

ZONING BOARD OF APPEALS  
TOWN HALL WELLESLEY, MA 02181JOHN A. DONOVAN, JR., Chairman  
ROBERT R. CUNNINGHAM  
KENDALL P. BATESELLEN D. GORDON  
Executive Secretary  
Telephone  
431-1019 X208WILLIAM E. POLLETTA  
FRANKLIN P. PARKER  
SUMNER H. BABCOCKZBA 93-12  
Petition of Babson College  
Knight Annex Addition/Babson College Campus  
Additional Conditions

On August 20, 1993, the Board of Appeals voted to accept a second amended Roof Drainage Plan dated August 13, 1993, drawn by Richard Weber, Professional Engineer, in connection with the Special Permit granted to Babson College for the construction of the Knight Annex Addition, a Major Construction Project, in a Water Supply Protection District.

The revised Roof Drainage Plan was accepted on the following conditions:

1. Following completion of the drainage installation, an As Built Plan showing the location, depth and coverage of the electric and gas lines shall be submitted to the office of the Board of Appeals and to the Town Engineer.
2. All depths and coverage of said utility lines shall be in compliance with the requirements of the Town of Wellesley Engineering Department.
3. The installation of said Roof Drainage Plan shall be completed within 30 days of the date of issuance by the Inspector of Buildings of the Temporary Certificate of Occupancy.
4. If, during construction, it is discovered that the utilities under the eastern retention basin will not have the required ground coverage, a revised Roof Drainage Plan shall be submitted to the Wetlands Protection Committee, Town of Wellesley Engineering Department, and Board of Appeals for approval prior to excavation.

cc: Planning Board  
Wetlands Protection Committee  
Steve Fader, Town Engineer  
Arthur LaConte, Inspector of Buildings  
Victor Cromie, project architect  
David Carson, Director of Planning/Babson College

RECEIVED  
TOWN CLERK'S OFFICE  
WELLESLEY, MA 02181

Aug 20 1 50 PM '93



AREA 2  
(VOL 2736 CUFT)

NOTES:

1. Location and depth of subsurface utilities have not been verified. The contractor shall locate the depth and location of each utility that may be effected by the planned construction and notify the engineer prior to construction. Modifications may be necessary.
  2. Discrepancies between the planned construction and actual field conditions shall be noted by the contractor and immediately brought to the attention of the engineer. Modifications may be required.
  3. All disturbed areas shall be treated with 4" loam and seed. The contractor shall complete this work in sufficient time to establish adequate vegetation.
  4. The pipe leading from the roof leader to the detention pond area shall be constructed on a uniform slope between the building and the planned discharge location in the pond area. The pipe shall be a minimum 6" dia. pvc schedule 40 pipe or equivalent. The pipe shall discharge at a depth of 12-inches below the crest of the detention area. A four to six inch thickness of 1-1/2" to 3/4" graded crushed stone shall be applied to the slope below the discharge outlet for slope protection. The protected area shall be 36 inches wide. Suitable elbow joints shall be used at the roof leader and at the 90 degree bend. A cleanout shall be provided at the upgradient end of the 90 degree bend. The cleanout shall consist of a "T" section extending from the pipe to the ground surface. The cleanout shall be suitably covered and constructed flush with the the ground surface. **Pipes shall be on minimum 1% slope.**
  5. Roof drainage from Knight Annex shall continue to discharge into the existing dry well.
- 6. PROVIDE MIN 12" COVER OVER TOP OF PIPE.**

DESIGN CALCULATIONS

1. Drainage into Existing Dry Well

Existing Conditions:

Drainage Area (Existing Knight Annex) 7460 sf  
 Drainage Area (Existing Knight Auditorium to Knight Annex) 3630 sf

Drainage to Existing Dry Well (Current Condition) 11090 sf

Proposed Conditions:

Drainage Area (Knight Annex) 9950 sf  
 Drainage Area Knight Auditorium (draining to Knight Annex roof) 507 sf

Drainage to Existing Dry Well (Proposed Condition) 10457 sf

**Net Reduction to Existing Dry Well 633 sf**

2. Drainage from Existing Roof Leaders (Knight Auditorium - front) will remain.

3. Remaining Runoff from Knight Auditorium

Drainage Area to East Side of Auditorium 1498 sf  
 Drainage Area to West Side of Auditorium 1624 sf

East:

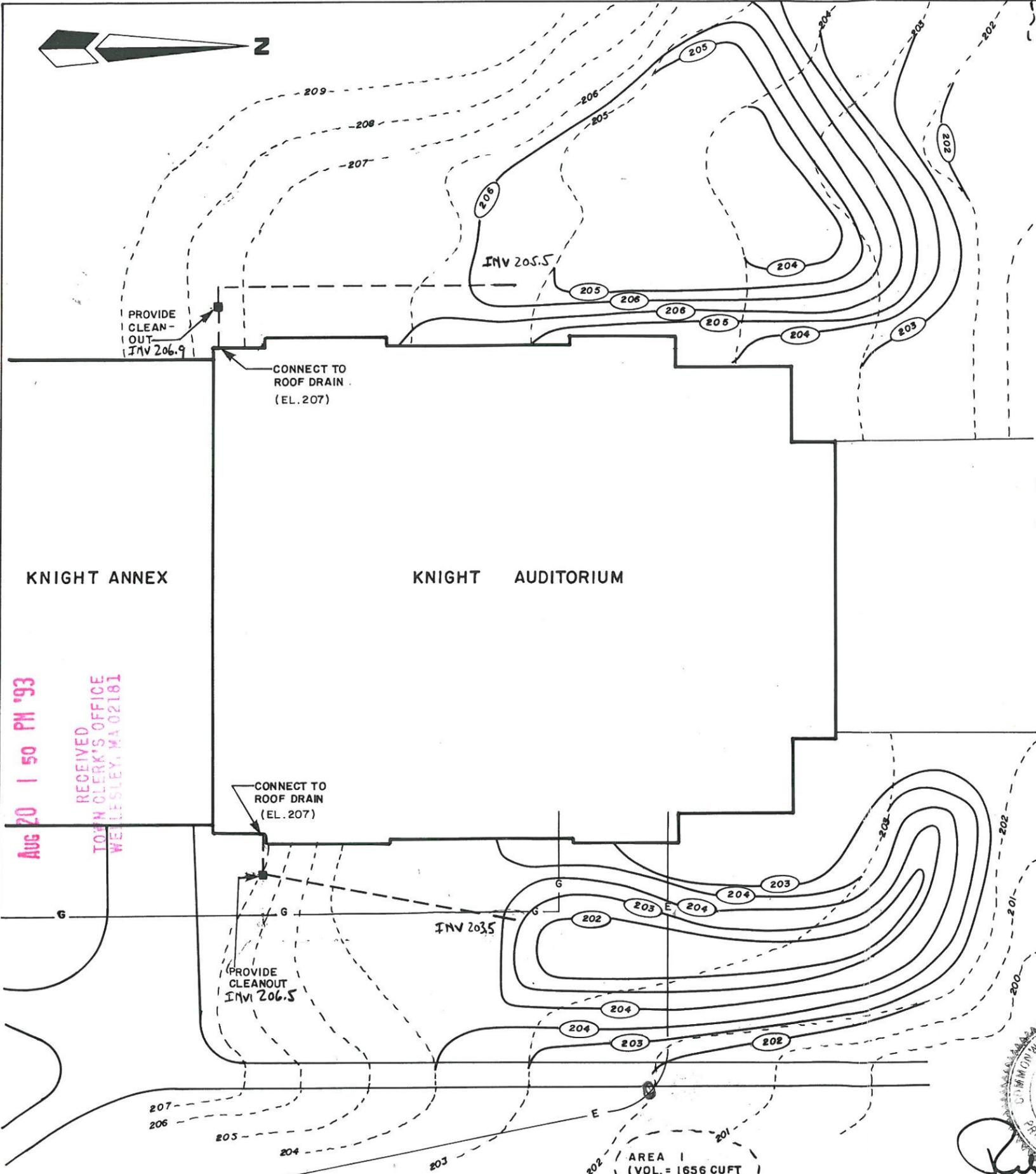
Required Volume:	roof	1498 sf x 6.6"/12 = 824 cf
	surface area of pond	1296 sf x 6.6"/12 = 713 cf
	Total Volume Required	1537 cf
Storage Volume Area 1		1656 cf

West:

Required Volume	roof	1624 sf x 6.6"/12 = 893 cf
	surface area of pond	2192 sf x 6.6"/12 = 1206 cf
	Total Volume Required	2099 cf
Storage Volume Area 2		2736 cf

DESIGN:

1. 100 yr 24hr STORM.
2. FIELD ADJUST AS NECESSARY.
3. ALL SLOPES 3H:1V.



Aug 20 1 50 PM '93  
 RECEIVED  
 JOHN CLERK'S OFFICE  
 WELLESLEY, MA 02181



REV. 8/93 - SHAPE OF PONDS, ADD NOTES.

**KUPFERMAN & WEBER, INC.**

KNIGHT ANNEX BUILDING - BABSON COLLEGE · WELLESLEY, MA.

**ROOF DRAINAGE PLAN**

JULY 1993

FIGURE No. 1



REVISED PLAN 8/13/93

E93479