



MAJOR SITE PLAN ATLANTIC CITY COUNTRY CLUB BLOCK 175, LOT 48 - CITY OF NORTHFIELD ATLANTIC COUNTY, NEW JERSEY







Survey Information

Outbound survey information was taken from a plan entitled "Property Survey" prepared by Arthur W. Ponzio Co. & Associates, Inc., 400 N. Dover Ave., Atlantic City, NJ; Arthur Ponzio, Jr, NJPLS. The survey was prepared for a title report with a date of March 6, 2014. Elevations were taken from a plan prepared by Noon-Mathis Associates, 101 Rose Dr., Mullica Hill, NJ; Michael Zimmerman, NJPLS. The survey was prepared in August 2016.

SURVEY INFORMATION

This set of plans has been prepared for purposes of municipal and agency review and approval. This set of plans shall not be utilized as construction documents until all conditions of approval have been satisfied on the drawings and each drawing has been revised to indicate "Issued for Construction."

Contractor shall check and verify all existing utilities, grades, site dimensions and existing conditions before proceeding with construction. Any discrepancies or unusual conditions are to be reported to design engineer/project staff immediately for adjustments or directions.

All construction to be performed in accordance with NJDOT Standard Specifications and supplementary specifications for this project.

These drawings do not include the necessary components for construction safety; however, all construction must be done in compliance with the Occupational Safety and Health Act of 1970 and all rules and regulations appurtenant to this project.

CONTRACTOR NOTES

OF SHEETS	SHEET <u>NUMBER</u>	ORIGINAL <u>DATE</u>	REVISION DATE
	1 OF 8	10/25/19	-
	2 OF 8	10/25/19	-
	3 OF 8	10/25/19	-
	4 OF 8	10/25/19	-
N	5 OF 8	10/25/19	-
	6 OF 8	10/25/19	-
	7 OF 8	10/25/19	-
	8 OF 8	10/25/19	-

LAST

(SHEET #21)

2. The project site is known as Block 175, Lot 48 as shown on the City of Northfield Tax Map, Plate #21. It contains approximately 102.6 acres.

3. The property is located in the C-C - Country Club Zoning District. It contains the

4. It is the intent of the applicant to remove the existing 106 space parking lot and

5. Stormwater runoff generated by the expanded lot will be retained on-site for

There are no proposed changes to the existing signage or buildings.

Any concrete curb or sidewalk and/or asphalt pavement disturbed within the

8. All traffic signs, utility poles, mailboxes and traffic safety devices moved during construction shall be reinstalled in their proper location.

This application requires approval from the following agencies:





ENGINEERING DETAILS SOIL CONSERVATION PLAN...





















SOIL EROSION AND SEDIMENT CONTROL PLAN

- All applicable erosion and sediment control practices shall be in place prior to any grading or installation of proposed structures or utilities.
- Soil Erosion and Sediment Control practices on this plan shall be constructed in accordance with the standards for Soil Erosion and Sediment Control in New Jersey.
- Applicable erosion and sediment control practices shall be left in place until construction is completed and/or the area is stabilized.
- The contractor shall perform all work, furnish all materials and install all measures required to reasonably control soil erosion resulting from construction operations and prevent excessive flow of sediment from the construction site.
- Any disturbed area that is to be left exposed for more than thirty (30) days and not subject to construction traffic shall immediately receive a temporary seeding and fertilization in accordance with the New Jersey Standards and their rates should be included in the narrative. If the season prohibits temporary seeding, the disturbed areas will be mulched with salt hay or equivalent and anchored in accordance with the New Jersey Standards (i.e. peg and twine, mulch netting or liquid mulch binder).
- 6. It shall be the responsibility of the developer to provide confirmation of lime, fertilizer and seed and seed application and rates of application at the request of the Soil Conservation District.
- All critical areas subject to erosion will receive a temporary seeding in combination with straw mulch at a rate of 2 tons per acre, according to the New Jersey Standards immediately following rough grading.
- The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
- 9. All sedimentation structures will be inspected and maintained on a regular basis and after every storm event.
- 10. A crushed stone, tire cleaning pad will be installed wherever a construction access exists. The stabilized pad will be installed according to the standards for stabilized construction access.
- 11. All driveways must be stabilized with 2 1/2" crushed stone or sub-base prior to individual lot construction.
- 12. All paved areas must be kept clean at all times.
- 13. All catch basin inlets will be protected according to the certified plan.
- 14. All storm drainage outlets will be stabilized, as required, before the discharge points become operational.
- 15. All dewatering operations must discharge directly into a sediment filter area. The sediment filter should be composed of a suitable sediment filter fabric. (see detail). The basin must be dewatered to normal pool within 10 days of the design storm.
- 16. N.J..SA. 4:24-39, Est Seq. requires that no certificate of occupancy be issued before all provisions of the certified soil erosion and sediment control plan have been complied with for permanent measures. All site work for the project must be completed prior to the district issuing a report of compliance as a prerequisite to the issuance of a certificate of occupancy by the municipality.
- Mulching is required on all seeded areas to insure against erosion before grass is established to promote earlier vegetation cover.
- 18. Offsite sediment disturbance may require additional control measures to be determined by the erosion control inspector. 19. A copy of the certified Soil Erosion and Sediment Control Plan must be maintained on the project site during
- construction.
- 20. The Soil Conservation District shall be notified 48 hours prior to any land disturbance. 21. Any conveyance of this project prior to its completion will transfer full responsibility for compliance with the certified plan
- to any subsequent owners. 22. Immediately after the completion of stripping and stockpiling of topsoil, the stockpile must be stabilized according to the
- standard for temporary vegetative cover. Stabilize topsoil with straw mulch for protection if the season does not permit the application and establishment of temporary seeding. All soil stockpiles are not to be located within fifty (50) feet of a floodplain, slope, roadway or drainage facility and the base must be protected with a sediment barrier.
- Any changes to the site plan will require the submission of a revised Soil Erosion and Sediment Control Plan to the 23. Soil Conservation District. The revised plan must be in accordance with the current New Jersey Standards for Soil Frosion and Sediment Control
- 24. Methods for the management of high acid producing soils shall be in accordance with the standards. High acid producing soils are those found to contain iron sulfides or have a pH of 4 or less.
- Temporary and permanent seeding measures must be applies according to the New Jersey Standards, and mulched with salt hay or equivalent and anchored in accordance with the New Jersey Standards (i.e. peg and twine, mulch netting or liquid mulch binder).
- Maximum side slopes of all exposed surfaces shall not be constructed steeper than 3:1 unless otherwise approved by the district.
- 27. Dust is to be controlled by an approved method according to the New Jersey Standards and may include watering with a solution of calcium chloride and water.
- 28. Adjoining properties shall be protected from excavation and land filling operations on the proposed site.
- 29. Use staged construction methods to minimize exposed surfaces, where applicable.
- 30. All vegetative material shall be selected in accordance with American Standards for Nursery Stock of the American Association of the Nurseryman and in accordance with the New Jersey Standards.
- 31. Natural vegetation and species shall be retained where specified on the Landscaping Plan.
- The soil erosion inspector may require additional soil erosion measures to be installed, as directed by the district inspector.

STORMWATER MANAGEMENT MAINTENANCE PROGRAM

BASIN MAINTENANC In order to ensure that all retention and detention basins function properly, a maintenance program must be followed. The following are the minimum requirements for the maintenance of all basins.

- Annual visual inspection of outlet structures and basins. a. Inspection of outlet structures to include checking for obstructions of outfall pipes and the accumulation of silts and sediments.
- b. Inspection of basins to include the removal of debris and accumulated particles such as silts and sediments. For maintenance of vegetated basins: a. Mowing of grass is required regularly to ensure the aesthetic quality of the site. All clippings shall be raked and
- bagged to avoid thatch buildup. b. A dense turf, with extensive root growth, is encouraged to reduce erosion and enhance infiltration throughout the bottom and the side of the basin. Well-established turf of the floor and sides will grow through sediment deposits, thus forming a porous turf and preventing the formation of an impermeable layer.
- c. Grasses of the fescue family are recommended for seeding, primarily due to their adaptability to dry sandy solid, drought resistance, hardiness, and ability to withstand brief inundations. Fescues will also permit longer intervals between mowings

2.1Lb./1,000 SF

- d. Seed type: A mixture of the following special water-tolerant seed will ensure a high quality grass for retention basins.
 - INGREDIENTS Mixture 8
 - SEEDING RATE Fescue Perennial Rye Grass Kentucky Bluegrass White Clover
 - 0.25Lb./1,000 SF 0.25Lb./1,000 SF 0.10Lb./1,000 SF
- e. Fertilizing and liming: Bi-annually Fertilize with 10-20-10 at a rate of 11lbs./1,000 SF
- Lime with pulverized dolomite limestone at a rate of 90lbs./1,000 SF

- Long term Maintenance

- a. In order to ensure proper function of all basins, every seven years each basin bottom shall be scarified to a depth of
- 4" to remove sediments and silts. Then 4" of topsoil must be added and reseeded.
- STORMWATER STRUCTURE MAINTENANCE

Maintenance is the work required to keep structures in practice, or restore them to their original physical and functional condition. Maintenance as it applies to this situation shall be devised into two stages: that which is necessary to allow for continuing performance of stormwater controls during the construction period and long term maintenance following construction. Both stages are necessary for the life of the stormwater structures and systems.

SOIL CONSERVATION NOTES

STORMWATER MANAGEMENT MAINTENANCE PROGRAM

- MINIMUM REQUIREMENTS FOR MAINTENANCE a. TRENCHES/SWALES
- undesirable vegetation growth, rodents, and overall system failure.
- b. OUTLET STRUCTURE/CONDUIT Inspection of outlet structures and conduit to include checking for of pipe, accumulation of silts and sediments, cracking, corrosion, deterioration from freezing, salt or chemicals, excessive wear or damage from settling.
- SPILLWAYS/INLETS/MANHOLES
- LONG TERM MAINTENANCE As noted, any basin, pipe, pit, trench or inlet not functioning as designed will be thoroughly as prescribed. Any system that continues to remain inoperable after thorough cleaning must be removed and replaced.

RESPONSIBILIT All on-site retention facilities shall be the sole responsibility of the developer/owner, his assigns and/or heir. The responsibility shall

include but not be limited to installation, inspection, and maintenance. DETENTION FACILITY MAINTENANCE

equipment is to be determined by the maintenance service under contract for the project.

MULCHING

Mulching is required on all seeding. It is defined as stabilizing exposed soils with non-vegetative materials. The purpose is to protect exposed soil surfaces from erosion damage and to reduce offsite environmental damage. Mulching provides temporary mechanical protection against wind or rainfall induced soil erosion until permanent vegetative cover may be established. This practice is applicable to areas subject to erosion, where the season and other conditions may not be suitable for growing. An erosion-resistant cover or where stabilization is needed for a short period until more suitable protection can be applied.

SITE PREPARATION

and mulch anchoring. All grading should be done in accordance with Standards for Land Grading, pg 19-1. measures, sediment basins, and waterways. See Standards 11 through 42.

PROTECTIVE MATERIALS

acre (90 to 115 pounds per 1,000 square feet.)

by people, animals, or machines is not a problem

- Wood-fiber or paper-fiber mulch at a rate of 1,500 pounds per acre may be applied by a hydroseeder.
- <u>Mulch</u> netting such as paper jute, excelsior, cotton, or plastic, may be used.
- Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into an inlet and plug it.

Gravel, crushed stone, or slag at the rate of 9 cubic yards per 1,000 SF applied uniformly to a minimum depth of 3 inches may be used. Size 2 or 3 (ASTM C-33) is recommended.

- the area, steepness of slopes, and costs.
- and a square pattern. Secure twine with two or more round turns.
- per acre. No tackifying or adhesive agent is required.
- B. Liquid Mulch-Binders May be used to anchor salt hay, hay, or straw mulches area should be uniform in appearance.
- b. Use one of the following: materials may be difficult to apply uniformly and will discolor surfaces.
- growth of turf grass. Vegetable based gels shall be applied at rates and weather conditions recommended by the manufacturer.
- manufacturer and remain tacky until germination of grass.

METHODS AND MATERIALS

Topsoil should be friable and loamy, free of debris, objectionable weeds and stones, and contain no toxic substance that may be narmful to plant growth. a pH range of 5.0-7.5 is acceptable. Soluble salts should not be excessive (conductivity less than 0.5 millimhos per centimeter). Topsoil hauled in from off site should have a minimum organic matter content of 2.75 percent. Organic matter content may be raised by additives.

Stockpiling

- b. Stockpiles should be vegetated in accordance with temporary seeding specifications on soil erosion sheet. Site Preparation
- application and anchoring, and maintenance. b. Subsoil should be tested for lime requirement and limestone, if needed, should be applied to bring soil pH to 6.5 and
- incorporate into as nearly as practical to a depth of 4 inches. Immediately prior to topsoil distribution, the surface should be scarified to provide a good bond with the topsoil. d. Employ needed erosion control practices such as diversions, grade stabilization structures, channel stabilization measures, sedimentation basins, and waterways.

Applying Topsoil

sulfide shall be covered with a minimum depth of 12 inches of soil having a pH of 5.0 or MORE.

DUST CONTROL STANDARDS

The following methods should be considered for dust control at the request of the Township Construction Code Official, or upon nspection by an S.C.D. official.

. Spray - On Adhesive - On mineral soils (not effective on muck soils.) Keep traffic off these areas. Water Dilution Type of Nozzle Anionic asphalt emulsior Coarse spray Fine spray Latex emulsion 12 1/2 :1 Fine spray Resin in water 4:1 2. Tillage - To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, and spring-toothed harrows are examples of equipment which may produce the desired effect. Sprinkling - Site is sprinkled until the surface is wet. Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Calcium Chloride - Shall be in the form of loose dry granules at a rate that will keep surface moist but not cause or flakes fine enough to feed through commonly used spreaders pollution or plant damage. If used on steeper slopes, Then pollution or plant damage. If used on steeper slopes, Then use other practices to prevent washing into streams or accumulation around plants. Stone - Cover surface with crushed stone or coarse gravel. Mulch - Stabilization with approved mulches and vegetation cover being temporary of permanent. SEEDING SPECIFICATIONS Temporary Seeding (10-20-10 or equivalent) Fertilizer Limestone (50% Calcium plus MgO)

Perennial Rye Grass Permanent Seeding Fertilizer

Mixture B-15

Engineers - Landscape Architects - Planners

Limestone

(50% Calcium plus MgO) Kentucky Bluegrass (Three Cultivar Blend) Hard Fescue

(Lolium multiflorum)

(10-20-10 or equivalent)

SOIL CONSERVATION NOTES

Perennial Rye Grass

FERTILIZEF Work lime and fertilizer into soil as nearly as practical to depth of four inches (4"0). Remove from the surface all stones two inches (2") or larger. Boll soil to firm the seed bed where feasible. Use specifications as shown above. Note: Optimum seeding dates February 1 to April 30 and August 15 to October 30.

Tenches/Swales to be inspected for rubbish or channel obstructions, bank failure, accumulation of silts and sediments,

PHASE

В.

C.

D.

G.

Н.

OPERATION

SITE CLEARING

ROUGH GRADING

CONSTRUCTION WILL BEGIN WINTER 2016-2017

FENCE POST 8' ON CENTER-

FABRIC SECURED TO POST WITH METAL

SEDIMENT TRAPPED BY FILTER _____

FASTNERS AND REINFORCEMENT -

BETWEEN FASTNER AND FABRIC

SILT ACCUMULATION

INCOMPLETE

ROADWAY -

SUBGRADE

1/11/201

EXISTING GROUND -

Maintenance

stabilized shall be blocked off.

WIRE MESH WITH 1/2" OPENINGS

ENTIRE INLET AS SHOWN. -

(HARDWARE CLOTH CAN BE

UTILIZED IN PLACE OF WIRE)

(10 GA.) TO BE STRETCHED OVER

ESTABLISH EROSION CONTROL MEASURES

CONSTRUCT STORM DRAINAGE STRUCTURES

PERFORM TEMPORARY SEEDING AS NECESSARY

PERFORM PAVING AND CONSTRUCT SIDEWALKS

PERFORM PERMANENT SEEDING AND LANDSCAPING

LAY BUILDING FOUNDATIONS AND CONSTRUCT DWELLINGS

CONSTRUCTION SEQUENCE

SILT FENCE DETAIL

NOTE: IF STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY

PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED

R=25

CONTRACTOR TO PROVIDE APPROPRIATE TRANSITION BETWEEN THE STABILIZED ENTRY AND THE R.O.W.

STABILIZED CONSTRUCTION ENTRANCE

The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto roadways.

This may require periodic dressing with additional stone or additional length as conditions demand and repair and/or

cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto roadways

Where accumulation of dust/sediment is inadequately cleaned or removed by conventional methods, a power broom

SOIL CONSERVATION DETAILS

or street sweeper will be required to clean paved or impervious surfaces. All other access points which are not

INLET PROTECTION

LENGTH ACCORDING TO

TABLE 29-1

50' OR GREATER

6" MIN. THICK CRUSHED

STONE (A.S.T.M. C-33.

(public or private) or other impervious surfaces must be removed immediately.

DRAWSTRING RUNNING THROUGH

GRAVEL FILTER TO CONSIST OF 2" - 3" DIA.

COARSE AGGREGATE PILED AROUND THE

PERIMETER OF THE INLET GRATE, 4" HIGH

PROPOSEI

CONCRETE CURB

- FINISHED GRAD

PUBLIC RIGH

OF WAY

EXISTING - EDGE OF PAVEMENT

FABRIC ALONG TOP OF FENCE-

FINE GRADE AND CONSTRUCT STONE BASE

CONSTRUCT DRAINAGE SWALES

CONSTRUCT STORMWATER BASIN INCLUDING VEGATATIVE STABILIZATION

CONSTRUCT SANITARY SEWER SYSTEM & WATER SYSTEM

Inspection to include checking for cracking, rodents, obtructions(silt-sediment, trash or other.) Check any gates, racks, or grates, for damage from corrosion, ice debris. Check for unauthorized modifications, tampering or vandalism.

he primary mechanical equipment use in the Annual Maintenance of the Basins will be for lawn cutting. The exact type and size of this

. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization

Mulch materials should be unrotted small grain straw, hay free of seeds, or salt hay to be applied at the rate of 2.0 to 2.5 tons per

Asphalt emulsion is recommended at the rate of 600 to 1,200 gallons per acres. This is suitable for a limited period of time where travel

Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities as recommended by the manufacturer.

Mulch anchoring should be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following methods, depending upon the size of the area, steepness of slopes, and costs depending upon the size of

Peg and Twine - Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross

Mulch Nettings - Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed. Crimper (mulch anchoring tool) - A tractor-drawn implement, somewhat like a disc-harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil as to anchor it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons

a. Applications should be heavier at edges where wind catches the mulch, in valleys, and at crests of banks. Remainder of

(1) Emulsified asphalt - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, and CRS-2). Apply 0.04 gal/sg./yd. or 194 gal./acre on flat slopes less than 8 feet high. On slopes 8 feet or more high, use 0.075 gal./sq./yd. or 363 gal/acre. These

(2) Organic and Vegetable Based Binders - Naturally occurring, power based, hydrophilic materials that mixed with formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluable polymers. The vegetative gel shall be physiologically harmless and not result in a phytotoxic effect or impede

3) High polymer synthetic emulsion, with water when diluted and following application to mulch, drying and curing shal no longer be soluble or dispersed in water. It shall be applied at rates weather conditions recommended by the

STANDARDS FOR TOPSOILING

a. Stockpiles of topsoil should be situated so as not to obstruct natural drainage or cause off-site environmental damage.

a. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch

Apply Gallons/Acre

11 Lbs./1,000 SF

90 Lbs./1.000 SF

1 Lb./1,000 SF

11 Lbs./1,000 SF

90 Lbs./1,000 SF

0.9 Lbs./1,000 SF

4.0 Lbs./1,000 SF

0.7 Lbs./1,000 SF

a. Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity. b. A uniform application to a depth of 5 inches (unsettled) is recommended. Soils with a pH of 4.0 or less or containing iron



TIME PERIOD

2 DAYS

3 DAYS

2 DAYS

3 DAYS

3 DAYS

2 DAYS

5 DAYS

5 DAYS

N/A

N/A

N/A

N/A