



TOWNSHIP OF WEST ORANGE DEPARTMENT OF ENGINEERING

25 LAKESIDE AVENUE, WEST ORANGE, N.J. 07052

ZAYIBETH CARBALLO
Director/ Municipal Engineer

Tel/Fax: (973) 325-4160

Email: engineering@westorange.org

MEMORANDUM

TO: PLANNING BOARD MEMBERS

FROM: ZAYIBETH CARBALLO, P.E., P.L.S., P.P, CME, CFM
DIRECTOR/MUNICIPAL ENGINEER

DATE: OCTOBER 9, 2025

SUBJECT: PB-25-08/ESSEX COUNTY/TURTLE BACK ZOO
HOOFSTOCK BARN
560 NORTHFIELD AVENUE
BLOCK 163, LOT 2

We are in receipt of the following information pertaining to the above-referenced application:

- A. Plan entitled, "Aerial Map for Hoofstock Barn at the Turtle Back Zoo, Block 161, Lot 1, Township of West Orange, New Jersey". The plan prepared by French & Parrello Associates (Michael J. Piga, LLA) is dated August 25, 2025;
- B. Plan entitled, "Conceptual Site Plan prepared for Hoofstock Barn at the Turtle Back Zoo, West Orange Township, Essex County, New Jersey". The plan prepared by French & Parrello Associates is dated May 17, 2025;
- C. Rendering entitled, "Hoofstock Barn at the Essex County Turtle Back Zoo, Essex County Department of Public Works and the Department of Parks and Recreation" The plan prepared by Comito Associates, P.C. is not dated;



- D. Floor Plan entitled, “Hoofstock Barn at at the Essex County Turle Back Zoo, Essex County Department of Public Works and the Department of Parks and Recreation”, The plan prepared by Comito Associates, P.C. is not dated;
- E. Correspondence prepared by French & Parrello Associates (Michael J. Piga, LLA), dated August 29, 2025; and
- F. Township’s Board Application and associated documents.

I. INTRODUCTION

The subject site is located along the Southerly side (eastbound side) of Northfield Avenue and located within the Township’s Residential (R-1) Zone District and abuts South Mountain Reservation.

The Applicant is proposing to construct a one-story timber barn that is $\pm$ 52 ft by 96 ft in size within the existing “African Adventure” exhibit area that will contain an indoor arena, six stalls, a mechanical room and storage space. In addition, two-off exhibit areas measuring $\pm$ 20ft by 40 ft in size each will be located on the east and south sides of the barn.

II. VARIANCE

None. The applicant is appearing before the Planning Board pursuant to the Municipal Land Use Law at N.J.S.A. 40:55D-31a, which requires public agencies expending public funds to refer development proposals to the municipal planning board for its review and recommendation related to the municipal master plan.

III. SITE PLAN

The proposal is basically the rehabilitation and improvement of an existing disturbed area of the Zoo that will house animals of the hoofstock species, including the bongo all within the zoo’s existing boundaries and consistent with the master plan.

The conceptual plans show the construction of the timber barn that is $\pm$ 52’ x 96’ that is $\pm$ 4,992 S.F. and creation of approximately two off exhibits totaling $\pm$ 1,600 SF. The board application shows an overall proposed impervious surface coverage of 13,917 SF or 0.32 Acres that needs to be confirmed by Applicant’s professional.

The proposed improvements results in an increase in impervious coverage that triggers NJDEP stormwater management rules N.J.A.C. 7:8 and the Township’s stormwater

control ordinance (SCO) which exceeds the 5,000 S.F. threshold for a Major Development under Chapter 25, Section 29 that was adopted in May 2025.

It is unclear in the conceptual site plan submitted if the Applicant proposes to manage the increase in surface runoff due to the increase in impervious coverage and if any green infrastructure (GI) is to be provided as required by the Township's SCO.

The concept plan shows a dashed area labeled as underground detention and two areas shown with stone hatching labeled storm drainage basin and pipes showing connection to the same stone areas with manholes, headwall, and flared end section. However, it needs to be clarified if it is existing or proposed. These features might satisfy stormwater runoff quantity and quality requirements but are not considered GI, nor are accepted stormwater management systems to address groundwater recharge.

The Applicant's Engineer should provide testimony and clarify how the Township's SCO requirements are to be addressed for green infrastructure, runoff quantity, runoff quality and groundwater recharge including the overall limit of disturbance for the proposed improvements.

ZC/jrm



