

PLUMBING SYMBOLS LIST			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CW	COLD WATER LINE	AFF	ABOVE FINISHED FLOOR
A	COMPRESSED AIR LINE	AHJ	AUTHORITY HAVING JURISDICTION
G	GAS LINE	CONT	CONTRACTOR
HW	HOT WATER LINE	EWC	ELECTRIC WATER COOLER
CON	MECHANICAL EQUIPMENT CONDENSATE LINE	FDC	FIRE DEPARTMENT CONNECTION
O	OIL LINE	GCO	GROUND CLEAN OUT
PLUMBING VENT LINE		L	LAVATORY
OW	UNDERGROUND OIL WASTE LINE	MS	MOP SINK
SAN	UNDERGROUND SANITARY DRAIN LINE	NTS	NOT TO SCALE
FCO	FCO-FLOOR CLEAN OUT	TP	TRAP PRIMER
FD	FD-FLOOR DRAIN	UNO	UNLESS NOTED OTHERWISE
HB	HOSE BIBB	UR	URINAL
WCO	WALL CLEAN OUT	VIF	VERIFY IN FIELD
	SHUT-OFF VALVE	VTR	VENT THROUGH ROOF
		WC	WATER CLOSET

CIVIL ENGINEERING DESIGN COORDINATION NOTICE

NOTICE TO ALL PARTIES HAVING AN INTEREST IN THIS CONSTRUCTION PROJECT

1.) CIVIL ENGINEERING FOR THIS PROJECT IS BEING PERFORMED BY OTHERS.

2.) CONTRACTORS RELYING ON DOCUMENTS NOT COORDINATED WITH THE CIVIL ENGINEERING WORK SHALL DO SO AT THEIR OWN RISK.

3.) COORDINATION WITH THE CIVIL ENGINEERING DOCUMENTS HAS BEEN COMPLETED ONLY AS SHOWN BELOW.

CIVIL ENGINEERING CONSULTANT IS: BGE
121 W. TRADE ST. SUITE 1030 CHARLOTTE, NC

CIVIL SHT. DWG. NO.	CIVIL SHEET DWG. TITLE	REV. NO.	REV. DATE	REV. NO.	REV. DATE	REV. NO.	REV. DATE
C4-0	UTILITY PLAN						

COORDINATION CHECKED BY	INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
DISCIPLINE	RMC	07/17/19				

- ### # KEYED PLAN NOTES - THIS SHEET
- ROUTE COLD & HOT WATER PIPING DOWN SERVICE BAY WALL. ROUTE PIPING AS REQUIRED TO SINK AND EYEWASH BELOW. ALL PIPING SHALL BE INSULATED. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 2" VENT UP TO 3" VENT THRU ROOF.
 - SEE ENLARGED RESTROOMS SHEET P2 FOR CONTINUATION.
 - EYEWASH PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. PROVIDE 1/2" INSULATED WATER LINE TO FIXTURE. MOUNT EYEWASH AT 41" A.F.F. TO THE CENTERLINE OF THE SPOUT. REFER TO FIXTURE PLAN FOR LOCATION. REFERENCE DETAIL 3 ON SHEET P5.
 - SANITARY LINE. EXTEND 5'-0" OUT FROM BUILDING. SEE CIVIL PLANS FOR CONTINUATION.
 - DOMESTIC WATER SERVICE TO MAIN. EXTEND 5'-0" OUT FROM BUILDING. SEE CIVIL PLANS FOR CONTINUATION.
 - ROUTE CONDENSATE LINE FULL SIZE OF EQUIPMENT MAIN CONNECTION TO MOP SINK OR NEAREST APPROVED DRAINAGE POINT AT AN 1/8" PER FOOT SLOPE HORIZONTALLY AND TIGHT TO WALL VERTICALLY. PROVIDE CODE REQUIRED AIR GAP. SEE ENLARGED PLANS AND SHEETS FOR DETAILS.
 - EYEWASH DRAIN PIPE SHALL BE 1/2" INSULATED FULL SIZE OF FIXTURE BACK IN WALL AND DOWN BELOW SLAB. REFER TO DETAIL 3 ON SHEET P5.
 - GAS PIPE DROP TO GAS METER EQUIPMENT. PROVIDE GAS COCK, DIRT LEG, FLEXIBLE CONNECTOR (WHEN PROVIDED). ALL GAS PIPING AND ACCESSORIES TO BE KEPT BETWEEN UNIT AND NEAREST WALL AND SHALL NOT EXTEND BELOW THE BOTTOM OF THE UNIT.
 - GAS METER BY UTILITY. CONTRACTOR SHALL VERIFY THAT NEW GAS SERVICE IS REGULATED FOR 7 IN. W.C. AND THE GAS METER HAS A MINIMUM CAPACITY OF 444 CUBIC FEET. ANY DISCREPANCIES IN THIS INFORMATION SHOULD BE IMMEDIATELY REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND/OR PROJECT ENGINEER.
 - ROUTE GAS PIPE TIGHT TO WALL AND AS REQUIRED TO GAS METER. COORDINATE LOCATION OF ROUGH IN AND/OR INSTALLATION OF GAS PIPE. GAS PIPING IS SIZED BASED ON 7 IN. W.C. PRESSURE AND A 0.5 W.C. PRESSURE DROP PER THE 2018 NORTH CAROLINA FUEL GAS CODE, TABLE 402.02.
 - CONTRACTOR SHALL PROVIDE GAS PRESSURE REGULATOR ON CUSTOMER SIDE OF METER TO SUPPLY BUILDING EQUIPMENT WITH 7" W.C. PRESSURE. REFER TO PRESSURE REGULATOR SCHEDULE ON SHEET P6 FOR SIZING REQUIREMENTS. REFER TO REGULATOR MANUFACTURER'S INSTALLATION INSTRUCTION.
 - FIRE RISER INLET. REFER TO SPECIFICATIONS, FIRE PROTECTION AND CIVIL DRAWINGS FOR MORE INFORMATION.
 - FIRE RISER FLOOR AREA. REFER TO SPECIFICATIONS AND FIRE PROTECTION DRAWINGS FOR MORE INFORMATION.
 - TURN DOWNSPOUT (DS) OUT AND TERMINATE TO GRADE. REFER TO ARCHITECTURAL DRAWINGS FOR DOWNSPOUT SIZE.
 - 2" UNDERGROUND VENTS UP IN WALL EXTEND UP 6" ABOVE FIXTURE RIM LEVEL. PROVIDE WCO ON EACH VENT LINE ONCE VENT LINES ARE ABOVE GROUND. COMBINE VENTS INTO (1) 3" VENT AND ROUTE UP IN WALL TO ROOF. PROVIDE 3" VENT THROUGH ROOF.
 - PROVIDE STRIEM MODEL OS-100 OIL/SAND SEPARATOR. MINIMUM BASIN SIZE: 275 GALLON STATIC LIQUID HOLDING CAPACITY. BASINS SHALL BE CONSTRUCTED OF POLYETHYLENE WITH BOLTED AND GASKETED TRAFFIC RATED CAST IRON COVERS. ALTERNATIVE BID: PRE-CAST CONCRETE TWO COMPARTMENT 350 GALLON STATIC HOLDING CAPACITY WITH BOLTED AND GASKETED TRAFFIC RATED CAST IRON COVERS. EXTEND 2" VENT LINE FROM EACH COMPARTMENT OR PER MANUFACTURER'S INSTRUCTIONS. INSURE THAT ALL UNDERGROUND PIPING AND OIL INTERCEPTOR PRESERVES THE ADJACENT BUILDING'S FOOTING. MAINTAIN A 6' MINIMUM DISTANCE FROM ADJACENT BUILDING'S FOOTING TO PRESERVE STRUCTURAL INTEGRITY. OIL INTERCEPTOR AND OIL INTERCEPTOR INSTALLATION SHALL COMPLY WITH 2018 NORTH CAROLINA PLUMBING CODE AND ALL LOCAL AMENDMENTS.

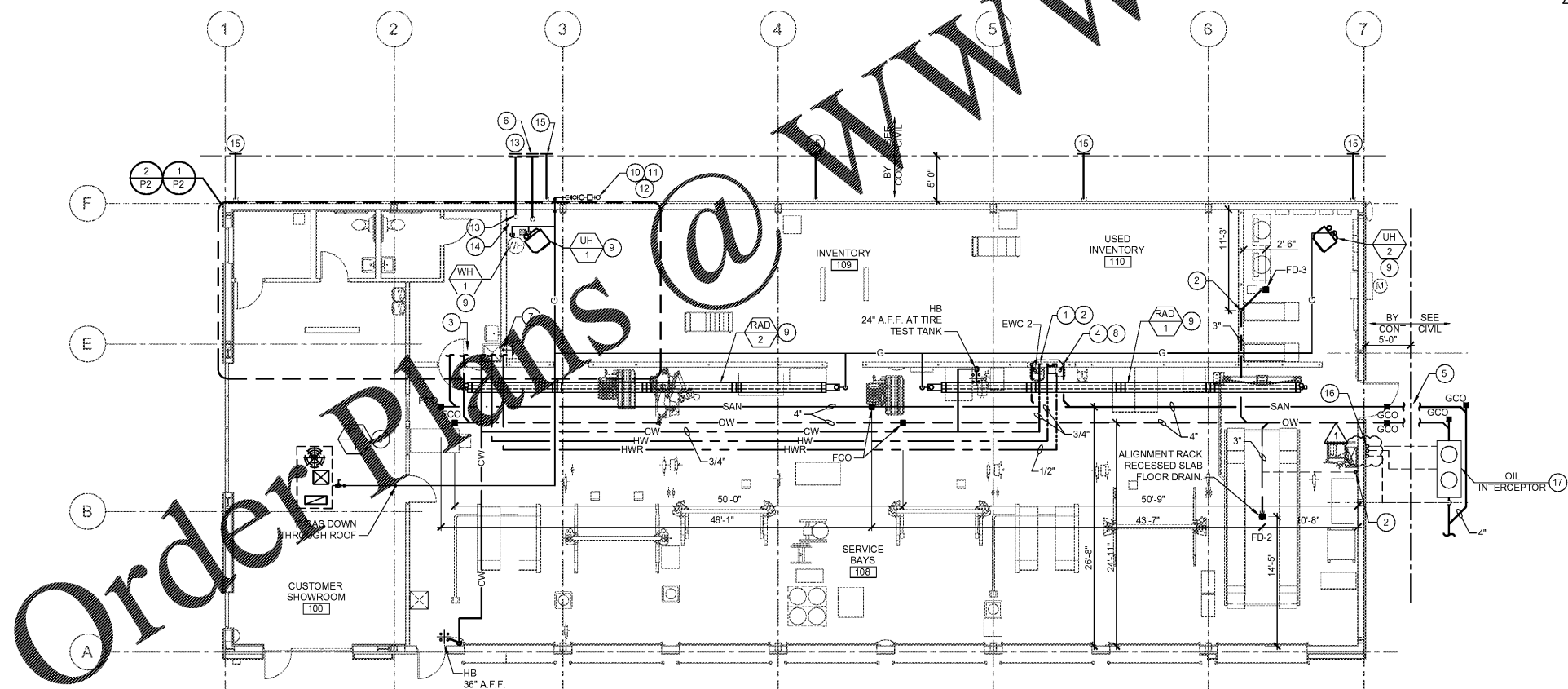
SLOPE OF HORIZONTAL DRAINAGE PIPE	
SIZE	MINIMUM SLOPE
2-1/2" OR LESS	1/4" / ft OR 2%
3" TO 6"	1/8" / ft OR 1%

NOTE:
SCHEDULE BASED ON NORTH CAROLINA PLUMBING CODE, SECTION 704 - TABLE 704.1.

PLUMBING INVERTS:
STARTING POINT: 0' - FINISHED FLOOR
ENDING POINT: 5'-0" OUTSIDE BUILDING
SANITARY: 44"
OIL WASTE: 48"

NOTE:
ROUTE ALL WATER AND GAS PIPING TIGHT TO CEILING AND WALLS WHERE POSSIBLE. NO PIPING SHALL BE ROUTED IN UNCONDITIONED SPACES. ALL EXPOSED PIPING SHALL BE INSULATED AND LABELED.

NOTE:
SANITARY AND DOMESTIC WATER PIPE ROUTING ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT ROUTING WITH FIELD CONDITIONS. REFER TO PIPING DIAGRAMS ON SHEET P6.



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

- ### PLUMBING GENERAL NOTES
- SANITARY AND DOMESTIC WATER PIPE ROUTING ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT ROUTING OF PIPING WITH FIELD CONDITIONS.
 - PROVIDE SHUT-OFF VALVES IN EACH BRANCH USING BALL VALVES FOR WATER SUPPLY.
 - ROUTE ALL PIPING TIGHT TO CEILING AND WALLS WHERE POSSIBLE. ALL PIPING SHALL BE ABOVE GROUND ONCE ENTERING BUILDING. NO PIPING SHALL BE ROUTED IN UNCONDITIONED SPACES. ALL PIPING SHALL BE INSULATED.
 - MAKE FINAL CONNECTIONS TO ALL EQUIPMENT FURNISHED BY OTHERS PER MANUFACTURER INSTALLATION INSTRUCTIONS.
 - ALL EQUIPMENT, MATERIAL AND LABOR NECESSARY FOR COMPLETION OF PLUMBING SYSTEMS SHOWN ON DRAWINGS OR REFERRED TO IN SPECIFICATIONS TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR UNLESS NOTED OTHERWISE.
 - WHERE DRAWINGS OR SPECIFICATIONS EXCEED GOVERNING CODE REQUIREMENTS, DESIGN SHALL GOVERN. INSTALL NO WORK CONTRARY TO OR BELOW MINIMUM LEGAL STANDARDS, WHETHER DRAWINGS AND SPECIFICATION FULLY COMPLY OR NOT.
 - ALL PLUMBING FIXTURES, EXCEPT RESTROOM FIXTURES, SHALL DISCHARGE INTO OIL WASTE LINES. COORDINATE WITH PLUMBING PLAN.
 - VERIFY FINAL LOCATIONS OF WATER SUPPLIES WITH FIXTURE PLAN AND CIVIL DRAWINGS.
 - VERIFY THAT ALL PLUMBING PIPING DOES NOT AFFECT ALIGNMENT RACK PADS. VERIFY LOCATION OF ALL PLUMBING PIPING WITH ALIGNMENT RACK MANUFACTURER PRIOR TO INSTALLATION. COORDINATE ALL PLUMBING PIPING AND ALIGNMENT RACK INSTALLATION WITH ALL DISCIPLINES PRIOR TO INSTALLATION.
 - REFERENCE FIXTURE PLAN SHEET F1 FOR EQUIPMENT QUANTITIES AND LOCATIONS.

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Firestone COMPLETE AUTO CARE

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NEW FCAC STORE
2019 JANUARY - SMALL ER
5845 NC HWY 42
GARNER, NC

09/26/19
ACERTUS NORTH CAROLINA
CERTIFICATION NUMBER - P1514

ISSUE BLOCK	
NO.	DATE
1	09/27/19

PROPERTY NO.:	160017
6 DIGIT NO.:	903065
4 DIGIT NO.:	015P
AOR PROJECT NUMBER:	1955801
TO PERMIT DATE:	07-28-19
TO BID DATE:	##-##-##

SHEET TITLE:
PLUMBING PLAN AND NOTES

SHEET NUMBER:
P1