CITY OF URBANA

Community Development Services Department

Building Safety Division

400 S Vine St • Urbana IL 61801 • (217) 384-2443 • UrbanaIL.gov

DATE: August 25, 2026

TIME: 4:00 p.m.

PLACE: City Council Chambers, 400 S. Vine St., Urbana, IL 61801

AGENDA

1. Call to Order

2. Approval of Minutes of Previous Meeting
   - Minutes of 5-2-2024

3. Old Business

4. New Business
   - BSCBA26-A-01; Signature Homes; Appeal of International Residential Code R405.1 regarding foundation drainage at 3020 Beringer Circle

5. Public Comment

6. Other

7. Adjournment

PUBLIC INPUT

The City of Urbana welcomes Public Input during open meetings of the City Council, the City Council's Committee of the Whole, City Boards and Commissions and other City-sponsored meetings. Our goal is to foster respect for the meeting process, and respect for all people participating as members of the public body, city staff, and general public. The City is required to conduct all business during public meetings. The presiding officer is responsible for conducting those meetings in an orderly and efficient manner.

Public Input will be taken in the following ways:

Email Input

In order to be incorporated into the record, emailed public comments must be received prior to 5:00 pm on the day preceding the meeting and sent to the following email address: **Buildingsafety@urbanail.gov**. The subject line of the email must include the words **"Building Safety Code Board of Appeals - PUBLIC INPUT"** and the meeting date. Emailed public comments labeled as such will be incorporated into the public meeting record, with personal identifying information redacted.

Written Input

Any member of the public may submit their comments addressed to the members of the public body in writing. If a person wishes their written comments to be included in the record of Public Input for the meeting, the writing should state so. Written comments must be received prior to the closing of the meeting record (at the time of adjournment unless otherwise noted).

Public Hearing

Any person desiring to appear at the public hearing and present testimony may speak during each public hearing at the time they appear on the agenda. This shall not count towards regular Public Input for the meeting. The Public Hearing is an opportunity for comments and questions to be addressed specifically to each case. Board or Commission members are permitted to respond and engage during this time and/or the Chairperson may direct the applicant to respond during rebuttal. Comments unrelated to any of the public hearings listed on an agenda should be shared during the Public Input portion of the meeting where Verbal Input guidelines shall apply.

Verbal Input

Protocol for Public Input is one of respect for the process of addressing the business of the City. Obscene or profane language, or other conduct that threatens to impede the orderly progress of the business conducted at the meeting is unacceptable.

Public comment shall be limited to no more than five (5) minutes per person. The Public Input portion of the meeting shall total no more than one (1) hour, unless otherwise shortened or extended by majority vote of the public body members present. The presiding officer or the city clerk or their designee shall monitor each speaker's use of time and shall notify the speaker when the allotted time has expired. A person may participate and provide Public Input once during a meeting and may not cede time to another person or split their time if Public Input is held at two (2) or more different times during a meeting.

The presiding officer or public body members shall not enter into a dialogue with citizens. Questions from the public body members shall be for clarification purposes only. Public Input shall not be used as a time for problem solving or reacting to comments made but, rather, for hearing citizens for informational purposes only.

In order to maintain the efficient and orderly conduct and progress of the public meeting, the presiding officer of the meeting shall have the authority to raise a point of order and provide a verbal warning to a speaker who engages in the conduct or behavior proscribed under "Verbal Input". Any member of the public body participating in the meeting may also raise a point of order with the presiding officer and request that they provide a verbal warning to a speaker. If the speaker refuses to cease such conduct or behavior after being warned by the presiding officer, the presiding officer shall have the authority to mute the speaker's microphone and/or video presence at the meeting. The presiding officer will inform the speaker that they may send the remainder of their remarks via e-mail to the public body for inclusion in the meeting record.

Accommodation

If any accommodation is needed to participate in a City meeting, please contact the City at least 48 hours in advance using one of the following methods:

Phone: 217.384.2443

Email: Buildingsafety@urbanail.gov

Watching the Meeting via Streaming Services

All City meetings are broadcast on Urbana Public Television and live-streamed on the web. Details on how to watch are found on the UPTV webpage located at **https://www.urbanail.gov/executive-department/page/urbana-public-television**.

CITY OF URBANA
BUILDING SAFETY CODE BOARD OF APPEALS
THURSDAY, MAY 2, 2024

Members Present: Scott Kunkel, Gary Burgett, and Brad Houk

Members Absent: Dave Seyler and Darrell Price

Staff Present: Nick Hanson, Mike Frank, Corey Ireland, and Brian Weldy

Others Present: Adam Rebholz and Dionne Clifton

Call to Order:
The meeting was called to order by Scott Kunkel at 4:05 p.m. Roll call was taken and a quorum was declared.

Approval of Minutes:
Mr. Kunkel asked for a motion to approve the minutes of the meeting held Thursday, January 11, 2024. Brad Houk made the motion to approve the minutes and Gary Burgett seconded the motion. All agreed and the minutes were approved as read.

Old Business: There was no old business to discuss

New Business: BSCBA24-A-01 Signature Homes appeal of section R-313.2 of the 2021 International Residential Code and calculation of square footage interpretation. Mr. Kunkel explained the process of how the hearing would be done and in what order.

Mr. Hanson, the Building Official, began with an opening statement stating that they received an application from Signature Homes for a new single family residence. Last year, when we adopted the new 2021 code, we amended the residential code requiring sprinklers for houses over 6000 square feet. The floor plan that was submitted had calculations of 6053 square feet. An overlay of those drawings presented it as having 6575 square feet, thus requiring a sprinkler system.

Mr. Rebholz, the builder, then spoke. He stated that the original application that was submitted was over 6000 square feet. The gross square footage calculation, by their understanding can be taken from the inside walls as opposed to the outside walls so they redid the calculations based on the inside walls and came up with under 6000 square feet so a sprinkler system should not be required.

Mr. Hanson first read out the section R-313.2 of the code. The key here is defining what is gross square feet. Unfortunately that terminology is not defined in the International Residential

Code (IRC), however, it is clearly defined in the International Building Code. The IRC does state that if it not defined in the IRC, you can use other codes where it is defined as the definition. So when you look at the definition for gross square footage, that includes everything inside the perimeter of the exterior walls. The interpretation is there are two areas within the home that are considered open space on the second floor. Based on that terminology that is still considered space within the four walls. Our interpretation is that this counted. We relayed that to Signature Homes, who disagreed.

Mr. Hanson then reached out to the International Code Council for an interpretation from them which is quoted in the packet including the attachment #1 which is the email he received back from the ICC basically in agreement of the city's interpretation of the definition of gross square footage.

Mr. Kunkel stated that the question at hand is really the section of the plans where there is an area on the second floor that is open to the first floor where there isn't a floor system there but the question is whether the implied area of that is included in the calculations.

Mr. Hanson stated that was correct. Mr. Hanson said that it is still square footage that can lead to additional fire load, etc.

Mr. Kunkel then asked the appellant to present his evidence.

Ms. Clifton looked up the definition according the IFC and ICC and it states that the floor area is within the inside perimeter of the exterior walls of the building. She understands that the open space creates additional space, but it is not floor area. She understands counting the space once but not twice. She also called the ICC and spoke to Mr. Phillip Grankowski on April 15th, who is a representative out of the Chicago office. He was helpful and indicated that a good rule of thumb is where "feet can be" hence the term square footage and that he would not count that open space.

Mr. Kunkel asked Ms. Clifton about Mr. Grankowski and she gave the phone number that she had for him. Mr. Rebholz did not have any other comments to add

Mr. Kunkel asked city staff for any rebuttal. Mr. Hanson said that you can go to the commentary for that section of the code for the definition of gross floor area and the commentary clearly indicates the area of all occupiable and non occupiable spaces. That is in the memo that was presented and is also quoted from the ICC interpretation.

Mr. Rebholz stated that it is getting foggy because of so many definitions. The amendment to the code was put in place for 6000 square feet so they are trying to follow the code and that they are under the 6000 square feet.

Ms. Clifton read the definition of gross floor area.

Mr. Kunkel then said the board would have a discussion regarding this. Mr. Houk asked staff about square footage calculation. Mr. Hanson explained how the square footage was calculated. Mr. Houk said he was having trouble not seeing how we were calculating that open space twice. Mr. Hanson explained that if you talk to the fire department, the houses that are lost are the big open houses. Mr. Hanson said they are trying to protect the citizen's that live there and the firefighters that respond to them. Mr. Houk does not see where the code is talking about cubic feet. Otherwise, there are massive attics in Stone Creek that are not counted within that calculation for sprinkler systems. Otherwise, they would be needing sprinkler systems. He does not see how that is any different.

Mr. Hanson stated that this is our amended code. IRC requires sprinklers on all residences. We actually amend that out. If we go by their code, every house that was built would require it. In the spring last year, when we proposed these code changes, the fire department asked to put this in. Brad Houk asked how they came up with 6000 square feet. Mr. Hanson said they had originally asked for 5000 square feet. In discussion with the board, they determined that 6000 was a more viable number and we came to an agreement that it was a starting point.

Mr. Houk asked whether they could put a limited space sprinkler system in the mechanical room or the garage. Would that bring it under the 6000 square foot threshold? Mr. Hanson gave an explanation of where the sprinkler would have to be. Mr. Houk stated that we need to work on the clarification.

Mr. Burgett stated that he was a little concerned about counting the second floor open space in the area calculation. When he reads floor area gross, it shall not include shafts, openings or interior courts. Maybe there's a better definition of that term but when he looks at the great room, and other spaces, it does look like they are counting that area twice. Mr. Kunkel asked how staff would look at a ranch style home with higher cathedral ceiling. Mr. Hanson said it would be considered a single story.

Mr. Weldy from the fire department introduced himself and explained that from the fire departments perspective wide open space that have living space allows more rapid fire growth. Mr. Kunkel said there are a handful of homes which have the higher ceilings where there wouldn't be an implied second floor.

Mr. Hanson said that when you talk about those open tall houses, what is the potential for life lost in a 20 foot high one story house. That is dead space up there. This house does not have dead space up there, it has a second floor up there.

Ms. Clifton said that there is a lot of speculation on this house in particular and how the fire might spread that is being presented without any information and it is subjective.

Mr. Kunkel asked what number they came up with square footage.
He also asked Ms. Clifton if she had any kind of print out of the conversation with Mr. Ronkowski. She did not. Mr. Kunkel asked Mr. Hanson what his thoughts were on why there was a different interpretation from ICC. Mr. Hanson said that he did not know but that it was an interpretation thing which is why he was adamant that they provide him something in writing.

Mr. Rebohlz said he joined the ICC and thinks that some of the confusion may be commercial vs residential.

Mr. Houk stating that sprinklers do add additional cost to the house. Mr. Hanson said he had reached out to different vendors and gotten some costs.

Mr. Kunkel explained that if the board is approving the appeal, they are required to have someone make a motion to approve the appeal. The motion has to be in a format of “I move that the appeal of and the rest of what is in the bylaws”

Mr. Houk moved to approve the appeal of BSCBA24-A-01 Signature Homes appeal of Section R-313.2 of the 2021 International Residential Code and calculation of square footage interpretation.

Mr. Kunkel asked for a vote. Roll call was taken and it passed unanimously. The appeal was granted.

Mr. Kunkel made a motion to close the public hearing portion of the meeting. Gary Burgett made the motion and Brad Houk seconded. That closed the public hearing portion of the meeting.

Adjournment:

The meeting was adjourned at 4:48 p.m.

Respectfully submitted,

Vivian Petrotte

BSCBA:vp

CITY OF URBANA
Community Development Services Department
400 S Vine St • Urbana IL 61801 • (217) 384-2444 • UrbanaIL.gov

Meeting: Building Safety Code Board of Appeals
From: Michael Frank, Building Inspector
Nicholas Hanson, Building Official
Date: August 18, 2026
Subject: 3020 Beringer

Background

On April 28, 2025, our office was contacted by Realtor "Martha" to investigate potential water issues in the basement at 3020 Berringer Circle. Upon visiting the site I observed moisture in the basement. I recommended that the realtor reach out to the contractor to discuss this issue, as the building was still under construction and our office had last conducted a framing inspection in March.

Our office was contacted again by the prospective homebuyer to revisit the property and discuss the moisture issues in the basement area. During our visit, signs of moisture was observed on the exterior walls, and we also noticed a leak at the main shut-off valve. We again encouraged the buyer to address these concerns with the contractor.

Additionally, on June 24, 2025, we sent an email to Signature Homes detailing the moisture problems observed in the basement. We inquired about the dampproofing method used on the exterior walls and the grading around the property, requesting that they rectify any issues identified. We cited R406.1 and R406.2 of the 2021 International Residential Code, which outlines proper foundation dampproofing methods.

In October 2025, our office was again contacted by a prospective home buyer who reported ongoing moisture issues in their home. They mentioned that several companies had conducted inspections, raising concerns about the tiles installed at the foundation. The home buyer asked if we had inspected the foundation tile; we clarified that this is not typically included in our inspections. For much of the home-building process, no specific inspection is performed, and we rely on IRC Section R105, which states, "It shall be the duty of every person who performs work for the installation or repair of buildings, structures, electrical, gas, mechanical, or plumbing systems, for which this code is applicable, to comply with this code."

The home buyer provided photos sent by the contractor, illustrating their method of installing foundation tile drains. Upon reviewing these photos, we questioned Signature Homes about whether the property had a membrane on the perforated pipe or if a membrane was placed over the gravel to protect the piping.

Our office has engaged in multiple conversations via phone and email regarding the methods and systems used for this project. They responded that they were unsure and would need to speak with the sub-contractor who did the concrete work for the footing and basement walls. The sub-contractor indicated they stocked both sleeved and unsleeved tile.

We reviewed the manufacturer's website for the installation methods applicable to the tile brand that was used, and we also spoke with a representative from the company to determine if the method complied with R405.1, which allows for installation without a membrane.

During our phone conversation, the company representative stated, “It does not explicitly state that installing a filter membrane is not recommended,” as noted in an email sent to Signature Homes on October 31, 2025. Our office requested to verify the installation of the filter membrane on the drainage tile by contacting our office and having an inspector meet the contractor onsite to dig up a selected area to visually inspect the tile. .

Our office was never contacted by Signature Homes or Anderson Brothers the subcontractor for the basement. However, a photo was submitted on XXXX showing a sleeved tile in the ground near the northwest corner of the structure. Our office reiterated the request to be present for such tile exposure.

At the request of Signature Homes our office met a representative from Signature and Anderson Brothers on-site on May 30, 2026, to discuss the matter further in person. During this meeting, our office was asked if what could be done if the sleeve was not on the tile. We advised that if a sleeve was not present, then they could dig down to the surrounding gravel and add a filter membrane or dig down and replace the tile with a properly sleeved tile.

The contractor then asked if the sleeve or filter membrane was not present, could they enlist an engineering company to certify that the property does not require a filter membrane, thereby avoiding the need for excavation or replacement. Our office responded and said if they could provide documentation from an Illinois-licensed architect or structural engineer indicating that the current method met the intent of the code, our office would review it for compliance.

Situation

It was finally admitted that the tile installed, lacked the filter membrane, therefore did not meet the minimum code requirement of the 2021 International Residential Code Section R405.1 (*see attachment for code and commentary*).

The contractor stated that they install two tiles, one inside the footing and one outside; therefore, that’s better than the code and should meet the minimum requirements. Our office has once again spoken with the tile manufacturer's representative and sent an email (attached) to obtain their response regarding whether they can meet the exception within R405.1 of

> “Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an *approved* filter membrane”.

Their email response was *"If soil migration into the crushed rock backfill is a concern, a geotextile wrap should be used around the rock. While we can provide general guidance, Prinsco cannot determine whether a geotextile or sock is required for a specific installation. That decision should be made by the Engineer of Record based on site conditions and project requirements.”* (*see attachment*)

Therefore, per the manufacturer, a filter membrane is required to be installed outside the structure.

Moving forward, our office now requires separate inspections for all basement foundations for both footing tiles and dampproofing, and we have begun documenting these inspections on the permit.

Question Before the Board

Is a filter membrane required to be installed?

Staff Recommendation

Install a filter membrane to comply with R405.1 minimum requirements.

Attachments

2021 International Residential Code R405.1 with commentary
Email with drain tile manufacturer Prinsco
ICC ES Report ESR-4078 for Prinsco ProForm HD system
Screenshot of other applications on Prinsco's website for drainage

2021 International Residential Code R405.1 Concrete or Masonry Foundations:

Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below *grade*. Drainage tiles, gravel or crushed stone drains, perforated pipe or other *approved* systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall discharge by gravity or mechanical means into an *approved* drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an *approved* filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an *approved* filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.
Exception: A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.

2021 International Residential Code Commentary on R405.1:

❖ To allow free groundwater that may be present *adjacent* to the foundation wall to be drained away, drains are usually placed around houses to remove water and prevent leakage into habitable or usable spaces below grade. The top of the gravel or crushed stone drain, with or without drainage tile or perforated pipe, **must** be covered with an approved filter membrane. Drainage tiles are extremely important in areas having moderate to heavy rainfall and in soils having a low percolation rate. Perforated pipe has perforations around the entire pipe. The perforations will be subject to clogging if not protected. Except where otherwise recommended by the drain manufacturer, the code requires an approved filter membrane to surround the perforated drain pipe. As an alternate solution, the code permits washed gravel or crushed stone covering the perforated pipe to be covered with an approved filter membrane. The filter membrane allows water to pass through the perimeter drain tiles or pipes without allowing, or at least greatly reducing, the possibility of fine soils entering the drainage system. A few examples of such systems are illustrated in Commentary Figures R405.1(1) and R405.1(2). The exception allows omission of the drainage system in Group I soils, which by definition exhibit good drainage characteristics as shown in Table R405.1.

From: Application Engineering
To: Michael Frank; Abby Thorson
Subject: RE: Foundation tile questions for the City of Urbana
Date: Monday, August 3, 2026 9:45:34 AM
Attachments: image006.png
HDPE Pipe - Installation - Foundation Drain - D-1-130_A.pdf

Good morning Michael,
Sorry for the delay, looks like there was a miscommunication on our end.

I have attached our Foundation Drain Drawing, which states: *"If soil migration into the crushed rock backfill is a concern, a geotextile wrap should be used around the rock."* While we can provide general guidance, Prinsco cannot determine whether a geotextile or sock is required for a specific installation. That decision should be made by the Engineer of Record based on site conditions and project requirements.

Thank you,

Bryce Erickson
Application Engineer II

Prinsco | Water Management Solutions
1717 16th St. NE Willmar MN 56201
o. 320.441.2674 | w. prinsco.com

From: Michael Frank <Michael.Frank@UrbanaIL.gov>
Sent: Monday, August 3, 2026 9:13 AM
To: Abby Thorson <Abby.Thorson@prinsco.com>
Cc: Application Engineering <AppEng@prinsco.com>
Subject: RE: Foundation tile questions for the City of Urbana

Good Morning

I spoke with Bryce on the phone last week to see if we could get a little more clarification in an email regarding the wording from Prinsco and if the method of install would meet the exception of the IRC that states “Except where otherwise recommended by the drain manufacturer, perforated drains ***shall*** be surrounded with an approved filter membrane or the filter membrane ***shall*** cover the washed gravel or crushed rock covering the drain”.

Prinsco offers additional foundation alternatives that have been approved the the Internation Code Council by way of an ESR-4078 for the ProForm HD installation that specifically states that a filter membrane material must be placed in accordance with IBC and IRC as applicable, and other residential applications shown on the website with a retaining wall showing a geotextile sleeve installed in the photo, and retaining wall drainage also shows a geotextile sleeve installed.

We are seeking clarification on whether the Goldline product, when used in a basement wall foundation without a filter membrane, meets the exception stated in the 2021 IRC 405.1. The manufacturer does not recommend this product for installation in foundation wall drains. Would Prinsco state that when used in this application it does not need a filter membrane?

Bryce said he would do a little more research and try to get back in touch with me, but I have not heard back yet from him.

Michael J Frank
Building Inspector I

Community Development Services | City of Urbana
400 S Vine St | Urbana, Illinois 61801
217.328.8266

From: Abby Thorson <Abby.Thorson@prinsco.com>
Sent: Monday, July 27, 2026 12:51 PM
To: Michael Frank <Michael.Frank@UrbanaIL.gov>
Subject: FW: Foundation tile questions for the City of Urbana

HI Michael,

Please see the response below from our engineering department.

Let me know if you have any questions.

Thank you,

Abby Thorson
National Accounts Sales Representative

Prinsco | Water Management Solutions
1717 16th St. NE Willmar MN 56201
o. 507.430.0775 | f. 320.222.6820 | w. prinsco.com

From: Application Engineering <AppEng@prinsco.com>
Sent: Monday, July 27, 2026 11:51 AM
To: Abby Thorson <Abby.Thorson@prinsco.com>
Subject: RE: Foundation tile questions for the City of Urbana

Good morning Abby,
To answer Michael's question, we are unable to sign off on installations.

Since we are the manufacturer of the pipe, we can provide product specifications and installation recommendations. However, verifying that an installation complies with local requirements is outside our scope. Determining whether an installation meets standards and approving it remains the responsibility of the Engineer of Record (EOR).

Let me know if there is anything than I can do to help.

Thank you,

Bryce Erickson
Application Engineer II

Prinsco | Water Management Solutions
1717 16th St. NE Willmar MN 56201
o. 320.441.2674 | w. prinsco.com

From: Michael Frank <Michael.Frank@UrbanaIL.gov>
Sent: Monday, July 27, 2026 10:03 AM
To: Abby Thorson <Abby.Thorson@prinsco.com>
Subject: Foundation tile questions for the City of Urbana

Good Morning

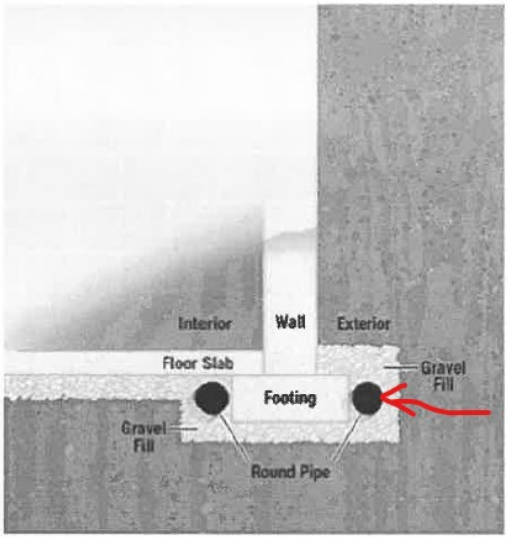
Thank you for taking the time to discuss the tile that Prinsco offers. We have a contractor who has installed a foundation drain both inside the house and around the perimeter like this:

Existing Foundation Drainage

For existing foundation water problems perforated HDPE pipe combined with a primary and back-up sump system can create a lasting, efficient drainage solution.

Related Products

- GOLDLINE®



My question comes from not so much the tile itself, but the installation methods/requirements to meet the minimum code standards. While the tile under the floor slab does not have to meet the minimum code requirements (as it is additional to the minimum code), in the 2021 International Residential Code, section R405.1 states that “Except where otherwise recommended by the drain manufacturer, perforated drains ***shall*** be surrounded with an approved filter membrane or the filter membrane ***shall*** cover the washed gravel or crushed rock covering the drain.” Full code here: https://codes.iccsafe.org/content/IRC2021V3.0/chapter-4-foundations#IRC2021V3.0_Pt03_Ch04_SecR405

The tile in question is the one with the red arrow pointed at it. From the wording of the code, this needs an approved filter membrane around the tile or above the rock, and the commentary on this section of code states the reason for this membrane is “The filter membrane allows water to pass through the perimeter drain tiles or pipes without allowing, or at least greatly reducing, the possibility of fine soils entering the drainage system”

Our question is whether Prinsco, as the drain manufacturer, would have a structural engineer sign off on the installation of the tile on a basement foundation, confirming that it meets or exceeds the minimum code requirements outlined in R405.1 of the 2021 International

Residential Code (IRC), even in the absence of a filter membrane.

The reason this has become an issue is that the prospective homebuyer noticed excessive moisture seeping into the foundation walls. This raised concerns about the installation method of the piping and the water table, especially since the property is located near a retention pond.

Thank you for taking the time to review this information.

Michael J Frank
Building Inspector I

Community Development Services | City of Urbana
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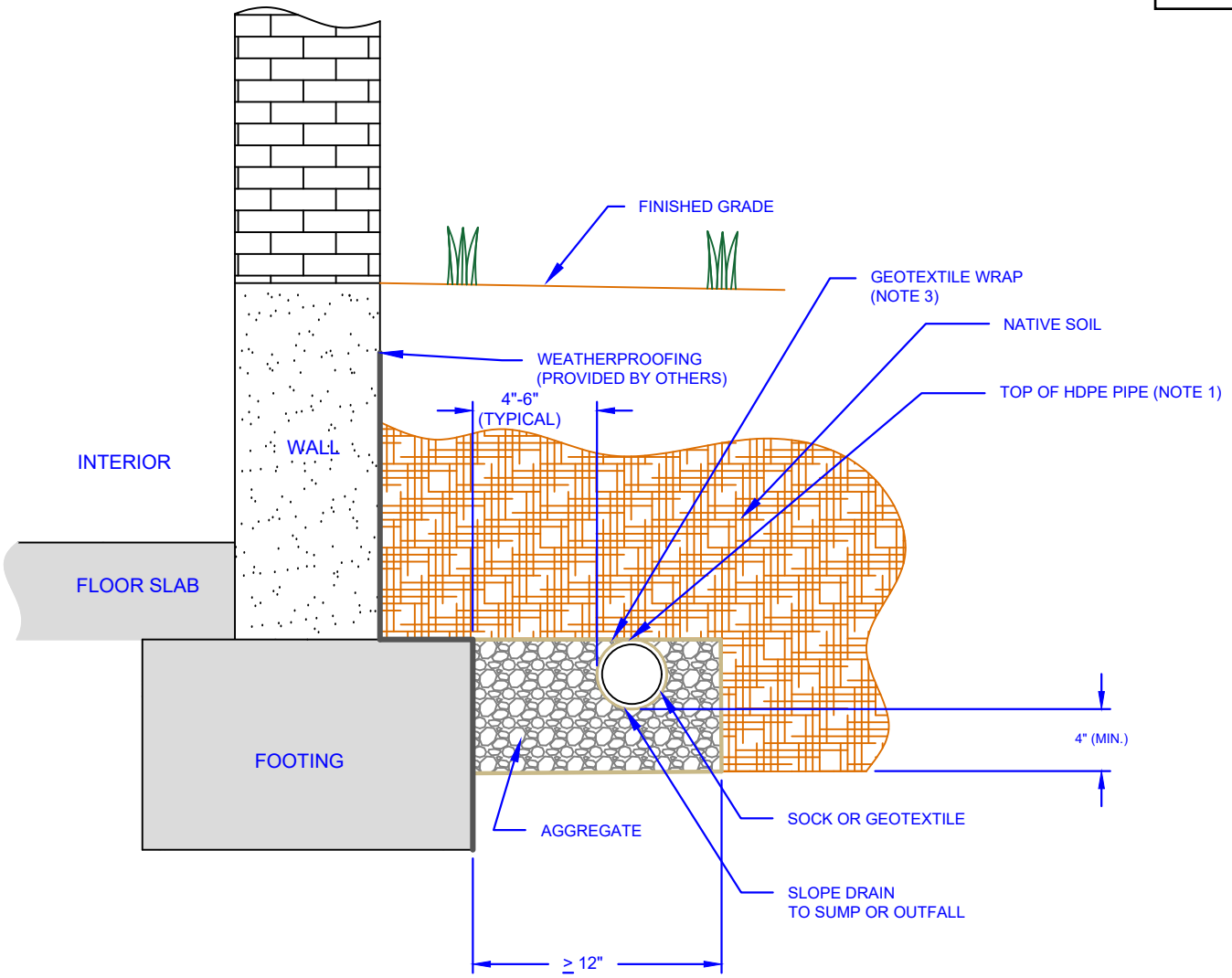
CITY OF URBANA



NOTES:

1. TOP OF PERFORATED PIPE MUST BE AT OR BELOW THE TOP OF FOOTING
2. A CRUSHED ANGULAR BACKFILL IS RECOMMENDED AROUND THE FOUNDATION DRAIN PIPE
3. IF SOIL MIGRATION INTO THE CRUSHED ROCK BACKFILL IS A CONCERN, A GEOTEXTILE WRAP SHOULD BE USED AROUND THE ROCK.
4. FOR VEHICULAR LOADS, A MINIMUM OF 12-INCHES OF COVER IS REQUIRED OVER THE TOP OF THE PIPE

PRINSCO
WATER MANAGEMENT SOLUTIONS
1717 16TH ST. NE
WILLMAR, MN 56201
www.prinsco.com

TITLE: HDPE PIPE- INSTALLATION - FOUNDATION DRAIN

DRAWN BY:	SSB	DATE:	17-Jun-20	DRAWING NUMB	D-1-1
SCALE:	NTS	SHEET:	1 OF 1		

ICC EVALUATION SERVICE®

ICC-ES Evaluation Report

ESR-4078

Reissued August 2024

Subject to renewal August 2026

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DIVISION: 33 00 00—UTILITIES Section: 33 46 00—Subdrainage	REPORT HOLDER: PRINSCO INC.	EVALUATION SUBJECT: PROFORM™ HD	

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2015 *International Building Code®* (IBC)
- 2015 *International Residential Code®* (IRC)

Property evaluated:

- Foundation Drainage

1.2 Evaluation to the following green standards:

- 2015, 2012 and 2008 ICC 700 *National Green Building Standard™* (ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attribute verified:

- See Section 3.0

2.0 USES

The PROFORM™ HD system is used to provide foundation drainage in accordance with IBC Section 1805.4 and IRC Section R405.

3.0 DESCRIPTION

3.1 General:

The PROFORM™ HD system consists of 10-foot-long (3.05 m) drainage channels, called "lineals", and connectors which are used to connect the lineals to each other and to the drainage pipe which discharges to an approved area in accordance with the IBC or IRC as applicable.

PROFORM™ HD lineals are manufactured from high density polyethylene (HDPE). The components of the system are described in Sections 3.2 and 3.3. Figure 1 of this report depicts a typical schematic of the PROFORM™ HD system. Figure 2 of this report depicts a section through a typical application of the lineal.

The attributes of the PROFORM™ HD system have been verified as conforming to the provisions of ICC 700-2015 and ICC 700-2012 Section 602.1.3.1 and ICC 700-2008 Section 602.3 for foundation drainage. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

3.2 PROFORM™ HD Lineal

The PROFORM™ HD lineal is up to 10 feet long (3.05 m), 6.5 inches (165 mm) high and 2.6 inches (66 mm) wide. The lineals are manufactured as hollow corrugated box sections. See Figure 3 of this report for an illustration of a lineal.

Water enters the lineal through slots in the vertical face of the lineal, and passes through the system to outlet fittings which provide the connection of the PROFORM™ HD to an approved discharge area in accordance with the IBC or IRC as applicable.

3.3 PROFORM™ HD Fittings

The PROFORM™ HD fittings are used to connect the lineals to each other and to connect the foundation drain system created by PROFORM™ HD to an approved drainage disposal system. The fittings consist of pre-installed straight couplings, vertical 90° "L" couplings, and adjustable elbows for multiple angles which include 45° and 90°. See Figure 3 of this report for illustrations of these fittings and other miscellaneous fittings and items used in the installation of the PROFORM™ HD system.

The couplings and fittings are manufactured with cleats so that they are snap fitted into the lineals, without the use of solvents or adhesives, to form the foundation drain system.

4.0 DESIGN AND INSTALLATION

The PROFORM™ HD system must be installed in accordance with the manufacturer's published installation instructions and this report. A copy of the manufacturer's published installation instructions must be available at the job site at all times during installation.

See Table 1 for infiltration rates of water into the PROFORM™ HD lineals.

The PROFORM™ HD lineal, gravel or crushed stone, and approved filter membrane material must be placed in accordance with IBC Section 1805.4 or IRC Section R405.1, as applicable. Discharge of the PROFORM™ HD system must be in accordance with IBC Section 1805.4.3 or IRC Section R405.1, as applicable.

5.0 CONDITIONS OF USE:

The PROFORM™ HD system described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.

5.2 Whenever crossovers are provided through foundations, plans and calculations must be submitted to the code official at the time of permit application, demonstrating the structural integrity of the foundation has been maintained. The calculations and drawings must be prepared and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

6.0 EVIDENCE SUBMITTED

6.1 Manufacturer's published descriptive literature and installation instructions.

6.2 Engineering calculations addressing water infiltration into the PROFORM™ HD system.

6.3 Quality documentation in accordance with ICC-ES Acceptance Criteria for Quality Documentation (AC10).

7.0 IDENTIFICATION

7.1 PROFORM™ HD system components must be labeled with the manufacturer's name and this evaluation report number (ESR-4078).

7.2 The report holder's contact information is the following:

PRINSCO INC.
1717 16TH STREET NORTHEAST
WILLMAR, MINNESOTA 56201
(320) 222-6800
www.prinsco.com

TABLE 1—DRAIN INFILTRATION RATES

WATER INFILTRATION RATE PER FOOT OF LINEAL (gal/min)					
Feet of Head					
0.5	1.0	1.5	2.0	2.5	3.0
16.7	23.6	28.9	33.4	37.4	40.9

For **SI:** 1 inch = 25.4 mm, 1 gallon/minute = 0.0631 liter/second

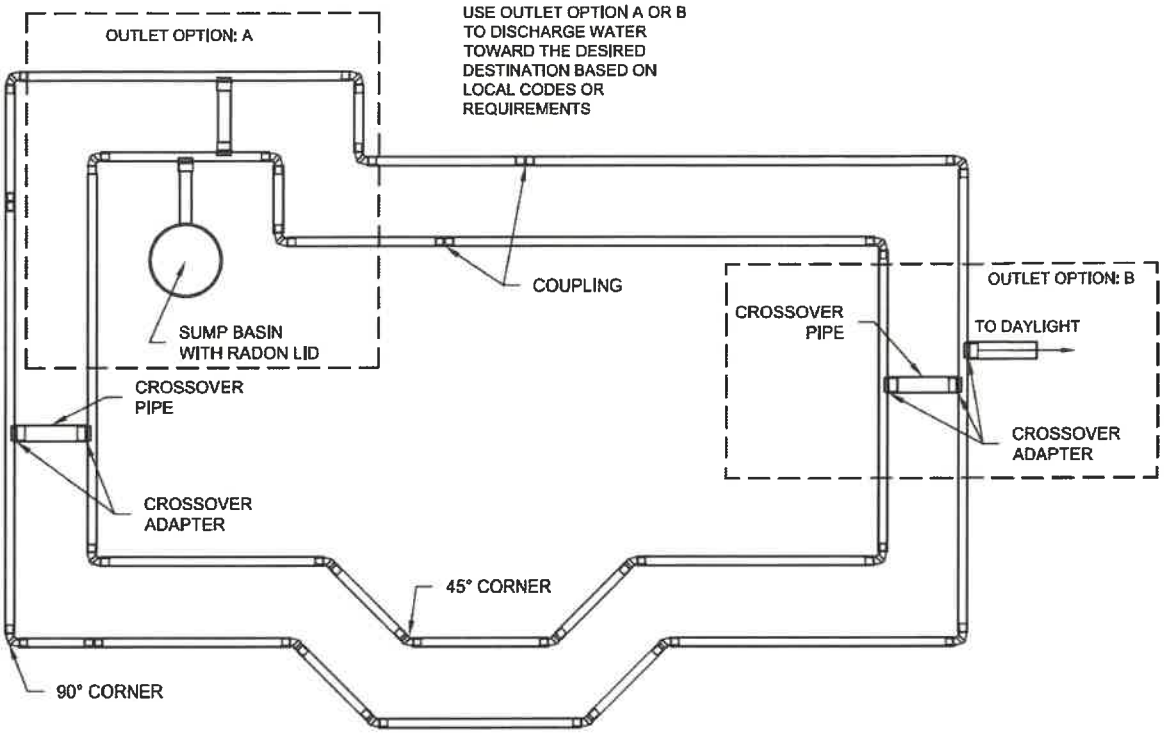

FIGURE 1—SYSTEM SCHEMATIC
Note: For illustrative purposes only

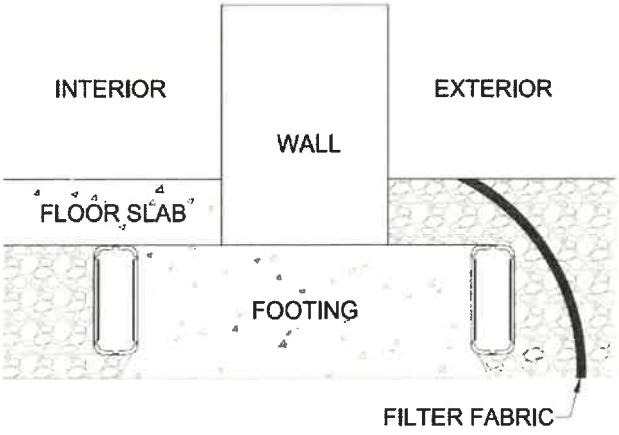

FIGURE 2—INSTALLATION CROSS SECTION
Note: For illustrative purposes only

PROFORM HD FITTINGS & ACCESORIES

FIGURE 3—SYSTEM COMPONENTS

From: Nicholas Hanson
To: Michael Frank
Subject: Prinsco
Date: Monday, July 27, 2026 1:22:30 PM
Attachments: Proform-HD-ICC-ES-Report-ESR-4078.pdf
image001.png
image002.png
image003.png

PRINSCO
WATER MANAGEMENT SOLUTIONS

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- FITTINGS & ACCESSORIES
- APPLICATIONS
- SUPPORT

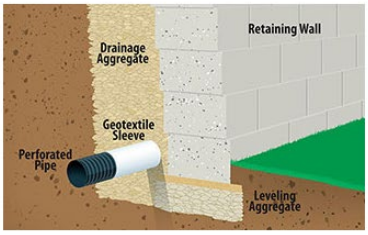
This innovative product forms foundation footings, offers superior drainage, and supports radon venting – in one simple system.

LEARN MORE ABOUT PROFORM™ HD >

ABOUT PRINSCO

Prinsco is a third-generation family-owned company committed to providing quality water management solutions. We have a mission to care, contribute and solve.

LEARN MORE >



APPLICATIONS

Prinsco products can be used in a variety of applications.

SEE RESIDENTIAL APPLICATIONS >

PROFORM™ HD

The new improved PROFORM™ HD is ready for your next project.

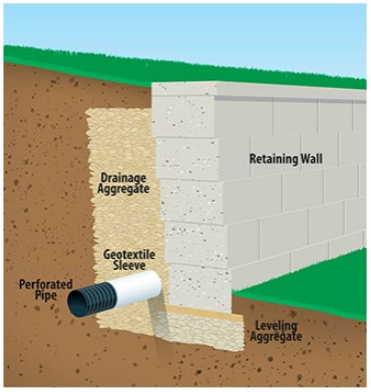
LEARN MORE >

Retaining Wall Drainage

In order for retaining walls to be effective and remain structurally sound, a water management system should be in integral part of the build. Corrugated plastic tubing can be used to create an effective drainage system for retaining wall applications.

Related Products

- GOLDLINE®



Best Regards,

Nick Hanson
Building Official

Community Development Services Department | City of Urbana
400 South Vine Street | Urbana, Illinois 61801
217-384-2430

CITY OF URBANA Illinois

CITY OF URBANA
UNIFORM APPEAL APPLICATION

TO: **CHAIRMAN**
BOARD OF APPEALS
400 S. VINE STREET
URBANA, IL 61801

( ) **BUILDING SAFETY CODES BOARD OF APPEALS**

==========

DO NOT WRITE IN THIS SPACE - FOR OFFICE USE ONLY

DATE FILED: 07-22-2026

APPEAL APPLICATION NO. BSCBA26-A-01

DATE SET FOR HEARING: 08-25-2026

DATE HEARING HELD: _____

NOTICE TO NEWS MEDIA: 08-19-2026

DATE: _____

FEE PAID - RECEIPT NO.: Paid

AMOUNT: $ 210 **DATE:** 7-22-2026

COMMENTS: **(INDICATE OTHER ACTIONS SUCH AS CONTINUANCES.)**

ACTION BY BOARD ON APPEAL: _____
(GRANTED, DENIED, OTHER)

==========

APPEAL IS TAKEN FROM THE ENFORCING OFFICER'S DECISION, A COPY OF WHICH IS ATTACHED, FOR A REVERSAL OR MODIFICATION OF SAID DECISION IN CONFORMITY WITH THE DISCRETIONARY POWERS OF THE BOARD TO PERMIT THE FOUNDATION DRAIN SYSTEM INSTALLED AT THE PROPERTY
(INSERT INSTALLATION OR CONSTRUCTION PROPOSED OR REQUIRED NOTICE.)

ON THE PROPERTY DESCRIBED BELOW.
LOCATION: 3020 E. BERINGER CIRCLE, URBANA
(STREET AND NUMBER)

PRESENT OR PROPOSED USE: RESIDENCE
(VACANT, RESIDENCE, GROCERY, FACTORY, ETC.)

==========

ACTIONS BY APPLICANT ON PROPERTY

PERMIT APPLIED FOR AND DENIED ( ) YES (X) NO DATE APPLICATION: _____

A PREVIOUS APPEAL WAS _____ WAS NOT __X__ MADE WITH RESPECT TO THESE PREMISES.

IN THE EVENT THIS APPEAL IS DENIED, AN ACCOMPANYING APPLICATION FOR REQUEST FOR VARIANCE IS ATTACHED. ( ) YES (X) NO.

DATA ON APPLICANT AND OWNER

NAME OF APPLICANT (S): ADAM REBHOLZ - SIGNATURE HOMES

ADDRESS OF APPLICANT (S): 3127 VILLAGE OFFICE PLACE, CHAMPAIGN IL 61822

PROPERTY INTEREST OF APPLICANT (S): OWNER/ BUILDER
(OWNER, CONTRACT PURCHASER, ETC.)

NAME OF OWNER (S): SIGNATURE CONSTRUCTION INC.

ADDRESS OF OWNER (S): 3127 VILLAGE OFFICE PLACE, CHAMPAIGN IL, 61822

1. THE SPECIFIC DECISION APPEALED FROM IS:

DENIAL OF FOUNDATION DRAINAGE SYSTEM INSTALLED AT THE PROPERTY

2. THE DECISION APPEALED FROM WAS INCONSISTENT WITH THE FOLLOWING SECTIONS OF THE CODE OF THE CITY OF URBANA, ILLINOIS. (NOTE: IDENTIFY EACH SECTION BY NUMBER AND QUOTE THE RELEVANT LANGUAGE OF EACH. IF YOU NEED MORE ROOM, INSERT ADDITIONAL PAGES BETWEEN THIS SHEET AND THE NEXT.)

SECTION R.405.1 OF THE 2021 IRC (INTERNATIONAL RESIDENTIAL CODE)

- SEE SECTION ATTACHED

3. I BELIEVE THE DECISION APPEALED FROM WAS INCONSISTENT WITH THE ABOVE DESCRIBED SECTION(S) FOR THE FOLLOWING SPECIFIC REASON(S): (NOTE: HERE, BRIEFLY STATE THE SPECIFIC FACTS AND ARGUMENTS IN SUPPORT OF YOUR POSITION.)

- SEE FORM ATTACHED

APPROVED/STAMPED FOOTING TILE DRAIN DETAIL ATTACHED

(PLEASE ATTACH ANY PLANS OR OTHER EXHIBITS WHICH WOULD HELP THE BOARD DECIDE THIS CASE.)

==========

WHEREFORE, PETITIONER PRAYS THAT THIS PETITION BE HEARD BY THE BOARD OF APPEALS AND THE DECISION OF THE CODE OFFICIAL BE REVIEWED ON THE BASIS OF ITS MERITS.

RESPECTFULLY SUBMITTED THIS 16 DAY OF JULY, A.D., 20 26.

APPLICANT'S SIGNATURE

309-212-5979
APPLICANT'S TELEPHONE NUMBER

TO BE FILED WITH:

ADMINISTRATIVE SECRETARY TO THE BOARD

COMMUNITY DEVELOPMENT SERVICES
400 S. VINE STREET
URBANA, IL 61801

C:\~\HOUSING\APPEALAPPLICATION

Supplemental information for item 2 in the appeal application

SECTION R405
FOUNDATION DRAINAGE ES

R405.1 Concrete or masonry foundations. INSIGHTS

Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below *grade*. Drainage tiles, gravel or crushed stone drains, perforated pipe or other *approved* systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall discharge by gravity or mechanical means into an *approved* drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an *approved* filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an *approved* filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

Exception: A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.

› INSIGHTS (1)

Response to item 3. in the uniform appeal application

We believe the decision appealed from was inconsistent with the above described section for the following specific reason(s)

The Code requires an *approved* drainage tile system at or below the top of the footing (exterior) OR below the bottom of the slab

- we have a drainage tile system installed on both the exterior AND the interior, that has been approved by a professional engineer
- see detail attached that has been approved and stamped by a licensed professional engineer

The code calls for perforated drains to be surrounded with an approved filter membrane, or the filter membrane shall cover the washed gravel or crushed rock covering the drain, except where otherwise recommended by the drain manufacturer.

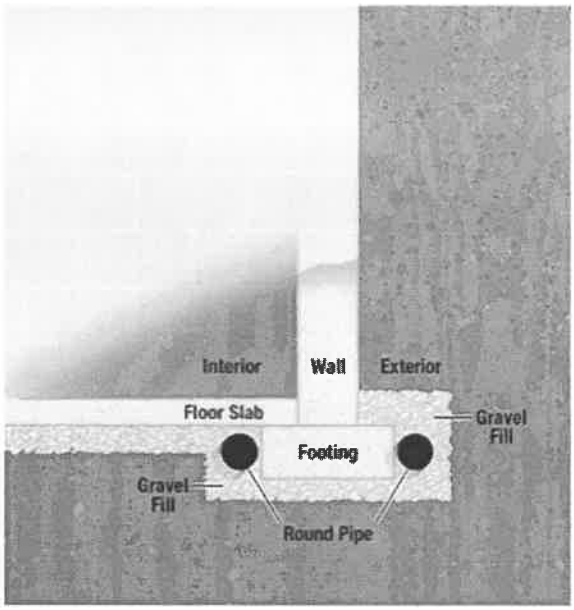
- Our drain tile manufacturer has published the exact drain tile detail on their website that we have currently installed at the property
- see link to website and detail below
  - Applications - Prinsco, Inc

Existing Foundation Drainage

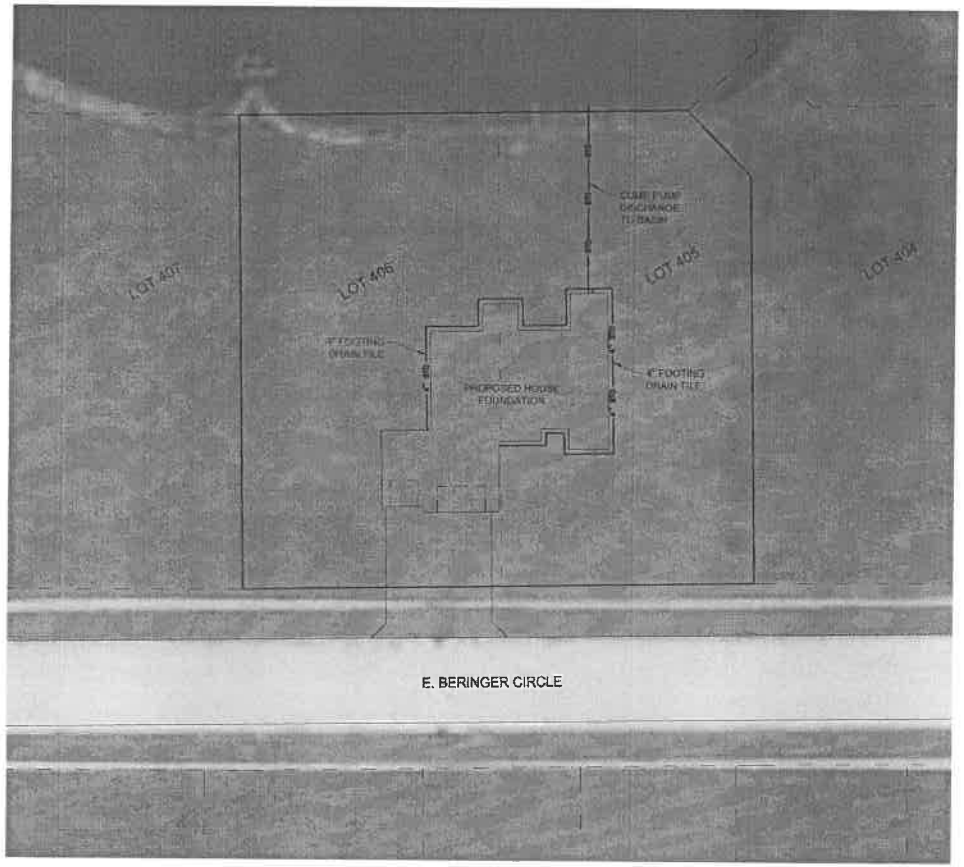
For existing foundation water problems, perforated HDPE pipe combined with a primary and back-up sump system can create a lasting, efficient drainage solution.

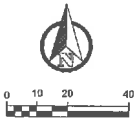
Related Products

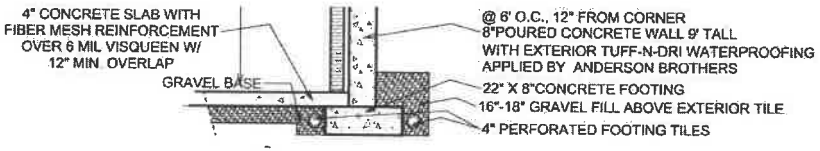
- GOLDLINE®



In summary, we believe our foundation drain tile system is completely within what is required by the building code, and we should be permitted to continue with the final inspection of the property.







TYPICAL FOOTING TILE DRAIN DETAIL
NOT TO SCALE

Signed: _____
Mark A. Miller
Illinois Licensed Professional Engineer
No. 062.056290
License Expires 11/30/27

MARK A. MILLER 062-056290 LICENSED PROFESSIONAL ENGINEER ILLINOIS

Date: 05/11/26

REV. #	REV. DATE:	REVISION MADE:	
DATE: 05/11/26		SCALE: AS SHOWN	PRECISION ENGINEERING GROUP, INC. P.O. BOX 794 CHAMPAIGN, IL 61824-0794 PHONE: 217.202.6049 CIVIL ENGINEERING - LAND SURVEYING ILLINOIS DESIGN FIRM REGISTRATION NO. 184007581
FIELD BOOK: -----		DRAWN BY: MAM	
CHECKED BY: MAM			
FOUNDATION DRAIN PLAN			
3020 E. BERINGER CIRCLE PART OF SEC. 10, T.19 N., R. 9 E., 3rd P.M. URBANA, ILLINOIS			FILE # 14726010 SHEET 1 OF 1

File Name: S:\000 Projects\14726010 3020 Beringer Circle Foundation\Dwg\14726010 foundation drain.dwg