



# Addendum #03 for RFB #939000-01

Project Name: DOC 1JD DPP Basement Water Infiltration Mitigation

DAS RFB #: 939000-01

DAS Project #: 9390.00

Date: January 02, 2024

Addendum #03:

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications. **This addendum shall also supersede any previous addenda.** 

The receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Bid Form.

#### This Addendum consists of:

#### 1. General Items

- a. Extended deadline for questions: January 7th, 2025, by 3:00pm
- b. Questions and Answers / Addendum Pages (4 Pages)
- c. Basement Boiler Hatch Structural Repair (1 Page)
- d. Revised Arch Drawing Sheets A1.0, A1.1, A2.0 (3 Pages)
- e. Revised MEP Drawing Sheets P1.0, P1.1, ED1.0, ED1.1, E1.0, E1.1 (6 Pages)
- f. Revised 00 4116 Bid Form to include Alternate (4 Pages)
- g. 01 2300 Alternates Spec Section (2 Pages)
- h. 07 1413 Hot Fluid Applied Waterproofing Spec Section (5 Pages)
- i. 07 1416 Cold Fluid Applied Waterproofing Spec Section (5 Pages)

#### 2. Questions and Answers

- a. Is a fused disconnect required before the service conductors enter the building per NEC code requirements?
  - i. This is an open coordination item with Alliant Energy. A disconnect has been added and service location revised via Addendum #3.
- b. Does the fiber have to be piped all the way to the data closet? Or do we just need sleeves entering the building and through any walls we core through?
  - i. The documents require fiber optic cabling to be routed in hard conduit all the way to the data closet.
- c. Who is to re-terminate the fiber once removed and re-installed?
  - i. The documents place this responsibility on the contractor. This addendum has added clarification on contractor vs Mediacom responsibilities.
- d. Will the current fiber re-use existing rack-mounted housings?
  - i. Yes, the existing rack-mounted housings will be reused.
- e. Would the Internet Service Provider (ImOn, CenturyLink, Mediacom, etc.) play a part in this correspondence or is this a privately owned fiber?
  - i. Please refer to drawing revisions and clarification in this addendum.





- f. Does the existing fiber that needs to be demoed currently terminate in the "newly proposed" data closet?
  - i. The termination location of the existing and new fiber is the same location. The location is currently a data closet.
- g. What type of fiber is currently in place? Single Mode OS2, or Multimode OM3, OM4?
  - i. The specifications have been updated to single-mode, 8.3/125 um (OS2) fiber optic cable in lieu of the previously stated multi-mode cabling.
- h. Are the fire alarm conductors allowed to be run open air in j hooks. If so, what are the locations that are and are not allowed.
  - Yes, conduit is required for fire alarm conductors. This has been clarified via Addendum #3.

## 3. Changes to Specifications

- a. Section 00 01100 Table of Contents.
  - i. DELETE Section 07 1326 Self-Adhering Sheet Waterproofing.
  - ii. ADD Section 07 1413 Hot Fluid Applied Waterproofing.
  - iii. ADD Section 07 1416 Cold Fluid Applied Waterproofing.
- b. Section 03 0137 Rehabilitation of Cast in Place Concrete.
  - CHANGE Paragraph 2.2.B Repair Mortar to SikaEmaco One Mix single component multi-purpose repair mortar suitable for vertical and overhead repairs. MeadowCrete is also approved. Others to be pre-approved. Install in accordance with manufacturer's instructions.
- c. Section 03 3053 Miscellaneous Cast in Place Concrete.
  - i. CHANGE Paragraph 2.5.B.1 the compressive strength from 3,500 psi to 5,000 psi at 28 days. This mix will be used for the alley pavement replacement.
- d. Section 05 5000 Metal Fabrications.
  - i. Paragraph 1.1.A. ADD Line 2. Miscellaneous steel framing and supports. Steel beam and clip angles for basement repair are to meet ASTM A 36. Provide shop primer on steel and all cut edges.
  - ii. Paragraph 2.2.B. ADD the following sentence; Provide 6 x 6 W2.9 x W2.9 WWF for concrete alley paving.
  - iii. ADD sub-paragraph 3.9. Field Quality Control. Owner will engage a qualified testing agency to perform tests and inspections. Test Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd.
- e. Section 07 1326 Self-Adhering Sheet Waterproofing.
  - i. DELETE Section 07 1326 Self-Adhering Sheet Waterproofing in its entirety.
- f. Section 07 1413 Hot Fluid Applied Waterproofing.
  - i. ADD the attached Section 07 1413 Hot Fluid Applied Waterproofing.
- g. Section 07 1416 Cold Fluid Applied Waterproofing.
  - i. ADD the attached Section 07 1416 Cold Fluid Applied Waterproofing.
- h. Section 271000 Structured Cabling.
  - i. REVISE cable type in paragraph 2.03.A.2 shall be single-mode, 8.3/125 um (OS2) in lieu of multi-mode cabling.
  - ii. CLARIFY specified fiber optic cabling is only applicable to cabling replaced by the contractor under this project. Utility company is to repair/replace cabling in kind for utility-owned cabling.
- i. Section 32 1216 Asphalt Paving.
  - i. DELETE Section 32 1216 Asphalt Paving in its entirety.
- j. Approved Substitution Requests: None.





# 4. Changes to Drawings

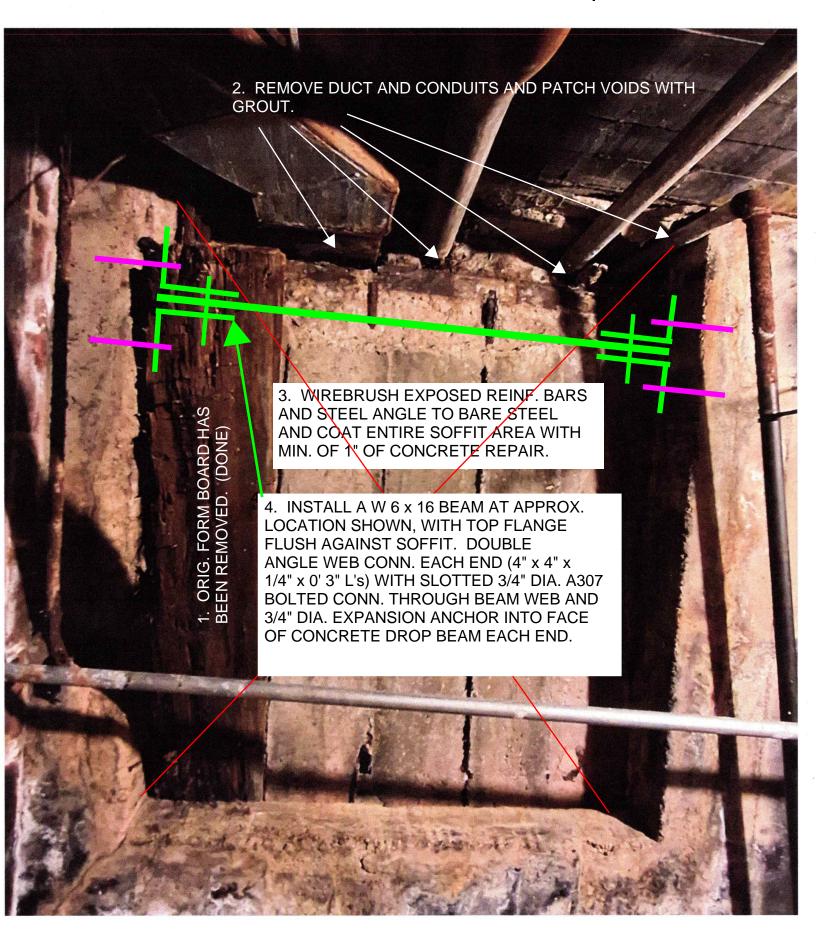
- Sheet A1.0 Partial Basement Plan. ADD the notes highlighted in the attached Drawing.
  - i. See also the attached Basement Boiler Hatch Structural Repair instructional sheet for repairs to the basement boiler hatch in the ceiling. Repair the exposed ends of the existing steel reinforcing bars, apply concrete patching repair mortar as specified, and install the steel support beam. Field measure and verify approximate hatch recess width of 3'-6".
- **b. Sheet A1.1– Alley and Partial First Floor Plan.** Replace this sheet with the attached Drawing.
  - i. ADD the following paragraph to the left sheet margin. Maintain Rear Building Exit. The rear exit door and egress to the alleyway must be maintained as an active means of egress during construction. Alley pavement demolition will need to be done in two sequences, removing all existing asphalt except for a 4 foot wide exit route leading from the doorway to the alley. This exit way will need to have construction barrier fencing on both sides and leading completely out of the construction zone. After all utilities have been replaced and the new concrete paving is ready to be done, the remaining asphalt exit path can be demolished and replaced as long as it is done in the same day. The existing basement window well lid can be shifted over and used in the exit while it is cut down and infilled as long as it is made solid and safe for exiting. Work that requires closing the exit must be scheduled during the weekend while the building is unoccupied.
- c. Sheet A1.2 Partial Second Floor Plan.
  - i. Note that the plaster patching repairs need to be done after the roof replacement has been completed and may require a later trip to the site depending on project sequencing. The roof replacement is a separate project running in conjunction with this project.
- d. Sheet A2.0 Section. Replace this sheet with the attached Drawing Sheet.
- e. Sheet P1.0 PARTIAL BASEMENT PLUMBING PLAN
  - i. REVISE location of gas piping to accommodate 3'-0" clearance from natural gas regulator to electrical service entrance. Refer to revised Sheet P1.0.
- f. Sheet P1.1 ALLEY PLUMBING UTILITY PLAN
  - i. REVISE location of gas meter to accommodate 3'-0" clearance from natural gas regulator to electrical service entrance. Refer to revised Sheet P1.1.
- g. Sheet ED1.0 PARTIAL BASEMENT ELECTRICAL DEMO PLAN
  - CLARIFY quantity and scope of work of fiber optic cabling under Keyed Note #2. Refer to revised Sheet ED1.1.
  - ii. ADD Keyed Note #5 referring to removal of telephone lines by CenturyLink. Refer to revised Sheet ED1.1.
- h. Sheet ED1.1 ALLEY & PARTIAL FIRST FLOOR ELECTRICAL DEMO PLAN
  - i. REVISE Keyed Note #1 to include removal of existing meter and metering conduit/conductors. Refer to revised Sheet ED1.1.
  - CLARIFY quantity and scope of work of fiber optic cabling under Keyed Note #2.
     Refer to revised Sheet ED1.1.
  - iii. ADD Keyed Note #6 referring to removal of telephone lines by CenturyLink. Refer to revised Sheet ED1.1.
  - iv. ADD removal of existing electric meter. Refer to revised Sheet ED1.1.
- . Sheet E1.0 PARTIAL BASEMENT ELECTRICAL PLAN
  - i. ADD underground electrical service conduits to new meter location. Refer to revised Sheet E1.0.
  - ii. REVISE electrical service location. Refer to revised Sheet E1.0.
  - iii. CLARIFY fire alarm conductors shall be run in conduit.

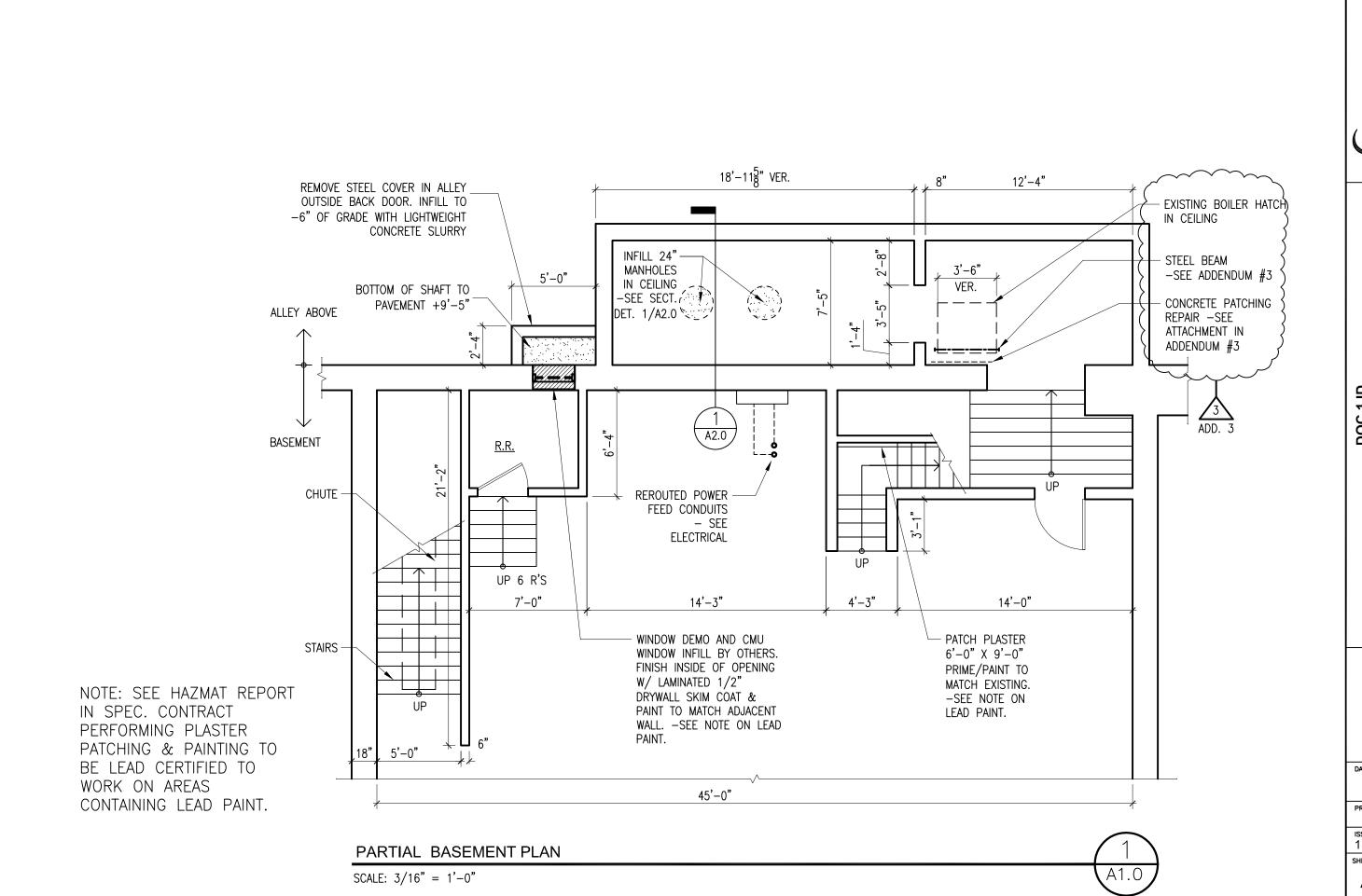




- iv. ADD Keyed Note #7 regarding coordination of new telephone cabling routing with CenturyLink. Refer to revised Sheet E1.1.
- . Sheet E1.1 ALLEY ELECTRICAL UTILITY PLAN
  - i. REVISE electrical service location. Refer to revised Sheet E1.1.
  - ii. CLARIFY fire alarm conductors shall be run in conduit.
  - iii. REVISE fiber optic cabling to be rerouted vs new cabling. Cabling shall be repaired by contractor if damaged. Refer to Keyed note 2 revisions on revised Sheet E1.1.
  - iv. ADD coordination of 3<sup>rd</sup> fiber optic cable with Mediacom. Refer to Keyed note 2 revisions on revised Sheet E1.1.
  - v. ADD Keyed Note #5 regarding coordination of new telephone cabling routing with CenturyLink. Refer to revised Sheet E1.1.

# Basement Boiler Hatch Structural Repair





DOC 1JD BASEMENT WATER INFILTRATION MITIGATION 745 MAIN ST DUBUQUE, IOWA 52001

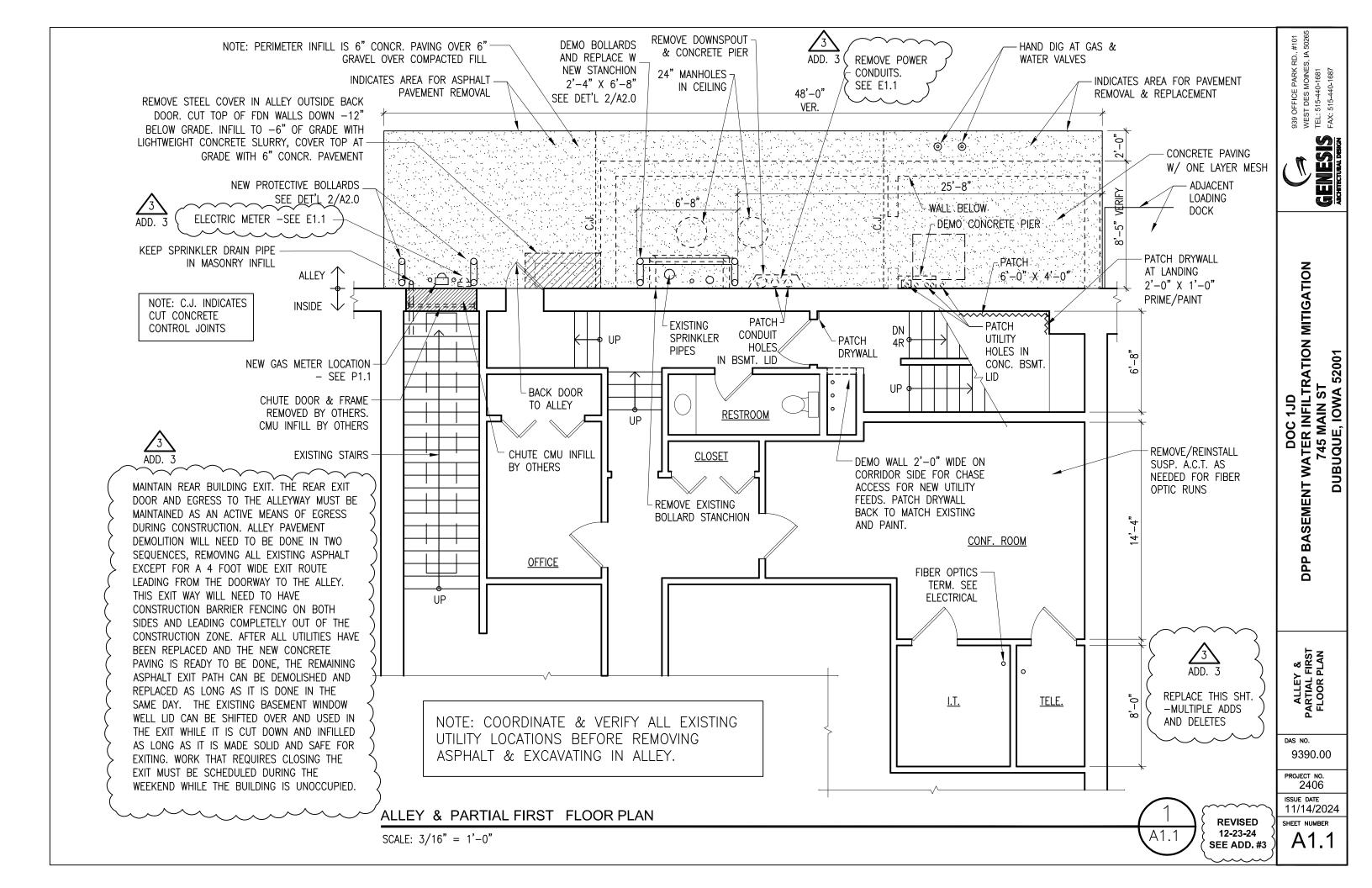
PARTIAL BASEMENT PLAN

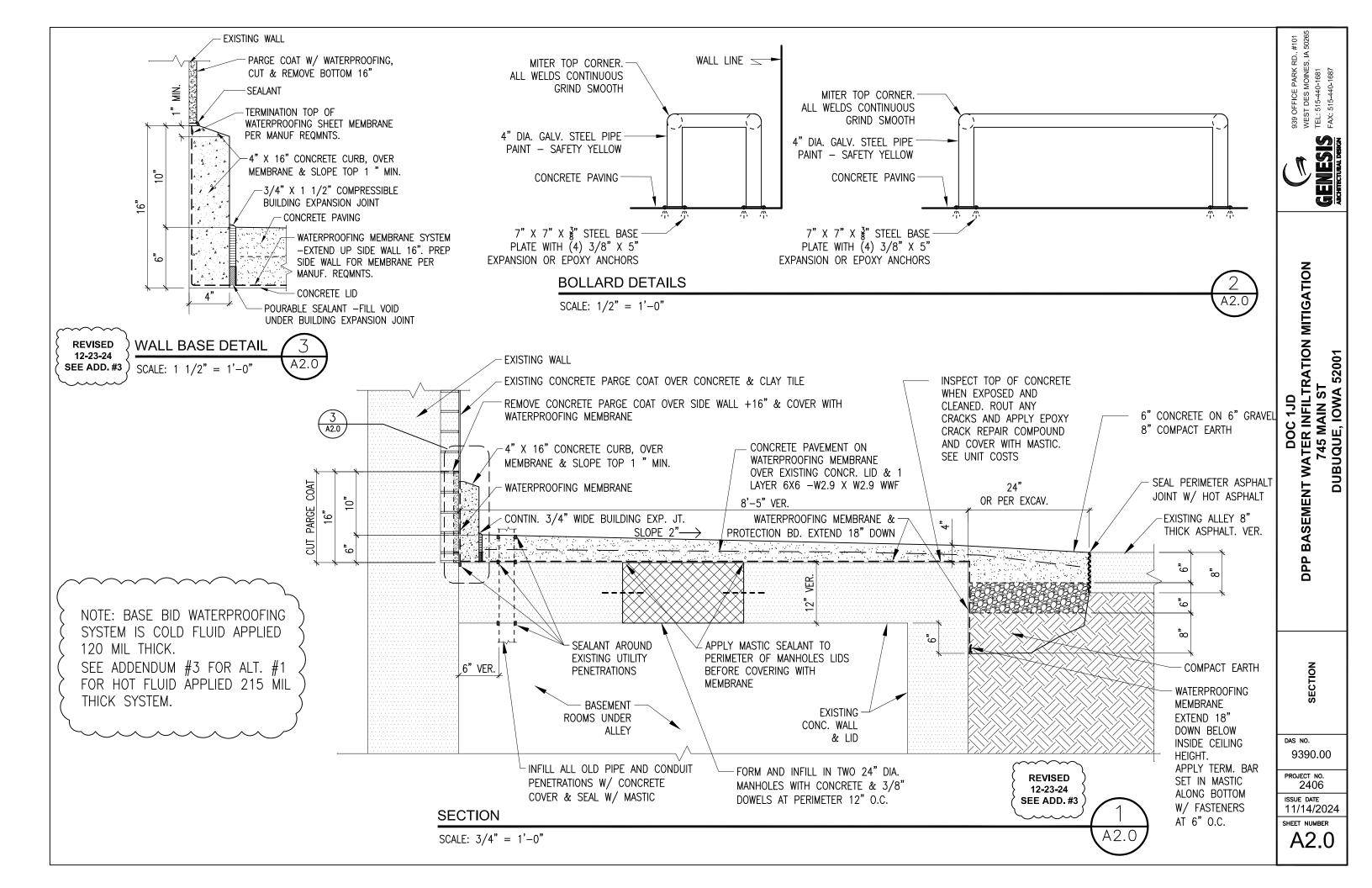
DAS NO. 9390.00

PROJECT NO. 2406

ISSUE DATE 11/14/2024

SHEET NUMBER A1.0



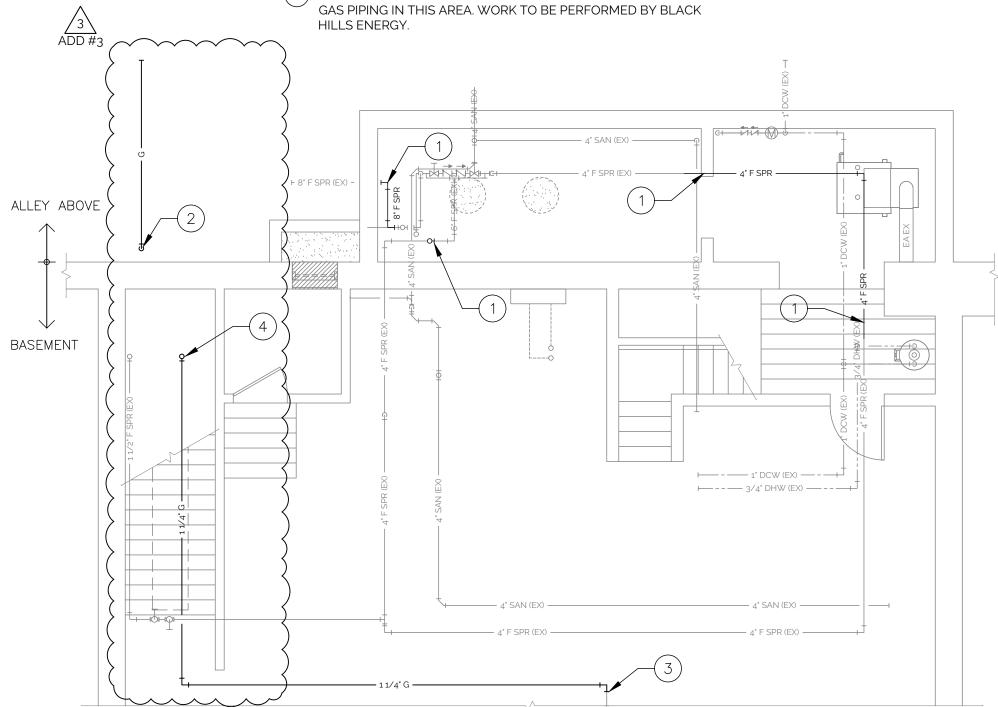


FOR CONTRACTOR REFERENCE ONLY: NATURAL GAS SERVICE UP TO METER. WORK TO BE PERFORMED BY BLACK HILLS

4 FOR CONTRACTOR REFERENCE ONLY: 1-1/4" G UP. REFER TO SHEET P1.1 FOR CONTINUATION. WORK TO BE PERFORMED BY BLACK HILLS ENERGY.

UP TO METER. WORK TO BE PERFORMED BY BLACK HILLS ENERGY.

(3) FOR CONTRACTOR REFERENCE ONLY: CONNECT TO EXISTING





PARTIAL BASEMENT PLUMBING PLAN
3/16" = 1'-0"

9 OFFICE PARK RD., #101 ST DES MOINES, IA 5026 L: 515-440-1681



GENESIS

DOC 1JD DPP BASEMENT WATER INFILTRATION MITIGATION 745 MAIN ST DUBUQUE, IOWA 52001

> PARTIAL BASEMENT PLUMBING PLAN

DAS NO.

9390.00 PROJECT NO.

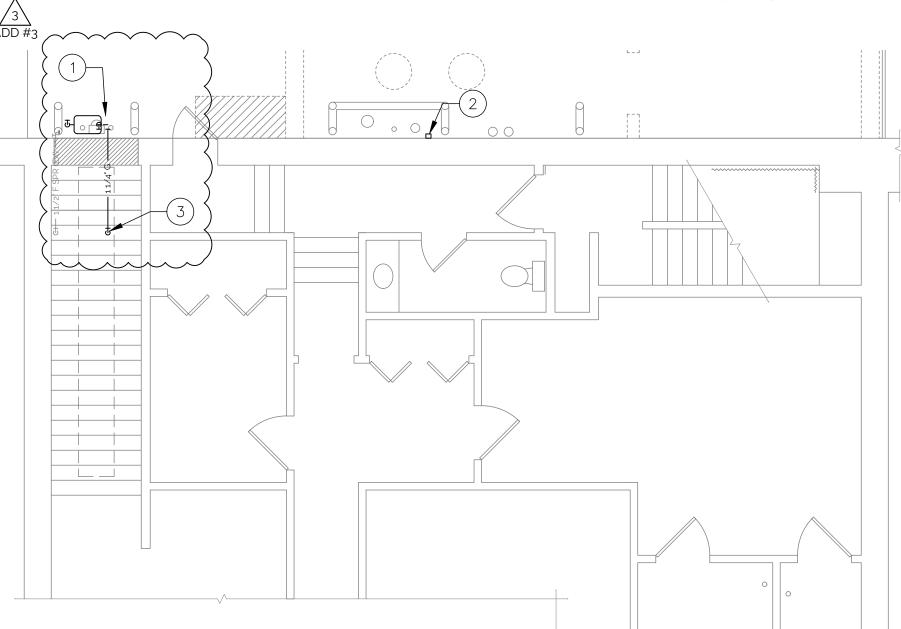
2406 ISSUE DATE 10/25/24

SHEET NUMBER

P1.0



FOR CONTRACTOR REFERENCE ONLY: 1-1/4" G DOWN. REFER TO SHEET P1.0 FOR CONTINUATION. WORK TO BE PERFORMED BY BLACK HILLS ENERGY.





ALLEY & PARTIAL FIRST FLOOR PLUMBING PLAN

GENESIS

DOC 1JD BASEMENT WATER INFILTRATION MITIGATION 745 MAIN ST DUBUQUE, IOWA 52001

ALLEY PLUMBING UTILITY PLAN

DPP

DAS NO. 9390.00

PROJECT NO. 2406 ISSUE DATE

10/25/24 SHEET NUMBER

P1.1

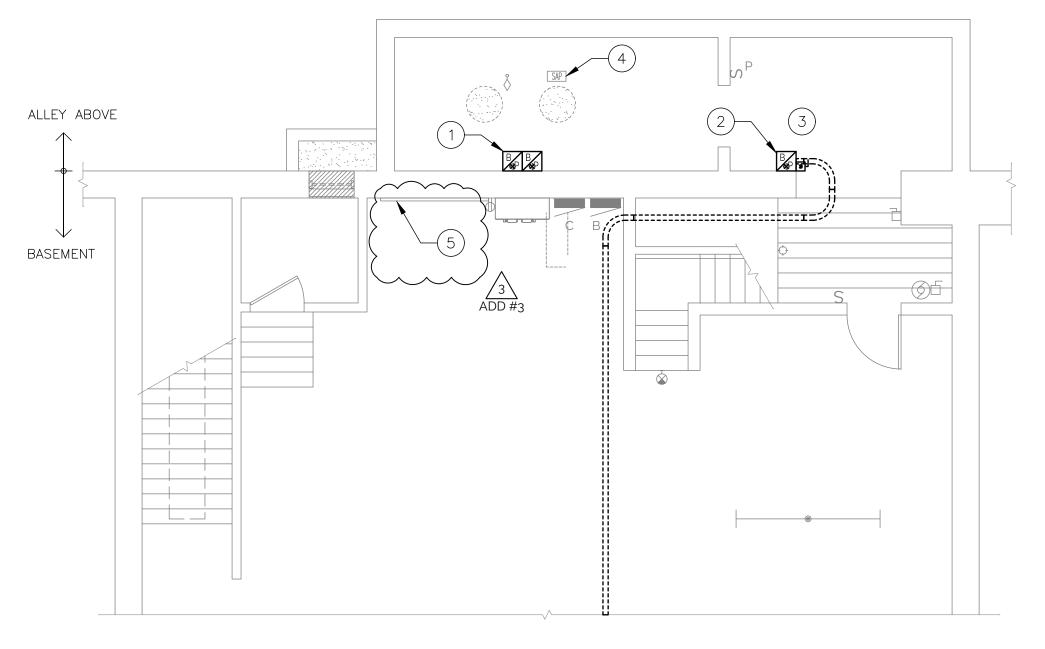
REMOVE SPLICE BOXES AND CONDUIT UP TO ELECTRIC METER IN ALLEY REFER TO NEW WORK PLANS FOR NEW ROUTING

REMOVE FIRE ALARM GONG CONDUCTORS TO FIRE SPRINKLER SERVICE. REFER TO SHEET ED11 FOR GONG LOCATION

REMOVE (2) LINES OF FIBER OPTIC CABLING AND CONDUIT AS INDICATED. COORDINATE REMOVAL OF 3RD LINE OF FIBER OPTICE CABLING WITH MEDIACOM. MINIMIZE SHUTDOWN(S) TO NIGHT/WEEKEND AS MUCH AS POSSIBLE. COORDINATE SHUTDOWN WITH OWNER.

COORDINATE REMOVAL OF PHONE LINES AND SPLICE BOX WITH CENTURYLINK. MINIMIZE SHUTDOWN(S) TO NIGHT/WEEKEND AS MUCH AS POSSIBLE. COORDINATE SHUTODOWN WITH OWNER.

DEMO CIRCUITS SERVING DOWNSPOUT HEAT TRACE. COORDINATE HEAT TRACE LOCATIONS AND REVISIONS WITH ROOFING REPLACEMENT AND TUCKPOINTING PROJECTS. REFER TO NEW WORK PLANS FOR NEW CONDUIT ROUTING.





PARTIAL BASEMENT ELECTRICAL DEMO PLAN



**MITIGATION** DOC 1JD BASEMENT WATER INFILTRATION 745 MAIN ST DUBUQUE, IOWA 52001

PARTIAL BASEMENT ELECTRICAL DEMO PLAN

DPP

DAS NO.

9390.00

PROJECT NO. 2406

ISSUE DATE 10/25/24

SHEET NUMBER ED1.0

# **KEYED NOTES**

SHUTDOWN WITH OWNER.

ADD #3 REMOVE ABANDONED CONDUIT. CONDUIT IS ROUTED UP THROUGH SHEET METAL ENCLOSURE TO ~10'-0" ABOVE GRADE, THEN ROUTES HORIZONTALLY ~15'-0". REMOVE ENTIRE

LENGTH OF ABANDONED CONDUIT.

COORDINATE REMOVAL OF PHONE LINES AND SPLICE BOX WITH CENTURYLINK. MINIMIZE SHUTDOWN(S) TO NIGHT/WEEKEND AS MUCH AS POSSIBLE. COORDINATE SHUTODOWN WITH OWNER.

REMOVE CONDUIT UP TO OVERHEAD SERVICE, METER, AND METERING CONDUIT/CONDUCTORS. REFER TO NEW WORK PLANS FOR NEW ROUTING. COORDINATE WORK WITH ALLIANT ENERGY. NOTE: DEMO WORK IS NOT TO BE COMPLETED UNTIL NEW SERVICE IS IN PLACE.

REMOVE (2) LINES OF FIBER OPTIC CABLING AND CONDUIT AS INDICATED. COORDINATE REMOVAL OF 3RD LINE OF FIBER OPTICE CABLING WITH MEDIACOM. DO NOT CUT/SEVER CABLING; CABLING IS TO BE REUSED. MINIMIZE SHUTDOWN(S), TO NIGHT/WEEKEND AS MUCH AS POSSIBLE. COORDINATE

REMOVE FIRE ALARM GONG. REMOVE CONDUCTORS BACK TO FIRE SPRINKLER SERVICE IN BASEMENT SPRINKLER ROOM. REFER TO SHEET ED1.0 FOR BASEMENT SPRINKLER ROOM

LOCATION. SALVAGE GONG FOR REUSE.

REROUTE CIRCUITS SERVING DOWNSPOUT HEAT TRACE. COORDINATE HEAT TRACE LOCATIONS AND REVISIONS WITH ROOFING REPLACEMENT AND TUCKPOINTING PROJECTS.



ALLEY & PARTIAL FIRST FLOOR ELECTRICAL DEMO PLAN

SHEET NUMBER ED1.1



**MITIGATION** DOC 1JD SEMENT WATER INFILTRATION M 745 MAIN ST DUBUQUE, IOWA 52001 BASI DPP

ALLEY & PARTIAL FIRST FLOOR ELECTRICAL DEMO PLAN

DAS NO. 9390.00

> PROJECT NO. 2406

ISSUE DATE 10/25/24



PARTIAL BASEMENT ELECTRICAL PLAN



**MITIGATION** 

DOC 1JD
MENT WATER INFILTRATION M
745 MAIN ST
DUBUQUE, IOWA 52001 Σ BASI DPP

PARTIAL BASEMENT ELECTRICAL PLAN

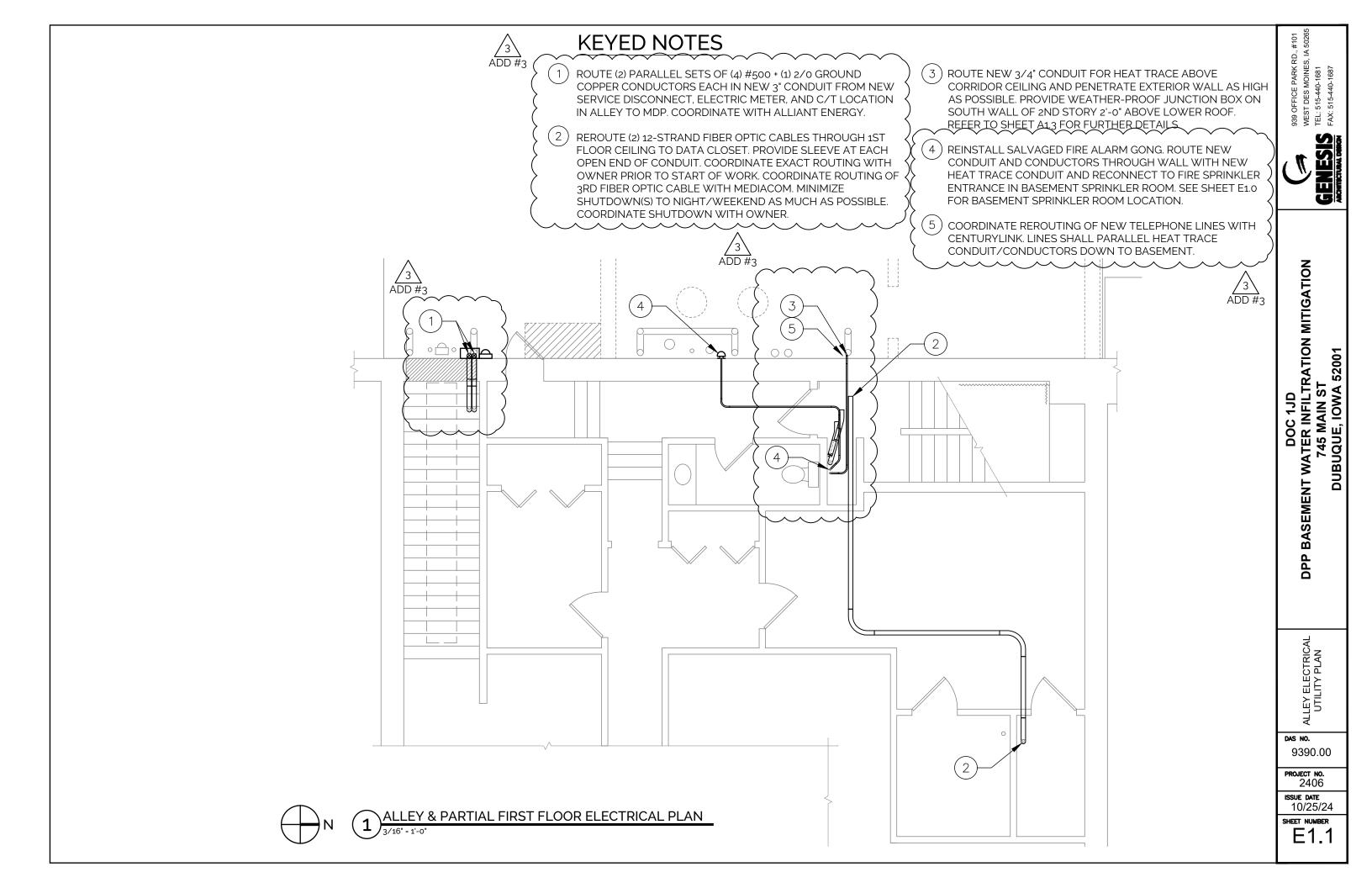
DAS NO.

9390.00 PROJECT NO.

2406 ISSUE DATE

10/25/24

SHEET NUMBER E1.0



#### **SECTION 00 4116**

#### **BID FORM**

The Bid Form must be submitted online through the State's <u>IMPACS Electronic Procurement</u> System.

#### RFB #939000-01

BID FORM for CONSTRUCTION CONTRACT for Department of Corrections 1<sup>st</sup> Judicial District Dubuque Probation and Parole 745 Main St. Dubuque, IA 52001 Project 9390.00

Iowa Department of Administrative Services Hoover State Office Building, Level 3 1305 East Walnut Street Des Moines, Iowa 50319-0105

The following information is to be completed and submitted with your bid..

- 1. Bid Form Completed and Signed (to be uploaded with bid submission)
- 2. Non-Discrimination Clause Information
- 3. Contractor Targeted Small Business Enterprise Pre-Bid Contract Information
- 4. Bid Security 5% of total Bid amount (to be uploaded with bid submission)

#### Authorized Representative:

The undersigned Bidder, in response to your Request for Bid for construction of the above project, having examined the Drawings, Specifications, and other Bidding Documents dated October 25, 2024 and Addenda issued and acknowledged below as received and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment and supplies to perform all work to construct the project in strict accordance with the proposed Contract Documents, within the time and at the prices stated below. Prices are to cover all expenses incurred in performing the work required under the proposed Contract Documents, of which this bid is a part.

Bidder acknowledges receipt of the following Addenda which are a part of the Bidding Documents and for which any effect on cost of the Work is included in the bid amounts indicated:

Number	 	 	
Dated	 	 	

Note that the State of Iowa is exempt from State and Local sales and use taxes (including local option and school option) for this project. Taxes on construction materials shall NOT be included in the bid amounts.

words shall govern.	
BID PACKAGES:	
BP 01	
Description: General Construction	
Bidder proposes and agrees to perform all work as described in the Construction Documents for of:	the sum
	Dollars
\$).	Bollaro
ALTERNATE PACKAGES:	
ALT 01	
Description: (ADD) State the lump sum price to provide a hot fluid applied, rubberized asphalt waterproofing membrane in lieu of the cold fluid applied membrane in the base bid.	
Bidder proposes and agrees to perform all work as described in the Construction Documents for of:	the sum
	Dollars
\$).	
JNIT PRICES:	
JNIT 01	
Description: Additional Concrete Crack Repairs	
	Dollars
<b>'</b>	

Amounts shall be indicated in both words and figures. In case of discrepancy, the amount indicated in

Bidder hereby certifies that:

- 1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation;
- 2. Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain any advantage over any other bidder or over the Owner.

- 3. Bidder hereby certifies that the Bidder is registered with the Iowa Labor Commissioner as a Contractor as required by Chapter 91C. Code of Iowa.
- 4. Bidder agrees to comply with all Federal and State Affirmative Action/Equal Employment Opportunity requirements concerning fair employment and will not discriminate between or among them by reason of race, color, religion, sex, national origin or physical handicap.
- 5. All construction under this Contract shall conform to the requirements of the *lowa State Building Code*.
- 6. Bidder agrees that this bid shall remain valid and shall not be withdrawn for a period of thirty (30) calendar days after the date for receipt of bids.
- 7. Bidder agrees that if written notice of acceptance of this bid is mailed, emailed, or delivered to the undersigned within thirty (30) days after the date in which bids are due, or at any time thereafter before it is withdrawn, the undersigned will sign and return the Contract Agreement, prepared in accord with the Bidding Documents and this bid as accepted; and will also provide proof of insurance coverage and required surety bonds.
- 8. Bidder understands that the Owner reserves the right to reject any and all bids, and to waive irregularities or informalities and enter into a contract for the work, as the Owner deems to be in the best interest of the State.
- 9. Bidder understands that the Owner reserves the right to accept any, or no, Alternate Bid, if requested, and that the Alternate Bids may be considered in any order or combination, and the low Bidder shall be determined on the basis of the sum of the base bid and any Alternate(s) accepted.

#### Subcontractors:

The Trade Contractor must identify all Subcontractors and Suppliers within 48 hours of the published date and time for which bids must be submitted, in accordance with Iowa Code Section 8A311, as amended by House File 646 in 2011. Subcontractors and suppliers may not be changed without the approval of the Owner. Requests for changing a Subcontractor or supplier must identify the reason for the proposed change, the name of the new Subcontractor or supplier, and the change in the subcontractor or supplier price as a result of the change. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract Price via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.

# Enforcement of Reciprocal Resident Bidder Preference, per Iowa Code 73A.21.

All bidders shall either check the box next to "Resident Bidder" or check the box next to "Nonresident Bidder" and by doing so and signing thereafter certifies and attests to the same. All information requested must be provided. Seek out the advice of an attorney if you have questions.

"Resident Bidder" means a person or entity authorized to transact business in of the State of Iowa and having a place of business for transacting business within the State of Iowa at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. Note, however, that if a nonresident bidder's state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

	Resident Bidder
Name	of Resident Bidder:
By: Author	ized Agent and Signatory of Resident Bidder
OR:	

Nonresident Bidder						
Name of Nonresident Bidder:						
Name of State or Foreign Country of Nonresident Bidder:						
Particularly identify and describe any preference, labor preference, or any other type of preferential treatment, in effect in the nonresident bidder's state or foreign country at the time of this bid:						
,						
NOTICE: Nonresident Bidders domiciled in a state or country with a resident labor force preference shall make and keep, for a period of not less than three years, accurate records of all workers employed on the public improvement. The records shall include each worker's name, address, telephone number when available, social security number, trade classification, and the starting ending time of employment.						
By: Authorized Agent and Signatory of Nonresident Bidder						
Bid Form shall be signed by an officer of the company with authority to bind in a contract.  Notice of acceptance of this bid, or request for additional information by the Department of Administrative Services, may be addressed to the undersigned at the address set forth below:						
Legal Name of Firm:						
Date:						
Signature of Bidder:						
Title:						
Typed Name of Signatory:						
Email:						
Business Address:						
Telephone Number: Fax Number:						
Federal Tax Identification Number:						
Iowa Contractor Registration Number:						
Bidder Safety Manager Name:						
For an out-of-state Bidder, Bidder certifies that the Resident Preference given by the State or						
Foreign Country of Bidder's residence is %.						

# **END OF SECTION**

#### SECTION 01 2300 - ALTERNATES

#### PART 1 - GENERAL

#### 1.1 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

# 1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

DAS PROJ: 9390.00

**GENESIS PROJ: 2406** 

## 1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

ALTERNATES 01 2300 - 1

PART 2 - PRODUCTS (Not Used)

#### **PART 3 - EXECUTION**

# 3.1 SCHEDULE OF ALTERNATES

- A. ALTERNATE NO. 1. (ADD) State the lump sum price to provide a hot fluid applied, rubberized asphalt waterproofing membrane in lieu of the cold fluid applied membrane in the base bid.
  - 1. Furnish and install a complete vertical and horizontal waterproofing system including surface conditioner, membrane, reinforcing fabric, terminations, related flashings, protection course, and all accessories as required by the manufacturer to meet the designated 20-year watertight warranty. Prime and prepare the concrete substrate accordingly to meet warranty and manufacturer's requirements.

DAS PROJ: 9390.00

GENESIS PROJ: 2406

2. See specification Section 07 1413 Hot Fluid Applied Rubberized Asphalt Waterproofing, and revised section details on Drawing Sheet A2.0 as issued in Addendum #3.

END OF SECTION 01 2300

ALTERNATES 01 2300 - 2

# SECTION 07 1413 - HOT FLUID-APPLIED RUBBERIZED ASPHALT WATERPROOFING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

# A. Section Includes:

1. Hot fluid applied rubberized asphalt waterproofing membrane.

# 1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show details for substrate joints and cracks, sheet flashings, penetrations, inside and outside corners, tie-ins to adjoining waterproofing, and other termination conditions.
- C. Sample warranty.

#### 1.4 QUALITY ASSURANCE

A. Source Limitations: Provide all waterproofing system components, products, and accessories as offered from single source manufacturer for warranty purposes.

## 1.5 FIELD CONDITIONS

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures as recommended by waterproofing manufacturer.
- B. System components contain petroleum distillates and are extremely flammable. Do not breathe vapors or use near an open fire. Do not store materials inside or near the building.

# 1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace waterproofing and sheet flashings that do not comply with requirements or that fail to remain watertight within specified warranty period.
  - 1. Warranty Period: 20 years from date of Substantial Completion.

DAS PROJ: 9390.00

#### PART 2 - PRODUCTS

#### 2.1 WATERPROOFING MEMBRANE

- A. Hot Fluid-Applied, Rubberized-Asphalt Waterproofing Membrane: Single component; 100 percent solids; hot fluid-applied, rubberized asphalt.
- B. Furnish and install a completed vertical and horizontal waterproofing system including surface conditioner, membrane, reinforcing fabric, related flashings, and protection course and all accessories as required by the manufacturer to meet the designated warranty.

#### 1. Manufacturers:

- a. Hydrotech Monolithic Membrane 6125 by American Hydrotech Inc.
- b. TREMproof 6100 by Tremco, Inc.
- c. Others as pre-approved.

# 2. Properties:

- a. VOC Content: Less than 160 g/L, trowel detailing grade.
- b. Elongation: Minimum of 800 percent.
- c. Vapor Permeance, ASTM E 96/E96M: Maximum 0.03 perms.
- d. Low Temperature Crack Bridging, CAN/CGSB 37.50-M89; Section 4.11: Pass.

#### 2.2 AUXILIARY MATERIALS

- A. General: Accessory materials as described in manufacturer's written installation instructions, recommended to produce complete waterproofing system meeting performance requirements, and compatible with waterproofing material and adjacent materials and capable of meeting warranty requirements.
- B. Primer: ASTM D 41/D 41M, asphaltic primer as recommended for substrate by waterproofing manufacturer.
- C. Flashing: Elastomeric Sheet: 60-mil minimum, uncured sheet uncured neoprene heavy duty reinforcing sheet.
- D. Reinforcing Fabric: Waterproofing manufacturer's standard spun-bonded polyester fabric sheet.
- E. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum termination bars; approximately 1 by 1/8 inch thick; with stainless-steel anchors.
- F. Sealants, Adhesives, and Accessories: Manufacturer's recommended sealants and accessories.

#### 2.3 PROTECTION COURSE

A. Provide appropriate protection course as recommended by the manufacturer and applicable for the project conditions.

DAS PROJ: 9390.00

- B. Protection Course: ASTM D 6506, semi-rigid, waterproof protection board composed of a rubberized asphalt impregnated core, reinforced with a fiberglass mat and sandwiched between two protective polypropylene layers.
- C. Protection Course will absorb the impact of aggregate shock and normal jobsite foot traffic. It also protects the membrane waterproofing from penetration by sharp aggregate during backfilling and later settlement.
- D. Do not provide drainage type protection boards that will trap moisture in or around the system below grade.
- E. Thickness: Minimum 1/8 inch thick for vertical applications; 1/4 inch nominal, elsewhere.

#### PART 3 - EXECUTION

# 3.1 PREPARATION

- A. Clean and prepare substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrate for waterproofing application.
- B. Scarify existing surfaces to remove any existing waterproofing, mastics, or other foreign materials that may affect proper bonding. Scarify by mechanical means, do not pressure spray with water or use chemicals. Scarify to expose existing concrete surfaces to ensure proper priming and bonding.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, acid residues, and other penetrating contaminants or film-forming coatings from concrete.
- D. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and over run on to other construction.
- E. Remove fins, ridges, and other projections, and fill honeycomb, aggregate pockets, holes, and other voids
- F. Remove and patch any concrete form ties, exposed metal fasteners or other non-structural exposed metal.
- G. Prepare, treat, rout, and fill joints and cracks in substrate according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M and ASTM C 1471/C 1471M. Before coating surfaces, remove dust and dirt from joints and cracks according to ASTM D 4258.
- H. Prepare surfaces at terminations and penetrations through waterproofing and at expansion joints, drains, sleeves, and corners according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M and ASTM C 1471/C 1471M.
- I. Substrate shall also be blown clean using an air compressor to remove any remaining loose debris.

DAS PROJ: 9390.00

- J. Surface conditioner or primer: Apply primer to substrates as required by manufacturer, at required rate, using roller, brush, or airless spray.
  - 1. Apply the surface conditioner to the concrete using a hand held sprayer evenly at rate recommended by the manufacturer.
  - 2. Allow sufficient time for the surface conditioner to thoroughly dry prior to the membrane application.

# 3.2 JOINTS, CRACKS, AND TERMINATIONS

A. Prepare and treat substrates to receive waterproofing membrane, including joints and cracks, corners, and penetrations according to manufacturer's written instructions.

#### 3.3 FLASHING INSTALLATION

- A. Install elastomeric sheets at terminations of waterproofing membrane according to manufacturer's written instructions.
- B. All detailing and flashing shall be completed before installing the membrane over the field of the substrate.

# 3.4 MEMBRANE APPLICATION

- A. Apply primer, at manufacturer's recommended rate, over prepared substrate and allow it to dry.
- B. Heat and apply rubberized asphalt according to manufacturer's written instructions. Membrane material shall be heated in double jacketed, oil bath or hot air melter with mechanical agitation, specifically designed for the preparation of a rubberized asphalt membrane.
- C. Heat membrane material until it can be drawn-free flowing at temperature range as recommended by the manufacturer.
- D. Reinforced Hot Fluid-Applied Rubberized Asphalt Waterproofing,: Apply waterproofing in total wet film thickness recommended in writing by waterproofing manufacturer, but not less than 215-mils total wet film thickness, applied in two or more equal coats applied using methods recommended by waterproofing manufacturer, as follows:
  - 1. Apply first coat at minimum thickness of 90 mils.
  - 2. Thoroughly embed reinforcing fabric in first coat while still liquid, with slight overlap of fabric edges. Overlap fabric reinforcing sheet 1-2 inches with membrane between sheets.
  - 3. Apply second coat at not less than 125 mils and as required to achieve total thickness of not less than 215 mils.
- E. Terminations: Install terminations of waterproofing membrane in accordance with ASTM C 898 and ASTM C 1471, as applicable to application, over prepared joints and up wall terminations and vertical surfaces to heights recommended by waterproofing manufacturer.
- F. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates and reapply waterproofing components.

DAS PROJ: 9390.00

#### 3.5 PROTECTION COURSE INSTALLATION

- A. Cover waterproofing with protection course prior to backfilling or subjecting installation to traffic. Install protection board in accordance with manufacturer's instructions.
- B. Embed the protection sheet/rigid insulation board into the membrane while it is still warm to insure a good bond.

#### 3.6 CLEANING AND PROTECTION

- A. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.
- B. Do not permit foot or vehicular traffic on unprotected membrane.
- C. The completed membrane/protection assembly shall be covered with subsequent topping materials as soon as possible, using care to avoid damaging waterproofing membrane system.
- D. Protect waterproofing from damage and wear during remainder of construction period.
- E. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.
- F. Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly per warranty requirements and notify the contractor of any defects. All defects shall be corrected.

END OF SECTION 07 1413

DAS PROJ: 9390.00

#### SECTION 07 1416 - COLD FLUID-APPLIED WATERPROOFING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Cold fluid applied modified polyurethane waterproofing.

# 1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For all system products to include flashings, protection course and accessories.
- B. Shop Drawings:
  - 1. Show locations and extent of waterproofing.
  - 2. Include details for substrate joints and cracks, sheet flashings, protection course, penetrations, inside and outside corners, tie-ins with adjoining waterproofing, and other termination conditions.
- C. Sample warranty.

#### 1.4 QUALITY ASSURANCE

A. One Source Manufacturer: Provide all system components, products, and accessories as offered by a single source manufacturer for warranty purposes.

#### 1.5 FIELD CONDITIONS

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended in writing by waterproofing manufacturer.
  - 1. Do not apply waterproofing to frozen, damp, or wet substrates, when relative humidity exceeds 85 percent, or when temperatures are less than 10 deg F (3 deg C) above dew point.
  - 2. Do not apply waterproofing when snow, ice, rain, fog, or mist are present, or when such weather conditions are imminent during application and curing period.
- B. System components contain petroleum distillates and are extremely flammable. Do not breathe vapors or use near an open fire. Do not store materials inside or near the building.

DAS PROJ: 9390.00

#### 1.6 WARRANTY

- A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace waterproofing that fails in materials or workmanship within specified warranty period.
  - 1. Warranty Period: 10 years from date of Substantial Completion.

#### PART 2 - PRODUCTS

# 2.1 SINGLE-COMPONENT POLYURETHANE WATERPROOFING

- A. Single-Component, Cold Fluid-Applied Bitumen Modified Polyurethane Waterproofing formulated for exterior below-grade or between slab applications. ASTM C 836/C 836M.
- B. Furnish and install a completed vertical and horizontal waterproofing system including surface conditioner, membrane, reinforcing fabric, related flashings, and protection course and all accessories as required by the manufacturer to meet the designated warranty.
  - 1. Manufacturers:
    - a. Hydralastic 836 HB by W.R. Meadows.
    - b. Sikalastic HLM 5000 GC by Sika Corporation.
    - c. TREMproof 250GC by Tremco, Inc.
    - d. Others as pre-approved.

# 2. Properties:

- a. VOC Content: Less than 160 g/L, trowel detailing grade.
- b. Elongation: Minimum of 400 percent.
- c. Moisture-Vapor Permeability (dry perms): < 0.1, ASTM E96.
- d. Hardness, Shore OO: 60-85, ASTM C836.

#### 2.2 AUXILIARY MATERIALS

- A. Primer: Manufacturer's standard primer, sealer, or surface conditioner; factory-formulated.
- B. Sheet Flashing: 50-mil minimum, nonstaining, uncured sheet neoprene.
  - 1. Adhesive: Manufacturer's recommended contact adhesive.
- C. Membrane-Reinforcing Fabric: Manufacturer's recommended fiberglass mesh or polyester fabric as recommended for high build applications.
- D. Joint Reinforcing Strip: Manufacturer's recommended fiberglass mesh or polyester fabric.
- E. Metal Termination Bars: Provide manufacturer's standard aluminum or stainless steel termination bar, with stainless steel fasteners for conditions where required.

DAS PROJ: 9390.00

F. Joint Sealant: Multicomponent polyurethane sealant, compatible with waterproofing; and as recommended by manufacturer for substrate and joint conditions.

#### 2.3 PROTECTION COURSE

- A. Protection Course: ASTM D 6506, semirigid sheets of fiberglass or mineral-reinforced-asphaltic core, pressure laminated between two asphalt-saturated fibrous liners.
- B. Protection Course will absorb the impact of aggregate shock and normal jobsite foot traffic. It also protects the membrane waterproofing from penetration by sharp aggregate during backfilling and later settlement.
- C. Do not provide drainage type protection boards that will trap moisture in or around the system below grade.

# D. <u>Properties:</u>

- 1. Thickness: 1/8 inch nominal, for vertical applications; 1/4 inch nominal, elsewhere.
- 2. Adhesive: Rubber-based solvent type as recommended by waterproofing manufacturer.
- 3. Type 1 Puncture Strength, Class A and B: 312 N (70 lbf) minimum.
- 4. Thickness, Class A and B: 0.095 to 0.155 inches.
- 5. Water Absorption, Class A and B: 10 percent maximum.
- 6. Asphalt Percent by Weight, Class A: 65 percent minimum.

#### **PART 3 - EXECUTION**

# 3.1 PREPARATION

- A. Clean, prepare, and treat substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Scarify existing surfaces to remove any existing waterproofing, mastics, or other foreign materials that may affect proper bonding. Scarify by mechanical means, do not pressure spray with water or use chemicals. Scarify to expose existing concrete surfaces to ensure proper priming and bonding.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, acid residues, and other penetrating contaminants or film-forming coatings from concrete.
- D. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and over run on to other construction.
- E. Remove fins, ridges, and other projections, and fill honeycomb, aggregate pockets, holes, and other voids.
- F. Remove and patch any concrete form ties, exposed metal fasteners or other non-structural exposed metal.
- G. Prepare, treat, rout, and fill joints and cracks in substrate according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M and

DAS PROJ: 9390.00

ASTM C 1471/C 1471M. Before coating surfaces, remove dust and dirt from joints and cracks according to ASTM D 4258.

- H. Prepare surfaces at terminations and penetrations through waterproofing and at expansion joints, drains, sleeves, and corners according to waterproofing manufacturer's written instructions and to recommendations in ASTM C 898/C 898M and ASTM C 1471/C 1471M.
- I. Primer: Apply primer to substrates as required by manufacturer, at required rate, using roller, brush, or airless spray. Allow to dry. Reprime areas not covered within 24 hours.

#### 3.2 WATERPROOFING APPLICATION

- A. Apply waterproofing according to manufacturer's written instructions and to recommendations in ASTM C 898/C 898M and ASTM C 1471/C 1471M.
- B. Reinforced Waterproofing Applications. Apply using roller or squeegee to required thickness.
- C. Apply waterproofing in two separate applications, with an embedded joint reinforcing layer in the first preparation coat as recommended by waterproofing manufacturer. Ensure complete coverage and saturate reinforcement fabric with the second application to achieve a minimum total build thickness of 120 mils free of entrapped gases and pinholes for the waterproofing system.
- D. Install sheet flashing and bond to deck and wall substrates where required according to waterproofing manufacturer's written instructions.
- E. Inside and Outside Corners: Install system flashings per manufacturer's requirements at all inside and outside corners.
- F. Terminations: Install terminations of waterproofing membrane in accordance with ASTM C 898 and ASTM C 1471, as applicable to application, at not less than minimum height recommended by waterproofing manufacturer. Overlap waterproofing on to intersecting construction a minimum of 16 to 18 inches.

# 3.3 PROTECTION COURSE

- A. Install protection course with butted joints over waterproofing before starting subsequent construction operations.
  - 1. For horizontal applications, install protection course loose laid over fully cured membrane.
  - 2. For vertical applications, set protection course in nominally cured membrane, which will act as an adhesive. If membrane cures before application of protection course, use adhesive.

## 3.4 PROTECTION

A. Do not permit foot or vehicular traffic on unprotected membrane.

DAS PROJ: 9390.00

# IOWA DEPT. OF ADMINISTRATIVE SERVICES DOC 1JD DPP BASEMENT WATER INFILTRATION MITIGATION

- B. Backfill or cover immediately using care to avoid damaging waterproofing membrane system.
- C. Protect waterproofing from damage and wear during remainder of construction period.
- D. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.
- E. Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly per warranty requirements and notify the contractor of any defects. All defects shall be corrected.

END OF SECTION 07 1416

DAS PROJ: 9390.00





**END OF ADDENDUM #03**