ADA

A. DIACHISHIN AND ASSOCIATES, P.C.

Consulting Engineers and Land Surveyors
115 Yankee Folly Road New Paltz, N.Y. 12561
(845) 419-2305 ph.
(845) 419-2306 fax
(914) 466-4398 (c)
e-mail: adapc@bestweb.net

November 7, 2018

Town of Marlborough
Planning Board
21 Milton Turnpike
Milton, N.Y. 12547

Re: 3 lot Subdivision for Nicholas Gallela (Nima Contracting) tax map: 102.4-2-32.810

To Whom it may concern:

Hand delivered herewith (by Nick Gallela) are the following items for the above captioned project.

Twelve sets of the following items.

1. Revised Preliminary Plan (3 sheets).

2. Revised drainage easement metes and bounds description. This was revised due to location of proposed drainage pipeline and catch basin out of detention pond leading to Ridge Road.

3. 18" dia. pipe hydraulic calculations.

The responses to MH&E comment letter from Patrick J. Hines dated 11/2/18 are as follows:

Comment #1.

We understand that UCDOH approval needs to be completed for both lots. Application(s) have not been submitted at this time. Mr. Gallela will be filing applications for the permits shortly.

Comment #2.

It is my understanding that the Highway Superintendent has signed off on driveway locations.

Comment #3.

The plans now show the proposed connection (with details) to the Town's culvert at Ridge Road.

    a. The invert of the existing 15" hdpe is lower than the original 12" cmp. This allows for an 18" hdpe discharge pipe out of the detention pond with a slope of 1.5%. The original design per filed map #10-175 called for a 24" hdpe at 0.49%. The attached hydraulic calculations show that the 18" hdpe at 1.5% will discharge 13.9 cfs flowing full. The original design 24" hdpe at 0.49% will discharge 17.1 cfs flowing full. NOTE: The allowable discharge for the 100 year storm from the pond as per the drainage calculations in the SWPPP last revised May 25, 2010 is 13.2 cfs. Therefore the 18" hdpe at 1.5% will satisfy this outflow.

    b. A proposed catch basin at the end of the existing 15" hdpe under Ridge Road would have to be placed over the existing 15" hdpe. there would then likely be a configuration as per my revised plans. From the north a new 15" hdpe would be placed under the driveway for Lot 2 an connect to the catch basin. From the south a short stub of 15" hdpe would be placed in the existing roadside ditch. From the detention pond the revised 18" hdpe would run through a 45° elbow and into the catch basin.

    c. The elevation of the frame and grate of the proposed catch basin would be of concern. If the basin were constructed per the Woodard's model CB-30x30 (which I have shown) then the frame elevation would be the same height as the edge of pavement of Ridge Road, and no stormwater would enter the top of the basin. If the basin were modified such that the 6" of concrete above each of the 4 knockouts were removed then this would allow for the frame and grate to be 6" lower than the edge of the road. Even so the grate would not take in much stormwater, but it would be less of an issue when plowing snow on Ridge Road. The existing catch basin on the east side of Ridge Road is approximately 8" below the edge of pavement of Ridge Road and does not take in much stormwater.

Comment #4:

Mr. Gallela has been in contact with the Water Superintendent for his comments / approval letter.

If you have any questions, please call.

Very truly yours,

A. DIACHISHIN & ASSOCIATES, P.C.

Robert J. James, P.E., L.S.

gallela prelim submit tom pb 3

ADA

A. DIACHISHIN AND ASSOCIATES, P.C.

Consulting Engineers and Land Surveyors
115 Yankee Folly Road New Paltz, N.Y. 12561
(845) 419-2305 ph.
(845) 419-2306 fax
e-mail: adapc@bestweb.net

October 18, 2018
Revised November 6, 2018

Deed Description
Drainage Easement for a detention pond
and appurtenances in favor of the
Town of Marlborough
on lands of Nima Contracting Inc.
Nicholas Gallela
as shown on a map entitled
"3 Lot Subdivision for Nima Contracting Inc."
to be filed in the Ulster County Clerk's Office

ALL THAT PIECE OR PARCEL OF LAND SITUATE, lying, and being in the Town of Marlborough, County of Ulster, and State of New York, and is more particularly described as follows:

BEGINNING at a point on the westerly boundary of Ridge Road as shown on a map entitled " Proposed 8 lot Subdivision entitled Sunrise Ridge" filed in the Ulster County Clerk's office on September 21, 2010 as map number 10-175, said point also being S 15°-42'-06" E 31.07' from the division line between Lot 1 and Lot 2 of the "3 Lot Subdivision for Nima Contracting Inc." to be filed in the Ulster County Clerk's Office;

THENCE through Lot 1 the following three courses and distances:-

1. S 79°-08'-37" W 54.84' to a point;
2. N 74°-43'-46" W 60.16' to a point;
3. N 07°-07'-58" E 24.58' to a point on the division line between Lot 1 and Lot 2 of the 3 Lot Subdivision for Nima Contracting Inc. to be filed in the Ulster County Clerk's Office;

THENCE through Lot 2 of the 3 Lot Subdivision for Nima Contracting Inc. to be filed in the Ulster County Clerk's Office the following three courses and distances:-

1. N 07°-07'-58" E 79.67' to a point;

2. N 15°-41'-49" E 44.69' to a point;
3. N 51°-15'-01" E 46.17' to a point on the westerly bounds of Ridge Road;

THENCE S 15°-42'-06" E 187.89' along the westerly bounds of Ridge Road as shown on a map entitled " Proposed 8 lot Subdivision entitled Sunrise Ridge" filed in the Ulster County Clerk's office on September 21, 2010 as map number 10-175 to the point and place of beginning.

nick gallela easement desc 1 det pond rev 1

10/17/18

REVISED OUTFLOW CULVERT FROM DETENTION POND A18
ORIGINAL DESIGN 24" DIA. N-12 AT 0.49%.

THIS CALCULATION 18" DIA. N-12 AT 1.5%

Manning Pipe Calculator

Given Input Data:

Shape	Circular
Solving for	Flowrate
Diameter	18.0000 in
Depth	17.0000 in
Slope	0.0150 ft/ft
Manning's n	0.0120

Computed Results:

Flowrate	14.9878 cfs
Area	1.7671 ft2
Wetted Area	1.7285 ft2
Wetted Perimeter	47.9828 in
Perimeter	56.5487 in
Velocity	8.6709 fps
Hydraulic Radius	5.1874 in
Percent Full	94.4444 %
Full flow Flowrate	13.9372 cfs
Full flow velocity	7.8869 fps

10-17-18

PROPOSED 24" HDPE OUT OF POND A18
PER ORIGINAL DESIGN

Manning Pipe Calculator

Given Input Data:
    Shape .... Circular
    Solving for .... Flowrate
    Diameter .... 24.0000 in
    Depth .... 23.0000 in
    Slope .... 0.0049 ft/ft
    Manning's n 0.0120

Computed Results:
    Flowrate .... 18.3914 cfs
    Area 3.1416 ft2
    Wetted Area 3.0968 ft2
    Wetted Perimeter .... 65.5309 in
    Perimeter .... 75.3982 in
    Velocity .... 5.9388 fps
    Hydraulic Radius .... 6.8050 in
    Percent Full .... 95.8333 %
    Full flow Flowrate .... 17.1553 cfs
    Full flow velocity .... 5.4607 fps