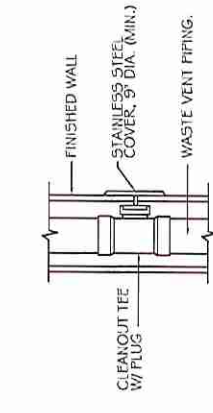
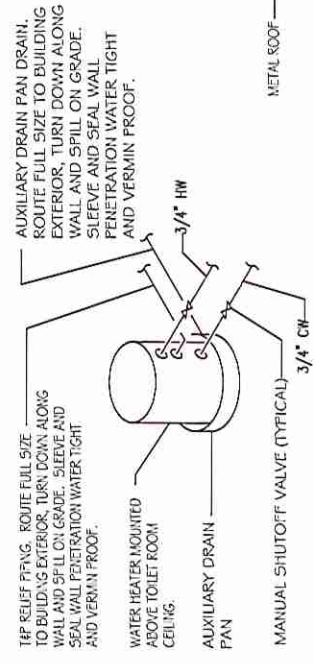


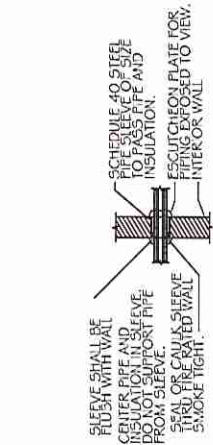
PLUMBING PLAN
SCALE: 3/16"=1'-0"



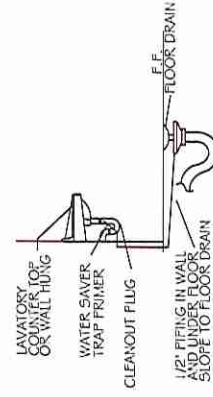
WALL CLEANOUT DETAIL
N.T.S.



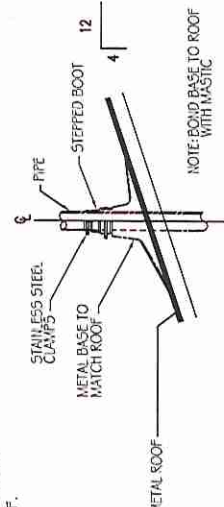
WATER HEATER DETAIL
N.T.S.



TYPICAL INTERIOR WALL SLEEVE DETAIL
N.T.S.



FLOOR DRAIN DETAIL
N.T.S.



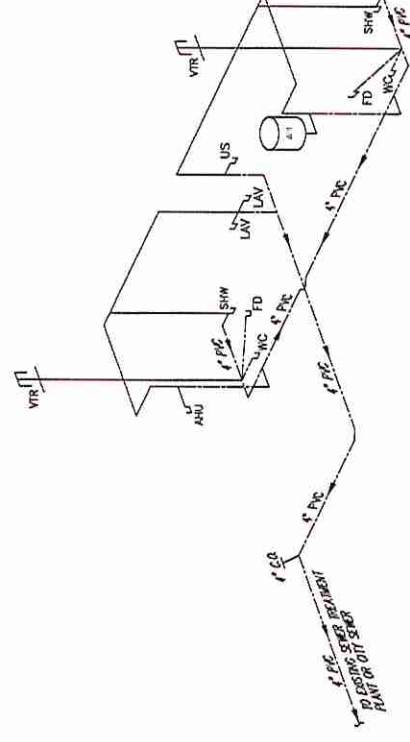
VENT THRU ROOF DETAIL
N.T.S.

PLUMBING NOTES

1. PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT FOR A COMPLETE OPERATING SYSTEM. THE SYSTEM SHALL INCLUDE HOT AND COLD WATER PIPING, SEWER AND VENT PIPING, INSULATION, WATER HEATER, HANGERS, VALVES, SUPPORTS WITHOUT ANY RESTRICTIONS TO COLUMN, CUT AND PATCH AS REQUIRED TO INSTALL PIPES.
2. ALL WORK AND MATERIAL SHALL CONFORM STRICTLY TO THE LATEST LOCAL, CITY, PARISH, STATE AND NATIONAL GOVERNING CODES.
3. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS. ELEVATIONS AND SIZES PRIOR TO COMMENCING ANY WORK. CONTRACTOR SHALL PAY NECESSARY FEES FOR THE UTILITIES CONNECTIONS.
4. CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING INVERTS AND SET NEW INVERTS OF SEWERAGE AND DRAINAGE PIPES.
5. SEWERAGE LINES 3-INCH AND SMALLER SHALL BE SLOPED 1/4" PER FOOT AND LINE 4-INCH AND LARGER SHALL BE 1/8" PER FOOT.
6. TEST ALL PIPING AT REQUIRED PRESSURE.
7. ALL PLUMBING SHALL BE CLOSELY COORDINATED WITH STRUCTURAL SYSTEM, MECHANICAL SYSTEM AND ELECTRICAL TO INSURE NO TRADES WILL CONFLICT WITH EACH OTHER.
8. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DOORS, WINDOWS, WALLS, FIXTURES, ETC.
9. ALL WATER MAINS AND PIPING NOT SHOWN FOR CLARITY. ALL LOCATIONS FIELD VERIFIED.
10. DOMESTIC HOT AND COLD WATER PIPING AND FITTINGS UNDER SLAB SHALL BE ASTM B88 COPPER WATER TUBE, TYPE K, SOFT ANNEALED. NO JOINTS SHALL BE ALLOWED UNDER THE SLAB.
11. DOMESTIC WATER PIPING AND FITTINGS ABOVE THE SLAB SHALL BE ASTM B88 COPPER WATER TUBE, TYPE L, HARD DRAWN WITH COPPER PRESSURE TYPE FITTINGS, ANSI B16.22. THE JOINTS SHALL BE SOLDERED TYPING USING ASTM B32, ALLOY GRADE 95A (95-5) SOLDER.
12. SOIL, WASTE, VENT PIPING AND FITTINGS ABOVE THE SLAB SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH BELL AND SPIGOT ENDS AND ONE PIECE NEOPRENE INSERT TYPE GASKET. USE PVC SCHEDULE 40 OR ABS DWV PIPES AND FITTINGS WHERE PERMITTED BY CODE.
13. ALL WATER PIPING AND FITTINGS ABOVE THE FLOOR SHALL BE INSULATED WITH 1/2" THICK FIBERGLASS INSULATION AND JACKET.
14. ALL ELECTRICAL, MECHANICAL AND PLUMBING PENETRATING FIRE PARTITIONS SHALL BE FIRE CAULKED. PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM E814.
15. ALL PLUMBING LINES SHOWN ARE DIAGRAMATIC.

PLUMBING FIXTURE SCHEDULE			
MARK	DESCRIPTION	TYPE	ROUGH-IN SIZES
WC	H.C. WATER CLOSET	WALL	4" x 4" x 4"
LAV	H.C. LAVATORY	WALL HUNG	2" x 2" x 1/2" x 1, 2, 3
FD	FLOOR DRAIN	-	2" x 2" x 3"
WH	WATER HEATER DRAIN	-	2" x 3"

- FIXTURE NOTES:
1. INSULATE PIPING FOR HANDICAP FIXTURES.
 2. PROVIDE CHAIR CARRIER FOR WALL HUNG FIXTURES.
 3. H.C. - HANDICAP FIXTURE
 4. INSTALL CONTINUOUS DRIP VALVE ON ALL FLOOR DRAINS.
 5. FIXTURES SELECTED BY OWNER.



PLUMBING WASTE RISER
N.T.S.

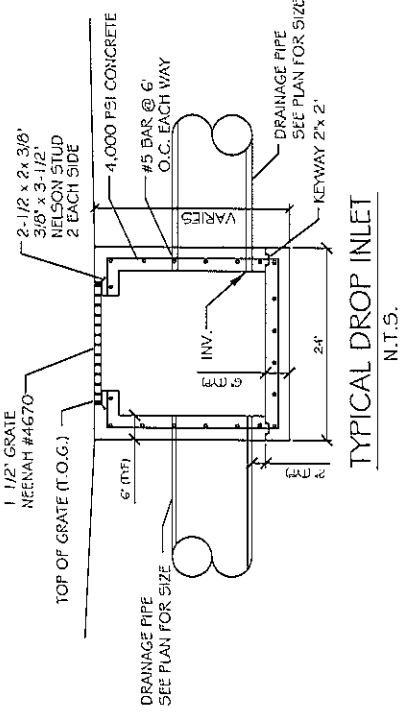
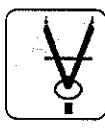
DAMMON ENGINEERING INC.
Architects & Engineers
1226 REBEKAH AVENUE
SUITE 100, LEXINGTON, LA 70458
PHONE: 504-641-5525
FAX: 504-641-5520
dammonengr.com
dammonengr@dammonengr.com

BULK SYSTEMS NEW OFFICE/WAREHOUSE BUILDING
1226 REBEKAH AVENUE
SUITE 100, LEXINGTON, LA 70458
JOB No: 2173
DATE: 04-23-2013
DRAWN BY: JTL
CHECKED BY: JTL

PLUMBING PLAN

SHEET No: 20 OF 20

P1



BULK SYSTEMS
STORMWATER RUN-OFF CALCULATIONS

Formulas used:
(1) RATIONAL METHOD: Q=AcI
where:
Q = Peak discharge of watershed in cubic feet per second (cfs) due to maximum storm assumed.
A = Area of watershed in acres.
I = Intensity of rainfall in inches per hour based on concentration area. [3]
(4) TC=
where:
TC = Time of concentration = time required for rain falling at most remote point to reach discharge point.
C = Site run-off coefficient based on conditions shown.
S = Percent slope of watershed.

POST DEVELOPMENT
25 Year Frequency

Watershed Surfaces	4144	sqft = 0.095 Acres
Gravel Surfaces	0	sqft = 0.000 Acres
Green Spaces	37188	sqft = 0.854 Acres
Summary	41332	sqft = 0.949 Acres

Duration (D) = Time of concentration (TC) runoff length
where
L = 1170
C = 0.23
S = 0.4603
TC = D + 45.53 minutes
I = 3.84 in/hr
Q = 0.778 cfs
10% reduction **0.978 cfs**

POST DEVELOPMENT
25 Year Frequency

Watershed Surfaces	11517	sqft = 0.261 Acres
Gravel Surfaces	0	sqft = 0.000 Acres
Green Spaces	29315	sqft = 0.664 Acres
Summary	41332	sqft = 0.949 Acres

Duration (D) = Time of concentration (TC) runoff length
where
L = 170
C = 0.36
S = 0.8824
TC = D + 42.50 minutes
I = 3.84 in/hr
Q = 1.249 cfs

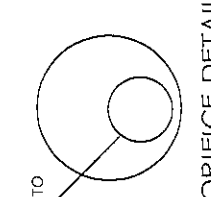
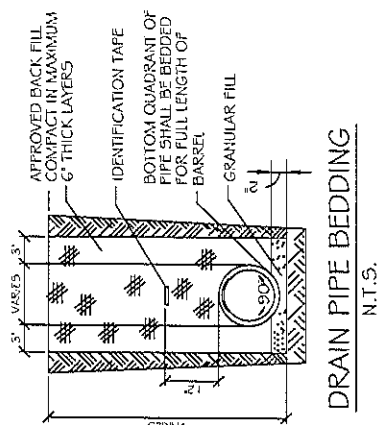
DETECTION REQUIREMENTS
ONE HOUR DETENTION
DETECTION DIMENSIONS
LENGTH 65 feet
DEPTH 0.28 feet

DISCHARGE END AREA REQUIREMENTS
10 Year Frequency

where:
A = Exchange Area in sq ft
V = Volume of water in cu ft
Q = Flow rate in cfs
P = Peak discharge in cfs
C = Coefficient
S = Slope

REQUIRED COBERT =
1.311011616 diameter

1. Covert, W.F. The Covert Handbook. 1984. 2nd Edition. 150 pages.
2. Covert, W.F. The Covert Handbook. 1984. 2nd Edition. 150 pages.
3. Covert, W.F. The Covert Handbook. 1984. 2nd Edition. 150 pages.
4. Covert, W.F. The Covert Handbook. 1984. 2nd Edition. 150 pages.
5. Covert, W.F. The Covert Handbook. 1984. 2nd Edition. 150 pages.



- LEGEND**
- PROPERTY LINE
 - SETBACK LINE
 - TEMPORARY SILT FENCING
 - NEW DRAIN LINE
 - 6" OPAQUE FENCE
 - NEW DROP INLET w/TEMP. SILT FENCING
 - SLOPE LINES
 - T.O. GRATE ELEVATION
 - INVERT ELEVATION
 - NEW ELEVATIONS
 - EXISTING ELEVATIONS

GUTTERS AND DOWN SPOUTS TO BE SEAMLESS ALUMINUM 24 GAUGE. COLORS TO BE SELECTED BY OWNER. GUTTERS TO BE OGGEE IN CROSS SECTION, MINIMUM 6" WIDTH.

NOTES:

- DRAIN PIPE & FITTINGS WITHIN PROPERTY LINE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE, MEETING CLASS 100 C-300 PVC.
- ELEVATIONS SHOWN ARE M.S.L.
- FIELD VERIFY ALL ELEVATIONS AND DRAINAGE SYSTEM PLACEMENT PRIOR TO START OF WORK.
- MOCK OUT 24" DEEP FOR FOUNDATION PAD MINIMUM, OR TO UNDISTURBED SOIL CAPABLE OF 1500 PSF BEARING.
- DRAIN SPOUTS SHALL FLOW INTO SUB-SURFACE DRAINAGE.
- THERE IS NO EVIDENCE OF EXISTING OFF-SITE FLOW CROSSING THE PROPERTY. NEW DRAINAGE CALCULATIONS ARE DETERMINED ACCORDINGLY.

