PART I -- GENERAL:

1.1 RELATED DOCUMENTS:

Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 specification sections apply to work specified in this section.

1.2 DESCRIPTION OF WORK:

A. Remove designated walls and components.

B. Cap and identify exposed utilities.

C. Miscellaneous cutting and patching.

D. Refer to Mechanical Division 15.

1.3 SUBMITTALS:

A. Permits and notices authorizing demolition.

B. Certificates and severance of utility services.

C. Permit for transport and disposal of debris.

D. Demolition procedures and operational sequence for review by the Contracting Officer.

1.4 PROTECTION:

A. Prevent movement or settlement of structure(s). Provide and place bracing or shoring and be responsible for safety and support of structure. Be liable for any such movement or settlement and any damage or injury caused.

B. Cease operations and notify the Contracting Officer immediately if safety of structure appears to be endangered. Take all precautions to properly support structure. Do not resume operations until permission is granted by the Governing Officer.

C. Provide, erect, and maintain barricades, lighting, and guardrails as required by applicable regulatory advisory to provide full protection for workers.

1.5 EXISTING SERVICES:

A. Arrange for disconnecting, removing, and capping utility services within areas of demolition. Disconnect and stub off where indicated on the drawing or as directed in the field. Notify the affected utility company in advance and obtain approval before commencing with this work.

B. Place markers to indicate location of disconnected services. Identify service lines and capping locations on as-built drawings.

PART 2 -- NOT USED

PART 3 -- EXECUTION

3.1 PREPARATION:

A. Erect weatherproof closures as required to close off exterior openings. Maintain exit requirements.

3.2 DEMOLITION:

A. Demolish to extent indicated on drawings and as required to accommodate new work. Take particular care in area of new work ensuring protection existing foundations and supporting structure. Demolish in an orderly and careful manner.

B. Repair all demolition performed in excess of that indicates or required to the approval of the Contracting Officer, and at no cost to the Government.

C. Burning of materials on site is not permitted.

D. Contaminated, vermin infested, or dangerous materials encountered are to be removed from the site and disposed of by safe means so as not to endanger the health of workers and the public.

E. Remove all demolished materials, tools and equipment from site upon completion of work. Leave site in a condition acceptable to the Contracting Officer.

1. The Government has the right of first refusal for all salvageable items removed from the project, including but not limited to piping, light fixture, doors, windows, and equipment.

3.3 PATCHING:

A. Where removals leave holes and damaged surfaces that will be exposed in the finished work, these holes and damaged surfaces shall be patched and repaired to match adjacent finished surfaces. Where new work shall be applied to existing surfaces, removals and patching shall produce surfaces that are suitable for the provision of the new work. Patching shall be performed by workmen skilled in the trade involved, and shall be performed in a neat and workmanlike manner. Finished surfaces of patched area shall be flush with the adjacent existing surface, and shall match the existing adjacent surface as closely as possible as to texture and finish. Patching shall be as specified and indicated, and shall include:

1. All holes and depressions left as a result of removals in existing masonry walls to remain shall be completely filled with an approved masonry patching material applied in accordance with the manufacturer’s printed instructions.

*** END OF SECTION ***

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division Specification sections, apply to work of this section.

1.1. DESCRIPTION

A. Clearing and grubbing of existing trees and shrubs to be removed.

B. Site demolition work.

1.2. RELATED WORK

A. Other Specification sections which directly relate to the work of this section include but are not limited to the following:

1. Section 02220 - Site Earthwork

PART 2 - PRODUCTS

Not used in this section

PART 3 - EXECUTION

3.1. CLEARING AND GRUBBING

A. Before any Clearing operations begin, stake out all structures, walks, pavements and "Contract Limit Lines" for final approval by the Contracting Officer. Remove all shrubbery and plant materials of all kinds, except as shown or as directed to remain, within the area bounded by the Contract Limit Lines or where any construction or site improvements are shown or called for, or where conformation of the ground is changed within the Contract Limit Lines.

B. The Contractor shall remove any trees and brush that are in the line of his work but only after receiving approval from the Contracting Officer. Removal shall mean taking trees out by the roots. No burning is allowed on site. Remove all clearing debris from the site.

C. Grubbing shall consist of grubbing up and removing for a depth of at least twelve (12) inches below the existing ground level, all the stumps and roots three (3) inches or more in diameter.

3.2. SITE DEMOLITION WORK

A. This section includes all labor, materials, equipment and appliances required to complete the entire demolition work. Demolition is limited to those items as noted on the plans. The clearing and prompt removal and disposal of all rubbish and debris shall be in accordance with the requirements of the municipality.

B. Obtain all permits as required.

C. Provide protection for all shrubs, trees, lawns, landscape work, walks, roads, drives, adjacent buildings and equipment, both on and off the property and in adjacent roads and streets.

D. Contractor: provide, erect and maintain such fences, planking, bridges, bracing, shoring, lights, barricades, warning signs and guards as necessary for the protection during the performance of the work.

E. Contractor: DO NOT close or obstruct existing access or exits, or store equipment or materials thereon without permits from the Contracting Officer. Access and egress for emergency equipment to any building must be maintained at all times during construction. Contractor: coordinate schedules with the Contracting Officer.

F. All operations shall be conducted with the minimum of interference to vehicular and pedestrian traffic, in accordance with the provisions of Section 11 of the Connecticut State Demolition Code.

G. Contractor: protect and preserve in operating order all utilities adjacent to and traversing the project site. Contractor: protect manholes, including frames and covers, valve boxes and other appurtenances. Damage to any utility due to work under this contract shall be repaired to the satisfaction of the Owner, at the Contractor's expense.

H. All materials, rubbish and debris shall be promptly removed from the premises.

I. Accumulation of same will not be permitted.

J. No blasting will be permitted on the project site except upon written permission from the owner.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 Specification sections apply to work of this section.

1.1. DESCRIPTION OF WORK

1. Provide and maintain silt control fence and/or hay bales for control of runoff of silt until paving has been installed and a satisfactory stand of grass has been established.

1.2. RELATED WORK

A. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Section 02110 - Clearing of Site.

2. Section 02220 - Earthwork..

1.3. SUBMITTALS

A. Per Section 01300:

1. Filter fabric material certification.

PART 2 - PRODUCTS

2.1. MATERIALS FOR HAY BALE CONTROL

A. Standard size bales of straw or hay, having no loose or decomposed baling twine.

B. Stakes shall be 2”x2”x3’0” long, pointed on one end.

2.2. MATERIALS FOR SILT CONTROL FENCE

A. Stakes shall be 2”x2”x5’0” long, pointed on one end

B. Wire fabric shall be 4x4 hogwire or chicken wire.

C. Filter fabric shall be MIRAFI-100X or approved equal, resistant to sunlight exposure.

D. Contractor may substitute “ENVIROFENCE” as manufactured by the Celanese Corporation (MIRAFI).

PART 3 - EXECUTION

3.1. BALED HAY EROSION CHECK:

A. Hay bales shall be held in place by two or more stakes driven through each bale as detailed. Butt bales tightly together.

B. As soon as each drainage structure has been constructed, surround the frame with hay bales as detailed.

3.2. SILT CONTROL FENCE

A. Construct in accordance with the detail.

3.3. MAINTENANCE

A. Maintain the silt control fence and/or hay bales by re-staking, tightening, adjusting or replacing them as required.

B. Remove build -up of silt.

C. When silt control fence and/or hay bales are no longer required, remove and repair the area to conform to site plan.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 Specification sections, apply to the work of this section.

1.1. DESCRIPTION OF WORK

1. Work consists of stripping and stockpiling of existing on-site topsoil and/or furnishing, placing and shaping topsoil in the areas shown on the plans.

1.2. RELATED WORK

A. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Section 02220 - Site Earthwork

2. Section 02936 - Seeding

1.3. SUBMITTALS

A. Per Section 01300:

1. Fertilizer and lime requirements as determined by an approved soil testing laboratory for existing topsoil and each source of borrow topsoil.

2. Mechanical analysis by an approved testing laboratory for borrow topsoil.

PART 2 - PRODUCTS

2.1. BORROW TOPSOIL

A. The term topsoil used herein means that portion of soil defined technically as the "A" horizon by the Soil Science of America. It shall contain not less than 3% or more than 20% organic matter as determined by loss-on ignition of oven-dried samples drawn by the approved testing laboratory.

B. The following textural classes as determined on the basis of material passing the 20-mesh sieve and subjected to partial mechanical analysis shall be acceptable:

1. Loamy sand, with not more than 80% sand.

2. Sandy Loam.

3. Loam.

4. Sandy clay loam, with not more the 30% clay.

5. Silt loam, with not more than 60% silt.

C. The topsoil shall be loose, friable, reasonably free of admixtures of subsoil, free from refuse, stumps, roots, brush, weeds, rocks and stones 1¼" in over all dimensions. The topsoil shall also be free from any material that will prevent the formation of a suitable seedbed or prevent seed germination and plant growth.

D. Contractor: notify the Contracting Officer of the location from which topsoil will be borrowed at least 15 calendar days prior to delivery, if additional topsoil is necessary.

E. The topsoil and its source shall be inspected and approved by the Contracting Officer before the material is delivered to the project. Any material delivered to the project, which does not meet specifications or has been mixed with undue amounts of subsoil during operations at the source or during placement or spreading, will be rejected and replaced by the Contractor with acceptable material at no extra cost to the Owner.

PART 3 - EXECUTION

3.1. STRIPPING OF TOPSOIL

A. Strip all topsoil of acceptable quality from within the Contract Limit Line where construction work occurs. Contractor: pay special attention to areas where stripping operations meet existing trees to avoid damage to roots systems. Areas to be regraded or resurfaced shall be stripped of topsoil without the admixture of subsoil. Contractor: protect the stockpile against loss and the admixture of debris. Remove from the stripped topsoil all sticks, stones and refuse 4" or more in any dimension. Do not strip topsoil in a muddy or frozen condition.

3.2. PLACEMENT OF TOPSOIL

A. Topsoil shall not be removed from the property until the construction is completed, and shall be stored in neat soil banks for use as required under this section.

B. The areas on which topsoil is to be placed shall be graded to a reasonably true surface. Topsoil shall then be spread and shaped to the lines and grades shown on the plans, or as directed by the Contracting Officer. The topsoil is to be placed 6" deep in lawn areas. All stones, roots, debris, sod, weeds and other undesirable materials shall be removed. After shaping and grading, all trucks and equipment shall be excluded from the topsoiled area to prevent excessive compacting.

Contractor: perform work as required to provide a friable surface for seed germination and plant growth prior to seeding.

C. Contractor: immediately remove any topsoil dumped or spilled on pavement areas during hauling and spreading operations.

D. Contractor: restore to line, grade or surface all eroded areas with approved material and keep topsoiled areas in acceptable condition until construction is complete.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 sections, apply to work of this section.

1.1. DESCRIPTION OF WORK

A. Excavation, filling, furnishing additional fill if required, compaction and/or disposal off site of sand, clay, gravel, broken stone, limestone, soft shale, soft slate or sandstone, loose or decomposed rock, boulders of less than 1 cubic yard in volume and all other material necessarily excavated and not otherwise classified under this specification. Rock or ledge of such consistency that it can be moved by bulldozer or other equipment, shall be included under mass earth.

B. This section includes all labor, materials, equipment and services required to complete all excavation, fill and grading as shown on drawings and/or herein specified including, but not limited to, the following:

1. Rough grading and filling to grade.

2. Compaction control outside building walls.

1.2. RELATED WORK

A. Other specification sections which relate to the work of this section include, but are not limited to, the following:

1. Section 02210 - Topsoiling.

2. Section 02225 - Trenching.

1.3. SUBMITTALS

A. Per Section 01300:

1. Bank-run gravel sieve analysis.

2. Processed aggregate certification of compliance from supplier and sieve analysis.

PART 2 - PRODUCTS

2.1. MATERIALS

A. Pervious backfill shall be clean, bank-run, or crushed gravel, free from organic materials, lumps of loam, silt, clay and other foreign substances. The material shall be sound, tough, durable and free from thin, elongated pieces. The materials shall conform to the latest edition of State Specifications, Section M.02.07 in all applicable respects except that the maximum aggregate diameter shall not exceed 5".

B. Common fill shall conform to Section 2.02 of the State Specifications in all applicable respects. It shall be approved by the Contracting Officer prior to placement.

C. Processed aggregate shall conform to Section M.05.01 of the State Specifications.

D. Bank-run gravel shall conform to Section M.02.05-2 of the State Specifications, except that it shall meet Grade "A" of Section M.02.06

PART 3 - EXECUTION

3.1. LOCATION OF FILL MATERIALS

A. Pervious Backfill shall be used where detailed on the plans.

B. Common fill shall be used for fill outside the outermost foundation walls of the building.

C. Processed aggregate under pavement shall be deposited in layers as detailed on the plans.

D. Bedding materials shall be used in the placement of underground utilities.

E. Bank-run gravel under paved areas where noted on the plans.

3.2. ROUGH GRADING AND FILLING

A. Contractor: include in the contract costs for supplying all pervious backfill and additional common fill as required, and grading all fill. "Shot rock" may not be disposed of on the site.

B. Material frozen in lumps or subject to decomposition or caving shall not be used in fill or backfill. All fill used shall require the approval of the Contracting Officer.

C. All backfill shall be placed in layers not to exceed 12" after compaction, 8" under pavement, processed aggregate in 4" lifts. The entire area of each layer shall be compacted with the appropriate roller or compactor until a layer of the required minimum density has been produced.

D. If after full compliance with the specifications for excavation, placement and compaction procedures, a stable embankment has not been obtained, Contractor: perform such corrective action as is necessary to produce a stable embankment. See Section 02220, 3.4 for compaction specifications.

E. Do all cutting , filling, backfilling and grading necessary to bring the area to the following subgrades after compaction and settlement.

1. For pavements: to underside of the base as indicated on the drawings.

2. For seeded areas: to 6" below finished grades except as otherwise noted on the plans.

F. All subgrades in areas to be paved which cannot be properly compacted shall be removed and replaced with approved material, and be compacted in accordance with Section 02220, 3.4.

G. Maintain subgrades in properly drained conditions until surface improvements are placed.

H. Remove all debris, paper and deleterious materials before backfilling.

I. Slope ground away from buildings and grade entire area outside of the building to a smooth, uniform surface. Grades not otherwise indicated shall be of uniform levels or slopes between points where grades are given or between such points and existing finished grades. Round all abrupt changes in slope. Should figures for finished grades conflict with finished contours shown, the figures shall govern.

J. Backfill around drainage structures with pervious backfill according to Section 0220, 2.1, compacted 6" layers to subgrades.

K. Complicate rough grading operations after building walls are finished, utilities are installed and all materials, rubbish and debris are removed from the site. Leave subgrade for site improvements and lawn areas clean and at required grades.

L. Material for subgrade in both cut and fill sections shall be approved by the Contracting Officer. Any soft or spongy areas shall be removed and replaced with properly compacted, firm bearing material. Notify the Contracting Officer before any such material is removed. The quality of fill required must be agreed upon by the Contracting Officer and the Site Contractor before it is replaced in excavated areas.

M. Restore, without extra cost to the Owner, existing pavements that may be opened in performance of work under this section in a manner prescribed by the authorities having jurisdiction.

N. Disposal of Material:

1. Material under this Contract which is not the property of the Owner shall be disposed of off the site at the Contractor's expense. This includes excess earth, rock, and topsoil, unless noted otherwise.

3.3. EXCAVATIONS

A. Excavate to elevations and dimensions indicated, plus sufficient space to permit erection of forms and inspection of foundations. Provide sufficient area in adjacent utility trench excavations for proper execution of the work and excavate 3" below pipe laying grade. Remove excess materials unsuitable for fill from the site.

B. Place no foundation until excavation has been observed by the Contracting Officer. If foundation excavations require greater depth because of latent soil conditions, adjustment will be made in the unit prices as established in the Proposal Form.

C. Horizontal lines of building excavations shall be the sheeting or shoring for braced excavations. As measured in the plan, building excavation shall include the area within sheeting or shoring for braced excavations and the area defined by a perimeter 5' outside the extreme foundation limits of the structure for non-braced excavations. All other excavations shall be as described elsewhere and on the drawings.

3.4. COMPACTION AND CONTROL (OUTSIDE BUILDING)

A. Construction methods:

1. After deposition of fill or backfill in layers according to Section 02220, 3.2, compact to the following percent optimum density under pavement:

a) Dry density after compaction -- not less than 95% of the dry density for that soil when tested according to AASHTO T-180, Method D, correction for particles retained on the ¾" sieve shall be as specified in AASHTO Method T-224.

B. Field Tests:

1. One modified Proctor Density Test for each source of fill material performed in accordance with AASHTO T-180.

2. Standard field density tests with an accuracy of ± 1%.

3. The above tests will be paid for by the Owner.

4. The Contracting Officer will direct when field density tests shall be made.

5. All required re-compaction and re-testing shall be done at the Contractor's expense.

6. It shall be the Contractor's responsibility to notify the Contracting Officer and Testing Laboratory when each layer of fill is to be in place and ready for testing. Contractor: allow ample time for testing. If any fill is placed in excess of 12" without testing, it shall be subject to removal at the Contractor's expense. Sieve analysis shall be at the Contractor's expense.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 sections, apply to work of this section.

1.1. DESCRIPTION OF WORK

A. Work under this item shall consist of trenching, backfilling, and satisfactory disposal of all surplus excavated material, the removal of which is necessary for proper installation of piping, conduits or cable at the locations shown on the plans.

1.2. RELATED WORK:

A. Other specification sections directly related to the work of this section include, but are not limited to, the following:

1. Section 02220 - Site Earthwork.

1.3. SUBMITTALS

A. Per Section 01300:

1. Sieve analysis of bedding material.

PART 2 - PRODUCTS

2.1. MATERIALS

A. Bedding material shall be sand or sandy soil, all of which passes a $^{3}/_{8}$" sieve, and not more than 10% passing a No. 200 sieve. On-site material may be used if it meets these requirements.

PART 3 - EXECUTION

3.1. Unless otherwise shown, provide separate trenches for each utility. Lay piping, conduit or cable in open trench except when Contracting Officer gives permission for tunneling. Maintain ready access for fire fighting apparatus.

3.2. Width of trench: Excavate trenches to width sufficient to allow proper installation of the work, but the maximum width, at an elevation one foot above the pipe shall be the inside diameter plus 3'.

3.3. Limit of excavation for structures and footings: 1' outside outer walls, and as nearly vertical as possible.

3.4. Grading trench bottoms: Grade the bottoms of trenches evenly to ensure uniform bearing for the full length of all pipes. Cut holes as necessary for joints and joint-making. Excavate to at least 6" below the pipe at all points.

3.5. Install pipe in bedding material with a thickness directly under the pipe of 6" and preshaped to a height of 10% of the total pipe height. After installation, backfill the trench with bedding material to 25% of the total pipe height for pies with a diameter greater than 12". For pipe with a diameter less than 12", backfill with bedding material to a height of 6" over the pipe. Backfill to subgrade. Existing material may be used above bedding material if it contains no unsuitable material or stones larger than 3½" in greatest dimension, unless otherwise prohibited for use with that particular utility.

3.6. Backfill for trenches located In paved areas shall be approved granular material or gravel conforming to (Grading A) M.01.05-2 of the State Specification. This backfill shall be deposited and spread in uniform, parallel layers not to exceed 6" in thickness before compaction. Before the next layer is placed, each layer shall be firmly compacted.

3.7. Backfill for trenches located in unimproved areas, including areas such as play fields or easily repaired lawns, may be compacted with existing material, if acceptable to the Contracting Officer unless otherwise noted in the drawings.

3.8. Backfill material shall be free from large or frozen lumps, wood or other extraneous materials.

3.9. Rick fill or boulders shall not be placed closer than 2' from the pipe at any point.

3.10. Contractor: keep trenches free of standing water at all times until permanent work is in place. All necessary well pointing and/or plumbing shall be performed at the Contractor's expense.

3.11. Contractor: provide, install maintain and remove all shoring, bracing and other items necessary to retain banks or excavations and prevent cave-ins and displacement of adjoining ground. Shoring and bracing shall be entirely independent of footings.

3.12. When soft or otherwise unsuitable material in encountered at low excavation limits, the depth of excavation below the pipe and structures shall be increased to a depth specified by the Contracting Officer.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, and Division 1 Specification sections.

1.1. DESCRIPTION OF WORK

A. Work consists of a bank run gravel sub-base, processed aggregate base, bituminous concrete binder course and surface course, conforming to the lines, grade, compacted thickness and typical cross section as shown on the plans.

1.2. RELATED WORK

A. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Submittals: Section 1300

2. Site Earthwork: Section 02220

1.3. SUBMITTALS

A. Per Section 01340:

1. Sieve analysis for bank run gravel.

2. Sieve analysis and product certification for processed aggregate.

3. Product certification for bituminous concrete binder and surface courses.

PART 2 - PRODUCTS

2.1. MATERIALS

A. Bank run gravel shall conform to Article M.02.03, and “Grading A” of Article M.02.06 of the State Specifications.

B. Processed aggregate for base course shall conform to Article M.05.01 of the State Specifications in all applicable respects.

C. The material for the bituminous concrete mixture, sources of supply, formula for the job mix, job mix tolerance, approval of job mix formula and the control of the mixture shall conform to the requirements of Section M.04 of the State Specifications.

D. Bituminous binder course gradation shall conform with "Class 1" in Section M.04 of the State Specifications.

E. Bituminous concrete surface course shall conform to "Class 2" in Section M.04 of the State Specifications.

PART 3 - EXECUTION

3.1. SUBGRADE

A. Prepare subgrade for pavement, as detailed on the plans, below and parallel to the finished grade after compaction.

3.2. CONSTRUCTION

A. The methods employed in performing the work and all equipment, tools, machinery and other plant used in handling materials and executing any part of the work shall conform to all the requirements of Article 4.11.03 for the construction of the sub-base, Article 3.04.030 for construction of the base and Article 4.06.030 for construction of pavement; State Specifications as noted below:

1. Daily samples of completed work will not normally be required; such samples shall be furnished by the Contractor only upon specific request of the Contracting Officer, in which case the Contractor shall remove the samples as directed and replace with new material equal to that in adjacent areas.

2. The surface of the finished base shall not vary by more than ¼" from a 10-foot straight edge applied parallel to the center line of the base.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 Specification sections apply to this section.

1.1. DESCRIPTION OF WORK

A. Work under this section consists of the preparation and placement of concrete for concrete pavement on the prepared base course where located and as detailed on the plans.

1.2. RELATED WORK

A. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Site Earthwork: Section 02220

1.3. SUBMITTALS

A. Contractor: submit the following samples, certifications or test results prior to use on the project:

1. Sieve analysis for processed aggregate.

2. Concrete mix design.

PART 2 - PRODUCTS

2.1. MATERIALS

A. Processed aggregate shall conform to Article M.05.01 of the State Specifications.

B. Concrete shall be Class “C” and shall conform to Article M.03.01 of the State Specifications. Concrete shall be 3,500 psi after 28 days. Air content to be 6%.

C. Reinforcing, where noted on plans, shall conform to Article M06.01 of the State Specifications.

D. Expansion joint material shall be ¾” premolded asphaltic expansion joint filler.

PART 3 - EXECUTION

3.1. PREPARATION

A. Prepare the subgrades for concrete as detailed on the plans, parallel to finish grade after compaction.

3.2. CONSTRUCTION METHODS

A. Install processed aggregate to compacted thickness as noted on the plans, and to Section 3.04.03 of the State specifications.

B. Concrete pavement shall be of width and extent shown on the plans.

C. Subgrades shall be parallel to the finished grade, to depth specified on the plans.

D. Refer to Article 4.01.030 of the State Specifications for Construction Methods.

E. Concrete pavement (on grade) shall have ¾" premolded asphaltic expansion joint filler where noted on plans separating all noted panels and between panels and curbs if poured-in-place curbs are specified. Concrete at these expansion joints shall not be edged. Trim premolded expansion joint filler with sharp chisel ¼" below the concrete surface.

F. Paving shall have broom finish, unless otherwise noted on the drawing. Tamp and screed concrete to grade and section, bringing sufficient mortar to the surface for finishing and give broomed finish before concrete sets, perpendicular to the line of travel or as indicated on the plans.

G. Provide $^{5}/_{8}$" diameter, 12" long dowels (smooth), 12"-on-center where concrete pavement abuts building foundation at all door openings unless otherwise noted on the plans. Wrap in tar paper, "Free End" of dowel to prevent adhesion to either the slab or foundation. Provide ¼" premolded asphaltic joint filler as described in item 2.01 (D) above.

END OF SECTION

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary General Conditions and Division 1 Specification sections apply to this section.

1.1. DESCRIPTION OF WORK

A. Work under this section consists of providing an accepted uniform stand of established perennial turf grasses by furnishing and placing fertilizer, seed and mulch on all areas to be treated as shown on the plans.

1.2. RELATED WORK

A. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:

1. Topsoiling: Section 02210

1.3. SUBMITTALS

A. Contractor: submit the following samples, certifications or test results prior to use on the project:

1. Fertilizer - Form for Affidavit (on official stationery of supplier) certifying compliance with state and federal regulations and Standards of the Association of Official Agricultural Chemists.

2. Seed - Form for Affidavit (on official stationery of supplier) certifying compliance with state and federal regulations and testing provisions of the Association of Official Seed Analysts for each shipment of seed for this project.

PART 2 - PRODUCTS

1. MATERIALS

All materials furnished In accordance with the requirements of this specification shall be delivered, where applicable, in sealed, unbroken packages bearing the brand and maker’s name, and shall be stored on platforms and be properly covered to protect the m from weather and damage.

D. Limestone (calcium carbonate): containing a minimum of 80% calcium and magnesium carbonates, certified analysis 100% to pass #10 mesh sieve, 90% to pass #100 mesh sieve, 50% to pass #200 sieve.

E. Fertilizer: Commercial composite fertilizer, uniform in composition, dry and free flowing. Fertilizer shall bear the manufacturer's guaranteed statement of analysis which shall be 5-10-5 for original fertilization and 10-6-4 for refertilization with 50% organic nitrogen. Any fertilizer which becomes caked or otherwise damaged, rendering it unsuitable for use, will not be accepted.

F. Seed: of the previous year's crop. Weed content not to exceed 1% of weight. Seed shall conform to the following table:

Name	Proportion by Weight	Percent Purity	Percent Germination
Kentucky Blue	40	85	80
Creeping Red Fescue	40	98	85
Perennial Rye Fiesta II	20	98	90

D. Water: Potable

E. Mulch: Straw mulch, composed of stalks or stems of grain after threshing.

PART 3 - EXECUTION

3.1. INSPECTION :

A. Verify that prepared soil base is ready to receive the work of this section.

B. Beginning of installation means acceptance of existing site conditions.

3.2. PREPARATION OF TOPSOIL

A. Harrow or rake topsoil to a depth of 3".

B. Remove debris and stones having any dimension greater than 1".

C. Apply limestone at rates determined by testing and thoroughly incorporate into the upper 1" of topsoil.

D. Apply fertilizer at rates determined by testing and thoroughly incorporate into the upper 1" of topsoil.

E. Rake finish surface smooth.

3.3. RATE OF APPLICATION

Materials	per 1000 ft.^{2}
Limestone	as determined by testing
Fertilizer	as determined by testing
Seed	6 pounds

Refertilizing	20 pounds
Straw Mulch	4½ tons per acre

3.4. SEEDING

A. Sow grass seed, applying half the quantity in one direction and the remaining quantity at right angles to it.

B. Do not sow seed on a windy day, or when the ground is frozen, wet or otherwise non-tillable

C. Cover seed with a thin layer of topsoil by raking or dragging. Cover with straw mulch, loosely spread to a uniform depth.

D. Under this specification, hydro-seeding is not acceptable unless by written approval of the Contracting Officer.

3.5. SEEDING SEASON

A. Calendar date for seeding shall be:

1. Spring: March 15 to June 15.

2. Fall: August 15 to October 15.

B. All disturbed soil areas shall be treated during the seeding season.

1. Areas at final grade: permanent seeding will be accomplished.

2. Areas not to be brought to final grade for an extended period of time: temporary seeding shall be perennial Rye grass (Lolium Perenne) at the rate specified in Sub-article 9.50.03-3 of the State Specifications.

3. During “out-of-season” periods, unseeded areas shall be treated in accordance with Section 2.10 - Water Pollution Control of the State Specifications. “Out-of-season” treatments shall be removed prior to seeding unless otherwise directed by the Contracting Officer.

3.6. MAINTENANCE:

A. Maintain a moist seed bed at all times. Water seed bed so that the topsoil is wet to a depth of 2”. Apply one complete coverage to seeded area in an 8-hour period.

B. Protect seed bed with barricade, if necessary, to keep all traffic off the area.

C. After grass has appeared, reseed all areas which fail to show a uniform stand of grass.

D. Maintain all seeded areas until acceptance. Maintenance includes any or all of the following, whichever are necessary:

1. Regrading.

2. Refertilizing.

3. Reseeding.

4. Watering.

5. Weeding.

6. Rolling.

E. Mowing: when average height of grass becomes 3½", mow to the height of 2½". Remove heavy clippings.

F. Second fertilization shall be done either:

1. The following Spring, after Fall seeding.

2. The following Fall, after Spring seeding.

Notify the Contracting Officer in writing when this is to be done.

3.7. INSPECTION AND ACCEPTANCE OF SEEDED AREAS:

A. Submit written notice requesting inspection by the Contracting Officer at least 10 days prior to the anticipated date.

B. No seeded areas will be inspected for acceptance:.

1. Prior to 60 days from date of seeding.

2. Prior to completion of 2 mowings.

C. A satisfactory stand of grass is defined as a uniform stand of at least 60% established permanent grass species. An acceptable stand of grass will be determined by the Contracting Officer.

D. Pre-emergent crabgrass control chemicals shall be spread according to manufacturer's specifications on all lawn areas the Spring following seeding. Tupesan is an acceptable material. Other materials must be approved by the Contracting Officer before use.

END OF SECTION