Polk County Conservation Board
Invitation to Bid (ITB 2016– 001)
For
2" water service directional bored, 1" water meter with DMWW line tap, 2-valve box's, 2 prefab restroom sewer rough-in and connections, and water line connection, 1 Coco filter septic system.
At
Fort Des Moines Park

The Polk County Conservation Board is seeking qualified and competent contractors to bid for the services described herein at Fort Des Moines Park located at 7200 SE 5th Street, Des Moines, Iowa 50315.

Interested parties are to mail or hand deliver their proposals to:

Wayne Johnson, Const. Maint. & Operations Manager
PolkCounty Conservation
11407 NW Jester Park Drive
Granger, IA 50109

Proposals must be received by Thursday, February 25, 2016 by 10:00 a.m. to be considered.Proposals will be opened, and recorded at 10:05 a.m. on the same date at the Polk County Conservation Office located in Jester Park, 11407 NW Jester Park Drive, Granger, Iowa 50109.

Wayne Johnson
Construction/Maintenance Manager
Polk County Conservation

Polk County Conservation Board
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At
Fort Des Moines Park

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At
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PART I
PROPOSAL PROCESS

1.1 PURPOSE

The Polk County Conservation Board (PCCB) would like to contract directional boring 3,400' of 2" HDPE water main, one 1" water meter with tap to DMWW, below grade sewer rough-in for 2 prefab restrooms, 2 valve pits at restrooms, final sewer and water connections, and install 1 Coco filter septic system.

Proposals will be accepted from all persons or firms qualified to do so. A contract will be signed with the successful Bidder.

This Invitation to Bid (ITB) provides instructions for parties interested in supplying the requirements of this proposal. It contains the specifications for the services to be supplied and the terms and conditions thereof.

1.2 SCOPE OF PROJECT

The scope of this project is to provide labor, materials, machinery and expertise to directional bore 3,400' of 2" HDPE water main, install a 1" water meter with tap to DMWW main, rough- in below grade plumbing for 2 prefab restrooms, set 2 concrete valve pits at restrooms, final sewer and water connections, and construct 1 Coco filter system at Fort Des Moines Park and complete this work according to the plans and specifications provided by Polk County Conservation and James Carroll, P.E.

1.3 INQUIRIES

A. For inquiries, you may contact:

Wayne Johnson, Construction/Maintenance Manager
Polk County Conservation
11407 NW Jester Park Drive
Granger, IA 50109
515.323.5367or 515.250.7317
wayne.johnson@polkcountyiowa.gov

B. Any changes made in the original Proposal Packet will only be made by Addendum issued by the Director of the PCCB.

C. In all cases, no verbal communications shall override written communications or the contents of this ITB.

1.4 APPLICANT'S RESPONSIBILITIES

Before submitting a proposal, each Bidder shall make all investigations and examinations necessary to ascertain conditions and requirements affecting operation of the proposed services. Failure to make such investigations and examinations shall not relieve the successful Bidder from the obligation to comply, in every detail, with all provisions and requirements, nor shall it be a basis for any claim whatsoever for alteration in any terms of or payment required by an Agreement.

No allowance will be made after proposals are received for oversight, omission, error or mistake by applicant.

The person submitting the request will be responsible for its prompt delivery. The PCC accepts no responsibility for delays in the receipt of your proposal due to mail delivery, messenger services or any other method of delivery. The responsibility for timely proposal delivery rests with the Bidder.

1.5 RECEIVING OF PROPOSALS

A. Proposals will be received until 10: 00 a.m. Thursday, February, 25, 2016

B. Proposals received after 10:00 a.m. on that date will not be considered and will be returned to the bidder.

C. Proposals are to be mailed or brought and submitted in a sealed envelope attn.

Wayne Johnson, Construction/Maintenance Manager
Polk County Conservation
11407 NW Jester Park Drive
Granger, IA 50109

Proposal For:

2" water service directional bored, 1" water meter with DMWW line tap, 2-valve box's, 2 prefab restroom sewer rough-in and connections, and water line connection, 1 Coco filter septic system.

1.6 FILING OF PROPOSALS

Proposals shall be on the form furnished with this packet. Proposals shall include all information requested as part of the Proposal. Proposal forms must be complete, signed and dated. The proposal and any clarification to same shall be signed by an officer of the offering firm or a designated agent empowered to bind the firm in contract.

1.7 OFFICIAL CLOCK

The official clock is located in the receptionist's area of the Polk County Conservation Office at Jester Park, Granger, Iowa.

1.8 OPENING OF PROPOSALS

Proposals will be opened and reviewed at 10:05 a.m. Thursday, February 25, 2016 at the Polk County Conservation Office located in Jester Park, 11407 NW Jester Park Drive, Granger, Iowa.

1.9 REJECTION OF PROPOSAL

The Polk County Conservation Board reserves the right:

- To reject any and all proposals.
- To waive technical or insubstantial irregularities when not shown to have resulted in any unfair advantage to any Bidder.

1.10 REPORTING OF ANTI-COMPETITIVE PRACTICES

When for any reason collusion or other anti-competitive practices are suspected among any Bidders, the Construction/Maintenance Manager shall prepare a notice of the relevant facts, which shall be given to the Director for review and possible involvement of the office of the Polk County Attorney.

1.11 POLK COUNTY CONSERVATION BOARD STATEMENT

The PCCB may show preference in purchasing goods and services from vendors who produce goods or maintain an office in Iowa. Preference may also be given to goods produced in Polk County or to vendors maintaining an office in Polk County. Further, the Polk County Conservation Board may actively solicit and seek out local vendors of goods and services and to encourage said vendors to stock and supply Iowa-made products.

1.12 TAXES

The PCCB is exempt from federal, state and local sales and use tax on the equipment, parts supplied, or services pursuant to this contract.

1.13 EXCLUSIVE AGREEMENT

The Agreement which results from this proposal solicitation constitutes the exclusive agreement between parties and incorporates the provisions of these terms and conditions, and supersedes any previous agreements, either written or oral. The terms and conditions hereof may not be altered without prior written consent of both parties.

1.14 PROJECT DATES

The following dates represent the proposed project schedule. If it becomes necessary to change the schedule, all known bidders will be notified.

Bid Opening:	Thursday, February 25, 2016
Award Date:	Wednesday, March 9, 2016
Completion Date:	Wednesday, June 1, 2016
Estimated Starting Date:	Monday, March 21, 2016
Pre-Construction Meeting:	T.B.A.

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At
Fort Des Moines Park

PART II
TERMS AND CONDITIONS

2.1 TERMINATION

A. Termination for causes: The County may terminate the agreement resulting from this request at any time that the Contractor fails to carry out its provisions or to make substantial progress under the terms specified in this request and the resulting proposal.

1. The County shall provide the contractor/vendor with five (5) day notice of conditions endangering performance.

2. The County shall be obligated only for those services rendered prior to the day of notice of termination, less any liquidated damages that may be assessed for nonperformance.

3. With the mutual agreement of both parties upon receipt and acceptance of not less than forty (40) days written notice, the agreement may be terminated on an agreed date prior to the end of the contract period without penalty to either party.

4. Polk County may terminate upon thirty (30) days' notice if it determines it is in the County's interest to do so.

2.2 WARRANTIES AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit and secure this contract upon an agreement of understanding for commission, percentage, brokerage, or contingency excepting bona fide employees or selling agents maintained by the contractor for the purpose of securing business. For breach or violation of this warranty, the County shall have the right to award this Contract without liability, or in its discretion, to deduct from the contract price, or to otherwise recover the full amount of such commission, percentage, brokerage, or contingency.

Changes in provisions or services to be furnished under this Bid may be made only in writing and must be approved mutually by the Contractor and Polk County Conservation.

2.3 IMMUNITY FROM LIABILITY

Every Bidder/Contractor to this agreement is hereby notified and agrees that Polk County, the using agency and any funding source for the using agency are immune from liability and suit for or from Contractor activities involving third parties and arising from this Bid.

2.4 CONFLICTS BETWEEN TERMS

The County reserves the right to accept or reject any exception taken by the Bidder to the terms and conditions of this Invitation for Bid.

2.5 WAIVER OF INFORMALITIES

The County reserves the right to waive any and all informalities in Bids if such waiver does not substantially change the offer or provide a competitive advantage to any Bidder.

2.6 TAXES - STATEAND LOCAL

A. The County is exempt from federal, state, and local sales and use tax on the equipment, parts supplied, or services pursuant to this contract.

B. Iowa Code Sections 422.42(15) & (16) and 422.47(5) authorizes the approved contractor to purchase building materials, incorporated solely into this project, tax free. Polk County, upon approval of Contract by the staff, will issue Tax Exemption Certificates to prime Contractor and authorized sub-contractors.

C. The Tax Exempt Certificates will allow the purchase of qualifying items to be made exempt from Iowa sales tax, applicable local option sales tax, and school infrastructure local option sales tax. It is the prime Contractor's responsibility to keep records identifying the materials and supplies purchased and verifying they were used on this construction contract. Misuse of certificates could result in civil or criminal penalties.

2.7 EXCLUSIVE AGREEMENT

The agreement which results from this Bid solicitation constitutes the exclusive agreement between parties and incorporates the provisions of these terms and conditions, and supersedes any previous agreements, either written or oral. The terms and conditions hereof may not be altered without prior written consent of both parties.

2.8 REMEDIES UPON DEFAULT

In any case where the Contractor has failed to deliver or has delivered nonconforming goods or services, the County may procure goods or services in substitution from another source and charge the difference between the contracted

price and the market price to the defaulting Contractor. The Polk County Attorney shall be requested to make collection from the defaulting Contractor.

2. 9 ACTS OF GOD

A. Contractor shall not be considered to be in default under this agreement, if performance is delayed or made impossible by an act of God, floods, fires, strikes, and similar events; but in each such case, the delay or impossibility must be beyond the control and without the fault or negligence of Contractor.

B. It shall be the responsibility of the Contractor to promptly advise the Construction/Maintenance Manager of the delay. The County may elect to cancel all orders on file with the Contractor and place the order with another Contractor.

2.10 SUBCONTRACTORS

Successful Contractors shall be responsible for all acts and performance of any subcontractor or secondary suppliers that the successful Contractor may engage for the completion of the terms of this bid. A delay that results from a subcontractor's conduct, negligence, or failure to perform shall not exempt the Contractor from default remedies. Successful Contractor shall be responsible for payment to all subcontractors or secondary suppliers.

2.11 ASSIGNMENT

Contractors may not assign contracts or purchase orders to any party (including financial institutions) without written permission of Polk County Conservation.

2.12 TITLE TO GOODS

Contractor warrants that the goods procured hereunder are free from all liens, claims, or encumbrances.

2.13 INDEMNIFICATION

To the extent the goods are not manufactured in accordance with designs, Contractor shall defend, indemnify and hold harmless Polk County Conservation Project Engineer, and other users of the goods from and against any claim of infringement of any letter patent, trade names, trademark, copyright, or trade secrets by reason of sale or use of any articles purchased hereunder. Polk County Conservation shall promptly notify Contractor of any such claim.

2.14 DISCRIMINATION AND AFFIRMATIVE ACTION

A. Contractor shall comply with the provisions of federal, state, and local laws and regulations to insure that no employee or applicant for employment is discriminated against because of race, religion, color, age, sex, national origin, or disability. Contractor shall have an affirmative action plan and shall provide the County with reports required to insure

compliance with equal employment legislation and regulations if requested. Contractor shall insure that all authorized subcontractors comply with the provisions of this clause.

B. A copy of the Bidder's "Affirmative Action Plan" must be made available to Polk County upon request.

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Fort Des Moines Park

PART III
SPECIAL REQUIREMENTS

3.1 BID SUBMITAL

Bids shall be submitted on **ATTACHED** bid sheet.

3.2 BIDDER QUALIFICATIONS

A. Bidders shall be prepared to satisfy Owner as to integrity, experience, adequacy of equipment, materials and personnel, and ability to perform work specified.

B. If successful Bidder is a non-Iowa corporation, all Bidders shall provide proof to jurisdiction prior to execution of contract of authorization by Secretary of State to do business in Iowa

3.3 PRE-BID MEETING

N.A.

3.4 INSURANCE CERTIFICATE

A Certificate of Insurance naming Polk County as an additional insured will be required upon award of bid as follows: "Polk County Government, it's elected officials, employees, Project Engineer and/or assigns are Additional Insured's with respect Project: "Fort Des Moines, 2" water service directional bored, 1" water meter with DMWW line tap, 2-valve box's, 2 prefab restroom sewer rough-in and connections, and water line connection, 1 Coco filter septic system.

See Attached Requirements.

3.5 BONDS

A. A "Bid" bond in the amount of 5% is required for this project.

B. Both a "Performance" and "Payment" bond will be required for this Project.

C. A 5% retainage will be withheld from payment until final inspection of completed project.

3.6 DETAILED PLANS

Detailed construction plans have been provided by Polk County Conservation and James Carroll, P.E.

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At
Fort Des Moines Park

PART IV
GENERAL REQUIREMENTS

4.1 SUMMARY

The work covered by this section includes items necessary to install 2" water service directional bored, 1" water meter with DMWW line tap, 2-valve box's, 2 prefab restroom sewer rough-in and connections, and water line connection, 1 Coco filter septic system construct all as shown on the drawings and as specified herein by Polk County Conservation and James Carroll, P.E. interpretation of all specifications shall be final.

4.2 QUALITY ASSURANCE

Perform all work in compliance with applicable requirements of governing authorities having jurisdiction

4.3 PROTECTION

Protect from damage to existing buildings, walks, paving, fencing, sod and other items noted to remain. Maintain bench marks, monuments, property stakes and other reference points. The Contractor is to use due caution in working over and around high pressure gas lines if applicable.

Contractor is responsible for correcting damage caused to existing construction, utilities, surfacing, tile lines, and other items noted to remain and no additional expense to the owner.

4.4 SAFETY

Barricades, and temporary fencing may be required during construction. Barricades will be considered incidental to other work on the project. No additional compensation will be allowed.

All work and methods of construction shall conform to the State of Iowa Bureau of Labor and all OSHA Standards.

Contractor shall be responsible to notify all utility companies of the construction schedule. Contractor shall be responsible for obtaining utility locates prior to performing any excavation. One-Call before digging – 1-800-292-8989.

4.5 SITE CLEARING

All areas of this project have been cleared and graded.

Fill depressions caused by excavation operations with satisfactory soil materials unless further excavation work is required or indicated.

Preserve stake and markers. Replace at no cost to the Owner, stakes or markers carelessly or willfully damaged by operations. Assume responsibility for accuracy of lines, grades and dimensions.

4.6 ACCESS

Access to adjacent properties shall be maintained by the contractor throughout construction.

4.7 FINISH GRADING

Restore the surface per plan documents.

4.8 SITE RESTORATION

Upon completion of construction, remove all excess materials and construction debris and restore any damage done to existing buildings or landscape.
Seeding will be done by Polk County Conservation.

4.9 FINAL INSPECTION

Work will not be considered for final inspection until all the work has been completed and the Contractor has certified all items are in strict compliance with the contract documents.

The Contractor, and Polk County Conservation Construction/Maintenance Manager shall mutually agree on a date/time for a final inspection and both will be present at the job site during said process.

The Construction/Maintenance Manager will present the Contractor a list of items not meeting contract requirements. This list will be confirmed in writing and all items listed must be made acceptable before final payment will be made.

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PART V
SCOPE OF WORK

5.0 SCOPE OF WORK (General):

- See Plans and Technical Specification provided by Polk County and James Carroll P.E.
- Directional bore approximately 3,400' of 2" HDPE water line
- Tap DMWW 12" main and set a 1" meter pit.
- Set 2 - 5' diameter concrete valve pits and extend 2" water service into restrooms.
- Install below grade plumbing for 2 pre-fab restrooms and compact granular base.
- Construct 1 Coco filter septic system.
- Connect all plumbing and water service inside new restroom mechanical room.
- Plumbing permit with City of Des Moines is required but no fee charged.

NOTE: Polk County Conservation to provide the following:

- Storage area for equipment and materials
- 2 pre-fab restrooms

BID PROPOSAL FORM
FOR

2" water service directional bored, 1" water meter with DMWW line tap, 2-valve box's, 2 prefab restroom sewer rough-in and connections, and water line connection, 1 Coco filter septic system.

AT
FORT DES MOINES PARK

Type of Work Directional bore, plumbing, septic system Project No. ITB 2016-001

Letting Date March 9, 2016 Park/Area Fort Des Moines Park

Location North Access Area, Shelter #2 area, and 3 Season Shelter Area

Description of Work: **Directional boring water main, installing a 1" meter pit, plumbing rough-in, setting 2 concrete valve box's, construct a Coco filter septic system, final connections.**

DBE Goal (%)	Amount of Proposal Guarantee	Working Day Contracts		Calendar Date Contracts	
		Working Days	Start Date	Completion Date	Liquidated Damages Per Day
ZERO	100% Bond	N/A	TBD	June 1, 2016	NONE

The bidder hereby certifies that no other principal is involved in or has an interest in this proposal; that the bidder has thoroughly examined the site of the work and understands that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; that the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the unit process stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete this project by the time specified; that no state or county official or employee has a direct or indirect interest in the contract which would cause violation of Iowa Code Section 314.2; that the bidder has made no agreement with

any supplier of motor fuel or special fuel which will result in violation of Iowa Code Section 452A.17(8).

If this bid is accepted, Bidder agrees: to perform all "extra work" required to complete the project at unit prices or lump sums to be agreed upon in writing prior to commencement of such "extra work" or, if prior agreement cannot be reached, to perform the work on a "force-account basis" as provided in the specifications; to execute the formal contract within thirty days of the date of approval for award or to forfeit the proposal guaranty furnished herewith; to begin work in accordance with the contract documents and to either complete the work within the contract period; and to furnish a performance bond in an amount equal to the contract award as security for the full and complete performance of the contract in accordance with the plans and specifications.

Enclosed herewith is a certified check, credit union share draft, cashier's check, bank draft on a solvent or a bid bond in the penal sum of 5% of the lump sum bid shown in the contract document as a proposal guaranty. It is understood by bidder that the said guaranty document shall be retained by the Contracting Authority as a forfeiture in the event the formal contract is not executed or performance bond is not furnished if the award is made to the undersigned.

The signing of the Bid Document shall serve as an unsworn declaration that, I (the owner, partner, President, other corporate officer, or an authorized representative) hereby certify under penalty of perjury under the laws of the United States and the State of Iowa that I have read, understand, and accept the Bidding Certifications and other provisions contained in the Proposal Notice and the DBE Contract Provisions (if a DBE goal has been set).

Proposal of _____

Name of Bidder

_____

Street Address

_____

City State Zip Code

Federal Tax I.D. No._____

Signature shall be by authorized agent. If joint venture, each shall sign.

_____ _____ _____ _____

Signature Date Signature Date

Lump Sum Bid

Project No. ITB 2016 – 001 Park/Area Fort Des Moines

TOTAL AMOUNT BID _____

POLK COUNTY GOVERNMENT
INSURANCE AND
CERTIFICATE REQUIREMENTS
REQUIREMENTS.

The contractor shall secure and maintain throughout the duration of this contract, insurance of such types and not less than the amounts specified herein. The Contracting Authority **(POLK COUNTY)** shall be named as "Additional Insured," using the following language: **"POLK COUNTY GOVERNMENT, its Elected Officials, Employees, Agents, and Assigns."**

Insurance coverage will be considered acceptable when provided in one of the following methods:

The Contractor shall furnish the Contracting Authority with a proper Certificate of Insurance or affidavits executed by representatives of duly qualified insurance companies, doing business in IOWA for approval by the Contracting Authority.

The Certificate shall identify the following: the insurance company firm name and address; contractor firm name and address; insurance policy(s) number(s); policy period; type of policy and coverage; limits of coverage; description of operations covered; certificate holder/"Additional Insured"; and cancellation clause.

All certificates submitted for the purpose of complying with these specifications shall identify as the "Named Insured" the Contractor; and the Contracting Authority, its agents and representatives, as "Additional Insureds."

This requirement shall apply with equal force, whether the work is performed by (1) persons employed directly by the Contractor, (2) by a subcontractor, or (3) by an independent contractor.

Regardless of such approval by the Contracting Authority, it shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times, and failure to do so shall not relieve the Contractor of any contractual obligation or responsibility. Failure on the part of the Contractor to maintain this insurance in full effect will be treated as such by the Contracting Authority. Failure on the part of the Contractor to comply with the requirements of this article will be considered sufficient cause to suspend the work, withhold payment(s), and/or be disqualified from receiving further contract awards.

Insurance policies filed with the Contracting Authority shall state that thirty (30) calendar days prior written notice will be given to the Contracting Authority before any policy covered thereby is changed or canceled.

Evidence of insurance coverage as identified and stipulated by these specifications shall be approved by the Contracting Authority prior to any work being performed by the Contractor, subcontractor(s), or agents of the Contractor.

TYPES OF INSURANCE

A. Workers' Compensation and Employers' Liability. This insurance shall protect the Contractor against all claims under Iowa Workers' Compensation Law. The Contractor shall also be protected against claims for injury, disease, or death, or employees which for any reason, may not fall within the provisions of the Workers' Compensation Law. The insurance requirements shall not be less than the following:

1. Workers' Compensation – Statutory
2. Employers' Liability

a. $500,000 Per Accident
b. $500,000 Disease, Policy Limit
c. $500,000 Disease, Each Employee

B. Commercial General Liability. This insurance shall be written in comprehensive form and shall protect the Contracting Authority against all claims arising from injuries to any person or damage to property of others arising out of any negligence of the Contractor.

The Contractor shall provide and maintain insurance coverage to protect the Contracting Authority against any and all claims for damages for personal injury, including accidental death, as well as from claims under this contract, whether such operations be performed by the Contractor or any subcontractors, or by one directly or indirectly employed by the Contractor or any subcontractors.
The liability limits shall not be less than the following:
General Aggregate **$ 2,000,000**
Products-Completed Operations Aggregate **2,000,000**
Personal & Advertising Injury **2,000,000**
Each Occurrence **2,000,000**
Fire Damage (Any one Fire) **100,000**
Medical Expenses (Any One Person) **5,000**
$2,000,000 combined single limit liability coverage will meet the requirement
C. Automobile Liability. This insurance shall be written in comprehensive form and

shall protect the Contractor against all claims for the operation of motor vehicles, whether they are owned, non-owned, or hired, by or on behalf of the Contractor.
The liability limits shall not be less than the following:
$1,000,000 CSL (Combined Single Limit) per accident Page 3

D. Excess Liability Umbrella. The Contractor shall procure and maintain, during the life of this contract **$1,000,000 Excess Liability Coverage (Umbrella**). This coverage is over and above the underlying coverage of **$2,000,000** the General Liability and Automobile & Employers Liability.

E. Builders Risk Insurance. Coverage shall be equal to 100 per cent of the replacement cost of all proposed construction (when applicable).

F. Subcontractors. The contractor shall require that any of its agents and / or subcontractors, who perform work and/or services pursuant to the provisions of this contract, meet the same insurance requirements as are required of the prime contractor.

G. Performance Bond. A bond for the faithful and timely completion of the entire proposal must be provided with a limit of 100 percent of the contract sum **(when applicable).**

H. Liquor Liability. Comprehensive liquor liability coverage shall be purchased with limits not less than **$1,000,000**. **This coverage is mandatory when the contractor/vendor will be serving alcohol for consumption.**

MISCELLANEOUS.

A. Cost of Insurance. The Contracting Authority shall make no direct payments to the Contractor for any costs associated with securing, maintaining, and/or providing the insurance coverage required by the Contract Department. All costs of such coverage shall be included in the prices bid and no additional payments for such costs shall be made.

B. Personal Liability of Public Officials. In carrying out any of the provisions of the contract, or in exercising any power or authority granted to any agent or representative of the County Board thereby, there shall be no liability upon such agent or representative, including the engineer or authorized assistants, either personally or as an official of the County Board, it being understood that in such matters they act as the agent and representative of the County Board.

C. Non-Waiver of Legal Rights. The Contracting Authority shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment thereof, from showing the true amount and character of the work performed and the materials furnished by the Contractor, or from showing that such measurement, estimate, or certificate is untrue or incorrectly made or that the work or materials do not in fact conform to the contract.

The Contracting Authority shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor and Surety such damages as it may sustain by reason of failure to comply with the terms of the contract. Neither the acceptance by the Contracting Authority, nor any representative(s), nor payment for acceptance of the whole or any part of the work, nor any extent of time, nor any possession taken place by the Contracting Authority shall operate as a waiver of any portion of the contract, or any powers herein reserved, or any right to damages herein provided. A waiver of any breach of the contract shall not be held to be a waiver of any other subsequent breach.
D. Litigation for Claims and Save Harmless Clause. The Contractor shall indemnify and hold harmless the Contracting Authority, Board of Supervisors, Elected Officials, Employees, Agents, and Assigns from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person(s), or property because of any act, omission, or neglect in safeguarding or performing the work, or through use of unacceptable materials in constructing the work.

The Contractor shall also hold the Contracting Authority, Board of Supervisors, Elected Officials, Employees, and their Assigns harmless from all claims for damages arising from any neglect, default, or mismanagement or omission of the Contractor, any subcontractor(s), agent, or employee in the performance of any duties imposed by this contract, or by law. If any litigation on account of such claims shall be commenced against the Contracting Authority, Board of Supervisors, Elected Officials, Employees, Agents, or Assigns, the Contractor, upon notice thereof from the Contracting Authority, shall defend the same at their cost and expense; and the record of any judgement rendered against the Contracting Authority, Board of Supervisors, Elected Officials, Employees, Agents, or Assigns to recover the full amount thereof, with interest and costs, and attorney's fees incurred by said Contracting Authority. The right of action therefore shall accrue to the Contracting Authority as soon as judgement shall have been rendered, whether the Contracting Authority shall have paid the amount or not.
THE CONTRACTOR IS REQUIRED TO BE IN ACCORDANCE WITH ALL O.S.H.A. SAFETY
GUIDELINES AND REGULATIONS AT ALL TIMES DURING THE CONTACT PERIOD. Page 5

POLK COUNTY GOVERNMENT
CERTIFICATE OF INSURANCE
REQUIREMENTS.

Certificates of Insurance are required on every contract to show proof of adequate insurance. A Certificate shall be submitted with each set of contract documents to the Risk Manager for review. Contract documents will not be submitted to the Board of Supervisors for execution until the Certificate of Insurance is correct and has received staff approval. The Certificate(s) must specifically identify the project (No yearly or all – project certificates will be accepted), and show **POLK COUNTY GOVERNMENT, its Elected Officials, Employees, Agents, and Assigns,** as "Additional Insured."

The following statements are requirements and should aid in the preparation of an acceptable certificate. The statement numbers refer to the circled numbers on the sample certificate.

1. The name of the producer with complete address, zip code, and telephone number.

2. The Name of the Insured with complete address, zip code, and telephone number.

3. The issue date must be complete.

4. The insurance companies affording coverage must be named and approved by the Insurance Commission of the State of Iowa. The Company letters (**4a**) must be placed along the corresponding insurance coverages **(4b)**.

5. All Certificates shall state that XCU Coverage is included. (If applicable)

The limits listed below are minimum acceptable limits. The Insurance Agent should review the Contract Special Provisions for each project, and verify with **POLK COUNTY RISK MANAGEMENT** that the insurance requirements have not been changed, as limits may vary from project to project.

6. General Liability:
General Aggregate **$2,000,000**
Product Completed Operations Aggregate **$2,000,000**
Personal & Advertising Injury **$2,000,000**
Each Occurrence **$2,000,000**
Fire Damage (Any one fire) **$ 100,000**
Medical Expense (Any one person) **$ 5,000**
($2,000,000 per occurrence single limit will meet the requirement)
7. Automobile Liability: $1,000,000

Each Accident **Combined Single Limit**
8. Workers' Compensation:

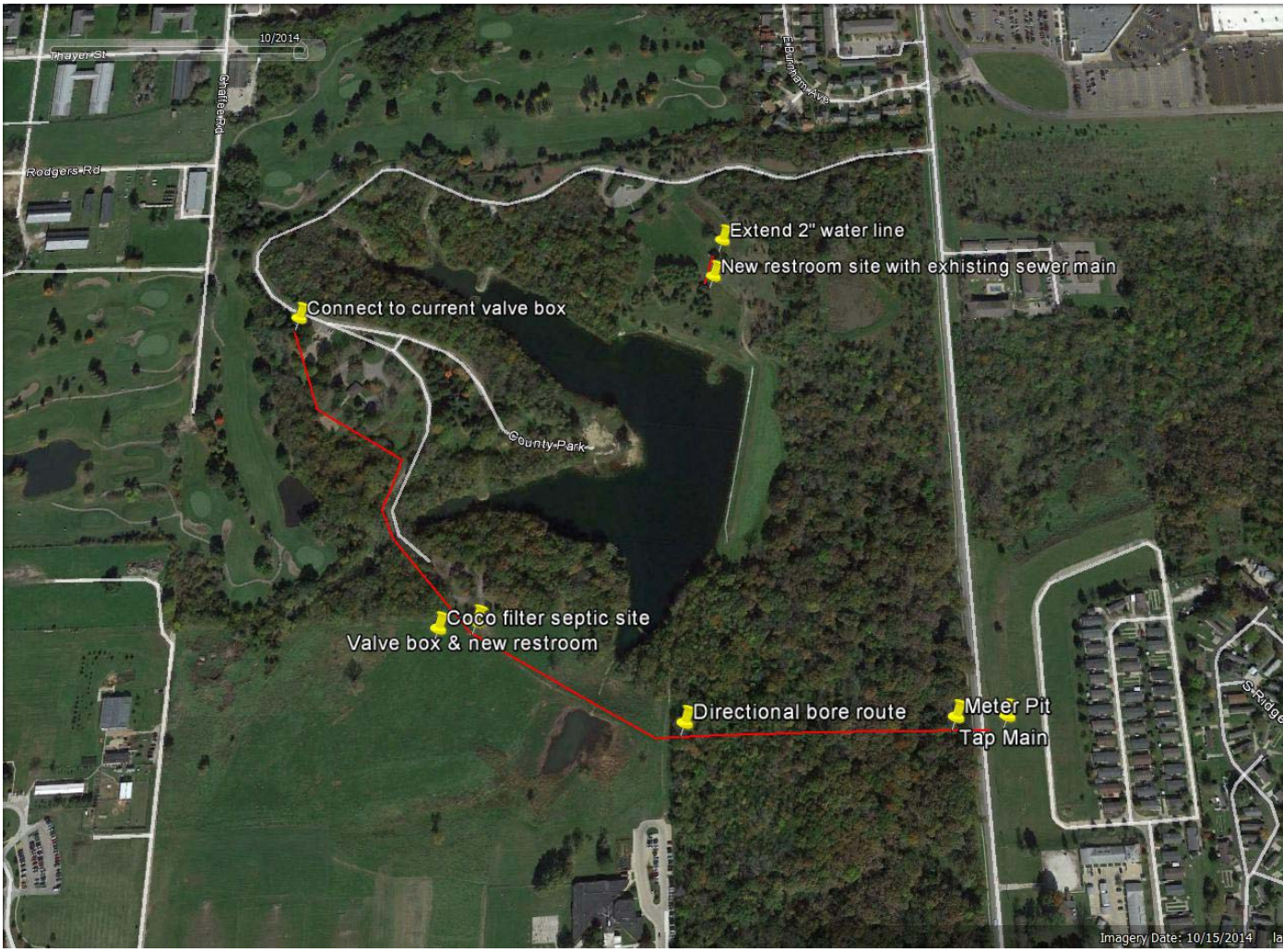
- Statutory Benefits
- Employers' Liability (Coverage B) **$ 500,000** Page 6

9. Excess Liability Umbrella $1,000,000
10. Builders Risk
a. Shall be equal to 100 per cent of replacement cost of construction.
(When Applicable)
11. Performance Bond
a. For the faithful and timely completion of the entire proposal with a limit of 100 percent of the contract sum
(When Applicable)
12. Liquor Liability $1,000,000
a. Mandatory for contractors/vendors who serve alcohol for consumption
13. Policy numbers for all policies must be included

14 Policy effective dates for all policies must be included
15. Policy expiration dates must be included.
16. Description of Operations: The Project Name and Work Order Number must be shown. All contracts require "**POLK COUNTY GOVERNMENT, its Elected Officials, Employees, Agents, and Assigns"** to be additionally insured.
17. POLK COUNTY GOVERNMENT must clearly and explicitly be shown the Certificate Holder.
18. The Cancellation Clause must read exactly as follows:
"Should any of the above described policies be canceled before the expiration date thereof, the issuing company will mail thirty (30) days written notice to the certificate holder named to the left."
19. All certificates of insurance must be signed by an authorized representative.

20. In order to preserve the governmental immunities available as defenses to

contractor (or Licensor) and its officials and employees, any insurance policy must contain an endorsement with the following language:
"The Company and the Insured expressly agree and state that the purchase of this policy of insurance by the Insured does not provide coverage for torts specified in Iowa Code 670.4, and that the Insured does not waive any of the defenses of governmental immunity available to the Insured under Iowa Code 670.4 as it now exists and as it may be amended from time to time. The Company and the Insured further expressly agree and state that the Insured may, at any time, assert any of the governmental immunity defenses available to it without affecting the coverage afforded under this policy


10/2014
Thayer St
Rodgers Rd
Crafton Rd
E Burnham Ave
Extend 2" water line
New restroom site with exhisting sewer main
Connect to current valve box
County Park
Coco filter septic site
Valve box & new restroom
Directional bore route
Meter Pit
Tap Main
Imagery Date: 10/15/2014

MUNICIPAL SUPPLY, INC.

1550 N.E. 51ST AVENUE DES MOINES, IA 50313
1-515-262-1300 1-800-747-2025
FAX: 1-515-262-6662

QUOTED TO: Wayne Johnson JOB:

ATTN: Polk County LOC:

ITEM #	QTY	DESCRIPTION	SALE PRICE	EXT
	2	C17-77 2" FIP x 2" POC		
		Compression		
	2	2 x 1 Bushed Body		
	1	18x66 Tandem Pit		
	2	18" CI covers for Pit		
	1	18" Ethe Pad.		
	1	LF5M326 1" Regulator		

THANK YOU

DARWIN BENGFORD

For Residential and Commercial Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

LEAD FREE*

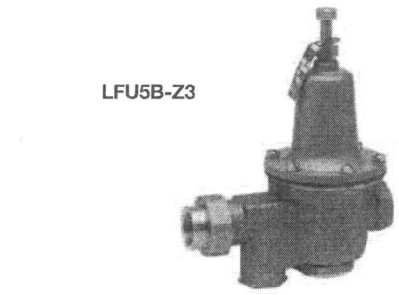
Series LFU5B

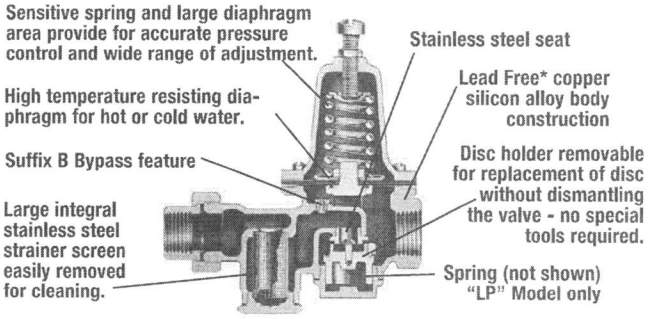
Water Pressure Reducing Valves**

Sizes: ½" – 2" (15 – 50mm)

Series LFU5B Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. The LFU5B features Lead Free* construction to comply with Lead Free* installation requirements. This series is suitable for water supply pressures up to 300psi (20.7 bar) and may be adjusted from 25 – 75psi (172 – 517 kPa). The standard setting is 50psi (345 kPa). All parts are quickly and easily serviceable without removing the valve from the line. The LFU5B's standard bypass feature permits the flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply.

LFU5B-Z3

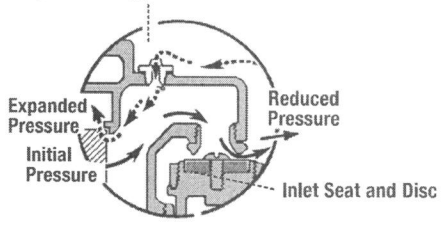




Features

- Standard construction includes Z3 sealed spring cage and stainless steel corrosion resistant adjusting cage screws for accessible outdoor or pit installations
- Integral stainless steel strainer
- Replaceable seat module
- Lead Free* cast copper silicon alloy body construction
- Serviceable in line
- Bypass feature controls thermal expansion pressure (LFU5B-Z3)***
- High temperature resistant reinforced diaphragm for hot water

Suffix B
Thermal Expansion Bypass Check Valve Feature



Models

LFU5B-Z3	NPT threaded female union inlet x NPT female outlet w/built in thermal expansion bypass
LFU5B-S-Z3	Solder union inlet x NPT female outlet w/built in thermal expansion bypass
LF5M3-Z6	Water meter threaded connections and 7½" (190mm) lay length for new or existing meter box installations. For ⅝" (16mm), ⅝" x ¾" (16 x 20mm) or ¾" (20mm) meter setters or resetters
LFU5B-QC-Z3	Quick-Connect Single-Union – Inlet end

Specifications

Standard Specifications: A Water Pressure Reducing Valve with integral strainer shall be installed in the water service pipe near its entrance to the building where supply main pressure exceeds 60psi (413 kPa) to reduce it to 50psi (345 kPa) or lower. The water pressure reducing valve shall be constructed using Lead Free* materials. Lead Free* regulators shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve shall feature a Lead Free* cast copper silicon alloy body suitable for water supply pressures up to 300psi (20.7 bar). Provision shall be made to permit the bypass flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply. Water Pressure Reducing Valve with built-in bypass check valves will be acceptable. Approved valve shall be listed to ASSE 1003 and IAPMO and certified to CSA B356. Valve shall be a Watts Series LFU5B-Z3.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

**A water saving test program concluded that reducing the supply pressure from 80-50psi (551-345 kPa) resulted in a water savings of 30%.

***The bypass feature will not prevent the pressure relief valve from opening on the hot water supply system with pressure above 150psi (10.3 bar).

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WATTS®

Materials

Body:	Lead Free* cast copper silicon alloy
Seat:	Replaceable stainless steel
Integral Strainer:	Stainless steel
Diaphragm:	Reinforced EPDM
Valve Disc:	EPDM
Yoke:	Lead Free* cast copper silicon alloy

LF5M3-Z6 model provided with cast iron spring cage

Pressure – Temperature

Temperature Range: 33°F – 160°F (0.5°C – 71°C)
Maximum Working Pressure: 300psi (20.7 bar)
Adjustable Reduced Pressure Range: 25 – 75psi (172 – 517 kPa)
Standard Reduced Pressure Setting: 50psi (345 kPa)

Options

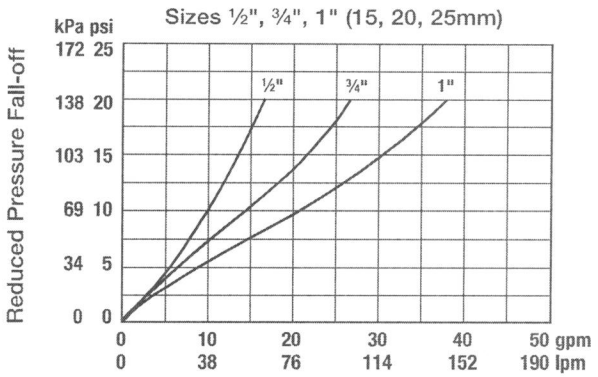
Add Suffix

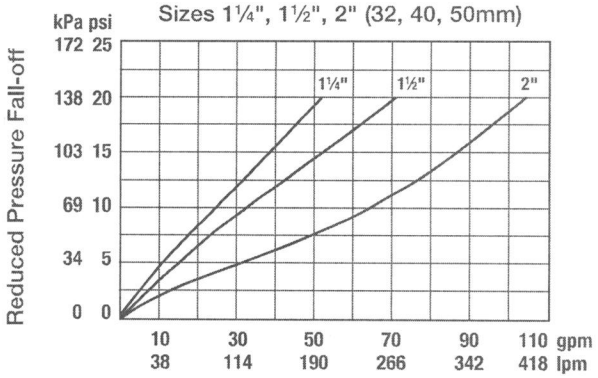
G	Gauge tapping
GG	Gauge tapping and 160psi (11.0 bar) gauge
HP	High pressure range 75 – 100psi (5.2 – 6.9 bar)
LP	Low pressure range 10 – 35psi (69 – 241 kPa)

Standards

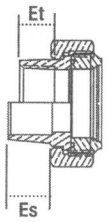
Meets requirements of ASSE Standard 1003; (ANSI A112.26.2); CSA Standard B356; Southern Standard Plumbing Code and listed by IAPMO.

Capacity

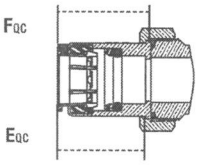


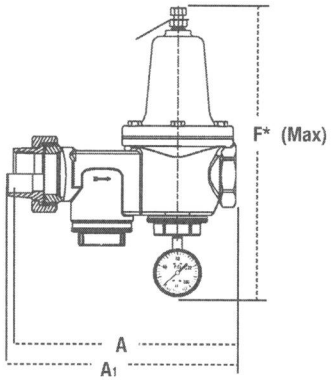


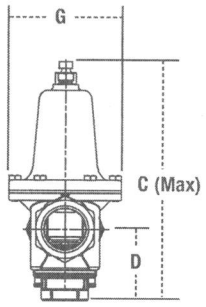
Dimensions - Weights



A - LFU5B-Z3
A1 - LFU5B-S-Z3
ET - NPT Engagement for tight joint
ES - Female sweat socket depth
EQC - Quick-Connect







MODEL	SIZE (DN)		DIMENSIONS																		WEIGHT	
			A		A1		C		D		G		Et		Es		EQC		FQC		F †			
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
LFU5B-Z3	½	15	5⅝	142.8	5½	139.7	5⅞	149.2	1⅝	41.2	3 1/16	77.7	7/16	11.1	½	12.7	1 7/16	36	1½	38	10¼	260.3	4	1.8
	¾	20	6 3/16	157.1	6¼	158.7	6⅞	174.6	1⅞	47.6	3½	88.9	½	12.7	¾	19	1 9/16	40	1 11/16	42	11½	292.1	5	2.3
	1	25	6⅝	168.2	6¾	171.4	7⅜	187.3	2	50.8	4	101.6	9/16	14.2	⅞	22.2	1 11/16	43	1¾	45	12⅛	307.9	6	2.7
	1¼	32	7 15/16	190.5	7 11/16	195.2	8⅜	212.7	2¼	57.1	4½	113.3	⅝	15.8	1	25.4	———		———		13⅜	339.7	9.4	4.3
	1½	40	9 7/16	239.7	9¾	247.6	9⅜	238.1	2⅞	73	4¾	120.6	⅝	15.8	1⅛	28.5	———		———		15	381.0	14.4	6.5
	2	50	10⅞	276.2	11½	292.1	12¼	311.1	3¼	82.5	6	152.4	⅝	15.8	1⅜	34.9	———		———		18¼	463.5	23	10.4

† Dimension includes optional gauge

WATTS®

A Watts Water Technologies Company

ISO 9001-2008 CERTIFIED

USA: Tel: (978) 688-1811 • Fax: (978) 794-1848 • www.watts.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • www.watts.ca

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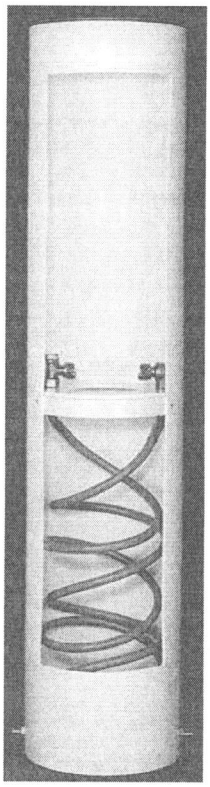
MUELLER® THERMAL-COIL® METER BOX



The MUELLER THERMAL-COIL Meter Box provides a means to allow a meter to be read and maintained even though it is set deep in the ground to resist freezing. The THERMAL-COIL Meter Box is designed with the meter installed on a platform that normally sets near the bottom of the box where the ground temperature keeps it warmer. The meter and platform are connected to the service line by coils of polybutylene tubing which allow the meter and platform to be raised to the surface.

The body of the meter box is made from rigid PVC which has a high insulating "R" value to resist frost bridging" inside the box. For extremely cold climates, an optional insulating pad is available which traps the relatively warm air rising from the earth inside the box.

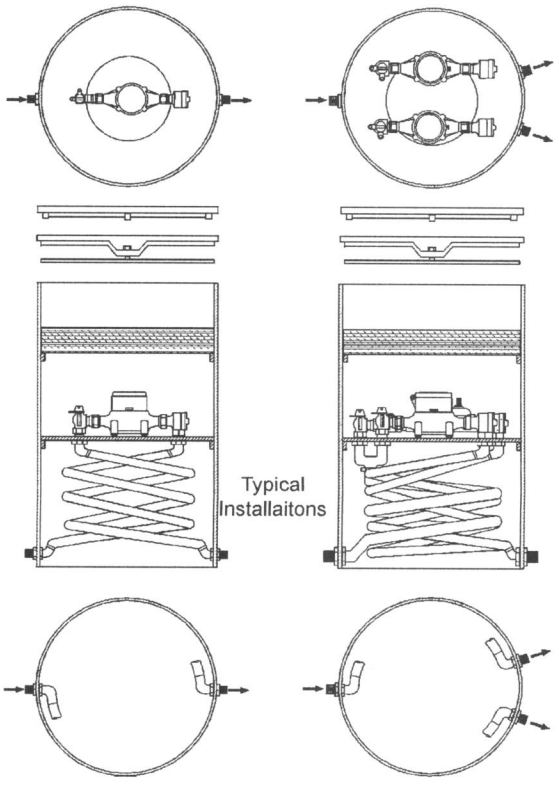
MUELLER THERMAL-COIL Meter Boxes are shipped fully assembled, ready for meter installation. Their light weight saves shipping costs and makes installation a one man job in most cases. Every box is factory tested and has a 150 psig maximum working pressure rating.

MUELLER THERMAL-COIL Meter Boxes are available for 5/8" to 1" meters. A wide variety of end connections, control valves, box depths, lids and other options provide you with the meter set you need. Due to the almost endless combination of features available, each box is custom built to your specifications. See page 8F.2 for options and ordering instructions.

Manufactured under one or more of the following: U.S. Patent No. 4,614,113; 4,813,281

MUELLER THERMAL-COIL Meter Box Features

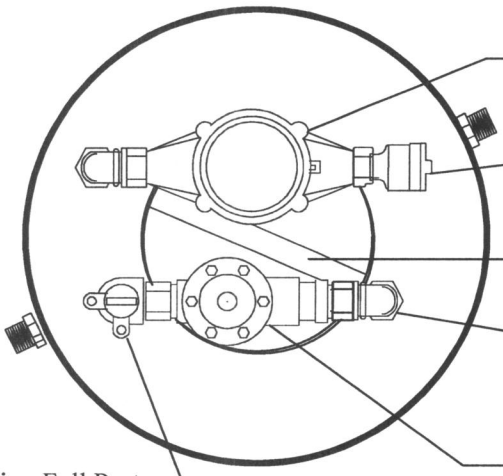
- Rigid .300 minimum wall PVC material holds shape and resists frost bridging
- Optional insulation pad traps earth's heat to prevent freezing in extremely cold climates
- White interior aids visibility
- Meter set is anchored to moveable platform to maintain alignment and stability
- Platform support and reinforcing ring add rigidity to box
- Poly coil tubing provides low friction loss equivalent to a typical conventional meter set of the same size and depth
- Male I.P. thread inlet and outlet connections accept a variety of MUELLER Service Fittings--see section 6
- Optional aluminum bottom available
- Large selection of optional lids

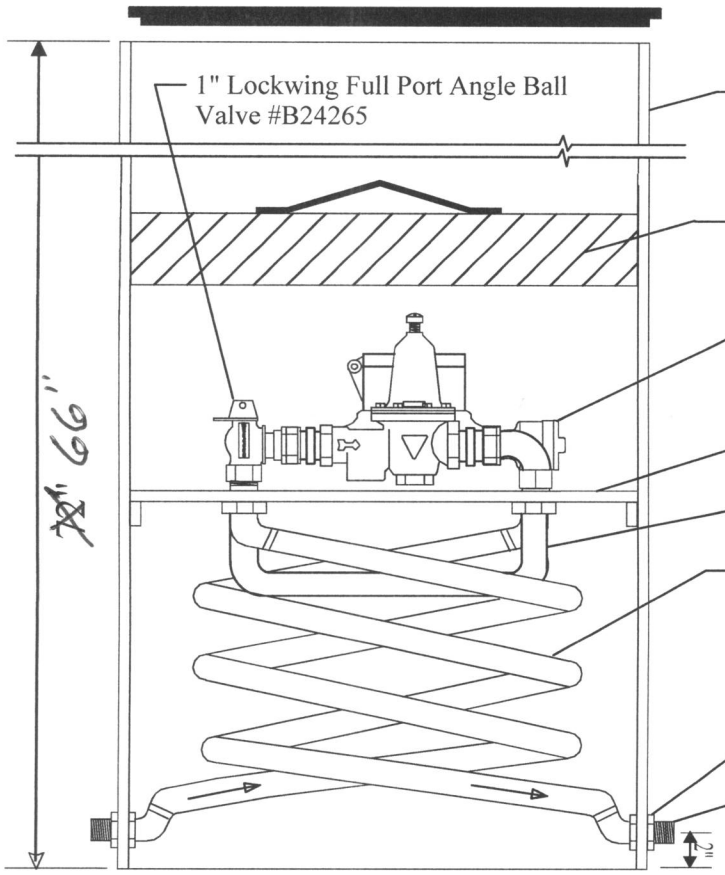


MUELLER Valves and Couplings used in these meter box assemblies are manufactured and tested in accordance with ANSI/AWWA C800. Components in contact with potable water will also comply with latest requirements of the Federal Safe Drinking Water Act.

MUELLER

18-Inch Diameter Coil Tandem Meter Pit for 1-Inch Meter





NOTE:
Meter and Regulator not Included.

330CT1872FSBS000044N.dwg

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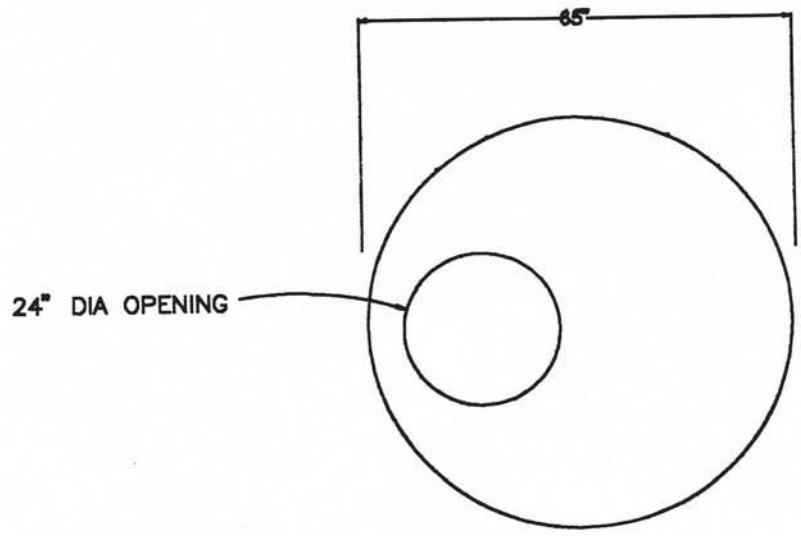
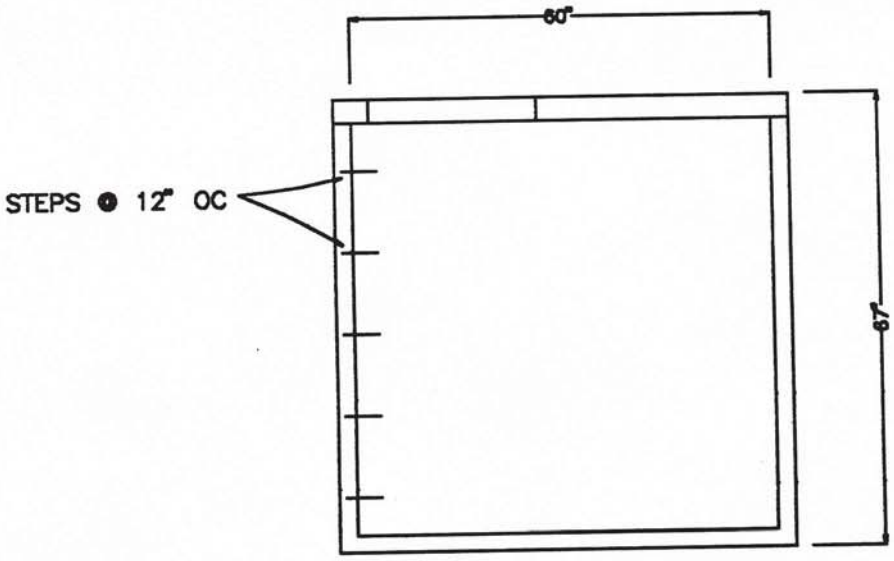
66



COVER PLAN



INTERIOR SECTION

REINFORCED WITH 6X6–10/10 WIRE MESH

METER PIT – 60" DIA

LISTER Industries

ONSITE WASTEWATER SITE EVALUATION FOR SEPTIC SYSTEM Pages with report 7 REPORT # 3553

OWNER NAME: Polk County Conservation PROPERTY ADDRESS: 7200 SE 5 ST, Des Moines

OWNER ADDRESS: _____ LEGAL DESCRIPTION: Fort Des Moines Park

PHONE # _____ LOT SIZE _____ acres

NO. BEDROOMS: NA AVERAGE DAILY FLOW 50 PEAK DAY DESIGN FLOW 200 gallons STRUCTURE X NEW ___ EXISTING

BUILDER: _____ PLUMBER: _____

THE TREATMENT SITE SHALL BE PROCTECTED FROM ANY AND ALL TRAFFIC, AND ANY SOIL DISTURBANCES. DISTURBING THE TREATMENT SITE SHALL VOID THIS RECOMMENDATION.

THE USE OF THIS DESIGN TO OBTAIN THE ONSITE WASTEWATER COUNTY CONSTRUCTION PERMIT AND THE CONSTRUCTION OF THE ONSITE SYSTEM IS AN ACCEPTANCE OF THE CONDITIONS ON PAGE 2 OF THIS REPORT.

The owner and contractor are responsible for verifying that the system layout is within the property boundaries. James Carroll has not verified the property and easement boundaries.

See attached drawings and notes.

AN EFFLUENT FILTER IS REQUIRED FOR ALL SYSTEMS.

LICENSED PROFESSIONAL ENGINEER JAMES A. CARROLL 11328 IOWA

SOIL LOADING RATE 0 gpsf.	BASED ON SURFACE AREA OF TRENCH BOTTOM.
WATER TABLE/CONFINING AT 0 FEET	2-FOOT WIDE TRENCH 0 FEET
MAXIMUM DEPTH OF TRENCH 0 INCHES	3-FOOT WIDE TRENCH 0 FEET
	16-INCH WIDE CHAMBER 0 FEET

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

DATE: 8/21/15 REG. NO. 11328. MY LICENSE RENEWAL DATE IS DECEMBER 31 2015.

JAMES A. CARROLL, P.E. PAGES WITH THIS REPORT 7.

The analyses and recommendations in this report are based in part upon the data obtained from the soil tests performed at the indicated locations, the SCS County Soil Survey book, onsite inspection, and the soil textural class was determined by the "Feel Method" This report does not reflect any variations, which may occur between borings or across the site. The nature and extent of such variations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.

In the event that any changes in the design, nature, or location of the project as outlined in this report occur, the data and recommendations contained in this report shall not be considered valid unless the changes are reviewed and verified in writing by James A. Carroll, P.E..

On Site Wastewater Design, Septic System Design, Soil Analysis

James A. Carroll, P.E.
1549 NW92 St. Clive, Iowa 50325
cell 250-2103

Fort Des Moines Park, Bathroom project.

A new shelter house will be constructed with a bathroom. The bathroom will be open May October The estimated number of people using this bathroom is groups up to 100, or school groups up to 50 people. Every day use will be park visitors and this is estimated to be only a few people per day. Using 100 visitors and assuming everyone will use the bathroom once at 1.5 gallons each for a design flow of 150 gallons. Then add in a few other park visitors of 50 gallons for a total max day use of 200 gallons.

The soils in this are not suitable for conventional laterals or mounds. I recommend a coco/peat filter system followed by 150 feet of lateral.

I recommend a coco/peat system before a sand filter because the park cannot control what people flush down the toilets. Chemicals will harm and plug a filter system. A sand filter is buried with no access the clean the sand if it becomes plugged. A coco/peat system has a lid on the surface for access to the filter media for inspection, cleaning, and replacement.

A coco/peat filter is a pre-manufactured unit and the smallest size is 600 gallons.

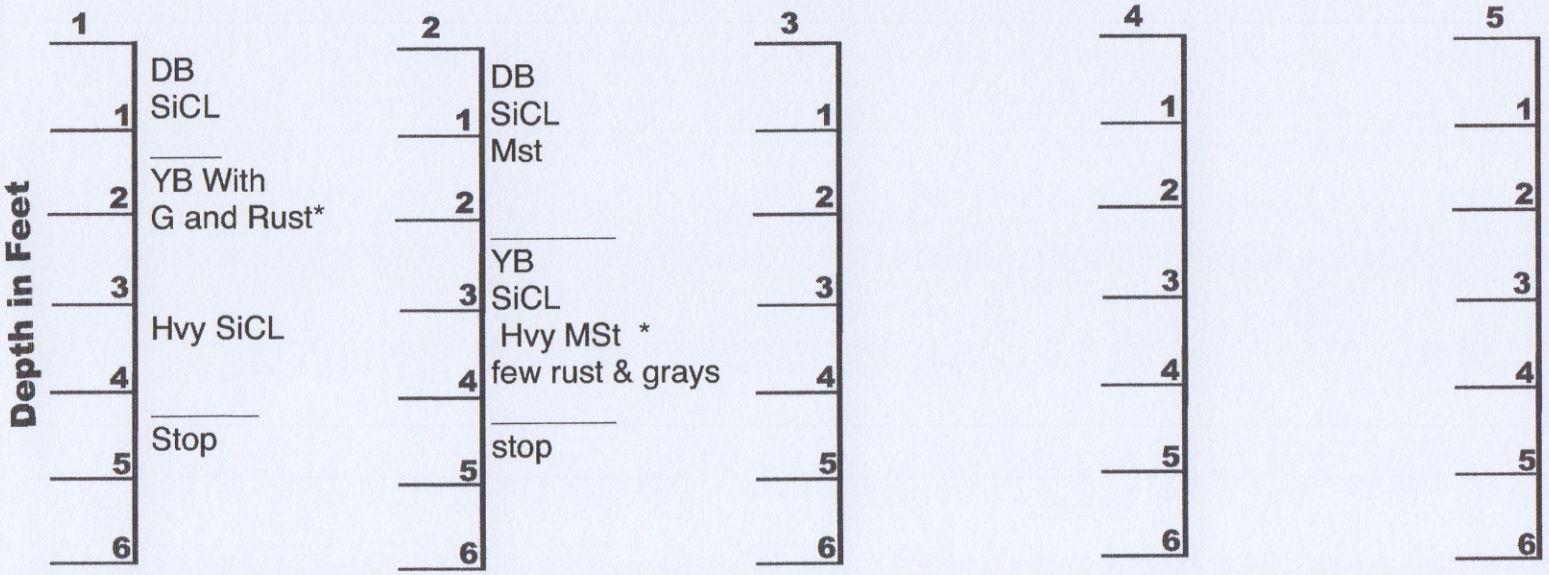
I recommend a 1,500 gallon concrete septic tank.

The effluent from a coco/peat filter can be discharged on the surface. The park staff feels that surface discharging is not the best practice in this setting. Therefore I recommend installing 150 feet of lateral pipe to disperse the treated effluent in the trees. There may be wet spots along the lateral line however this id a dispersal system not a lateral system.

Report # 3553

Soil Probe Number

Confining Layer Location (*)



Textures S-Sand, SL-Sandy Loam, L-Loam, SiL-Silty Loam, Si-Silt, SCL-Sandy Clay Loam, SC-Sandy Clay, CL-Clay Loam, SiCL- Silty Clay Loam, SiC- Silty Clay, C-Clay, FS-Fine Sand.

Color DYB-Dark Yellow Brown, YB-Yellow Brown, Y-Yellow,B-Brown, VDB-Very Dark Brown, GB-Gray Brown, G-Gray, LG-Light Gray, DG-Dark Gray, PB-Pale Brown, BY-Brownish Yellow, BK-Black,Wh-White, RB-Reddish Brown, R-Red.

Other MSt-Moderate Structure, WSt-Weak Structure, MaSt-Massive Structure, Ls-Loose, HVY-Heavy, Lt-Light.

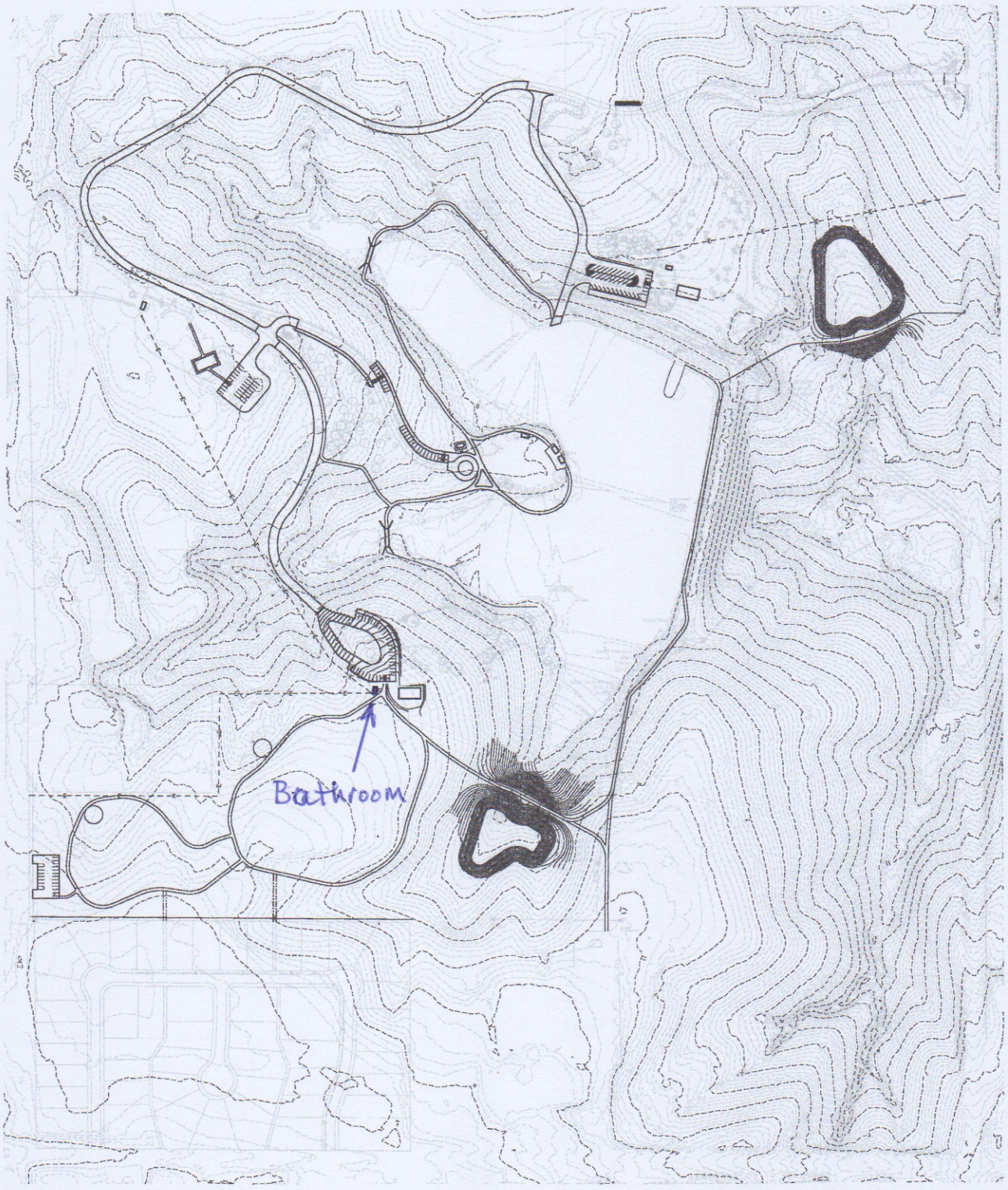
The use of this design to obtain the onsite wastewater county construction permit and the construction of the system is an acceptance of the following conditions:

The septic system Engineer, James Carroll, has evaluated the site and located what appears to be a suitable location for an onsite septic system. However easements, floodplains, wetlands, wells, property lines, underground utilities were not marked, located or identified to the Engineer. The drawling may contain any or all of these items however they are not accurately shown. It is the responsibility of the Property Owner, Home Builder, and Septic Contractor to locate any and all of these items. The contractor is solely responsible for locating all underground utilities shown or not shown, and for the safety and protection of all such underground utilities and repairing any damage. In the event that any item is located in the proposed septic area the Engineer will be called to re-evaluate the site.

The Engineer will no be inspecting or overseeing any of the work performed by the Contractor. All work performed by the Contractor shall comply with IAC 567 Chapter 69 and County Ordi nances unless specifically show/detailed in this report and design.

Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of contractor to comply with State and County Laws and Regulations applicable to the performance of the work. Engineer will not be responsible for Contractor's failure to perform the work in accordance with State and County requirements and the attached design, Engineer will not be responsible for the acts or omis sions of Contractor, any Subcontractor, any Supplier, or of any other individual or entities performing any of the work, or the failure of any State or County Regulator in accepting the work Completed.

The Property Owner, Home Builder, and Septic Contractor agree that by using this report/design for the onsite system they shall indemnify and hold harmless the Engineer from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgment of every nature, and description brought or recovered against them by reasons of any act or omission of the said Property Owner, Home Builder, and Septic Contractor, its agents, or employees, in the execution of the work.


Bathroom

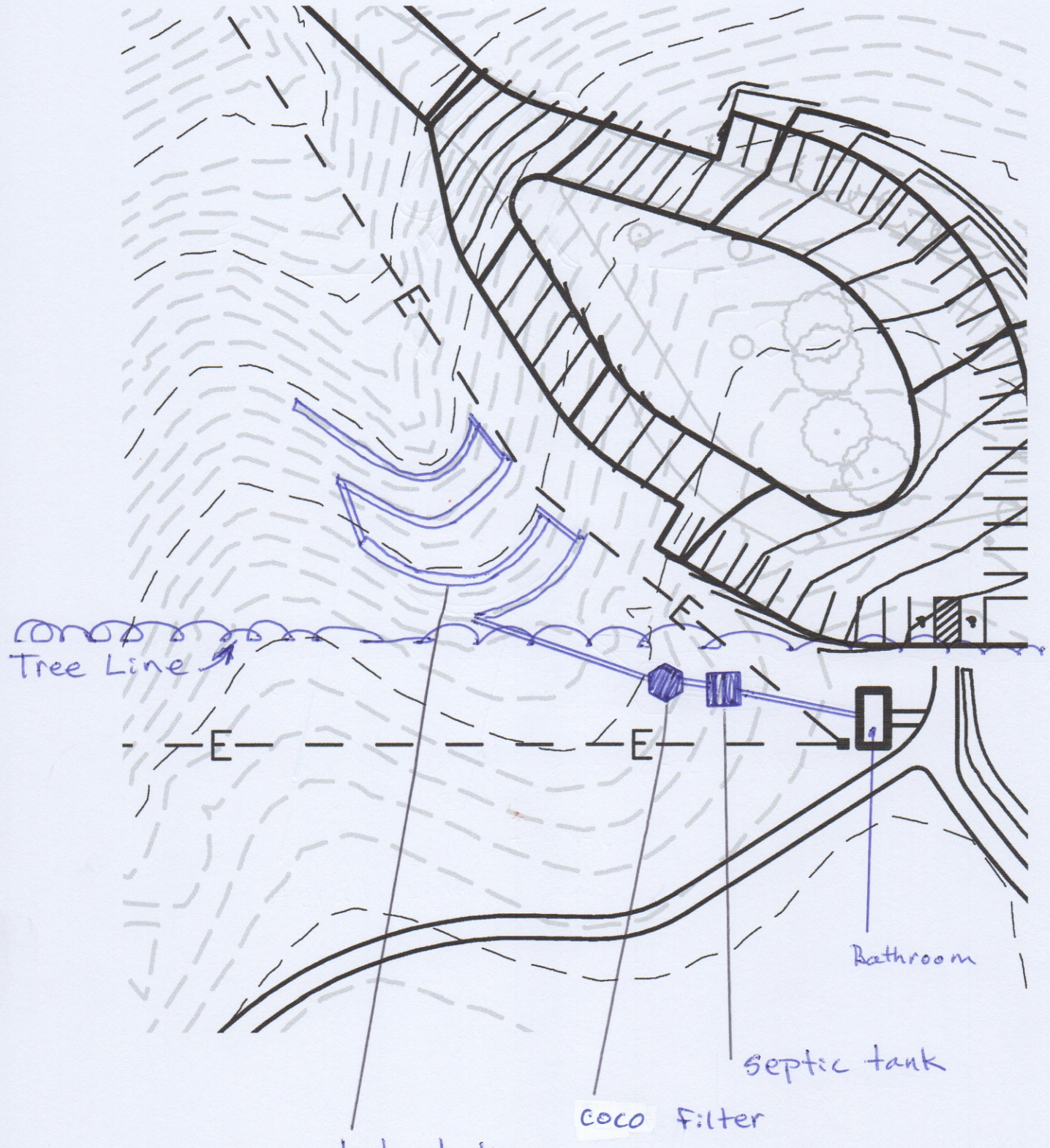
N

Bathroom

Septic Tank

coco Filter

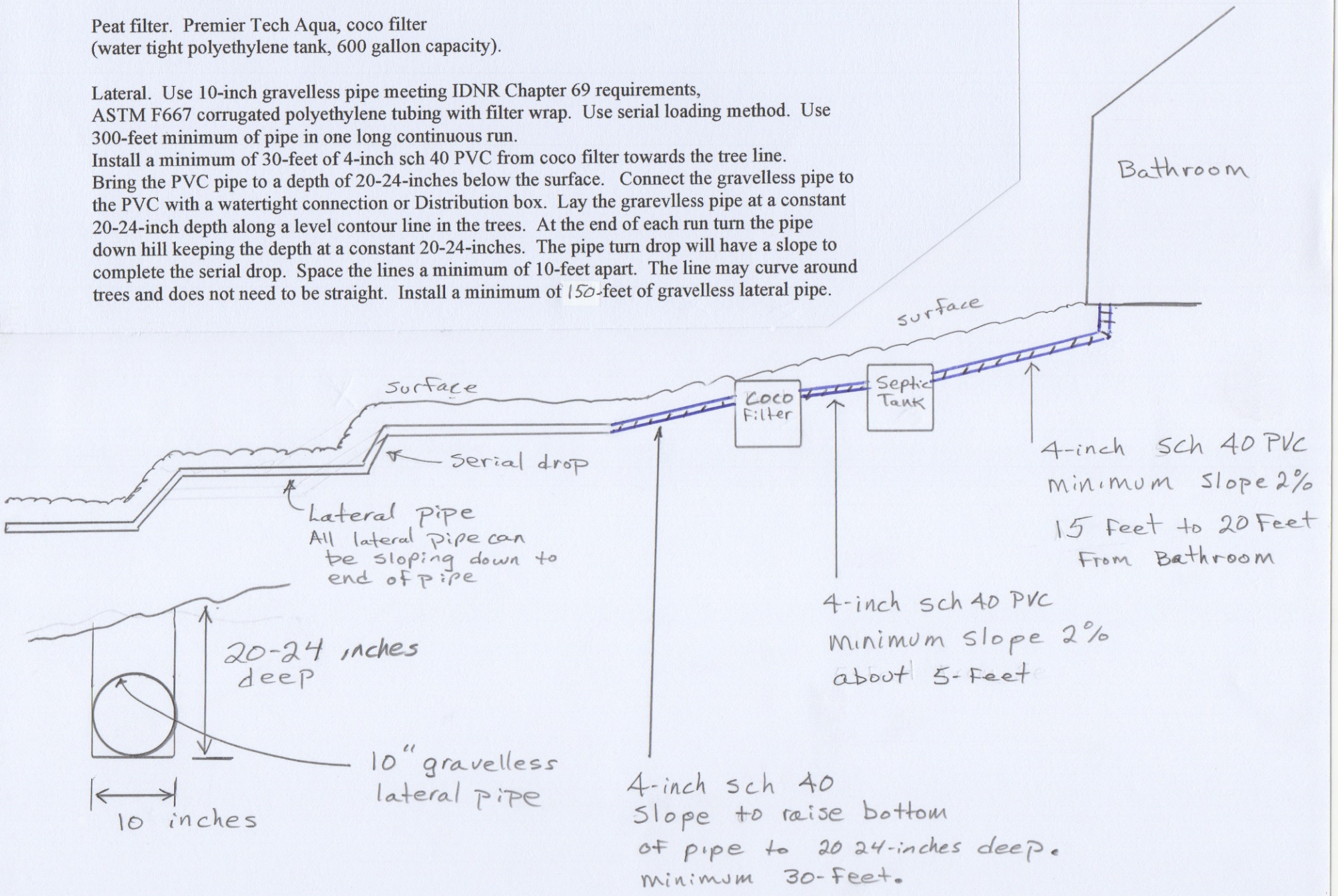
lateral Line
Actual loction can
vary to Fit site

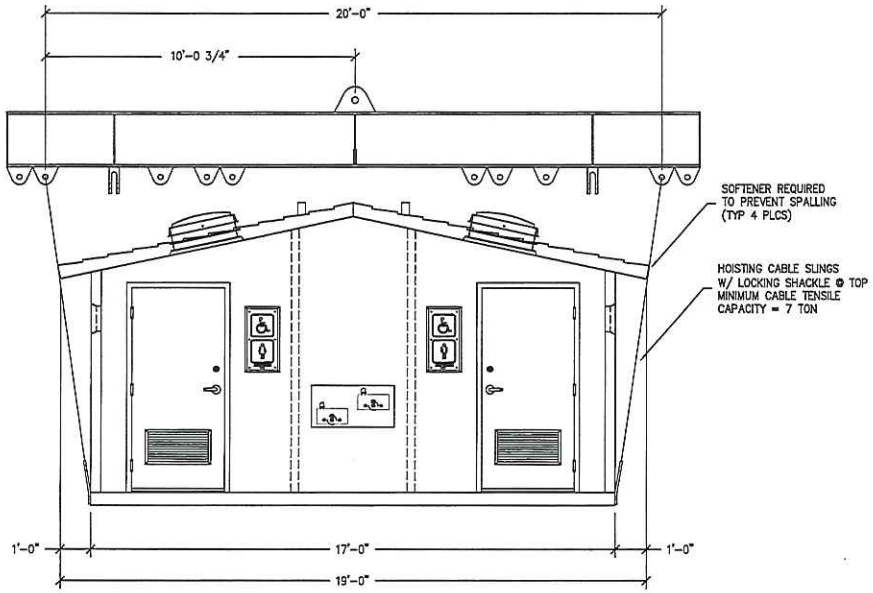

E
E
E
Tree Line
Bathroom
septic tank
coco Filter
Lateral lines
Actual location can vary to Fit site

Septic tank. 1,500 gallon concrete tank meeting
IDNR Chapter 69 requirements, with 2 risers to the surface.
One over the inlet and one over the outlet.
Install an effluent screen on outlet.

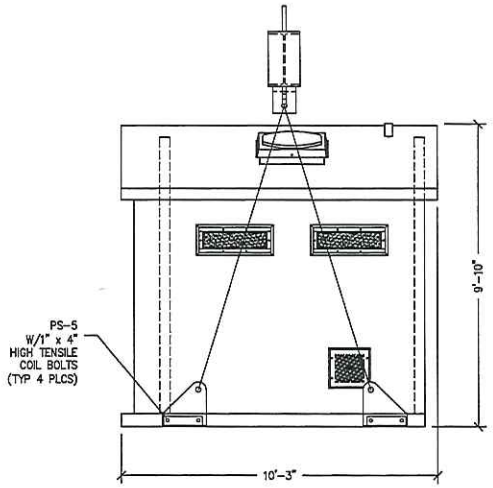
Peat filter. Premier Tech Aqua, coco filter
(water tight polyethylene tank, 600 gallon capacity).

Lateral. Use 10-inch gravelless pipe meeting IDNR Chapter 69 requirements,
ASTM F667 corrugated polyethylene tubing with filter wrap. Use serial loading method. Use 300-feet minimum of pipe in one long continuous run.
Install a minimum of 30-feet of 4-inch sch 40 PVC from coco filter towards the tree line.
Bring the PVC pipe to a depth of 20-24-inches below the surface. Connect the gravelless pipe to the PVC with a watertight connection or Distribution box. Lay the grarevlless pipe at a constant 20-24-inch depth along a level contour line in the trees. At the end of each run turn the pipe down hill keeping the depth at a constant 20-24-inches. The pipe turn drop will have a slope to complete the serial drop. Space the lines a minimum of 10-feet apart. The line may curve around trees and does not need to be straight. Install a minimum of 150-feet of gravelless lateral pipe.





FRONT ELEVATION



RIGHT SIDE ELEVATION

SHIPPING WEIGHTS AND DIMENSIONS CR-1014			
WEIGHT	LENGTH	WIDTH	HEIGHT
44,300	17'-0"	10'-3"	9'-10"

LICENSED PROFESSIONAL ENGINEER
CARL A. DEMETER
12085
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.

(Signature) (Date) 7-16-14

Carl A. Demeter

My license renewal date is December 31, 2014

Pages or sheets covered by this seal:

Progressive Engineering Inc.
56540 State Road 15 Goshen, IN 46528 Ph: (574) 533-0337
THIRD-PARTY REVIEW
07/17/2014

STRUCTURAL DESIGN & MANAGEMENT, INC.
11310 W. Coal Mine Drive
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Fax: (775) 655-5831
Carl A. Demeter SE., PE. cademeter@comcast.net
3808 N. Sullivan Bldg. #7 Spokane, WA 99216
CXT
Precast Products
901 N. Highway 77 Hillsboro, TX 76645

PROJECT TITLE
CORTEZ
BUILDING NUMBER CR-1014

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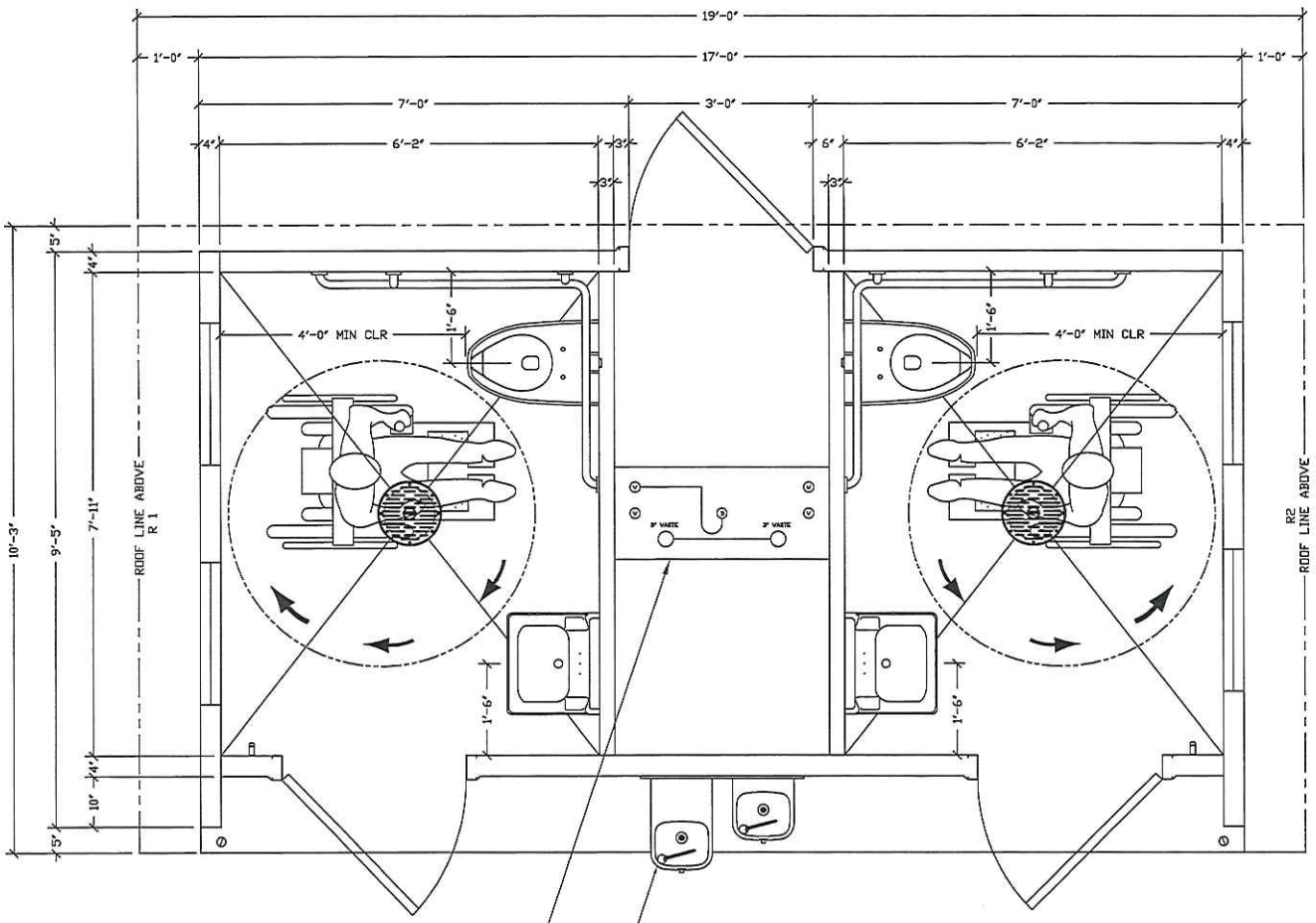
REV.	DESCRIPTION	APPROVAL	DATE
SCALE	1/4"=1'-0"	DATE	7-15-14
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	KW	PLOT	48

RIGGING DETAIL

DWG NO. CR-02 | SHEET 2 / 20 | REV.



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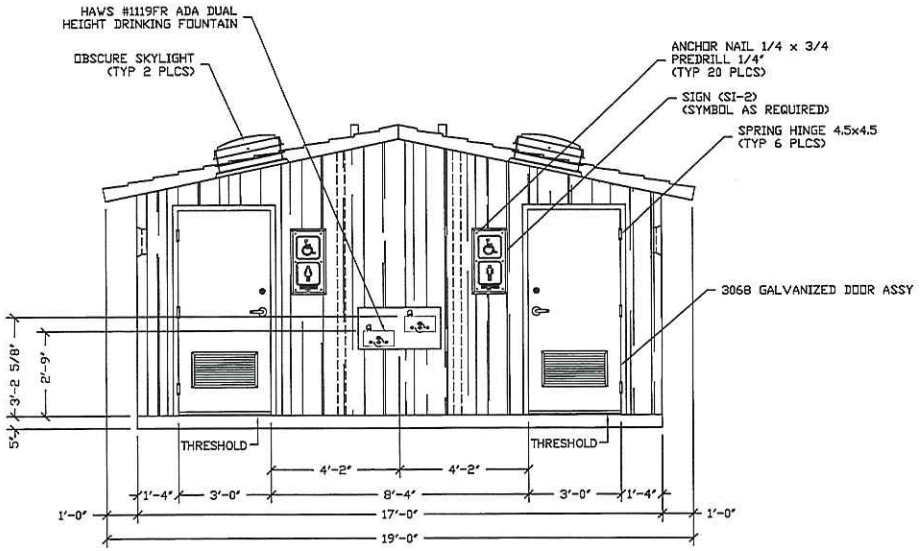
NO.	DESCRIPTION	APPROVAL	DATE

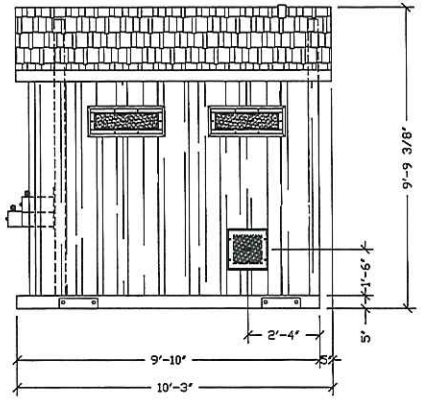
SCALE	1/2"=1'-0"	DATE	7-8-14
DRAWN	MATT GRANCO	FILE NO.	CR-1014
CHECKED	KW	PLOT	24

FLOOR PLAN

DWG NO.	SHEET	REV.
CR-03	3 / 20	



FRONT ELEVATION



RIGHT SIDE ELEVATION

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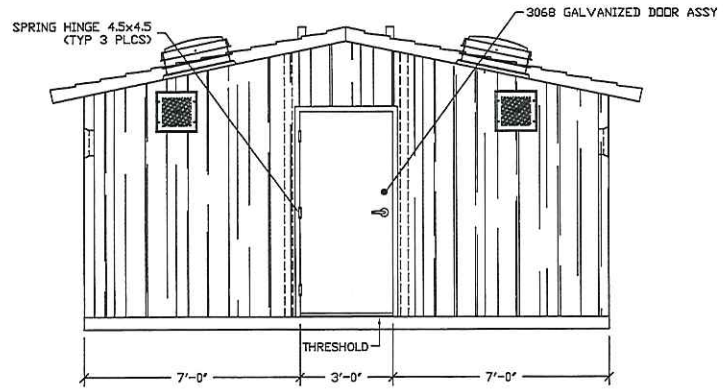
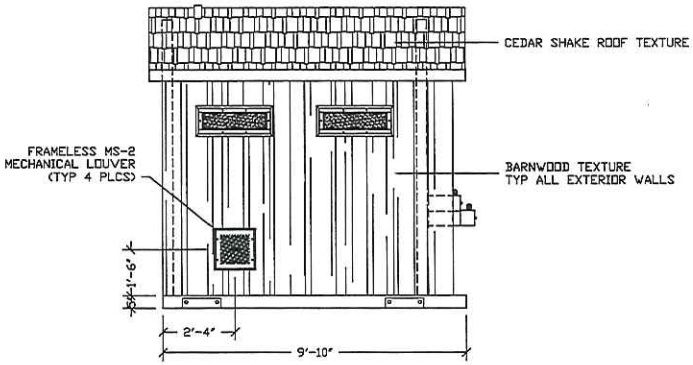
PROFESSIONAL ENGINEER CARL A. DEMETER 12085 LICENSED IOWA



REAR ELEVATION



LEFT SIDE ELEVATION

Progressive Engineering Inc.
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07/17/2014

EMBEDDED MATERIALS	
ITEM	QTY
3068 DOOR ASSEMBLY	3
SPRING HINGE 4.5x4.5	9
SI-2	2
ANCHOR NAIL 1/4x3/4	20
OBSCURE SKYLIGHT	2
HAWS #1119FR DRINKING FOUNTAIN	1

CU. FT. CONC.	SQ. FT. W.W.F.

APPROXIMATE WEIGHT

STRUCTURAL DESIGN & MANAGEMENT, INC.
11356 W. Coal Mine Drive
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Carl A. Demeter SE., PE.
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PROJECT TITLE
CORTEZ
BUILDING NUMBER CR-1014

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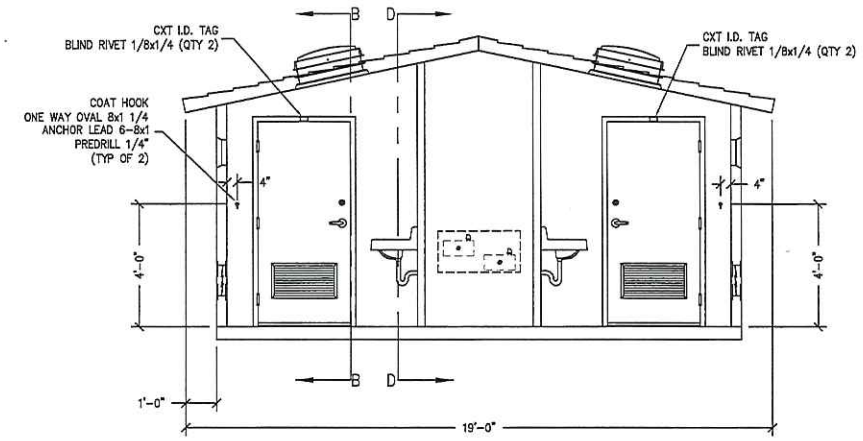
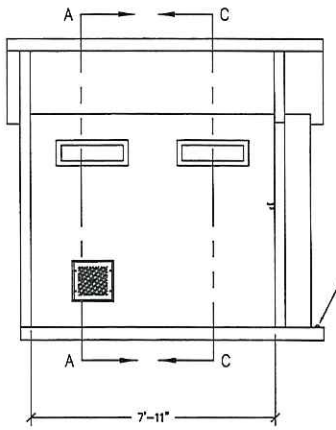
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	KDW	PLOT	48

BUILDING ELEVATIONS

DWG NO.	SHEET	REV.
CR-04	4 / 20	



SECTION A – A



SECTION B – B

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(Signature) (Date) 7-16-14

Carl A. Demeter

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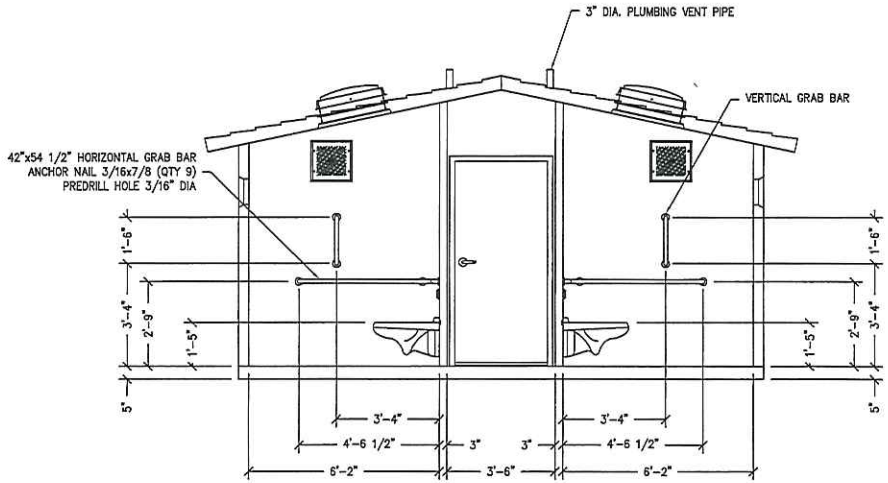
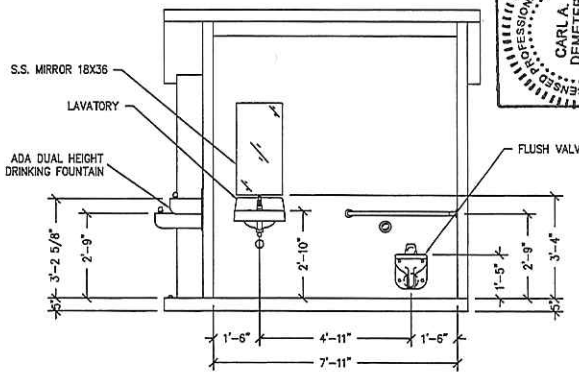
PROFESSIONAL ENGINEER
CARL A. DEMETER
12085
LICENSED
IOWA



SECTION C – C



SECTION D – D

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THIRD-PARTY REVIEW
07/17/2014

EMBEDDED MATERIALS	
ITEM	QTY
BLIND RIVET 1/8x1/4	4
GRAB BAR	2
COAT HOOK	2
DOOR STOP	2
ONE WAY OVAL 8x1 1/4	4
ANCHOR LEAD 6-8x1	4
CXT I.D. TAG	2
ANCHOR NAIL 1/4x3/4	8
ANCHOR NAIL 3/16x7/8	30

CU. FT. CONC.	SQ. FT. W.W.F.

APPROXIMATE WEIGHT

STRUCTURAL DESIGN & MANAGEMENT, INC.
11355 W. Coal Mine Drive
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CXT Precast Products
901 N. Highway 77 Hillsboro, TX 76645

PROJECT TITLE
CORTEZ
BUILDING NUMBER CR-1014

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SCALE	1/4"=1'-0"	DATE	7-8-14
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	KW	PLOT	48

INTERIOR ELEVATIONS

DWG NO.	SHEET	REV.
CR-05	5 / 20	

NOTE:

THIS FACTORY ASSEMBLED BUILDING AS CONSTRUCTED PROVIDES A RIGID BOX TYPE STRUCTURAL SYSTEM. VERTICAL LOADS ARE TRANSFERRED PRIMARILY THROUGH BEARING WALLS TO A PREPARED GRANULAR SUB-BASE WHICH DISSIPATES VERTICAL LOADS UNIFORMLY TO THE NATIVE SUBGRADE AND ALSO ACTS AS A FROST BARRIER. DUE TO THE INHERENT STIFFNESS OF THE BUILDING, IT WILL REMAIN SAFE AND STRUCTURALLY SOUND IN THE UNLIKELY EVENT OF FREEZING ACTION BELOW THE BUILDING.

LATERAL LOADS ARE TRANSFERRED TO THE GROUND THROUGH FRICTIONAL RESISTANCE WITHOUT SLIDING OR SHIFTING BETWEEN THE BUILDING FLOOR SLAB AND THE PREPARED SOIL AND GRAVEL SUB-BASE ON WHICH THE BUILDING RESTS. SEISMIC ANALYSES ARE BASED ON LOADS DETERMINED IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE USING PARAMETERS, WHICH MEET OR EXCEED THE CODE PRESCRIBED REQUIREMENTS FOR THIS INSTALLATION.

THIS BUILDING, AS DESIGNED, RESTING ON A PROPERLY PREPARED GRANULAR SUB-BASE WILL BE SAFE AND STRUCTURALLY SOUND FOR VERTICAL AND LATERAL LOADS AS DISCUSSED ABOVE. A FULL DEPTH FOUNDATION WALL AT THE BUILDING PERIMETER, TYPICAL FOR OTHER TYPES OF BUILDING CONSTRUCTION, IS NOT REQUIRED FOR THIS BUILDING.

LICENSED PROFESSIONAL ENGINEER
CARL A. DEMETER
12085
IOWA

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Carl A. Demeter

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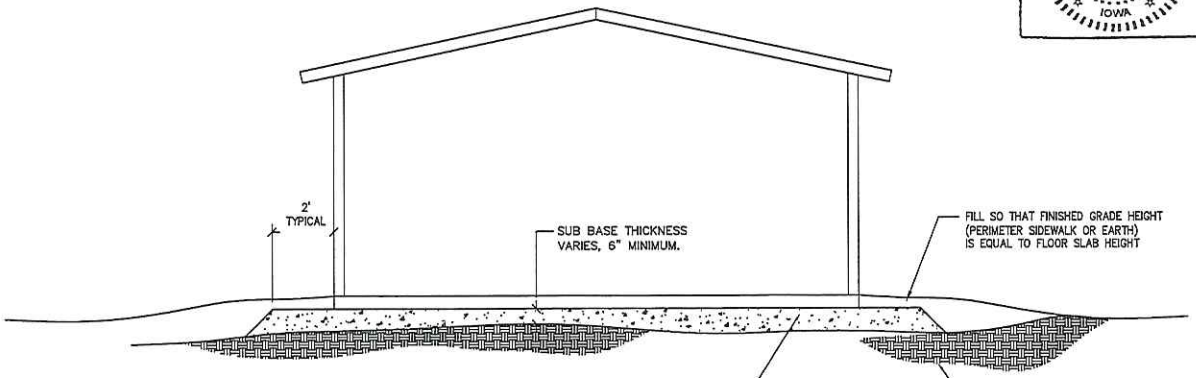

PRIOR TO PLACEMENT OF BUILDING A PROPERLY PREPARED SUB-BASE SHALL BE PROVIDED. SUB-BASE SHALL BE A MINIMUM OF 6" THICK AND CONSIST OF ¾" MINUS CRUSHED ROCK (ROAD BASE MATERIAL) COMPACTED TO 95% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557. FINISHED SURFACE OF SUB-BASE SHALL BE FLAT AND LEVEL, WITH A MAXIMUM DEVIATION OF -½", +0" FROM A TRUE HORIZONTAL PLANE. REFER TO BUILDING HANDLING SHEET FOR SUB-BASE REQUIREMENTS DURING BUILDING PLACEMENT. (PREPARED SUB-BASE NOT BY CXT).

Progressive Engineering Inc.
58549 State Road 13 Goshen, IN 46528 PH: (574) 533-0327
THIRD-PARTY REVIEW
07/17/2014

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PROJECT TITLE
CORTEZ
BUILDING NUMBER CR-1014

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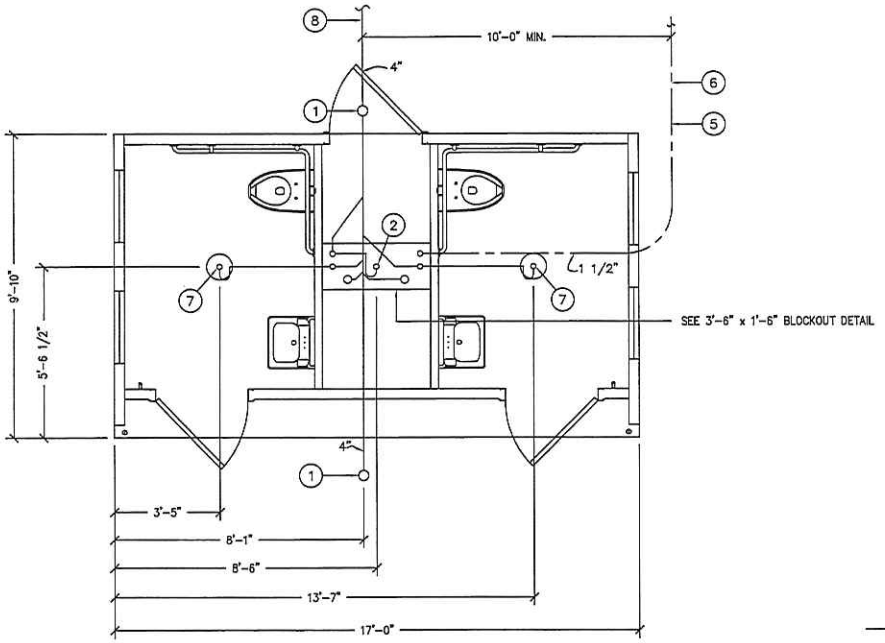
CHECKED	RDW	PLOT	48

FOUNDATION DETAIL

DWG NO.	SHEET	REV.
CR-16	16/20	



FLOOR DRAIN BLOCKOUTS & BELOW FLOOR PIPING

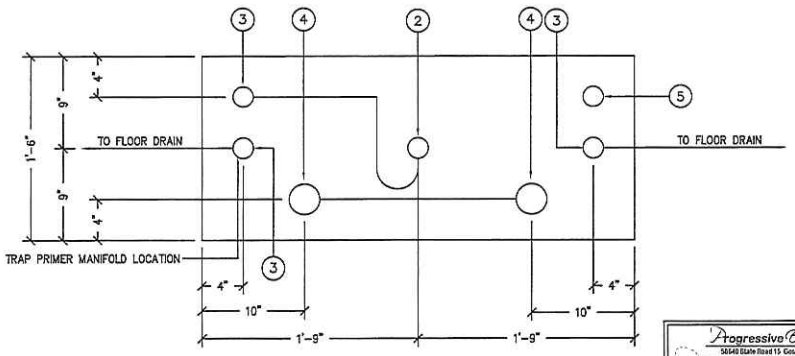
ALL PIPING INDICATED ON THIS SHEET IS NOT BY CXT

BELOW FLOOR PIPING – KEY NOTES

1. 4" CLEAN OUT TO GRADE.
2. 2" FLOOR DRAIN. FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION. (3'–6" x 1'–6" BLOCKOUT)
3. 2" VENT PIPES EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (3'–6" x 1'–6" BLOCKOUT)
4. 3" WASTE PIPE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (3'–6" x 1'–6" BLOCKOUT)
5. 1 1/2" TYPE K ANNEALED "SOFT" COPPER WATER SERVICE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE CAP AT END. (3'–6" x 1'–6" BLOCKOUT)
6. MIN. BURY PER LOCAL REQUIREMENTS TO PROTECT AGAINST FREEZING AND DAMAGE.
7. 2" FLOOR DRAIN. FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION. (10" BLOCKOUT)
8. 30" MIN. BURY, PROVIDE TRACER TAPE.

PIPING LEGEND

BELOW FLOOR WASTE PIPING SCH 40 PVC TYPE DWV	BELOW FLOOR VENT PIPING SCH 40 PVC TYPE DWV	1 1/2" TYPE "K" ANNEALED "SOFT" COPPER WATER SERVICE



3'–6" x 1'–6" BLOCKOUT DETAIL

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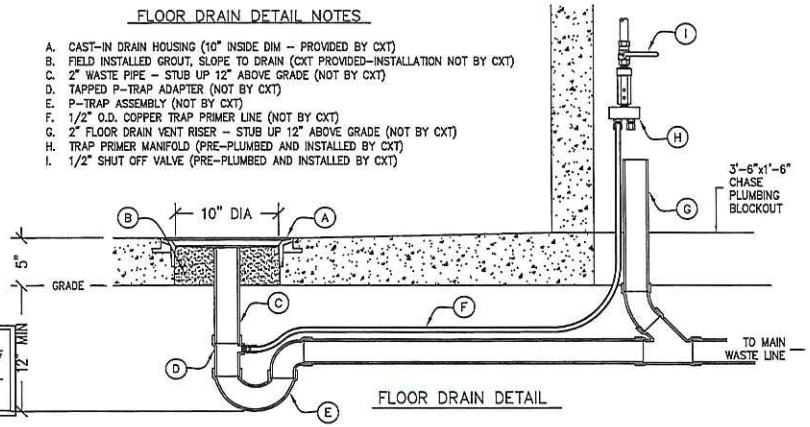
07/17/2014

FLOOR DRAIN DETAIL NOTES

A. CAST–IN DRAIN HOUSING (10" INSIDE DIM – PROVIDED BY CXT)
B. FIELD INSTALLED GROUT, SLOPE TO DRAIN (CXT PROVIDED–INSTALLATION NOT BY CXT)
C. 2" WASTE PIPE – STUB UP 12" ABOVE GRADE (NOT BY CXT)
D. TAPPED P–TRAP ADAPTER (NOT BY CXT)
E. P–TRAP ASSEMBLY (NOT BY CXT)
F. 1/2" O.D. COPPER TRAP PRIMER LINE (NOT BY CXT)
G. 2" FLOOR DRAIN VENT RISER – STUB UP 12" ABOVE GRADE (NOT BY CXT)
H. TRAP PRIMER MANIFOLD (PRE–PLUMBED AND INSTALLED BY CXT)
I. 1/2" SHUT OFF VALVE (PRE–PLUMBED AND INSTALLED BY CXT)



FLOOR DRAIN DETAIL

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(Signature) (Date) 7-16-14
Carl A. Demeter
My license renewal date is December 31, 2014
Pages or sheets covered by this seal:

LICENSED PROFESSIONAL ENGINEER
CARL A. DEMETER
12085
IOWA

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Precast Products
901 N. Highway 77 Hillsboro, TX 76645

PROJECT TITLE
CORTEZ
BUILDING NUMBER CR–1014

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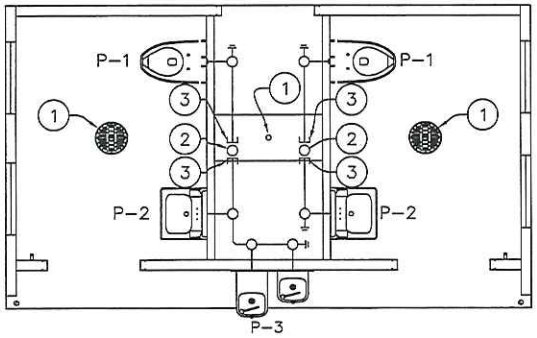
REV.	DESCRIPTION	APPROVAL	DATE
SCALE	1/4"=1'-0"	DATE	7-8-14
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	RDW	PLOT	48

FIELD STUB UP LOCATIONS

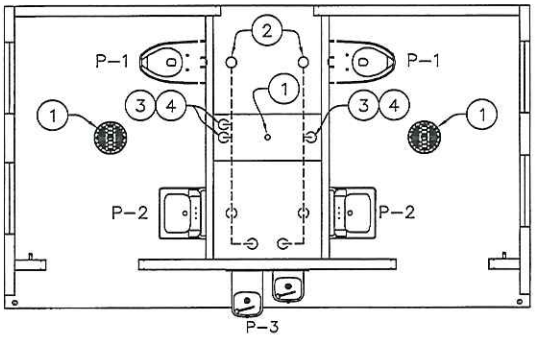
DWG NO. CR–17 | SHEET 17/20 | REV.



WASTE PIPING

WASTE PIPING – KEY NOTES

1. 2" FLOOR DRAIN, FIELD INSTALLED (NOT BY CXT)
2. 3" WASTE THROUGH FLOOR, FIELD INSTALLED (NOT BY CXT)
3. PROVIDE TEST PLUG IN END OF WASTE PIPE. CONTINUATION OF PIPING IS FIELD INSTALLED & NOT BY CXT.



VENT PIPING

VENT PIPING – KEY NOTES

1. 2" FLOOR DRAIN, FIELD INSTALLED (NOT BY CXT)
2. 3" VENT THROUGH ROOF.
3. 2" VENT WITH TEST PLUG.
4. FIELD INSTALLED 2" VENT PIPING FROM FLOOR DRAINS. (NOT BY CXT)

PIPING LEGEND

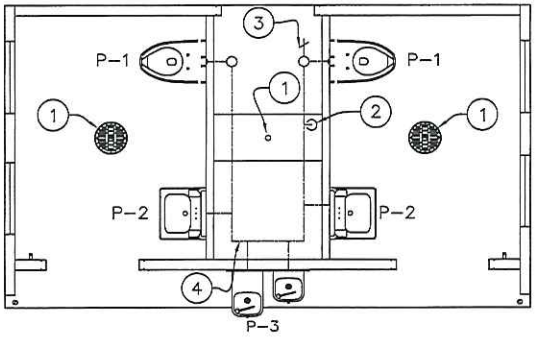
——— COLD WATER

——— HOT WATER

- - - - - - VENT PIPING
SCH 40 PVC TYPE DWV

——— WASTE PIPE:
SCH 40 PVC, ASTM D2665, TYPE DWV

. . . . . FIELD PIPING (NOT BY CXT)



WATER PIPING

WATER PIPING – KEY NOTES

1. 2" FLOOR DRAIN, FIELD INSTALLED
2. FIELD INSTALLED 1-1/2" WATER SUPPLY WITH SHUT-OFF VALVE NEAR FLOOR.
3. 3/4" HOSE BIBB WITH VACUUM BREAKER AND WHEEL HANDLE.
4. WATER PIPING ALONG WALL SEE DIAGRAM ON SHEET CR-19.

LICENSED PROFESSIONAL ENGINEER
CARL A. DEMETER
12085
IOWA

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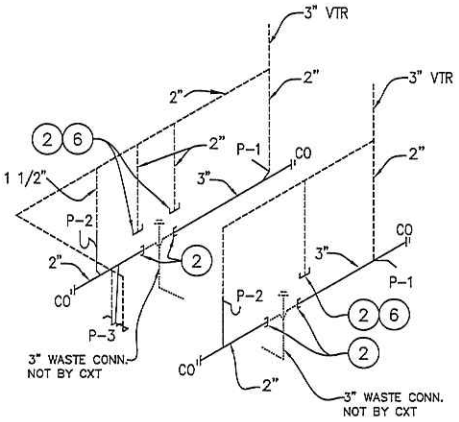
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	RDB	PLOT	48

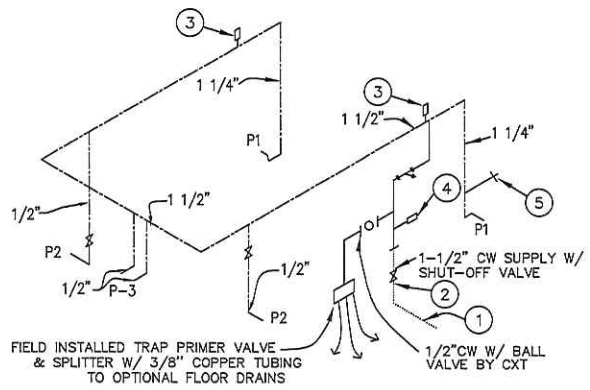
WATER, WASTE & VENT PIPING PLANS & NOTES

DWG NO.	SHEET	REV.
CR-18	18 / 20	



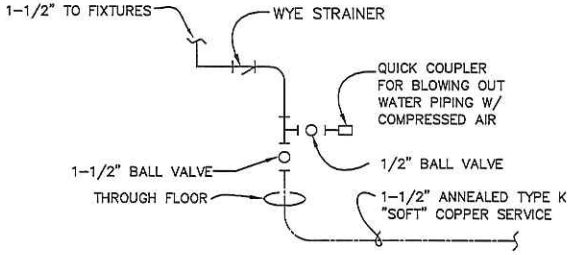
WASTE & VENT RISER DIAGRAM

NTS



WATER PIPING DIAGRAM

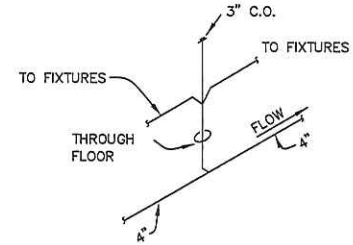
NTS



WATER SERVICE DETAIL

NTS

NOTE:
THIS PIPING IS FIELD
INSTALLED & NOT BY CXT



DETAIL OF FIELD INSTALLED
WASTE CONNECTION

NTS

NOTES:

1. 1-1/2" COLD WATER THRU FLOOR, NOT BY CXT.
2. TO THIS POINT BY CXT.
3. WATER HAMMER ARRESTOR SIOUX CHIEF HYDRA-RESTOR #654-C OR EQUAL
4. 1/2" AIR QUICK CONNECTION W/ BALL VALVE FOR BLOWING OUT WATER PIPING.
5. 3/4" HOSE BIBB W/ SCREW ON VACUUM BREAKER
6. 2" VENTS FOR FLOOR DRAINS.

PIPING LEGEND

- HOT WATER (OPTIONAL)
- COLD WATER
- VENT
- WASTE
- FIELD INSTALLED (NOT BY CXT)
- SHUT-OFF VALVE
- WYE STRAINER

WATER PIPE:
COPPER, ASTM 588, TYPE L

WASTE PIPE:
PVC, ASTM D2665, SCHED. 40

PROVIDE BACKFLOW PREVENTER ONLY IF SPECIFICALLY REQUIRED BY LOCAL JURISDICTION

SYM	DESCRIPTION	MANUFACTURER	CXT PART NUMBER	FLUSH VALVE/FAUCET	SUPPLIES	HW	CW	WASTE	VENT	SUPPLIES / NOTES
P1	WATER CLOSET	KOHLER	K-4323-0	SLOAN "ROYAL" #952-1.6 L-3 W=4"	SLOAN HY33A		1-1/4"	3"	2"	1,3,5
P2	LAVATORY	KOHLER	K-2007-0	SYMMONS S-71			1/2"	1-1/2"	1-1/2"	2,4,6
P3	DRINKING FOUNTAIN	HAWS	1119FR				(2) 1/2"	(2) 1 1/2"	(2) 1 1/2"	8
P6	FLOOR DRAIN	TRAVIS	54960-CXT (QTY 2)					2"	2"	7
		SIOUX CHIEF (CHASE)	840-2A (QTY 1)							

NOTES:
1. OFFSET FLUSH VALVE TAILPIECE PER ADA, RIGHT OR LEFT HAND, AS REQUIRED. PROVIDE FLUSH VALVE FOR 3" WALL THICKNESS.
2. HAMMER ARRESTOR JRS520-T-C, FLOOR DRAIN S2005A025NBLP, TRAP PRIMER- MIFAB MM500, DISTR UNIT- MIFAB
3. MOUNT RIM OF P-1 AT 17" ABOVE FLOOR.
4. 1/2X15 COMP ANG LAV BSCR1915AC,
5. USE CLOSET GASKET JG13534 AND Z1203 FINISH KIT
6. 3 PC COVER SET PF202WH.
7. TRAP PRIMER- MIFAB MM500, DISTR UNIT- MIFAB
8. DUAL HEIGHT COMBINATION

Progressive Engineering Inc.
58549 State Road 13 Goshen, IN 46528 Ph: (574) 533-0327
THIRD-PARTY REVIEW
07/17/2014

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa. (Date) 7-16-14
(Signature)
Carl A. Demeter
My license renewal date is December 31, 2014
Pages or sheets covered by this seal:

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CARL A. DEMETER
12085
IOWA
LICENSED

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901 N. Highway 77 Hillsboro, TX 76645

PROJECT TITLE
CORTEZ
BUILDING NUMBER CR-1014

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CXT Incorporated

REV.	DESCRIPTION	APPROVAL	DATE
SCALE	1/4"=1'-0"	DATE	7-8-14
DRAWN	MATT BRANCO	FILE NO.	CR-1014
CHECKED	RDW	PLOT	48

PLUMBING SCHEDULE, DIAGRAMS & NOTES

DWG NO.	SHEET	REV.
CR-19	19 / 20	