

TPOLOGY 17

Commercial/School



BUDGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEERS
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1808 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MEP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE

ALEXANDER BOEDY ASSOCIATES
5511 PARKCREST DRIVE, #207
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

NORTH CENTRAL ELEMENTARY SCHOOL 1

P08-0026-NCES 1

AUSTIN INDEPENDENT SCHOOL DISTRICT
AUSTIN, TEXAS

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE PFLUGERVILLE, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
- COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
- ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VTR ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 8 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS), 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET, 3" VENT UP TO 84 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 256 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
- ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EW	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIBB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

ALL PLUMBING
SHALL BE IN ACCORDANCE WITH CITY OF
AUSTIN ADOPTED PLUMBING CODES.
REVIEWED 1/31 DATE 2-14-22
The permittee shall not be construed to be a permit
for or approval of any violation of any of the provisions
of the current adopted plumbing code or any other
ordinance, statute or rule.

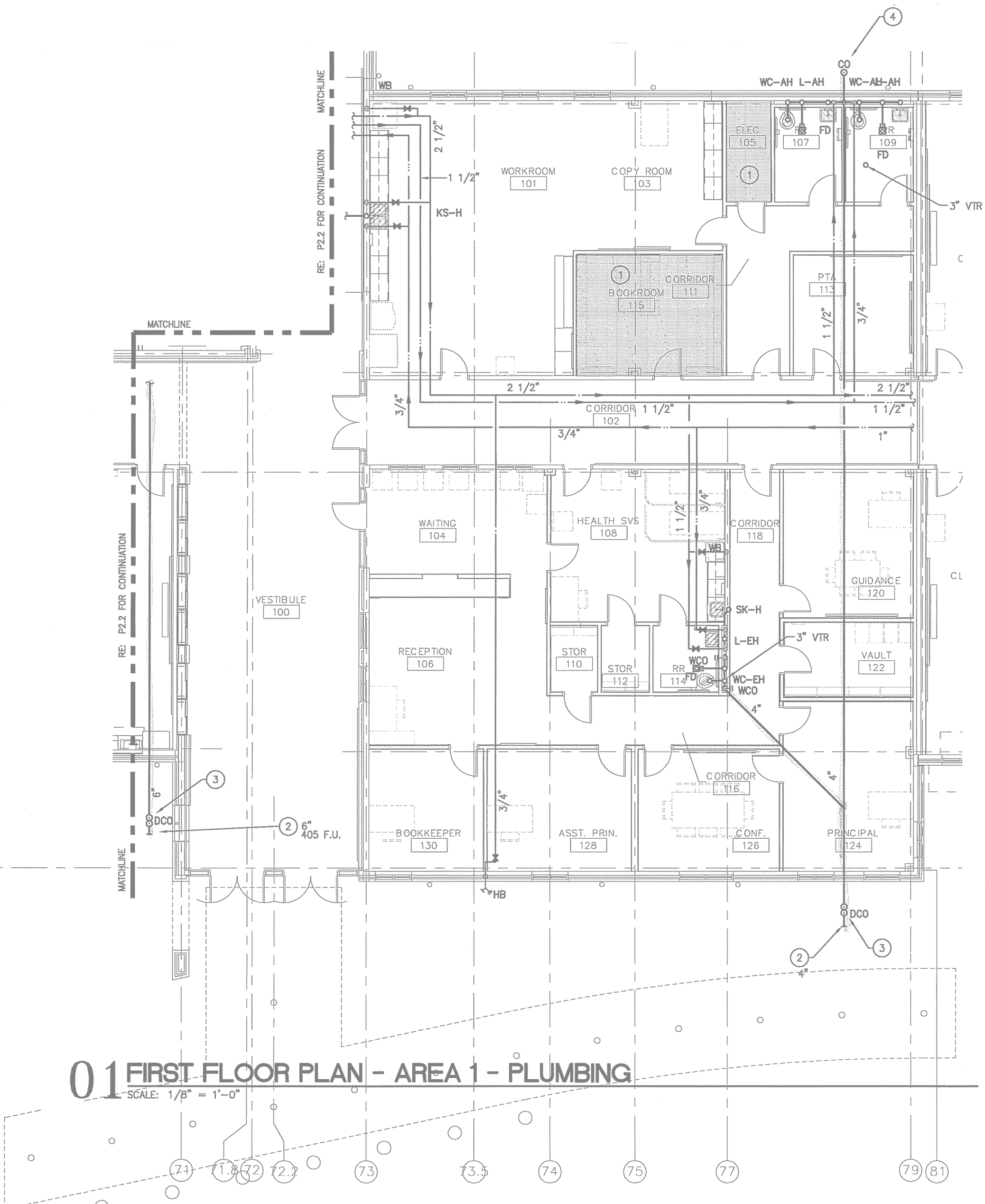
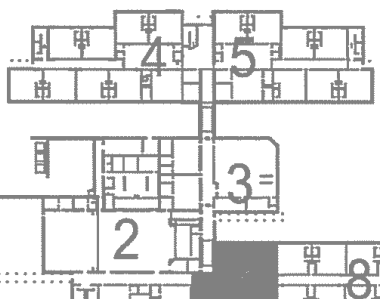


THE SEAL APPEARING ON THIS
DRAWING IS VALIDATED BY
THE STATE OF TEXAS
ON 05-25-22

REFERENCE: GENERAL NOTES ON
SHEETS M-1, P-1 AND E-1
FOR ADDITIONAL INFORMATION



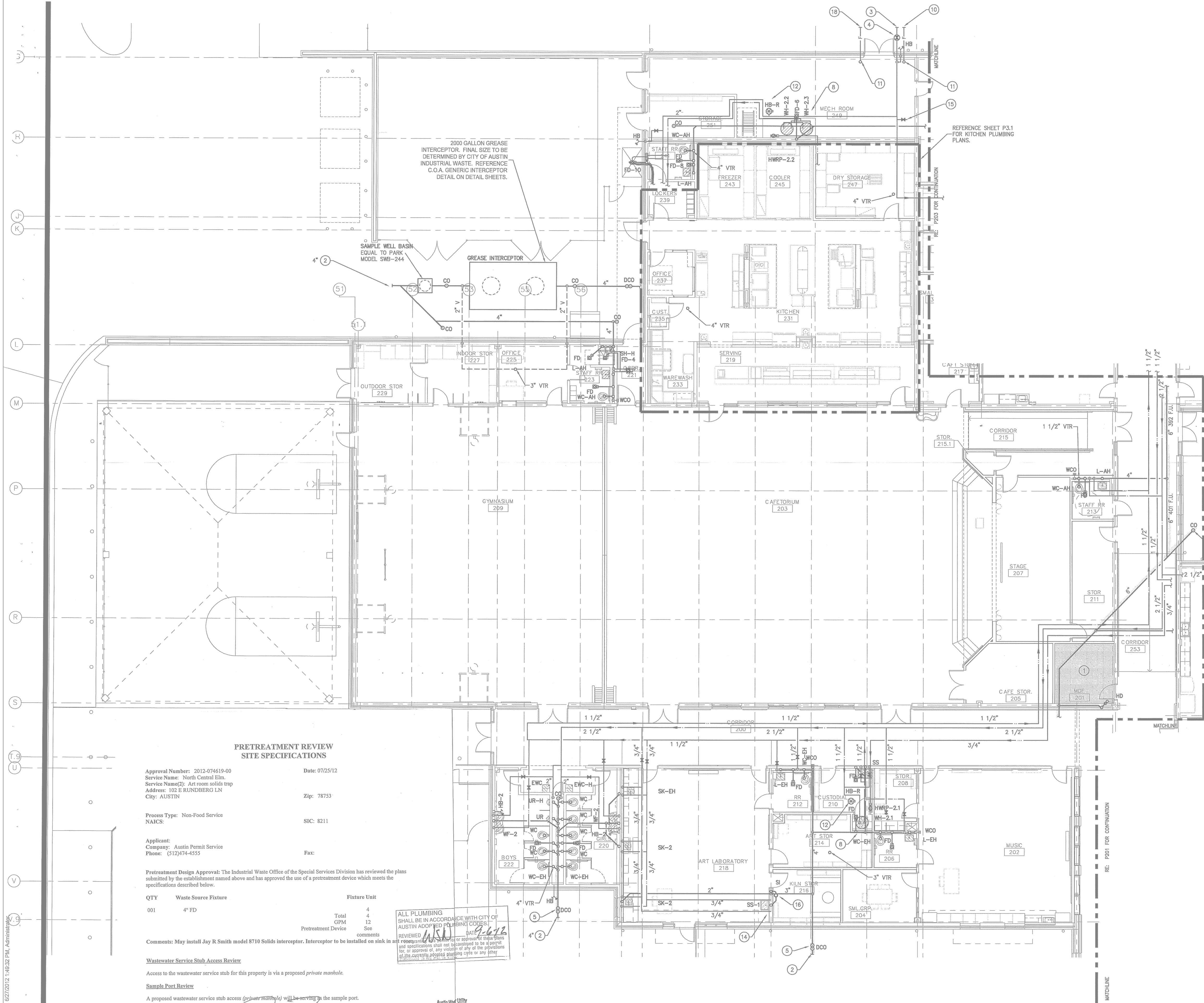
This document, the ideas and
designs incorporated herein are
and shall remain the property of
Hendrix Consulting Engineers.
These documents are not to be
used or altered, in whole or in
part, for other than the original
intended use, nor are they to be
assigned to any third party
without written permission from
Hendrix Consulting Engineers
F - 4085
HCE job no.: 11-077



01 FIRST FLOOR PLAN - AREA 1 - PLUMBING

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

61 62 63 65 68 69 71 72 73 74 75 77 79 81



KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- CONNECT TO COLD WATER (CW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION.
- RE: CW BUILDING ENTRY DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.
- RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).
- CONNECT TO FIRE LINE (F) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT.
- RE: FIRE LINE RISER SUPPORT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: HOSE BIBB AT ROOF DETAIL ON PLUMBING DETAIL SHEET(S).
- HUB DRAIN FOR CONDENSATE FROM A/C UNIT.
- WW FROM SINK TO BE ROUTED TO SOLIDS INTERCEPTOR "SI" LOCATED IN ADJACENT ROOM.
- RE: COLD WATER MAKE UP ASSEMBLY DETAIL ON DETAIL SHEETS.
- SOLIDS INTERCEPTOR "SI" TO SET ON ANGLE IRON FRAME. INSURE ACCESS SPACE IS MAINTAINED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- PROVIDE SHUT OFF VALVE AT APPROXIMATELY 48" A.F.F.
- CONNECT TO FIRE LINE (F) STUB FROM YARD FIRE DEPARTMENT CONNECTION (FDC) PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT.

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE PFLUGERVILLE, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
- COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
- ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASEWALL OR TO NEAREST COMMON VENT TO CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS); 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET; 3" VENT UP TO 84 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 256 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE IN HORIZONTAL POSITION. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
- ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	WC+AH L-AH	L-RH WC-AH	2"
WATER CLOSET (TANK TYPE)	1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EW	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIBB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

PRETREATMENT REVIEW SITE SPECIFICATIONS

Approval Number: 2012-074619-00
Service Name: North Central Elem.
Service Name(2): Art room solids trap
Address: 102 E RUNDBERG LN
City: AUSTIN

Date: 07/25/12

Zip: 78753

Process Type: Non-Food Service
NAICS:

SIC: 8211

Applicant:
Company: Austin Permit Service
Phone: (512)474-4555

Fax:

Pretreatment Design Approval: The Industrial Waste Office of the Special Services Division has reviewed the plans submitted by the establishment named above and has approved the use of a pretreatment device which meets the specifications described below.

QTY	Waste Source Fixture	Fixture Unit
001	4" FD	Total 4 GPM 4 Pretreatment Device 12 See comments

Comments: May install Jay R Smith model 8710 Solids Interceptor. Interceptor to be installed on sink in art room.

Wastewater Service Stub Access Review

Access to the wastewater service stub for this property is via a proposed private manhole.

Sample Port Review

A proposed wastewater service stub access (private manhole) will be serving to the sample port.

Reviewed By:

Jonathan Bode, Pretreatment Compliance Specialist
Office of Industrial Waste, Special Services Division
Austin Water Utility, (512) 972-1060

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES. REVIEWED BY: [Signature] DATE: 7-26-12

Austin Water Utility
Industrial Waste Review
This approval does not absolve the owner/operator of this establishment from meeting the Requirements of Chapter 15-10 of the Austin City Code (ACC) with regard to the quality of effluent discharged into the sanitary sewer. The owner/operator of said establishment shall be responsible for meeting any necessary modifications or alterations to the pretreatment device in order to bring the quality of the effluent into compliance with the Code. All materials used in the construction of the pretreatment device and the piping into and out of the pretreatment device shall meet the requirements of the Plumbing Code as adopted by the City of Austin.

Name (Signature): [Signature]
Name (Print): JONATHAN BODE
Approval #: 2012-074619-00 Date: 7/25/12

01 FIRST FLOOR PLAN - AREA 2 - PLUMBING

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



BLOGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEER
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-8094

MEP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE

ALEXANDER BODY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

NORTH CENTRAL ELEMENTARY SCHOOL 1

DISTRICT

P08
AUSTIN INDEPENDENCE
AU

PLANNING & DEVELOPMENT
CITY OF AUSTIN
REJECTED
REVISIONS REQUIRED
BY: DATE:



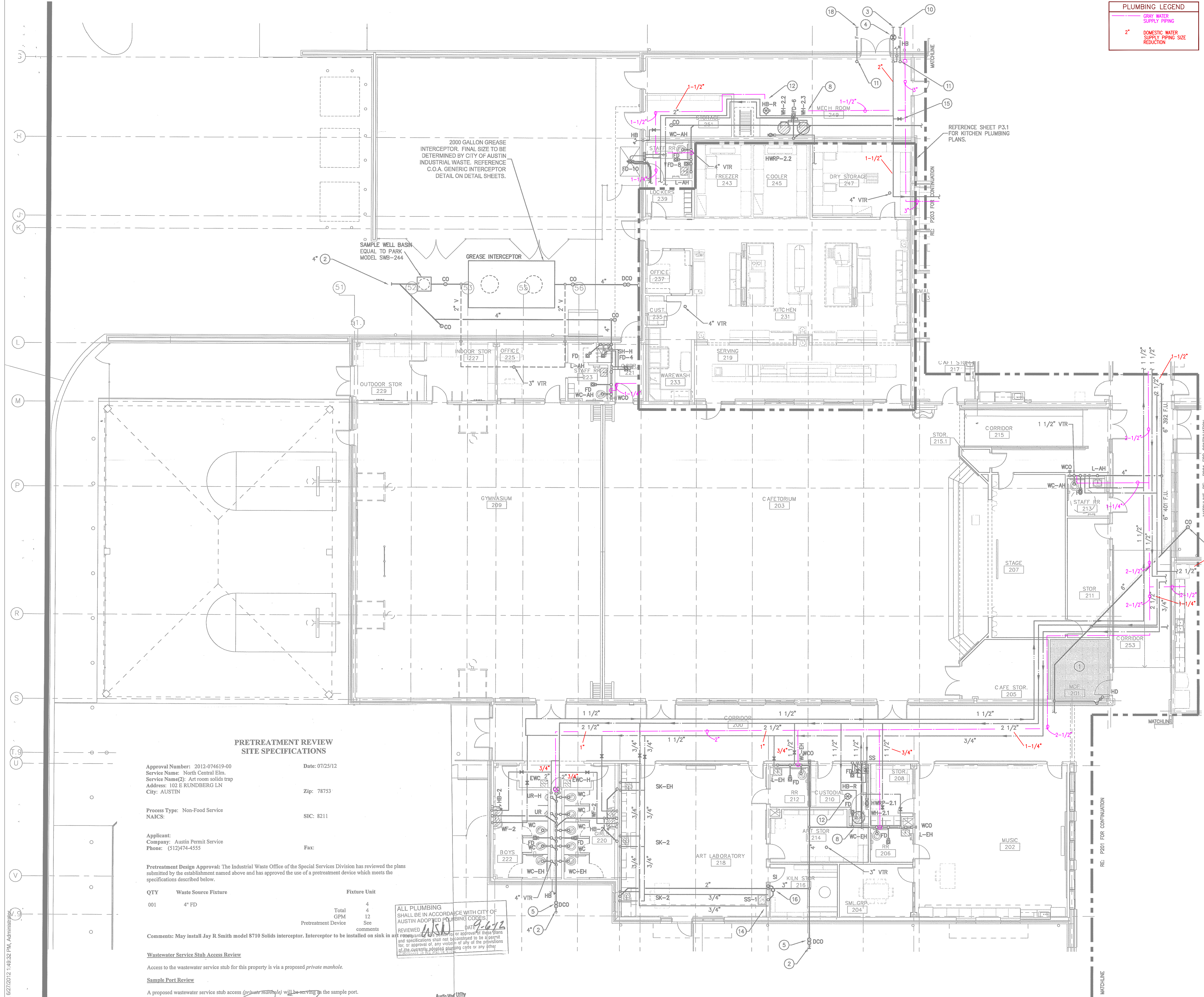
REFERENCE GENERAL NOTES ON SHEETS M-1, P-1, AND E-1 FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers. P-4895
HCE job no.: 11-077

PROJECT NO.: 20803.00
ISSUE DATE: 06.25.12

P2.2



PLUMBING LEGEND	
	GRAY WATER SUPPLY PIPING
	2" DOMESTIC WATER SUPPLY PIPING SIZE REDUCTION

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- CONNECT TO COLD WATER (CW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION.
- RE: CW BUILDING ENTRY DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.
- RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).
- CONNECT TO FIRE LINE (F) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT.
- RE: FIRE LINE RISER SUPPORT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: HOSE BIBB AT ROOF DETAIL ON PLUMBING DETAIL SHEET(S).
- HUB DRAIN FOR CONDENSATE FROM A/C UNIT.
- WW FROM SINK TO BE ROUTED TO SOLIDS INTERCEPTOR "SI" LOCATED IN ADJACENT ROOM.
- RE: COLD WATER MAKE UP ASSEMBLY DETAIL ON DETAIL SHEETS.
- SOLIDS INTERCEPTOR "SI" TO SET ON ANGLE IRON FRAME. INSURE ACCESS SPACE IS MAINTAINED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- PROVIDE SHUT OFF VALVE AT APPROXIMATELY 48" A.F.F.
- CONNECT TO FIRE LINE (F) STUB FROM YARD FIRE DEPARTMENT CONNECTION (FDC)/PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT.

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE PFLUGERVILLE, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
- COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
- ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VTR ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS), 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET, 3" VENT UP TO 84 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 266 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
- ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	WC-AH	L-AH	WC-AH 2"
WATER CLOSET (TANK TYPE)	1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EW	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIBB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

PRETREATMENT REVIEW SITE SPECIFICATIONS

Approval Number: 2012-074619-00
Service Name: North Central Elem.
Service Name(D): Art room solids trap
Address: 102 E RUNDBERG LN
City: AUSTIN

Date: 07/25/12

Zip: 78753

Process Type: Non-Food Service
NAICS:

SIC: 8211

Applicant:
Company: Austin Permit Service
Phone: (512) 774-4555

Fax:

Pretreatment Design Approval: The Industrial Waste Office of the Special Services Division has reviewed the plans submitted by the establishment named above and has approved the use of a pretreatment device which meets the specifications described below.

QTY	Waste Source Fixture	Fixture Unit
001	4" FD	Total 4
		GPM 4
		Pretreatment Device 12

Comments: May install Jay R Smith model 8710 Solids Interceptor. Interceptor to be installed on sink in art room.

Wastewater Service Stub Access Review

Access to the wastewater service stub for this property is via a proposed private manhole.

Sample Port Review

A proposed wastewater service stub access (private manhole) will be serving to the sample port.

Reviewed By:

Jonathan Bode, Pretreatment Compliance Specialist
Office of Industrial Waste, Special Services Division
Austin Water Utility, (512) 972-1060

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES. REVIEWED BY: J. BODE DATE: 07/25/12

Austin Water Utility
Industrial Waste Review
This approval does not absolve the owner/operator of this establishment from meeting the requirements of Chapter 15-10 of the Austin City Code (ACC) with regard to the quality of effluent discharged into the sanitary sewer. The owner/operator of said establishment shall be responsible for making any necessary modifications or alterations to the pretreatment device in order to bring the quality of the effluent into compliance with the Code. All materials used in the construction of the pretreatment device and the piping into and out of the pretreatment device shall meet the requirements of the Plumbing Code as adopted by the City of Austin.

Name (Print): Jonathan Bode
Approval #: 2012-074619-00 Date: 07/25/12

01 FIRST FLOOR PLAN - AREA 2 - PLUMBING

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



BUGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEER
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-460-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-8094

M/E/P

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE

ALEXANDER BODY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

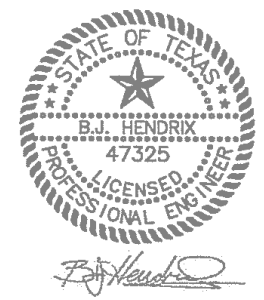
TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

NORTH CENTRAL ELEMENTARY SCHOOL 1

DISTRICT
AUSTIN INDEPENDENT SCHOOLS

P08



PLANNING & DEVELOPMENT
CITY OF AUSTIN

REJECTED

REVISIONS REQUIRED
BY: DATE:

REFERENCE: GENERAL NOTES ON SHEETS M-1, P-1, AND E-1 FOR ADDITIONAL INFORMATION.



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers.

F-4095

HCE job no.: 11-077

PROJECT NO.: 20803.00

ISSUE DATE: 06.25.12

P2.2

G:\2011\NSD - NORTH CENTRAL ES\077777P2.3.dwg, 06/20/12 3:41:18 PM, Administrator, PDFB85, ARCH E1, 180

PLUMBING LEGEND	
	GRAY WATER SUPPLY PIPING
	2" DOMESTIC WATER SUPPLY PIPING SIZE REDUCTION

- THESE NOTES APPLY TO THIS SHEET ONLY
- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
 - RE: WALL CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
 - RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
 - RE: HOSE BIBB AT ROOF DETAIL ON PLUMBING DETAIL SHEET(S).

- PIPE SIZING REQUIREMENTS**
- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE PFLUGERVILLE, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
 - PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
 - COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
 - ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VTR ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 8 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 80 FEET (EXCEPT FOR WATER CLOSETS), 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET, 3" VENT UP TO 34 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 268 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
 - ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

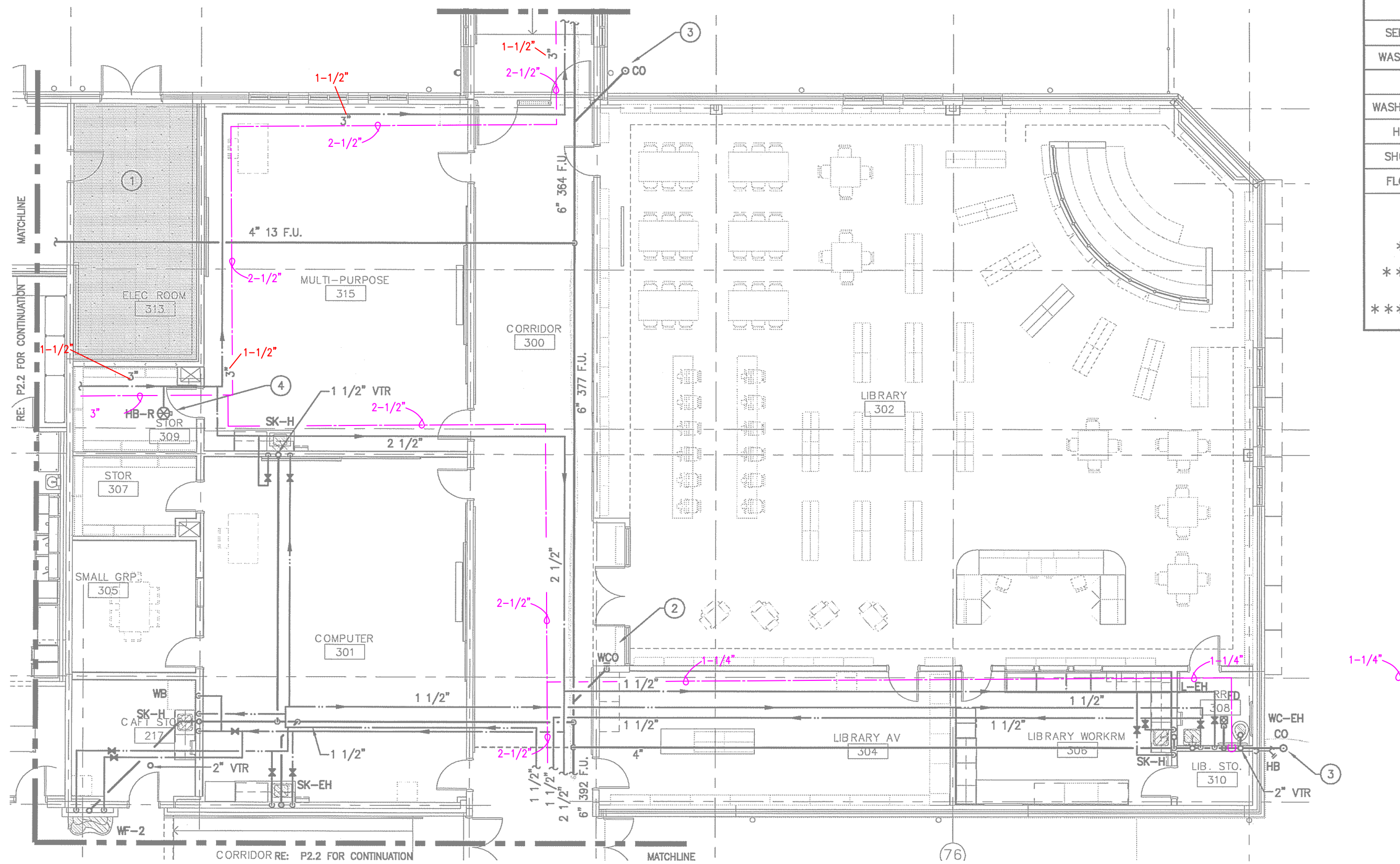
FIXTURE CONNECTION SCHEDULE						
MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EW	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIBB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

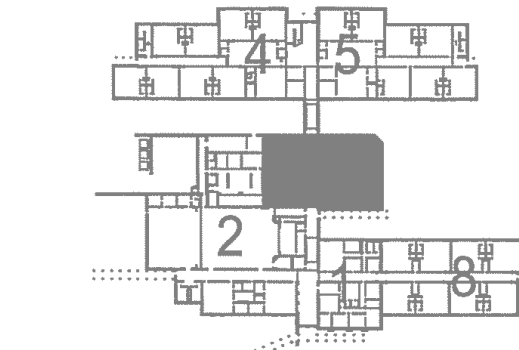
*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.



01 FIRST FLOOR PLAN - AREA 3 - PLUMBING

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

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES. REVIEWED *[Signature]* DATE *7-2-12*



REFERENCE GENERAL NOTES ON SHEETS M1.1, PL.1 AND EL.1 FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers. F-4695 HCE job no.: 11-077



BUGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL
CHAN & PARTNERS ENGINEE
4319 JAMES CASEY ST. #30
AUSTIN, TX 78745
512-480-8155

STRUCTURAL
JASTER-QUINTANILLA ENGINEE
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MFP
HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE
ALEXANDER BOEY ASSOCIATES
5511 PARKCREST DRIVE, #21
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY
ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-4445

NORTH CENTRAL ELEMENTARY SCHOOL 1
P08-0026-NCES 1
AUSTIN INDEPENDENT SCHOOL DISTRICT
AUSTIN, TEXAS

PROJECT NO.: 20803.00
ISSUE DATE: 06.25.12



- 1 DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- 2 RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 3 RE: ELEVATOR SUMP PUMP DETAIL ON PLUMBING DETAIL SHEET(S).
- 4 OIL INTERCEPTOR EQUAL TO PARK ELEVATOR SEPARATOR MODEL ESC-100, 100 GALLON CAPACITY, 50 GPM FLOW.
- 5 CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- 6 CONNECT TO STORM SEWER STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- 7 PROVIDE STUB IN P-TRAP OF EWC FOR CONDENSATE FROM ELEVATOR MACHINE ROOM A/C UNIT. COORDINATE WITH MECHANICAL CONTRACTOR.
- 8 ROUGH-IN FOR FUTURE WASHING MACHINE. PROVIDE PLUG IN WASTE CONNECTION TO BE REMOVED IN FUTURE.

1. ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE W/ FITTINGS ARE TO BE REMOVED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1" IN JURISDICTIONS LIKE PRUGERVILLE, TX., WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
2. PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL. SIZE OF DROP INDICATED. REFERENCE FITTING CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
3. COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND FLOOR PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
4. ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VTR ABOVE CEILING. REFERENCE FITTING CONNECTION SCHEDULE FOR INDIVIDUAL FLOOR WATER FIXTURE SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY. 1" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS). 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 100 FEET. 3" VENT UP TO 25 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 255 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 13 FEET OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
5. ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VENTS TO BE MINIMUM 1/2" ABOVE ROOF FINISH. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	—	—	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	—	—	4"	4	2"
URINAL	3/4"	—	—	2"	2	2"
LAVATORY *	1/2"	—	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	—	3"	2	2"
WASH FOUNTAIN	1/2"	—	1/2"	2"	2	1 1/2" **
EWV	1/2"	—	—	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	—	2"	2	2"
HOSE BIBB	3/4"	—	—	—	—	—
SHOWER ***	1/2"	1/2"	—	3"	2	1 1/2"
FLOOR DRAIN	—	—	—	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

* * * COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

***** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION
BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets- 1.28 gpf
Urinals- 0.5 gpf
Public lavatory- 0.5 gpm
Metered faucets serving the transient public

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.

REVIEWED WSW DATE 9-6-12

The granting of a permit for, or approval of these plans and specifications shall not be construed to be a permit for, or approval of, any violation of any of the provisions of the currently adopted plumbing code or any other

016-05-23-12

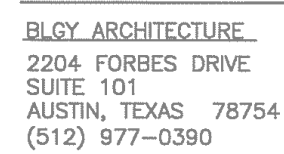
REFERENCE GENERAL NOTES ON
SHEETS M1.1, P1.1 AND E1.1
FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers.

F - 4095

HCE job no.: 11-077



PROFESSIONAL'S SEAL

CMIL

CHAN & PARTNERS ENGINEER
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MFP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

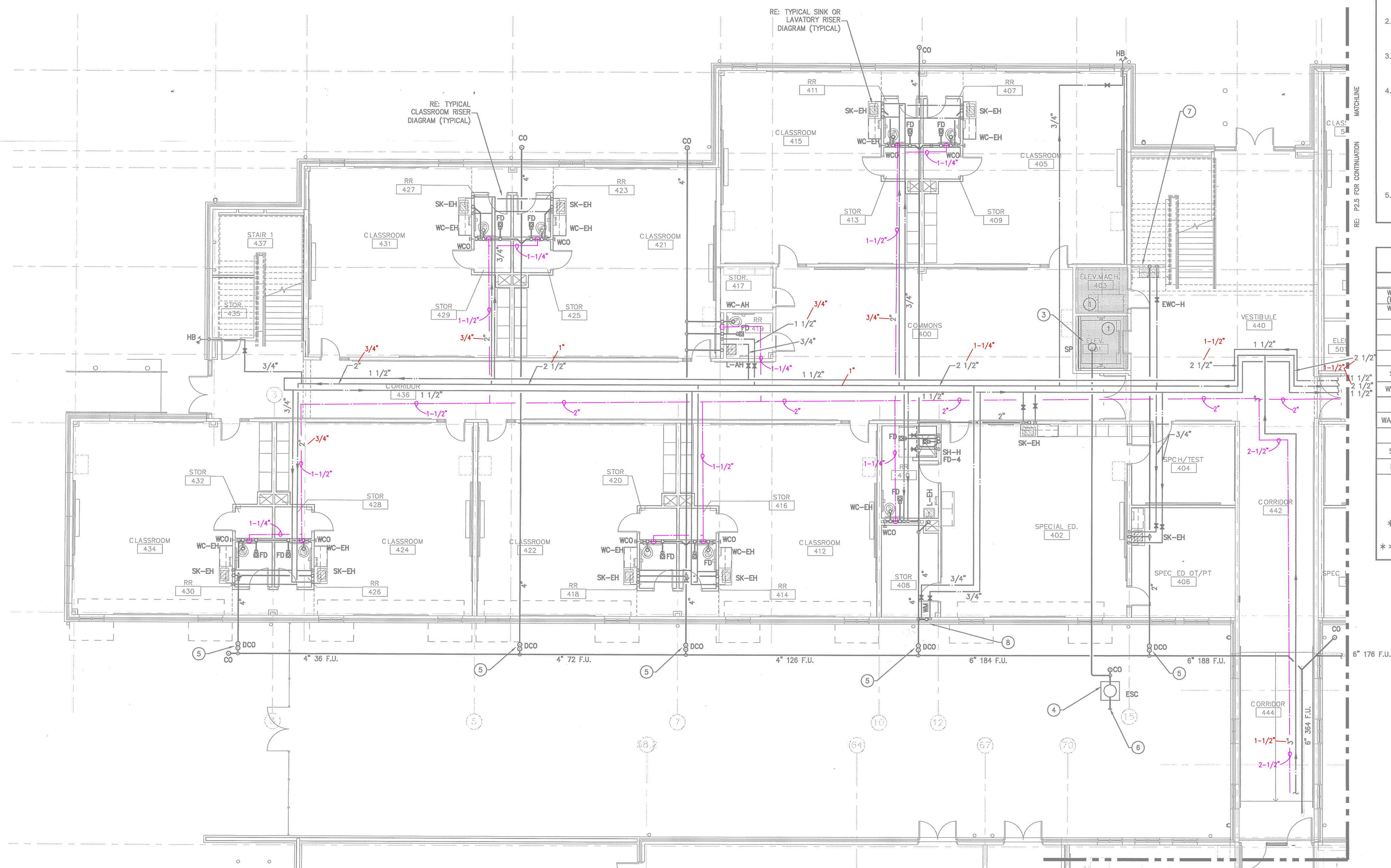
LANDSCAPE

ALEXANDER BOEDY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

C:\2011\NSD - NORTH CENTRAL\ES 07777\F2.4.dwg, 6/24/2012 4:30:48 PM, Administrator, PDFB95, ARCH E1, 198



01 FIRST FLOOR PLAN - AREA 4 - PLUMBING

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

PLUMBING LEGEND	
---	GRAY WATER SUPPLY PIPING
---	DOMESTIC WATER SUPPLY PIPING SIZE REDUCTION

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: ELEVATOR SUMP PUMP DETAIL ON PLUMBING DETAIL SHEET(S).
- OIL INTERCEPTOR EQUAL TO PARK ELEVATOR SEPARATOR MODEL ESC-100, 100 GALLON CAPACITY, 50 GPM FLOW.
- CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- CONNECT TO STORM SEWER STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- PROVIDE STUB IN P-TRAP OF EWC FOR CONDENSATE FROM ELEVATOR MACHINE ROOM A/C UNIT. COORDINATE WITH MECHANICAL CONTRACTOR.
- ROUGH-IN FOR FUTURE WASHING MACHINE. PROVIDE PLUG IN WASTE CONNECTION TO BE REMOVED IN FUTURE.

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE PFLUGERVILLE, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
- COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
- ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VTR ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS), 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET, 3" VENT UP TO 24 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 256 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
- ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EWC	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIBB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

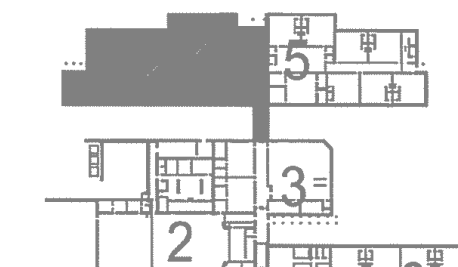
Trap Seal Protection

When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

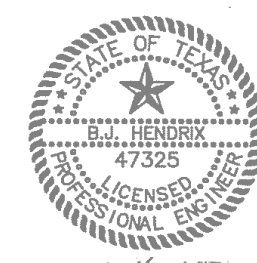
Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets- 1.28 gpf
Urinals- 0.5 gpf
Public lavatory- 0.5 gpm
Metered faucets serving the transient public

ALL PLUMBING

SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.
REVIEWED BY *[Signature]* DATE *9-2-12*
The undersigned is a duly licensed professional engineer and certifies that the design and specifications herein are his original work and that he is not providing engineering services to any other project of the same or similar nature at the same time.



Lavatories
Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.



REFERENCE GENERAL NOTES ON SHEETS M1.1, P1.1 AND E1.1 FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrick Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrick Consulting Engineers. P-4095

HCE job no.: 11-077



BLOGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEER
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MFP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0080

LANDSCAPE

ALEXANDER BOEDY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

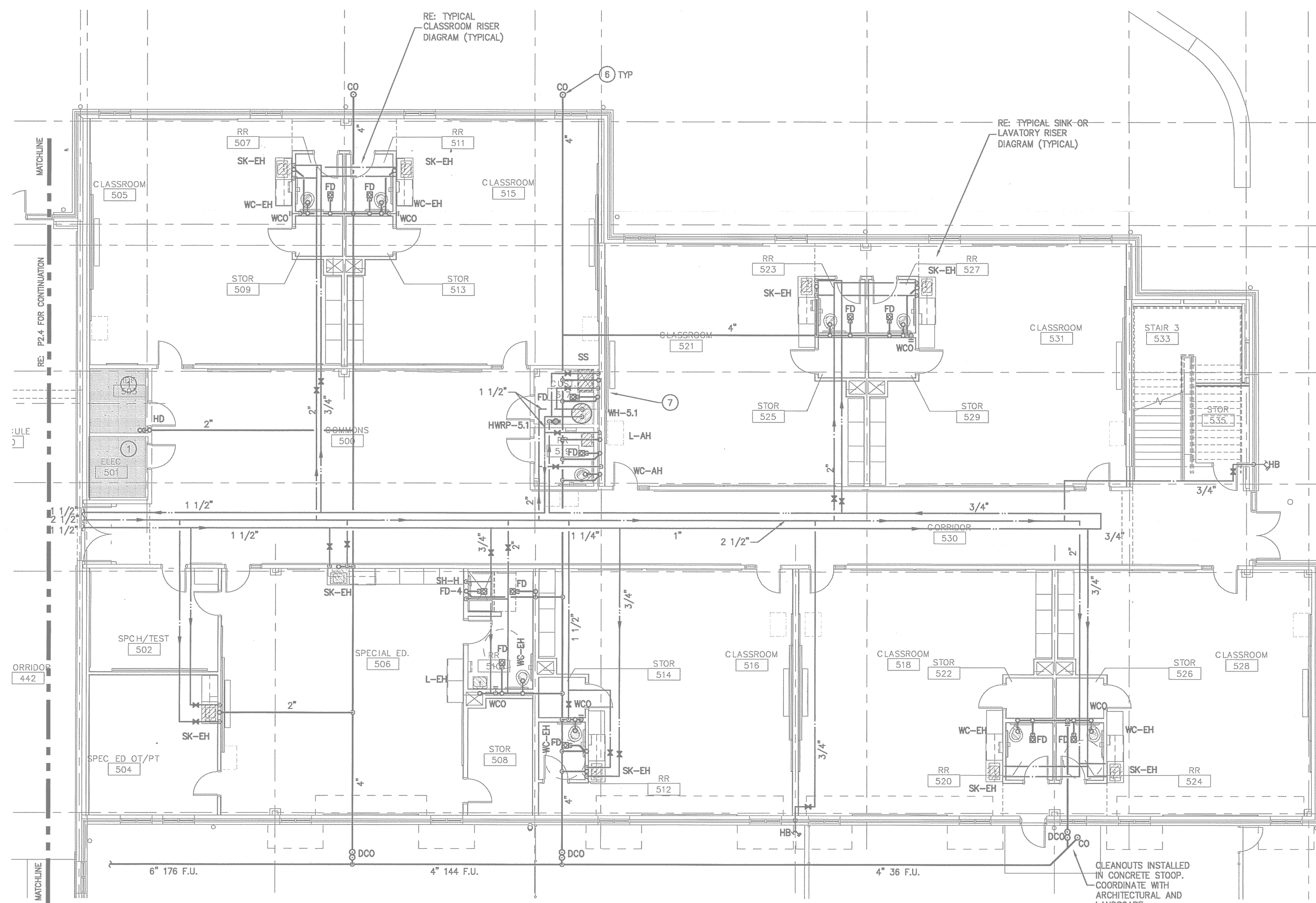
NORTH CENTRAL ELEMENTARY SCHOOL 1

P08-0026-NCES 1
STIN INDEPENDENT SCHOOL DISTRICT
AUSTIN, TEXAS

PRO.

ISSUE DATE: 06.25.12

P2.4



01 FIRST FLOOR PLAN - AREA 5 - PLUMBING

Lavatories Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

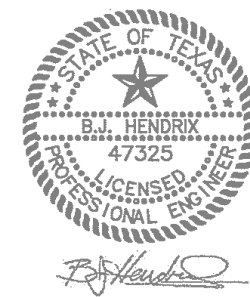
Trap Seal Protection
When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets- 1.28 gpf
Urinals- 0.5 gpf
Public lavatory- 0.5 gpm
*Delayed faucets serving the transient public

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.

REVIEWED W.B.W. DATE 9-6-1

The granting of a permit for, or approval of these plans and specifications shall not be construed to be a permit for, or approval of, any violation of any of the provisions of the currently adopted plumbing code or any other ordinance of the City of Austin.



REFERENCE GENERAL NOTES ON
SHEETS M1.1, P1.1 AND E1.1
FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers.
F - 4095

HCE job no.: 11-077

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- 1 DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- 2 CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- 3 RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 4 RE: WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.
- 5 RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 6 RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 7 RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).

PIPE SIZING REQUIREMENTS

1. ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS TO DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC., "OREGON #1". IN JURISDICTIONS LIKE FLUORVILLE, TX., WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
2. PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL. SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
3. COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUT/BRACE CONFLICTS.
4. ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO "NEAREST COMMON VENT ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1" VENT VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS); 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET; 3" VENT UP TO 40 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 210 FEET AND 4" VENT UP TO 250 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 10 FEET OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
5. ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (NTR) TO MINIMIZE ROOF PENETRATIONS. VENTS TO BE SIZED TO MATCH COMMON VENT. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	—	—	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	—	—	4"	4	2"
URINAL	3/4"	—	—	2"	2	2"
LAVATORY *	1/2"	—	1/2"	2"	1	1 1/2" **
— SINK (8) *	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	—	3"	2	2"
WASH FOUNTAIN	1/2"	—	1/2"	2"	2	1 1/2" **
EWV	1/2"	—	—	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	—	2"	2	2"
HOSE BIBB	3/4"	—	—	—	—	—
SHOWER * * * *	1/2"	1/2"	—	3"	2	1 1/2"
FLOOR DRAIN	—	—	—	3"	2	2"

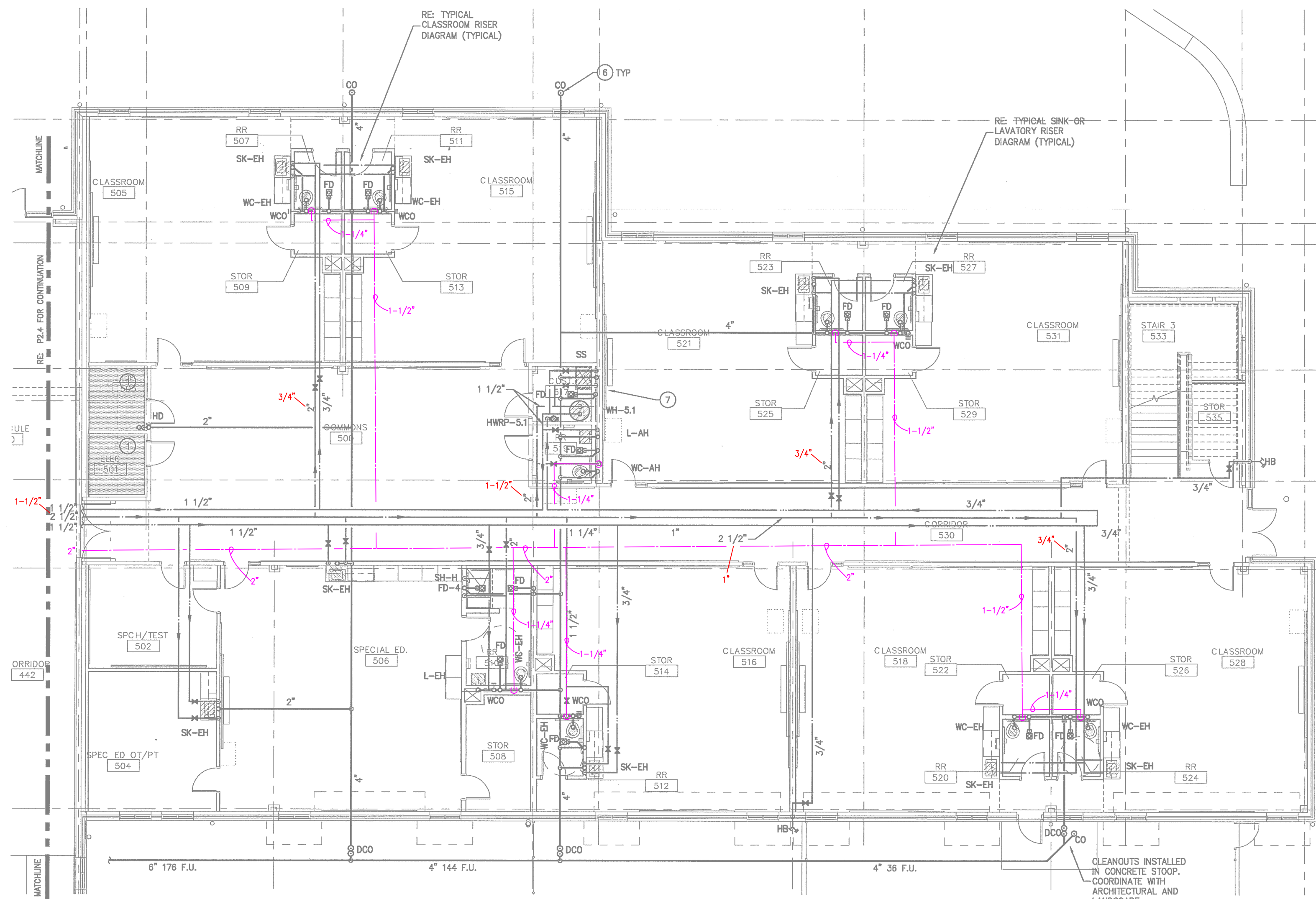
* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES

* * * COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION
BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

S:\01\W005 - NORTH CENTRAL ELEMENTARY\01\W005.dwg, 6/24/2012 4:54:17 PM, Administrator, P08-0026-NCES 1, 108



01 FIRST FLOOR PLAN - AREA 5 - PLUMBING
SCALE: 1/8" = 1'-0"

PLUMBING LEGEND	
	COLD WATER SUPPLY PIPING
	DOMESTIC WATER SUPPLY PIPING SIZE REDUCTION

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.
- RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON" #1". IN JURISDICTIONS LIKE Pflugerville, TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
- COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
- ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO "NEAREST COMMON VTR ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1 1/2" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS), 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 256 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 1/3 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
- ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (VTR) TO MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	-	-	4"	6	2"
WATER CLOSET (TANK TYPE)	1 1/2"	-	-	4"	4	2"
URINAL	3/4"	-	-	2"	2	2"
LAVATORY *	1/2"	-	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	-	3"	2	2"
WASH FOUNTAIN	1/2"	-	1/2"	2"	2	1 1/2" **
EW	1/2"	-	-	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	-	2"	2	2"
HOSE BIB	3/4"	-	-	-	-	-
SHOWER ***	1/2"	1/2"	-	3"	2	1 1/2"
FLOOR DRAIN	-	-	-	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

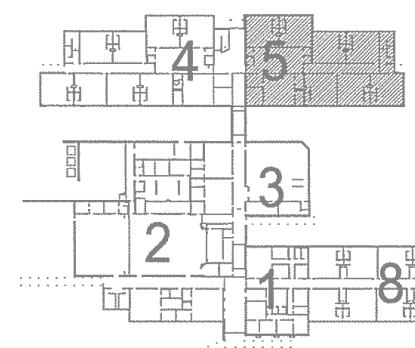
*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

Lavatories
Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

Trap Seal Protection
When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets - 1.25 gpf
Urinals - 0.5 gpf
Public lavatory - 0.5 gpm
Metered faucets serving the transient public

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.
REVIEWED BY: [Signature] DATE: 6/24/12
The drawings are a plan for or approval of their use and specifications shall not be construed to be a permit for or approval of, any violation of any of the provisions of the currently adopted building code or any other regulations.



REFERENCE GENERAL NOTES ON SHEETS M-1, P-1 AND E-1 FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers. F-4085 HCE job no.: 11-077



BUDGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEER
4319 JAMES CASEY ST. #30C
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1808 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MEP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE

ALEXANDER BOEY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

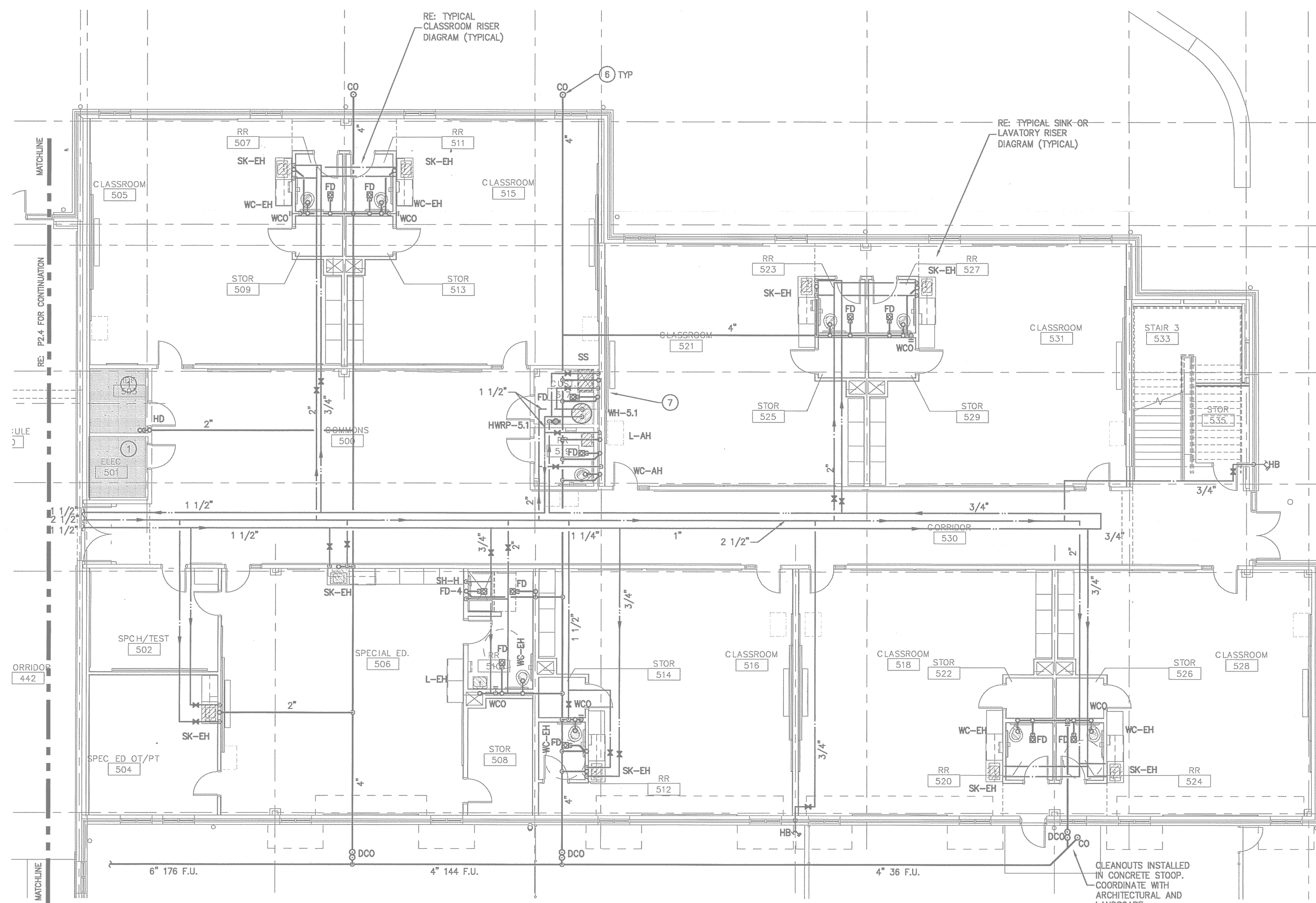
ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

NORTH CENTRAL ELEMENTARY SCHOOL 1

P08-0026-NCES 1
AUSTIN INDEPENDENT SCHOOL DISTRICT
AUSTIN, TEXAS

PROJECT NO.: 20803.00

ISSUE DATE: 06.25.12



01 FIRST FLOOR PLAN - AREA 5 - PLUMBING

Lavatories Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

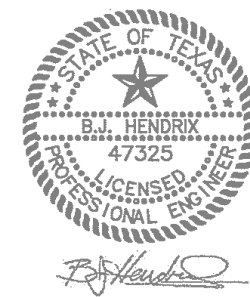
Trap Seal Protection
When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets- 1.28 gpf
Urinals- 0.5 gpf
Public lavatory- 0.5 gpm
*Delayed faucets serving the transient public

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.

REVIEWED W.B.W. DATE 9-6-1

The granting of a permit for, or approval of these plans and specifications shall not be construed to be a permit for, or approval of, any violation of any of the provisions of the currently adopted plumbing code or any other ordinance of the City of Austin.



REFERENCE GENERAL NOTES ON
SHEETS M1.1, P1.1 AND E1.1
FOR ADDITIONAL INFORMATION



This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers.
F - 4095

HCE job no.: 11-077

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- 1 DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- 2 CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR MATERIAL TRANSITION.
- 3 RE: INTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 4 RE: WATER HEATER DETAIL ON PLUMBING DETAIL SHEET(S) FOR WATER HEATER AND HOT WATER RECIRCULATION PUMP PIPING.
- 5 RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 6 RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 7 RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).

PIPE SIZING REQUIREMENTS

1. ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS TO DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLUSH VALVE FITTINGS ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC., OREGON #1. IN JURISDICTIONS LIKE FLUORVILLE, TX., WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
2. PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL. SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
3. COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUT/BRACE CONFLICTS.
4. ROUTE VENT FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO "NEAREST COMMON VENT ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY: 1" VENT VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS); 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 120 FEET; 3" VENT UP TO 40 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 210 FEET AND 4" VENT UP TO 250 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 10 FEET OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
5. ROUTE ALL VENTS TO NEAREST COMMON VENT THRU ROOF (NTR) TO MINIMIZE ROOF PENETRATIONS. VENTS TO BE SIZED TO MATCH NTR. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

FIXTURE CONNECTION SCHEDULE


MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	—	—	4"	6	2"
WATER CLOSET (TANK TYPE)	1/2"	—	—	4"	4	2"
URINAL	3/4"	—	—	2"	2	2"
LAVATORY *	1/2"	—	1/2"	2"	1	1 1/2" **
— SINK (8) *	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	—	3"	2	2"
WASH FOUNTAIN	1/2"	—	1/2"	2"	2	1 1/2" **
EWV	1/2"	—	—	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	—	2"	2	2"
HOSE BIBB	3/4"	—	—	—	—	—
SHOWER * * * *	1/2"	1/2"	—	3"	2	1 1/2"
FLOOR DRAIN	—	—	—	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

** IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES

* * * COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (ASSE 1070) AT THE FIXTURE.

*** SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION
BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO ASSE 1016.

PLUMBING LEGEND	
	GRAY WATER SUPPLY PIPING
2"	DOMESTIC WATER SUPPLY PIPING SIZE REDUCTION

MARK	CW	HW	TW	WASTE	DRAIN FIXTURE UNITS	VENT
WATER CLOSET (FLUSH VALVE)	1"	—	—	4"	6	2"
WATER CLOSET (FLANK TYPE)	1/2"	—	—	4"	4	2"
URINAL	3/4"	—	—	2"	2	2"
LAVATORY *	1/2"	—	1/2"	2"	1	1 1/2" **
SINK ***	1/2"	1/2"	1/2"	2"	2	1 1/2" **
SERVICE SINK	3/4"	3/4"	—	3"	2	2"
WASH FOUNTAIN	1/2"	—	1/2"	2"	2	1 1/2" **
EW	1/2"	—	—	2"	1	1 1/2" **
WASHING MACHINE	3/4"	3/4"	—	2"	2	2"
HOSE BIBB	3/4"	—	—	—	—	—
SHOWER ***	1/2"	1/2"	—	3"	2	1 1/2"
FLOOR DRAIN	—	—	—	3"	2	2"

* HOT (TEMPERED) AND COLD WATER REQUIRED UNLESS NOTED OTHERWISE ON PLUMBING FIXTURE SCHEDULE. PROVIDE TEMPERATURE MIXING VALVE (AS1070) AT THE FIXTURE.

** * IF HORIZONTAL VENT LENGTH EXCEEDS 20 FEET, INCREASE VENT SIZE TO TWO INCHES.

*** * COMMERCIAL KITCHEN SINKS GET HOT WATER, REMAINDER TO BE PROVIDED WITH TEMPERATURE MIXING VALVE (AS1070) AT THE FIXTURE.

*** * SHOWER VALVES TO BE BALANCED-PRESSURE, THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC CONFORMING TO AS1016.

PIPE SIZING REQUIREMENTS

- ALL FLOOR DRAINS AND FLOOR SINKS MUST HAVE TRAP PRIMERS. CONNECT TO NEAREST WATER LINE THAT IS UNDER 1 1/2" IN SIZE. CONNECT TO AS SMALL A LINE AS POSSIBLE. PROVIDE ACCESS DOORS AS REQUIRED. TRAP PRIMERS OFF LAVATORY WASTE FITTINGS AND FLOOR VALVE WASTE LINES ARE ALSO ALLOWED, WHERE FEASIBLE. STANDARD TRAP PRIMERS TO BE EQUAL TO PPP INC. "OREGON #1". IN JURISDICTIONS LIKE FLORIDA/TX, WHERE PRESSURE ACTIVATED MECHANICAL PRIMERS ARE NOT ALLOWED, USE ELECTRONIC TRAP PRIMERS. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
2. PIPING SIZE FOR WATER MAIN DROPS AND MANIFOLD IN CHASE OR WALL TO REMAIN FULL. SIZE OF DROP INDICATED. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL LINE SIZE TO EACH FIXTURE.
3. COORDINATE ALL WASTEWATER FLOOR PENETRATIONS AND PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO INSTALLATION. PIPING MAY BE OFFSET SLIGHTLY TO AVOID STRUCTURAL CONFLICTS.
4. ROUTE ENTIRE FROM EACH FIXTURE TO HORIZONTAL VENT HEADER IN CHASE/WALL OR TO NEAREST COMMON VENT ABOVE CEILING. REFERENCE FIXTURE CONNECTION SCHEDULE FOR INDIVIDUAL FIXTURE VENT SIZES. VENT HEADERS IN CHASE TO BE SIZED ACCORDINGLY. 1 1/2" VENT UP TO 6 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 60 FEET (EXCEPT FOR WATER CLOSETS). 2" VENT UP TO 20 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. 3" VENT UP TO 25 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 212 FEET AND 4" VENT UP TO 256 DRAIN FIXTURE UNITS MAXIMUM DEVELOPED LENGTH OF 300 FEET. BRANCH VENTS EXCEEDING 40 FEET IN DEVELOPED LENGTH ARE TO BE INCREASED BY ONE PIPE SIZE. NO MORE THAN 13 OF DEVELOPED LENGTH SHALL BE IN HORIZONTAL POSITION. EXTEND COMMON VENT UP THROUGH ROOF.
5. ROUTE ALL VENTS TO NEAREST COMMON VENT/ROOF VTR (VTR) MINIMIZE ROOF PENETRATIONS. VTR TO BE MINIMUM 15 FEET AWAY FROM OUTSIDE AIR INTAKES. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

KEYED NOTES

THESE NOTES APPLY TO THIS SHEET ONLY

- 1 DO NOT ROUTE ANY PIPING ABOVE THIS AREA.
- 2 CONNECT TO WASTEWATER (WW) STUB PROVIDED BY CIVIL. FIELD VERIFY EXACT
LOCATION AND INVERT. PROVIDE ADAPTER AS REQUIRED TO MAKE SIZE AND/OR
MATERIAL TRANSITION.
- 3 RE: TYPICAL CONDENSATE STUB DETAIL ON PLUMBING DETAIL SHEET(S).
- 4 RE: EXTERIOR CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 5 RE: DOUBLE CLEANOUT DETAIL ON PLUMBING DETAIL SHEET(S).
- 6 RE: HOSE BIBB AT ROOF DETAIL ON PLUMBING DETAIL SHEET(S).



BLGY ARCHITECTURE
2204 FORBES DRIVE
SUITE 101
AUSTIN, TEXAS 78754
(512) 977-0390

PROFESSIONAL'S SEAL

CIVIL

CHAN & PARTNERS ENGINEERS
4319 JAMES CASEY ST. #300
AUSTIN, TX 78745
512-480-8155

STRUCTURAL

JASTER-QUINTANILLA ENGINEER
1608 W. 6TH ST.
AUSTIN, TX 78703
512-474-9094

MEP

HCE ENGINEERS
115 E. MAIN
ROUND ROCK, TEXAS 78664
512-218-0060

LANDSCAPE

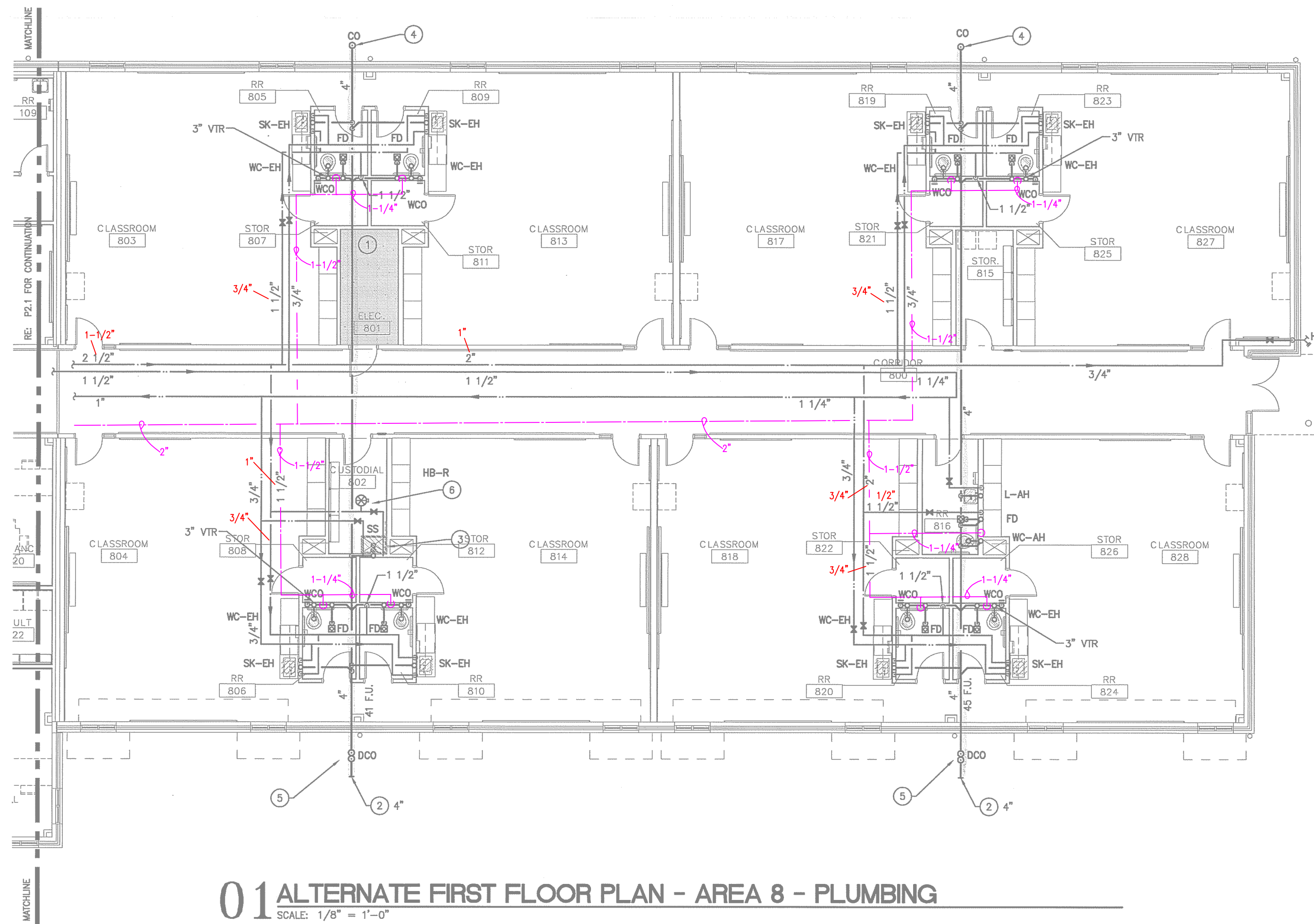
ALEXANDER BOEDY ASSOCIATES
5511 PARKCREST DRIVE, #20
AUSTIN, TEXAS 78731
512-329-9833

TECHNOLOGY

ELERT & ASSOCIATES
8500 N. MOPAC, #813
AUSTIN, TEXAS 78759
512-451-5445

NORTH CENTRAL ELEMENTARY SCHOOL 1

**P08-0026-NCES 1
AUSTIN INDEPENDENT SCHO
AUSTIN, TEXAS**



Lavatories
Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

Trap Seal Protection
When structurally feasible, traps for floor drains and similar fixtures shall be primed by methods utilizing gravity flow wastewater from acceptable plumbing fixtures. Fixtures used for grease or food particle wasting shall not be used for trap seal priming.

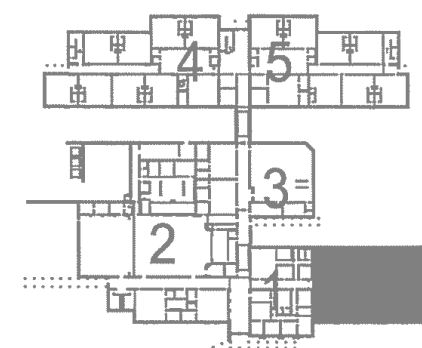
Plumbing fixtures must comply with adopted City of Austin codes and ordinances and State of Texas requirements for plumbing fixture rates:
Water closets- 1.28 gpf
Urinals- 0.5 gpf
Public lavatory- 0.5 gpm
Motored fountains serving the transient public

ALL PLUMBING SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN ADOPTED PLUMBING CODES.
REVIEWED MSH DATE 8-6-12
The granting of a permit for, or approval of these plans and specifications shall not be construed to be a permit for, or approval of, any violation of any of the provisions of the currently adopted plumbing code or any other



REFERENCE GENERAL NOTES ON
SHEETS M1.1, P1.1 AND E1.1
FOR ADDITIONAL INFORMATION

This document, the ideas and designs incorporated herein are and shall remain the property of Hendrix Consulting Engineers. These documents are not to be used or altered, in whole or in part, for other than the original intended use, nor are they to be assigned to any third party without written permission from Hendrix Consulting Engineers. ©
F - 4095



P2.8

