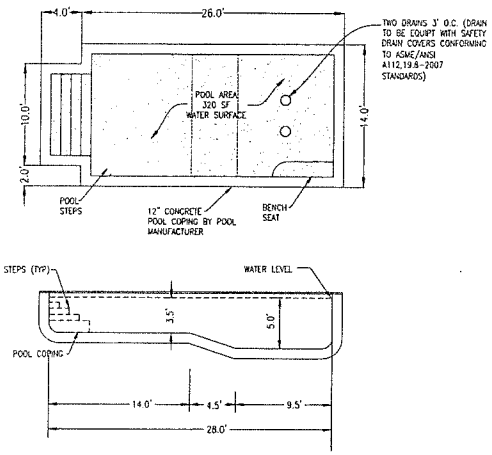
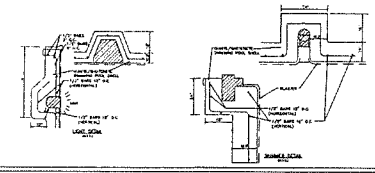
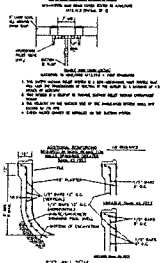






GENERAL REQUIREMENTS: 2009 IRC AS RESIDENTIAL CODE AND THE 2012 INTERNATIONAL SWIMMING POOL AND SPA CODE SHALL APPLY.

1.01 The Uniform Construction Code shall apply to all construction contained with this project. All construction shall comply with the applicable provisions of the State Administrative Code. Any deviations or variances made shall be approved by the contractor then shall be brought to the attention of the Engineer.

1.02 Construction details and contract are the drawings, set admin or specific structures and are intended to serve as typical architectural details for all similar structures. Field conditions may dictate some variations in the construction details, and shall be brought to the attention of the Engineer prior to completion of the work.

1.03 The Contractor shall be responsible for verifying all dimensions and datum prior to the start of construction. The Contractor shall assume all responsibility for all errors, omissions, discrepancies, and field modifications not brought to the attention of the Engineer prior to construction.

1.04 Do not scale drawings. Refer to written text and dimensions for information.

1.05 All grading around pool per approved grading plan or per direction of Construction Code Official.

1.06 The Contractor shall assure the safety and stability of structures at all times during the construction period, and shall present any inconsistent not applicable Federal, State and Local requirements.

CONCRETE SPECIFICATIONS

2.00 CODES AND STANDARDS

The Contractor shall comply with the provisions of the following codes. Specific issues, and standards, except as otherwise shown or specified.

ACI 318 "Recommended Practice for Concrete Inspection."
ACI 318 "Building Code Requirements for Structural Concrete."
ACI 347 "Recommended Practice for Concrete Formwork."
ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete"
Concrete Reinforcing Steel Institute, "Manual of Standard Practice."

2.01 STEEL WIRE: ASTM A 185 welded wire fabric

2.02 SUPPORTS FOR REINFORCEMENT: Provide supports for reinforcement including bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use wire bar type supports complying with CRSI's recommendations specified. Wood, brick and other materials will not be acceptable. For slabs on grade, but shall be fabricated or precast block made with materials of the same strength as slab.

2.03 PORTLAND CEMENT: ASTM C 150, Type I

2.04 AGGREGATES: ASTM C-33, and or from an approved. The maximum stock provide aggregate from a single source.

A Fine aggregate: Clean, sound, natural sand or fine harm sand, free from or other deleterious substances.

B Coarse Aggregates: Clean, sound, uniform aggregates from natural rock or stone containing no clay, mud, loam or foreign material. 2.07 Water: Clean, fresh, free from oil, acid, organic matter or other deleterious substances.

2.05 READY MIX CONCRETE: Comply with the requirements of ASTM C 94, and to specified herein. During hot weather, or under conditions contributing to the rapid setting of concrete, a shorter mixing time than specified in ASTM C 94 may be required. During cold weather placing, concrete to be protected from the element per ACI requirements, and or required to prevent damage to the concrete(s). While air temperature is below 40 degrees F, the Contractor shall maintain the concrete and ambient air temperature between 70 and 80 degrees. While air temperature is above 90 degrees F, the Contractor shall reduce mixing and delivery time to 60 minutes.

2.06 FORMS: The contractor shall design, erect, support, brace and maintain formwork to support vertical and lateral loads that might be applied until such loads can be supported by the concrete structure.

2.07 PLACING REINFORCEMENT:

A. Comply with the applicable codes and standards, and Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars," for details and methods of reinforcement placement and supports, and as shown specified.

B. Clean reinforcement based rust and mill scale, earth, oil and other materials which reduce or destroy bond with concrete.

C. Assembly of mesh, supports and secure reinforcement against displacement by internal vibrators, or subsequent concrete operations. Locate and support reinforcing to minimum chairs, bolsters, bummers, spacers and hangers as required.

D. Place reinforcement or stirrups or hoop the maximum spacings for indicated protection. Arrange, space and securely tie bars and welded wire fabric to bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so that ends are directed into concrete.

2.08 Set steel supports and ties.

E. Do not place reinforcing bars more than 1" beyond the last leg of stirrups or hoop support. Do not use supports, or bars, or stirrups for temporary scaffolding equipment and similar construction loads.

F. Bend all wire ties to at least 90 degrees at protrusions. Leg adjacent stirrups of hoop or U-shaped bars to form a tight area. Other end bent to adjacent stirrup to prevent construction bag or other obstacles.

SAFETY FEATURES:

3.01 Steps and Plates

Provide safety, the proper of first steps beneath square, a steps and flat horizontally shall be provided across the width of the pool. The steps assembly shall be secured not less than 1 foot and not greater than 3 feet between the surface edge of the steps beneath. Every stairway or ramp shall be continuously maintained in a safe and sound condition of repair. Every step shall attach to the steps stringer through so that the steps will not be disconnected from the steps stringer or tread.

DIVING NOTE:

THIS POOL IS NOT DESIGNATED AS A DIVING POOL.

NO	DATE	DESCRIPTION	BY
1	3/31/21	REV. STEPS	RS

CLIENT:

BACKYARD OASIS
INC. BUILD
201-840-7665

engineering inc. Caraaga

JEFFREY J. CARAGA
PROFESSIONAL ENGINEER, N.J. LIC. NO. 35973

POOL STRUCTURE DETAILS

47 KENT ROAD

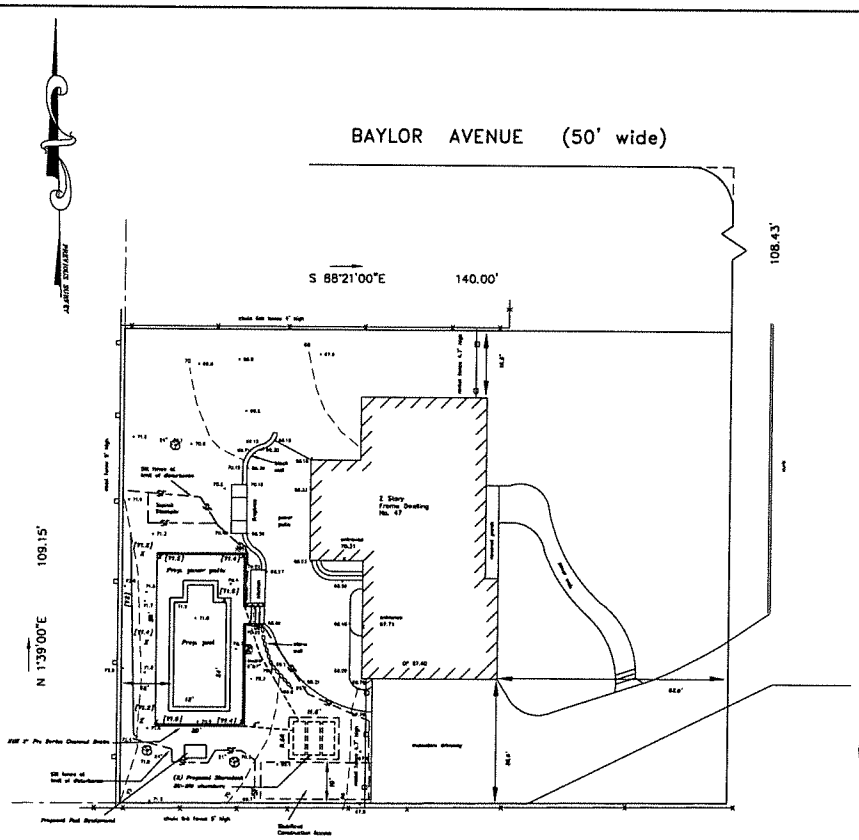
LOT 42.01 BLOCK 93

SITUATED IN

BOROUGH OF HILLSDALE

BERGEN COUNTY NEW JERSEY

DATE	SHOWN	DRAWING NO.
3/4/21		14184
DRAWN BY: RS	CHECKED BY: JJC	SHEET 1 OF 1



COVERAGE CALCULATIONS

EXISTING

Dwelling = 2195 square feet
Covered Porch = 52 square feet
Building Coverage = 2291/15,239= 14.9%

Building Coverage = 2291 square feet
Paved Driveway = 1726 square feet
Paver Walk = (399 x 5.5) = 145 square feet
Paver Patio = (1017 x .29) = 295 square feet
Walls/Steps = 33 square feet
Chimney/Fireplace = 53 square feet
Total = 4797 square feet
Impervious Coverage = 4797/15,239 = 31.3%

PROPOSED

Dwelling = 2195 square feet
Covered Porch = 52 square feet
Building Coverage = 2291/15,239= 14.9%

Building Coverage = 2291 square feet
Paved Driveway = 1726 square feet
Paver Walk = (399 x 5.5) = 146 square feet
Paver Patio = (1468 x .3) = 444 square feet
Walls/Steps = 34 square feet
Chimney/Fireplace = 53 square feet
Pool Coping = 54 square feet
Pool Equipment = 10 square feet
Total = 5058 square feet
Impervious Coverage = 5058/15,239 = 33.2%

ZONING REQUIREMENTS – ZONE R-2

	Required	Existing	Proposed	
Lot Area	15,000 Sq. Ft.	15,239 Sq. Ft.	15,239 Sq. Ft.	
Lot Width	100.0' min.	108.30'	108.30'	
Lot Depth	130.0' min.	140.00'	140.00'	*
Front Yard	30.0' min.	32.9'	32.9'	
Side Yard	10.0' min.	15.3' min.	15.3' min.	
	30% total min.	43.1% total	43.1% total	
Rear Yard	50.0' min.	4.7'	4.7'	*
Building Coverage	20% max.	14.9%	14.9%	
Impervious Coverage	30.0% max.	31.3%	33.2%	**

* – indicates an existing nonconforming condition
** – indicates a variance is required

NOTES

1. Existing conditions taken from a plan entitled "Property Survey, Property Situated in Borough of Hillsdale, Bergen County, New Jersey, Lot 1, Block 2303" prepared by Lamontre, Kurens & Associates, P.C. for Matthew and Jessica DeFelice.
2. If this drawing does not contain the raised impression seal of the licensed professional it is not an original document and may have been altered.
3. Offsets shown are not to be used as a basis for construction.
4. Subject to easements, restrictions or any other information that would be disclosed by an accurate title search.
5. Certifications are not transferable to subsequent owners or additional institutions.
6. The word "Certify" or "Certification" used herein means an expression of professional opinion regarding the facts of the plan and does not constitute a guarantee or warranties, express or implied.
7. Locations of underground utilities or structures are approximate. Location to be verified prior to any excavation.
8. One tree is to be removed to perform the work indicated.
10. The proposed cut is 71 cubic yards and proposed fill is 12 cubic yards. 61 cubic yards of soil are to be removed from the site.
11. All fences and gates to meet requirements for pool enclosure.
12. Measurements of elevations taken April 24, 2021.
13. Rear house setback dimension is as scaled from drawing referenced in note 1.

GRAPHIC SCALE

(30 FEET)
1 inch = 30 ft.

(X) 18" – indicates a deciduous tree and diameter
(X) 18" – indicates a deciduous tree to be removed

REVISIONS

NO. DATE

SITE PLAN OF PROPERTY
AT 47 KENT ROAD

Borough of Hillsdale, N.J.
Scale: 1" = 10'

County of Bergen
May 12, 2021

REFERENCES: Tax Map Lot 1, Block 2303

CERTIFIED TO:
Matthew and Jessica DeFelice

KENT RIGG ENGINEERING & LAND SURVEYING, LLC
24 KERRY AVENUE
MIDLAND PARK, NEW JERSEY 07432
(201) 370-4633
CERTIFICATE OF AUTHORIZATION NO. 24GA28229900

KENT RIGG
PROFESSIONAL ENGINEER & LAND SURVEYOR
LICENSE NO. 27,766
PROFESSIONAL PLANNER
LICENSE NO. 4126

1/2

SOIL EROSION & SEDIMENT CONTROL NOTES

1. All soil erosion and sediment control practices will be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (NJ Standards) and will be installed to prevent sediment and maintained until permanent stabilization is established.

2. Any disturbed area that will be left exposed more than thirty (30) days and not subject to construction traffic shall be protected immediately by temporary seeding and mulching. If the temporary seeding is not sufficient to prevent erosion, or if the area will be disturbed after permanent seeding, a 3 - 4 inch layer of hay or straw mulch or equivalent material (i.e. jute mat, netting, mulch matting, or liquid mulch binder).

3. Immediately following initial disturbance or rough grading, all critical areas subject to erosion will receive a temporary seeding in accordance with either mulch or a suitable mulching, at the rate of 2 tons per acre, according to the N.J. Standards.

4. Stabilization Specifications
   A. Temporary Seeding and Mulching
   Ground Limestone - Applied uniformly according to soil test recommendations
   Fertilizer - Apply 11 lbs/1,000 sf of 10-20-10 or equivalent with 50% water insoluble nitrogen (urea) or soil test indicates otherwise) worked into soil a minimum of 4".
   - Seed - Perennial Ryegrass 100 lbs/acre (5.5 lbs/1,000 sf) or other approved seed mixture from Stands 1 and Seq 13 of other approved seed mixture.
   - Mulch - Unrotted small grain straw at the rate of 2 tons per acre (90 lbs/1,000 sf) to be applied by spreader. 50% soil surface covered. Mulch must be anchored by approved methods (i.e. jute and netting, mulch matting, or liquid mulch binder).

   B. Permanent Seeding and Mulching
   - Topsoil- uniform stockpiling to the average depth of 6", minimum of 4" spread in place is required.
   Ground Limestone - Applied uniformly according to soil test recommendations
   Fertilizer - Apply 11 lbs/1,000 sf of 10-10-10 or equivalent with 50% water insoluble nitrogen (urea) or soil test indicates otherwise) worked into soil a minimum of 4".
   - Seed - Turf type tall fescue blend (blend of 3 cultivars) 200 lbs/acre (5 lbs/1,000 sf) or other approved seed (April between Stands 1 and October 1).
   Supplemental seeding require irrigation)
   - Mulch - Unrotted small grain straw at the rate of 2 tons per acre (90 lbs/1,000 sf) to be applied by spreader 50% soil surface covered. Mulch must be anchored by approved methods (i.e. jute and netting, mulch matting, or liquid mulch binder).

5. The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.

6. Soil erosion and sediment control measures will be inspected and maintained on a regular basis, including after every storm event.

7. Stockpiles are not to be located within 50' of a footpath, trail, roadway, or drainage ditch. The base of all stockpiles must be surrounded by a hay bale sediment barrier or silt fence.

8. A knotted cotton, nylon or sisal standing internal will be installed whenever a construction access road intersects any paved roadway. Base blanket will be comprised of 1" - 2-1/2" crushed stone, 6" thick, and be at least 50' x 10' and should be separate with a suitable synthetic sediment filter fabric and maintained.

9. Washback area shall be kept to a minimum. Washed out sediment must be removed to a location approved by the District.

10. Driveways must be stabilized with 1" - 2-1/2" crushed stone or subbase prior to individual lot construction.

11. All soil exposed, stockpiled, spilled or tracked outside the limit of disturbance on city public right-of-ways, will be removed immediately. Paved roadways must be kept clean at all times.

12. Curb inlets inlets will be protected with an inlet filter designed in accordance with section 20-1.1 of the NJ Standards.

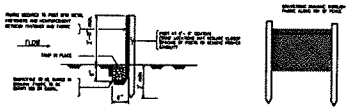
13. Storm drainage outlets will be stabilized, as required, before the discharge points become operational.

14. Dewatering operations must discharge directly into a sediment control basin or other approved filter in accordance with Section 10-1.1 of the NJ Standards.

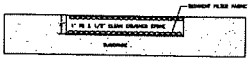
15. Dust shall be controlled by the application of water, calcium chloride or other approved material in accordance with Section 19-1 of the NJ Standards.

16. Trees to remain after construction are to be protected with a suitable fence located at the drip line or beyond in accordance with Section 5-1 of the NJ Standards.

17. The project owner shall be responsible for any erosion or sedimentation that may occur below downstream culverts or off-site as a result of construction of the project.



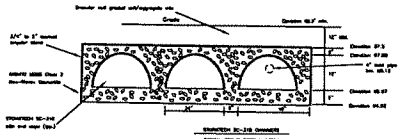
SILT FENCE FOR TEMPORARY SOIL EROSION CONTROL



STABILIZED CONSTRUCTION ACCESS

SEQUENCE OF CONSTRUCTION

1. The Borough of Hillsdale must be notified 48 hours in advance of any land disturbance.
2. Install sediment fence where shown on plans.
3. Construct temporary stone-outlet sediment on plans.
4. Clear vegetation in all areas of construction, only as required for the installation of the proposed site improvements.
5. Construct piles and pool.
6. Fine grade site, remove topsoil and stockpile all disturbed areas with landscaping and/or grass. Uniformly apply topsoil to an average depth of 3", minimum of 4", spread in place.
7. Upon completion of all construction and stabilization, remove the temporary sediment basin.
8. The contractor shall be responsible for the maintenance and replacement of all erosion control devices prior to and during construction.
9. Property is located in the Upper Saddlebrook Area. Soil compaction remediation is not required.



STONEWORK NC-210 DRAINAGE
TYPICAL CROSS SECTION DETAIL
(Not to Scale)
Construction to be 11'-6" wide by 9'-7" long

SITE PLAN OF PROPERTY
AT 47 KENT ROAD

Borough of Hillsdale, N.J. — County of Bergen
Scale: As Noted — May 12, 2021

REFERENCES: Tax Map Lot 1, Block 2303

REVISIONS	
NO.	DATE

KENT RIGG ENGINEERING & LAND SURVEYING, LLC
21 SEDGWICK AVENUE
HILLSIDE PARK, NEW JERSEY 07438
(201) 276-4613
CERTIFICATE OF AUTHORIZATION NO. 24GA28021600

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PROFESSIONAL PLANNER
LICENSE NO. 41,32

2/2