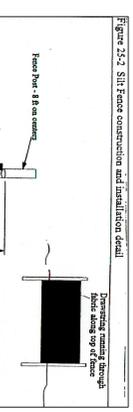
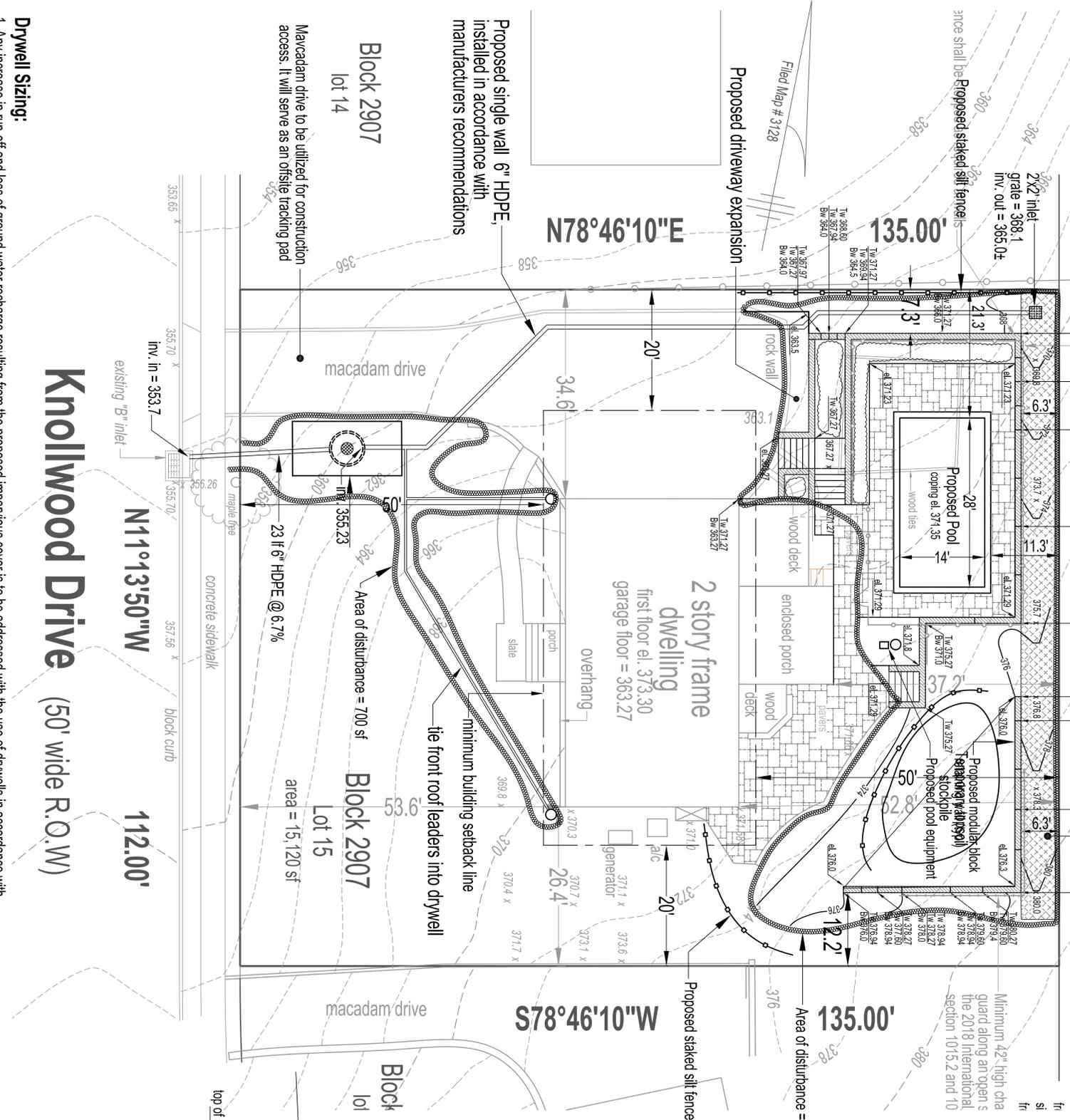


Minimum 48" high chainlink or aluminum fence to act as a guard along an open side/tracking surface, as required by re-2018 International Building Code, New Jersey Edition, section 1015.2 and 1015.3, as well as an enclosure around the pool as required by code 509



Soil Erosion and Sediment Control Notes

- All Soil Erosion and Sediment Control Practices will be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, and will be in place prior to any major soil disturbance or in their proper sequence and maintained until permanent protection is established.
- Any disturbed area that will be left exposed for more than fourteen (14) days and not subject to construction traffic shall immediately receive a temporary seeding. If the season prohibits temporary seeding, the disturbed areas will be mulched with straw or hay and tacked in accordance with the New Jersey Standards.
- Permanent vegetation (is to be established on exposed areas within ten (10) days after final grading. Mulch is to be used for protection until vegetation is established.
- Immediately following initial disturbance or rough grading, all critical areas (steep slopes, sandy soils, wet conditions) subject to erosion will receive a temporary seeding.
- Permanent Seeding and stabilization to be in accordance with the Standard for Permanent Vegetative Cover for Soil Stabilization.
- The site shall at all times be graded and maintained so that all stormwater runoff is diverted to Soil Erosion and Sediment Control facilities.
- All sedimentation structures (silt fence) will be inspected and maintained daily.
- Stockpiles shall not be located within 50' of a floodplain, slope, drainage facility, or roadway. All stockpiles bases shall have a silt fence properly entrenched at the toe of slope.
- Paired roadways must be kept clean at all times.
- Before discharge points become operational, all storm drainage outlets will be stabilized as required.
- The Morris Township Engineer may request additional measures to minimize on site or off site erosion problems during construction.
- The Morris Township Engineer must be notified, in writing, at least 48 hours prior to any land disturbance.
- Topsoil Stockpile Protection
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft.
 - Apply Fertilizer (10-20-10) at a rate of 11 lbs per 1000 sq. ft.
 - Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft.
 - Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.
- Temporary Stabilization Specifications
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft.
 - Apply Fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
 - Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft.
 - Mulch disturbed soil with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.
- Permanent Stabilization Specifications
 - Apply topsoil to a depth of 5 inches (unsettled).
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft. and work four inches into soil.
 - Apply Fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
 - Apply Hard Fescue seed at 2.7 lbs. per 1000 sq. ft. and Greening Red Fescue seed at 0.7 lbs. per 1000 sq. ft. and Perennial Ryegrass seed at 0.25 lbs per 1000 sq. ft.
 - Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.



Estimated Earthwork Summary:

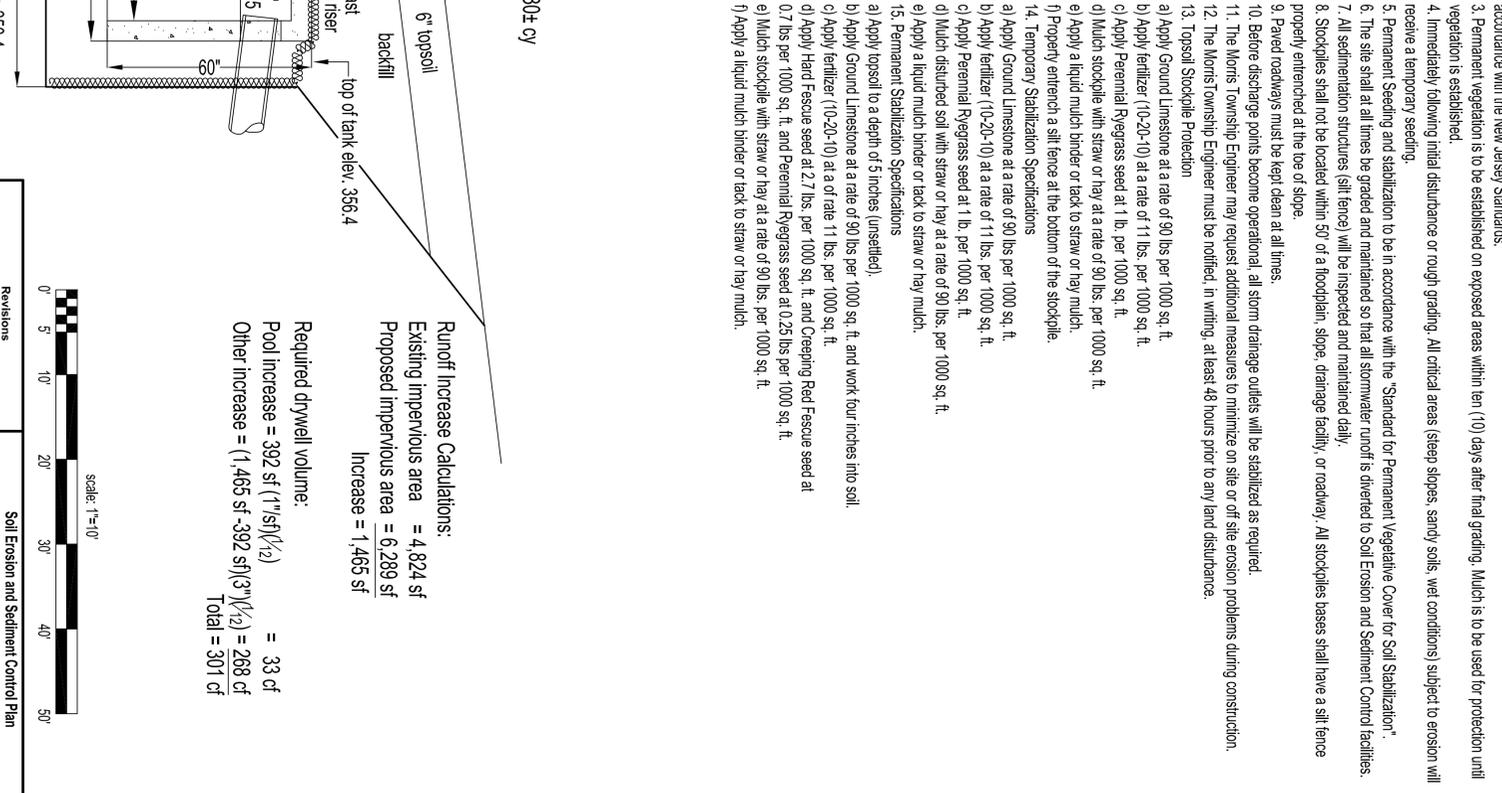
- Excess soil excavated from drywell = 910± cf
- Excess soil excavated from pool (average 6' depth) = 2,640± cf
- Excess soil excavated from easterly side of pool = 180± cf
- Excess soil excavated from southerly side of pool = 240± cf
- Excess soil excavated from southerly side of lawn = 580± cf
- Fill required on north side of pool = -720± cf
- Fill required on west side of pool = -380± cf
- Net cut = 3,450± cf or 130± cy

Runoff Increase Calculations:

- Existing Impervious area = 4,824 sf
- Proposed impervious area = 6,289 sf
- Increase = 1,465 sf

Required drywell volume:

- Pool increase = $392 \text{ sf} (1'' \text{sf}/(1/2)) = 33 \text{ cf}$
- Other increase = $(1,465 \text{ sf} \cdot 392 \text{ sf}/(3'' \text{sf}/(1/2))) = 288 \text{ cf}$
- Total = 301 cf



Drywell Sizing:

- Any increase in run-off and loss of ground water recharge resulting from the proposed impervious cover is to be addressed with the use of drywells in accordance with §57-119 of the Township Code. Drywells are to be sized to handle 3" depth of flow over the total area of increased impervious associated with the proposed improvements (i.e., new dwelling, addition, driveway, deck, walkways, etc.). Additional impervious surfaces for pools, pool patio (up to 4' in width) and/or ponds are to use 1" depth of flow for the volume calculations.
- The design of the drywell shown is based upon best estimations of the soil conditions at the site based upon Soil Survey data. Soil permeability testing and/or determination of seasonal high ground water or bedrock has not been conducted in accordance with an agreement with the owner. At the start of construction, a minimum of 1 soil log shall be conducted at the location of the proposed drywell to determine the capacity of the soil to accept water from the drywell as well as the depth (if any) to seasonal high groundwater and depth to bedrock (if any). The depth, size and/or location of the drywell may have to be modified based upon the results of the soil log.

Proposed single wall 6" HDPE, installed in accordance with manufacturers recommendations

Block 2907 Lot 14

Proposed driveway expansion

2 story frame dwelling
first floor el. 373.30
garage floor = 363.27

Proposed pool
28' x 14'
coping el. 371.35

Proposed stockpile

Proposed modular block retaining wall (drywell)

Proposed pool equipment

Area of disturbance = 700 sf

Area = 15,120 sf

Area between lot line and wall to be stabilized with Eastcoast Erosion Blanket ECS-2, or equivalent

Minimum 42" high chainlink or aluminum fence to act as a guard along an open side/tracking surface, as required by re-2018 International Building Code, New Jersey Edition, section 1015.2 and 1015.3, as well as an enclosure around the pool as required by code 509

Area of disturbance = 4,100 sf

Knollwood Drive (50' wide R.O.W)

Block 2907 Lot 15

Area of disturbance = 700 sf

Area = 15,120 sf

Area between lot line and wall to be stabilized with Eastcoast Erosion Blanket ECS-2, or equivalent

Minimum 42" high chainlink or aluminum fence to act as a guard along an open side/tracking surface, as required by re-2018 International Building Code, New Jersey Edition, section 1015.2 and 1015.3, as well as an enclosure around the pool as required by code 509

Area of disturbance = 4,100 sf

Date	Revisions	By

Scale: 1"=10'

Soil Erosion and Sediment Control Plan for **Block 2907 Lot 15**

33 Knollwood Drive
Morris County
JAMES J. MANTZ, PE & LS
Professional Engineer & Land Surveyor
198 Brimble Avenue Bridgewater, NJ 08807 (908)231-9864

Scale: 1"=10'
Date: 02/03/2021
33 Knollwood
Sheet 2 of 2