



## ADDENDUM #2

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To: Prospective Bidders  
From: Porter Co. Dept. of Development & Storm Water Management  
Date: January 19, 2024  
Subject: Carriage Lane Road Storm Sewer and Roadway Improvements

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The attention of all prospective bidders is called to the following Addendum.

This Addendum, designated as Addendum #2, is hereby included in and made a part of the bidding documents, whether or not attached thereto. Except as modified by this Addendum, all requirements of the bidding documents shall remain in full force and effect.

Bidder shall acknowledge the receipt of this Addendum #2 on his or her bid form.

### PRE-BID MEETING SIGN-IN SHEET & MINUTES

1. The pre-bid meeting sign-in sheet and minutes are attached as Attachments A & B to this Addendum. Please note that the meeting minutes may contain clarifications related to bid items that should be considered when preparing bids for this project.

### CLARIFICATIONS & MODIFICATIONS

The following clarifications and/or modifications to the bidding documents are being provided or are being made by the Department in response to questions posed and/or as determined necessary by the Department and are hereby included in and made a part of the bidding documents.

### BASIS OF BID FORM

2. Basis of Bid Form

**The Basis of Bid Form has been revised**, to reflect the following:

- WORK ITEM #12, "PIPE, REMOVE"  
**The quantity of Work Item #12 "Pipe, Remove" has increased from 482 LFT to 530 LFT to reflect the actual quantity of such work item required to successfully complete the work**, as shown on the construction plans.
- WORK ITEM #18, "SUBGRADE TREATMENT, TYPE II ALLOWANCE"  
**Subgrade Treatment, Type II Allowance will be revised to Subgrade Treatment, Type II.** The quantity will remain unchanged. The quantity is based on 50% of the full depth pavement replacement area. The amount of the quantity to be used is not guaranteed. No adjustment to the unit price will be allowed unless mutually agreed upon by the Owner and Contractor.
- WORK ITEM #35, "STORM SEWER, HDPE, 4'"  
**The quantity of Work Item #35 "Storm Sewer, HDPE, 4'" has increased from 305 LFT to 350 LFT to reflect the actual quantity of such work item required to successfully complete the work**, as shown on the construction plans.



- WORK ITEM #36, "STORM SEWER, HDPE, 8"  
**The quantity of Work Item #36 "Storm Sewer, HDPE, 8" has decreased from 145 LFT to 100 LFT to reflect the actual quantity of such work item required to successfully complete the work, as shown on the construction plans.**
- WORK ITEM #37, "UNDERDRAIN, HDPE, 6"  
**The quantity of Work Item #37 "Underdrain, HDPE, 6" has increased from 486 LFT to 527 LFT to reflect the actual quantity of such work item required to successfully complete the work, as shown on the construction plans.**
- WORK ITEM #38, "GROUT PIPE"  
**The quantity of Work Item #38 "Grout Pipe" has decreased from 1,566 LFT to 1,517 LFT to reflect the actual quantity of such work item required to successfully complete the work, as shown on the construction plans.**
- WORK ITEM #39, "UNSUITABLE STORM SEWER SUBGRADE ALLOWANCE"  
**Unsuitable Storm Sewer Subgrade Allowance will be revised to Unsuitable Storm Sewer Subgrade.** The quantity will remain unchanged. The quantity is based on a depth of 2' for a width of the pipe plus 2' on either side. This was assumed for 50% of the mainline pipe length. The amount of the quantity to be used is not guaranteed. No adjustment to the unit price will be allowed unless mutually agreed upon by the Owner and Contractor.

The revised Bid Form is attached to this Addendum #2. **Please replace the original Bid Form with the attached revised Bid Form.**

### CONSTRUCTION PLANS

#### 3. Construction Plans

**The construction plans have been revised on Sheets C1.1 and C1.3 to clarify pipe removal limits and correct the existing storm sewer pipe size.**

### TECHNICAL SPECIFICATIONS AND SPECIAL PROVISIONS

#### 4. Technical Specifications and Special Provisions

**The Technical Specifications and Special Provisions have been revised to reflect the following:**

- SECTION 6 "SAMPLES, TESTS, AND CITED SPECIFICATIONS"  
**Samples, Tests, and Cited Specifications has been revised to reference the necessary testing specifications.**
- SECTION 25 "COMPACTED AGGREGATE, NO. 53"  
**Compacted Aggregate, No. 53 has been revised to clarify the Method of Measurement and Basis of Payment for such item.**
- SECTION 34 "SUBGRADE TREATMENT, TYPE II ALLOWANCE"  
**Section 34, Subgrade Treatment, Type II Allowance has been revised to Section 26, Subgrade Treatment, Type II.**
- SECTION 27 "DRIVEWAY, REMOVE AND REPLACE"  
**Section 27 Driveway, Remove and Replace has been revised to Section 28, Driveway, Remove and Replace and to clarify the depth of concrete to 5".**
- SECTION 34 "STORM SEWER, HDPE, 4"  
**Section 34, Storm Sewer, HDPE, 4" has been revised to clarify that HDPE, solid wall pipe shall be utilized for such work item.**

- SECTION 35 "STORM SEWER, HDPE, 8"  
**Section 35, Storm Sewer, HDPE, 8" has been revised to clarify that HDPE, solid wall pipe shall be utilized for such work item.**
- SECTION 38 "UNSUITABLE STORM SEWER SUBGRADE ALLOWANCE"  
**Section 38, Unsuitable Storm Sewer Subgrade Allowance has been revised to Section 38, Unsuitable Storm Sewer Subgrade.**
- SECTION 39 "OTHER ITEMS"  
**Section 39, Other Items has been revised to include the restoration and repair of private utilities shall be included in the work.**

#### SEPTIC SYSTEM AS-BUILT DRAWINGS

5. The septic system as-built drawings are attached as Attachment C.

#### CONTRACTOR QUESTIONS

The following are questions received during bidding and all responses will be made part of the bidding documents.

1. Bid Item #12: Pipe Removal – The quantity shown on the bid form is 482 LF however there is no indication to remove approx. 30 LF of existing pipe going East out of Storm Manhole 1007 on sheet C1.1 and it does not appear the 78 LF of existing culvert pipe across Carriage Lane Road on Sheet C1.5 is included in the bid quantity, it appears there is approximately a total of 600 LF of pipe removal, can the bid form be revised to the correct removal quantity?  
**The construction plans and bid form have been revised to reflect such changes, as described above.**
2. On sheets C1.0 thru C1.7 the existing buried utilities, telephone, fiber optic, etc. have the letters (QLD) after them, what does (QLD) mean?  
**QLD stands for Quality Level 'D'. This means that these are the approximate location of the utilities as best determined by information provided by the utility companies. It is the responsibility of the Contactor to obtain accurate locations of these utilities. No additional payment will be made. Any conflict with the new work shall be reported immediately to the Owner and Engineer prior to commencement of work.**
3. On sheet C1.3 there is an existing 10" pipe shown from existing storm manhole #1337 going South which indicates the pipe is to be grouted, the 10" pipe only is shown to just past the centerline of the road, is this the limit of grouting? Please clarify how many feet of 10" pipe we are to grout at this location?  
**6 LF of the 10" pipe shall be grout from the limits of pipe removal as shown on the attached plan revisions.**
4. Bid Item #37: Underdrain, HDPE, 6" – The quantity shown on the bid form is 486 LF, however, there are three (3) locations of underdrain (Sheet C1.4 shows 45 LF & 67 LF and Sheet C1.7 shows 415 LF). The total LF of 6" underdrain shown is 527 LF., can the bid form be revised to reflect the actual LF of 6" underdrain shown?  
**This item has been updated in the revised bid form.**
5. Bid Item #35: Storm Sewer, HDPE, 4" indicates 305 l.f., however sheets C1.1 thru C1.5 show 8 locations totaling 350 l.f., will the bid form be revised to 350 l.f.?  
**The construction plans and bid form have been revised to reflect such changes, as described above.**



6. Bid Item #36: Storm Sewer, HDPE, 8" indicates 145 LF, however sheets C1.1 thru C1.5 shows 3 locations totaling 100 LF, will the bid form be revised to 100 l.f?  
**The construction plans and bid form have been revised to reflect such changes, as described above.**
7. The legend on sheets C1.2 & C1.5 indicates "D" Concrete Driveway, the legend indicates 5" of concrete, however, the special provision and technical specifications for 27. Driveway, Remove and Replace on page 116 indicates the concrete drive is to be 6" thick, what thickness of concrete are we to figure for the driveways?  
**The Special Provisions and Technical Specifications have been revised to remove this discrepancy, as described above.**
8. The plans do not show any irrigation pipe, wire or heads at any location. How will this be handled if an irrigation system is encountered during storm sewer installations? Please clarify.  
**The Special Provisions and Technical Specifications have been revised to clarify the payment for the restoration and repair of private utilities, as described above.**
9. Regarding Compaction Testing: In the Special Provisions and Technical Specifications page 106 section 6. Sub-section B. states testing shall be performed in accordance with the "Manual for Frequency of Sampling and Testing for INDOT and Basis for Use of Materials" and INDOT Standard Specifications.

The Manual for Frequency of Sampling and Testing page 9 of 25 item #22 indicates testing for Structural Backfill is every 500 C.Y. (minimum one sample) but no % of compaction is shown and item #23 indicates testing for compacted aggregate is one test per 800 Ton but no percentage is shown and item #24 indicates testing for subbase is one test per 800 Ton but no % of compaction is shown.

In the plans Sheet C2.0, Sewer Trench Detail 2 indicates beneath pavement or within 5' of pavement: Use INDOT #53 limestone placed in 6" max. lifts and compacted to 95% mod. proctor density.

In the Special Provisions and Technical Specifications page 115 section 25. Compacted Aggregate, No. 53 sub-section A references INDOT Standard Specification and section 25. B references Porter County Construction Standards and Specifications, Section IV.

The INDOT testing requirements are as listed above.

The Porter County Standards/Specifications page 20 indicates compaction for backfill in pipe and conduit trenches under pavements and curbs to be 95% and subgrade under pavement) including approaches and driveways) and curbs to be 100%.

With these varying specifications, it is very difficult to determine what is required for this project, Can you please clarify what frequency of testing, thickness of lifts and what percentage of compaction (standard or modified) we are to meet for the storm sewer trenches and for compacted aggregate subbase below asphalt as the contractor never handles compaction testing on any INDOT projects?

**Detail 2 on Sheet C2.0 shows the thickness of lifts and percentage of compaction that needs to be met for the storm sewer trenches. Refer to Porter County Specification Section 8.95.G.b. for thicknesses of lifts for compacted aggregate subbase, compacted aggregate subbase percentage of compaction, and frequency of testing for the storm sewer trench and the compacted aggregate subbase.**

10. Will any onsite testing be required for the asphalt pavement and/or concrete drives?  
**Testing will be required per the Porter County Paving Specifications, attached as Attachment G.**

*Porter County is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, military status, genetic testing, pregnancy, sexual orientation or any other unlawful bias.*



11. Regarding watertight connections at storm structures, some structures will not allow for aloks/boots to be installed due to size restrictions. If a watertight seal cannot be installed in structures from the supplier, is it acceptable to use non-shrink grout for these pipe connections into structures?  
**Cast-in-place watertight connectors are required where non-concrete pipe (i.e., HPDE storm sewer or underdrain) will be connected to the concrete storm sewer structures. Where concrete pipe will be connected to concrete storm sewer structures, non-shrink grout or "brick and mortar" type connections are acceptable.**
12. The spec says the 4" and 8" HDPE is perforated, but nothing about #8s. Are the 4" and 8" supposed to be solid wall? 6" HDPE states to be perforated wrapped in #8s and geo fabric.  
**The Special Provisions and Technical Specifications have been revised for the Storm Sewer, HDPE 4" and Storm Sewer, HDPE, 8" is to be solid wall, as described above.**
13. Can we reuse existing topsoil for restoration?  
**Yes, topsoil can be reused for restoration per the Special Provisions and Technical Specifications.**
14. Can utility trench be backfilled all the way up to subgrade with #8s?  
**No, the pipe needs to be backfilled to 1' above the pipe with No. 8 limestone. The rest of the trench needs to be backfilled with No. 53 limestone if beneath the pavement or within 5' of the pavement or can be backfilled with suitable borrow if beyond 5' of the pavement. See Detail 2 on Sheet C2.0.**
15. Please confirm that the new RCP to be installed is to be bed and filled to 1' above with #8 limestone.  
**Per the Special Provisions and Technical Specifications and Construction Plans, all storm sewer is to be have bedding and initial backfill to 1 FT above the crown of pipe with No. 8 limestone.**
16. Is the #8 limestone to be wrapped with fabric?  
**The No. 8 limestone for pipe bedding, haunching, and initial backfill does not need to be wrapped with fabric. The Course Aggregate, No. 8 for the 6" underdrains does need to be wrapped in geotextile fabric.**
17. Please confirm that the trench is to be backfilled with #53 limestone.  
**The trench needs to be backfilled with No. 53 limestone if beneath the pavement or within 5' of the pavement or can be backfilled with suitable borrow if beyond 5' of the pavement.**
18. What tasks does line item #8 pertain to.  
**Pay Item #8 Common Excavation shall consist of all excavation required for the project including removal of asphalt pavement. This pay item includes ditch grading at Str. No. 150A and Str. No. 150B.**
19. What tasks does line item #17 pertain to.  
**Pay Item #17 Compacted Aggregate, No. 53 pertains to the 10" of roadway subbase layer called out in Legend Item A1 of the plans.**
20. What tasks does line item #19 pertain to.  
**Pay Item #19 Geogrid pertains to the geogrid listed in Legend Item A1 of the plans underneath the Compacted Aggregate, No. 53 subbase layer.**
21. Are CAD As-builts required?  
**Per Item #14 of the Special Provisions, CAD as-built drawings are required.**

22. For line Base Bid Item 38, Grout Pipe, is flowable fill allowable?  
**No, only grout will be allowed for filling the abandoned pipes called out in the plans.**
23. For line item 38: Grout Pipe – Are we just grouting the pipe at the invert? The item is paid for as LF so wasn't sure if that was the case or if we needed to put flow fill throughout the entire pipe run.  
**The entire pipe run from invert to crown shall be filled with grout. Additionally, any known or perceived voids around the pipe shall be filled with grout.**
24. Is RAP permissible in either HMA Mixture? If so, what percentage of RAP is allowed for HMA Intermediate and HMA Surface?  
**Yes, RAP will be permissible in both HMA Intermediate and HMA Surface. The maximum replacement percentage allowed shall be per the referenced INDOT Specifications.**
25. Will an item for Tack Coat be added to the Itemized Proposal?  
**No, the cost for Tack Coat should be included in the unit prices for the HMA pay items, per the Special Provisions and Technical Specifications.**
26. Is Joint Adhesive only for the Surface Course, or both Intermediate and Surface Courses?  
**Joint Adhesive is for both HMA Intermediate and HMA Surface courses.**
27. Will Joint Adhesive Item(s) be added to the Itemized Proposal?  
**No, the cost for Joint Adhesive should be included in the unit prices for the HMA pay items, per the Special Provisions and Technical Specifications.**
28. Will Liquid Asphalt Sealant for Joints be added to the Itemized Proposal?  
**No, the cost for Liquid Asphalt Sealant for Joints should be included in the unit prices for the HMA pay items, per the Special Provisions and Technical Specifications.**

## **PUBLIC OPENING OF BIDS**

### 6. Public Opening of Bids

As stated in the bidding documents, bids will be opened at 10:00 a.m., or as soon thereafter as possible, on Tuesday, January 23, 2024, at a public opening of bids to be held at 10:00 a.m. local time at the Porter Co. Administration Center, 155 Indiana Ave., Ste. 311, Valparaiso, Indiana 46383. In accordance with the bidding documents, the public opening of bids will also be conducted live via videoconference. All bidders, as well as members of the public, are welcome to attend the opening of bids, either in person or via videoconference.

The following information may be used to access and participate in the videoconference.

Join Zoom Meeting:

<https://us02web.zoom.us/j/81987452413?pwd=N0M5TW54bW8vSIBDOXZCdnZHMj5Zz09>

Meeting ID: 819 8745 2413

Passcode: ti7xPF

At the meeting, bids will be opened and, unless obviously non-responsive, read aloud publicly. Respondents are invited to be present at the opening of bids. An abstract of the total bids will be made available to respondents after the opening of bids.



**ATTACHMENTS**

- ATTACHMENT A&B - PRE-BID MEETING MINUTES & SIGN-IN SHEET
- ATTACHMENT C - SEPTIC SYSTEM AS-BUILT DRAWINGS
- ATTACHMENT D - REVISED CONSTRUCTION PLAN SHEETS C1.1 AND C1.3
- ATTACHMENT E - REVISED BID FORM
- ATTACHMENT F - REVISED SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS



**ATTACHMENT A & B  
PRE-BID MEETING MINUTES & SIGN-IN SHEET**

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## **MEETING MINUTES**

January 10, 2024, 10:00 am  
155 Indiana Ave., Ste. 311 & Video Conference  
Pre-Bid Meeting  
Carriage Lane Road – Storm Sewer and Roadway Improvements

1. **Sign-in and Introductions**

2. **Miscellaneous Milestone Dates**

- a. Pre-Bid Meeting: January 10, 2024 (10:00 AM local time)
- b. Deadline for Questions: Thursday, January 18, 2024 @ 12:00 PM (local time) – questions asked after this time might not be able to be answered
- c. Bid Deadline and Opening: Tuesday, January 23, 2024 @ 10:00 AM (local time) @ Porter County Government Building, Porter County Department of Development and Storm Water Management, Ste 311
- d. Anticipated Bid Award: Tuesday, January 30, 2024 @ 9:00 AM (local time) @ Porter County Storm Water Management Board Meeting
- e. Estimated Notice to Proceed will be issued after receiving necessary submittals
- f. Substantial Completion: October 31, 2024

3. **Compliance Issues**

- a. Compliance with equal opportunity employment laws
- b. MBE goal: 7%; WBE goal: 5% (See item 13 in Instruction to Bidders)
- c. IDEM Construction Stormwater General Permit Requirements

4. **Bid Submittal Requirements**

- a. Bid Form
- b. Basis of Bid Form
- c. Responsible Bidding Submittal Requirements Form
- d. Bidders Work History Form
- e. Bidders Organizational Experience and Workload Form
- f. Bidders Subcontractor and Supplier Form
  - i. List entities comprising 10% or more of the bidder's total costs
- g. Bid Security
  - i. 10% of bid total

5. **Other Bidding Items**

- a. Bids will remain open for 60 calendar days
- b. Lowest, responsive, and responsible bidder
- c. Acknowledgement of Addenda

6. **Successful Bidder (within 10 days of NOA)**

- a. Executed Contract, Performance Bond – 100%, Payment Bond – 100%, Certificates of Insurance
- b. E-Verify Affidavit & Certification Regarding Investment in Iran



7. **Maintenance Bond will be required upon final acceptance of work – 10% contract price, 1 year**
8. **Project Overview**
9. **Other Items**
  - a. Subgrade Treatment Allowance – Estimated amount (50% of pavement replacement area). Entire quantity may not be used.
  - b. Unsuitable Storm Sewer Subgrade Allowance – Estimated amount (50% of mainline pipe length for 2' on either side of pipe). This will be limited in its use and only as authorized by Porter County. Entire quantity may not be used.
  - c. Asphalt, stone, fill, excavation quantities, and others as specified in the special provisions will not be measured. Unless a change is made by Porter County to the limits, additional quantities will not be authorized.
  - d. Sawcutting, pipe bedding, pipe backfill, removing & resetting mailboxes, removing & resetting street signs, protecting utilities, protecting fences and protecting trees – no direct measurement of quantities; therefore, no additional amounts/quantities will be approved or paid for unless project limits are increased/decreased. Figure this into the cost of other items.
  - e. Topsoil, seeding, mulching, etc. needed to restore the site will not be measured separately as specified in the special provisions. All materials, equipment and labor needed to restore the project site will be included in the lump sum pay item Restore Disturbed Areas. Unless a change is made by Porter County to the limits, additional quantities will not be authorized.
  - f. Maintenance of Traffic - maintain traffic for residents at all times and coordinate with residents during construction particularly when constructing across their drives.
10. **Addendum #2 may include but not be limited to:**
  - a. Clarification of subgrade allowances
  - b. Clarification and response to submitted questions
11. **Questions**

Q1: Is sand acceptable instead of No. 53 limestone?

A1: It is preferred that compacted No. 53 Limestone be used for final backfill rather than B Borrow sand due to the depth of the storm sewer.

Q2: Who will provide the material testing?

A2: Material testing will be done by the contractor, per the Special Provisions.

Q3: Are the septic drains on the drawings accurate?

A3: The location of the septic drains on the drawings are based on Health Department as-built plans. The existing storm sewer structures also show several pipes connected, leading us to believe that these are the septic perimeter drains.

Q4: There is a 10" pipe coming from the south, ending in the center of the road, what is this for?

A4: That clay 10" tile could be the master tile for the septic system perimeter drains for the north side properties. The properties on the south side of the road discharge to the rear property line and not to the roadway.

Q5: What is the required percent compaction for the No. 53 limestone?

A5: As stated in the technical specifications, the No. 53 limestone shall be compacted to 95% modified proctor density.

Q6: Two bid items state an allowance. Is there a dollar amount associated?

A6: Clarifications will be made to the allowances with a revised basis of bid form.

Q7: There is a portion of pavement where 1.5" surface is missing. Will additional payment be made for this section of pavement if it severely damaged during construction and full depth reconstruction is necessary?

A7: If this portion of the pavement significantly deteriorates during construction, then the Owner and Engineer will coordinate with the Contractor for the necessary repair.

Q8: Can the storm sewer televising footage be provided?

A8: Yes, the storm sewer was televised in 2018/2019, and again in March of 2022. Provided below is the most recent televising footage that was completed in 2022:

<https://www.dropbox.com/scl/fo/ev6wu8e9qn60is32eacuq/h?rlkey=bvb7daoyarnsdii99ii5seydz&dl=0>

Q9: Are there any sump pump connections to the storm sewer?

A9: There shouldn't be any sump pump connections directly to the storm sewer. They should be draining to the yard or connected to the perimeter drain tile.

Q10: Will the contractor be held responsible if a sump pump is connected directly to the existing storm sewer and gets disconnected during construction, causing water to back up into the basement?

A10: The Department will directly coordinate a repair if it is determined that a sump pump connection was made directly to the existing storm sewer and is damaged due to abandoning the existing storm sewer in place.

Q11: Where can material staging take place?

A11: Materials can be staged in the cul-de-sac as well as the roadway extension to the north. There is a garage on the west side of the north roadway extension so the contractor should coordinate with the property owner to maintain access to the garage.

Q12: C1.6 shows an existing pipe from the yard inlet to the existing storm sewer structure. Should this pipe be vacated and grouted?

A12: No, the pipe shall remain in place. Cap and abandon the existing pipe in place when installing Str. No. 200.

Q12: Can the road be shut down for a few hours to complete the storm sewer crossings from the inlets to the manholes?

A12: The goal would be to keep the road open to the maximum extent practicable. Emergency access shall be maintained at all times since it is a one way in and one way out subdivision.

CARRIAGE HILLS SWM IMPROVEMENTS  
PRE-BID MEETING  
DATE/TIME

NAME	COMPANY	ADDRESS	OFFICE/CELL/FAX	EMAIL
Chelsey Gordon	Porter Co. Dept. of Development and Storm Water Management	155 Indiana Ave., Ste. 311 Valparaiso, IN 46383	Office: (219) 465-3652 Cell: (219) 252-7499 Fax:	<a href="mailto:chelsey.gordon@porterco.org">chelsey.gordon@porterco.org</a> <i>CRB</i>
Meredith Phillis	Porter Co. Dept. of Development and Storm Water Management	155 Indiana Ave., Ste. 311 Valparaiso, IN 46383	Office: (219) 465-3632 Cell: Fax:	<a href="mailto:meredith.phillis@porterco.org">meredith.phillis@porterco.org</a>
<i>ERIC CANNON</i>	<i>G.S. MARSHALL, INC</i>	<i>1351 Joliet Road Valparaiso, IN 46385</i>	Office: <i>219-462-3415</i> Cell: <i>219-241-8750</i> Fax: <i>219-462-3964</i>	<i>eric.cannon@gsmarshall.com</i>
<i>RICH MUIHA</i>	<i>GARIUP CONSTRUCTION</i>		Office: <i>219-887-5233</i> Cell: <i>219-712-8479</i> Fax:	<i>RICH.MUIHA@GARIUP.COM</i>
<i>ERIC QUALIZZA</i>	<i>RIETH-RILEY</i>		Office: <i>219-977-0722</i> Cell: <i>219-775-7996</i> Fax:	<i>equalizza@rieth-riley.com</i>

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CARRIAGE HILLS SWM IMPROVEMENTS  
 PRE-BID MEETING  
 DATE/TIME

Mark Hedges	GE Marshall Inc	1351 Juliet nd Valpo	Office: 219 462-3885 Cell: 574-952-7345 Fax:	mark.hedges at ge.marshall.com
Chris Nowak	National Trench Safety	247 W. Lake St Elmhurst, IL	Office: 312 720 0519 Cell: 312 720 0519 Fax:	Christopher Nowak@NTsafety.com
Ethan Knapp	HRP Construction	5777 Cleveland Rd South Bend, IN	Office: 574-271-7800 Cell: 574-658-3777 Fax:	ethank@HRPconstruction.com
DAVID ASHKRAFT	WOODRUFF AND SONS	2125 E. U.S. Hwy 12 MICHIGAN, CITY, IN	Office: 219-872-8605 Cell: 219-898-6856 Fax:	davea@woodruff andsons.com.
KYLE WEISMAN	Woodruff Sons	2125 E. U.S. Hwy 12 Michigan City	Office: 219-872-8605 Cell: 219-898-6811 Fax:	Kylew@woodruffandsons.com

CARRIAGE HILLS SWM IMPROVEMENTS

PRE-BID MEETING

DATE/TIME

<p>Shawn Finney</p>	<p>DLZ</p>		<p>Office: 219-301-3218</p>	<p>Sfinney@dlz.com</p>
			<p>Cell:</p>	
			<p>Fax:</p>	
<p>Scott Norwine (Zoom)</p>	<p>Reichert Plumbing</p>		<p>Office:</p>	
			<p>Cell:</p>	
			<p>Fax:</p>	
<p>Keith Kegebein (Zoom)</p>	<p>Dyer Construction</p>		<p>Office:</p>	
			<p>Cell:</p>	
			<p>Fax:</p>	
<p>Sean Davidson (Zoom)</p>	<p>Grimmer Construction</p>		<p>Office:</p>	
			<p>Cell:</p>	
			<p>Fax:</p>	
<p>Jennifer Gough (Zoom)</p>	<p>Gough, Inc.</p>		<p>Office:</p>	
			<p>Cell:</p>	
			<p>Fax:</p>	



**ATTACHMENT C  
SEPTIC SYSTEM DRAWINGS**

Permit Number 00-250

Required Sq. Footage 1500

Contractor Johnson

Applicant Gore R.T.

Location Lot 13 Carriage

500 Carriage Lane Rd West of the Hills

Septic Tank Size 1000 gal

Pump Tank Size \_\_\_\_\_

Distance From Foundation 12'

Total Linear Ft 504'

Width of Trench 3'

Total Sq. Footage 1512 ft<sup>2</sup>

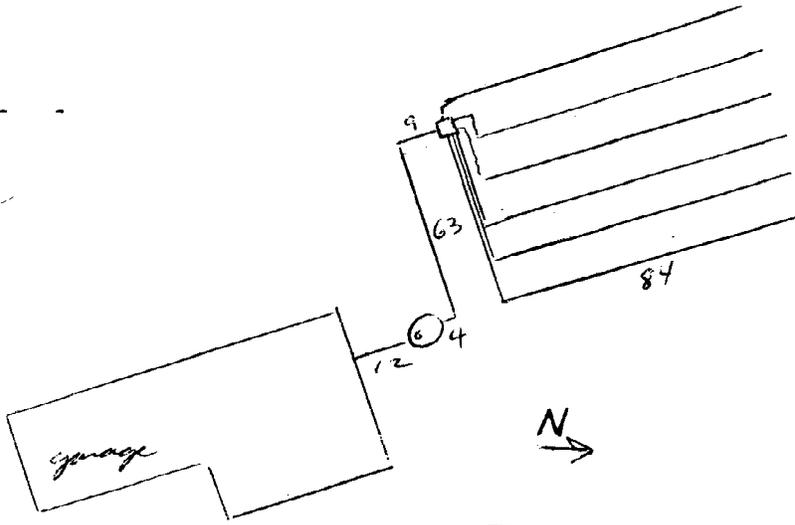
Avg. Centers 75'

Avg. Depth of Trench 18-20"

Avg. Depth of Drainage N/A

Cover Material Slag

Tile Type PVC Plastic



Porter County Health Department  
 Final Inspection Approval  
 Released Applicability (N)  
 Inspector [Signature]

	Yes	No
Is septic field properly located to permit specs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there sufficient gravity to distribution box?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the box properly placed and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Was the well installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Distance from tank _____ from trenches _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was notification left at site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is re-inspection required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

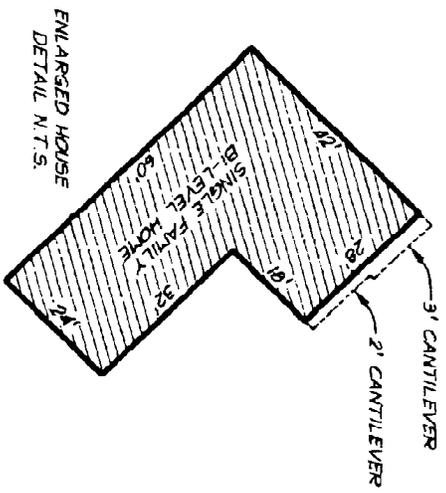
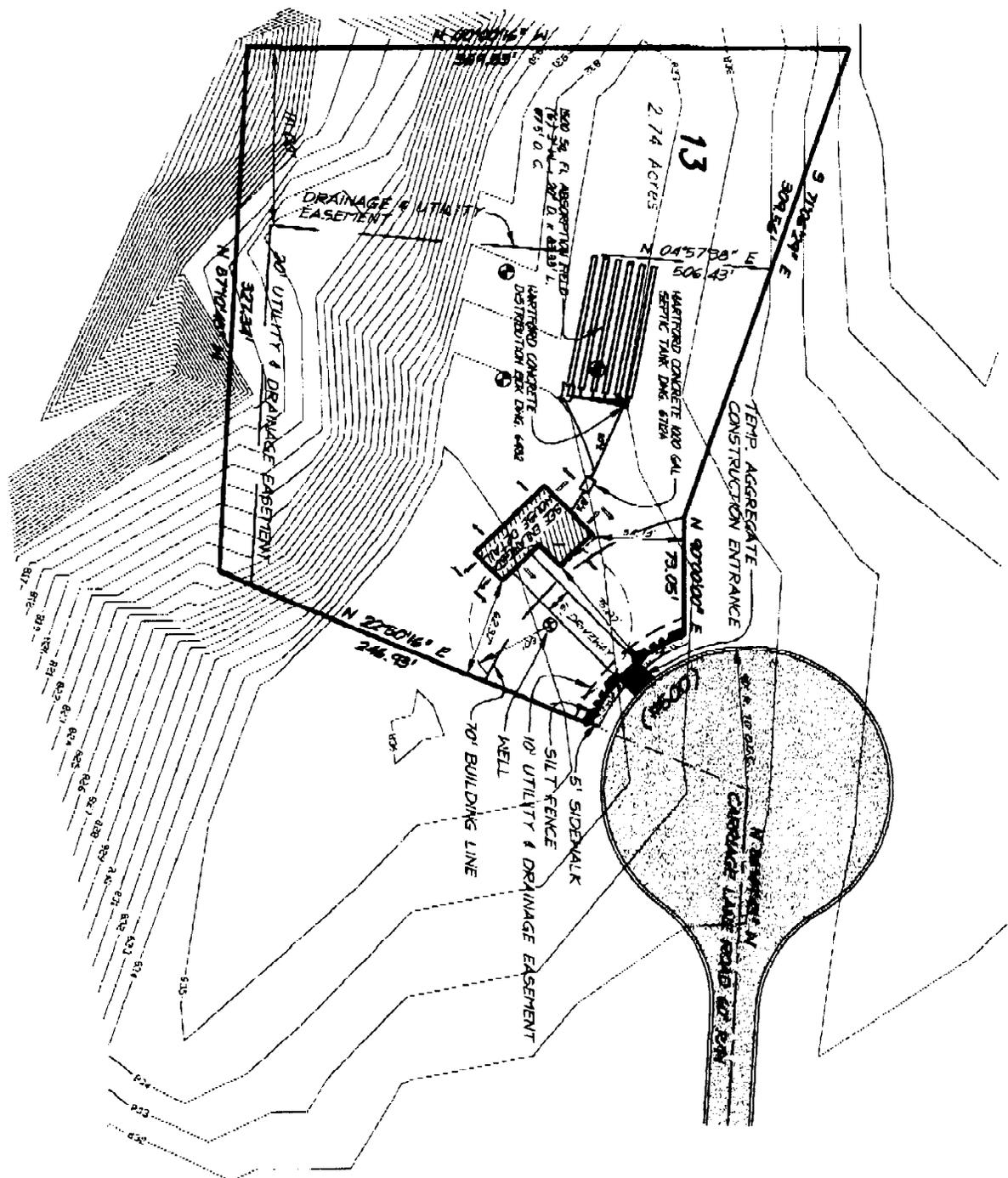
APPROVAL GRANTED 11/29/00 APPROVAL DENIED \_\_\_\_\_

Additional Comments: System installed according to permit specifications

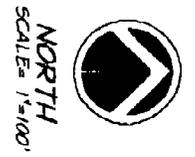
Date Inspected 11/29/00

Inspector [Signature]

# CARRIAGE HILLS, LOT 13 SITE PLAN



- LEGEND**
- SOIL BORING
  - (#500) ADDRESS
  - SILT FENCE
  - DIRECTION OF FINISHED SURFACE RUN-OUT
- ALL GRAVITY SEWERS TO BE 4" PVC ASTM-D-2665



OK made 9/1/00

REVISIONS	BY



**DUNELAND GROUP**  
ENGINEERING & SURVEYING  
220 BROADWAY  
CHESTERTON, INDIANA 46304  
219-926-1007 fax 219-928-1544  
E-MAIL: dg@dunelandgroup.com

DATE	09/01/2000
SCALE	1"=100'
REVISION	ART / DGI
PROJECT	138.018
SHEET	1



# Inspection Summary

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2005-0496

Well P2005-0497

Property Owner Name: Gore Realty Mel Gore  
Property Location: 503 Carriage Ln Westville IN 46391

Date Submitted: 8/31/2005

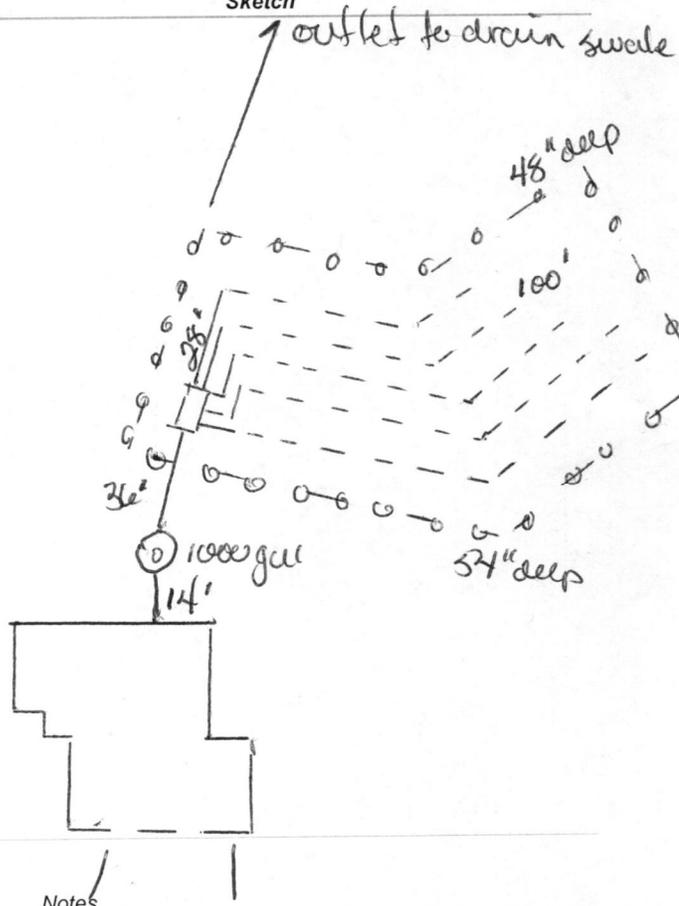
**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
R Tarnow	8/31/2005	Yes	Denied	Initial	N →

**Property Specifications**

M Cavnah - 8/31/2005	Contractor:	Bill Johnson
R Tarnow - 8/31/2005	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
R Tarnow - 8/31/2005	Distance from Foundation:	14 ft
R Tarnow - 8/31/2005	Total Lineal Feet:	500 ft
R Tarnow - 8/31/2005	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
R Tarnow - 8/31/2005	Absorption Field Size:	1500 sq ft
R Tarnow - 8/31/2005	Absorption Field Depth:	13 inches
R Tarnow - 8/31/2005	Average Centers:	7.5 ft
R Tarnow - 8/31/2005	Drainage Type:	Perimeter
M Cavnah - 8/31/2005	Required Square Footage:	1500 sq ft
R Tarnow - 8/31/2005	Cover Material:	Slag
	Tile Type	
	<input type="checkbox"/> Schedule 4	
	<input checked="" type="checkbox"/> SDR 35	
	<input type="checkbox"/> Tile Type Other	
	Average Field Cover	0 inches
R Tarnow - 8/31/2005	<input checked="" type="checkbox"/> Septic field properly located to permit specifications	
R Tarnow - 8/31/2005	<input checked="" type="checkbox"/> Sufficient gravity to distribution box	
R Tarnow - 8/31/2005	<input checked="" type="checkbox"/> Box properly placed and sealed	
	<input type="checkbox"/> Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

**Sketch**

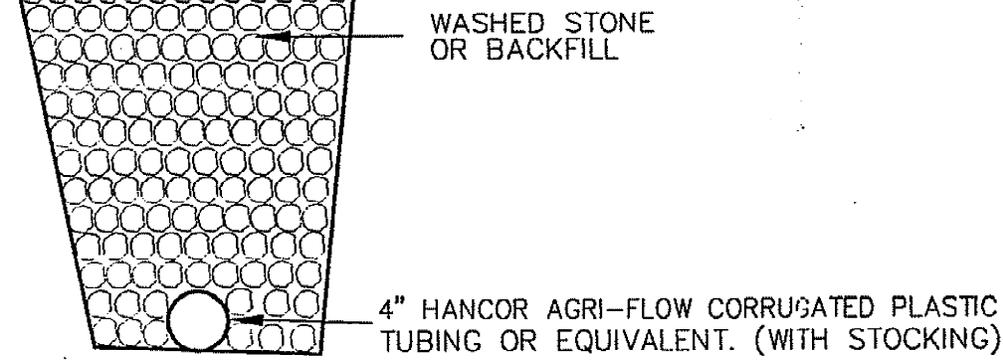


**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
R Tarnow	8/31/2005	Well not installed at time of this inspection. House foundation only. Perimeter drain outlet northeast of field to drain swale with animal grid. Need field cover check for final.

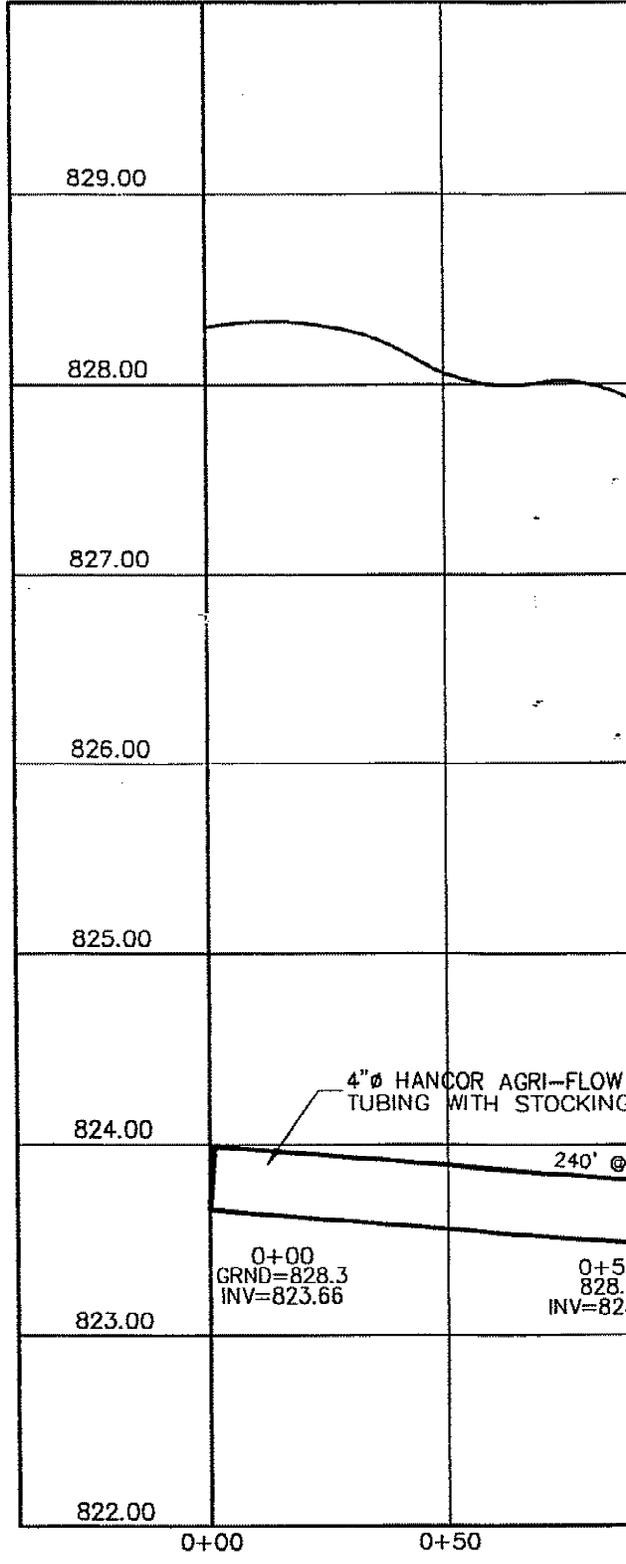
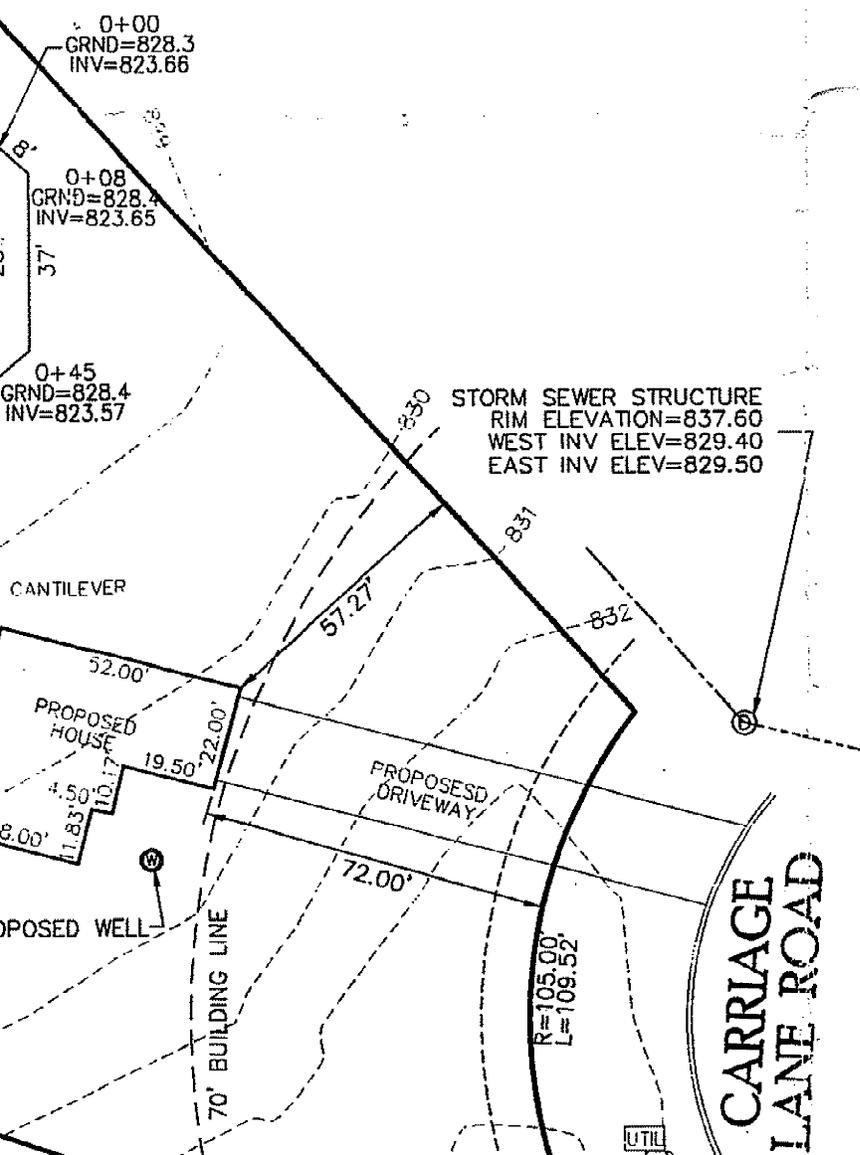
11-21-05 Field cover 12" x 15" - approved - green wood sent to cross

Inspector Name: Ruben J. [Signature] Date Inspected: 8-31-05 Approval Granted/Denied: \_\_\_\_\_



APPROV  
 insp *Cornish*  
 Date *7-7-*

# METER DRAIN TRENCH



# Final Approval

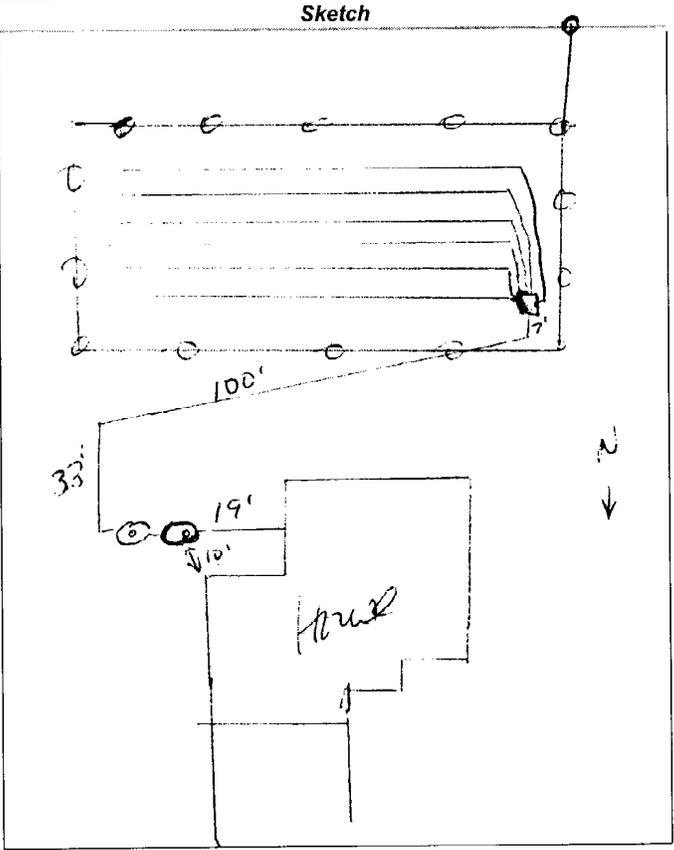
Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2001-0120  
Well P2001-0121

Property Owner Name: Gore Realty Mel Gore  
Property Location: 504 Carriage Lane Rd Westville IN 46391

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
M Cavanaugh	2/12/02	No	Approved	
M Cavanaugh	1/16/02	No	Denied	Field Cover Inspection
M Cavanaugh	1/16/02	No	Denied	Field Cover Inspection
M Cavanaugh	8/8/01	Yes	Denied	Initial

Property Specifications	
K Cadwell - 8/8/01	Contractor: Bill Johnson
M Cavanaugh - 8/8/01	Septic Tank Size: 1000 gal
M Cavanaugh - 8/8/01	Pump Tank Size: 750 gal
M Cavanaugh - 8/8/01	Distance from Foundation: 10 ft
M Cavanaugh - 8/8/01	Total Lineal Feet: 504 ft
M Cavanaugh - 8/8/01	Width of Trench: 3 ft
M Cavanaugh - 8/8/01	Basal Area: 0 sq ft
M Cavanaugh - 8/8/01	Bed Area: 0 sq ft
M Cavanaugh - 8/8/01	Absorption Field Size: 1512 sq ft
M Cavanaugh - 8/8/01	Absorption Field Depth: 12 inches
M Cavanaugh - 8/8/01	Average Centers: 7.5 ft
M Cavanaugh - 8/8/01	Drainage Type: Perimeter
	47 inches
K Cadwell - 8/8/01	Required Square Footage: 1500 sq ft
M Cavanaugh - 8/8/01	Cover Material: Limestone
	Tile Type
	<input checked="" type="checkbox"/> Schedule 40
	<input checked="" type="checkbox"/> SDR 35
	<input type="checkbox"/> Tile Type Other
M Cavanaugh - 1/16/02	Average Field Cover: 12 inches
M Cavanaugh - 8/8/01	<input checked="" type="checkbox"/> Septic field properly located to permit specification
	<input type="checkbox"/> Sufficient gravity to distribution box
M Cavanaugh - 8/8/01	<input checked="" type="checkbox"/> Box properly placed and sealed
	<input type="checkbox"/> Well installed
	Distance from tank: 0 ft
	Distance from trenches: 0 ft



Inspected By	Date Inspected	Notes
M Cavanaugh	2/12/02	Pump and alarm installed.
M Cavanaugh	1/16/02	At least one foot of cover over the septic field.
M Cavanaugh	1/16/02	At least one foot of cover provided over the septic field. Need to inspect pump and alarm when installed.
M Cavanaugh	8/8/01	Pump and alarm not installed. Also, need to check final cover when complete.

Porter County Health Department  
Final Inspection Approval  
Township or Town: Jackson  
Release Applicable: Y/N  
Inspector: Cavanaugh

Inspector Name: Mary Cavanaugh

Date Inspected: 2/12/02



# Inspection Summary

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2005-0683

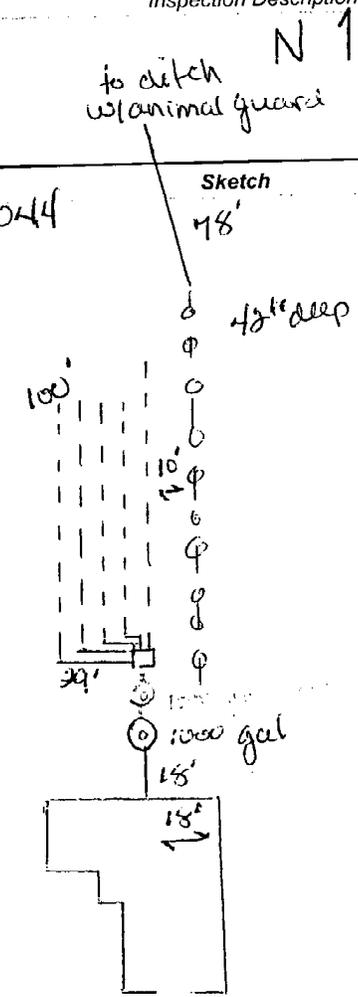
Well P2005-0684

Property Owner Name: Gore Realty Mel Gore  
Property Location: 505 Carriage Lane Rd

Date Submitted: 9/27/2005

Inspection Date	Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
	R Tarnow	9/28/2005	Yes	Denied		

Property Specifications	
R Tarnow - 9/27/2005	Contractor: Bill Johnson 241-8044
R Tarnow - 9/28/2005	Septic Tank Size: 1000 gal
	Pump Tank Size: 0 gal
R Tarnow - 9/28/2005	Distance from Foundation: 18 ft
R Tarnow - 9/28/2005	Total Lineal Feet: 500 ft
R Tarnow - 9/28/2005	Width of Trench: 3 ft
	Basal Area: 0 sq ft
	Bed Area: 0 sq ft
R Tarnow - 9/28/2005	Absorption Field Size: 1500 sq ft
R Tarnow - 9/28/2005	Absorption Field Depth: 12 inches
R Tarnow - 9/28/2005	Average Centers: 7.5 ft
R Tarnow - 9/28/2005	Drainage Type: Curtain
	42 inches
R Tarnow - 9/27/2005	Required Square Footage: 1500 sq ft
R Tarnow - 9/28/2005	Cover Material: Slag
	Tile Type
	<input type="checkbox"/> Schedule 4
	<input checked="" type="checkbox"/> SDR 35
	<input type="checkbox"/> Tile Type Other
	Average Field Cover: 0 inches
	<input type="checkbox"/> Septic field properly located to permit specifications
	<input type="checkbox"/> Sufficient gravity to distribution box
R Tarnow - 9/28/2005	<input checked="" type="checkbox"/> Box properly placed and sealed
	<input type="checkbox"/> Well Installed
	Distance from tank: 0 ft
	Distance from trenches: 0 ft



**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
R Tarnow	9/28/2005	Septic field and curtain drain installed per permit specifications. Pump tank and pump not installed, installer site plan did not show dosed system, revised site plan and permit specify dosing. Need pump tank installation, pump and pump alarm inspection and field cover check for final. Foundation installed only, well not installed at time of this inspection.

Inspector Name: R Allen Tarnow Date Inspected: 9-28-05 Approval: Granted/Denied: \_\_\_\_\_

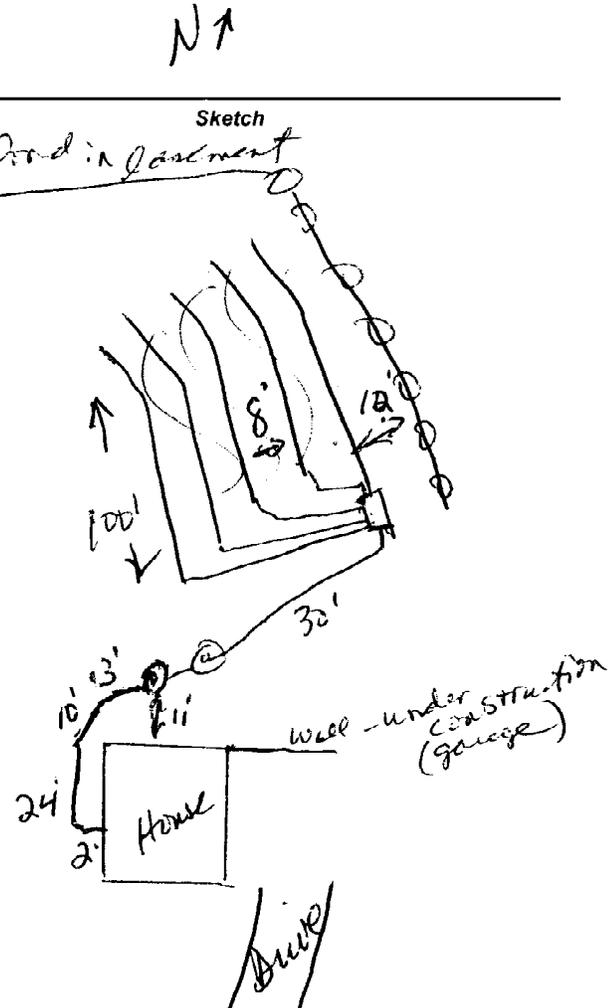


# Inspection Summary

Septic Permit     Well Permit     Repair Permit    Permit Number: Septic P2006-0669  
 Property Owner Name: Vickie Maupin    Well P2006-0670  
 Property Location: 507 Carriage Ln Westville IN 46391    Date Submitted: 12/11/2006

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavnah	12/12/2006	Yes	Denied	Initial	

Property Specifications	
J Martin - 12/11/2006	Contractor: Butch Riley
Cavnah - 12/12/2006	Septic Tank Size: 1000 gal
Cavnah - 12/12/2006	Pump Tank Size: 750 gal
Cavnah - 12/12/2006	Distance from Foundation: 11 ft
Cavnah - 12/12/2006	Total Lineal Feet: 500 ft
Cavnah - 12/12/2006	Width of Trench: 3 ft
	Basal Area: 0 sq ft
	Bed Area: 0 sq ft
Cavnah - 12/12/2006	Absorption Field Size: 1500 sq ft
Cavnah - 12/12/2006	Absorption Field Depth: 14 inches
Cavnah - 12/12/2006	Average Centers: 8.0 ft
Cavnah - 12/12/2006	Drainage Type: Curtain
	44 inches
J Martin - 12/11/2006	Required Square Footage: 1500 sq ft
Cavnah - 12/12/2006	Cover Material: Slag
	Tile Type
	<input checked="" type="checkbox"/> Schedule 4
	<input checked="" type="checkbox"/> SDR 35
	Tile Type Other
	Average Field Cover: 0 inches
Cavnah - 12/12/2006	<input checked="" type="checkbox"/> Septic field properly located to permit specifications
	Sufficient gravity to distribution box
Cavnah - 12/12/2006	<input checked="" type="checkbox"/> Box properly placed and sealed
	Well Installed
	Distance from tank: 0 ft
	Distance from trenches: 0 ft



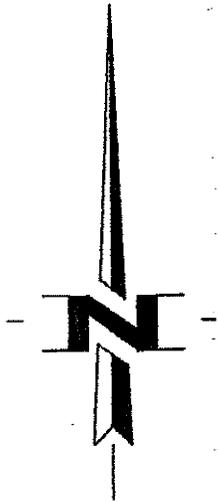
**Notes from Previous Inspections**  
 Inspected By: M Cavnah    Date Inspected: 12/12/2006    Notes: need second lid in pump tank. Need to check final cover and alarm installation. Curtain drain outlet to pond.

Inspector Name: *Mary Cavnah*

Date Inspected: *12-12-06*    Approval Granted/Denied:

outlet/runover.

QJM 11-3-80

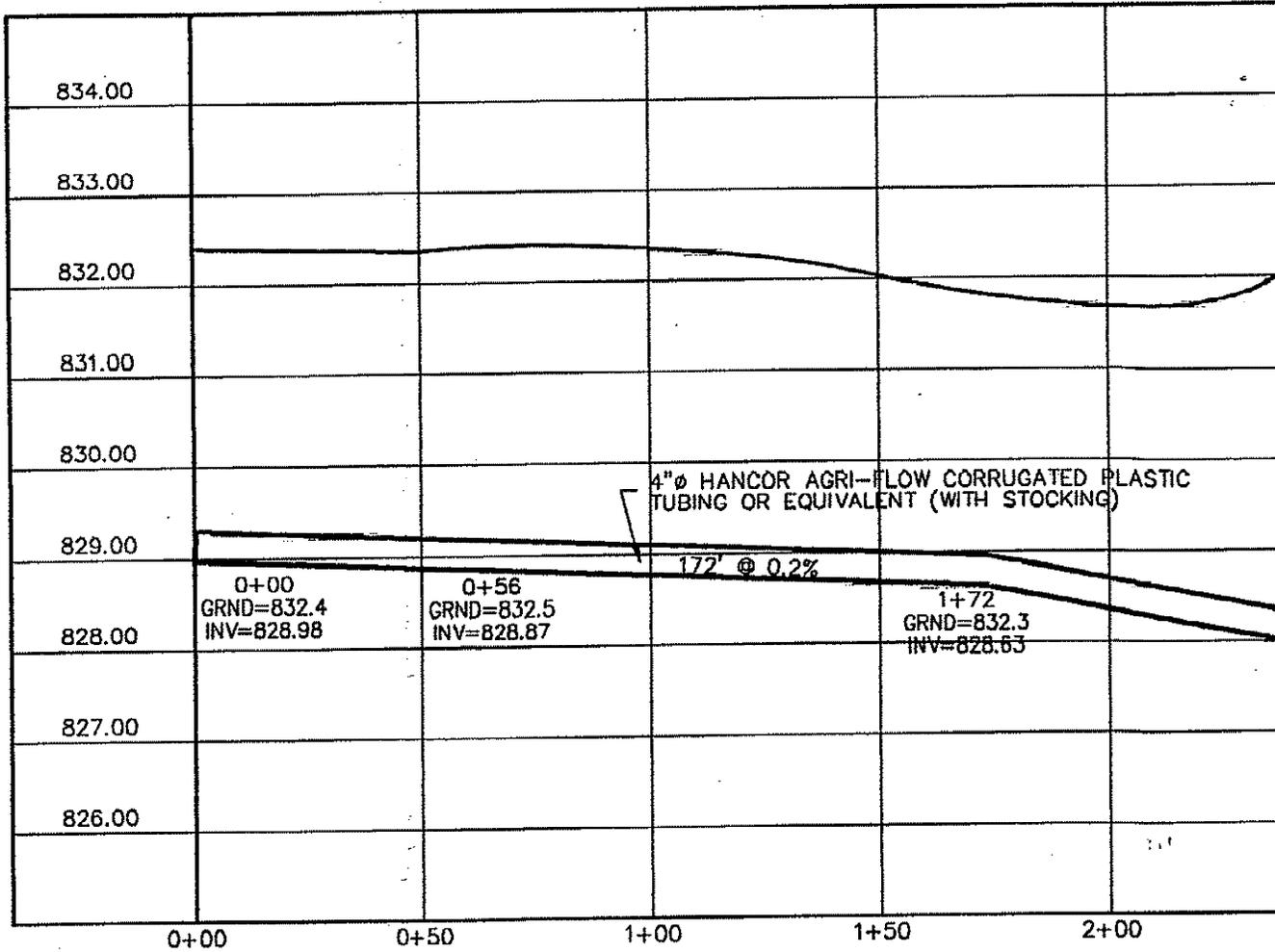


### GRAPHIC SCALE



( IN FEET )  
1 inch = 40 ft.

N BOX



ER STRUCTURE  
TION=831.6  
ELEV=826.3  
ELEV=826.4

DRONE

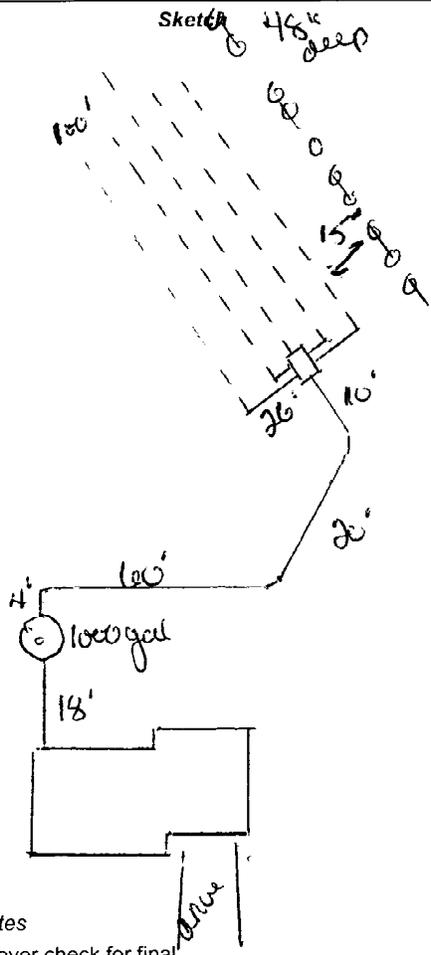
# Inspection Summary

Septic Permit   
  Well Permit   
 Repair Permit   
 Permit Number: Septic P2005-0290  
 Well P2005-0291  
 Property Owner Name: Gore Realty Mel Gore    Date Submitted: 7/21/2005  
 Property Location: 508 Carriage Ln Westville IN 46391

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
R Tarnow	7/22/2005	Yes	Denied	Initial to master tile

**Property Specifications**

- Contractor: Bill Johnson
- Septic Tank Size: 1000 gal
- Pump Tank Size: 0 gal
- Distance from Foundation: 18 ft
- Total Lineal Feet: 500 ft
- Width of Trench: 3 ft
- Basal Area: 0 sq ft
- Bed Area: 0 sq ft
- Absorption Field Size: 1500 sq ft
- Absorption Field Depth: 13 inches
- Average Centers: 7.5 ft
- Drainage Type: Curtain
- 48 inches
- Required Square Footage: 1500 sq ft
- Cover Material: Limestone
- Tile Type
  - Schedule 4
  - SDR 35
  - Tile Type Other
- Average Field Cover: 0 inches
- Septic field properly located to permit specifications
- Sufficient gravity to distribution box
- Box properly placed and sealed
- Well Installed
  - Distance from tank: 0 ft
  - Distance from trenches: 0 ft



**Notes from Previous Inspections**

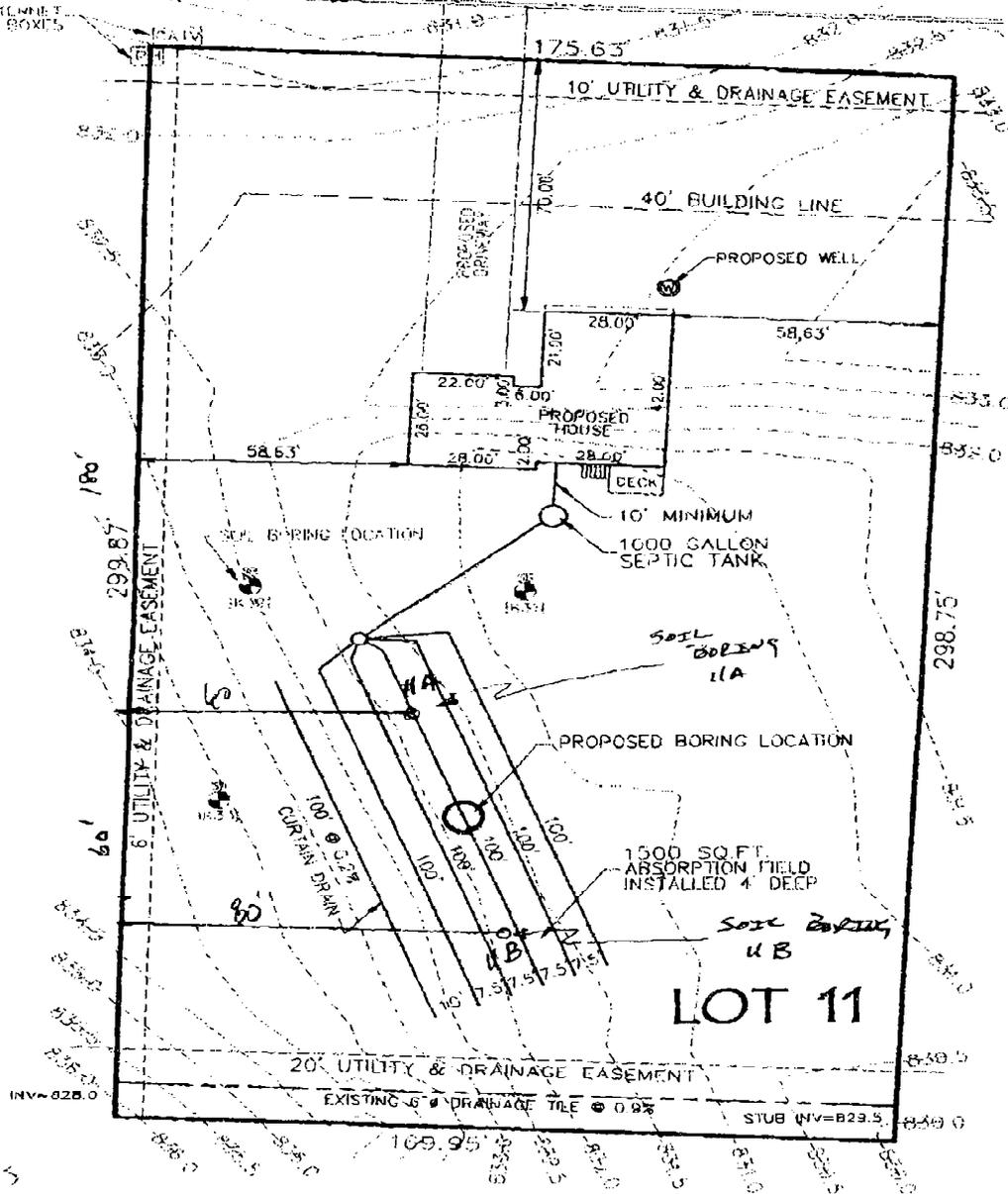
Inspected By	Date Inspected	Notes
R Tarnow	7/22/2005	Well not installed at time of this inspection. Need field cover check for final.

Inspector Name: *Ralph Tarnow*   
 Date Inspected: *7-22-05*   
 Approval Granted/Denied:

# CARRIAGE LANE ROAD

CURB INLET  
RIM ELEV=830.6  
NORTH INV=826.3

PHONE & INTERNET  
UTILITY BOXES



# Final Approval

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2008-0221

Property Owner Name: Gore Realty Mel Gore  
Property Location: 509 Carriage Ln Westville IN 46391

Well P2008-0222

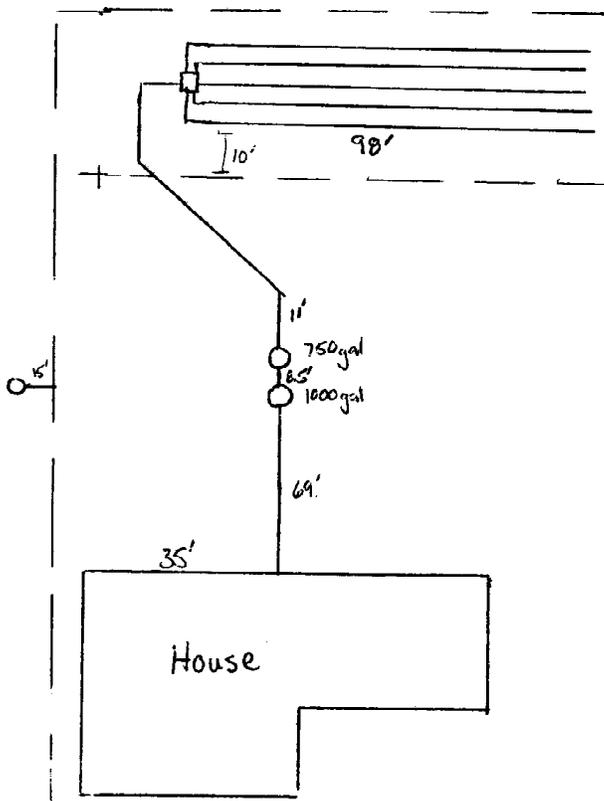
**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
D Boyd	1/28/2009	Yes	Approved	Field cover, pump, and alarm
D Boyd	7/24/2008	Yes	Denied	Initial

**Property Specifications**

< Cadwell - 7/24/2008	Contractor:	Bill Johnson
D Boyd - 7/24/2008	Septic Tank Size:	1000 gal
D Boyd - 7/24/2008	Pump Tank Size:	750 gal
D Boyd - 7/24/2008	Distance from Foundation:	69 ft
D Boyd - 7/24/2008	Total Lineal Feet:	500 ft
D Boyd - 7/24/2008	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
D Boyd - 7/24/2008	Absorption Field Size:	1500 sq ft
D Boyd - 7/24/2008	Absorption Field Depth:	15 inches
D Boyd - 7/24/2008	Average Centers:	7.5 ft
D Boyd - 7/24/2008	Drainage Type:	Perimeter
		50 inches
< Cadwell - 7/24/2008	Required Square Footage:	1500 sq ft
D Boyd - 7/24/2008	Cover Material:	Slag
	Tile Type	
	<input checked="" type="checkbox"/> Schedule 4	
	<input checked="" type="checkbox"/> SDR 35	
	Tile Type Othe	
	Average Field Cover	0 inches
D Boyd - 7/24/2008	<input checked="" type="checkbox"/> Septic field properly located to permit specifications	
	Sufficient gravity to distribution box	
D Boyd - 7/24/2008	<input checked="" type="checkbox"/> Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

**Sketch**



**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
D Boyd	1/28/2009	Alarm and pump installed properly. Ground was frozen, but it appear that there is sufficient field cover.
D Boyd	7/24/2008	Low area with a stormwater outlet, Check pump and field cover.

APPROVED  
DWB  
1/28/09

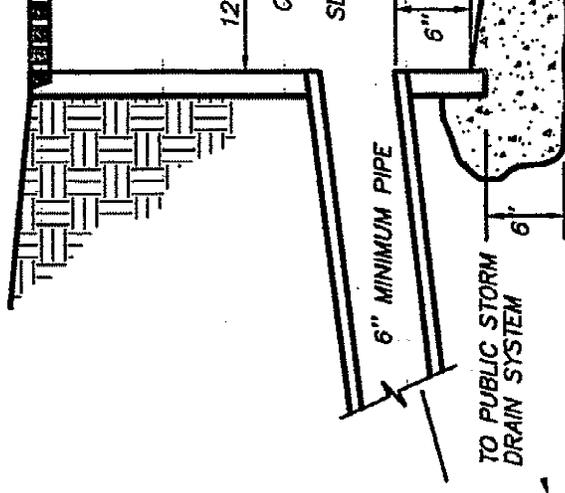
Inspector Name

*D W Boyd*

Date Inspected:

*1/28/09*

NEENAH DRAINAGE GRATE R-438  
OR R-4385, D&L C-1012, OR  
APPROVED EQUIVALENT



**NOTES:**

1. PORTLAND CEMENT CONCRETE (P.C.) 3000 PSI MIN. COMPRESSIVE STRENGTH. CURING CURE WITH SLUMP AT 1 TO 2 INCHES. SSPWC, SECTION 202.
2. TO BE OWNED AND MAINTAINED BY THE OWNER. USED IN DRIVEWAYS OR WHERE DRAINAGE IS SUBJECT TO VEHICULAR TRAFFIC.
3. INSTALL GREASE TRAP PER STANDARD SPECIFICATIONS.

PERIMETER DRAIN CONNECTION  
STA 1+30.82  
IE=828.48

6" HANCOR AGRI-FLOW CORRUGATED PLASTIC TUBING OR EQUIVALENT (WITH STOCKING)

131' ± @ -0.40%

830

INSTALL YARD DRAIN

EXISTING GROUND

DATUM ELEV  
820.00

829.00

832.5

828.80

832.9

828.60

0+00

1+00

**YARD DRAIN TILE PROFILE**

HORIZONTAL 1"=50' VERTICAL 1"=5'

**APPROVED**

Insp. [Signature]  
Date 6/2/08

T18  
INCLUDED

840

# Final Approval

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2007-0400  
Well P2007-0401

Property Owner Name: Chris & Jennifer Coen  
Property Location: 512 Carriage Lane Rd Westville IN 46391

**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial
M Cavnah	10/26/2007	Yes	Approved	

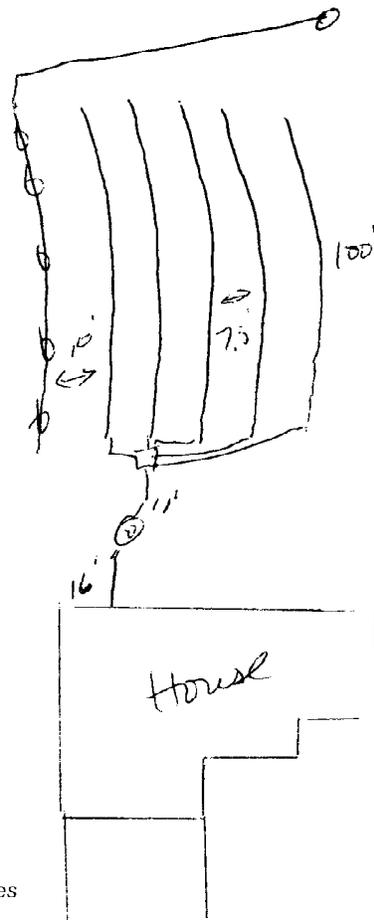
Inspection Description

N ↓

**Property Specifications**

Cavnah - 10/26/2007	Contractor:	Bill Griffey
Cavnah - 10/26/2007	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
Cavnah - 10/26/2007	Distance from Foundation:	16 ft
Cavnah - 10/26/2007	Total Lineal Feet:	500 ft
Cavnah - 10/26/2007	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
Cavnah - 10/26/2007	Absorption Field Size:	1500 sq ft
Cavnah - 10/26/2007	Absorption Field Depth:	19 inches
Cavnah - 10/26/2007	Average Centers:	7.5 ft
Cavnah - 10/26/2007	Drainage Type:	Curtain
		55 inches
Cavnah - 10/26/2007	Required Square Footage:	1500 sq ft
Cavnah - 10/26/2007	Cover Material:	Limestone
	Tile Type	
	✓ Schedule 4	
	SDR 35	
	Tile Type Othe	
	Average Field Cover	0 inches
Cavnah - 10/26/2007	✓ Septic field properly located to permit specifications	
Cavnah - 10/26/2007	✓ Sufficient gravity to distribution box	
Cavnah - 10/26/2007	✓ Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

**Sketch**



Notes

**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
M Cavnah	10/26/2007	Septic installed according to specifications.

Inspector Name

*Mary Cavnah*

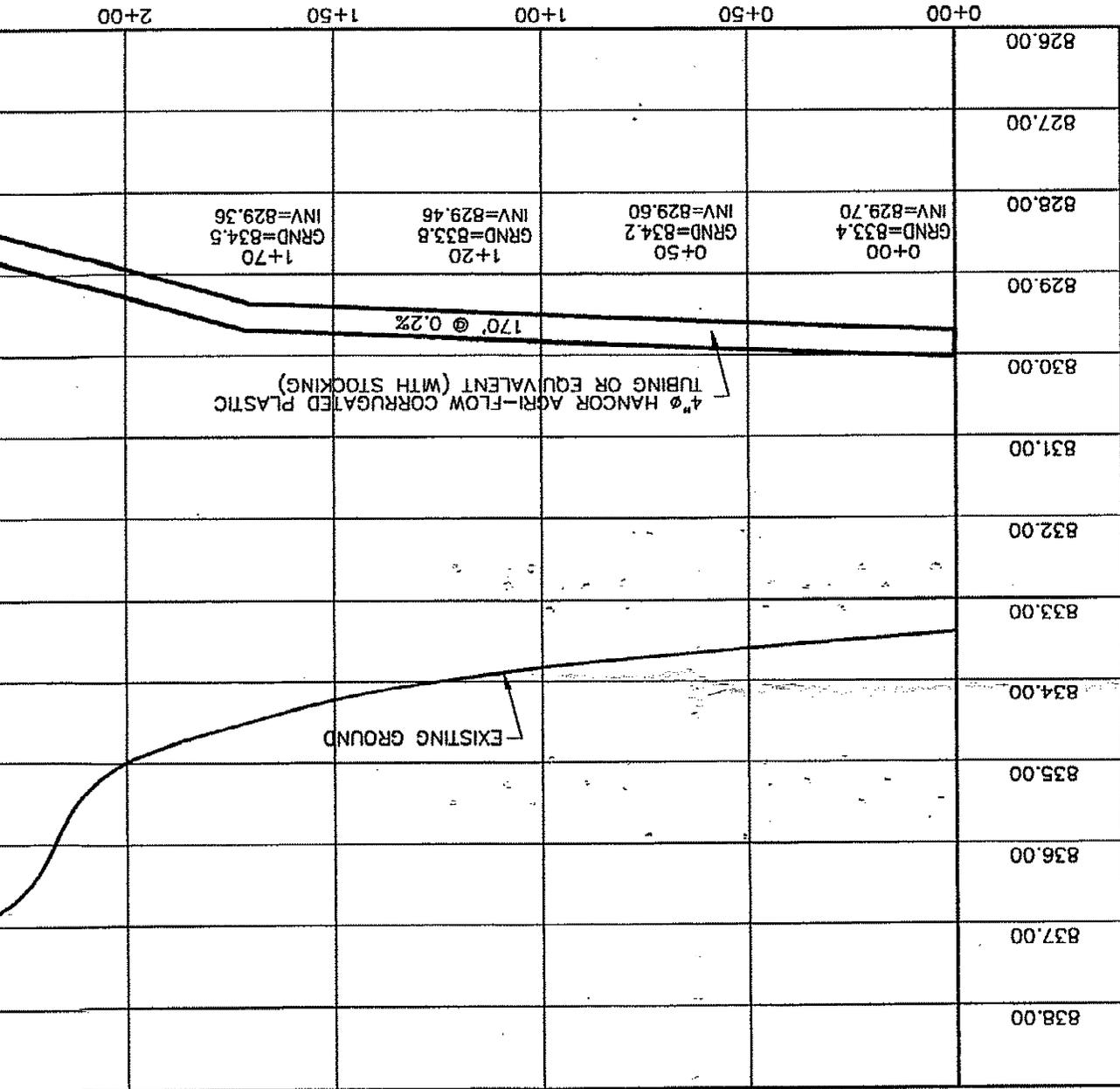
Date Inspected: 10/26/07





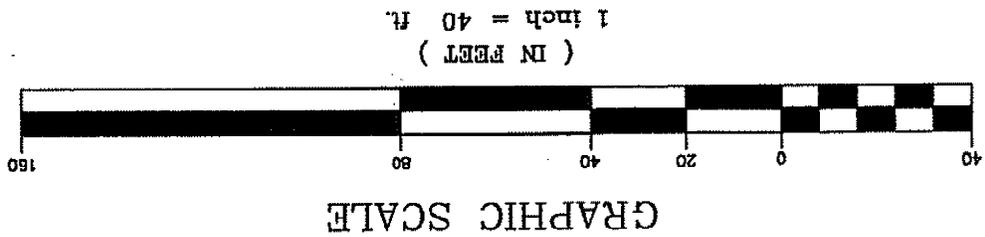
MATCH EXISTING  
STORM SEWER  
3+43  
INV=826.91F

PROFILE  
SCALE: HORIZ 1"=40' VERT 1"=4'



DISTRIBUTION BOX  
1+70  
GRND=834.5  
INV=829.36

436.84



835

# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2008-0358

Property Owner Name: Jesse & Kim Harty

Well P2008-0359

Property Location: 516 Carriage Ln Westville IN 46391

Date Submitted: 1/6/2009

**Inspection Date**

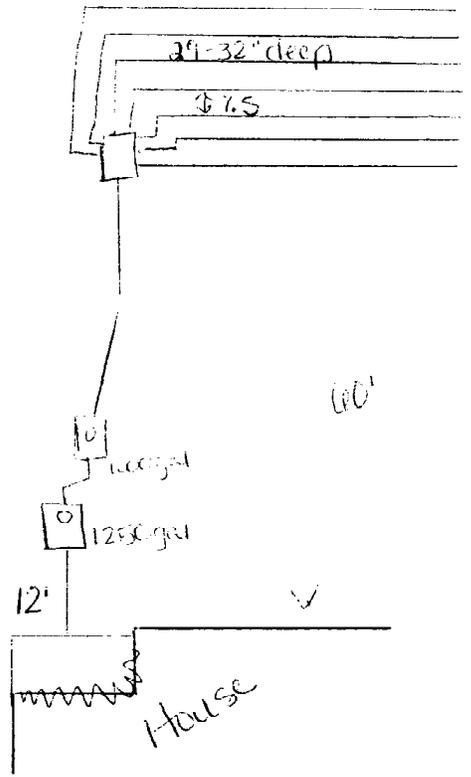
Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
J Martin	1/5/2009	Yes	Denied	tanks
J Martin	12/31/2008	Yes	Denied	Initial

**Property Specifications**

405-8654

**Sketch**

J Martin - 12/30/2008	Contractor:	Perkins
J Martin - 1/5/2009	Septic Tank Size:	1250 gal
J Martin - 1/5/2009	Pump Tank Size:	1000 gal
J Martin - 1/5/2009	Distance from Foundation:	12 ft
J Martin - 12/31/2008	Total Lineal Feet:	667 ft
J Martin - 12/31/2008	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
J Martin - 12/31/2008	Absorption Field Size:	2000 sq ft
J Martin - 12/31/2008	Absorption Field Depth:	29 inches
J Martin - 12/31/2008	Average Centers:	7.5 ft
J Martin - 12/31/2008	Drainage Type:	Not Required
J Martin - 12/30/2008	Required Square Footage:	2000 sq ft
J Martin - 12/31/2008	Cover Material:	Slag
	<b>Tile Type</b>	
	Schedule 4	
	✓ SDR 35	
	Tile Type Othe	
	Average Field Cover	0 inches
J Martin - 12/31/2008	✓ Septic field properly located to permit specifications	
	Sufficient gravity to distribution box	
J Martin - 12/31/2008	Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft



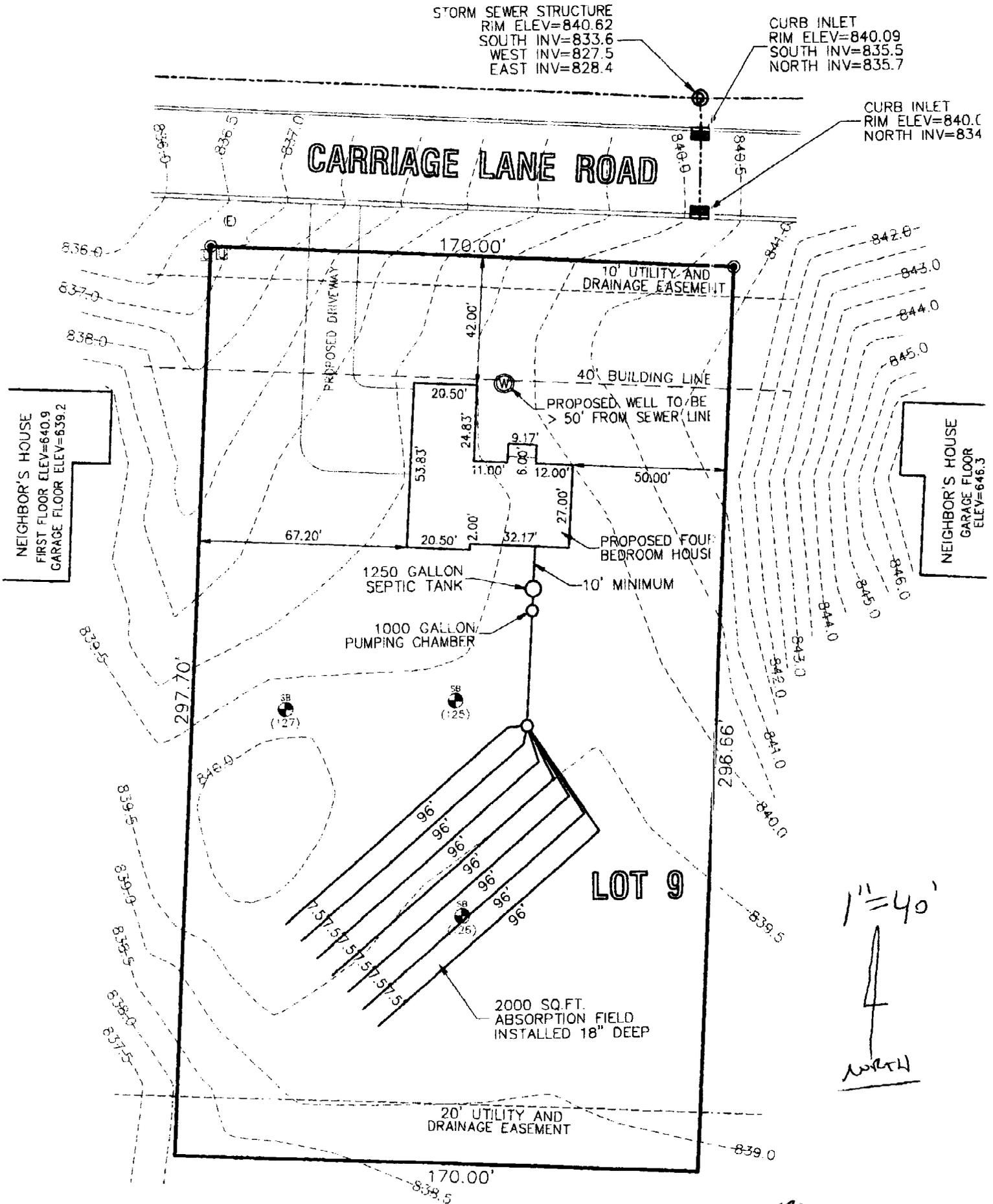
**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
J Martin	1/5/2009	Needs alarm inspection.
J Martin	12/31/2008	Need tank inspection.

Inspector Name

Date Inspected:

Approval Granted/Denied:



# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2005-0458

Property Owner Name: Gore Realty Mel Gore  
Property Location: 517 Carriage Lane Rd Westville IN 46391

Well P2005-0459  
Date Submitted: 8/12/2005

**Inspection Date**

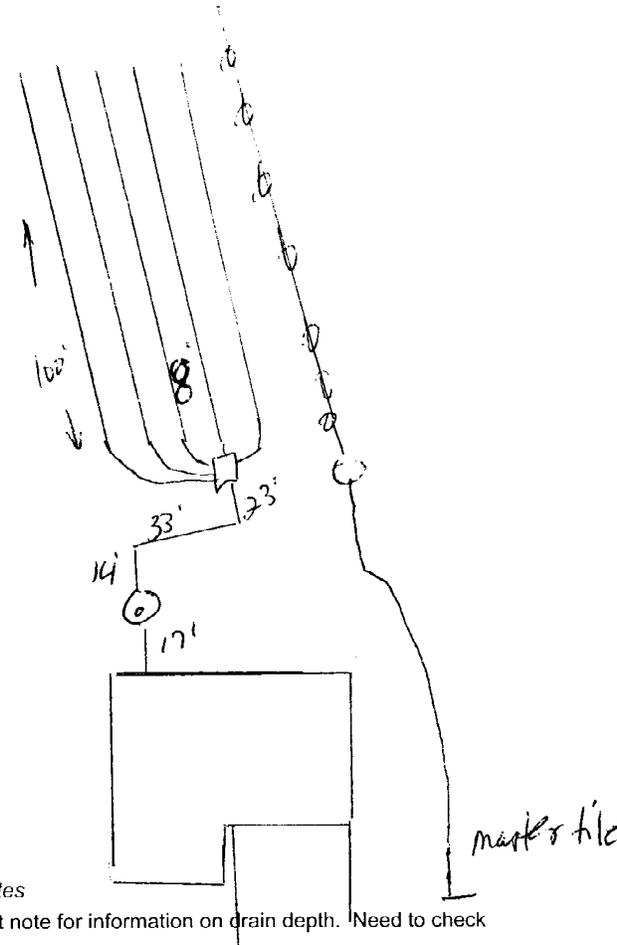
Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavnah	8/12/2005	Yes	Denied		

NA

**Property Specifications**

- ✓ M Cavnah - 8/12/2005 Contractor: Bill Johnson
- ✓ M Cavnah - 8/12/2005 Septic Tank Size: 1000 gal
- ✓ M Cavnah - 8/12/2005 Pump Tank Size: 0 gal
- ✓ M Cavnah - 8/12/2005 Distance from Foundation: 17 ft
- ✓ M Cavnah - 8/12/2005 Total Lineal Feet: 500 ft
- ✓ M Cavnah - 8/12/2005 Width of Trench: 3 ft
- Basal Area: 0 sq ft
- Bed Area: 0 sq ft
- ✓ M Cavnah - 8/12/2005 Absorption Field Size: 1500 sq ft
- ✓ M Cavnah - 8/12/2005 Absorption Field Depth: 14 inches
- ✓ M Cavnah - 8/12/2005 Average Centers: 8.0 ft
- ✓ M Cavnah - 8/12/2005 Drainage Type: Curtain
  
- ✓ M Cavnah - 8/12/2005 Required Square Footage: 1500 sq ft
- ✓ M Cavnah - 8/12/2005 Cover Material: Slag
- Tile Type
  - ✓ Schedule 4
  - ✓ SDR 35
  - Tile Type Othe
- Average Field Cover: 0 inches
- ✓ M Cavnah - 8/12/2005 ✓ Septic field properly located to permit specifications
- ✓ M Cavnah - 8/12/2005 ✓ Sufficient gravity to distribution box
- ✓ M Cavnah - 8/12/2005 ✓ Box properly placed and sealed
- Well Installed
  - Distance from tank: 0 ft
  - Distance from trenches: 0 ft

**Sketch**



**Notes**

**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
M Cavnah	8/12/2005	Could not measure drain depth, backfilled with slag. Left note for information on drain depth. Need to check final cover.

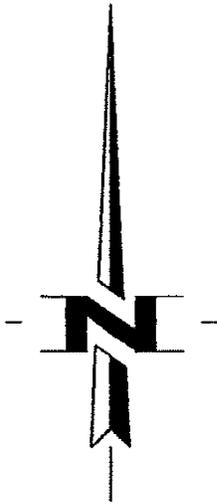
Inspector Name

*Mary Cavnah*

Date Inspected:

*8.12.05*

Approval Granted/Denied:

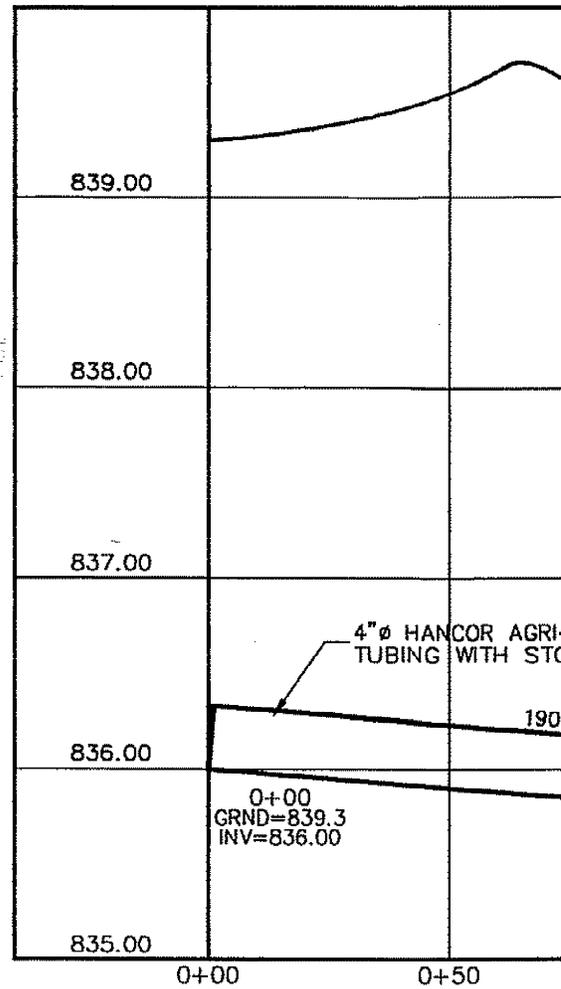


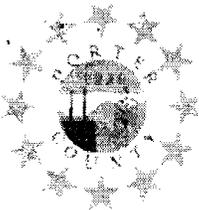
GRAPHIC SCALE



( IN FEET )  
1 inch = 40 ft.

CURTAIN





# Final Approval

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2004-0901  
Well P2004-0902

Property Owner Name: Gore Realty Mel Gore  
Property Location: 520 Carriage Ln Westville IN 46391

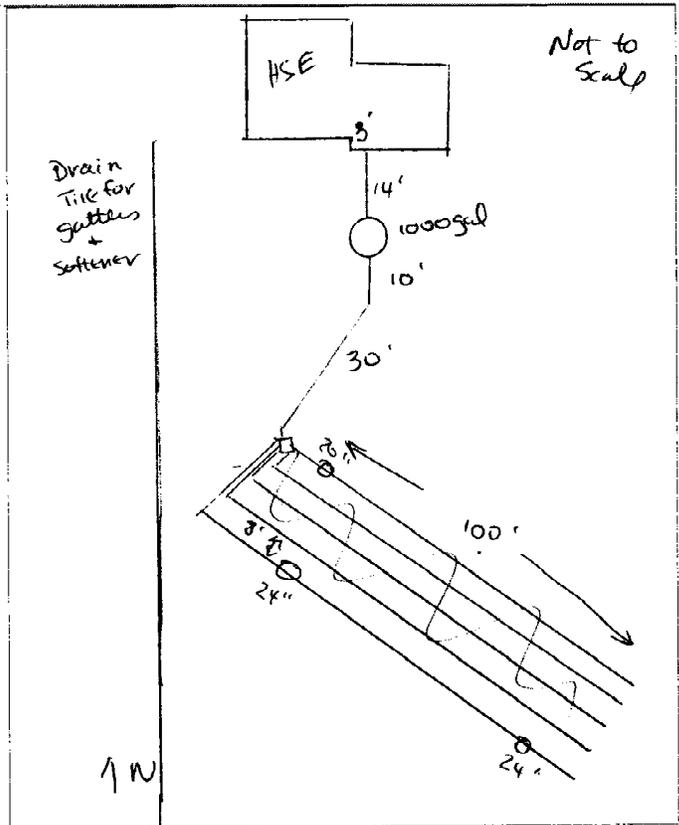
### Inspection Date

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
K Cadwell	11/22/04	Yes	Approved	Initial

### Property Specifications

M Cavnah - 11/22/04	Contractor	Bill Johnson
K Cadwell - 11/22/04	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
K Cadwell - 11/22/04	Distance from Foundation:	14 ft
K Cadwell - 11/22/04	Total Lineal Feet:	500 ft
K Cadwell - 11/22/04	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
K Cadwell - 11/22/04	Absorption Field Size:	1500 sq ft
K Cadwell - 11/22/04	Absorption Field Depth:	24 inches
K Cadwell - 11/22/04	Average Centers:	8.0 f
K Cadwell - 11/22/04	Drainage Type:	Not Required
M Cavnah - 11/22/04	Required Square Footage:	1500 sq ft
K Cadwell - 11/22/04	Cover Material:	Slag
	Tile Typ	
	<input checked="" type="checkbox"/> Schedule 4	
	<input checked="" type="checkbox"/> SDR 35	
	<input type="checkbox"/> Tile Type Othe	
	Average Field Cover	0 inches
K Cadwell - 11/22/04	<input checked="" type="checkbox"/> Septic field properly located to permit specification	
K Cadwell - 11/22/04	<input checked="" type="checkbox"/> Sufficient gravity to distribution box	
K Cadwell - 11/22/04	<input checked="" type="checkbox"/> Box properly placed and sealed	
	<input type="checkbox"/> Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

### Sketch



### Notes from Previous Inspection

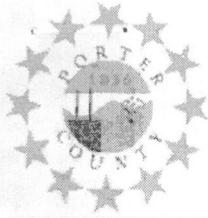
Inspected By	Date Inspected	Notes
K Cadwell	11/22/04	

Porter County Health Department  
 Final Inspection Approval  
 Township or Town: Jackson  
 Release Authority: [Signature]  
 Inspector: [Signature]

Inspector Name

Date Inspected: 11/22/04





# Inspection Summary

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2004-0903

Property Owner Name: Gore Reality Mel Gore

Well P2004-0904

Property Location: 521 Carriage Ln Westville IN 46391

Date Submitted: 11/24/04

**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavnah	11/24/04	No	Denied		Initial

**Property Specifications**

**Sketch**

M Cavnah - 11/24/04 Contractor: Bill Johnson

M Cavnah - 11/24/04 Septic Tank Size: 1000 gal

M Cavnah - 11/24/04 Pump Tank Size: 0 gal

M Cavnah - 11/24/04 Distance from Foundation: 14 ft

M Cavnah - 11/24/04 Total Lineal Feet: 500 ft

M Cavnah - 11/24/04 Width of Trench: 30 ft

M Cavnah - 11/24/04 Basal Area: 0 sq ft

M Cavnah - 11/24/04 Bed Area: 0 sq ft

M Cavnah - 11/24/04 Absorption Field Size: 1500 sq ft

M Cavnah - 11/24/04 Absorption Field Depth: 14 inches

M Cavnah - 11/24/04 Average Centers: 7.5 ft

M Cavnah - 11/24/04 Drainage Type: Perimeter

M Cavnah - 11/24/04 Required Square Footage: 50 inches

M Cavnah - 11/24/04 Cover Material: 1500 sq ft Slag

**Tile Typ**

Schedule 4

SDR 35

Tile Type Othe

Average Field Cover: 0 inches

M Cavnah - 11/24/04  Septic field properly located to permit specification

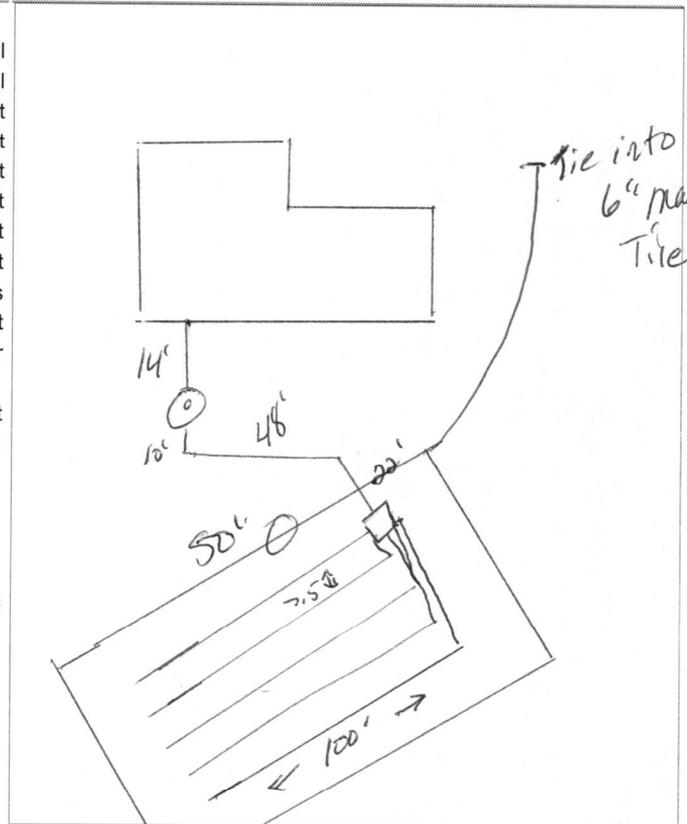
M Cavnah - 11/24/04  Sufficient gravity to distribution box

M Cavnah - 11/24/04  Box properly placed and sealed

Well Installed

Distance from tank: 0 ft

Distance from trenches: 0 ft



**Notes**

**Notes from Previous Inspection**

Inspected By	Date Inspected	Notes
M Cavnah	11/24/04	Septic installed according to specifications. Need to check final cover.

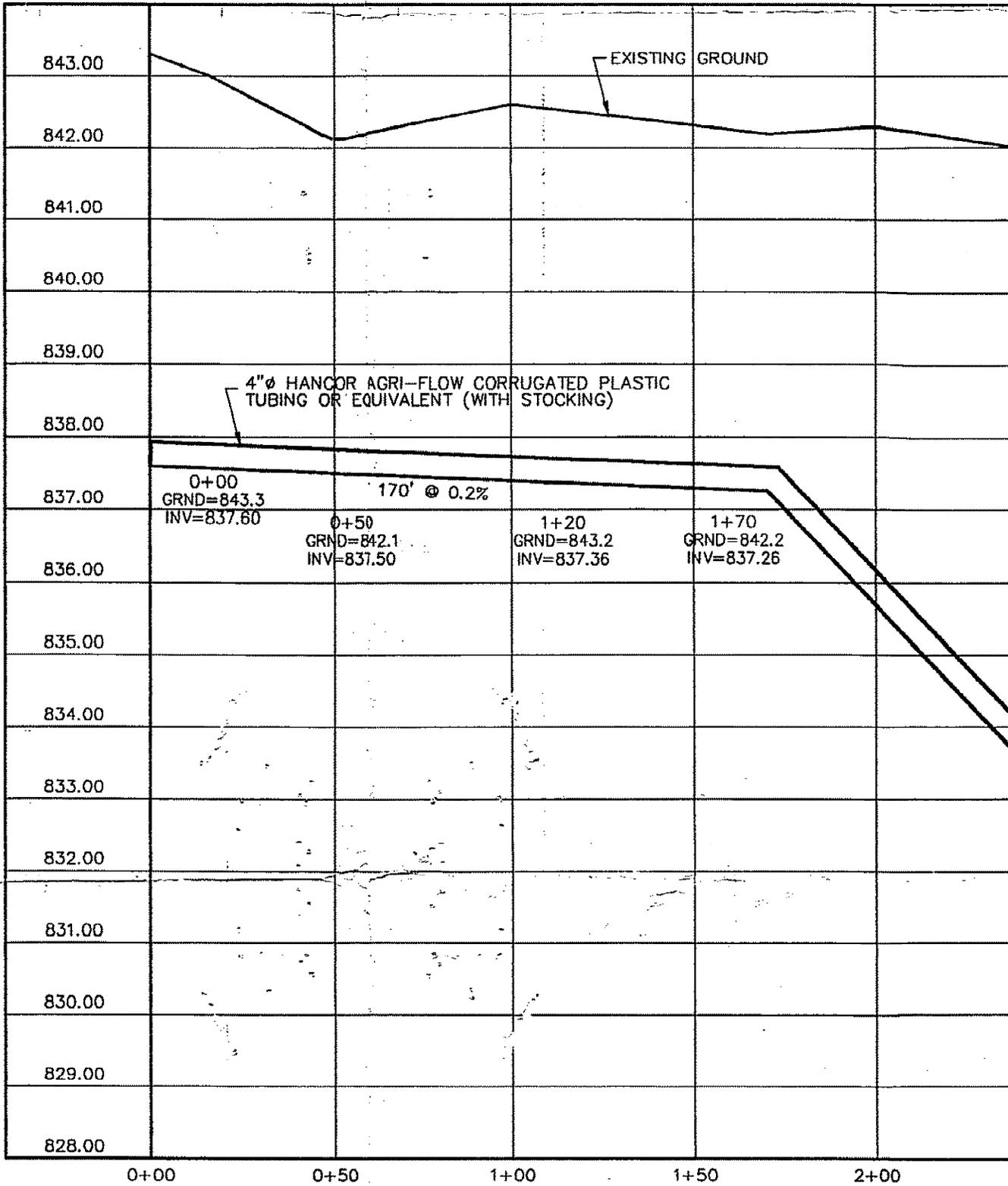
*R Turner 5-4-05 16" cover approved - green cover left @ site*

Inspector Name: Mary Cavnah Date Inspected: 11-24-04 Approval  Granted / Denied: 5-4-05  
*R Turner*

# GRAPHIC SCALE



( IN FEET )  
1 inch = 40 ft.



# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2003-0575

Well P2003-0576

Property Owner Name: Gore Really Mel Gore  
Property Location: 524 Carriage Ln Westville IN 46391

Date Submitted: 01/14/04

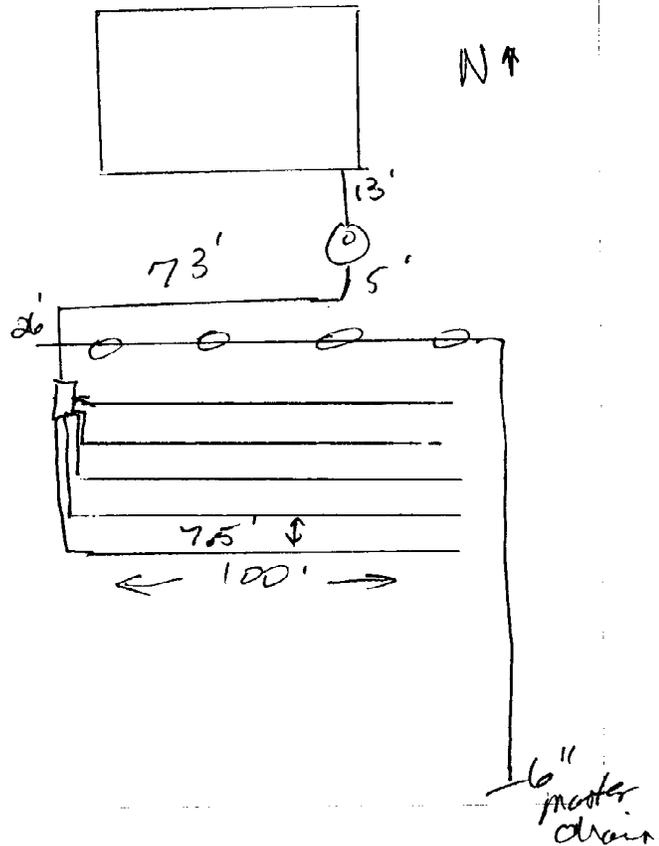
**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavnah	01/14/04	No	Denied		Initial

**Property Specifications**

**Sketch**

M Cavnah - 01/14/04 Contractor: Bill Johnson  
M Cavnah - 01/14/04 Septic Tank Size: 1000 gal  
M Cavnah - 01/14/04 Pump Tank Size: 0 gal  
M Cavnah - 01/14/04 Distance from Foundation: 13 ft  
M Cavnah - 01/14/04 Total Lineal Feet: 500 ft  
M Cavnah - 01/14/04 Width of Trench: 3 ft  
M Cavnah - 01/14/04 Basal Area: 0 sq ft  
M Cavnah - 01/14/04 Bed Area: 0 sq ft  
M Cavnah - 01/14/04 Absorption Field Size: 1500 sq ft  
M Cavnah - 01/14/04 Absorption Field Depth: 14 inches  
M Cavnah - 01/14/04 Average Centers: 7.5 ft  
M Cavnah - 01/14/04 Drainage Type: Curtain  
50 inches  
M Cavnah - 01/14/04 Required Square Footage: 1500 sq ft  
M Cavnah - 01/14/04 Cover Material: Slag  
Tile Typ  
✓ Schedule 4  
✓ SDR 35  
Tile Type Othe  
Average Field Cover: 0 inches  
M Cavnah - 01/14/04 ✓ Septic field properly located to permit specification  
M Cavnah - 01/14/04 ✓ Sufficient gravity to distribution box  
M Cavnah - 01/14/04 ✓ Box properly placed and sealed  
Well Installed  
Distance from tank: 0 ft  
Distance from trenches: 0 ft



**Notes from Previous Inspection**

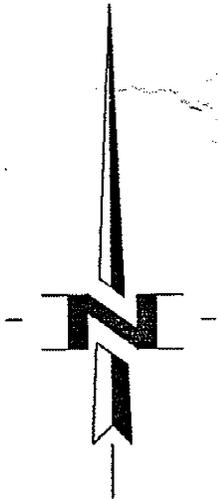
Inspected By	Date Inspected	Notes
M Cavnah	01/14/04	Need to check final cover.

Inspector Name

*Mary Cavnah*

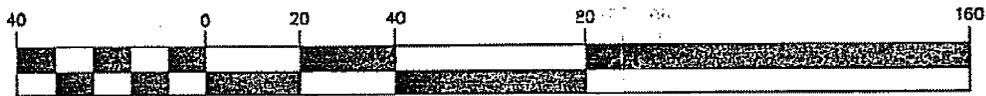
Date Inspected: 1-14-04

Approval Granted/Denied:



CURTAIN

GRAPHIC SCALE

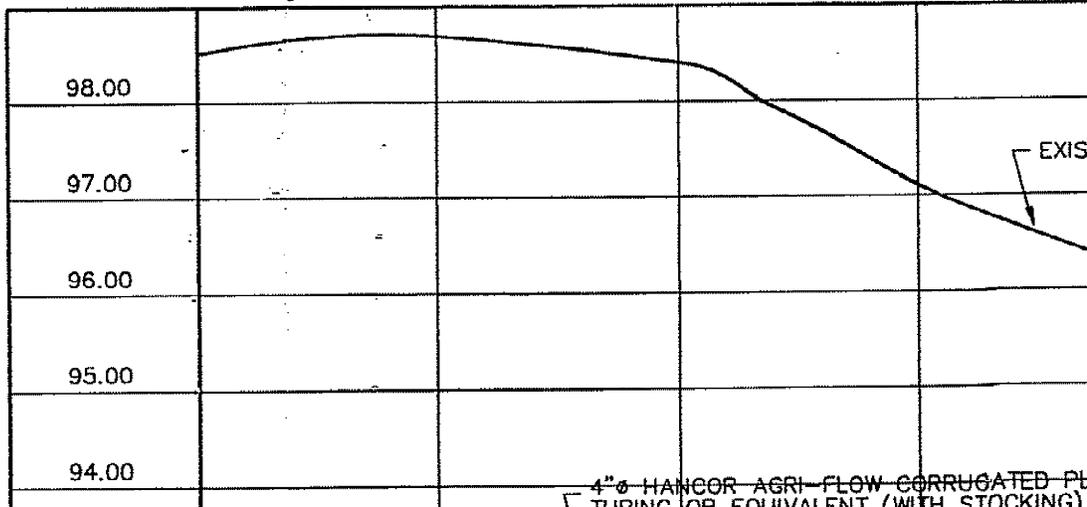


( IN FEET )  
1 inch = 40 ft.

**APPROVED**  
 Insp. *James Wolf*  
 Date: *7-14-03*

CH EXISTING  
DRAINAGE TILE

77±  
89.92



4" HANGOR AGRI-FLOW CORRUGATED PL  
 TYPING OR EQUIVALENT (WITH STOCKING)

# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2005-0292

Property Owner Name Mel Gore

Well P2005-0293

Property Location: 525 Carriage Ln Westville IN 46391

Date Submitted: 7/25/2005

**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial
R Tarnow	7/25/2005	Yes	Denied	Initial

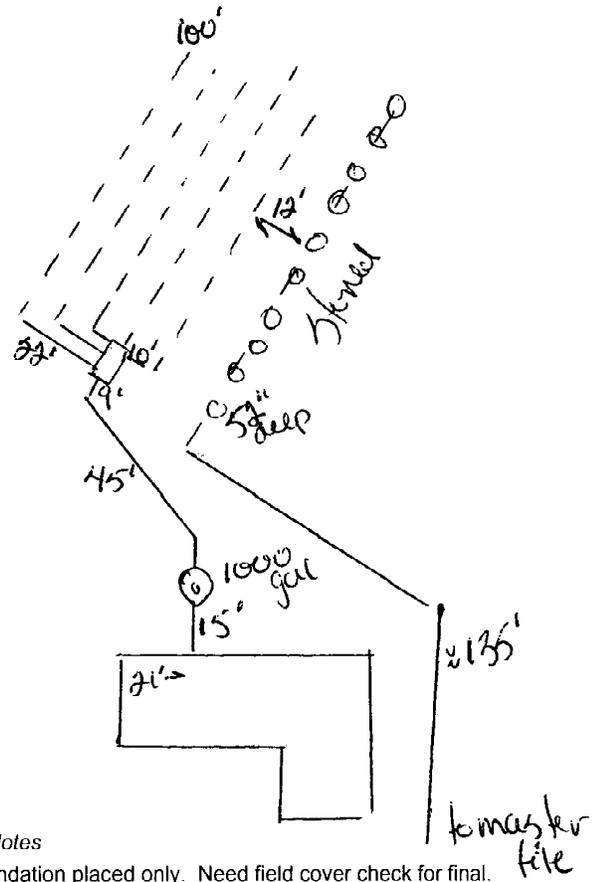
Inspection Description

1 N

**Property Specifications**

**Sketch**

M Cavnah - 7/25/2005	Contractor:	Bill Johnson
R Tarnow - 7/25/2005	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
R Tarnow - 7/25/2005	Distance from Foundation:	15 ft
R Tarnow - 7/25/2005	Total Lineal Feet:	500 ft
R Tarnow - 7/25/2005	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
R Tarnow - 7/25/2005	Absorption Field Size:	1500 sq ft
R Tarnow - 7/25/2005	Absorption Field Depth:	14 inches
R Tarnow - 7/25/2005	Average Centers:	7.5 ft
R Tarnow - 7/25/2005	Drainage Type:	Curtain
		52 inches
M Cavnah - 7/25/2005	Required Square Footage:	1500 sq ft
R Tarnow - 7/25/2005	Cover Material:	Slag
	Tile Type	
	✓ Schedule 4	
	✓ SDR 35	
	Tile Type Other	
	Average Field Cover	0 inches
R Tarnow - 7/25/2005	✓ Septic field properly located to permit specifications	
R Tarnow - 7/25/2005	✓ Sufficient gravity to distribution box	
R Tarnow - 7/25/2005	✓ Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

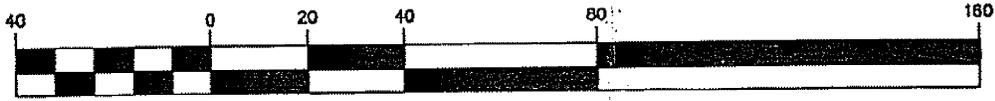


**Notes from Previous Inspections**

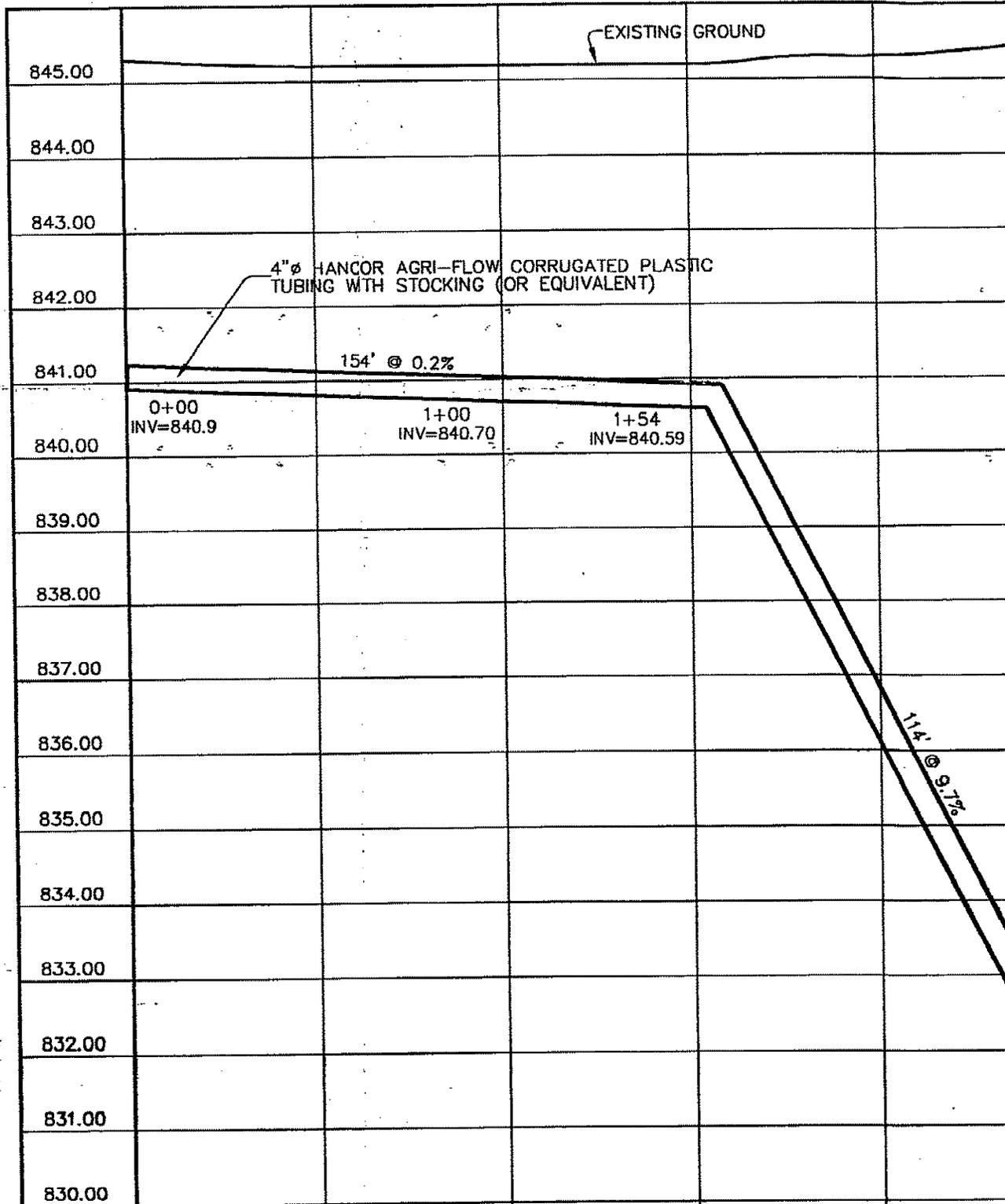
Inspected By	Date Inspected	Notes
R Tarnow	7/25/2005	Well not installed at time of this inspection. House foundation placed only. Need field cover check for final.

Inspector Name *Ralph F. Tarnow* Date Inspected: *7-25-05* Approval Granted/Denied:

# GRAPHIC SCALE



( IN FEET )  
1 inch = 40 ft.



STRUCTURE  
N=846.00  
N=830.62

Permit Number 00-37  
Master tile

Required Sq. Footage 15005 ft

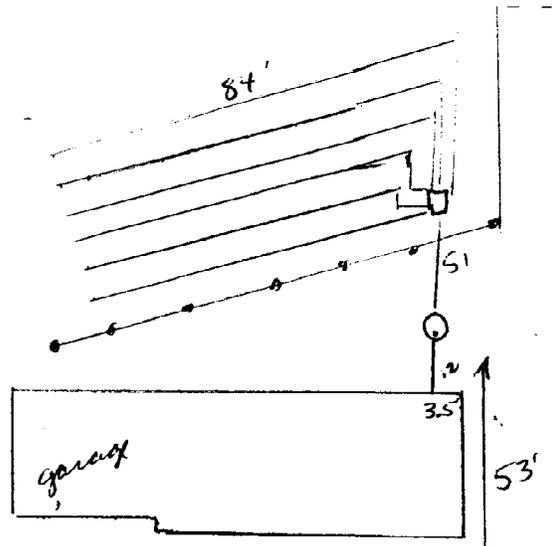
Contractor Bill Johnson

Applicant Core Realty

Location Carriage Hills Lot 6

528 Carriage Lane Rd - Westville

Septic Tank Size 1000 gal  
 Pump Tank Size \_\_\_\_\_  
 Distance From Foundation 12'  
 Total Lineal Ft 504'  
 Width of Trench 3'  
 Total Sq. Footage 1512 #  
 Avg. Centers 7.5  
 Avg. Depth of Trench 16"  
 Avg. Depth of Drainage 48"  
 Cover Material Slag  
 Tile Type PVC Plastic



Is septic field properly located to permit specs?   
 Is there sufficient gravity to distribution box?   
 Is the box properly placed and sealed?   
 Was the well installed?   
 Distance from tank 53' from trenches >53'  
 Was notification left at site?   
 Is re-inspection required?

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

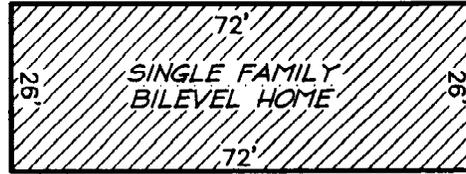
Porter County Health Department  
 Final Inspection Approval  
 Towns of or Town Jackson  
 Release Applicable Y  
 Inspector D. S. [Signature]

APPROVAL GRANTED Field 6/21/00 cover 6/29/00 APPROVAL DENIED \_\_\_\_\_

Additional Comments: System installed according to permit specifications 6/29/00 Rechecked cover over system > 12" Avg

Date Inspected 6/29/00

Inspector [Signature]

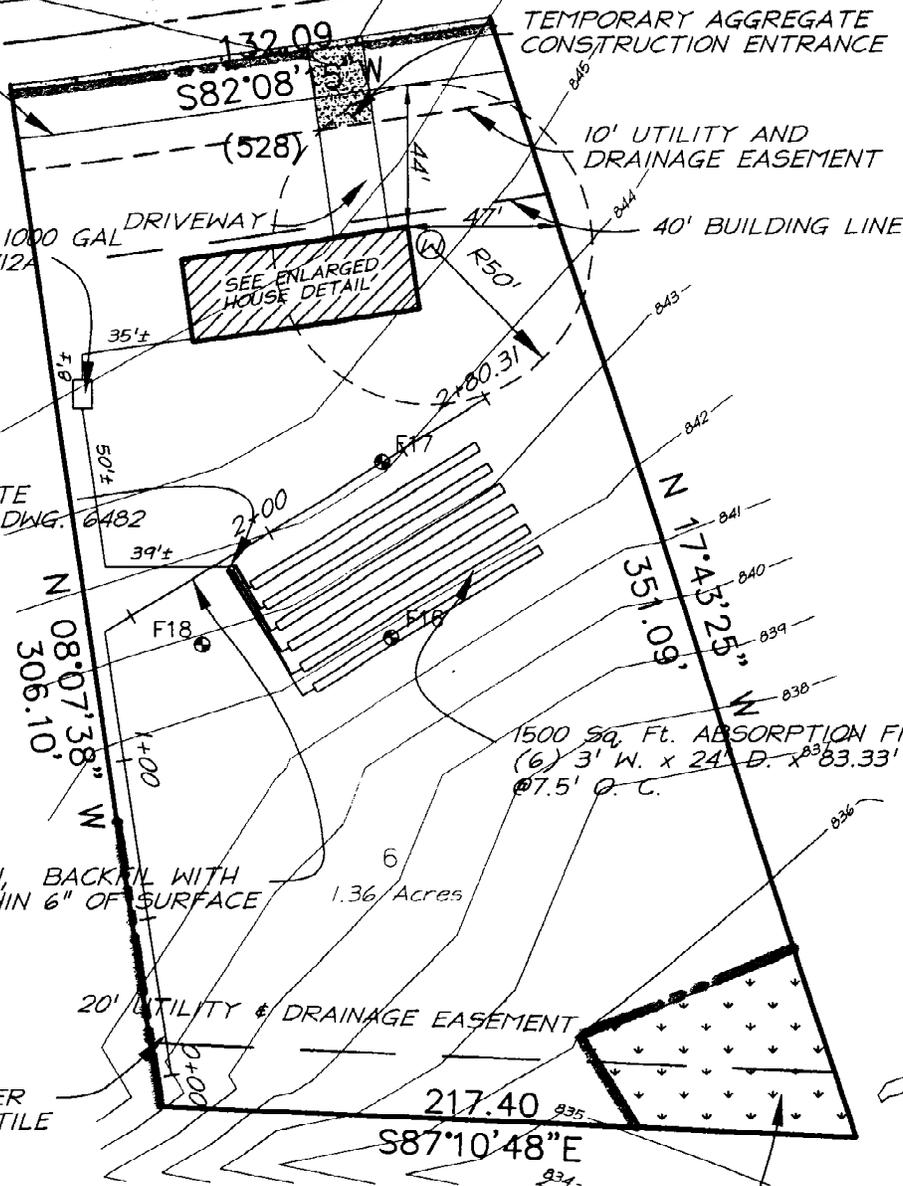


N. T. S.

CARRIAGE LANE ROAD 60' R/W  
(CR 920 N.)

N83°22'20"E  
22.84  
02°28'10"  
530.00  
22.84

HARTFORD CONCRETE 1000 GAL  
SEPTIC TANK DWG. 6712A



HARTFORD CONCRETE  
DISTRIBUTION BOX DWG. 6482

4" PERIMETER DRAIN, BACKFILL WITH  
AGGREGATE TO WITHIN 6" OF SURFACE

CONNECT TO MASTER  
PERIMETER DRAIN TILE

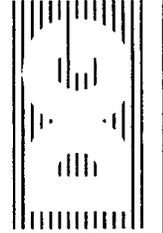
WETLAND AREA - DELINEATED BY  
J.F. NEW & ASSOCIATES, INC.  
JFNA FILE# 99-01-08

**NOTES**

- SOIL BORING
- SILT FENCE
- ALL GRAVITY SEWERS TO BE 4" PVC ASTM-D-2665

DATE	2/15/00
SCALE	1"=60'
DRAWN	BAF / DGI
PROJECT	1198.008
SHEET	1

**DUNELAND GROUP**  
ENGINEERING & SURVEYING  
220 BROADWAY  
CHESTERTON, INDIANA 46304  
219-926-1007 fax 219-926-1544  
E-MAIL duneland\_group@yahoo.com



BY	REVISIONS

**CARRIAGE HILLS  
LOT 6**

# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2006-0470

Property Owner Name Gore Realty Mel Gore

Well P2006-0471

Property Location: 529 Carriage Ln Westville IN 46391

Date Submitted: 8/9/2006

**Inspection Date**

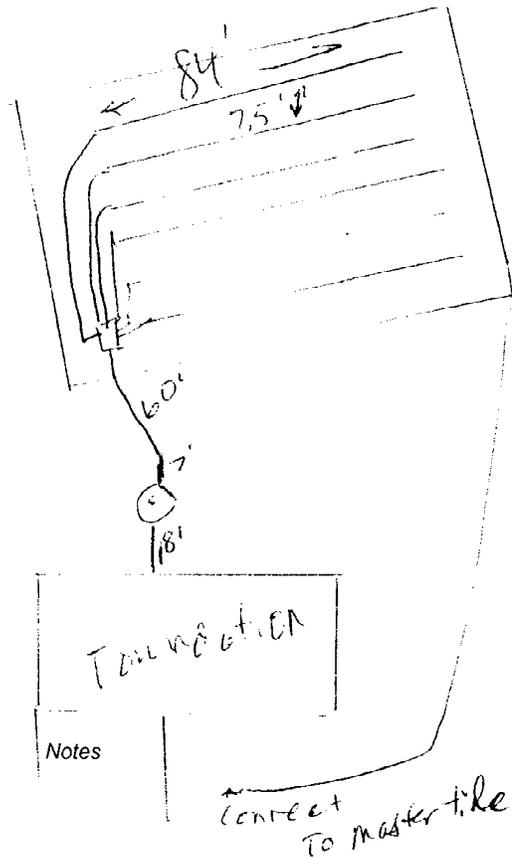
Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavnah	8/10/2006	Yes	Denied	Initial	

*Wd*

**Property Specifications**

**Sketch**

M Cavnah - 8/9/2006	Contractor:	Bill Johnson
✓ M Cavnah - 8/10/2006	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
✓ M Cavnah - 8/10/2006	Distance from Foundation:	18 ft
✓ M Cavnah - 8/10/2006	Total Lineal Feet:	504 ft
✓ M Cavnah - 8/10/2006	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
✓ M Cavnah - 8/10/2006	Absorption Field Size:	1512 sq ft
✓ M Cavnah - 8/10/2006	Absorption Field Depth:	10 inches
✓ M Cavnah - 8/10/2006	Average Centers:	7.5 ft
✓ M Cavnah - 8/10/2006	Drainage Type:	Perimeter
		48 inches
M Cavnah - 8/9/2006	Required Square Footage:	1500 sq ft
✓ M Cavnah - 8/10/2006	Cover Material:	Limestone
	<b>Tile Type</b>	
	✓ Schedule 4	
	✓ SDR 35	
	Tile Type Othe	
	Average Field Cover	0 inches
✓ M Cavnah - 8/10/2006	✓ Septic field properly located to permit specifications	
✓ M Cavnah - 8/10/2006	✓ Sufficient gravity to distribution box	
✓ M Cavnah - 8/10/2006	✓ Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft



**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
M Cavnah	8/10/2006	need to check final cover.

Inspector Name

*Mary Cavnah*

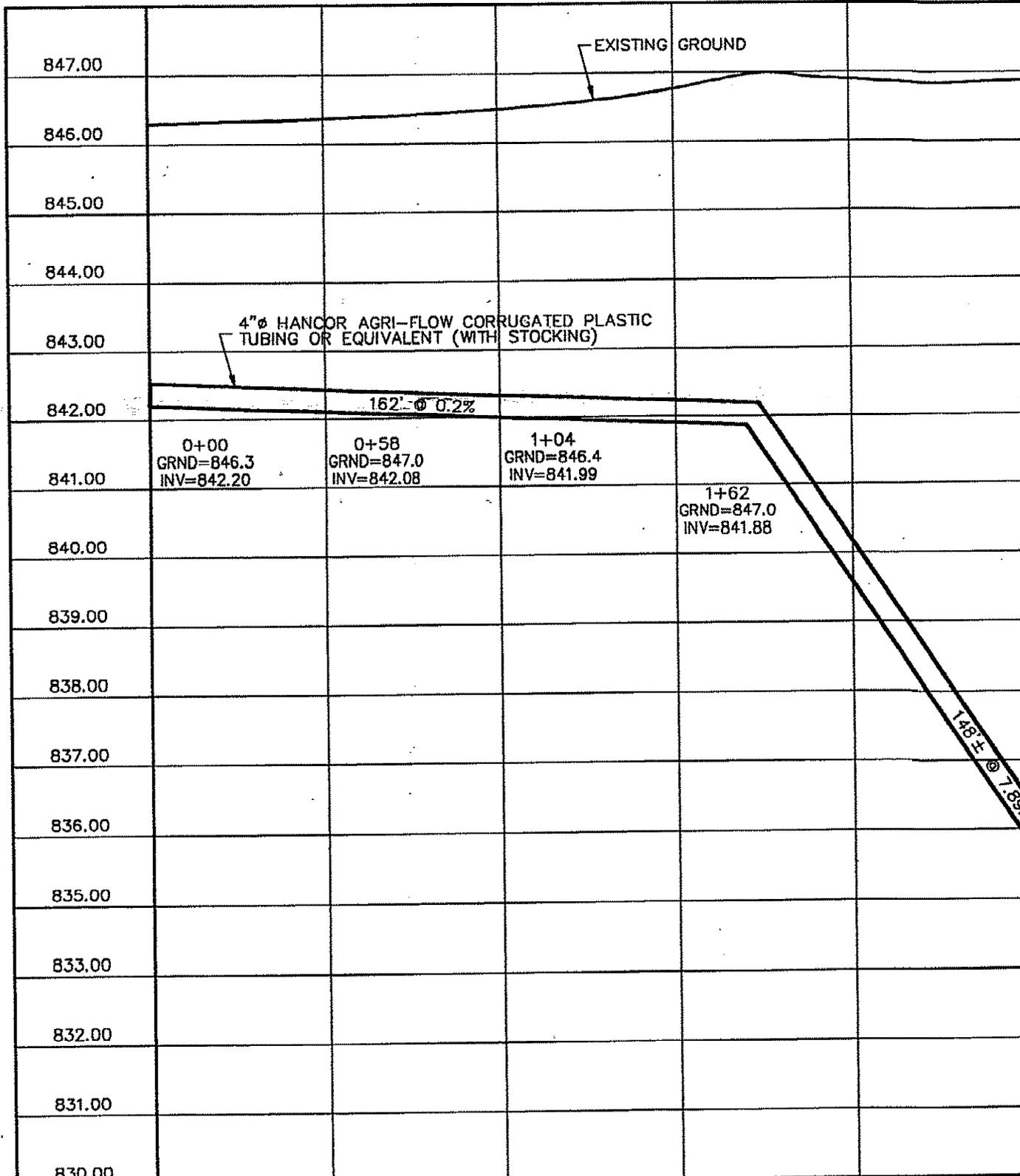
Date Inspected:

Approval Granted/Denied:

# GRAPHIC SCALE



( IN FEET )  
1 inch = 40 ft.



Ø PIPE FOUND  
OF PROPOSED STOOP

# Final Approval

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2008-0223

Property Owner Name: Gore Realty Mel Gore

Well P2008-0224

Property Location: 535 Carriage Ln Westville IN 46391

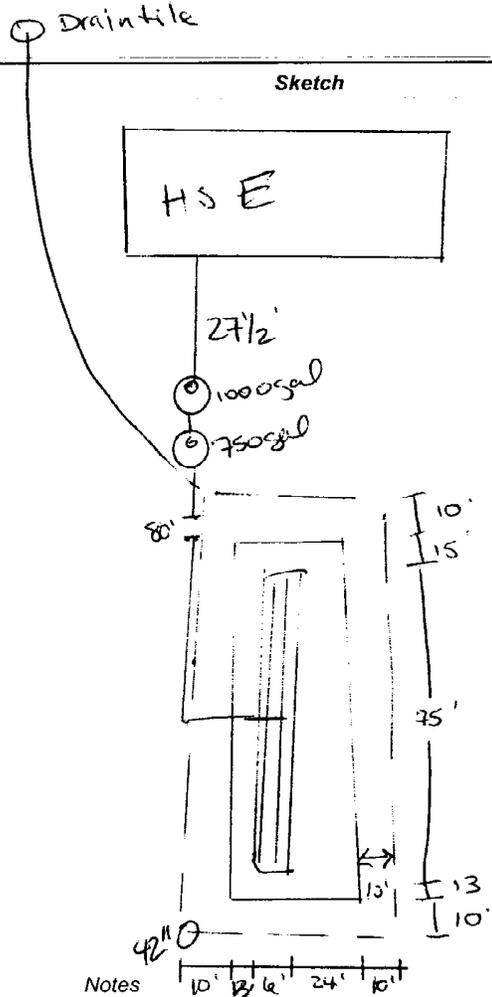
**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Inspection Description
D Boyd	1/28/2009	Yes	Approved	Final cover, pump and alarm
K Cadwell	8/14/2008	No	Denied	2nd Mound Inspection
K Cadwell	8/6/2008	Yes	Denied	Initial

**Property Specifications**

K Cadwell - 8/6/2008	Contractor:	Bill Johnson
K Cadwell - 8/6/2008	Septic Tank Size:	1000 gal
K Cadwell - 8/6/2008	Pump Tank Size:	750 gal
K Cadwell - 8/6/2008	Distance from Foundation:	12 ft
	Total Lineal Feet:	0 ft
	Width of Trench:	0 ft
< Cadwell - 8/14/2008	Basal Area:	1800 sq ft
< Cadwell - 8/14/2008	Bed Area:	375 sq ft
	Absorption Field Size:	0 sq ft
	Absorption Field Depth:	0 inches
	Average Centers:	0.0 ft
< Cadwell - 8/14/2008	Drainage Type:	Perimeter
		42 inches
K Cadwell - 8/6/2008	Required Square Footage:	1800 sq ft
< Cadwell - 8/14/2008	Cover Material:	Limestone
	Tile Type	
	<input checked="" type="checkbox"/> Schedule 4	
	<input checked="" type="checkbox"/> SDR 35	
	Tile Type Other	
	Average Field Cover	0 inches
< Cadwell - 8/14/2008	<input checked="" type="checkbox"/> Septic field properly located to permit specifications	
	<input type="checkbox"/> Sufficient gravity to distribution box	
	<input type="checkbox"/> Box properly placed and sealed	
	Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

**Sketch**



Notes: 10' 12' 12' 24' 10'  
30'

**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
D Boyd	1/28/2009	Alarm and pump installed properly. Appears to have sufficient field cover, ground was frozen.
K Cadwell	8/14/2008	Needs final cover, pump and alarm.
K Cadwell	8/6/2008	Plow area 36' x 87'.

Delivery line = 2" }  
Lateral = 1 1/4" } K9C  
Manifold = 2" }

NV  
Not to Scale

**APPROVED**

Insp. KJC  
Date 1/29/09

Inspector Name

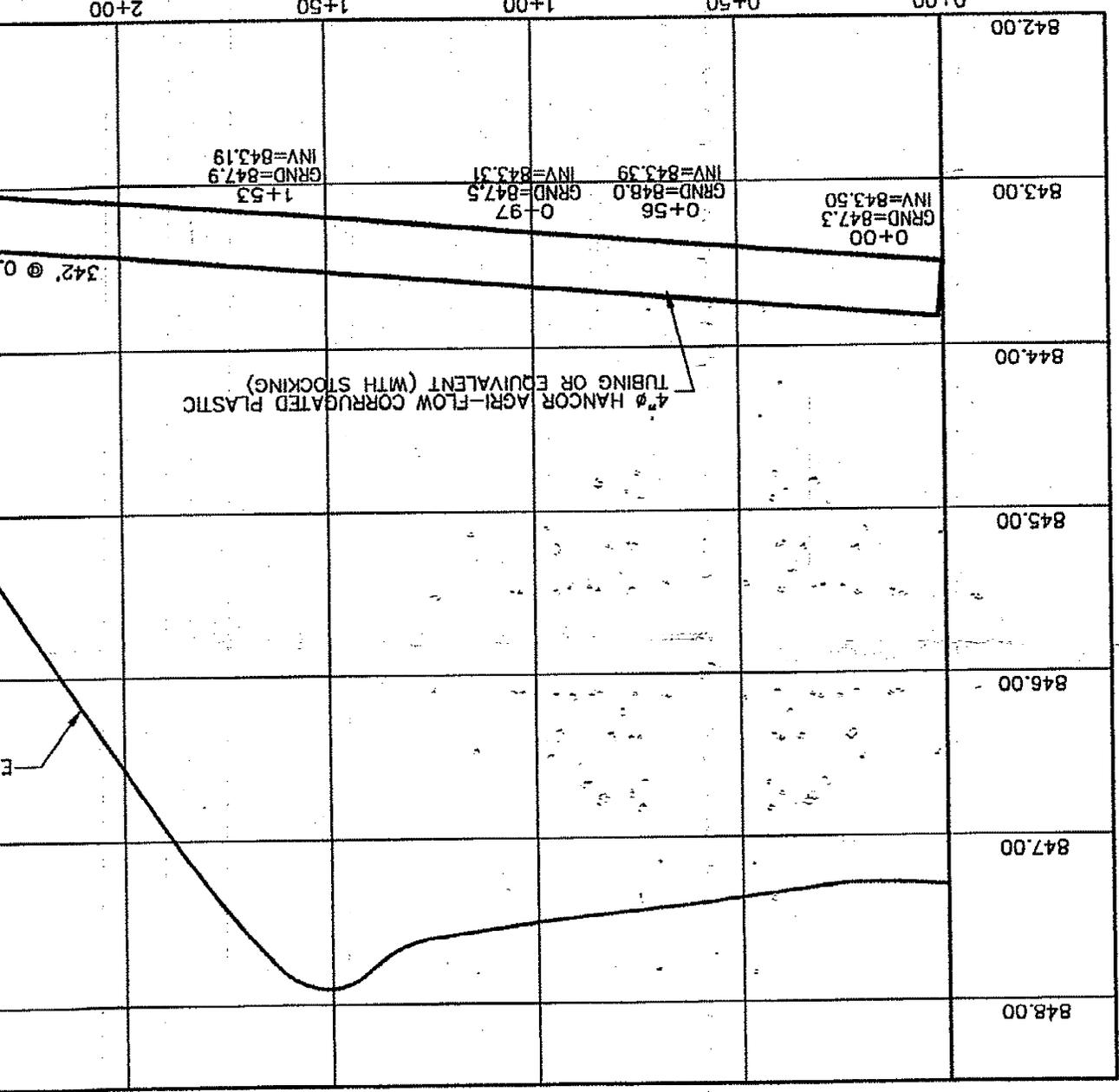
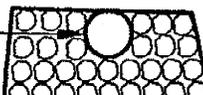
*[Handwritten Signature]*

Date Inspected: 1/29/09

H LIES  
10 F.  
T LINE  
AREA  
NTERALS  
RT  
OLD

PERIMETER DRAIN TRENCH

4" HANCOR AGRI-FLOW  
CORRUGATED PLASTIC  
TUBING OR EQUIVALENT  
(WITH STOCKING)



PERIMETER DRAIN

SCALE: HORIZ 1"=40'

684

ER BOX

35

847

Permit Number 00-38'

Required Sq. Footage 1500

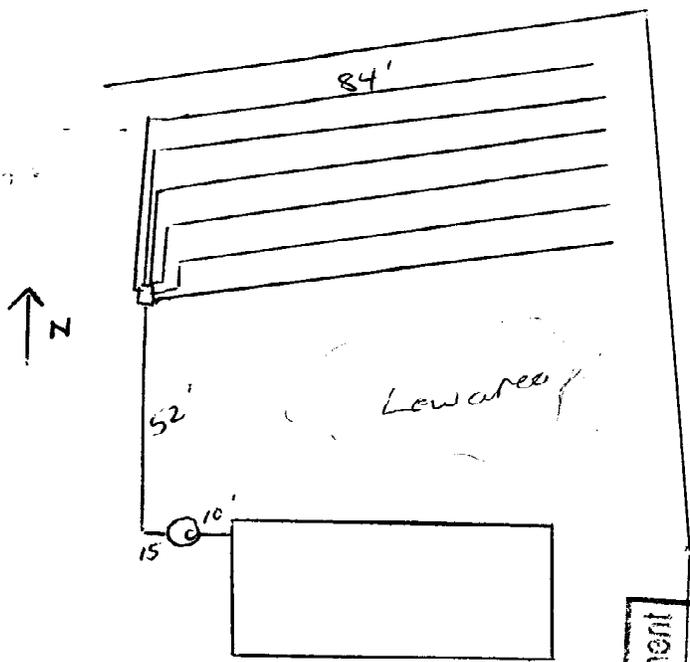
Contractor Bill Johnson

Applicant Gore Realty

Location Carriage Hills

539 Carriage Lane Rd  
Westville 10705

Septic Tank Size 1000 gal  
 Pump Tank Size —  
 Distance From Foundation 10'  
 Total Lineal Ft 504'  
 Width of Trench 3'  
 Total Sq. Footage 1512 ft  
 Avg. Centers 9'  
 Avg. Depth of Trench 24"-30"  
 Avg. Depth of Drainage ~80"  
 Cover Material Slag  
 Tile Type PK Plastic



Is septic field properly located to permit specs?   
 Is there sufficient gravity to distribution box?   
 Is the box properly placed and sealed?   
 Was the well installed?   
 Distance from tank \_\_\_\_\_ from trenches \_\_\_\_\_  
 Was notification left at site?   
 Is re-inspection required?

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Porter County Health Department  
 Final Inspection Approval  
 Township or Town \_\_\_\_\_  
 Release Applicable  
 Inspector [Signature]

APPROVAL GRANTED 7/19/00

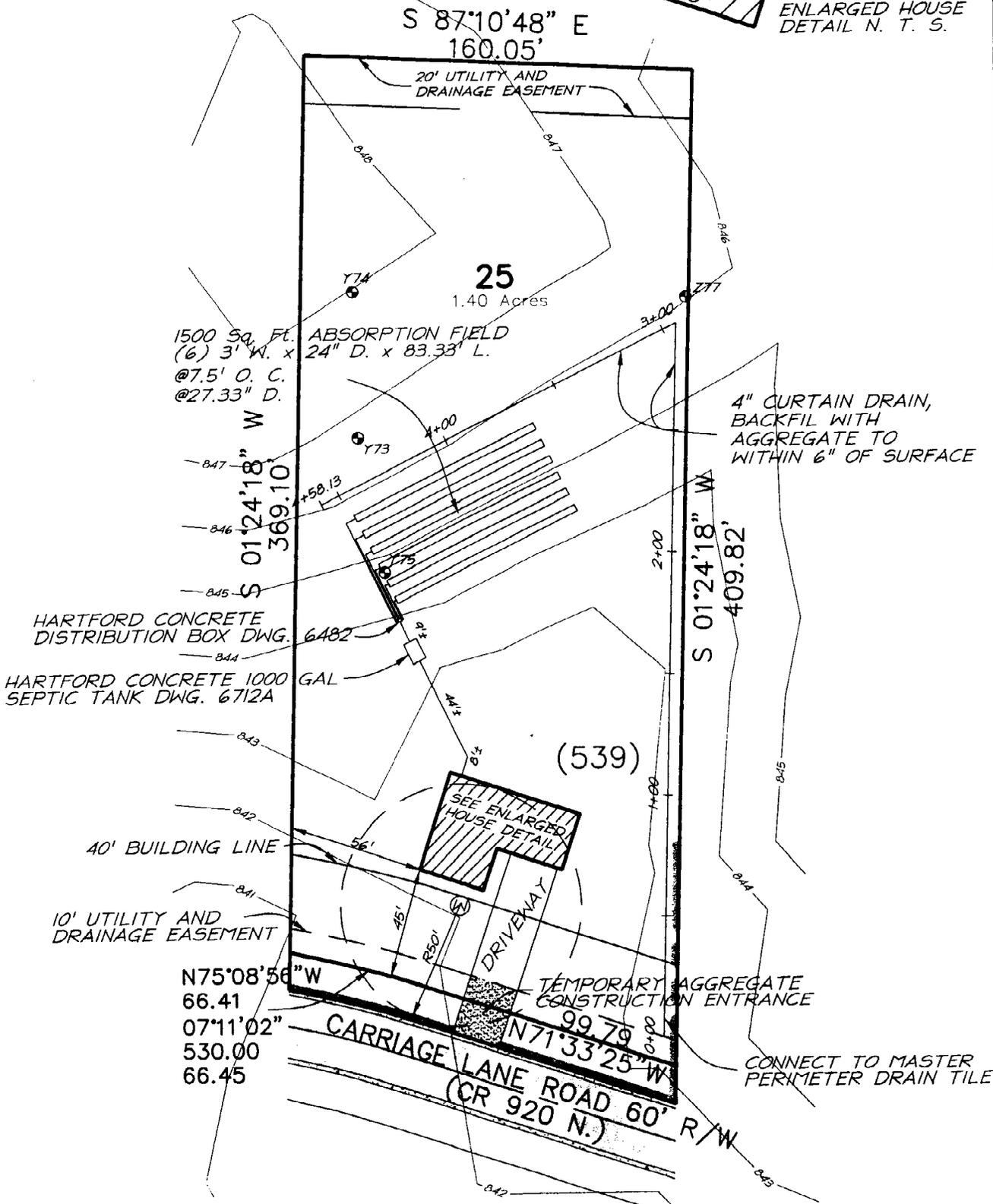
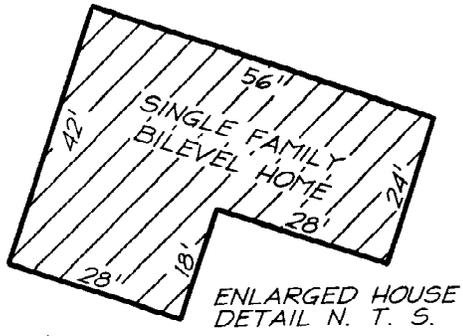
APPROVAL DENIED \_\_\_\_\_

Additional Comments: System installed according to permit specifications. System kept No. low area.

Date Inspected 7/19/00

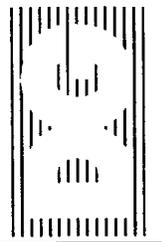
Inspector [Signature]

NORTH  
SCALE 1"=60'



DATE 2/17/00.  
SCALE 1"=60'  
DRAWN BAF / DGI  
PROJECT 1138.0  
SHEET 1

**DUNELAND GROUP**  
ENGINEERING & SURVEYING  
220 BROADWAY  
CHESTERTON, INDIANA 46304  
219-926-1007 fax 219-926-1544  
E-MAIL duneland\_group@yd100.com



REVISIONS	BY

**CARRIAGE HILLS  
LOT 25**

**NOTES**  
 ● SOIL BORING  
 — SILT FENCE  
 ALL GRAVITY SEWERS TO BE 4" PVC ASTM-D-2665



# Inspection Summary

Septic Permit     Well Permit     Repair Permit

Permit Number: Septic P2003-0573

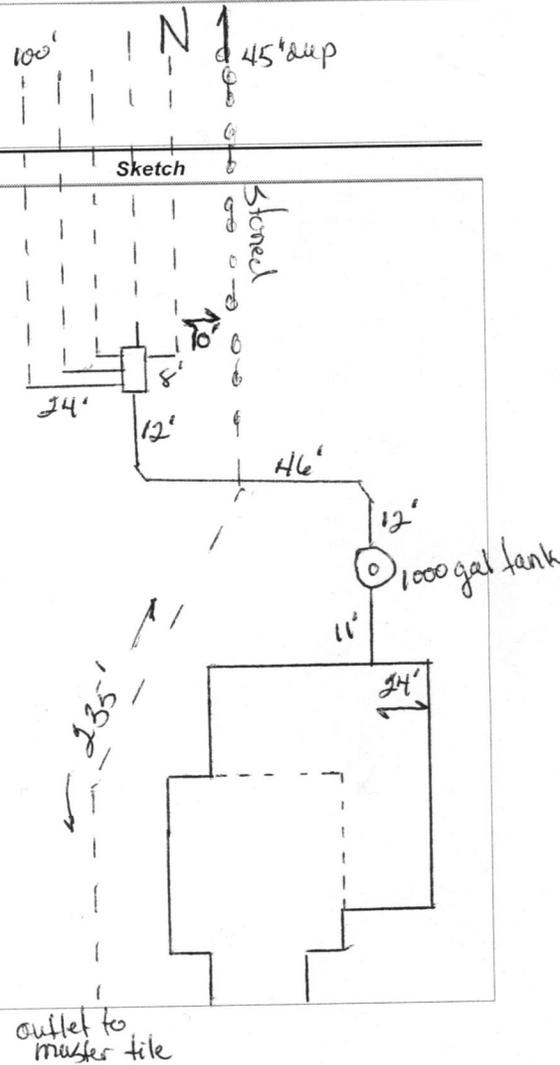
Property Owner Name: Gore Realty Mel Gore  
Property Location: 541 Carriage Ln Westville IN 46391

Well P2003-0574  
Date Submitted: 01/15/04

Inspection Date				Inspection Description
Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial
R Tarnow	01/15/04	No	Denied	

### Property Specifications

M Cavnah - 01/15/04	Contractor	Bill Johnson
R Tarnow - 01/15/04	Septic Tank Size:	1000 gal
	Pump Tank Size:	0 gal
R Tarnow - 01/15/04	Distance from Foundation:	11 ft
R Tarnow - 01/15/04	Total Lineal Feet:	500 ft
R Tarnow - 01/15/04	Width of Trench:	3 ft
	Basal Area:	0 sq ft
	Bed Area:	0 sq ft
R Tarnow - 01/15/04	Absorption Field Size:	1500 sq ft
R Tarnow - 01/15/04	Absorption Field Depth:	10 inches
R Tarnow - 01/15/04	Average Centers:	7.5 ft
R Tarnow - 01/15/04	Drainage Type:	Curtain
		45 inches
M Cavnah - 01/15/04	Required Square Footage:	1500 sq ft
R Tarnow - 01/15/04	Cover Material:	Limestone
	Tile Typ	
	<input checked="" type="checkbox"/> Schedule 4	
	<input checked="" type="checkbox"/> SDR 35	
	<input type="checkbox"/> Tile Type Othe	
	Average Field Cover	0 inches
R Tarnow - 01/15/04	<input checked="" type="checkbox"/> Septic field properly located to permit specification	
R Tarnow - 01/15/04	<input checked="" type="checkbox"/> Sufficient gravity to distribution box	
R Tarnow - 01/15/04	<input checked="" type="checkbox"/> Box properly placed and sealed	
	<input type="checkbox"/> Well Installed	
	Distance from tank:	0 ft
	Distance from trenches:	0 ft

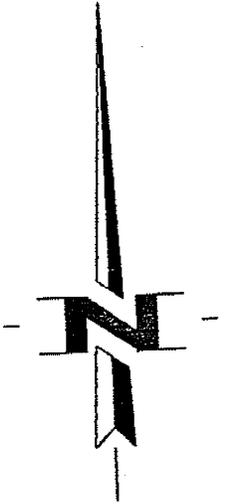


### Notes from Previous Inspection

Inspected By	Date Inspected	Notes
R Tarnow	01/15/04	well not installed at time of this inspection, foundation for house only. Need cover check for final.

*R Tarnow 1-16-04 well 12"*

**APPROVED**  
 Insp. *[Signature]*  
 Date *7-14-03*



CURTAIN

GRAPHIC SCALE



( IN FEET )  
 1 inch = 40 ft.

100.00					
99.00					
98.00					
97.00					
96.00					
95.00					

4" HANCOR AGRI-FLOW CORRUGATED PLASTIC TUBING OR EQUIVALENT (WITH STOCKING)

# Inspection Summary

✓ Septic Permit    ✓ Well Permit    Repair Permit

Permit Number: Septic P2006-0472

Well P2006-0473

Property Owner Name: Gore Realty Mel Gore  
Property Location: 549 Carriage Lane Rd Westville IN 46391

Date Submitted: 8/15/2006

**Inspection Date**

Inspected By	Date Inspected	Notification left at Site	Approved / Denied	Initial	Inspection Description
M Cavanaugh	8/15/2006	No	Denied	Initial	

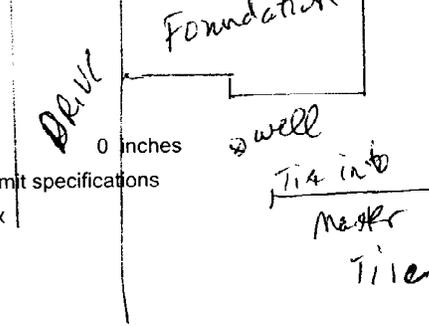
NA

**Property Specifications**

**Sketch**

- ✓ M Cavanaugh - 8/15/2006 Contractor: Bill Johnson
- ✓ M Cavanaugh - 8/15/2006 Septic Tank Size: 1000 gal
- ✓ M Cavanaugh - 8/15/2006 Pump Tank Size: 750 gal
- ✓ M Cavanaugh - 8/15/2006 Distance from Foundation: 14 ft
- ✓ M Cavanaugh - 8/15/2006 Total Lineal Feet: 504 ft
- ✓ M Cavanaugh - 8/15/2006 Width of Trench: 3 ft
- Basal Area: 0 sq ft
- Bed Area: 0 sq ft
- ✓ M Cavanaugh - 8/15/2006 Absorption Field Size: 1512 sq ft
- ✓ M Cavanaugh - 8/15/2006 Absorption Field Depth: 18 inches
- ✓ M Cavanaugh - 8/15/2006 Average Centers: 7.5 ft
- ✓ M Cavanaugh - 8/15/2006 Drainage Type: Perimeter

48 inches  
1500 sq ft  
Limestone



- ✓ M Cavanaugh - 8/15/2006 Required Square Footage: 1500 sq ft
- ✓ M Cavanaugh - 8/15/2006 Cover Material: Limestone
- Tile Type
  - ✓ Schedule 4
  - ✓ SDR 35
  - Tile Type Other
- Average Field Cover: 0 inches
- ✓ M Cavanaugh - 8/15/2006 ✓ Septic field properly located to permit specifications
- Sufficient gravity to distribution box
- ✓ M Cavanaugh - 8/15/2006 ✓ Box properly placed and sealed
- Well Installed
- Distance from tank: 0 ft
- Distance from trenches: 0 ft

**Notes from Previous Inspections**

Inspected By	Date Inspected	Notes
M Cavanaugh	8/15/2006	need to check pump and alarm installation and final cover. Septic field shallow on the ends.

Inspector Name

*Mary Cavanaugh*

Date Inspected:

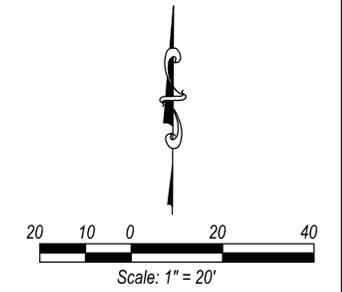
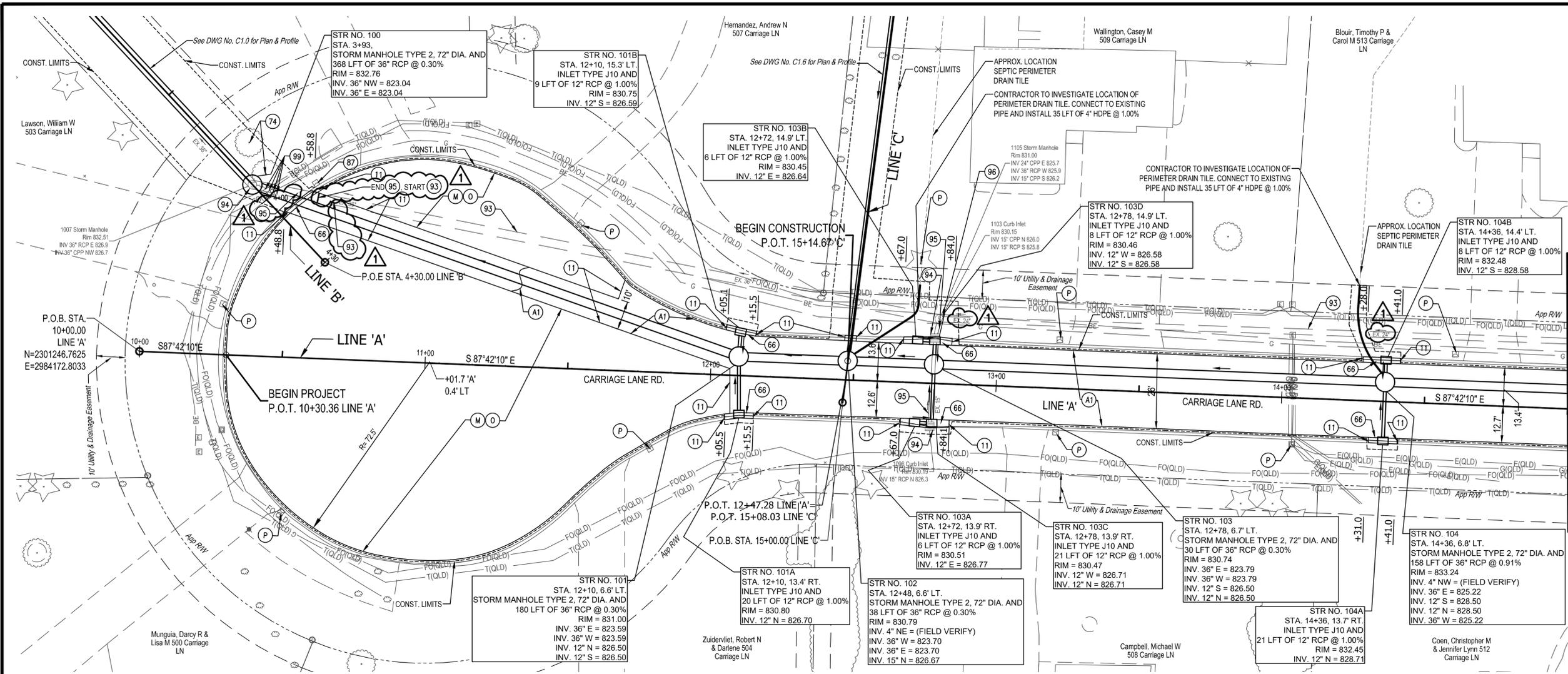
*8/15/06*

Approval Granted/Denied:

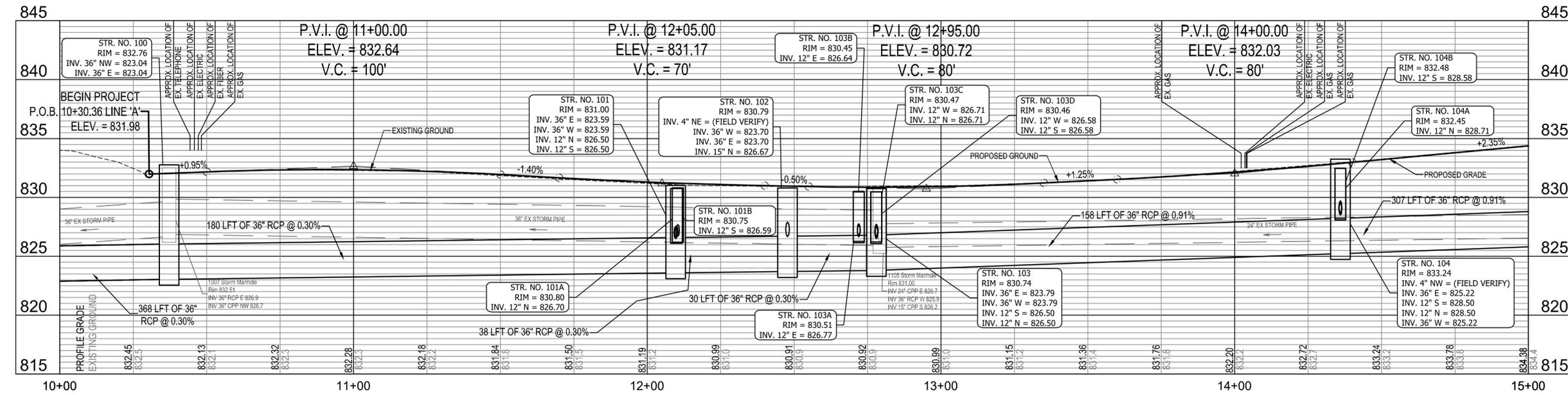




**ATTACHMENT D  
REVISED CONSTRUCTION PLAN SHEETS C1.1 AND C1.3**



MATCHLINE - SEE SHEET C1.2



- NOTES**
- LINE 'A' TO BE CONSTRUCTED.
  - ALL SOLID LID MANHOLE CASTINGS TO BE NEENAH R-1642.
- LEGEND**
- (A1) HMA PAVING, TYPE B, CONSISTING OF: 165#/SYD, HMA SURFACE, ON 275 #/SYD, HMA INTERMEDIATE, ON 10" COMPACTED AGGREGATE, NO. 53, ON GEOGRID (PER PORTER COUNTY STANDARDS), ON COMPACTED SUBGRADE
  - (M) ASPHALT MILLING, 1.5"
  - (O) 165#/SYD HMA SURFACE, TYPE B
  - (P) PROTECT
  - (11) SAWCUT
  - (66) CURB AND GUTTER, REMOVE AND REPLACE
  - (74) TREE, REMOVE
  - (87) MAILBOX REMOVE AND RESET
  - (93) PIPE, GROUT
  - (94) STRUCTURE, REMOVE
  - (95) PIPE, REMOVE
  - (96) STRUCTURE, ABANDON (SEE DETAIL 4, DWG C2.0)
  - (99) UTILITY INVESTIGATION. CONFIRM LOCATION & DEPTH OF UTILITIES PRIOR TO START OF WORK

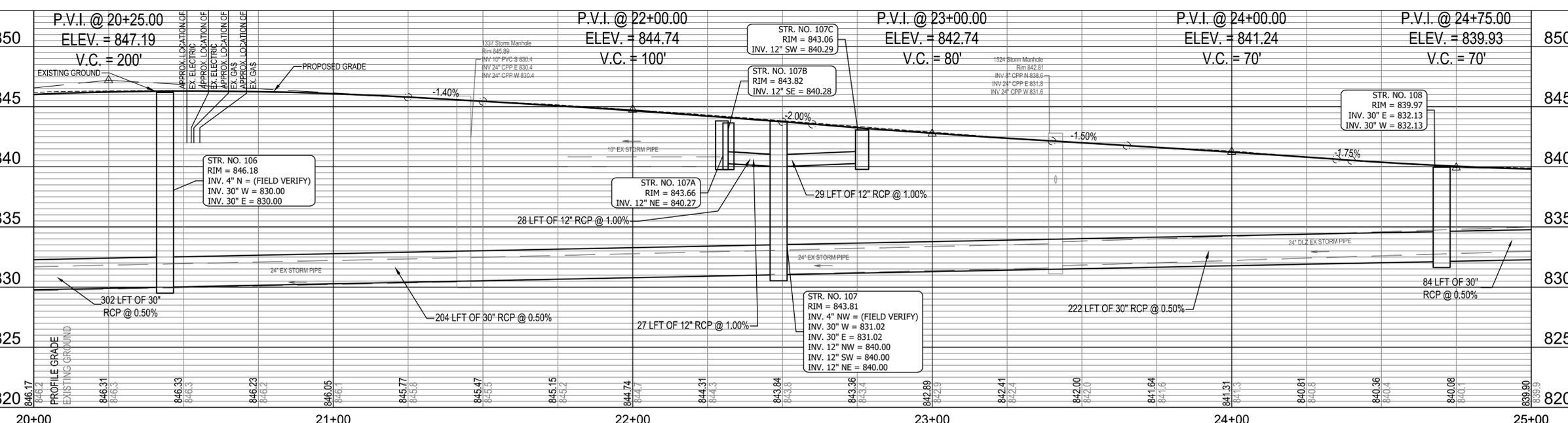
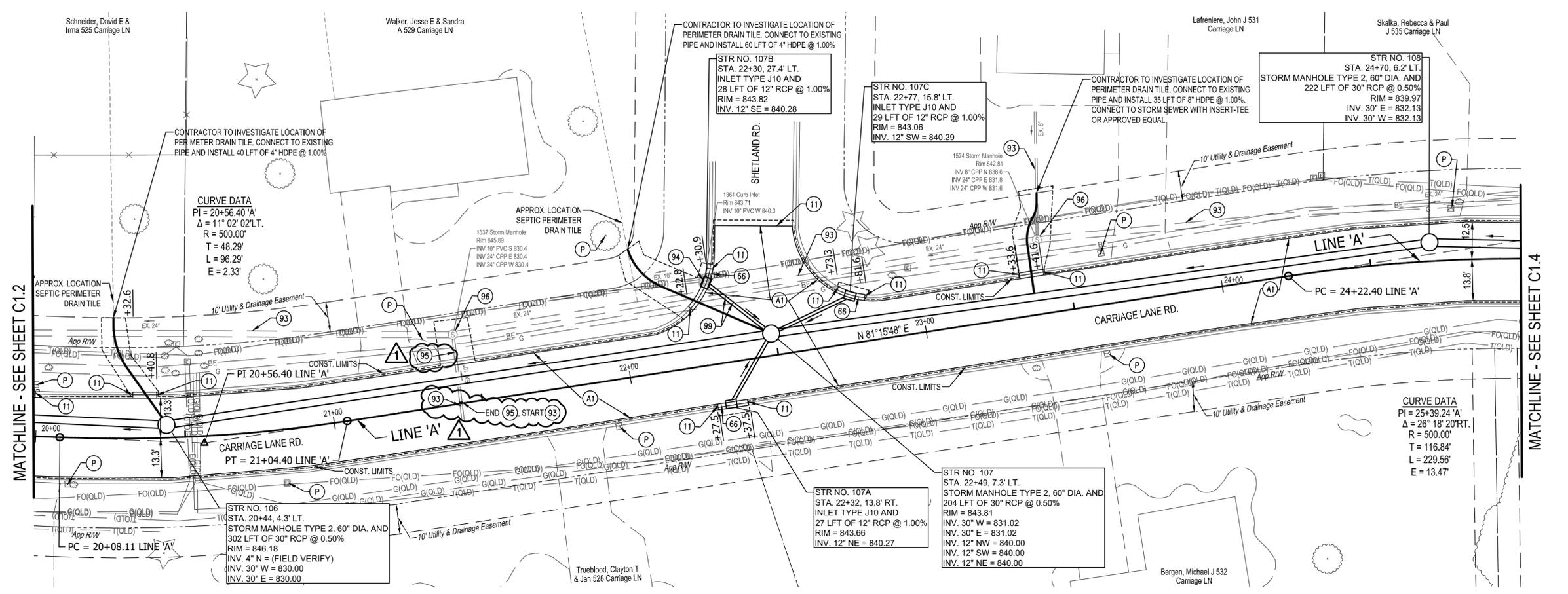


PORTER COUNTY  
**CARRIAGE LANE ROAD**  
 STORM SEWER & ROADWAY IMPROVEMENTS  
 INDIANA  
 PLAN & PROFILE - LINE 'A'  
 STA. 10+00 - 15+00

NO.	REVISION	BY	DATE
1	ADDENDUM #2	SGF	1/18/24
2			
3			
4			
5			
6			

DRAWN: BRA    CHK'D: EMM  
 DESIGNED: BRA    APPR'VD: AJK  
 DATE: DECEMBER 2023  
 HORIZ. SCALE: 1" = 20'  
 VERT. SCALE: 1" = 5'  
 PROJECT NUMBER:  
**2264-1424-90**

SHEET	6
OF	21
DRAWING NUMBER	<b>C1.1</b>
1/18/2024 DLZ INDIANA, LLC	



- NOTES**
- LINE 'A' TO BE CONSTRUCTED.
  - ALL SOLID LID MANHOLE CASTINGS TO BE NEENAH R-1642.
- LEGEND**
- (A1) HMA PAVING, TYPE B, CONSISTING OF:  
165#/SYD, HMA SURFACE, ON  
275 #/SYD, HMA INTERMEDIATE, ON  
10" COMPACTED AGGREGATE, NO. 53, ON  
GEOGRID (PER PORTER COUNTY  
STANDARDS), ON COMPACTED SUBGRADE
  - (P) PROTECT
  - (11) SAWCUT
  - (66) CURB AND GUTTER,  
REMOVE AND REPLACE
  - (93) PIPE, GROUT
  - (94) STRUCTURE, REMOVE
  - (95) PIPE, REMOVE
  - (96) STRUCTURE, ABANDON  
(SEE DETAIL 4, DWG C2.0)
  - (99) UTILITY INVESTIGATION. CONFIRM  
LOCATION & DEPTH OF UTILITIES PRIOR  
TO START OF WORK



PORTER COUNTY  
**CARRIAGE LANE ROAD**  
 STORM SEWER & ROADWAY IMPROVEMENTS  
 INDIANA  
 PLAN & PROFILE - LINE 'A'  
 STA. 20+00 - 25+00

DRAWN	CHK'D	EMM	NO.	REVISION	BY	DATE
DESIGNED	BRA	APPR'VD	AJK	ADDENDUM #2	SGF	1/18/24
DATE:	DECEMBER 2023					
HORIZ. SCALE:	1" = 20'					
VERT. SCALE:	1" = 5'					
PROJECT NUMBER	<b>2264-1424-90</b>					

SHEET	8
OF	21
DRAWING NUMBER	<b>C1.3</b>



**ATTACHMENT E  
REVISED BID FORM**

**BID FORM**

(Based on State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013))

SECTION I. BID  
(Please type or print)

Date (month, day, year): \_\_\_\_\_

1. Project: \_\_\_\_\_

2. Owner (Governmental Unit): \_\_\_\_\_

3. County: \_\_\_\_\_

4. Respondent (Firm): \_\_\_\_\_

Address: \_\_\_\_\_

City/State/ZIP Code: \_\_\_\_\_

5. Telephone Number: \_\_\_\_\_

6. Agent of Respondent (if applicable): \_\_\_\_\_

Pursuant to notices given, the undersigned offers to furnish labor, equipment, and/or material necessary to complete the public works project of \_\_\_\_\_

(Governmental Unit) in accordance with the plans and specifications prepared by \_\_\_\_\_

\_\_\_\_\_ and dated \_\_\_\_\_ for the sum of:

\_\_\_\_\_ \$ \_\_\_\_\_

The undersigned bidder further agrees to furnish, with this bid, a bid security made payable to the owner in an amount not less than ten percent (10%) of bidder's total bid and in the form of a bank cashier's check, bank draft, certified check, or bid bond, on the bid bond form included in the bidding documents, or a form otherwise approved by the owner, executed in accordance with the provisions of the instructions to bidders, and issued by a surety acceptable to the owner and authorized to transact business under the laws of the state of Indiana.

If items "as ordered by engineer", additive bid items, and/or alternate bid items will be considered by owner, the undersigned bidder shall submit a bid for each item "as ordered by engineer", additive bid item, and/or alternate bid item in accordance with the instructions to bidders. If additional items of work originally included in the contract are needed, the unit costs associated with such work shall be the same as those included in the contract, if accepted by the owner. Any addenda issued by the governmental unit shall be specifically acknowledged by the undersigned at the appropriate location on this form.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

SECTION II. BASIS OF BID FORM  
 (Please type or print)

This Basis of Bid Form is to be submitted by bidder, as an attachment to the Bid Form, for the project designated as **Carriage Lane Road – Storm Sewer and Roadway Improvements**. It is to include an entry for each and every work item listed, including all base work items, all items “as ordered by Engineer”, if any, all additive work items, if any, and all alternate work items, if any, as well as a total quote, in both words and figures, as provided for below.

**BASE BID**

Bidder will perform all work specified or indicated in the contract documents in accordance with terms and conditions of the contract documents for the following price(s):

**BASE BID ITEMS**

ITEM	DESCRIPTION	UNIT	QTY.	UNIT PRICE	EXT. PRICE
1	MOBILIZATION & DEMOBILIZATION	LS	1		
2	CONSTRUCTION ENGINEERING	LS	1		
3	MAINTAINING TRAFFIC	LS	1		
4	RECORD DRAWINGS	LS	1		
5	PRECONSTRUCTION AUDIO-VIDEO SURVEY	LS	1		
6	CLEARING RIGHT OF WAY	LS	1		
7	TEMPORARY EROSION AND SEDIMENT CONTROL	LS	1		
8	EXCAVATION, COMMON	CYD	2,046		
9	CURB & GUTTER, REMOVE	LFT	638		
10	STRUCTURE, REMOVE	EA	9		
11	STRUCTURE, ABANDON	EA	5		
12	PIPE, REMOVE	LFT	530		
13	CURB AND GUTTER, CONCRETE, ROLLED	LFT	638		
14	MILLING, SURFACE, 1.5-INCHES	SYD	3,244		
15	HMA SURFACE, TYPE B	TON	713		
16	HMA INTERMEDIATE, TYPE B	TON	742		
17	COMPACTED AGGREGATE, NO. 53	TON	2,965		

ITEM	DESCRIPTION	UNIT	QTY.	UNIT PRICE	EXT. PRICE
18	SUBGRADE TREATMENT, TYPE II	SYD	2,722		
19	GEOGRID	SYD	5,637		
20	DRIVEWAY, REMOVE AND REPLACE	SYD	120		
21	FENCE, REMOVE AND RESET	LFT	120		
22	RESTORE DISTURBED AREAS	LS	1		
23	INLET, TYPE J10	EA	21		
24	CATCH BASIN, TYPE E7	EA	2		
25	STORM MANHOLE, TYPE 1, 48" DIA.	EA	3		
26	STORM MANHOLE, TYPE 2, 60" DIA.	EA	6		
27	STORM MANHOLE, TYPE 2, 72" DIA.	EA	6		
28	15" PIPE END SECTION	EA	2		
29	36" PIPE END SECTION	EA	1		
30	STORM SEWER, RCP CL III, 12"	LFT	616		
31	STORM SEWER, RCP CL III, 15"	LFT	711		
32	STORM SEWER, RCP CL III, 18"	LFT	198		
33	STORM SEWER, RCP CL III, 30"	LFT	812		
34	STORM SEWER, RCP CL III, 36"	LFT	1,081		
35	STORM SEWER, HDPE, 4"	LFT	350		
36	STORM SEWER, HDPE, 8"	LFT	100		
37	UNDERDRAIN, HDPE, 6"	LFT	527		
38	GROUT PIPE	LFT	1,517		
39	UNSUITABLE STORM SEWER SUBGRADE	CYD	480		
<b>TOTAL BID (I.E., TOTAL OF ALL EXTENDED PRICES, ITEMS 1-39):</b>					

Bidder's total bid for the work, which is the sum of the Bidder's extended price(s) for the base bid items, is:

**TOTAL BID  
(IN FIGURES):** \_\_\_\_\_

**TOTAL BID  
(IN WORDS):** \_\_\_\_\_

Bidder acknowledges that the estimated quantities of items of unit price work included on this Basis of Bid Form are not guaranteed and are provided solely for the purposes of comparing bids, establishing pay item unit prices, and determining an initial contract price. In accordance with the contract documents, payment to the successful bidder will be based upon the actual quantities of work performed, the acceptance of such work and the determination of such quantities to be made by the Engineer in accordance with the contract documents.

SECTION III. CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS  
(if applicable)

I, the undersigned bidder, or agent of such bidder, understand my statutory obligation to use steel products made in the United States (IC 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded to me. I understand that violations hereunder may result in forfeiture of contractual payments.

SECTION IV. BIDDER'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governmental unit awarding the contract shall be specific enough and shall provide enough detail so that the governmental unit can make a proper determination of the respondent's capability for completing the project if the contract is awarded to the respondent.

SECTION V. BIDDER'S NON-COLLUSION AFFIDAVIT

The undersigned bidder, or agent of such bidder, being duly sworn under oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation, or partnership represented by him, entered into any combination, collusion, or agreement with any person relative to the price to be bid by anyone in response to the invitation to bid issued by the governmental unit, nor to prevent any person from bidding, nor to include anyone to refrain from bidding, and that this bid is provided without reference to any other bid and without any agreement, understanding, or combination with any other person in reference to such other bid.

He further says that no person or persons, firm, or corporation has, have, or will receive, directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of the contract being awarded to the bidder.

SECTION VI. BIDDER'S REPRESENTATIONS

In submitting this bid, bidder represents that:

- (a) Bidder has examined and carefully studied the contract documents, other related data identified in the invitation to bid, and the following addenda, receipt of which is hereby acknowledged:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

- (b) Bidder has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance of the work.
- (c) The contract documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the work for which this bid is submitted.





**ATTACHMENT F  
REVISED SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS**

**SPECIAL PROVISIONS & TECHNICAL SPECIFICATIONS**  
 FOR  
**CARRIAGE LANE ROAD**  
**STORM SEWER AND ROADWAY IMPROVEMENTS**

PORTER CO. DEPARTMENT OF DEVELOPMENT & STORMWATER MANAGEMENT  
 REVISED: JANUARY 19, 2024

The following Special Provisions & Technical Specifications shall apply to and govern the project designated as **Carriage Lane Road - Storm Sewer and Roadway Improvements**. Such Special Provisions & Technical Specifications supplement the specifications contained in the documents listed in the table below and, in case of conflict with any part or parts of said specifications, the Engineer shall determine which specifications shall take precedence and govern. The following hierarchy will be applied by the Engineer in resolving any conflict, error, ambiguity, or discrepancy in or between said specifications.

<b>Specification</b>	<b>Issuing Agency</b>	<b>Adopted/Dated</b>
Special Provisions & Technical Specifications for Carriage Lane Road - Storm Sewer and Roadway Improvements	Porter Co. Department of Development & Storm Water Management	December 8, 2023 <b>Revised:</b> January 19, 2024
Construction Plans for Carriage Lane Road - Storm Sewer and Roadway Improvements	Porter Co. Department of Development & Storm Water Management	December 8, 2023 <b>Revised:</b> January 19, 2024
General Specifications	Porter Co. Department of Development & Storm Water Management	February 1, 2024

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**SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS  
CARRIAGE LANE ROAD- STORM SEWER AND ROADWAY IMPROVEMENTS**

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### **1. Overview of this Section**

This section identifies and provides: a) Modifications, additions, deletions, and clarifications to the General Specifications Section of these Bidding Documents; b) Modifications, additions, deletions, and clarifications to the Indiana Department of Transportation (INDOT) Standard Specifications, latest edition; and c) Additional technical specifications that are not provided for in the General Specifications and INDOT Standard Specifications.

The INDOT Standard Specifications, latest edition for road and bridge construction and maintenance are the technical specifications on this contract except as noted in these special provisions and technical specifications.

### **2. Modification of Terms in the INDOT Standard Specifications**

Related Documents

- A. INDOT Standard Specifications: Various Sections

Modifications

- A. "Department of Transportation" and "Indiana Department of Transportation" shall be changed to the "Storm Water Management Board of Porter County, Indiana acting through its authorized representative, the Department of Development and Storm Water Management."
- B. "Engineer" and "Chief Engineer", shall be changed to "County Engineer, of Porter County".
- C. "State" shall be changed to "Porter County, Indiana".
- D. "Bituminous" shall be changed to "Asphalt".
- E. Owner and County shall mean Storm Water Management Board of Porter County.

### **3. Method of Measurement and Payment**

Related Documents

- A. General Specifications: 109, "Measurement and Payment"
- B. INDOT Standard Specifications: Various Sections

Modifications

- A. The methods of measurement and payment shall be as defined in these Special Provisions and Technical Specifications for each bid item.

### **4. Coordination of the Contract Documents**

Related Document

- A. General Specifications: 105.05, "Coordination of the Contract Documents"

Modifications

- A. Special provisions and technical specifications hold over construction plans and general specifications; and
- B. Construction plans hold over general specifications.

### **5. Warranty and Maintenance Bond**

Related Documents

- A. General Specifications, Section 105.19, "Warranty and Guarantee"

Modifications

- A. The cost incurred by the Contractor in complying with the requirements of this article shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

**6. Samples, Tests, and Cited Specifications**

Related Documents

- A. General Specifications: 106.04, "Samples, Tests, and Cited Specifications"

Modifications

- A. The Contractor shall collect all samples and conduct all tests for all earthwork, backfill, compaction, aggregate base, asphalt, and concrete. Testing shall be performed by an independent testing agency hired by the Contractor.
- B. Testing shall be performed in accordance with the Porter County Construction Standards and Specifications. If not covered by Porter County Construction Standards and Specifications, the testing shall be performed in accordance with the "Manual for Frequency of Sampling and Testing for INDOT and Basis for Use of Materials", latest edition and INDOT Standard Specifications, latest edition.
- C. The Contractor shall include the cost of samples and testing in other bid items. Re-sampling and re-testing costs shall be paid for by the Contractor.
- D. Any representative materials sampled and found to be in non-compliance with contract specifications by said testing laboratory will be cause for the Owner to reject all materials incorporated into this project.
- E. The Owner, at his discretion, may elect to accept a Certified Statement of Compliance for materials or workmanship in lieu of testing.

Method of Measurement and Basis of Payment

- A. Testing will not be paid for separately but shall be included in the cost of other items.

**7. Geotechnical Exploration**

Related Documents

- A. General Specifications: 104.05, "Differing Site Conditions"

Modifications

- A. A total of five (5) geotechnical soil borings were collected for this project. The Report of Geotechnical Exploration for this project (dated May 18, 2023) is provided as an Appendix to the bidding documents. Contractors, prior to submitting a bid to the Department, shall make whatever additional borings necessary to fully acquaint themselves with conditions as they exist so that they may fully understand the conditions which may affect the cost of the work. Failure to make such borings or any borings made which do not provide a complete understanding of the conditions encountered shall not relieve the Contractor of the responsibility for carrying out all the work to completion as shown on the plans, or as specified, at the price specified to be paid for the work.

Method of Measurement and Payment

- A. Contractor will not be paid for borings and the cost to repair damages caused by borings shall be paid for by the Contractor.

**8. Matching Old Work to New and Saw Cutting**

Related Documents

- A. None

Modifications

- A. Where new work is to be fitted to old work the Contractor shall check all leading dimensions and conditions in the field and report any errors or discrepancies to the Owner or assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, the Contractor shall make and pay for such alterations and/or new parts as may be necessary to assure proper fits and connections meeting the approval of the Owner.
- B. All concrete and bituminous edges shall be full depth saw cut prior to the new material being placed next to the existing material.
- C. All concrete areas and drives shall be saw cut at existing joints as directed by the Engineer.

Method of Measurement and Payment

- A. The cost incurred by the Contractor in complying with the requirements of this article shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

**9. Contractor Notifications**

Related Documents

- A. General Specifications: 105.07, "Cooperation by Contractor"; 105.08, "Cooperation with Utilities"; 107.07, "Public Convenience and Safety"

Modifications

- A. Sufficient notice shall be given by the Contractor to all County Departments, utilities and property owners whose pipes, poles, tracks, wires, conduits or other structures may be affected by the work in order that they may protect, adjust, remove or rebuild said items, or take such measures as they may desire to minimize inconvenience. He shall notify the Porter County Highway Department, Porter County Engineer, surrounding fire department(s), Duneland School Corporation, and Porter County Sheriff Department forty-eight (48) hours in advance of the temporary blocking of any street or any street closures.
- B. The Contractor shall communicate with residents on all phases of the project. Communication may entail discussions with individual residents during construction, door hangers, and attending public meetings as directed by the Owner.

Method of Measurement and Payment

- A. Contractor notifications will not be paid for separately. It shall be included in the cost of other items.

**10. Preconstruction Audio-Video Survey**

Related Documents

- A. None

Modifications

- A. Intent - Prior to the start of construction on the Contract, the Contractor shall furnish to the Engineer videos of the construction areas. The videos shall remain available for viewing by the Contractor and may be reviewed by him for any assistance that the tapes may provide in resolving disputes, which arise with the property owners claiming improper restoration of their properties. The videos will also be used as a guide by the Engineer, prior to issuance of final

- payments, in determining the adequacy of restoration and the extent of damages attributable to the Contractor's work.
- B. Technical Requirements - The total audio-video recording system and the procedures employed in its use shall be such as to produce a finished product that will fulfill the technical requirements of the project, as well as those more subjective requirements of high-quality audio and video production. The video portion of the recording shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls, or any other form of picture imperfection. The audio portion of the recording shall reproduce precise and concise explanatory notes by the camera operator with proper volume, clarity and freedom from distortion.
  - C. Tapes - The Contractor shall supply the Owner with two sets of DVDs or USBs.
  - D. Camera - The video documentation shall be recorded in high definition video.
  - E. Character Printout - The video recordings shall include Contents Index, Time and Date.
  - F. Audio - At the start of production and at the beginning of a new street or easement, an identification summary shall be read into the record while, at the same time, a wide-angle view with numeric displays shall be provided for a visual record. This summary shall include 1) tape number; 2) job title; 3) job location; 4) positional location at job start; 5) date and time; 6) weather; and 7) any other notable conditions.
  - G. Coverage - The recording shall include coverage of all surface features located within the construction zone-of-influence. This zone shall be defined as 1) the area within the permanent and temporary easements and areas adjacent to these easements which may be affected by routine construction operations; 2) road right-of-way, and 3) areas directed by the Owner. The surface features within the construction zone shall include, but not be limited to, all roadways, pavements, curbs, driveways, sidewalks, culverts, headwalls, retaining walls, buildings, landscaping, shrubbery and fences. Of particular concern shall be the existence or non-existence of any faults, fractures or defects.
  - H. Visibility - No recording shall be done during periods of significant precipitation, mist, or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recording. No recording shall be performed when the ground area is covered with snow unless otherwise authorized by the Engineer.
  - I. Rate of Travel - The rate of travel shall be indirectly proportional to the number, size, and value of the surface features within the construction area's zone-of-influence. The average rate of travel shall not exceed 48 feet per minute.
  - J. Camera Elevation - To ensure proper perspective and to capture optimal detail, the camera lens shall be placed at optimum height above the ground.
  - K. Recording Schedule - The recording shall be performed prior to the placement of any construction materials or equipment on the proposed construction site.
  - L. File Name Indexing - All filenames shall be properly identified by videotape index number, project title, and general project location. Provide a log that shall describe 1) the various segments contained on that tape in terms of the names and the sides of the streets or easements; 2) coverage start, direction and end points with corresponding videotape player counter numbers. A cumulative index correlating the various segments of coverage to their corresponding tapes shall be typed and supplied to the Owner.
  - M. Unacceptable Documentation - The Owner will have the authority to reject all or any portion of the video documentation not conforming to the Specifications. Those rejected portions shall be re-taped at no additional cost to the Owner.
  - N. The cost of the preconstruction audio-video survey will not be paid for directly but shall be included in the cost of the other pay items of the Contract.

#### Method of Measurement and Payment

- A. The above item(s) will be paid per LUMP SUM and shall include labor, materials and equipment necessary as required for the project.

- B. The above item(s) will be paid for per the pay item and unit as follows:

PRECONSTRUCTION AUDIO-VIDEO SURVEY.....LS

**11. Mobilization and Demobilization**

Related Documents

- A. INDOT Standard Specifications, latest edition: 110

Modifications

- A. None

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid per LUMP SUM and shall include labor, materials, equipment necessary, furnishing, and installing as required for the project.  
B. Contractor shall not request more than 50% of this pay item until the project is substantially complete.  
C. The above item(s) will be paid for per the pay item and unit as follows:

MOBILIZATION AND DEMOBILIZATION.....LS

**12. Construction Engineering**

Related Documents

- A. INDOT Standard Specifications, latest edition: 105  
B. General Specifications: 105.10, "Survey Control Points"; 105.11, "Construction Layout & Survey"; 105.13, "Verification of Lines, Grades, Elevations, & Dimensions"

Modifications

- A. None

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid per LUMP SUM and shall include labor, materials, equipment necessary, furnishing, and installing as required for the project.  
B. The above item(s) will be paid for per the pay item and unit as follows:

CONSTRUCTION ENGINEERING.....LS

**13. Maintaining Traffic**

Related Documents

- A. INDOT Standard Specifications, latest edition: 104.04, 107, 801  
B. 2011 Indiana Manual on Uniform Traffic Control Devices with Revisions 1 & 2 & 3  
C. 2015 INDOT Work Zone Safety and Mobility Policy  
D. General Specifications: 107.09, "Maintenance of Traffic".

Modifications

- A. Traffic must be maintained to all residences at all times during construction.  
B. The Contractor shall provide all signage, flagmen, barricades, etc. as per the Indiana Department of Transportation Standard Drawings (i.e., E801-TCFO-01, etc.). All traffic control devices shall be in accordance with the latest version of the Indiana Manual of Uniform Traffic Control Devices.

- C. The Contractor shall coordinate with Porter County Highway Department prior to any road, sidewalk and driveway closures. The Contractor shall submit a proposed traffic control plan to the Owner and Engineer for review and approval prior to construction.
- D. The minimum allowable lane width shall be 10 feet wide.
- E. Traffic may be restricted by use of flagging operations to one lane operation during daylight hours only and outside of the hours between 7:00 a.m. to 8:00 a.m. and 4:00 p.m. to 6:00 p.m.
- F. Incomplete construction shall be backfilled and plated or otherwise secured at the end of each work day to allow local traffic access and access to each approach.
- G. The Contractor shall provide notices to each homeowner within the one block work area of the impending closure a minimum of 48 hours prior to the road, sidewalk and driveway, closure.
- H. The names and telephone numbers of the Superintendent and one other responsible employee shall be furnished to the project engineer, and the Porter County Highway Department. These employees shall be on call or available at nights, weekends, or during other nonworking periods to repair or replace all traffic control devices that may become damaged or inoperative. The Contractor shall contact the Porter County Highway Department and all emergency service providers to this road and its local school district at least 48 hours prior to the commencement of lane restrictions and closures. The Contractor shall also furnish a schedule of traffic restrictions anticipated the following work week to the Porter County Highway Department every Thursday during the construction period. This schedule shall include the planned restrictions for each day during the work week including the location(s) and direction(s) of travel affected.
- I. All signs, barricades and channelizing devices shall comply as to construction, dimensions, color, lettering and mountings as set out in the current Indiana Manual on Uniform Traffic Control Devices for Streets and Highways and the 2022 Indiana Department of Transportation Specifications, Section 801 and Standard Drawings with exceptions:
  - a. Oil burning torches will not be permitted.
  - b. Flashing beacons shall flash at a rate for each beacon of 50 to 60 times per minute with the illuminated period from 1/2 to 2/3 of the total cycle. Second beacons, if specified, shall flash alternatively except for intersection control beacons which shall flash simultaneously.
- J. It shall be the Contractor's responsibility to provide sufficient numbers of each type of sign/barricade or protective devices, as shown in the INDOT Misc. Standard Drawing Detour Sheets and as directed by the Engineer to positively inform the motorist or pedestrian of the obstruction or danger which exists. The Contractor shall provide designation for any work area where danger exists whether it be storage of equipment and materials, excavation, work areas or work having been performed and not accepted.
- K. All cost for the materials, erection, maintenance, lighting, flagman, etc. and the removal of such will be paid for as defined below.
- L. Existing traffic signage shall be maintained throughout all road projects, this shall include street name signs, speed signs, stop sign, etc.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid per LUMP SUM and shall include labor, materials, equipment necessary, furnishing, installing, maintaining, and removing of all maintenance of traffic control measures (i.e. all traffic control devices, including advanced signing for lane closures/restrictions, detour signage, flashing arrow signs, all other signs, temporary pavement markings, aggregate for temporary drives, and other costs for maintenance of traffic and detours) as required for the project.
- B. The above item(s) will be paid for per the pay item and unit as follows:

MAINTAINING TRAFFIC....LS

**14. Record Drawings**

Related Documents

- A. General Specifications: 105.13, "Verification of Lines, Grades, Elevations, & Dimensions"

Modifications/Additions

- A. Provide an electronic "As-Built" drawing in AutoCAD 18 or newer. Engineer will provide a base drawing in AutoCAD format. Provide digital pictures and GPS coordinates for all items (piping, foundations, structures, etc..) that are identified during the project and are left in-place. Mark these items on the "As-Built" drawings. For all items abandoned in-place, mark the depth below finished grade and provide coordinates or dimensions, which will allow the Contractor to locate the item later. Provide the physical size of all items abandoned in-place. Mark new information that is important to the Contractor but was not shown on Contract Drawings or Record Drawings. Provide one (1) electronic file in AutoCAD 18 and one hard copy of the "As-Built" drawings to the Contractor Representative every 30 days for review. The "As-built" drawings shall be updated to reflect Work that has occurred in the previous 30 days. Provide three (3) copies of the final record drawing sets to the Contractor Representative and an electronic file in AutoCAD 18.

Method of Measurement and Payment

- A. The above item(s) will be paid per LUMP SUM.
- B. The above item(s) will be paid for per the pay item and unit as follows:

RECORD DRAWINGS...LS

**15. Clearing Right of Way**

Related Documents

- A. INDOT Standard Specifications, latest edition: 201

Modifications

- A. None

Method of Measurement and Payment

- A. The above item(s) will be paid for per LUMP SUM and shall include labor, materials, equipment necessary for the clearing and removal of trees and vegetation, removal of stumps and roots, and stripping and stockpiling of topsoil within the construction limits.
- B. Trees, vegetation, stumps, and roots shall be disposed of off-site, at an appropriate and, if applicable, properly permitted off-site location. Disposal will not be paid for separately but shall be included in the cost of the above item.
- C. The removal of any landscaping, trees, bushes or pipes not specifically called out for removal on the plans will not be paid for separately but shall be included in the cost of the above item.
- D. The above item(s) will be paid for per the pay item and unit as follows:

CLEARING RIGHT OF WAY...LS

**16. Temporary Erosion and Sediment Control**

Related Documents

- B. INDOT Standard Specifications, latest edition: 205

Modifications

- A. None

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LUMP SUM and shall include labor, materials, equipment necessary, furnishing, installing, maintaining, and removing of all temporary erosion and sediment control measures and temporary seeding as required for the project.
- B. The above item(s) will be paid for per the pay item and unit as follows:

TEMPORARY EROSION AND SEDIMENT CONTROL....LS

**17. Excavation, Common**

Related Documents

- A. INDOT Standard Specifications, latest edition: 203, 205

Modifications

- A. The cost for saw cutting of existing asphalt or concrete material to be removed will not be paid for directly, but the cost thereof shall be included in the price bid for the cost of other items under this contract.
- B. The removal of asphalt pavement shall be included in the removal of EXCAVATION, COMMON.
- C. It is assumed that all excavated material will not be reusable and shall be hauled off-site by the Contractor. Any borrow material shall be clean fill material meeting all applicable INDOT material standards and delivered from an off-site source.

Method of Measurement and Basis of Payment

- A. The above item(s) EXCAVATION, COMMON will be paid for per CUBIC YARD and shall include the cost of all labor, materials, disposal, and appurtenances for the fully functional installation of each item in place.
- B. The quantity provided on the bid form will not be adjusted for payment. It is the responsibility of the Bidder/Contractor to independently verify the quantity and adjust his/her unit price to account for any differences in quantity.
- C. The above item(s) will be paid for per the pay items and units as follows:

EXCAVATION, COMMON...CYD

**18. Curb & Gutter, Remove**

Related Documents

- A. INDOT Standard Specifications, latest edition: 202

Modifications

- A. None

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include the cost of all labor, materials, disposal, and appurtenances for the fully functional removal of the concrete curb and gutter.
- B. The quantity provided on the bid form will not be adjusted for payment. It is the responsibility of the Bidder/Contractor to independently verify the quantity and adjust his/her unit price to account for any differences in quantity.
- C. The above item(s) will be paid for per the pay items and units as follows:

CURB & GUTTER, REMOVE...LFT

**19. Structure, Remove**

Related Documents

- A. INDOT Standard Specifications, latest edition: 202

Modifications

- A. None.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per EACH and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. Items covered under this are included but not limited to inlets, manholes, and catch basins.
- C. The above item(s) will be paid for per the pay item and unit as follows:

STRUCTURE, REMOVE...EA

**20. Structure, Abandon**

Related Documents

- A. INDOT Standard Specifications, latest edition: 202

Modifications

- A. None.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per EACH and shall include labor, materials, equipment necessary, disposal, removal of top of manhole, concrete, sand, stone, backfill, structure backfill, grout and maintaining, as required for the project.
- B. Items covered under this are included but not limited to inlets, manholes, and catch basins.
- C. The above item(s) will be paid for per the pay item and unit as follows:

STRUCTURE, ABANDON...EA

**21. Pipe, Remove**

Related Documents

- A. INDOT Standard Specifications, latest edition: 202

Modifications

- A. None.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. The above item(s) will be paid for per the pay item and unit as follows:

PIPE, REMOVE...LFT

**22. Curb and Gutter, Concrete, Rolled**

Related Documents

- A. INDOT Standard Specifications, latest edition: 605
- B. Porter County Construction Standards and Specifications: Section IV

Modifications

- A. Slag will not be allowed for use in concrete mix.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include the cost of all labor, materials, equipment necessary, and appurtenances for the fully functional installation of each item.
- B. The cost warping the curb to construct the inlet offset shall be included in this item and will not be paid for separately.
- C. Curb turnouts will not be paid for separately but shall be included in the cost of this item.
- D. The above item(s) will be paid for per the pay item and unit as follows:

CURB AND GUTTER, CONCRETE, ROLLED...LFT

**23. Milling, Surface, 1.5-Inches**

Related Documents

- A. INDOT Standard Specifications, latest edition: 306

Modifications

- A. None

Method of Measurement and Payment

- A. The above item will be paid for per SQUARE YARD and shall include the cost of all labor, materials, equipment, and disposals, as required for the project.
- B. Surface Milling shall not be paid for where full depth pavement removal is identified.
- C. The above item(s) will be paid for per the pay item and unit as follows:

MILLING, SURFACE, 1.5-INCHES...SYD

**24. HMA Surface or Intermediate, Type B**

Related Documents

- A. INDOT Standard Specifications, 2012 edition: 401, 406
- B. Porter County Construction Standards and Specifications: Section IV

Modifications

- A. Slag aggregate will not be allowed for use in any portion of the HMA mixture(s).
- B. The Bituminous paving machine shall be gated to the actual width of the bituminous lay required for surface course. Overlapping of longitudinal joint on adjacent bituminous surface lays will not be permitted.
- C. An INDOT Certified plant shall produce all HMA pavements with materials certified by INDOT.
- D. The Contractor shall perform smoothness tests for all base, intermediate, and surface pavements in accordance with the most current edition of the INDOT Standard Specification Section 401.18. The test shall be done in the presence of an Owner representative. The Contractor shall straight edge each course prior to the placement of the next course.
- E. Damages will be assessed if the Contractor varies from the above specification.
- F. Tack coat shall be applied prior to placement of each lift of HMA at a rate of 0.00025 tons/sq. yd. per application. Surface shall be clean prior to application of tack coat.
- G. The cost of tack coat on approaches shall be included in the cost of other.
- H. Any necessary cleanup for excess tack placed outside of the paving limits shall be performed by the Contractor at no cost to the Owner.

Method of Measurement and Basis of Payment

- A. The cost of tack coat shall be included in the cost of other items.

- B. The cost of joint adhesive and joint sealant will not be paid for separately but shall be included in the cost of other items.
- C. The above item(s) will be paid for per TON as indicated on the itemized proposal sheet and shall include labor, materials, equipment necessary, furnishing, installing, and compacting.
- D. The quantity provided on the bid form will not be adjusted for payment. It is the responsibility of the Bidder/Contractor to independently verify the quantity and adjust his/her unit price to account for any differences in quantity.
- E. The above item(s) will be paid for per the pay items and units as follows:

HMA SURFACE, TYPE B...TON  
HMA INTERMEDIATE, TYPE B...TON

**25. Compacted Aggregate, No. 53**

Related Documents

- A. INDOT Standard Specifications, latest edition: 303
- B. Porter County Construction Standards and Specifications: Section IV

Modifications

- A. Slag aggregate and crushed concrete will not be allowed for use as compacted aggregate.
- B. The removal and disposal of the existing roadway subbase will not be paid for separately but shall be included in the cost of the other contract items.
- C. The aggregate shall contain sufficient moisture to avoid segregation during loading, hauling, placing and shaping operations. The Contractor shall add sufficient water to the aggregate as required to produce an optimum moisture for the aggregate which is expected to be in the range of 7 to 9 percent of the dry aggregate weight to ensure proper placement and compaction. Moisture content of aggregate shall be checked and water added if necessary before spreading or compaction as required. The Contractor shall add water to the aggregate in such a way as not to flush the fine aggregate content from the material and cause segregation of the aggregates.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per TON and shall include labor, materials, equipment necessary, furnishing, installing, compacting, and all water added to the aggregate as required or directed by the Engineer.
- B. This pay item only covers the Compacted Aggregate, No. 53 used for the roadway subbase. Compacted Aggregate, No. 53 used to backfill the storm sewer trenches is included in the cost of the storm sewer pipe.
- C. The quantity provided on the bid form will not be adjusted for payment. It is the responsibility of the Bidder/Contractor to independently verify the quantity and adjust his/her unit price to account for any differences in quantity.
- D. The above item(s) will be paid for per the pay item and unit as follows:

COMPACTED AGGREGATE, NO. 53...TON

**26. Subgrade Treatment, Type II**

Related Documents

- A. INDOT Standard Specifications, latest edition: 207

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per SQUARE YARD of Subgrade Treatment provided and shall include the cost of all labor, materials, placement, removal and disposal of poor material, and appurtenances for the fully functional installation of each item.
- B. A quantity is provided on the bid form. The amount of quantity to be used is not guaranteed. No adjustment to the unit price will be allowed unless mutually agreed upon by the Owner and Contractor.
- C. The above item(s) will be paid for per the pay item and unit as follows:

SUBGRADE TREATMENT, TYPE II...SYD

**27. Geogrid**

Related Documents

- A. Porter County Construction Standards and Specifications: Section IV

Modifications

- A. None

Method of Measurement and Payment

- A. The above item will be paid for per SQUARE YARD of geogrid provided and shall include the cost of all labor, materials, and appurtenances for the fully functional installation of the item.
- B. The above item(s) will be paid for per the pay item and unit as follows:

GEOGRID...SYD

**28. Driveway, Remove and Replace**

Related Documents

- A. Construction drawings and general provisions, including General and Supplementary Conditions and other Special Provisions.
- B. Prevailing Specifications: INDOT Standard Specification, latest edition: 202, 203, 610
- C. Additions: PCCP for Approaches, 5" will be paid for per SYS, complete and in place

Modifications

- A. Drives shall only be removed as shown on the plans and at the direction of the Engineer.
- B. Drives or portions of drives shall be removed from locations at the existing joints.
- C. The Contractor shall provide a jointing plan for the driveway replacement to the Engineer for approval prior to placement of the concrete for the drive.
- D. The maximum spacing between joints shall be 6 feet.
- E. The use of slag shall not be allowed.

Method of Measurement and Basis of Payment

- A. This item includes all labor, materials, and equipment for the removal and replacement of drives. The item includes all removals, compaction, the installation of subgrade treatment, compacted aggregate base, and geogrid, as necessary.
- B. The above item(s) will be paid for per the pay item and unit as follows:

DRIVEWAY, REMOVE AND REPLACE...SYD

**29. Fence, Remove and Reset**

Related Documents

- A. INDOT Standard Specifications, latest edition: 603

Modifications

- A. None.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. The above item(s) will be paid for per the pay item and unit as follows:

FENCE, REMOVE AND RESET...LFT

**30. Restore Disturbed Areas**

Related Documents

- A. INDOT Standard Specifications, latest edition: 621

Modifications

- A. Seeding shall be Mulched Seeding, Type U.
- B. Topsoil shall be spread at a depth of 6 inches.
- C. All areas disturbed during construction shall be restored.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LUMP SUM and shall include the cost of all labor, materials, equipment necessary, and appurtenances for the fully functional installation of each item including seed, mulching material, topsoil, erosion control blanket, straw, fertilizer, and watering.
- B. The quantity provided on the bid form will not be adjusted for payment. It is the responsibility of the Bidder/Contractor to independently verify the quantity and adjust his/her unit price to account for any differences in quantity.
- C. The above item(s) will be paid for per the pay item and unit as follows:

RESTORE DISTURBED AREAS ...LS

**31. Storm Sewer Structures**

Related Documents

- A. INDOT Standard Specifications, latest edition: 720
- B. Porter County Construction Standards and Specifications: Section VII

Modifications

- A. Each storm sewer structure includes the specified frame and cover.
- B. Each storm sewer structure includes the specified stone bedding/backfill and geotextile fabric.
- C. Half pipe depth concrete benching shall be provided.

Method of Measurement and Basis of Payment

- A. The above items will be paid for EACH and shall include labor, materials, equipment, furnishing, installing, and connections. Excavation, disposal of excavated material, dewatering, stabilization of subgrade, structures, gaskets, bedding, backfill, compaction and testing are included in the price for the item.
- B. The above item(s) will be paid for per the pay items and units as follows:

INLET, TYPE J10 ...EA  
CATCH BASIN, TYPE E7 ...EA  
STORM MANHOLE, TYPE 1 ...EA  
STORM MANHOLE, TYPE 2, (DIAMETER)" DIA. ...EA

**32. (Diameter)” Pipe End Section**

Related Documents

- A. INDOT Standard Specifications, latest edition: 715
- B. Porter County Construction Standards and Specifications: Section VII

Modifications

- A. None.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per EACH and shall include labor, materials, equipment necessary, installing, bedding, pipe connection, toe plate anchors, galvanized bolts as required for the project.
- B. All pipe end sections in the roadway clear zone shall be safety metal end sections.
- C. The above item(s) will be paid for per the pay item and unit as follows:

(DIAMETER)” PIPE END SECTION...EA

**33. Storm Sewer, RCP CL III, (Diameter)”**

Related Documents

- A. INDOT Standard Specifications latest edition: 715

Modifications

- A. The pipe type shall be reinforced concrete, Class III in accordance with ASTM C76, latest edition and shall be gasketed in accordance with ASTM C443, latest edition.
- B. Bedding, initial backfill, and final backfill shall be per the drawings and in accordance with Porter County standards.
- C. All storm sewer shall be inspected via closed circuit television not less than 30 days after the pipe has been installed and the backfilling has been completed. Such inspection shall be performed in the presence of the Engineer. All storm sewers shall be cleaned as necessary to allow for such inspection.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, furnishing, installing, and connections, as required for the project.
- B. Excavation, disposal of excavated material, dewatering, sheeting and shoring, bracing and support of adjacent utilities, stabilization of subgrade, pipe, connections to structures and other pipe, concrete pipe saddles, removal of pipe within trench, bedding, backfill, compaction and testing are included in the price for the item.
- C. Video inspection of the installed storm sewer shall be included in the cost.
- D. No additional payment shall be provided for over-excavation and/or extra stone or stabilization materials beneath the pipe without authorization by the Owner via written approval.
- E. Measurement for payment shall be from outside of structure to outside of structure.
- F. Connections to existing structures shall not be paid for separately but shall be included in the cost of STORM SEWER, RCP CL III, (DIAMETER)”.
- G. The above item(s) will be paid for per the pay item and unit as follows:

STORM SEWER, RCP CL III, (DIAMETER)” ...LFT

**34. Storm Sewer, HDPE, 4"**

Related Documents

- A. INDOT Standard Specifications, latest edition: 715

Modifications

- A. The pipe shall be HDPE, solid wall pipe per Porter County Standards.
- B. The Contractor shall provide tees on each drain and connect to private drains where required. A connection to the drain shall be provided for each property located along each drain.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. Excavation, disposal of excavated material, dewatering, stabilization of subgrade, pipe, caps, bedding and backfill material and installation, geofabric material and installation, connections to structures, compaction and testing are included in the price for the item. The price for this item shall also include the cost of providing connections to private drains and capping previous connections, as required.
- C. The above item(s) will be paid for per the pay item and unit as follows:

STORM SEWER, HDPE, 4"...LFT

**35. Storm Sewer, HDPE, 8"**

Related Documents

- A. INDOT Standard Specifications, latest edition: 715

Modifications

- A. The pipe shall be HDPE, solid wall pipe per Porter County Standards.
- B. The Contractor shall provide tees on each drain and connect to private drains where required. A connection to the drain shall be provided for each property located along each drain.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. Excavation, disposal of excavated material, dewatering, stabilization of subgrade, pipe, caps, bedding and backfill material and installation, geofabric material and installation, connections to structures, compaction and testing are included in the price for the item. The price for this item shall also include the cost of providing connections to private drains and capping previous connections, as required.
- C. The above item(s) will be paid for per the pay item and unit as follows:

STORM SEWER, HDPE, 8"...LFT

**36. Underdrain, HDPE, 6"**

Related Documents

- A. INDOT Standard Specifications, latest edition: 715
- B. Porter County Construction Standards and Specifications: Section VII

Modifications

- A. The pipe shall be HDPE, single wall perforated (SWP) pipe per Porter County Standards.

- B. The Contractor shall provide tees on each drain and connect to private drains where required. A connection to the drain shall be provided for each property located along each drain.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include labor, materials, equipment necessary, disposal, furnishing, installing, and maintaining, as required for the project.
- B. Excavation, disposal of excavated material, dewatering, stabilization of subgrade, pipe, bedding and backfill material and installation, coarse aggregate no. 8, geofabric material and installation, connections to structures, compaction and testing are included in the price for the item. The price for this item shall also include the cost of providing connections to private drains, as required.
- C. The above item(s) will be paid for per the pay item and unit as follows:

UNDERDRAIN, HDPE, 6" ...LFT

**37. Grout Pipe**

Related Documents

- A. Construction drawings and general provisions, including General and Supplementary Conditions and other Special Provisions.

Modifications

- A. None

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per LINEAR FOOT and shall include the cost of all labor, materials, equipment, and disposal for the complete abandonment of pipe by grouting in accordance with the plans and details.
- B. The above item(s) will be paid for per the pay item and unit as follows:

GROUT PIPE ...LFT

**38. Unsuitable Storm Sewer Subgrade**

Related Documents

- A. INDOT Standard Specifications, latest edition: 207

Modifications

- A. As directed by the Engineer, the Contractor shall remove unsuitable material and install either IN No. 2 and/or IN No. 53 compacted limestone surrounded by geofabric to a depth directed by the Engineer.

Method of Measurement and Basis of Payment

- A. The above item(s) will be paid for per CUBIC YARD of aggregate IN No. 2 and/or IN No. 53 stone and shall include the cost of all labor, materials, placement, disposal, and appurtenances for the fully functional installation of each item.
- B. The cost shall include excavation and removal of unacceptable soils from the site.
- C. The cost shall include geofabric for separation of the stone and the native soils.
- D. A quantity is provided on the bid form. The amount of quantity to be used is not guaranteed. No adjustment to the unit price will be allowed unless mutually agreed upon by the Owner and Contractor.
- E. The above item(s) will be paid for per the pay item and unit as follows:

UNSUITABLE STORM SEWER SUBGRADE ...CYD

**39. Other Items**

Related Documents

- A. INDOT Standard Specifications, latest edition
- B. Porter County Construction Standards and Specifications, latest edition
- C. General Specifications Section 105.08, "Cooperation with Utilities"
- D. General Specifications Section 107.15, "Protection and Restoration of Property"

Modifications and/or Additions

- A. The Contractor shall protect existing storm sewers, sanitary sewers, water utilities, gas utilities, cable utilities, electric utilities, fiber optic utilities and pipeline utilities except those that shall be removed and replaced during the road reconstruction. Any damage to any part of the existing storm or sanitary sewer system (that is not to be removed or replaced) caused by the Contractor's operations or equipment, shall be satisfactorily replaced or repaired by the Contractor at his own expense.
  
- B. All work shown on the drawings not identified as a pay item including but not limited to:
  - a. Removing and resetting mailboxes;
  - b. Removing and resetting all street signs;
  - c. Removing and resetting existing light poles;
  - d. Restoration and repair of private utilities including, but not limited to, irrigation and underground electric wire inclusion fence;
  - e. And all other removals, protections, and coordination items not specifically called out on the plans

Shall be included in the work.

Method of Measurement and Basis of Payment

- A. The above item(s) will not be paid for directly, but the cost thereof shall be included in the price bid for the cost of CLEARING RIGHT OF WAY.



**ATTACHMENT G  
REVISED SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS  
PORTER CO. PAVING SPECIFICATIONS**

The Indiana Department of Transportation (INDOT) Standard Specifications, dated 2022, shall apply with the modifications as noted herein. Section numbers refer to INDOT Standard Specifications.

**0.01 Property Restoration**

Shall be in accordance with Section 104.08 and 107.14. Contractor shall repair any damage caused by the Contractor's operations, including damage to driveways, utilities or concrete surfaces.

**1.01 Mobilization/Demobilization**

This work shall consist of all work necessary for the movement of personnel and equipment to and from the project site, except for seeding, and for the establishment and removal of all field offices, buildings, and other facilities necessary to the performance of the work according to Section 110. Contractor shall obtain permission from property owners if operations extend beyond County Right-of-way.

**2.01 Maintenance of Traffic**

The Contractor is responsible for the maintenance of traffic throughout the duration of the project. Traffic flow patterns shall be maintained per Section 801 and the Indiana MUTCD. Driveway access shall be maintained throughout the contract. A maintenance of traffic plan which complies with Section 801 and the Indiana MUTCD shall be submitted for review to the County Highway Supervisor, Highway Engineering, and the Owner two (2) weeks prior to commencement of work. The maintenance of traffic plan must be approved by Porter County prior to commencement of work.

**2.02 Unclassified Excavation**

Shall be in accordance with Section 203.04.

**2.03 Compaction**

Shall be in accordance with sections 211.04, 301.04, 301.05, 301.6, 302.04, 302.5, and 302.6. Any material used as structural backfill shall be a limestone material.

**2.04 Proofrolling**

This work shall consist of proofrolling after milling has occurred. Once a milling operation has concluded, the Contractor shall provide a truck for proofrolling for observance by the County. The proofroll shall be performed with an on-highway dump truck with a minimum tire pressure of 90 psi and minimum total weight of 20 tons. The Contractor is encouraged to attend the proofroll. The Contractor shall notify Porter County Representative (PCR) if there is an issue with any localized pavement or subbase/subgrade conditions that will deter the contractor from reaching the minimum density requirements. The Contractor's notification must be made within 24 hours of the proofroll and include documentation of the area by pictures, detailed location and overall size of the area in question. If the Contractor and PCR mutually agree that the area in question may not achieve the required density, then the density penalty in Special Provision 5.12 will not apply and does not relieve the Contractor of the project's warranty (General Specification 105.19) beyond the agreed upon areas in question. Proofrolling will not be an additional cost to the contract.

**3.01 Milling**

This work shall consist of the milling of asphalt and concrete pavements according to Section 306. Millings shall be the responsibility of the contractor. Milling operations shall be described in the QCP in accordance with ITM 803. Project milling depth may be reduced if field conditions warrant as approved by the County. Macrotexture per 306.07 shall not be required. Where the milling operation in a partial-day road restriction results in a longitudinal vertical or near vertical face exceeding 2 in. in height, the adjacent lane shall be milled during the same day, the milled lane resurfaced during the same day, or the vertical face tapered at a 45° angle or flatter. Where located within 3 in. of a curb, surface material that cannot be removed by the cold-milling machine shall be removed by other approved methods. Any localized yielding areas uncovered by the milling process shall be brought to the attention of the County. The roadway shall be cleaned after milling operations, prior to paving and striping operations and if deemed necessary prior to opening to traffic. Any loose asphalt scabs left over after milling

operations shall be removed by the Contractor prior to asphalt placement. The Contractor shall dispose of project millings in the following project locations:

**3.02 Joint Adhesive & Liquid Asphalt Sealant**

This work shall consist of joint adhesive according to Section 401.15. Prior to application of the joint adhesive and sealant, the surface shall be dry and free of loose material and foreign objects. The application of the adhesive shall be made within the same day, but at least 30 minutes prior to construction of the longitudinal joint. The sealant temperature at the time of application shall be at least 135°F and shall not exceed 180°F. The ambient air and pavement temperatures at the time of sealant application shall be greater than 32°F. The joint adhesive and liquid sealant will be accepted by a Type A certification. If applicable, joint adhesive shall be placed on the inside face of a concrete curb prior placing HMA. The liquid asphalt sealant shall be a minimum width of 24” and centered on the joint line

**4.01 Asphalt for Tack Coat**

PCCP, milled asphalt surfaces and asphalt shall be tacked according to Section 406. Prior to tack coat application, any loose asphalt scabs left over after milling operations shall be removed prior to tack coat operations. Contact surfaces of asphalt longitudinal and transverse joints, curbing, gutters, manholes and other structures shall be tacked in accordance with Section 406. Asphalt material shall be placed uniformly across entire width of pavement to be overlaid and shall cover a minimum of 95% of the surface. The asphalt material shall be given sufficient time to break and set to minimize tracking from hauling and laydown equipment. The surface to which the asphalt material is applied shall not have standing water and shall be cleaned of dust, debris and any substances that will prevent adherence.

**4.02 HMA Wedge and Level**

This work shall consist of HMA Wedge and Leveling according to Section 402. If the Contractor chooses to place Wedge and Level courses in multiple lifts, then no mixture shall be placed on a previously paved course that has not cooled to less than 175°F. The table below supersedes Section 402.13 lines 213-217 and shall be used to determine nominal aggregate size per average course thickness.

Wedge and Level Nominal Agg. Size (mm)	Ave. Wedge and Level Course Thicknesses, t, Per Lift (in)
4.75	Feather < t ≤ 7/8
9.50	7/8 < t ≤ 2-1/4
12.50	2-1/4 < t ≤ 4
19.00	4 < t ≤ 5-1/2
25.00	5-1/2 < t ≤ 8

**5.01 HMA Description**

This work shall consist of one (1) or more courses of Hot Mix Asphalt (HMA) surface mixtures for project related activities.

**5.02 HMA Quality Control**

HMA shall be supplied from a Certified HMA Plant in accordance with *Indiana Test Method (ITM) 583 – Certified Volumetric Hot Mix Asphalt Producer Program*. HMA shall be transported and placed according to a Quality Control Plan (QCP) prepared by the Contractor in accordance with *ITM 803 – Contractor Quality Control Plan for HMA Pavement*. The QCP shall be submitted to the Porter County Highway Supervisor fifteen calendar days prior to commencing HMA paving operations.

**5.03 HMA Design Mix Formula and Mixture Type**

The design mix formula (DMF) shall be prepared by an INDOT approved Mix Design Laboratory in accordance with Section 401.04 and 401.05 and submitted to Porter County via email to the County Highway Department supervisor one (1) week prior to use. The DMF shall be based on the mixture type (design ESAL) and mixture

designation of the following tables.

<b>Mixture Type</b>	<b>Type 2*</b>
<i>Design ESAL</i>	<3,000,000
<i>AADT (Average Annual Daily Traffic)</i>	4,000 - 15,000
<i>AADTT (Average Annual Daily Truck Traffic)</i>	50 - 1700

<b>Mixture Type</b>	<b>Type 2*</b>
<b>Surface</b>	
Nominal Maximum Aggregate Sizes	4.75 mm 9.5 mm 12.5 mm

PG Binder Grade	64-22
<b>Intermediate</b>	
Nominal Maximum Aggregate Sizes	9.5 mm 12.5 mm 19.0 mm 25.0 mm
PG Binder Grade	64-22

\* A higher category mix may be used for a lower category application at no additional cost to the agency.

**5.04 HMA Acceptance of Mixtures**

Acceptance will be on the basis of a Type D Certification in accordance with Section 916.02(d) and current INDOT frequency manual. The HMA Certification shall be the quality control test representing the material and shall include air voids at  $N_{design}$  and binder content for material supplied to the project. Type D Certification shall be submitted to Porter County Highway Engineering each day in which material is received.

**5.05 HMA General Construction Requirements**

Shall be in accordance with Section 401.10.

**5.06 HMA Preparation of Surfaces to be Overlaid**

Milling of an existing surface shall be in accordance with Section 306 and Special Provisions 3.01. Surfaces on which a mixture is placed shall be free from objectionable or foreign materials at the time of placement. Contractor shall notify Porter County Representative (PCR) if there is an issue with any localized pavement or subbase/subgrade conditions that will deter the contractor from reaching the minimum density requirements.

**5.07 HMA Weather Limitations**

Shall be in accordance with Section 401.13. Pavement shall not be laid on wet surfaces, especially surfaces that are wet enough to cause honeycombing or excessive cooling.

**5.08 HMA Spreading and Finishing**

Shall be in accordance with Section 401.14.

**5.09 HMA Compaction**

Rollers shall not cause undue displacement, cracking, or shoving. A reduced number of applications on a course may be approved if detrimental results are being observed. Compaction equipment shall be operated with the drive roll or wheels nearest the paver and at speeds not to exceed 3 mph. However, vibratory rollers will be limited

to 2.5 mph. Rolling shall be continued until applications are completed and all roller marks are eliminated.

**5.10 HMA Pavement Smoothness**

Shall be in accordance with Section 401.18. Profilograph testing will not be required.

**5.11 HMA Method of Measurement**

Shall be in accordance with Section 401.21, except the Material Adjustment Factor (MAF) shall not apply.

**5.12 HMA Quality Control & Penalties**

If the contract contains less than 600 tons of surface hot mix asphalt, then the quality control and penalty requirements of this section shall not apply to the contract. Density cores shall be taken by the Contractor in the presence of the County per Section 401.16. Density of samples will be assigned a MSG of 94.0%. Density testing shall be completed by a qualified, third-party testing agency approved by INDOT to perform testing or qualified laboratory to perform testing per ASTM standards. The first 300 tons of the first subplot of the first lot for each mixture pay item will not be sampled for density.

The contract asphalt unit prices shall be adjusted to penalize asphalt compacted less than 94% MSG. The following formula shows that the pay factors for the two (2) core density tests will be averaged and applied per subplot:

$$Contract\ Adjustment\ to\ Asphalt\ Mix\ Pay\ Item = \sum_{i=1}^n \left\{ \left( \frac{PF_{Core1} + PF_{Core2}}{2} \right) - 1.00 \right\} \times SL \times U$$

Where,

PF<sub>Core1</sub> = Pay Factor determined from the table below for Density Core Sample 1

PF<sub>Core2</sub> = Pay Factor determined from the table below for Density Core Sample 2

SL = Placed subplot quantity in tons

U = Contract unit price of pay item

n = number of sublots

<b>Density of Dense Graded Asphalt</b>	
<b>Density % Based on MSG</b>	<b>Pay Factors (rounded to nearest 0.001)</b>
≥ 98.0	Test results shall be submitted to the County Engineer and will be considered and adjudicated as a failed material in accordance with INDOT practice as listed in Section 105.03
93.0-97.9	1.00
92.0-92.9	1.00-0.0025 for each 0.1% below 93.0%
91.0-91.9	0.97.5-0.005 for each 0.1% below 92.0%
90.0-90.9	0.92.5-0.015 for each 0.1% below 91.0%
≤ 89.9	Test results shall be submitted to the County Engineer and will be considered and adjudicated as a failed material in accordance with INDOT practice as listed in Section 105.03

The Contractor may appeal the density test and resulting contract adjustment per Section 401.20. The Contractor shall give the County access anytime to take random samples throughout construction operations.

**5.13 Sampling Frequency**

The Minimum Testing Frequency for Core Density (ASTM D 7226) and Thickness (ASTM D 3549).

Surface                                      One (1) sample for each 600 ton

The Minimum Testing Frequency for ASTM D2950, Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods.

One field density test for every 1,000 Square Yards for each lift, lane or mixture placed.

**5.14 HMA Basis of Payment**

The accepted quantities for this work will be paid for at the contract unit price, complete in place. Adjustment to the contract payment with respect to density will be included in a quality adjustment pay item defined by 5.12 in accordance with Section 109.05.1.

<u>Pay Item</u>	<u>Pay Unit</u>
QC/QA-HMA, 2, 64, Surface, XX mm	Ton

**6.01 Pavement Traffic markings**

This work shall consist of furnishing, installing and removing pavement traffic markings in accordance with the MUTCD, these specifications and consistent with existing markings according to Section 808. Markings shall be installed as required unless written approval is obtained from Porter County Highway Engineering to make modifications at specific locations. The thermoplastic markings will be accepted by a type C certification for longitudinal line placed greater than 10,000 lineal feet.

**6.02 Loop Detectors**

This work shall consist of furnishing and installing loop detectors consistent with existing locations according to Section 805.

**7.0 Documentation**

Documentation for material conformance shall be submitted for review per current INDOT frequency manual and/or INDOT standard specifications.