HOUSTON	PBK SPORTS
	11 GREENWAY PLAZA, 22ND FLOOR	
	HOUSTON, TX 77046	
	T 713.965.0608	
	F 713.961.4571	
	TX Firm: BR 1958	



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
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 GARLAND, TX 75040
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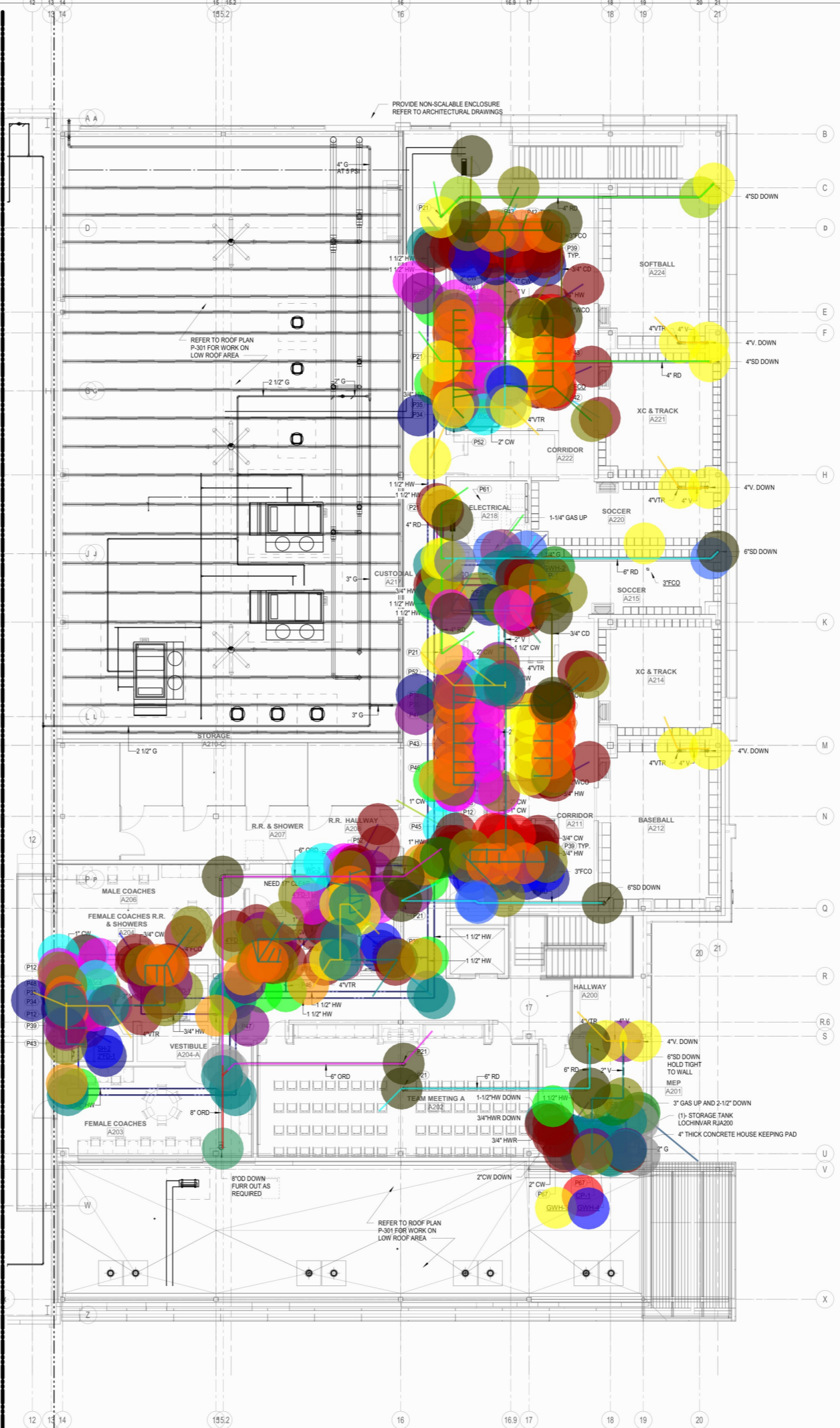
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PBK PROJECT NUMBER	230485	
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DATE	07/29/2024	
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90% Construction Documents - GMP
MEZZANINE LEVEL PLUMBING PLAN - COMPOSITE

90% Construction Documents - GMP

- 4" Dia RD Pipe 135.8 FT
- 6" Dia RD Pipe 126.5 FT
- 6" Dia ORD Pipe 102.1 FT
- 8" Dia ORD Pipe 14.7 FT
- 2" Dia SS Pipe 130.4 FT
- 4" Dia V Pipe 138.5 FT
- 3" Dia V Pipe 4.0 FT
- 2" Dia V Pipe 329.6 FT
- 4" Dia PVC Pipe 90 Deg Elbow 22.0 EA
- 4" Dia PVC Pipe 45 Deg Elbow 3.0 EA
- 6" / 4" Dia PVC Pipe Wye 1.0 EA
- 6" / 4" Dia PVC Pipe Reducer 1.0 EA
- 6" Dia PVC Pipe 90 Deg Elbow 9.0 EA
- 6" Dia PVC Pipe 45 Deg Elbow 3.0 EA
- 8" Dia PVC Pipe Wye 1.0 EA
- 8" / 6" Dia PVC Pipe Reducer 2.0 EA
- 8" Dia PVC Pipe 90 Deg Elbow 1.0 EA
- 2" Dia PVC Pipe 90 Deg Elbow 37.0 EA
- 2" Dia PVC Pipe 45 Deg Elbow 1.0 EA
- 4" / 3" Dia PVC Pipe Wye 1.0 EA
- 3" / 2" Dia PVC Pipe Wye 1.0 EA
- 3" / 2" Dia PVC Pipe Reducer 1.0 EA
- 4" / 2" Dia PVC Pipe Reducer 10.0 EA
- 4" / 2" Dia PVC Pipe Tee 2.0 EA
- 4" Dia PVC Pipe Tee 7.0 EA
- 2" Dia PVC Pipe Tee 36.0 EA
- 2" Dia CW Pipe 140.2 FT
- 1-1/2" Dia CW Pipe 97.2 FT
- 1-1/2" Dia HW Pipe 446.4 FT
- 3/4" Dia CW Pipe 269.6 FT
- 3/4" Dia HW Pipe 440.4 FT
- 1" Dia CW Pipe 51.9 FT
- 1" Dia HW Pipe 19.2 FT
- 3/4" Dia TP Pipe 45.5 FT
- 1-1/4" Dia Gas Pipe 43.8 FT
- 2" Dia Gas Pipe 11.6 FT
- 2-1/2" Dia Gas Pipe 12.2 FT
- 2" / 1-1/4" Dia S Pipe Tee 1.0 EA
- 2" / 1-1/4" Dia S Pipe Reducer 1.0 EA
- 2-1/2" / 2" Dia S Pipe Reducer 1.0 EA
- 1-1/4" Dia S Pipe 90 Deg Elbow 9.0 EA
- 2" Dia S Pipe 90 Deg Elbow 2.0 EA
- 2" Dia Gas Valve 1.0 EA
- 1-1/4" Dia Gas Valve 1.0 EA
- 1" Dia CD Pipe 23.7 FT
- 3/4" Dia CD Pipe 106.8 FT
- 1" Dia CD Pipe 90 Deg Elbow 2.0 EA
- 3/4" Dia CD Pipe 90 Deg Elbow 10.0 EA
- 1-1/2" Dia C Pipe 90 Deg Elbow 44.0 EA
- 1-1/2" Dia C Pipe Tee 2.0 EA
- 1-1/2" / 3/4" Dia C Pipe Reducer 2.0 EA
- 3/4" Dia C Pipe 90 Deg Elbow 118.0 EA
- CP-1 2.0 EA
- CP-2 1.0 EA
- GWH-3 1.0 EA
- GWH-4 1.0 EA
- 4" Dia FS-1 1.0 EA
- 1-1/2" / 3/4" Dia C Pipe Tee 14.0 EA
- 1" Dia C Pipe 90 Deg Elbow 4.0 EA
- 2" Dia C Pipe 90 Deg Elbow 11.0 EA
- 2" / 1-1/2" Dia C Pipe Reducer 5.0 EA
- 2" / 1" Dia C Pipe Reducer 5.0 EA
- 2" / 1-1/2" Dia C Pipe Tee 14.0 EA
- 1" / 3/4" Dia C Pipe Tee 8.0 EA
- 1" / 3/4" Dia C Pipe Reducer 5.0 EA
- 1-1/2" / 1" Dia C Pipe Tee 2.0 EA
- 3/4" Dia C Pipe Tee 22.0 EA
- 2" Dia C Pipe Tee 4.0 EA
- 2" / 3/4" Dia C Pipe Tee 1.0 EA
- GWH-2 1.0 EA
- SH-1 3.0 EA
- SH-2 7.0 EA
- 2" Dia FD-1 10.0 EA
- 4" Dia FD-1 8.0 EA
- WC-1 13.0 EA
- WC-2 4.0 EA
- L-1 10.0 EA
- 3" Dia FS-1 1.0 EA
- L-2 1.0 EA
- 3/4" Dia Isolation Valve 5.0 EA
- 3/4" Dia Kemper KHS Flow Splitter Unit 6500-06 SERIES 9.0 EA
- 2" Dia Shock Absorber With Access Panel 5.0 EA
- 1" Dia Isolation Valve 4.0 EA
- 1" Dia Isolation Valve 1.0 EA



- ### GENERAL NOTES - PLUMBING PLAN
- A. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.
 - B. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.
 - C. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.
 - D. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
 - E. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
 - F. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
 - G. PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
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 - J. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
 - K. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 8" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.
 - L. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
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 - N. CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.
 - O. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.
 - P. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

- ### KEYNOTES - PLUMBING PLAN
- P12 4" WASTE UP TO WALL CLEAN-OUT, ABOVE FLOOR RIM OF WATER CLOSET, TYPICAL.
 - P21 STORM DRAIN UP, SIZE AS NOTED.
 - P24 SHOCK ABSORBER WITH ACCESS PANEL AND ISOLATION VALVE BELOW FOR EASE OF MAINTENANCE, OMIT ACCESS PANEL IF ABOVE ACCESSIBLE CEILING.
 - P35 TRAP PRIMER WITH DISTRIBUTION BOX, ISOLATION VALVE AND ACCESS PANEL.
 - P39 3/4" COLD WATER, 3/4" HOT WATER AND 2" VENT DOWN TO FIXTURE.
 - P42 2" VENT DOWN.
 - P43 2" VENT DOWN COMBINE MULTIPLE 2" VENTS AT 42" AFF, TYPICAL.
 - P44 2" VENT, 3/4" CW AND 3/4" HW DOWN TO MOP SINK.
 - P45 1" CW UP TO NON-FREEZE ROOF HYDRANT (NFRH).
 - P46 ISOLATION VALVES ABOVE ACCESSIBLE CEILING, DO NOT PROVIDE ABOVE HARD CEILING, PLACE IN WALL WITH ACCESS PANEL OR ACCESSIBLE LOCATION, NO MORE THAN 12" ABOVE CEILING OR WITHIN 6" OF WALL ACCESS PANEL.
 - P47 (2)-3/4" HW DOWN TO LAVS, PROVIDE KEMPER KHS VENTURI FLOW SPLITTER UNIT 6500-06 SERIES, TO PROVIDE HOT WATER LOOP TO WITHIN 24" OF HAND WASH STATIONS TO MEET THE REQUIREMENTS 2021 ICC.
 - P48 2" COLD WATER DOWN TO CHASE AND BRANCH TO FIXTURES.
 - P52 2" COLD WATER FROM BELOW WITH ISOLATION VALVE AND ACCESS PANEL, PROVIDE AT HANDICAPPED STALL ON SECOND LEVEL.
 - P61 NO PIPING SHALL BE RUN ABOVE MDF A106, OR ANY ELECTRIC ROOMS.
 - P67 CHECK VALVE



ARCHITECT HOUSTON
11 GREENWAY PLAZA, 22ND FLOOR
HOUSTON, TX 77046
T 713.965.0608
F 713.961.4571
TX Firm: BR 1958

PKB SPORTS
PKB.com

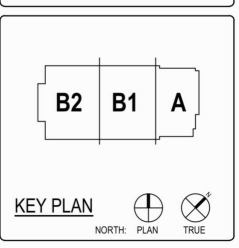
MECHANICAL ENGINEERING
111 West Main St
Austin, Texas 78703
T (872) 959-1713

STRUCTURAL
11 Greenway Plaza, Suite 1910
Houston, TX 77046
T 1-800-248-3474

MECHANICAL ENGINEERING
11 Greenway Plaza, 19th Floor
Houston, TX 77046
T (713) 961-3300

LEAF ENGINEERS

PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL
GARLAND INDEPENDENT SCHOOL DISTRICT
510 STADIUM DR
GARLAND, TX 75040
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GARLAND INDEPENDENT SCHOOL DISTRICT		230485		
DATE		07/29/2024		
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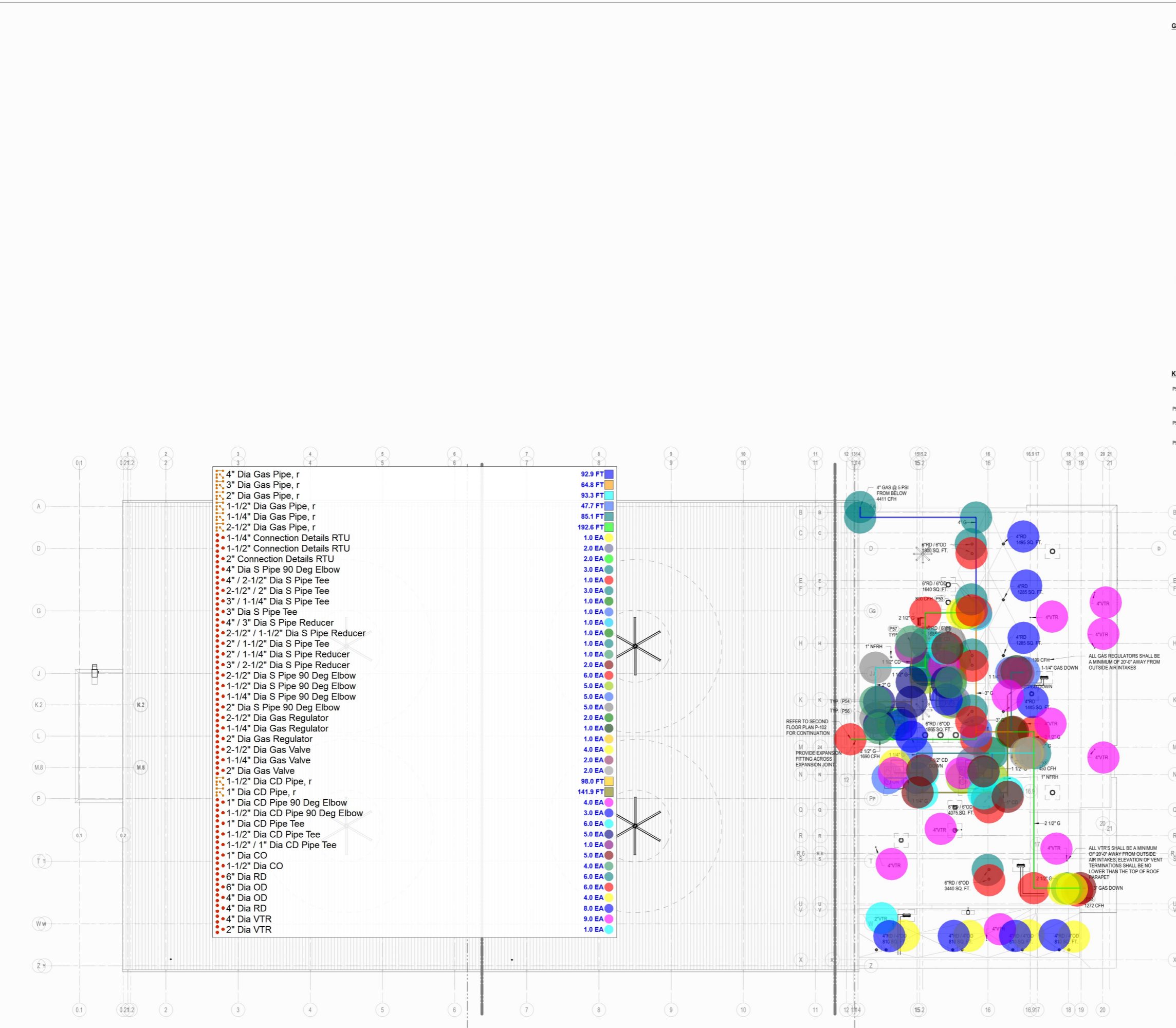
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MEZZANINE LEVEL PLUMBING PLAN - FIELD HOUSE

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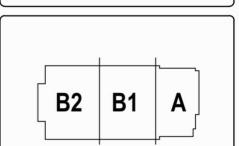
- KEYNOTES - PLUMBING PLAN**
- P53 GAS REGULATOR TO REDUCE PRESSURE DOWN FROM 5 PSI TO 1/4"WC. MUST BE MINIMUM OF 20'-0" AWAY FROM OUTSIDE AIR INTAKES.
 - P54 GAS CONNECTION TO RTU WITH GAS COOK, DRIP LEG AND UNION. REFER TO DETAILS.
 - P56 FULL SIZE CONDENSATE DRAIN CONNECTION TO RTU WITH DEEP SEAL P-TRAP AND VENT. REFER TO DETAILS.
 - P57 CONDENSATE DRAIN SHALL HAVE CLEAN-OUT AT ALL CHANGES IN DIRECTION.



ARCHITECT	HOUSTON 11 GREENWAY PLAZA, 22ND FLOOR HOUSTON, TX 77046 T 713.965.0608 F 713.961.4571 TX Firm: BR 1958	PBK SPORTS PBK.com
MECHANICAL	1111 West Main St Houston, TX 77002	T (281) 758-8100
CIVIL	1111 West Main St Houston, TX 77002	T (281) 758-1713
STRUCTURAL	11 Greenway Plaza, Suite 1910 Houston, TX 77046	T 1.800.248.3614
MECHANICAL	11 Greenway Plaza, 15th Floor Houston, TX 77046	T (713) 940-3300



PH1-BP02 FIELDHOUSE AND MULTI-PROGRAM ACTIVITY CENTERS
GARLAND HIGH SCHOOL DISTRICT
 GARLAND INDEPENDENT SCHOOL DISTRICT
 510 STADIUM DR
 GARLAND, TX 75040
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KEY PLAN
 NORTH PLAN TRUE

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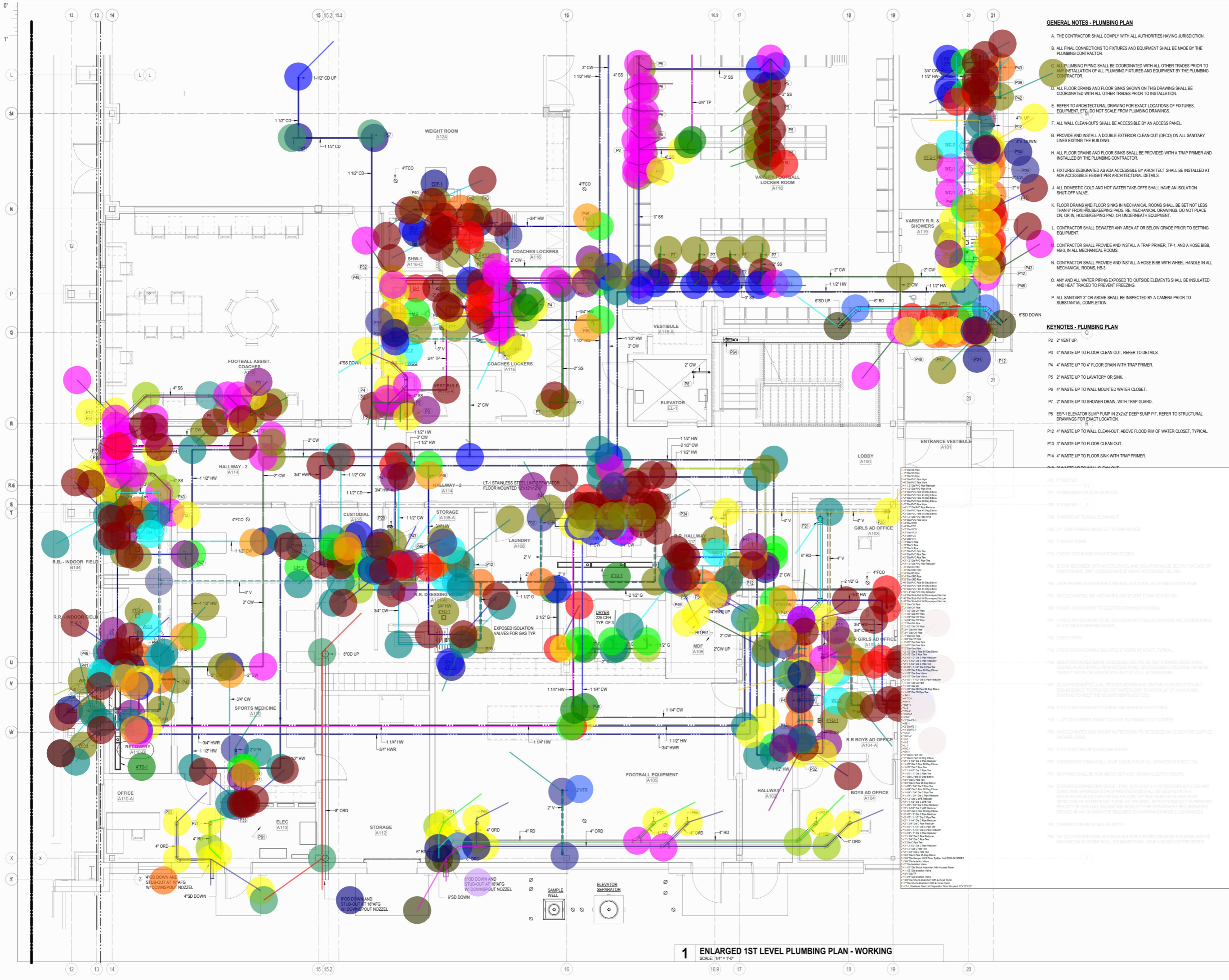
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PLUMBING ROOF PLAN

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- KEYNOTES - PLUMBING PLAN**
- 2" VENT UP.
 - 4" WASTE UP TO FLOOR CLEAN OUT, REFER TO DETAILS.
 - 4" WASTE UP TO 4" FLOOR DRAIN WITH TRAP PRIMER.
 - 2" WASTE UP TO LAVATORY OR SINK.
 - 4" WASTE UP TO WALL MOUNTED WATER CLOSET.
 - 2" WASTE UP TO SHOWER DRAIN, WITH TRAP GUARD.
 - ESP-1 ELEVATOR SUMP PUMP IN 2x2x2" DEEP SUMP PIT, REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATION.
 - 4" WASTE UP TO WALL CLEAN-OUT, ABOVE FLOOR RIM OF WATER CLOSET, TYPICAL.
 - 3" WASTE UP TO FLOOR CLEAN-OUT.
 - 4" WASTE UP TO FLOOR SINK WITH TRAP PRIMER.

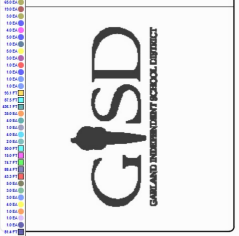


ARCHITECT: HOUSTON
11 GREENWAY PLAZA, 22ND FLOOR
HOUSTON, TX 77046
T 713.965.0608
F 713.961.4571
TX Firm: BR 1608

CONTRACTOR: LEAF ENGINEERS
11 Greenway Plaza, Suite 1510
Houston, TX 77046
T 1.800.248.3474
F 713.961.4571

CLIENT: GARLAND INDEPENDENT SCHOOL DISTRICT
510 STADIUM DR
GARLAND, TX 75040
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GARLAND HIGH SCHOOL
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KEY PLAN
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PLUMBING ENLARGED PLAN

P-401

1 ENLARGED 1ST LEVEL PLUMBING PLAN - WORKING
SCALE: 1/4" = 1'-0"