

12 February, 2024

via EMAIL

**ADDENDUM NO. 2**

**TO PROJECT MANUAL AND PLANS  
FOR THE WASHINGTON COUNTY HOSPITAL  
STEPHENS AVE., CHATOM, AL  
ARCH PROJECT NO. 23-05**

**PROJECT MANUAL AND PLANS**

All Bidders are hereby notified that the Project Manual and Plans dated 8 December 2023 is hereby amended and supplemented as follows (note: Where conflicts occur between this addendum and the original plans and specifications, this addendum shall govern.):

**CLARIFICATIONS**

**ITEM NO. 1:** Refer to the attached drawings, Civil. This includes a Demolition Plan and New Required Drainage Plan.

**ITEM NO. 2:** Refer to the project specifications, the attached specification and revised, section 'PVC Membrane, is to added to the construction documents. This is now marked as 'v2' for identification.

**– End of Addendum No. 2 –**

Foshee Architecture  
21 S. Court Street  
Montgomery, AL 36104

JBP

# POLYVINYL CHLORIDE (PVC) MEMBRANE ROOFING (v2)

*(Note: The owner has begun the replacement of the facility roof systems. All roofing materials and work related to this project must be obtained from the existing roofing contractor to maintain all roof warranties. Please contact Old South Construction Company (Steven Shipp) at [334-399-4609](tel:334-399-4609) to obtain pricing and coordinate all new roofing related work.)*

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. PVC Adhered membrane roofing system.
- B. Insulation and Cover board.

### 1.2 RELATED SECTIONS:

- A. Miscellaneous Repairs Section "Steel Coverings"
- B. Miscellaneous Repairs Section "Wood Blocking" for wood nailers, curbs, and blocks.

### 1.3 REFERENCES

- A. Roofing Terminology: Refer to the following publications for definitions of roofing work related terms used in this Section:
  - 1. ASTM D 1079 "Terminology Relating to Roofing and Waterproofing."
  - 2. Glossary of NRCA's "The NRCA Roofing and Waterproofing Manual."
  - 3. Roof Consultants Institute "Glossary of Roofing Terms."
- B. Sheet Metal Terminology and Techniques: SMACNA Architectural Sheet Metal Manual.

### 1.4 DESIGN CRITERIA

- A. General: Installed roofing membrane and base flashing systems shall remain watertight; and resist specified wind uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Roofing materials shall be compatible with one another under conditions of service and application required, as demonstrated by roofing system manufacturer based on testing and field experience.
- C. Wind Uplift Performance: Roofing system shall be identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist wind uplift pressure calculated in accordance with ASCE-7.
- D. EPA Energy Star:
  - 1. Roofing membrane shall achieve an initial reflectance of greater than 0.65 and a three year aged reflectance of greater than 0.50.
- E. T24/CRRC-1:
  - 1. Roofing system shall comply with the requirements of Title 24.
  - 2. Roofing membrane shall be tested by CRRC-1.

## 1.5 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets for each product to be provided.
- B. Detail Drawings: Provide roofing system plans, elevations, sections, details, and details of attachment to other Work, including:
  - 1. Base flashings, cants, and membrane terminations.
  - 2. Tapered insulation, including slopes.
  - 3. Crickets, saddles, and tapered edge strips, including slopes.
- C. Verification Samples: Provide for each product specified.
- D. Maintenance Data: Refer to manufacturer's latest published documents.
- E. Guarantees: Special guarantees specified in this Section.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and is eligible to receive the specified manufacturer's guarantee.
- B. Testing Agency Qualifications: Independent testing agency with the experience and capability to conduct the testing indicated, as documented in accordance with ASTM E 548.
- C. Source Limitations: Obtain all components from the single source roofing system manufacturer guaranteeing the roofing system. All products used in the system shall be labeled by the single source roofing system manufacturer issuing the guarantee.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

## 1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when current and forecasted weather conditions permit roofing system to be installed in accordance with manufacturer's written instructions and guarantee requirements.

## 1.9 GUARANTEES

- A. Provide manufacturer's system guarantee (No Dollar Limit Roofing System Guarantee).
  - 1. Single-Source special guarantee includes Insulation, Two-Part Urethane Insulation Adhesive, PVC membrane and other single-source components of roofing system marketed by the manufacturer.
  - 2. Guarantee Period: 20 years from date of Substantial Completion.
- B. Installer's Guarantee: Submit roofing Installer's guarantee signed by Installer, covering Work of this Section, including all components of roofing system, for the following guarantee period:
  - 1. Guarantee Period: 5 Years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 POLYVINYL-CHLORIDE ROOFING MEMBRANE - PVC

- A. PVC Sheet: ASTM D 4434, Type III, fabric reinforced.
  - 1. Certification, by letter, stating that the formulation has a minimum 15 years of performance history in North America.
  - 2. Thickness: .80 mils nominal (membrane) / .60 mils nominal (flashings)

### 2.2 AUXILIARY ROOFING MATERIALS – SINGLE PLY

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.
  - 1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.
- B. Sheet Flashing: Manufacturer's sheet flashing of same material, type, reinforcement, thickness, and color as sheet membrane.
- C. Sheet Flashing: Manufacturer's unreinforced sheet flashing of same material as sheet membrane.
- D. Bonding Adhesive: Manufacturer's standard water-based bonding adhesive for membrane, and solvent-based bonding adhesive for base flashings.
- E. Slip Sheet: Manufacturer's recommended slip sheet, of type required for application.
- F. Metal Termination Bars: Manufacturer's standard predrilled stainless-steel or aluminum bars, with anchors.
- G. Metal Battens: Manufacturer's standard aluminum-zinc-alloy-coated or zinc-coated steel sheet, pre-punched.
- H. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination reglets, cover strips, sealants, and other accessories.

## 2.3 AUXILIARY ROOFING SYSTEM COMPONENTS

- A. Metal Flashing Sheet: Metal flashing sheet is specified in Section "Sheet Metal Flashing."

## 2.4 WALKWAYS

- A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads sourced from membrane roofing system manufacturer.

## 2.5 INSULATION / COVER BOARD

- A. High Density rigid polyisocyanurate board with a black fibrous glass facer conforming to or exceeding the requirements of ASTM C 1289, with the following characteristics.
  - 1. Board Thickness: 1/2"
  - 2. Thermal Resistance (LTTR value): 2.5 Minimum
- B. Tapered rigid polyisocyanurate board, with a strong white or black fibrous glass facer conforming to or exceeding the requirements of ASTM C 1289 / FS HH-I-1972, with the following characteristics.
  - 1. Main Roof: 1/4" Slope – 3" Start Thickness
  - 2. Crickets / Saddles: 1/2" Slope – 1/2" Start Thickness
- C. Adhesive: Manufacturer's specified low-rise foam adhesive to secure subsequent layers of insulation and cover board.
- D. Mechanical Fasteners: Manufacturer approved heavy duty fasteners with 3" disk plates for mechanical attachment of insulation base layers.
- E. Wood Nailer Strips: Comply with requirements in Section "Miscellaneous Repairs"

## *PART 3 - EXECUTION*

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions for compliance with requirements affecting performance of roofing system.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Clean and remove from substrate sharp projections, dust, debris, moisture, and other substances detrimental to roofing installation in accordance with roofing system manufacturer's written instructions.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.3 PREPARATION

- A. Replacement Roofs: Remove the existing roof according to roofing system manufacturer's written instructions, applicable recommendations of the roofing manufacturer, and requirements in this Section.

- B. Recover Roofs: Sweep / clean the existing roof system to allow for the installation of the new roof system.
- C. Remove all base flashings, counter flashings, pitch pans, pipe flashings, vents and like components necessary for application of new membrane.
- D. Remove and replace wet, deteriorated, or damaged roof insulation and/or decking.
- E. Remove abandoned equipment curbs, skylights, smoke hatches, and penetrations. Install decking to match existing as directed by Owner's Representative.
- F. Raise, (disconnect by licensed craftsmen, if necessary) all HVAC units and other equipment supported by curbs to conform with the following:
  1. Modify curbs as required to provide a minimum 8" base flashing height measured from the surface of the new membrane to the top of the flashing membrane.
  2. Nail top of flashing and install new metal counter flashing prior to re-installation of unit.
  3. Perimeter nailers must be elevated to match elevation of new roof insulation.
- G. Immediately remove all debris from roof surface. Demolished roof system may not be stored on the roof surface.
- H. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.4 INSULATION / COVER BOARD INSTALLATION

- A. Coordinate installing membrane roofing system components so cover board and base layers of insulation are not exposed to precipitation or left exposed at the end of the workday.
- B. Comply with membrane roofing system manufacturer's written instructions for installing roof insulation.
- C. Install insulation and cover board with long joints of board in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with cover board.
  1. Cut and fit boards within 1/4 inch (6 mm) of nailers, projections, and penetrations.
- D. Trim surface of boards where necessary at roof drains so completed surface is flush and does not restrict flow of water.
  1. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.
  2. Install in a two-part urethane adhesive according to roofing system manufacturer's instruction.
  3. Attachment of Cover Board and base layers of insulation: Install all layers with manufacturer's specified adhesive and/or mechanical fasteners, as required.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.5 ROOFING MEMBRANE INSTALLATION, GENERAL

- A. Install roofing membrane in accordance with roofing system manufacturer's written instructions, applicable recommendations of the roofing manufacturer and requirements in this Section.
- B. Start installation of roofing membrane in presence of roofing system manufacturer's technical personnel.
- C. Where roof slope exceeds 1/2 inch per 12 inches (1:24, contact the membrane manufacturer for installation instructions regarding installation direction and back-nailing

- D. Cooperate with testing and inspecting agencies engaged or required to perform services for installing roofing system.
- E. Coordinate installing roofing system so insulation and other components of the roofing membrane system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is imminent.
  - 1. Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation with a course of coated felt set in roofing cement or hot roofing asphalt with joints and edges sealed.
  - 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
  - 3. Remove and discard temporary seals before beginning work on adjoining roofing.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.6 ADHERED ROOFING MEMBRANE INSTALLATION

- A. Install roofing membrane over area to receive roofing in accordance with membrane roofing system manufacturer's written instructions. Unroll roofing membrane and allow to relax before installing.
  - 1. Install sheet in accordance with ASTM D 5036 and roofing system manufacturer's written instructions.
- B. Start installation of roofing membrane in presence of membrane roofing system manufacturer's technical representative.
- C. Accurately align roofing membrane and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- D. Bonding Adhesive: Apply water-based bonding adhesive to substrate and underside of roofing membrane at rate required by manufacturer and allow to partially dry before installing roofing membrane. Do not apply bonding adhesive to splice area of roofing membrane.
- E. Mechanically fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing.
- F. Apply roofing membrane with side laps shingled with slope of roof deck where possible.
- G. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement, and firmly roll side and end laps of overlapping roofing membranes according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of roofing membrane terminations.
  - 1. Apply a continuous bead of in-seam sealant before closing splice if required by membrane roofing system manufacturer.
- H. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
  - 1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roofing membrane.
  - 2. Verify field strength of seams a minimum of twice daily and repair seam sample areas.
  - 3. Remove and repair any unsatisfactory sections before proceeding with Work.
  - 4. Repair tears, voids, and lapped seams in roofing membrane that do not meet requirements.

- I. Spread sealant or mastic bed over deck drain flange at deck drains and securely seal roofing membrane in place with clamping ring.
- J. Install roofing membrane and auxiliary materials to tie in to existing roofing.
- K. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.7 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates in accordance with membrane roofing system manufacturer's written instructions.
- B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with sheet flashing.
- D. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
- E. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.
- F. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.
- G. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.8 WALKWAY INSTALLATION

- A. Flexible Walkways: Install walkway products in locations indicated. Adhere with compatible adhesive and heat weld walkway products to substrate according to roofing system manufacturer's written instructions. – PVC
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.9 FIELD QUALITY CONTROL

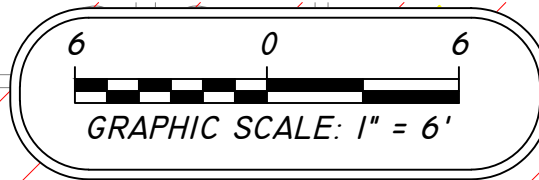
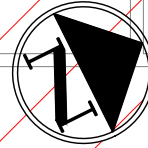
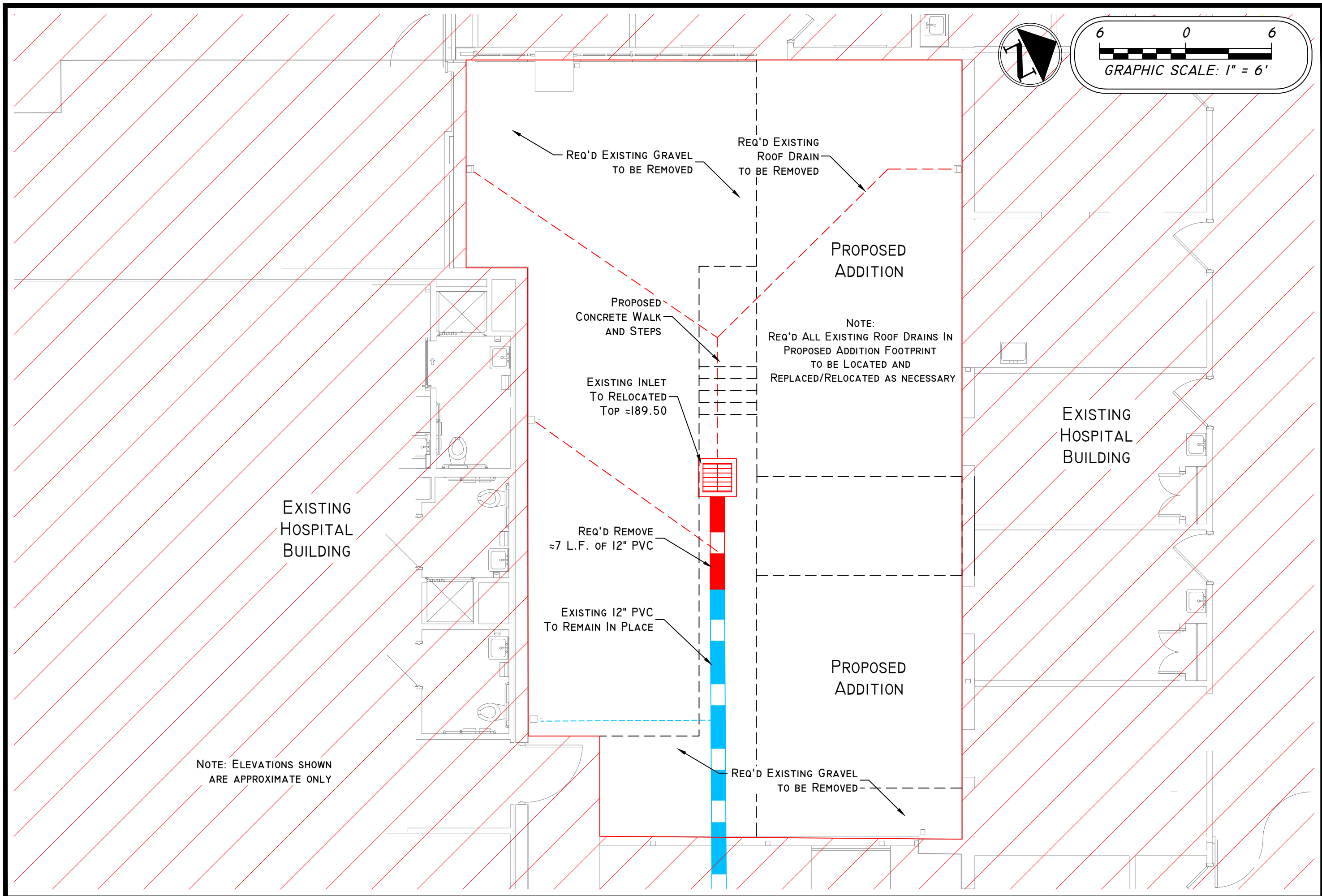
- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports.
- B. Final Roof Inspection: Arrange for roofing system manufacturer to inspect roofing installation on completion and submit report to owner's representative.
- C. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.

### 3.10 PROTECTION AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period.
- B. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

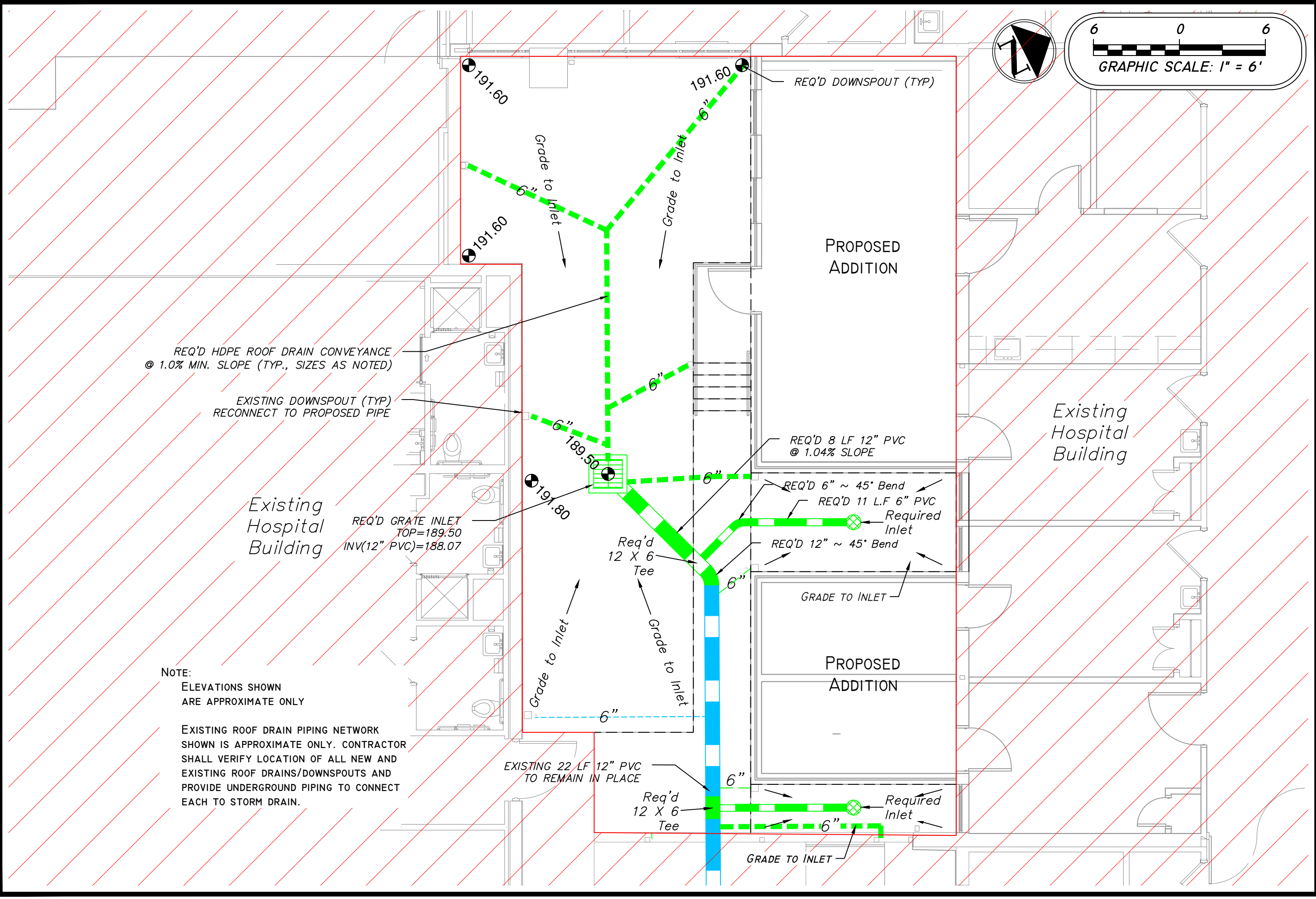
END OF SECTION





NOTE: ELEVATIONS SHOWN ARE APPROXIMATE ONLY

NOTE:  
REQ'D ALL EXISTING ROOF DRAINS IN PROPOSED ADDITION FOOTPRINT TO BE LOCATED AND REPLACED/RELOCATED AS NECESSARY



REQ'D HDPE ROOF DRAIN CONVEYANCE  
@ 1.0% MIN. SLOPE (TYP., SIZES AS NOTED)

EXISTING DOWNSPOUT (TYP)  
RECONNECT TO PROPOSED PIPE

Existing  
Hospital  
Building

REQ'D GRATE INLET  
TOP=189.50  
INV(12" PVC)=188.07

NOTE:  
ELEVATIONS SHOWN  
ARE APPROXIMATE ONLY

EXISTING ROOF DRAIN PIPING NETWORK  
SHOWN IS APPROXIMATE ONLY. CONTRACTOR  
SHALL VERIFY LOCATION OF ALL NEW AND  
EXISTING ROOF DRAINS/DOWNSPOUTS AND  
PROVIDE UNDERGROUND PIPING TO CONNECT  
EACH TO STORM DRAIN.

EXISTING 22 LF 12" PVC  
TO REMAIN IN PLACE

Req'd  
12 X 6  
Tee

GRADE TO INLET

PROPOSED  
ADDITION

GRADE TO INLET

REQ'D 6" ~ 45° Bend  
REQ'D 11 L.F 6" PVC  
Required  
Inlet  
REQ'D 12" ~ 45° Bend

REQ'D 8 LF 12" PVC  
@ 1.04% SLOPE

Existing  
Hospital  
Building

PROPOSED  
ADDITION

REQ'D DOWNSPOUT (TYP)

