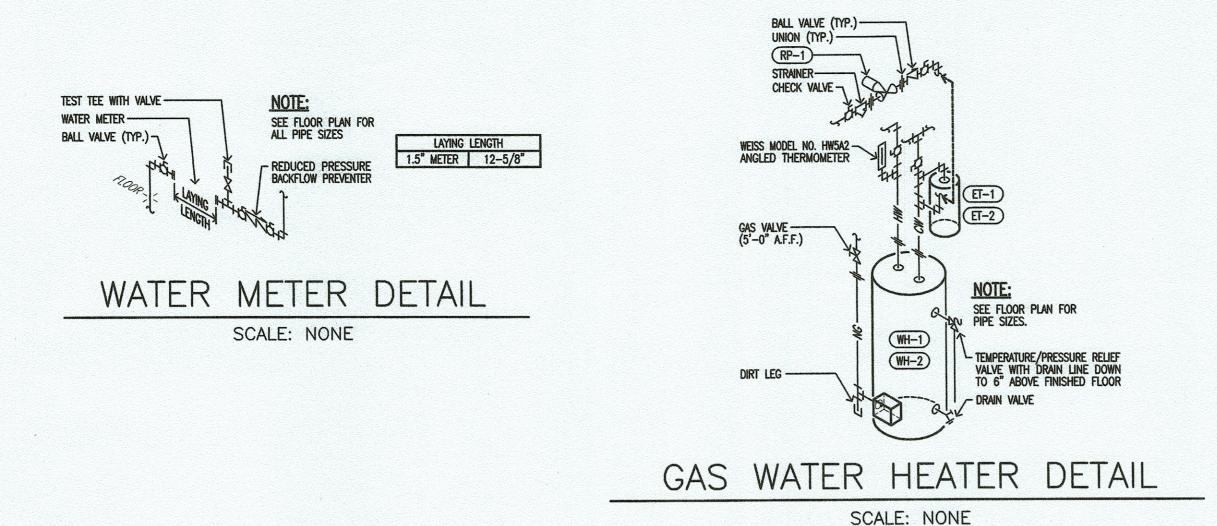
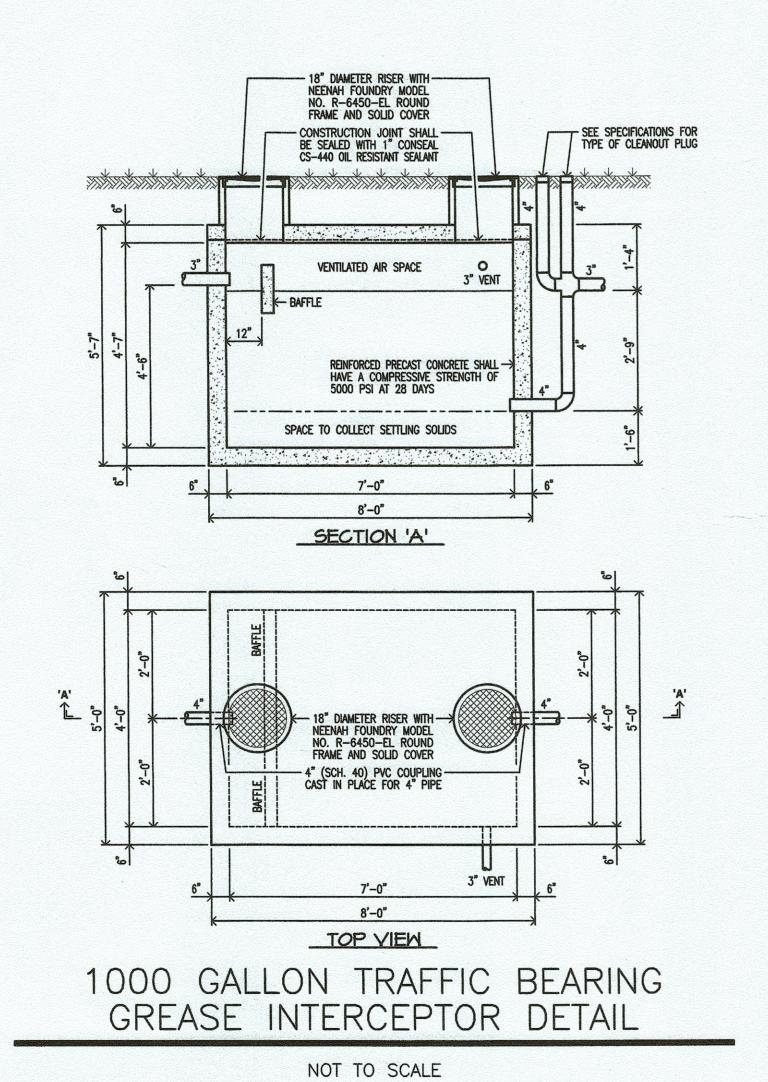


PLUMBING SPECIFICATIONS

GENERAL CONDITIONS A. REFERENCE

- For purposes of clearness and legibility, Drawings are essentially
 diagrammatic and although size and location of equipment are drawn
 to scale wherever possible, Contractor shall make use of all data in
 all of the Contract Documents and shall verify this information at the
 building site. Dimensions given in figures on the Drawings take
 precedence over scaled dimensions.
- Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.
- B. QUALITY ASSURANCE 1. Codes and Permits - Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.
- 1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.
- D. DAMAGE AND EMERGENCY REPAIRS Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.
- E. MATERIALS Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
- All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necessary for proper operation, and in compliance with effective State or Local
- Where piping passes through floor, ceiling or wall, close space between pipe and construction with fire stop putty.





HW CW TRAP SAN MT. HT. AMERICAN STANDARD MODEL NO. 215AA.004.020 "CADET PRO" WATER CLOSET (AMERICAN) STANDARD MODEL NO. 4188A.004.020 TANK WITH TRIP LEVER ON LEFT SIDE AND AMERICAN STANDARD MODEL NO. 3517A.101.020 ELONGATED BOWL WITH AMERICAN STANDARD MODEL NO. 5901.110.020 OPEN FRONT SEAT), HANDICAPPED, WATERSAVER (1.6 GPF), VITREOUS CHINA, CLOSE COUPLED, SIPHON JET, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP, KEENEY MODEL NO. K20288 ESCUTCHEON PLATE, KEENEY MODEL NO. PP23805 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE, HERCULES MODEL NO. 90243 "JOHNI-RING" EXTRA THICK WAX RING, AND HERCULES MODEL NO. 90124 JOHNI-BOLT" BRASS TOILET BOLTS AMERICAN STANDARD MODEL NO. 215AA.005.020 "CADET PRO" WATER CLOSET (AMERICAN STANDARD MODEL NO. 4188A.005.020 TANK WITH TRIP LEVER ON RIGHT SIDE AND AMERICAN STANDARD MODEL NO. 3517A.101.020 ELONGATED BOWL WITH AMERICAN STANDARD MODEL NO. 5901.110.020 OPEN FRONT SEAT), HANDICAPPED, WATERSAVER (1.6 GPF), VITREOUS CHINA, CLOSE COUPLED, SIPHON JET, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP, KEENEY MODEL NO. K20288 ESCUTCHEON PLATE, KEENEY MODEL NO. PP23805 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE, HERCULES MODEL NO. 90243 "JOHNI-RING" EXTRA THICK WAX RING, AND HERCULES MODEL NO. 90124 "JOHNI-RING" EXTRA THICK WAX RING, AND HERCULES MODEL NO. 90124 "JOHNI-BOLT" BRASS TOILET BOLTS AMERICAN STANDARD MODEL NO. 0356.015.020 "LUCERNE" (20x18) LAVATORY, HANDICAPPED, VITREOUS CHINA, WALL HUNG (WALL HANGERS FURNISHED), 3—HOLE CAST FOR AMERICAN STANDARD MODEL NO. 6540.177.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (0.5 GPM) AERATOR, KEENEY MODEL NO. 5700PCCR (1-1/4") CAST BRASS OPEN GRID STRAINER WITH OFFSET TAILPIECE, KEENEY MODEL NO. 5303PC (1-1/4") CAST BRASS P-TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), KEENEY MODEL NO. PP23809LF 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2), WATTS MODEL NO. LFUSG-B-M2 (ORDER NO. 0204143) THERMOSTATIC MIXING VALVE (ASSE 1070 CERTIFIED), KEENEY MODEL NO. PP23801LF 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2), AND TRUEBRO MODEL NO. 2018-AS-L "LAV-SHIELD" LAVATORY PROTECTIVE ENCLOSURE WITH TAMPER RESISTANT SCREWS MUSTEE MODEL NO. 63M PRECAST MOLDED STRUCTURAL FIBERGLASS MOP SERVICE BASIN WITH MUSTEE MODEL NO. 65.309 (3") DRAIN SEAL, MUSTEE MODEL NO. 62.301 REMOVABLE STAINLESS STEEL STRAINER, MUSTEE MODEL NO. 63.403 STAINLESS STEEL BUMPER GUARD (QTY. 2), MUSTEE MODEL NO. 67.2424 WALL GUARD WITH TWO PANELS AND CORNER BRACKET, MUSTEE MODEL NO. 65.600 MOP HANGER WITH THREE (3) SPRING LOADED RUBBER HOLDERS, MUSTEE MODEL NO. 65.70 HEAVY DUTY RUBBER HOSE WITH STAINLESS STEEL HOLDER WALL PLATE, AND AMERICAN STANDARD MODEL NO. 8344.212.004 UTILITY FAUCET WITH VACUUM BREAKER, TOP BRACE, LEVER HANDLES, AND HOSE THREADER SPOUT WITH BUCKET HOOK MUSTEE MODEL NO. 18F "UTILATUB" SINGLE COMPARTMENT UTILITY SINK WITH STEEL LEGS, 2—HOLE PUNCHED FOR AMERICAN STANDARD MODEL NO. 7500.170.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (1.5 GPM) AERATOR, KEENEY MODEL NO. 140PC (1—1/2") CAST BRASS STRAIGHT TAILPIECE, KEENEY MODEL NO. KEENEY MODEL NO. 530PC (1—1/2") CAST BRASS P—TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2) ADVANCE TABCO MODEL NO. 94-63-54-18RL "REGALINE" TRIPLE COMPARTMENT SINK, 14 GAUGE (TYPE 304) STAINLESS STEEL, FLOOR MOUNTED WITH ADJUSTABLE TUBULAR STAINLESS STEEL LEGS, 2-HOLE PUNCHED FOR ADVANCE TABCO MODEL NO. K-105 FAUCET WITH LEVER HANDLES AND ADVANCE TABCO MODEL NO. K-06 FAUCET MOUNTING KIT, ADVANCE TABCO MODEL NO. K-5 (2") CAST BRASS TWIST HANDLE DRAIN (QTY. 3), KEENEY MODEL NO. 153PC (2") CAST BRASS FLANGED TAILPIECE (QTY. 3), KEENEY MODEL NO. 919PC NUT WITH RUBBER WASHER (QTY. 3), KEENEY MODEL NO. 2782PCLF (1/2") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23811LF 16" LONG (1/2") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2) ADVANCE TABCO PREP SINK (PER OWNER), 20 GAUGE (TYPE 304) STAINLESS STEEL, COUNTER MOUNT (SINGLE BOWL), 2—HOLE PUNCHED FOR ADVANCE TABCO MODEL NO. K—69 GOOSENECK FAUCET WITH LEVER HANDLES AND ADVANCE TABCO MODEL NO. K—06 FAUCET MOUNTING KIT, KEENEY MODEL NO. 1377PC (1—1/2") CAST BRASS OPEN GRID STRAINER, KEENEY MODEL NO. 140PC (1—1/2") CAST BRASS FAMGED TAILPIECE, KEENEY MODEL NO. 5307PC (1—1/2") CAST BRASS P—TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2). INCLUDE DISPOSAL PER 1-1/2 1-1/2 ADVANCE TABCO MODEL NO. 7-PS-70 HAND SINK, 20 GAUGE (TYPE 304) STAINLESS STEEL, WALL HUNG (WALL HANGER FURNISHED), 2-HOLE PUNCHED FOR ADVANCE TABCO MODEL NO. K-69 GOOSENECK FAUCET WITH LEVER HANDLES AND ADVANCE TABCO MODEL NO. K-06 FAUCET MOUNTING KIT, KEENEY MODEL NO. 1377PC (1-1/2") CAST BRASS OPEN GRID STRAINER, KEENEY MODEL NO. 140PC (1-1/2") CAST BRASS P-TRAP WITH CLEANOUT, KEENEY MODEL NO. 5307PC (1-1/2") CAST BRASS P-TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2) JUST MODEL NO. SL—2125—A—GR "STYLIST" (25x21) SINGLE COMPARTMENT SINK, 18 GAUGE (TYPE 304) STAINLESS STEEL, SELF RIMMING, 3—HOLE PUNCHED FOR AMERICAN STANDARD MODEL NO. 6409.170.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (1.5 GPM) AERATOR, KEENEY MODEL NO. 1438PC (1—1/2") CAST BRASS CRUMB CUP STRAINER, KEENEY MODEL NO. 140PC (1—1/2") CAST BRASS FLANGED TAILPIECE, KEENEY MODEL NO. 5307PC (1—1/2") CAST BRASS P—TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2) OATEY MODEL NO. 38530 WASHING MACHINE OUTLET BOX WITH BOTTOM OUTLET (PVC) CONNECTION, TOP MOUNTED QUARTER TURN SUPPLY STOP WITH HOSE THREADED OUTLET (QTY. 2), AND KEENEY MODEL NO. PP23821 48" LONG (3/4") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2) OATEY MODEL NO. 39156 ICE MAKER OUTLET BOX WITH TOP MOUNTED QUARTER TURN SUPPLY STOP, AND KEENEY MODEL NO. PP25523 60" LONG (1/4") BRAIDED STAINLESS STEEL SUPPLY LINE JUST MODEL NO. DL-2133-A-GR "STYLIST" (33x21) DOUBLE COMPARTMENT SINK, 18 GAUGE (TYPE 304) STAINLESS STEEL, SELF RIMMING, 3-HOLE PUNCHED FOR AMERICAN STANDARD MODEL NO. 6409.170.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (1.5 GPM) AERATOR, KEENEY MODEL NO. 1438PC (1-1/2") CAST BRASS CRUMB CUP STRAINER (QTY. 2), KEENEY MODEL NO. 140PC (1-1/2") CAST BRASS FLANGED TAILPIECE (QTY. 2), KEENEY MODEL NO. 5307PC (1-1/2") CAST BRASS P-TRAP WITH CLEANOUT (QTY. 2), KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2)

FIXTURE SCHEDULE

SYM.

CONNECTIONS (IN INCHES)

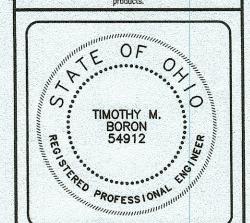
\wedge	DRAIN SCHEDULE			
SYM.	DESCRIPTION	GRATE TYPE	Drain Type	
1 SMITH MODEL BUCKET, SPEI	NO. 2230L03-NB CAST IRON FLOOR DRAIN WITH FLASHING COLLAR, SEDIMENT DI-SET (PVC) OUTLET CONNECTION, AND SMITH MODEL NO. 2692-03 INLINE	NICKEL BRONZE	GENERAL	

	CLEANOUT SCHEDULE				
SYM.	DESCRIPTION	COVER TYPE	CLEANOUT TYPE		
1	SMITH MODEL NO. 4033L03—NB CAST IRON CLEANOUT WITH BRONZE PLUG AND SPEEDI SET (PVC) OUTLET CONNECTION	NICKEL BRONZE	INTERIOR		
2	SMITH MODEL NO. 4033L02—NB CAST IRON CLEANOUT WITH BRONZE PLUG AND SPEEDI SET (PVC) OUTLET CONNECTION	NICKEL BRONZE	INTERIOR		
3	SMITH MODEL NO. 4263L03—CI CAST IRON CLEANOUT WITH BRONZE PLUG AND SPEEDI SET (PVC) OUTLET CONNECTION	CAST IRON	EXTERIOR		

SYM.	MFR.	MODEL NO.	DESCRIPTION
WH-1	BRADFORD WHITE	RG2PDV50H6N	COMMERCIAL, GAS FIRED, SEALED COMBUSTION, GLASS LINED WATER HEATER, 48 GALLON CAPACITY, 60,000 BTU/HR INPUT 65 GALLON RECOVERY AT 90°F RISE, 3/4" HOT AND COLD WATER CONNECTIONS, 1/2" NATURAL GAS CONNECTION, 5-YEAR WARRANTY WEIGHT: 205 LBS. (SHIPPING)
WH-2	BRADFORD WHITE	RG2PDV50H6N	COMMERCIAL, GAS FIRED, SEALED COMBUSTION, GLASS LINED WATER HEATER, 48 GALLON CAPACITY, 60,000 BTU/HR INPUT 65 GALLON RECOVERY AT 90°F RISE, 3/4" HOT AND COLD WATER CONNECTIONS, 1/2" NATURAL GAS CONNECTION, 5-YEAR WARRANTY WEIGHT: 205 LBS. (SHIPPING)

=	EXPANSION TANK SCHEDULE				
SYM.	MFR.	MODEL NO.	DESCRIPTION		
ET-1	WATTS	(ORDER NO. 0067370)	THERMAL DIAPHRAGM EXPANSION TANK, 2.1 GAL. VOLUME, 1.5 GAL. ACCEPTANCE © 20 PSI, 8" DIA. x 11" HIGH TANK, 150 PSI MAXIMUM WORKING PRESSURE, 200°F MAXIMUM ALLOWABLE WORKING TEMPERATURE, 3/4" SYSTEM CONNECTION WEIGHT: 6 LBS. (SHIPPING)		
ET-2	WATTS	(ORDER NO. 0067370)	THERMAL DIAPHRAGM EXPANSION TANK, 2.1 GAL. VOLUME, 1.5 GAL. ACCEPTANCE @ 20 PSI, 8" DIA. x 11" HIGH TANK, 150 PSI MAXIMUM WORKING PRESSURE, 200'F MAXIMUM ALLOWABLE WORKING TEMPERATURE, 3/4" SYSTEM CONNECTION WEIGHT: 6 LBS. (SHIPPING)		

This print is issued by mds & associates, inc. only upo epresentation that it will be retained in strict confide by the person or corporation to whom it has been issue neither to be duplicated nor exhibited except to facility the construction or maintenance of mds & associates, i



0 **ADDITION** BUILDIN

mas

& associates, inc. consulting enginéers 4125 HILLS & DALES ROAD, N.W. SUITE 100 CANTON, OHIO 44708-1676 330.492.0874 330.492.7054

e-mail: mds-michael@sbcglobal.net

JOB TITLE: PLUMBING RENOVATIONS

DWN. BY CHK. BY

MRD/TMB SHEET NO.

02/19/20

DEK/JAB

