

915018

Entered

SP-19-0017  
7/13/92

## **SPECIFICATIONS FOR ROADWAY AND PARKING LOT REHABILITATION**



**DUNLOP TIRE CORPORATION  
TONAWANDA, NEW YORK**

RECEIVED

FEB 16 1993

ENVIRONMENTAL  
REHABILITATION

SP-19-0017  
7/13/92

## SPECIFICATIONS FOR ROADWAY AND PARKING LOT REHABILITATION



DUNLOP TIRE CORPORATION  
TONAWANDA, NEW YORK

TABLE OF CONTENTS		Page No.
1.0	<u>Introduction</u>	1.1
2.0	<u>Drawings and Standards</u>	2.1
3.0	<u>General Conditions</u>	
3.1	Definition of Terms	3.1
3.2	Intent of Specifications	3.2
3.3	Terms of Obligation	3.3
3.4	Safety	3.3
3.5	Work Included	3.4
3.6	Proposals	3.5
3.7	Examination of Premises	3.6
3.8	Drawings	3.6
3.9	Shop Drawings	3.7
3.10	Dimensions	3.7
3.11	Materials and Workmanship	3.7
3.12	Personnel and Supervision	3.8
3.13	Coordination of work	3.9
3.14	Permits	3.10
3.15	Substitutions	3.10
3.16	Sub Contractors	3.10
3.17	Laying Out Work	3.10
3.18	Insurance and Indemnification	3.10
3.19	Repairs	3.12
3.20	Work Period	3.13
3.21	Cleaning Up	3.13
3.22	Regulations and Compliance	3.17
3.23	Plant Rules	3.17
3.24	Progress Schedule	3.20
3.25	Waiver of Lien Rights	3.20
3.26	Proposal Bond	3.21
3.27	Performance Bond	3.21
3.28	Charges Payable to Owner	3.21
3.29	Reporting Requirements	3.22
3.30	Liquidated Damages	3.22
3.31	Completion and Acceptance	3.22
3.32	Confidential Information	3.23
3.33	Assignment	3.23
3.34	Temporary Utilities	3.24
3.35	Additional Work	3.24
3.36	Work Outside of Stated Work Schedule	3.25
3.37	Disputed Work	3.26
4.0	<u>Scope of Work</u>	

TABLE OF CONTENTS (CONT.)

Page No.

5.0 Bid Requirements

5.1	Pre-Bid Meeting and Site Inspection	5.1
5.2	Submission of Bids	5.1
5.3	Sales Tax	5.1
5.4	Format of Bids	5.2
5.5	Invoices and Payment	5.3
5.6	Terms and Conditions	5.3
5.7	Overrun at Bid Opening	5.3

Attachment A: Time and Materials Rates  
Attachment B: Supplemental Terms and Conditions  
Attachment C: Unit Pricing  
Attachment D: Form F-1989, Work and Services  
Attachment E: Form TO53, Terms and Conditions  
Attachment F: Safety Guidelines For Contractors

Appendix I : Non-Discrimination; Affirmative Action

o	Definitions	A.1
o	A. Requirements	A.2
o	B. Minority & Women-Owned Business Enterprise Utilization	A.3
o	C. Minority/Female Workforce Utilization Requirements	A.5
o	Instructions for Filing Monthly Employment Utilization Report (CC-257)	A.6

Forms:

Form A Schedule of Minority/Women Owned Business Participation  
Form B MBE/WBE Letter of Intent to Perform as Contractor or Subcontractor  
Form C MBE/WBE Monthly Utilization Report  
Form D Monthly Employment Utilization Report

1.0 INTRODUCTION

1.1 Description of Specification

These Specifications are presented by Dunlop Tire Corporation to cover the general requirements for the complete installation of paved driveways and parking lots at our tire production facility, located in Tonawanda, New York.

It is intended that the selected Contractor shall be responsible for the complete materials supply, delivery, unloading, site preparation and installation as directed in these Specifications. These Specifications and sketches, and/or drawings referenced herein, describe the minimum requirements for the completion of the intended work.

The selected Contractor will assume full responsibility for the total project work, as described in these Specifications.

1.2 Minority and Woman-Owned Business Enterprise Utilization Requirements

The attention of the bidders is called particularly to the requirements with respect to conditions of employment to be observed and further to the Minority/Woman-Owned Business Utilization and Affirmative Action Requirements for Equal Employment Opportunity. Bidders are further advised that the contractors shall achieve the following Affirmative Action Program: 50% of Contract price MBE/WBE Utilization and the MBE/WBE shall comply with a Minority/Female Workforce Participation goal equal to or greater than 10%.

See Appendix I for requirements.

1.3 Dunlop Contacts

- A. For questions regarding clarification of these specifications, please contact:

Daniel J. Pyanowski  
Central Environmental Engineer  
Dunlop Tire Corporation  
P.O. Box 1109  
Buffalo, New York 14240  
716-879-8274 Fax: 716-879-8563

Daniel T. Parshall Plant Environmental Engineer  
Dunlop Tire Corporation  
P.O. Box 1109  
Buffalo, New York 14240  
716-879-8536 Fax: 716-879-8563

- B. For questions regarding "Terms and Conditions" of this quotation, please contact:

Mr. Arthur J. Williams  
Purchasing Manager  
Dunlop Tire Corporation  
P.O. Box 1109  
Buffalo, New York 14240  
716-879-8403  
Fax:716-879-8222

2.0 DRAWINGS AND STANDARDS

2.1 Applicable Standards

Materials and workmanship involved in this contract shall be in accordance with the following latest revisions of codes and standards: OSHA, AISC, AWS, ANSI, NEMA, JIC, IEEE and NETA.

2.2 Drawing List

The attached drawings and any information or instructions stated on the drawings constitute essential and integral parts of the purchase order and the resulting contract. The Contractor is responsible to verify dimensional correctness on all drawings before construction begins and must bring any discrepancies to the attention of the Owner.

DRAWING

<u>NO.</u>	<u>COMPANY</u>	<u>DESCRIPTION</u>
2	URS Consultants, Inc.	Site Plan
3	URS Consultants, Inc.	Miscellaneous Details

3.0 GENERAL CONDITIONS

3.1 Definition of Terms

- A. The terms "Owner", "Buyer", or "Owner's Engineer", as used herein, shall mean Dunlop Tire Corporation, or its authorized representative.
- B. The term, "Contractor" or "Vendor", as used herein, shall be the selected Contractor, and any Sub-Contractors commissioned by the Contractor.
- C. The term "Superintendent", as used herein, shall mean the superintendent, foreman, or supervisor, who is charged by the Contractor, with the responsibility of representing the Contractor on the job, for the purpose of supervising all project work.
- D. "Specification" means the Technical Specification of the Owner, all specifications of the Contractor (or any instrument in the nature of specifications) attached to or made a part of the Proposal, and all supplementary specifications hereinafter referred to; together with all maps, plans, and drawings to any of the foregoing annexed or in any of them referred to, as well as all maps, plans, and drawings not so annexed which may hereinafter from time to time be needed during the course of the work or in connection with its satisfactory completion.
- E. "Work" means the construction, installation, equipment, material, and/or work, labor, and services which constitute the completed production, installation or provided for, described, or indicated in the Contract.
- F. "Proposal" means the completed "Form of Proposal" with specifications submitted by the Contractor, and all maps, plans, or drawings thereto annexed or therein to.



3.2 Intent of Specifications

- A. It is the intent of these Specifications to establish the overall functional objectives and constraints required to accommodate the Owner's practices and standards.
- B. It is not the intent of these Specifications to restrict the Contractor, such that he cannot, from his experience, and in his estimation, provide a service, which will produce the intended results. The Contractor is encouraged to offer alternative methods, when such restrictions are perceived. In each case, alternates are to be clearly identified as such, and will be subject to the Owner's prior approval.
- C. Quality, reliability, and schedule attainment, are of prime importance in design, materials supply, and construction.
- D. These Specifications and attached drawings are presented in good faith as being an accurate description of the work to be done. In any case where these Specifications are deficient, the Contractor shall bring these deficiencies to the attention of the Owner's Engineer for resolution. In no case will the Contractor be relieved of the responsibility for the successful and timely completion of this project.
- E. This project contains milestones, which are of critical importance to Dunlop, and the Contractor will be expected to take all reasonable steps to assure that the project remains on schedule at all times. If, in the judgement of the Owner's Engineer, the Contractor is not exercising all reasonable means to keep the project on schedule, or if the Contractor fails to show good faith in executing the conditions of these Specifications, Dunlop reserves the right to terminate this Contract at no further charge or penalty.
- F. In any event that Dunlop elects to cancel any portion of the work covered by these Specifications, our liability shall be limited to full payment for all work completed, plus any additional costs the Contractor has incurred for committed labor or materials.

3.2 Intent of Specifications (cont.)

- G. Contractor can and should approach Owner with any and all cost and time saving ideas.

3.3 Terms of Obligation

- A. No verbal agreement, or conversation with any officer, agent, or employee of the Owner, or Contractor, shall affect, or modify the terms or obligations of these Specifications, unless confirmed in writing, and acknowledged, in writing, by the other party .
- B. In no case will payment be made for any additional labor or materials, without prior written authorization from the Owner's Engineer.

3.4 Safety

- A. If services required herein, affect the Owner's place of employment, fixtures, or goods, therein, the Contractor warrants that the Owner's place of employment, fixtures, or goods, insofar as such services affecting it, or them, will be in compliance with the Occupational Safety and Health Act of 1970, and within then applicable standards, rules, regulations, and orders therein.
- B. Contractor shall pursue his work in a safe manner at all times, taking all necessary precautions to avoid damages or injury to the public, his employees, the Project, and the site. He shall comply with all laws, ordinances, codes, rules, and regulations relative to safety and the prevention of accidents, with the manual entitled "Accident Prevention in Construction" of the Associated General Contractors of America (latest revision), unless prevention of accidents is regulated by a more stringent local code or ordinance, and with any safety requirements of the Owner of which he is advised, including the Owner's General Safety Regulations for Contractors. He also shall comply with the Owner's safety requirements and regulations pertaining to the Project or to any operating plant or other facility of the Owner's, at the Site, to the extent applicable.

3.4 Safety (cont.)

- C. A Safety Representative shall be appointed by each Contractor to monitor the work activity for compliance with the Project Safety Program and all O.S.H.A., State, and Dunlop's Safety Procedures. All Contractors must have an approved First Aid Kit on the job site.
- D. Particular attention is called to the requirements of wearing hard hats and other necessary personal protection equipment by all personnel when at the Site; maintaining good housekeeping conditions in all work areas; properly constructing all scaffold, scaffold working platforms and access ladders; barricading and shoring all excavations and/or floor openings; protecting persons and property from injury or damage resulting from burning, welding, or any other Contractor's operations, including the providing of adequate fire fighting equipment.

3.5 Work Included

- A. The work to be done by the Contractor shall consist of furnishing all labor, materials, equipment, tools, supplies, transportation, and superintendence, necessary for, and incidental to, the completion of work required as shown, indicated, or noted on the drawings and in these specifications.
- B. The Contractor shall verify all dimensions and sizes prior to the commencement of the Scope of Work, and should use all drawings provided, only to assist in defining the Scope of Work. Errors resulting from the Contractor's failure to check/verify and discovered in the process of doing the work, shall be corrected at Contractor's expense.
- C. As punch list work is identified by the Owner's Engineer, the Contractor shall provide segregated crew(s) from the construction efforts, at the Contractor's expense, to provide immediate disposition of any and all remedial type work.

3.5

**Work Included (cont.)**

- D. The Contractor shall remove any beams, braces, supports, etc., which interferes with construction, erection, and setting of equipment, and reinstall immediately after erection or equipment is in place. Work of this nature requires prior approval of the Owner's Engineer.
- E. The Contractor shall make copies as required, available to the Owner's Engineer, and furnish these copies as requested of all information concerning work performed by the Contractor, or his agents. This action will be required in a timely manner, as the work progresses and at the completion of the contract.
- F. The Contractor shall furnish and install all miscellaneous supports, brackets, braces, hangers, frames, etc., whether permanent or temporary, to properly support equipment, controls, electrical devices, panels, piping, ductwork, etc. Including those shown, and not shown on the drawings.
- G. The Contractor will paint, coat, or touch-up all miscellaneous metals, equipment, system process piping, doors, tanks, walls (interior or exterior), welded areas, supports, hangers, and all construction damaged surfaces, etc., except as noted or listed in Work Not Included. All painting, coating, or touching-up shall be installed in accordance with the Dunlop Tire Painting Specification ST-51-0003, unless otherwise noted or directed by the Owner's Engineer.
- H. The Contractor shall furnish and install all materials required for temporary protection of existing facilities and equipment as directed by the Owner's Engineer.

3.6

**Proposals**

- A. All bidders are hereby notified and requested to thoroughly examine all specifications and drawings. If there is any doubt or obscurity as to the meaning of any part of these specifications or drawings, bidders shall request an explanation from the Owner, before submitting their proposal.

3.6       **Proposals (cont.)**

- B.    The Owner reserves the right to accept or reject any or all proposals.

3.7       **Examination of Premises**

- A.    Contractor will be held to have examined the site so as to compare actual conditions, with conditions shown on the drawings and described in these Specifications, and to have satisfied himself, generally, as to the condition of the premises, before the delivery of his proposal. No allowance will be made subsequently, in behalf of the Contractor, by reason of any omission, on his part, to include the cost of all items of work, either labor or materials, whether they are, or are not, especially or particularly shown or noted, but which are implied, or required, to attain the completed conditions contemplated by the Owner.

3.8       **Drawings**

- A.    All work shall be constructed in accordance with the drawings and specifications enumerated in, and which became a part of the contract or purchase order covering this job. Any information shown on the plans, but not specified in these specifications, shall become part of these specifications. Any information written in these specifications, but not shown on the plans, likewise, shall become part of the plans or drawings.
- B.    In any instance, where the Contractor shall deviate from the drawings, without prior authorization from the Owner, the Contractor shall, at the Owner's option, make appropriate corrections or changes, in accordance with the Dunlop Drawing Standards, at no expense to the Owner.
- C.    Contractor shall maintain a set of record drawings on all work, as it is fabricated and installed, at the site, during construction, along with specifications, bulletins and shop drawings, all marked to show changes made during construction and installation, and are to be kept in good order and condition, and shall be available to the Owner's Engineer at all times.

3.8 Drawings (cont.)

- D. All conflicts between the Scope of Work, Contract Documents, Drawings, or Specifications, will be resolved and disposition given, by the Owner's Engineer.

3.9 Shop Drawings

Prior to fabrication and/or construction, the Contractor will submit to the Owner's Engineer, for approval, four (4) copies of all shop or manufacturer's equipment drawings required for his work. The Contractor will then make any corrections, required by the Owner, and file with the Owner, eight (8) corrected copies. The Owner's approval of such drawings, shall not relieve the Contractor from responsibility for deviations from drawings or specifications, nor relieve him from responsibility for errors in shop drawings.

3.10 Dimensions

- A. The Contractor will be held responsible for the construction of all work to the lines, grades, and elevations shown on the plans, or specified in these Specifications. The Contractor will be held responsible for all project dimensions and shall field check all dimensions shown on the plans.
- B. In any event where the Contractor's work does not comply with the dimensions shown on the drawings, or plans, the Contractor shall, at the Owner's option, make appropriate corrections or changes, at no expense to the Owner.

3.11 Materials and Workmanship

- A. All materials will be new, unless salvaged material is specified by the Owner. The Contractor will supply engineering data and/or cut sheet diagrams on all purchased materials.

3.11 **Materials and Workmanship (cont.)**

- B. Asbestos is considered to be a hazardous material, and is not to be used in any form, at any Dunlop facility. Insulation or building materials that contain any percentage of asbestos is not acceptable.
- C. Any substitution of materials for those specified by trade name, or manufacturer, shall be made only upon the permission of the Owner's Engineer.
- D. All workmanship shall be first-class in all respects, and in accordance with the best modern construction practices.
- E. The Contractor will guarantee all his work and all its component parts against defects due to poor workmanship or materials, for one year after completion of work.
- F. The Contractor will employ only experienced and skilled trades people on this project.
- G. Any solvents used for any purpose, must be approved by the Owner's Engineer, before being brought on to the premises.

3.12 **Personnel & Supervision**

- A. The Contractor will utilize only qualified trades personnel on the job at all times.
- B. It is the Contractor's responsibility to maintain the appropriate number of personnel on the job site, to keep the job on schedule.
- C. The Contractor shall maintain a dedicated and qualified Supervisor on the project job site at all times work is scheduled. This Supervisor must be technically oriented, in that he will verify that proper procedures are being followed by trades personnel, and actively assist in the start up and commissioning of equipment.

3.12 Personnel & Supervision (cont.)

1. There will be no exceptions to this requirement. Failure to have a Supervisor on site at all times, unless otherwise agreed to by the Owner's Engineer, will be deemed an act of bad faith by the Contractor, and could result in the cancellation of the Contract.
  2. The assigned supervisor for this Contract shall work solely on this Contract and no others on or off the project site, and such person(s) shall be satisfactory to the Owner's Engineer and if deemed unsatisfactory, be replaced promptly. The supervisor shall represent the Contractor, and all instructions given to or requested from him shall be as binding as if given to or requested from the Contractor. This Supervisor shall not be replaced during the progress of the work without the Owner's prior consent or request.
- D. The Contractor's Supervisor will be responsible for the conduct of all Sub-Contract trades people on this project with respect to the adherence to Dunlop's Safety Guidelines and Plant Rules.
- E. The Contractor's Supervisor will work directly with the Owner's Engineer to execute the implementation of this project.
- F. The Contractor's Supervisor shall have the authority to make decisions relative to cost; such as, estimating, pricing extra work, accepting and signing Modifications, Change Orders, and Extra Work Orders, as requested by the Owner's Engineer. All requests relative to pricing shall be submitted to the Owner's Engineer within 24 hours of his request.

3.13 Coordination of Work

- A. The Contractor's work shall proceed in a safe and well planned manner, so as not to interrupt normal plant or office operations. These areas shall be protected from exterior elements, dirt and dust, by use of drop curtains and/or temporary wooden partition walls, as deemed necessary by the Owner's Engineer.



3.14      **Permits**

The Contractor must obtain and pay for any and all permits, licenses, certificates, inspections, and any other legal fees required in the scope of his work. Contractor shall give inspecting authorities proper notice for all required inspections.

3.15      **Substitutions**

Where an item is specified outright, the Contractor may submit a substitute to be considered for approval by the Owner.

3.16      **Sub Contractors**

The Contractor must submit with his proposal, the names of all sub-contractors for approval by the Owner.

3.17      **Laying Out Work**

The Contractor shall immediately, upon entering the job site, for the purpose of beginning work, locate all general and specific reference points and take such action as is necessary to prevent their destruction, lay out the work, measurements of buildings, grading, elevations, utilities, and any other work under the Contract. The Contractor must exercise proper precaution to verify all dimensions shown on the drawings, and will be held responsible for any error resulting from his failure to exercise such precaution.

3.18      **Insurance and Indemnification**

- A. The Contractor shall insure each and every one of his employees on the project with respect to Workman's Compensation and Public Liability Insurance. The Contractor shall indemnify and protect Dunlop Tire Corporation from any loss or recoveries from damage of life, limb, or property occasioned by his negligence, or those of his agents, employees, or workmen.

3.18

Insurance and Indemnification (cont.)

B. The Contractor agrees to obtain, and have in force during the term of this Contract, the below described insurance coverage relating to the work, with the Owner as named insured. Such insurance shall be carried with insurance companies satisfactory to the Owner, and the Contractor will furnish the Owner with certificates evidencing such insurance coverage prior to commencing any work under this Contract and shall contain the following language: Dunlop Tire Corporation is to be named an additional Insured on a direct, primary basis, as respects work performed for it by or for the named insured. Such certificates shall provide at least ten (10) days written notice of any policy cancellation to be given to the Owner. Three (3) copies of each certificate, evidencing such coverage, are to be mailed to the Owner's Purchasing Agent. The certificates must show the Contract number, so that the Owner can identify the same by project. The insurance coverage shall so obtain and keep in force as follows:

1. Workman's Compensation and/or Employers Liability Insurance as required under the laws applicable to the work, which shall cover all of Contractor's employees, agents, or workmen engaged in the work.
2. Automobile Public Liability Insurance covering all automotive equipment used in connection with the work, with not less than \$500,000/\$1,000,000 bodily injury and \$1,500,000 property damage coverage.
3. Comprehensive Public Liability Insurance (including contractual liability insurance covering the indemnification appearing in this section) with not less than \$500,000/\$1,000,000 bodily injury coverage and property damage insurance with limits of \$500,000, per occurrence.
4. Risk insurance to be provided by Contractor:
  - a. For construction projects an, "All Risk Builders Risk Policy" for 100% value of contract.

3.18 Insurance and Indemnification (cont.)

- b. For equipment installation projects, an "All Risk Installation Policy" for 100% value of contract.

NOTE: Certificates from the following Carriers will be refused by Dunlop Tire Corp.:

- American Home Assurance Company
- American International Group Inc.
- Commerce and Industry Insurance Company
- Lexington Insurance Company
- Nation Union Fire Insurance Company of Pittsburgh, Pennsylvania
- New Hampshire Insurance Company

- C. The Contractor shall specifically require his Sub-contractors to obtain like coverage to that specified above, and prior to commencing work, submit certificates evidencing such insurance to the Owner, as provided above.
- D. The Contractor agrees to indemnify the Owner against, and hold the Owner harmless, from any and all claims, liabilities, obligations, governmental penalties, fines, and causes of action of whatsoever kind or nature for injury or death of any person (including the Owner's employees) and for damage to, or destruction of, property (including the Owner's property) resulting from any and all acts or omissions of the Contractor or of any Sub-Contractor's employees, or the concurrent negligence of the Owner in connection with the performance of the work covered by this Contract. This indemnification is limited to the extent of the insurance coverage, and does not include consequential damage. A certificate of proof of coverage, with the Owner named as insured, on a direct, primary basis, must be supplied prior to commencing work.

3.19 Repairs

- A. The Contractor will repair, to the satisfaction of the Owner, without any cost to the Owner, all damages occurring during construction, to existing buildings, furnishings, fencing, glass, road surfaces, production material (in process or in storage), plant production equipment, or any of the Owner's property.

- B. If damage is done to adjoining property, and the Contractor shall fail to immediately repair the same, the Owner will have the power to cause such repairs to be made, and the cost thereof shall be deducted from the amount due or to become due to the Contractor under his Contract and to include a 25% surcharge for overhead expenses incurred by the Owner.

3.20      **Work Period**

- A. The Contractor shall furnish sufficient forces, and shall work such hours, including night shifts, weekends, holidays, and overtime, as may be necessary to ensure the prosecution of the work, in accordance with the Owner's approved progress schedule.

If in the opinion of the Owner, the Contractor falls behind the progress schedule, the Contractor will be required to take such steps as may be necessary, to improve his progress. These steps may include any or all of the following: increasing the number of shifts, increasing the manpower, increasing or implementing overtime operations, and/or days of work, including Saturdays, Sundays, and Holidays.

The Owner shall not be charged with the cost of any additional work required to bring the project back on schedule.

- B. If the Contractor does not maintain the approved progress schedule, and does not adhere to the Owner's request for additional effort, the Owner may, at his option, cancel the Contract, with liability limited only to payment for work completed and materials furnished on site.

3.21      **Cleaning Up**

A.      **General**

- 1. The Contractor shall, at all times, keep the premises free from accumulations of waste materials, debris, or rubbish caused by his employees or work, and at the completion of the work, he shall remove all accumulated debris from the Owner's premises and dispose of by legal means.

At the completion of the work, the Contractor shall promptly remove all of his tools, scaffolding, and surplus materials, and leave his work broom clean.

2. On a daily basis, during the course of the work, the Contractor will cleanup the job site, to the Owner's satisfaction.
3. In the event the Contractor fails to comply with the requirements of the above paragraph "2", the Owner's Engineer, at his option, may employ a custodial service to have the work area cleaned to his satisfaction. The cost of this service will be charged to the Contractor.
4. Because the work is to be performed at or adjacent to an operating facility, the Contractor, his employees, or agents, must guard carefully against contaminating any of the products being manufactured at the facility. They must assure that no foreign materials of any kind are introduced into any such products.

B. Progress Cleaning

1. Contractor shall broom sweep entire area daily during the execution of the project, insuring all debris, trash, dirt, dust, or any other foreign materials are removed.
2. Contractor shall broom sweep any other areas utilized or affected by his work during this project, including loading and unloading areas, storage areas, crew areas, and any other areas, as directed by the Owner's Engineer.
3. During any uncrating or unpacking, the Contractor shall remove ALL wood, crates, boxes, paper, packing materials, and any other trash or debris from the site DAILY. Accumulation at the job site will not be tolerated.

As directed by the Owner's Engineer, the Contractor shall sort all refuse material. Such material deemed recycleable will be taken by the Contractor to the Owner's recycling container on the plant property.

3.21      Cleaning Up (cont.)

4.      Upon completion of the demolition, and prior to the installation of any new equipment, Contractor shall thoroughly clean the floor area and wet mop. Contractor shall clean existing equipment, building steel, and floors and walls where requested. For this section and the following section "clean" shall be:

The level of cleanliness generally provided by skilled professional cleaners using commercial quality building maintenance equipment and materials.

5.      All equipment shall be thoroughly cleaned prior to the Owner's final acceptance. This includes all marks, oil, grease, carbon black dust, weld marks, chalk marks, crayon, etc.
6.      The Contractor will retain all stored items in an orderly arrangement, allowing maximum access, without impeding drainage or traffic, and providing the required protection of materials.
7.      The Contractor will not allow the accumulation of scrap, debris, waste material, and any other items not required for the project.
8.      Daily, and more often if necessary, completely remove all scrap, debris, and waste materials from the job site.
9.      Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire and ecological protection.
10.     Weekly, and more often if necessary, inspect all arrangements of materials stored on the site; re-stack, tidy, or otherwise service all arrangements to meet the requirements of the subparagraph 3.21-B.6 above.

3.21 Cleaning Up (cont.)

C. Final Cleaning

1. Definition: Except as otherwise specifically provided, "clean" (for the purpose of this article) shall be interpreted as meaning the level of cleanliness generally provided by skilled professional cleaning personnel using commercial quality building maintenance equipment (power cleaners) and materials.
2. General: Prior to completion of the work, remove from the job site all tools, surplus material, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.21-C.1 above.
3. Structures
  - a. Interior: Visually inspect all interior surfaces and remove all traces of soil, waste material, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only the specified cleaning materials and equipment.
  - b. Timing: Schedule final cleaning as approved by the Owner's Engineer to enable the Owner to accept a completely clean project.

D. Compatibility of Cleaning Materials

1. Contractor shall insure the compatibility of all cleaning materials with materials being cleaned prior to their use.

3.22 Regulations and Compliance

- A. The Contractor's work shall be subject to all applicable provisions, and be performed in strict compliance with all Federal, State, and Local codes, laws, regulations, standards, and ordinances including those of the Occupational Safety and Health Act (O.S.H.A.), in addition to all Owner's rules and orders.
- B. The Contractor will provide all temporary construction barriers that contain all dust, dirt, and debris, as needed to meet the product purity requirements of the Owner's local production area, as well as temporary construction barriers to meet O.S.H.A. safety guidelines on personnel safety.

The Contractor shall provide their own sanitary facilities as needed which meet the requirements of the Owner and local Health Authorities.

3.23 Plant Rules

The following plant rules are to be observed & adhered to for all Contractors performing work at the Buffalo Plant, located at Sheridan Drive and River Road, Tonawanda, New York.

- A. Workmen to enter and leave the plant only through the designated gates. All workmen are to park in the designated lot only.

Vehicles for delivering equipment, as well as Contractors' Superintendents, will be allowed to proceed to and from the job site, upon approval of Owner's Engineer.

- B. Contractors' and subcontractors' workmen, are not to enter any plant buildings unless they have been assigned specific work therein. No workmen will be permitted to wander in the plant roadway. Workmen are only authorized to travel to and from the work site and must otherwise remain therein.

At all times, workmen must display their Contractors' badge, from Dunlop's security, whether escorted or otherwise.



3.23 Plant Rules (cont.)

- C. Smoking is prohibited, except in areas specifically designated as such. Owner's Engineer shall be consulted for this designation.
- D. Workmen will not be allowed to use the Plant Cafeteria, vending machines, or employee break areas.
- E. A vending truck will be allowed on the premises, outside, if required. The Contractor is to arrange this service and coordinate it through Dunlop Plant Security, main gate.
- F. All Contractors and Subcontractors may be required to open their lunch boxes, packages, or vehicles, for inspection upon entering or leaving the plant.
- G. Telephone hookups may be provided by the Owner to the Contractor's field office. Otherwise only public telephones may be utilized.
- H. Creating, or contributing to unsanitary conditions is prohibited.
- I. Willful, deliberate, or continued violation of, or disregard of safety rules, or common safety practices is prohibited. Reference "Contractor's Safety Guidelines".
- J. Contractors are not permitted to use plant restrooms and must make provisions for same. If portable toilet facilities are required, their exact location is subject to approval by the Owner's Engineer. The Contractor will be responsible for their maintenance.
- K. Limited portable washroom facilities may be provided by the Owner, if necessary, for the use by all Contractors. Any additional facilities requested by the Contractor will be subject to the approval of the Owner's Engineer.
- L. The Contractor will be responsible for providing potable water for his workmen.

3.23 Plant Rules (cont.)

- M. The Contractor shall secure daily welding and burning permits from the Owner's Engineer, before any welding, burning, or grinding shall take place. The Contractor shall furnish his workmen with suitable fire extinguishers to have on the job site.
- Contractors shall supply and enforce the use of approved flame resistant flash curtains during any burning, welding, or grinding operations.
- N. No solid or liquid material shall be dumped, poured, or allowed to drain into any plant or yard sewers, man-holes, or drains.
- O. Contractors are not permitted to operate trucks or cars within the plant without specific permission from the Owner's Engineer.
- P. The use of plant compressed air is not permitted.
- Q. Contractors must take all reasonable precautions to ensure that their work does not interfere with plant production.
- R. The Contractor must supply all of the tools and equipment necessary to perform his work. The use of DTC tools and/or equipment is prohibited.
- Use of the plant store room by Contractors is prohibited.
- S. Contractor lay down areas will be given to the successful bidder at the time of contract award. In some cases, it may be necessary that the Contractor erect dust curtains around any and all work areas. Applicability will be determined by the Owner's Engineer.
- T. Yellow hard hats will be worn by all Contractors and Subcontractors at all times, in areas designated as "hard hat area". Owner's Engineer shall be consulted as to applicability.

3.23 Plant Rules (cont.)

- U. Contractor must comply with O.S.H.A. standard 1910, 1200 Hazard Communication Section. All Contractors must contact DTC Safety Engineer for instruction and discussion of requirements for use of hazardous materials before initial entrance to the job site.

3.24 Progress Schedule

- A. Within seven (7) days after the execution of the purchase order, the Contractor must submit, for the Owner's approval, a progress schedule, indicating the starting and completion dates of the various stages of the work. At least ten (10) days prior to submitting the first Application for Payment, the Contractor shall submit a schedule of values, as required below.
- B. The schedule of values shall be in the form of a progress chart, of suitable scale, to indicate the approximate percentage of work scheduled for completion at any time.
- C. The Owner will make monthly progress payments, based upon Contractor's applications for payment. Progress payments shall not exceed 90% of the work completed, or materials and equipment installed in place.
- D. Balance of final payment will be made thirty (30) days after 100% of job completion, against the Contractor's application for payment, and upon the Owner's inspection and satisfaction of compliance.

3.25 Waiver of Lien Rights

- A. The Contractor agrees to keep the Owner's premises and work free and clear of all mechanic's liens, and to furnish to the Owner proper affidavits and/or waivers certifying thereto.

3.26      **Proposal Bond**

- A.    A certified check or bank draft, in a sum equal to five percent (5%) of the total amount of the bid, including alternates, payable to Dunlop Tire Corporation, shall be furnished with each bid, or a guarantee proposal bond, furnished by a solvent surety company authorized to do business in the State of New York, in an amount of five percent (5%) of the bid, may be furnished, in lieu of the certified check. Such proposal bond, or certified check shall be conditioned that if the bid be accepted, a contract will be entered into and the performance of said contract properly secured. As soon as contracts are awarded, all certified checks, or proposal bonds, accompanying unsuccessful bids, will be returned.

3.27      **Performance Bond**

- A.    The successful Contractor shall furnish an indemnity, or Performance Bond and Payment Bond to the Owner, in the full amount (100 percent) of the Contract, as a guarantee of good faith on behalf of the Contractor, that the terms of these Specifications shall be complied with, in every particular.
- B.    The Contractor's bond will not be released until all provisions of the Contract have been fulfilled to the satisfaction of the Owner's Engineer.

3.28      **Charges Payable to Owner**

      If the Owner's Engineer incurs any cost for repairs to the work or other work, removing rejected work, moving or off loading Contractor's materials because of Contractor's fault or negligence, removing Contractor's rubbish or clean up occasioned by Contractor, Contractor shall reimburse owner in full, for all costs incurred plus 25 per cent overhead and administrative cost.

3.29      **Reporting Requirements**

Contractor shall promptly submit the schedules and reports set forth below and in addition, those schedules and reports as requested by the Owner's Engineer pursuant to the General Terms and Conditions.

1. The Contractor shall provide a Bar Chart Schedule. The schedule shall show manpower required by time interval and shall reflect percent completion by time interval.
2. A biweekly report showing scheduled progress versus actual progress giving details of how work will be completed in relation to the schedule
3. Daily labor alert report if the Contractor's available manpower is not sufficient to meet the schedule for performance of the work.
4. Procurement schedule for the procurement and receipt of materials, equipment, and Subcontracted services by Contractor and a monthly report of all such materials, equipment and services.

3.30      **Liquidated Damages**

In the event that the completion of the Work should be delayed by more than one (1) week beyond the said completion target date due to the reasons attributable to the Contractor, the Contractor agrees to pay the Owner, as liquidated damages, 1/4 percent of the Contract value per full business day, counting from scheduled completion date; however, in no event shall such liquidated damages exceed 10 percent of the full purchase order amount.

3.31      **Completion and Acceptance**

- A. The Owner shall have the right to enter into, and occupy, or use a portion of the work under this contract before completion and acceptance of the work as a whole. Such partial occupancy or use before completion shall not be construed as acceptance of the work.

3.31 **Completion and Acceptance (cont.)**

- B. When the Contractor deems the work finally completed, the Contractor shall give the Owner notice thereof in writing, within ten (10) days after receipt of such notice, the Owner will determine if the work has been completed in a satisfactory manner. If so, the Owner will advise the Contractor in writing of its final acceptance thereof. If the work is unsatisfactory, the Owner will notify the Contractor of the defects and the Contractor will repeat the procedure stated herein until the work has been satisfactorily completed and accepted at no additional cost to Owner.

3.32 **Confidential Information**

- A. All drawings, specifications, technical data and other information furnished to the Contractor by the Owner in connection with this contract are, and shall remain, the property of the Owner, and may not be copied or otherwise reproduced or used in any way except in connection with work performed under this contract, or disclosed to third parties or used in any manner detrimental to the interests of the Owner. The Contractor must have on file with Dunlop a signed confidentiality agreement form. Forms are available from the Owner's Engineer.
- B. The Contractor agrees to insert in any subcontract a restriction on the use of such information, data, drawings, and specifications familiar to that which was set forth in the preceding paragraph. The Contractor shall require its subcontractors to comply with the provisions of this specification.

3.33 **Assignment**

- A. This Contract may not be assigned or transferred by the Contractor in whole or in part without the Owner's prior written approval.

3.34      **Temporary Utilities**

- A.    The Contractor must make arrangements and furnish, at his own expense, all temporary sources of air, electricity, lighting, heat, and other utilities necessary for construction purposes.

3.35      **Additional Work**

- A.    It is reasonable to assume that in the course of this project, the Contractor may be requested to perform additional work not covered by these Specifications. All additional work **must have a written Extra Work Order (EWO)** assigned, prior to work being started.
  - 1.    In such instances, where possible, the Contractor will be requested to give a fixed cost estimate, prior to starting this work.
  - 2.    In some instances, at the discretion of the Owner's Engineer, the Contractor may be requested to perform additional work on a time-and-materials basis.
    - a.    The Contractor will provide a list of the standard hourly and premium rates (daily overtime, Saturday, Sunday, & Holidays) for each trade to be used on this project. This list is to be presented at the time of submission of the Contractor's quotation.
    - b.    In such instances where additional work is performed by the Contractor on a time-and-materials basis, time sheets for that labor must be approved by the Owner's Engineer on a daily basis.
    - c.    When invoicing for additional work performed on a time-and-materials basis, the Contractor shall include with his invoice, copies of all associated daily time sheets and material invoices.

3.35 Additional Work (cont.)

3. All additional work must have prior written authorization of the Owner's Engineer. In no case will payment be made for additional work without prior written authorization by the Owner's Engineer.
4. If for any reason the work schedule is to be accelerated or overtime is needed due to Dunlop delays, it is to be understood that the Owner will pay only for the premium portion of any overtime that is needed.

3.36 Work Outside of Stated Work Schedule

- A. Upon submission of his quotation, unless otherwise stated, the Contractor agrees that all work included in these Specifications, will be completed within the defined time limits, work days, and work hours, as stated in the Project Implementation Schedule.
- B. In the event that it is necessary for the Contractor to work additional hours, or furnish additional trades people to complete Project Milestones on schedule, and this additional work is not due to any delay caused by Dunlop, then the Contractor shall work these additional hours without surcharge to Dunlop.
  1. If such additional work, as described above, is due to a delay caused by Dunlop, then this additional work will be performed by the Contractor, at the discretion of the Owner's Engineer, under the conditions of "Additional Work", as described above.
- C. In the event that the Contractor is requested to perform work outside the defined work schedule, for the convenience of Dunlop, then this work will be performed by the Contractor under the conditions of "Additional Work", as described above.
- D. During the course of the project, the work schedule may be altered to meet special circumstances, with the mutual agreement of both the Contractor and the Owner's Engineer. In such instances, no financial penalty will be incurred by the Contractor or Dunlop.



3.37

**Disputed Work**

- A. In any event, where there is a dispute in the scope of work to be performed by the Contractor, or whether he is entitled to any additional payment, he shall notify the Owner's Engineer in writing immediately and continue to proceed diligently with the work as directed by the Owner's Engineer. The resolution of the dispute shall be determined by the Owner's Engineer and the Contractor with reasonable promptness, but in no event shall any delay in such determination excuse the prompt performance of the work as requested by the Owner's Engineer.
- B. In addition, the Contractor shall submit to the Owner's Engineer, on a daily basis, time and material sheets for costs the Contractor feels he has incurred for disputed work performed, pending resolution and disposition between the Contractor and the Owner's Engineer.

## SECTION 4.0

### SCOPE OF WORK TABLE OF CONTENTS

ITEM NUMBER	ITEM DESCRIPTION	PAGE NUMBER
4.1	Clearing and Grubbing	4.1-1
4.2	Unclassified Excavation	4.2-1
4.3	Existing Ramp Removal	4.3-1
4.4	Embankment in-place	4.4-1
4.5	Subbase Course	4.5-1
4.6	Asphalt Concrete Pavement	4.6-1
	1" Top Course	
	2" Binder Course	
	3" Binder Course	
4.7	Saw Cutting	4.7-1
4.8	Concrete Pads & Ramps	4.8-1
4.9	Trailer Relocation	4.9-1
4.10	Fencing	4.10-1
4.11	Perforated Corrugated Metal Pipe	4.11-1
	6" Diameter	
	12" Diameter	
	15" Diameter	
	Corrugated Metal Pipe	
	15" Diameter	
	18" Diameter	
4.12	Catch Basins	4.12-1
4.13	Frames and Grates	4.13-1
4.14	Adjust Existing Drainage Structures	4.14-1
4.15	Pavement Markings	4.15-1
4.16	1" Top Course Overlay	4.16-1
4.17	Pipe Bollards	4.17-1

The following unit prices for items of work, as specified, will be used in making additions to, or deductions from, the project as shown on the Plans, or as specified.

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	
			ADDITION	DEDUCTION
4.1	Clearing and Grubbing	L.S.		
4.2	Unclassified Excavation	C.Y.		
4.3	Existing Ramp Removal	Each		
4.4	Embankment in-place	C.Y.		
4.5	Subbase Course	S.Y.		
4.6	Asphalt Concrete Pavement			
	1" Top Course	S.Y.		
	2" Binder Course	S.Y.		
	3" Binder Course	S.Y.		
4.7	Saw Cutting	L.F.		
4.8	Concrete Pads & Ramps	C.Y.		
4.9	Trailer Relocation	L.S.		
4.10	Fencing	L.F.		
4.11	Perforated Corrugated Metal Pipe			
	6" Diameter	L.F.		
	12" Diameter	L.F.		
	15" Diameter	L.F.		
	Corrugated Metal Pipe			
	15" Diameter	L.F.		
	18" Diameter	L.F.		
4.12	Catch Basins	Each		
4.13	Frames and Grates	Each		
4.14	Adjust Existing Drainage Structures	Each		
4.15	Pavement Markings	L.S.		
4.16	1" Top Course Overlay	S.Y.		
4.17	Pipe Bollards	Each		

ITEM 4.1  
CLEARING AND GRUBBING

1.0 SCOPE:

The work shall consist of clearing, grubbing, removing, and disposing of all trees, brush, stumps, and debris within the construction area and such other areas as specified or directed.

2.0 DEFINITIONS:

2.1 Clearing: Clearing shall consist of the satisfactory disposal of the trees and other vegetation designated for removal, including down timber, snags, brush, rubbish and debris occurring in the areas to be cleared.

2.2 Grubbing: Grubbing shall consist of the removal and disposal of stumps, roots, refuse and debris from the designated grubbing areas.

3.0 MATERIALS:

(Not Applicable)

4.0 EXECUTION:

4.1 Clearing: Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or directed to be left standing. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require. Clearing shall also include the removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work.

4.2 Grubbing: Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 6 inches

7-13-92

below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract, such as areas for buildings, and areas to be paved. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground.

#### 5.0 DISPOSAL:

Logs, stumps, roots, brush, rotten wood, and other refuse and debris from the clearing and grubbing operations, shall be disposed of offsite in a permitted landfill.

#### 6.0 MEASUREMENT AND PAYMENT:

6.1 Payment for clearing and grubbing will be made at the lump sum price bid.

#### 7.0 BASIS OF PAYMENT:

7.1 Clearing and Grubbing: Payment will be made at the lump sum contract price to furnish all materials, labor and equipment necessary to satisfactorily complete the work as specified. No separate payment will be made for any excavation, backfill or earth cover necessary to complete the work of disposal outside the embankment area nor for the work in handling, storing, rehandling and hauling of disposable material within or outside the right-of-way.

\* \* \* \* \*

ITEM 4.2  
UNCLASSIFIED EXCAVATION

1.0 SCOPE:

This work shall consist of the excavation and disposal of all asphalt concrete and other material in areas specified on the drawings or as directed by the Engineer.

2.0 MATERIALS:

(Not Applicable)

3.0 EXCAVATION:

The Contractor shall remove all asphalt concrete and other material to the lines and grades shown on the drawings or as directed by the Engineer. The Contractor shall provide and maintain slopes, crowns and ditches on all excavation and embankments to insure satisfactory surface drainage at all times. Ditches and other drainage facilities necessary to remove ponded water shall be constructed as soon as practical to have the work area dry during the progression of work. All existing culverts and drainage systems shall be maintained in satisfactory operating condition throughout the course of the work. If it is necessary to interrupt existing surface drainage, sewers or under-drainage, then temporary drainage facilities shall be provided until the permanent drainage work is complete.

4.0 DISPOSAL:

The Contractor shall dispose of all excavated material as directed by the Dunlop Tire Corp.

5.0 MEASUREMENT AND PAYMENT:

5.1 Measurement: Quantities shall be in cubic yards, computed in the original position for all excavation within right-of-way limits. No deduction shall be made for any pipes, culverts,

structures, or other obstructions, unless these are measured for payment under another contract item.

5.2 Payment: The unit price bid shall cover all costs of required excavation with the lines as shown on the Contract Drawings or directed by the Engineer.

\* \* \* \* \*

ITEM 4.3  
EXISTING RAMP REMOVAL

1.0 SCOPE:

This work shall consist of the removal of two existing ramps indicated on the drawings or as directed by the Engineer.

2.0 MATERIALS:

(Not Applicable)

3.0 EXCAVATION:

3.1 General: Care shall be exercised in removing the existing ramps so as not to damage materials designated to remain in place. Reinforcement designated to remain in place shall be cleaned in a manner satisfactory to the Engineer.

Saw cutting of concrete shall be performed only where indicated on the contract plans or where ordered by the Engineer.

4.0 DISPOSAL:

The Contractor shall dispose of all concrete and other material from the removal operation at an onsite location to be designated by Dunlop Tire Corp.

5.0 MEASUREMENT AND PAYMENT:

5.1 Measurement: The work shall be measured as the actual number of ramps removed.

5.2 Payment: The unit bid price shall include the cost of all labor, materials and equipment necessary to complete the work.

\* \* \* \* \*



ITEM 4.4  
EMBANKMENT IN PLACE

1.0 SCOPE:

This work shall consist of the placement and compaction of embankment materials to the lines, grades and thickness shown on the drawings or as directed by the Engineer.

1.1 References:

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications Construction and Materials.

NYSDOT 203-3.12B - Compaction Equipment

1.2 Submittals: The Contractor shall submit for approval the following:

- a. Proposed embankment material
- b. Proposed equipment to be used
- c. Proposed topsoil to be used
- d. Proposed seed mixture to be used

2.0 MATERIALS:

2.1 Suitable Material: A material whose composition is satisfactory for use in embankment construction is designated as a suitable material. The moisture content has no bearing upon such designation. In general, any mineral (inorganic) soil, blasted or broken, including mixtures thereof, are considered as suitable materials. Determinations of whether a specific material is a suitable material shall be made by the Engineer on the above basis.

7-13-92

2.2 **Unsuitable Materials:** Any material containing vegetable or organic matter, such as muck, peat, organic silt, topsoil or sod, that is not satisfactory for use in embankment construction under 2.1 is designated as an unsuitable material.

### 3.0 EXECUTION:

3.1 **Embankments:** The embankment shall be constructed of suitable material as defined by 2.1, Suitable Material. Embankment material shall not be placed on frozen earth, nor shall frozen soils be placed in any embankments. Embankment material shall be placed and spread in lifts (layers) of uniform thickness, then uniformly compacted as specified under applicable portions of 3.2, Compaction. During embankment construction operations, earth moving equipment shall be routed as evenly as possible over the entire width of embankments. At the close of each day's work, the working surface shall be crowned, shaped and rolled with smooth steel wheel or pneumatic tired rollers, for proper drainage.

Particles with a dimension in excess of two-thirds of the loose lift thickness are designated as oversized particles. Oversized particles shall be removed prior to compaction of the lift and may be placed in designated areas to be determined by Dunlop Tire Corp. Embankments constructed from rock products, shall be spread by beaded equipment on each lift to minimize the formation of large voids as the work progresses. The top lift of a rock fill shall be thoroughly chinked.

Damage to any compacted list at any time during the course of construction, such as rutting under the loads imposed by earth moving equipment, shall be fully repaired by the Contractor at his own expense prior to placement of any overlying materials.

3.2 **Compaction:** It shall be the Contractor's responsibility to properly place and compact all materials, and to correct any deficiencies resulting from insufficient or improper compaction of such materials throughout the contract period. The Contractor shall determine the type, size and weight of compactor best suited to the work at hand, select and control the lift (layer) thickness, exert proper control over the moisture content of the material, and other details necessary to obtain satisfactory results. During the progression of the work, the Engineer will inspect the Contractor's operations and will permit the work to continue where:

1. List thickness is controlled and does not exceed the maximum allowed according to the equipment classifications in NYSDOT Standard Specifications 203-3.12B, and the equipment meets all specified class criteria. Thinner lifts and lighter equipment than the maximum allowed may be necessary for satisfactory results on some materials.
2. The composite effort (number of passes and travel speed) is uniformly applied and not less than that specified for the given equipment class and lift thickness. Higher efforts than the minimum allowed may be necessary for satisfactory results on some materials.
3. The Engineer concludes from a visual observation that proper compaction has been attained, with the exception of backfill at structures, culverts, pipes, conduits, and direct burial cables. However, Dunlop Tire Corp. reserves the right to perform density tests at their expense, at any time. When tests are performed, the results shall indicate that not less than 90 percent of Standard Proctor Maximum Density is attained in any portion of an embankment, or 95 percent in a subgrade area, or as specified for other items with a percent maximum density requirement.
4. Significant rutting under the action of the compactor shall not be observed on the final passes on a lift.

Whenever the Contractor's operations do not conform to the above criteria, or requirements contained in other subparagraphs of this subsection, the Engineer will prohibit placement of an overlying lift until the Contractor takes effective corrective action.

When the Engineer determines that density tests are necessary, the Contractor shall provide any assistance requested to facilitate such tests. Such assistance shall include but will not be limited to excavation and backfill of test pits and holes. This work shall be considered to be incidental construction.

7-13-92

Damage to any compacted lift at any time during the course of construction such as rutting under the loads imposed by earth moving equipment, shall be fully repaired by the Contractor at his own expense prior to placement of any overlying materials.

#### 4.0 MEASUREMENT AND PAYMENT:

4.1 Measurement: Quantities shall be in cubic yards, computed in the final compacted position. Any additional quantity of material required to compensate for embankment settlement shall not be included in the measurement of this item. Embankments constructed under the item, "Unclassified Excavation," shall not be included under this work. The quantities of embankment shall exclude the total volume of pipes, culverts, other roadway items, and granular backfill within the payment lines for such granular backfill. All topsoil and seeding shall be included in the price bid per cubic yards for embankment in place.

4.2 Payment: The unit price bid for embankment in place shall include the cost of furnishing all equipment, labor and material necessary to complete the work.

\* \* \* \* \*

ITEM 4.5  
SUBBASE COURSE

1.0 SCOPE:

The work shall consist of furnishing, placing and compacting a subbase course in conformity with the lines, grades, thicknesses and typical sections shown on the drawings, or as determined by field conditions and directed by the Engineer.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only the most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications Construction and Materials.

NYSDOT 203-3.12 - Compaction

1.2 Submittals: The Contractor shall submit material specifications for the proposed material to be used.

2.0 MATERIALS:

Materials for subbase course shall consist of stone. All materials furnished shall be well graded from coarse to fine and free from organic or other deleterious materials.

It shall be the Contractor's responsibility to provide a material which meets this specification and is within his capabilities to fine grade to the required tolerances. Should the subbase course become unstable at any time prior to the placement of the overlying course due to the gradation of the material furnished, the Contractor shall, at his own expense, correct the unstable condition to the satisfaction of the Engineer.

Material furnished for Type 2 shall consist solely of approved stone which is the product of crushing ledge rock.

2.1 Gradation Type 2:

SIEVE SIZE DESIGNATION	PERCENT PASSING BY WEIGHT
2 inch	100
1/4 inch	25 - 60
No. 40	5 - 40
No. 200	0 - 10

2.2 Soundness: Material for Type 2 will be accepted on the basis of a magnesium sulfate soundness loss after 4 cycles of 20 percent or less.

2.3 Plasticity Index: The plasticity index of the material passing the No. 40 mesh sieve shall not exceed 5.0.

2.4 Elongated Particles: Not more than 30 percent, by weight, of the particles retained of a 1/2 inch sieve shall consist of flat or elongated particles. A flat or elongated particle is defined herein as one which has its greatest dimension more than 3 times its least dimension. Acceptance for this requirement will normally be based on a visual inspection by the Engineer. When the Dunlop Tire Corp. elects to test for this requirement, material with a percentage greater than 30 will be rejected.

All material shall meet the specified gradation prior to placement on the grade. All processing shall be completed at the source.

3.0 EXECUTION:

3.1 Placing: The upper course material shall be placed on the grade, in a manner to minimize segregation, using equipment and procedures approved by the Engineer. Uncontrolled spreading from piles dumped on the grade resulting in segregation will not be permitted. This course shall not be placed in excess of 500 linear feet without being compacted.

7-13-92

The maximum layer thickness shall be 15 inches compacted, or as shown on the plans. The loose lift thickness shall be a minimum of 1.5 times the maximum particle size. In confined areas as defined by the Engineer the maximum compacted layer thickness shall be 6 inches.

3.2 Compaction: When the moisture content is within the limits for proper compaction, the material shall be compacted in accordance with the requirements of NYSDOT Standard Specifications §203-3.12, Compaction. Density tests are not required for the acceptance of these courses.

When a subbase course has been placed, but subsequent paving operations have been delayed so that the subbase has been distributed by frost action, the Contractor shall recompact the subbase where directed by the Engineer.

3.3 Tolerance: After compaction, the top surface of the course of Type 2 shall not extend more than 1/4 inch above nor more than 1/4 inch below true grade for the course at any location.

#### 4.0 MEASUREMENT AND PAYMENT:

4.1 Measurement: The quantity shall be the number of cubic yards of material, computed from payment lines shown on the plans or, where changes have been ordered, from payment lines established by the Engineer.

4.2 Payment: The unit price bid for this work shall include the cost of furnishing all labor, material and equipment necessary to complete the work. The cost of adding water shall be included in the price bid unless the items for furnishing and applying water are included in the contract. No direct payment will be made for losses of material resulting from compaction, foundation settlement, erosion or any other cause. The cost of such losses shall be included in the price bid for this item. No deductions shall be made for the volumes occupied by manholes, catch basins and other such objects.

\* \* \* \* \*

ITEM 4.6  
ASPHALT CONCRETE PAVING

1.0 SCOPE:

The work covered by this section consists of furnishing all equipment and material, and performing all labor for the preparation of subgrade and placing binder, and top courses for roads, driveways, and parking areas.

1.1 Reference Standards:

NYSDOT - Section 401 - Plant Mix Pavements

NYSDOT - Section 403 - Hot Mix Asphalt Concrete Pavement

NYSDOT - Section 703 - Aggregates

1.2 Submittals: Contractor shall submit certificates of compliance from the manufacturers of the specified materials.

2.0 PRODUCTS:

2.1 Materials:

2.2. Binder Course: Binder course material shall conform to NYSDOT - Section 401 and Section 403 Type 3.

2.3 Top Course: Top course material shall conform to NYSDOT - Section 401 and Section 403, Type 7.

3.0 EXECUTION:

3.1 Preparation of Subgrade: Areas shall be excavated or filled and compacted as required for the access roads and parking areas. The subgrade shall be graded and compacted to the lines and grades shown on the drawings.



7-13-92

3.2 **Placement of Binder and Top Courses:** Placement of the various courses shall conform to the applicable sections of NYSDOT Standard Specifications.

3.3 The binder and top courses for the roads, driveways, and parking areas shall be placed and compacted and fine graded to proper elevation and cross section. Subgrade material shall be replaced with crushed stone at soft yielding places and compacted until no signs of rutting appear from fully loaded truck traffic.

4.0 **METHOD OF MEASUREMENT:**

The various pavement courses will be measured by the number of square yards of compacted material in place.

5.0 **BASIS OF PAYMENT:**

The unit price bid per square yard for each of the various pavement courses shall include the cost of furnishing all materials including asphalt cement and all equipment and labor necessary to complete the work.

\* \* \* \* \*

ITEM 4.7  
SAW CUTTING

1.0 SCOPE:

This work shall consist of saw cutting all asphalt concrete joints as indicated on the drawings or as described by the Engineer.

1.1 Submittals: The Contractor shall submit for approval the proposed method and equipment to be used for the saw cutting work.

2.0 MATERIALS:

(Not Applicable)

3.0 EXECUTION:

Saw cutting of asphalt concrete shall be performed only where indicated on the contract drawings or where ordered by the Engineer. Saw cutting equipment shall be capable of sawing asphalt concrete to the specified depth. The saw cut shall be made to the full depth of the existing asphalt pavement and shall be straight and true. All saw cut surfaces shall be thoroughly cleaned by means satisfactory to the Engineer. Care shall be exercised in saw cutting asphalt so as not to damage material designated to remain in place. All debris from the saw cutting work shall be disposed of on-site in a location to be determined by Dunlop Tire Corp.

4.0 MEASUREMENT AND PAYMENT:

4.1 Measurement: The work shall be measured as the actual number of linear feet at saw cutting performed.

4.2 Payment: The unit price bid per linear foot shall include the cost of all labor, materials, and equipment necessary to complete the work.

\* \* \* \* \*

ITEM 4.8  
CONCRETE PADS AND RAMPS

1.0 SCOPE:

The work covered by this section consists of furnishing all equipment and material and performing all labor for the preparation of subgrade for concrete pads and ramps.

1.1 Reference Standards:

NYSDOT - Section 304 - Subbase Course

NYSDOT - Section 301 - Portland Cement Concrete

NYSDOT - Section 555 - Structural Concrete

NYSDOT - Section 556 - Reinforcing Steel for Concrete Structures

NYSDOT - Section 703 - Aggregate

NYSDOT - Section 705 - Expansion Joint Material

NYSDOT - Section 711 - Concrete Curing Material and Admixtures

1.2 Submittals: Contractor shall submit certificates of compliance from the manufacturers for the product data, test reports and materials for concrete and joint sealers.

2.0 PRODUCTS:

2.1 Materials:

A. Forms:

1. Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.

- a. Use flexible spring steel forms or laminated boards to form radius bends as required.
- b. Coat forms with a non-staining form release agent that will not discolor or deface surface of concrete.

**B. Welded Wire Mesh:**

1. Welded wire fabric shall conform to ASTM A-497, with gages, spacing and arrangement of wires as indicated on the drawing.

**C. Reinforcing Bars:**

1. Deformed steel bars, ASTM A-615, Grade 60.

**D. Concrete Materials:**

1. Comply with requirements of applicable NYSDOT - Sections 500, 550 and 700 for concrete Class A and, admixtures, bonding materials, curing materials, and others as required. Cement used shall be Portland Cement Type II, low alkali as specified in ASTM C-150.

**E. Expansion Joint Materials:**

1. Comply with requirements of applicable NYSDOT - Section 705 for performed expansion joint fillers and sealers.

**F. Liquid Membrane Forming Curing Compound:**

1. Complying with ASTM C-309, Type 1, Class A unless other type acceptable to the Engineer. Moisture loss not more than 0.055 Gr/Sq CM when applied at 200-square feet, per gallons. It shall correspond to NYSDOT - Section 711 - Concrete Curing Materials.

7-13-92

## 2.2 Concrete Mix, Design and Testing:

- A. Comply with requirements NYSDOT - Sections 500 and 550 for concrete mix design, sampling and testing, and quality control, an as herein specified.
- B. Design mix to produce normal-weight concrete consisting of Portland Cement, aggregate, water-reducing or high-range water-reducing admixture (super-plasticizer), air entraining admixture and water to produce NYSDOT concrete Class A.

$f_{lc} = 3,000$  psi, minimum at 28-days unless otherwise indicated.

## 3.0 EXECUTION:

3.1 Surface Preparation: Remove loose material from compacted subbase surface immediately before placing concrete .

## 3.2 Form Construction:

- A. Set forms to required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24-hours after concrete placement.
- B. Check completed formwork for grade and alignment to following tolerances:
  - 1. Top of Forms: Not more than 1/8-inch in 10-feet.
  - 2. Vertical Face: On longitudinal axis, not more than 1/4-inch in 10-feet.
- C. Clean forms after each use, and coat with form release agent as often as required to ensure separation from concrete without damage.

### 3.3 Concrete Placement:

#### A. General:

1. Comply with requirements of NYSDOT - Sections 501 and 555 for mixing and placing concrete, and as herein specified.

- B. Do NOT place concrete UNTIL subbase and forms have been checked for line and grade. Moisten subbase, if required, to provide a uniform dampened condition at time concrete is placed. Do NOT place concrete around manholes or other structures until they are at required finish elevation and alignment.

- C. Place concrete using methods which prevent segregation of mix. Consolidate concrete along face of forms and adjacent to transverse joints with internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.

Use bonding agent at locations where fresh concrete is placed against joints, as far as possible. If interrupted for more than 1/2-hour, place a construction joint.

Deposit and spread concrete in a continuous operation between transverse joints, as far as possible. If interrupted for more than 1/2-hour, place a construction joint.

### 3.4 Joints:

#### A. General:

1. Construct expansion joints, true-to-line, with face perpendicular to surface of concrete. Construct transverse joints at right angles to the centerline, unless otherwise indicated.

**B. Expansion Joints:**

1. Provide premolded joint filler for expansion joints abutting concrete walls, poured slabs, and other fixed objects, unless otherwise indicated.
2. Extend joint fillers full-width and depth of joint, and not less than 1/2-inch or more than 1-inch below finished surface where joint sealer is indicated. If no joint sealer, place top of joint filler flush with finished concrete surface.
3. Furnish joint fillers in one-piece lengths for full width being placed, whenever possible. Where more than one length is required, lace or clip joint filler sections together.
4. Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.

**C. Fillers and Sealants:**

1. Comply with requirements of applicable NYSDOT - Section 705 for preparation of joints, materials, installation, and performance.

**3.5 Concrete Finishing:**

- A.** After striking-off and consolidating concrete, smooth surface by screeding and floating. Use hand methods only where mechanical floating is not possible. Adjust floating to compact surface and produce uniform texture.
- B.** After floating, test surface for trueness with a 10-foot straight-edge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.

7-13-92

- C. Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2-inch radius, unless otherwise indicated. Eliminate tool marks on concrete surface.
- D. After completion of floating and troweling, when excess moisture or surface sheen has disappeared, complete surface finishing, as follows:
  - 1. Broom finish, by drawing a fine-haired broom across concrete surface, perpendicular to line of traffic. Repeat operation, if required, to provide a fine line texture acceptable to the Engineer.
- E. Do NOT remove forms for 24-hours after concrete has been placed. After form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by the Engineer.

### 3.6 Curing:

- A. Protect and cure finished concrete slabs and ramp, complying with applicable requirements of NYSDOT - Section 711. Use membrane-forming curing and sealing compound or approved moist-curing methods.
- B. Anti-Spalling Treatment:
  - 1. A second coat of curing and sealing compound may be used or an anti-spalling compound applied over concrete cured by continuous moist-curing methods.
  - 2. Apply compounds to concrete no sooner than 28-days after placement, to clean, dry concrete, free of oil, dirt, and other foreign material. Apply curing and sealing compound at a maximum coverage rate of 300-square feet/gallon. Apply anti-spalling compound in two (2) sprayed applications. First application at rate of 40-square yards per gallon;



second application, 60-square yards per gallon. Allow complete drying between applications.

3.7 Repairs and Protections:

- A. Repair or replace broken or defective concrete, as directed by the Engineer.
- B. Drill test cores where indicated by the Engineer, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas, with Portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage until acceptance of the work. Exclude traffic from slag for at least 14-days and 28-days from ramp after placement. When construction traffic is permitted, maintain pavement as clean as possible, by removing surface stains and spillage of materials, as they occur.
- D. Sweep concrete slabs and ramps and wash free of stains, discolorations, dirt, and other foreign materials, just prior to final inspection.

3.8 Reinforcing Steel:

- A. Placing and Fastening Reinforcing Steel: Prior to placing reinforcing steel all grease, dirt, mortar, and any other foreign substances shall be removed. Plain reinforcing steel shall also have all excessive mill scale and injurious rust removed.

For the purpose of this section, the term "injurious rust" shall be interpreted to mean rust which is not firmly bonded to the reinforcing steel. Rust which is difficult to remove, even by vigorous scrubbing with a wire brush, shall be considered firmly bonded to the steel.

Steel reinforcement shall be placed in the position indicated and within the allowable tolerances specified. Before concrete is placed, all reinforcement shall be securely fastened and supported with approved chairs or other approved devices.

- B. Inspection: Concrete shall not be placed until the reinforcing steel is inspected and permission for placing concrete is granted by the Engineer. All concrete placed in violation of this provision shall be rejected and removed.

3.9 Method of Measurement:

Concrete for Pads and Ramps: Payment for each item will be made for the number of cubic yards within the lines of the structure as shown on the plans or as revised by authority of the Engineer. In computing the volume of concrete for payment, no deductions shall be made for the volume of joint material, embedded metal reinforcement, structural shapes, or chamfers.

3.10 Basis of Payment:

Concrete Pads and Ramps: The unit price bid per cubic yards, for each class of concrete, shall include the cost of furnishing all labor, materials and equipment necessary to complete the concrete work as shown on the plans or called for in the specifications.

All replacements or corrections to concrete surfaces mis-shapen by bulges or deformations shall be made at the Contractor's expense.

\* \* \* \* \*

ITEM 4.9  
TRAILER RELOCATION

1.0 SCOPE:

This work shall consist of the onsite relocation of a trailer including plumbing, heating, electrical, sanitary, telephone, water supply, and other service connections as specified or directed.

2.0 MATERIALS:

(Not Applicable)

3.0 EXECUTION:

3.1 Site Preparation: The Contractor shall construct all necessary foundations in connection with said relocated trailer, in accordance with the Contract Documents.

3.2 Service Connections: At the trailer's final location, the Contractor shall provide necessary plumbing, heating, electrical, sanitary, water supply and other service connections equivalent in construction to those existing and the work shall be accomplished in such a manner as to cause the least possible interruption of domestic services to the properties affected.

The existing utilities shall be safely deenergized by Dunlop Tire Corp. personnel.

3.3 Restoration Work: The Contractor shall restore all portions of the trailer, including steps, porches, railings, and other appurtenances, to as good a condition as originally existed and shall put the property in as usable condition as existed prior to its relocation as determined by the Engineer. Any trailer facilities damaged or destroyed during the execution of the work, shall be repaired or restored by the Contractor, at his expense, by full replacement or by such other means acceptable to Dunlop Tire Corp.

4.0 DISPOSAL:

The Contractor shall remove all foundations in connection with the trailer relocation, and dispose off-site all debris produced during the trailer relocation.

5.0 MEASUREMENT AND PAYMENT:

5.1 General: The Contractor will be paid the lump sum price bid for the relocation of the trailer and all utilities in accordance with the provisions of these specifications.

5.2 Basis of Payment: The lump sum price shall cover all labor, materials, tools, machinery including all excavation necessary in connection with the old/new building site, and incidentals necessary to satisfactorily complete the work.

\* \* \* \* \*

ITEM 4.10  
FENCING

1.0 SCOPE:

This work shall consist of furnishing and erecting fencing and metal fence gates of the type and size, and at the locations shown on the plans or as directed by the Engineer.

1.1 REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 94                      Ready-Mixed Concrete

FEDERAL SPECIFICATIONS (FS)

FS RR-F-191/GEN              (Rev K) Fencing, Wire and Post Metal and Gates,  
Chain-Link Fence Fabric, and Accessories

FS RR-F-191/1                (Rev D) Fencing, Wire and Post, Metal (Chain-Link  
Fence Fabric)

1.3 SUBMITTALS:

1.3.1 Chain-Link Fence Drawings: Drawings showing post sizes and sections; post setting and bracing; gate details; details of attachment of fabric to support members; and any other details required to erect the fence along the lines indicated. Temporary fence and permanent fence shall conform to all of the requirements indicated herein and as shown on the drawings for typical fence work.

PART 2 PRODUCTS

2.1 Materials: Materials shall conform to the following:

2.1.1 Chain Link Fence: Chain link fence shall conform to FS RR-F-191/GEN.

2.1.1.1 **Posts:** Posts shall conform to FS RR-F-191/3, zinc-coated: Class 1 Grade A or B, steel pipe; Class 3, formed steel sections; or Class 6, steel square section. Class 4, steel H-section may be used for line posts in lieu of line post shapes specified for the other classes. Sizes shall be as specified in FS RR-F-191/3 for the class used. Line posts shall be of the same class throughout the fence. Terminal (corner, gate, and pull) posts selected shall be of the same class throughout the fence. Gate post shall be either round or square, subject to the limitation specified in FS RR-F-191/3.

2.1.1.2 **Braces:** Braces shall conform to FS RR-F-191/3, zinc-coated; Class 1 Grade A or B, steel pipe, size SP1 Class 3, form steel sections, size FS1, conforming to FS RR-F-191/3, may be used as braces if Class 3 line posts are furnished.

2.1.1.3 **Accessories:** Accessories shall conform to FS RR-F-191/4. Ferrous accessories shall be zinc- or aluminum-coated. Truss rods shall be furnished for each terminal post. Truss rods shall be provided with turnbuckles or other equivalent provisions for adjustment.

2.1.2 **Concrete:** Concrete shall conform to ASTM C 94, using 3/4-inch maximum-size aggregate, and having minimum 28-day compressive strength as shown on the drawings. Grout shall consist of one part portland cement to three parts clean, well-graded sand and the minimum amount of water to produce a workable mix.

### PART 3 EXECUTION

3.1 **General:** Fence shall be installed to the lines and grades indicated on the drawings. The area on either side of the fence line shall be cleared to the extent indicated. Line post shall be spaced equidistant at intervals not exceeding those shown. Terminal (corner, gate, and pull) posts shall be set at abrupt changes in vertical and horizontal alignment. Fabric shall be continuous between terminal posts. However, runs between terminal posts shall not exceed 500 feet.

3.2 **Posts:** Posts shall be set plumb and in alignment. Except where solid rock is encountered, posts shall be set in concrete to the depth as shown on the drawings. Where solid rock is encountered with no overburden, posts shall be set to a minimum depth of 18 inches in rock. Where solid rock is covered with an overburden of soil or loose rock, posts shall be set to a minimum depth of 36 inches unless a penetration of 18 inches in solid rock is achieved before reaching the 36-inch depth in which case depth of penetration shall terminate. All portions of posts set in rock shall be grouted. Portions of posts not set in rock shall be set in concrete from the rock to ground level. Posts set in concrete shall be set in holes with dimensions as shown.

Diameters of holes in solid rock shall be at least 1 inch greater than the largest cross section of the post. Concrete and grout shall be thoroughly consolidated around each post so as to be free of voids and finished to form a dome. Concrete and grout shall be allowed to cure for 72 hours prior to attachment of any item to the posts. Class 3 type line posts may be mechanically driven provided soil conditions are such that the driven posts develop strengths at least equal to posts set in concrete and rock is not encountered. Driven posts shall be set to a minimum depth of 3 feet and shall be protected with drive caps when being set.

3.3 Braces and Truss Rods: Braces and truss rods shall be installed as required and in conformance with the standard practice for the fence furnished. Braces and truss rods shall extend from terminal posts to line posts. Diagonal braces shall form an angle of approximately 40 to 50 degrees with the horizontal.

3.4 Tension Wires: Tension wires shall be installed along the top and bottom of the fence line and attached to the terminal posts of each stretch of the fence. Top tension wires shall be installed within the top one (1) foot of the installed fabric. Bottom tension wire shall be installed within the bottom six (6) inches of the installed fabric. Tension wire shall be pulled taut and shall be free of sag.

3.5 Chain-Link Fabric: Chain-link fabric shall be installed on the side of the post indicated on the drawings or as approved. Fabric shall be attached to terminal posts with stretcher bars and tension bands. Bands shall be spaced at approximately 15-inch intervals. Fabric shall be pulled taut to provide a smooth uniform appearance free from sag. Fabric shall be fastened to line posts at approximately 15-inch intervals and fastened to tension wires at approximately 24-inch intervals. Fabric shall be cut by untwisting and removing pickets. Splicing shall be accomplished by weaving a single picket into the ends of the rolls to be joined. The bottom of the installed fabric shall be above the ground as shown.

3.6 Grounding: The Contractor shall furnish and install ground conforming to the requirements of Subsection 9 of the National Electric Safety Code.

#### 4.0 MEASUREMENT AND PAYMENT:

4.1 General: The quantity to be paid for all fencing exclusive of fence and fencing of the types listed in subsequent subsections, will be the number of linear feet of chain-link fencing measured along the top of fencing, center to center of end posts, properly furnished and installed in accordance with the plans, specifications, standard sheets and directions of the Engineer. An

allowance of 10 linear feet will be added for each end post, corner post and pull post installed in accordance with the plans, specifications, and directions of the Engineer.

4.2 Basis of Payment:

4.2.1 General: ^The unit price bid per linear foot shall include the cost of furnishing all labor, materials, tools and equipment necessary to satisfactorily complete the work and shall include all necessary clearing, grubbing, excavation and disposal, fill, concrete, anchoring, posts, hardware, fencing, repair of material damaged by the Contractor's operations and all other necessary materials.

\* \* \* \* \*



ITEM 4.11  
CORRUGATED METAL PIPE

1.0 SCOPE:

This section covers material, installation, and testing requirements for pipe and drainage structures for storm-drainage system and culverts.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications Construction and Materials.

1.2 American Association of State Highway and Transportation Officials (AASHTO) Publications:

Standard Specifications for Highway Bridges (1983) & Interim Specifications (1984)

M 36-83I Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains

M 243-81 Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches and Arches.

M 245-84I Precoated, Galvanized Steel Culverts and Underdrains

M 246-84I Steel Sheet, Metallic-Coated and Polymer Polymeric Precoated for Corrugated Steel Pipe

T 180-83I Moisture-Density Relations of Soils Using a 10-lb. (4.54 kg) Rammer and an 18-inch (457 mm) Drop

1.3 American Society for Testing and Materials (ASTM) Publications:

A 123-84	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
A 444-84	Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process for Culverts and Underdrains
A 798-82	Installing Factory Made Corrugated Steel Sewer Pipe
C 1557-78	Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.54 kg) Rammer and 18-inch (457 mm) Drop
D 2167-84	Density and Unit Weight of Soil in Place by the Rubber-Balloon Method
D 2922-81	Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
D 2937-83	Density of Soil in Place by the Drive-Cylinder Method
D 3017-78	Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)

1.4 Submittals:

1.4.1 **Manufacturer's Recommendations:** Where installation procedures or any part thereof are required to be in accordance with the recommendations of the manufacturer of the material being installed, printed copies of these recommendations shall be furnished to the Engineer prior to installation.

1.4.2 **Certification:** Certified copies of test reports demonstrating conformance to applicable pipe specifications shall be submitted to the Engineer before pipe is installed.

## 2.0 DELIVERY, STORAGE, AND HANDLING

2.1 **Delivery and Storage:** Materials delivered to site shall be inspected for damage, unloaded, and stored with a minimum of handling. Materials shall not be stored directly on the ground. The inside of pipes and fittings shall be kept free of dirt and debris. Plastic materials shall be protected from exposure to the direct sunlight over extended periods.

2.2 **Handling:** Materials shall be handled in such a manner as to insure delivery to the trench in sound, undamaged condition. Pipe shall be carried to the trench, not dragged.

## 3.0 PRODUCTS AND EXECUTION:

3.1 **Pipe for culverts and storm drains** shall be of the sizes indicated and shall conform to the requirements for the following pertinent types:

3.1.1 **Corrugated Steel Pipe:** AASHTO M 36, zinc coated Type II with helical corrugations. Sheet thickness shall be 16 gauge for 12 inch diameter, and 15-inch diameter sizes.

3.2 **Joints for Corrugated Metal Pipe:** Transverse field joints shall be of such design that the successive connection of pipe sections will form a continuous line free of appreciable irregularities in the flow line. In addition, the joints shall meet the general performance requirements described in ASTM A 798. Suitable transverse field joints which satisfy the requirements for one or more of the joint performance categories can be obtained with the following types of connecting bands, furnished with suitable band-end fastening devices: corrugated bands, bands with projections, flat bands, and bands of special design that engage factory reformed ends of corrugated pipe. The space between the pipe and connecting bands shall be kept free from dirt and grit so that corrugations fit snugly. The connecting band, while being tightened, shall be tapped with soft-head mallet of wood, rubber or plastic, to take up slack and insure a tight joint. The annular space between abutting sections of part paved, fully paved, and asbestos treated pipe and pipe arch, in sizes 30 inches or larger, shall be filled with a bituminous material after jointing.

Field joints for each type of corrugated metal pipe shall maintain pipe alignment during construction and prevent infiltration of fill material during the life of the installations. The type, size, and sheet thickness of the band and the size of angles or lugs and bolts shall be as indicated or where not indicated, shall be as specified in the applicable standards or specifications for the pipe. Field joints between corrugated metal pipes and corrugated perforated polyethylene pipe shall be made in accordance with recommendations of the manufacturer's of both types of pipes subject to the approval of the Engineer.

3.2.1 Connecting bands shall be of the type, size and sheet thickness of band, and the size of angles, bolts, rods and lugs as indicated or where not indicated as specified in the applicable standards or specifications for the pipe. Exterior rivet heads in the longitudinal seam under the connecting band shall be countersunk or the rivets shall be omitted and the seam welded.

3.2.2 The band shall be tightened evenly, even tension being kept on the rods or bolts, and the gasket shall be closely observed to see that it is seating properly in the corrugations. Watertight joints shall remain uncovered for a period of time designated, and before being covered, tightness of the nuts shall be measured with a torque wrench. If the nut has tended to loosen its grip on the bolts or rods, the nut shall be retightened with a torque wrench and remain uncovered until a tight, permanent joint is assured.

3.3.1 Trenching: The width of trenches at any point below the top of the pipe shall be not greater than the outside diameter of the pipe plus 12 inches to permit satisfactory jointing and thorough tamping of the bedding material under and around the pipe. The Contractor shall maintain stability of trenches at all times using sheeting, bracing or other means. Care shall be taken not to over excavate. Where trench widths are exceeded, redesign with a resultant increase in cost of stronger pipe or special installation procedures shall be necessary. Cost of this redesign and increased cost of pipe or installation shall be borne by the Contractor without additional cost to Dunlop Tire Corp.

3.3.2 Removal of Unstable Material: Where wet or otherwise unstable soil incapable of properly supporting the pipe, as determined by the Engineer is unexpectedly encountered in the bottom of a trench, such material shall be removed to the depth required and replaced to the proper grade with select granular material, compacted as provided in paragraph: BACKFILLING. When

removal of unstable material is due to the fault or neglect of the Contractor in his performance of shorting and sheeting, water removal, or other specified requirements, resulting material shall be excavated and replaced.

3.4 Bedding: The bedding surface for the pipe shall provide a firm foundation of uniform density throughout the entire length of the pipe. When necessary, the bedding shall be tamped. Bell holes and depressions for joints shall be only of such length, depth, and width as required for properly making the particular type of joint. It is not required to shape the bedding to the pipe geometry. Pipe bedding shall be placed in accordance with the Contract Drawings or as ordered by the Engineer.

3.5 Placing Pipe: Each pipe shall be carefully examined before being laid, and defective or damaged pipe shall not be used. Pipelines shall be laid to the grades and alignment indicated. Proper facilities shall be provided for lowering sections of pipe into trenches. Lifting lugs in vertically elongated metal pipe shall be placed in the same vertical plane as the major axis of the pipe. Under no circumstances shall pipe be laid in water, and no pipe shall be laid when trench conditions or weather are unsuitable for such work. Diversion of drainage or dewatering of trenches during construction shall be provided as necessary. All pipe in place shall be inspected before backfilling, and those pipes damaged during placement shall be removed and replaced.

3.5.1 Corrugated Metal Pipe: Laying shall be with the separate sections joined firmly together, with the outside laps of circumferential joints pointing upstream, and with longitudinal laps on the sides.

3.6 Backfilling:

3.6.1 Backfilling Pipe in Trenches: After the pipe has been properly bedded, backfilling material at a moisture content that will facilitate compaction, shall be placed along both sides of pipe in layers not exceeding 6 inches in compacted depth. Material to be used for backfilling will be as described below.

3.6.1.1 Underdrain Filter: 605-1 Description. The work shall consist of installing underdrain filter in accordance with these specifications and in conformity with the lines, grades, and cross-sections shown on the plans or established by the Engineer.

3.6.1.2 Materials: 605-2.02 Granular Filter Materials. Underlain Filter Material shall consist of crushed stone, sand, gravel or screened gravel. Material tests and quality control methods pertaining to the item requirements and work of this Section will be performed in conformance with the procedures contained in the appropriate Departmental publication in effect on the letting date of the project. These publications are available upon request to the Regional Director or the Director, Soil Mechanics Bureau.

The procedure for acceptance or rejection of these materials shall be as directed in the appropriate Soil Control Procedure (SCP) manual.

Underdrain Filter Type I coordinate with drawing.

A. Underlain Filter Type I.

Gradation:

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
1 inch	100
1/2 inch	30 - 100
1/4	0 - 30
No. 10	0 - 10
No. 20	0 - 5

Soundness:

The soundness of material meeting the requirements of §703-02, Coarse Aggregates or §703-10, Lightweight Aggregates, is acceptable for Underdrain Filter Type 1. When the Contractor elects to use material from sources not approved under §702-02 or §703-10, the

soundness of the material shall be tested and shall have a loss not exceeding 20 percent by weight after four (4) cycles of the Magnesium Sulphate Soundness Test.

Construction Details:

Underdrain Filter: After the pipe installation has been inspected and approved, Underdrain Filter shall be loosely placed around and over the pipe to such a depth that, after compaction, Underdrain Filter will extend to a level six inches above the underdrain pipe. Subsequent lifts of Underdrain Filter shall be no more than six inches thick prior to compaction and shall be compacted by two passes of an approved vibrating pad or drum type compactor. The remainder of the installation shall be in accordance with the applicable standard sheet or as indicated on the plans.

In the event that a pipe is not included in this installation, the filter shall be placed in horizontal layers not exceeding six (6) inches in thickness prior to compacting. Each lift shall be compacted by two passes of an approved vibrating pad or drum type compactor.

No compaction control tests will be required.

The backfill shall be brought up evenly on both sides of pipe for the full length of pipe. Care shall be taken to insure thorough compaction of the fill under the haunches of the pipe. Each layer shall be thoroughly compacted with mechanical tampers or rammers. This method of filling and compacting shall continue until the fill has reached an elevation of at least 8 inches above the top of the pipe. The remainder of the trench shall be backfilled and compacted by spreading and rolling or compacted by mechanical rammers or tampers in layers not exceeding 8 inches. Tests of density will be made as necessary to insure conformance to the compaction requirements specified elsewhere in this paragraph. Where it is necessary in the opinion of the Engineer, any sheeting or portions of bracing used shall be left in place and the contract will be adjusted accordingly. Untreated sheeting shall be not left in place beneath structures or pavements.

**3.6.2 Backfilling Pipe in Fill Sections:** Pipe laying in fill sections shall commence only after the fill has been placed in an approved manner to an elevation of at least 12 inches above the pipe

crown for a particular area of fill. Fill shall be placed at least six (6) feet on both sides of the longitudinal centerline of the proposed pipe location, or to horizontal limits described on the drawings, so that trenching for pipe placement can proceed in a stable manner. Pipe construction shall then proceed according to the methods described for placing pipe in trenches as described previously in this specification section.

**3.6.3 Movement of Construction Machinery:** In compacting by rolling or operating heavy equipment parallel with the pipe, displacement of or injury to the pipe shall be avoided. Movement of construction machinery over a culvert or storm drain at any stage of construction shall be at the Contractor's risk. Any pipe damaged thereby shall be repaired or replaced.

**3.6.4 Compaction:**

**3.6.4.1 General:** Cohesionless materials include gravels, gravel-sand mixtures, sands, and gravelly sands. When results of compaction tests for moisture-density relations are recorded on graphs, cohesionless soils will show straight lines or reverse-shaped moisture-density curves.

**3.6.4.2 Minimum Density:** Backfill over and around the pipe and backfill around and adjacent to drainage structures shall be compacted at the approved moisture content to the following applicable minimum density (densities) which will be determined as specified in this paragraph.

a. Under paved roads, parking areas, and similar-use pavements including adjacent shoulder area, the density shall be not less than 95 percent of maximum density for cohesionless material, up to the elevation where requirements for pavement subgrade materials and compaction shall control.

**3.6.5 Determination of Density:** Testing shall be the responsibility of the Contractor and performed at no additional cost to Dunlop Tire Corp. Testing shall be performed by the Contractor supplied laboratory. Tests shall be performed in sufficient number to insure that specified density is being obtained. Laboratory tests for moisture-density relations shall be made in accordance with AASHTO T 180 or ASTM D-1557 except that mechanical tampers may be used provided the results are correlated with those obtained with the specified hand tamper. Field density tests shall be performed in accordance with ASTM D-2167; ASTM D-2922; or ASTM



D-2937, as applicable. For the method discussed in ASTM D-2922 the calibration curves shall be checked and adjusted if necessary using only the sand cone method described in paragraph "Calibration" of the ASTM publication. ASTM D-2922 results in a wet unit weight of soil and when using this method, ASTM D-3017 shall be used to determine the moisture content of the soil. The calibration curves furnished with the moisture gages shall also be checked along with density calibration checks as described in ASTM D-3017. Test results shall be furnished to the Engineer. The calibration checks of both the density and moisture gages shall be at the beginning of a job on each different type of material encountered and at intervals as directed.

#### 4.0 MEASUREMENT AND PAYMENT:

##### 4.1 Measurement:

4.1.1 Perforated CMP, 14 GA: The quantity of CMP, pipe to be paid for will be the number of linear feet of pipe incorporated in the completed work in accordance with the drawings, and specifications and as directed by the Engineer.

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
4.11	6" PCMP, 14 GA	L.F.
4.11	12" PCMP, 14 GA	L.F.
4.11	15" PCMP, 14 GA	L.F.
4.11	18" PCMP, 14 GA	L.F.
4.11	15" CMP, 14 GA	L.F.
4.11	18" CMP, 14 GA	L.F.

##### 4.2 Payment:

4.2.1 Perforated CMP, 14 GA: The unit price bid per each linear foot shall include the cost of all material, labor and equipment necessary to satisfactorily complete the work including all necessary excavation, backfill, bedding, dewatering and replacement of any pavement, shoulders and sidewalk courses, subcourses, curbs, drives, lawns, and other surfaces.

\* \* \* \* \*

ITEM 4.12  
CATCH BASINS

1.0 SCOPE:

General: This work shall consist of the construction or alteration of catch basins and manholes as shown on the plans or in a manner approved by the Engineer.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications  
Construction and Materials

1.2 Adjustment Rings for Manholes: When required, the Contractor shall furnish and install prefabricated adjustment rings for manholes. The extensions shall elevate and support the manhole covers at the proper grade without the necessity of removing the original manhole casing, when the street is resurfaced.

2.0 MATERIALS:

2.1 Catch Basins: Unless specifically designated on the plans and/or in the proposal, the Contractor shall have the option of constructing these items with one of the following materials meeting the requirements of §700-Materials:

Common Brick	704-01
Concrete Brick	704-02
Reinforced Concrete Pipe	706-02
Precast Concrete Drainage Units	706-04
Cast-In-Place Concrete - Class A	501

NOTE: The three edge bearing test will not be required for 706-02, Reinforced Concrete Pipe.

Other materials required for the construction of these items shall meet the following specifications of §700-Materials.

Concrete Grouting Material	701-05
Mortar for Concrete Masonry	705-21
Bar Reinforcement, Grade 60	709-01

2.2 Prefabricated Adjustment Rings for Manholes: Materials for adjustable extensions to manhole castings shall conform to materials §715-13.

### 3.0 CONSTRUCTION DETAILS:

3.1 Excavation: Excavation shall be performed in accordance with the requirements of §206-3, under "Trench, Culvert and Structure Excavation."

#### 3.2 Masonry Units:

3.2.1 Bricks: Units for both manholes and basins must be designed so that only full length units are required to lay any one course.

All bricks shall be laid in full mortar beds. Mortars have been stiffened because of evaporation of water, may be retempered by adding water as needed to restore the required consistency. Mortar used for filling vertical or inclined joints shall be of such consistency that will require rodding for placing. The mortar shall be rodded until it rises to the top and completely fills the joints.

3.2.2 Joints: All joints in masonry units shall be full mortar joints not greater than 1/2-inch wide on the inside and outside. When specified, the outside of each structure shall be plastered with 1/2-inch thick mortar coat.

3.3 **Cast-In Place Concrete:** Concrete construction shall conform to the requirements of §555, Structural Concrete.

3.4 **Pipe Installations:** All pipe built into the walls of the structure shall be flush with the inside face of the wall and shall project outside a sufficient distance to allow for proper connection with the adjoining pipe section. The masonry shall fit neatly and tightly around the pipe and shall be sealed with mortar.

3.5 **Alterations:** When adjustment of existing structures to proper grade is specified, the frames, covers, and gratings, shall be removed and the walls reconstructed as required. The cleaned frames shall be reset at the required elevation. Upon completion, each structure shall be cleaned of any accumulation of silt, debris, or foreign matter of any kind and shall be kept clear of such accumulation until final acceptance of the work.

3.6 **Prefabricated Adjustment Rings for Manholes:** Prior to the placement of the surface course and after the placement of the binder course, when required, the Contractor shall install adjustable rings for manholes. The adjustment ring shall be placed so the manhole cover will not protrude above the finished surface of the pavement. When adjustment rings have incremental height adjustments are installed and the increment cannot produce a height which will result in the cover being flush with the surface they shall be installed so the cover is no more than one increment below the finished grade of the pavement.

To assure a firm and secure fit with the adjustment ring, the seat of the existing manhole casting shall be free of all foreign material at the time of the installation. The entire assembly shall be set on the seat of the existing manhole casting and the locking bolts shall be tightened evenly, expanding the unit for a swedge fit against the existing manhole casting. The manhole cover shall then be set upon the seat of the adjustment ring.

All rings shall be protected from displacement caused by traffic maintained on the roadway or equipment used in the paving operation.

The Contractor shall have the option of removing and resetting the existing manhole casting to the required grade where shown on the plans or approved by the Engineer.

3.7 Backfill: No structure shall be backfilled until all the mortar has completely set.

The requirements of §203-3.15, Fill and Backfill at Structures, Culverts, Pipes, Conduits and Direct Burial Cable, shall apply.

4.0 METHOD OF MEASUREMENT:

4.1 Catch Basins: The quantity to be paid for will be the number of catch basins installed.

5.0 BASIS OF PAYMENT:

5.1 Catch Basins: The unit price bid per catch basin shall include the cost of all labor, equipment, and materials necessary to complete the work, except as follows:

5.1.2 Frames, covers, and gratings will be paid for under the appropriate payment items, Frames and Grates. Any frames, covers or grating broken through carelessness on the part of the Contractor shall be replaced at the Contractor's expense.

\* \* \* \* \*

ITEM 4.13  
FRAMES AND GRATES

1.0 SCOPE: This work shall consists of furnishing and placing frames and grates for drainage structures as shown on the plans or as directed by the Engineer.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications  
Construction and Materials

2.0 REFERENCES: The publications listed below for a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

3.0 MATERIALS:

3.1 Frames and Grates (Castings): All gratings, manhole covers, frames and curb boxes shall meet the requirements of §715-02, Steel Castings, Grade N-1; or §715-05, Iron Castings, Class No. 30; or §715-09, Malleable Iron Castings, Grade 32510 at the Contractor's option. Suitable measures shall be taken to ensure that grates and covers shall have continuous, full and uniform bearing contact with their corresponding frames and shall be non-rocking when in place and under the influence of traffic or other loads. Methods suitable to achieve secure non-rocking fits between grates, covers and their corresponding frames include, but are not limited to:

- a. Ground mating surfaces
- b. Machined and milled mating surfaces (horizontal and/or vertical)
- c. Matchmarked elements
- d. Locking elements

If matchmarked elements are utilized, care shall be taken to retain the identity of the elements in order to correctly match them and assure proper fits.

Frames, grates, covers and appurtenant parts that fail to meet the requirements of this specification shall be rejected and removed from the work site.

3.2 **Frames and Grates (Fabricated):** The frames, gratings and appurtenant parts shall be fabricated from steel conforming to ASTM A-36.

Galvanizing shall be in accordance with 01 Type I, unless otherwise indicated.

Welding shall conform to the requirements of Welding, specified in the New York State Steel Construction Manual, except that radiographic inspection will not be required.

#### 4.0 **CONSTRUCTION DETAILS:**

4.1 **Frames and Grates:** Frames, covers and grates shall be placed true to line and grade. Covers, grates and frames shall make firm, full and even bearing on their respective underlying surfaces and shall be non-rocking under the influence of traffic or other loads.

4.2 **Field Repairs for Improperly Fitting Systems:** The Contractor may propose to the Engineer reasonable field repair procedures for improperly fitting castings. No field repairs of improperly fitting fabricated frames and grates shall be allowed. Field repairs may include grinding and/or proper welding techniques for the materials involved. Repairs that involve welding shall be allowed only on steel castings, and constituent parts have full, uniform and even bearing contact on their respective underlying surfaces and that do not rock or move under the influence of traffic and other loads. All such repairs must be completely satisfactory to the Engineer or the work shall be rejected and replaced with satisfactory systems. All repairs shall be done at no cost to the State.

7-13-92

## 5.0 METHOD OF MEASUREMENT:

5.1 Frames and Grates: The quantity to be measured under this work will be the number of frames and grates installed.

## 6.0 BASIS OF PAYMENT:

6.1 Frames and Grates: The unit price bid per cast or prefabricated cast or prefabricated frames and grates shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work, including the cost of any field repair work to render the frame and grate non-rocking.

Payment will be made under:

<u>ITEM NO.</u>	<u>ITEM</u>	<u>PAY UNIT</u>
13	Frames and Grates (Castings)	Each
13	Frames and Grates (Fabricated)	Each

\* \* \* \* \*



ITEM 4.14  
ADJUST EXISTING DRAINAGE STRUCTURES

1.0 SCOPE:

This work shall consist of adjusting existing drainage structures to the elevations indicated on the drawings or as directed by the Engineer.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications Construction and Materials

NYSDOT Section 604: Catch basins, manholes, field inlets, drop inlets, and leaching basins.

1.2 Submittals: The Contractor shall submit the following submittals for approval.

- a. Method for performing adjustments to existing drainage structures.
- b. Manufacturers information, specifications and recommendations for all material to be used to complete this work.

2.0 MATERIALS:

Adjustments to the existing drainage structures shall be made with the same type of material used in the original construction unless otherwise indicated on the drawings or specified by the Engineer. Material shall conform to the NYSDOT Standard Specification Section 604: Catch basins, manholes field inlets, drop inlets and leaching basins, unless otherwise approved.

### 3.0 EXECUTION:

When adjusting the indicated existing drainage structures the proper grades, the frames, covers and gratings, shall be removed and the walls reconstructed as required. The cleaned frames shall be reset at the required elevations. Adjustments shall be made so that the manhole cover will not protrude above the finished surface of the pavement. Upon completion, each structure shall be cleaned of any accumulation of silt, debris, or foreign matter of any kind and shall be kept clear of such accumulation until final acceptance of the work. The Contractor shall dispose of all debris and other foreign matter on site in locations to be determined by Dunlop Tire Corp.

### 4.0 MEASUREMENT AND PAYMENT:

4.1 Measurement: The unit of quality to be paid for under this item will be the number of structures adjusted.

4.2 Payment: The unit price bid per each shall include the cost of all material, labor, and equipment necessary to complete the work including all necessary excavation, backfill and replacement of any pavement, shoulder and sidewalk courses, subcourses, curbs, drives, lawns and other surfaces. Payment shall include the tying into any storm or sanitary drainage structure with a new pipe. All connection shall be made watertight. Any frames, covers or grates broken through carelessness on the part of the Contractor shall be replaced at the Contractor's expense.

\* \* \* \* \*

ITEM 4.15  
PAVEMENT MARKINGS

1.0 SCOPE:

This work shall consist of furnishing and applying pavement marking points at the locations and in accordance with the patterns indicated on the plans or as directed by the Engineer.

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most current editions shall apply.

New York State Department of Transportation (NYSDOT) Standard Specifications Construction and Materials.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D-1535 Method for Specifying Color by the Munsell System

1.2 Submittals:

- a. Manufacturers information and specifications.
- b. Certifications: Certified copies of test reports demonstrating conformance to applicable point specifications shall be submitted to the Engineer prior to start of work.

2.0 MATERIALS:

The paint shall be formulated and manufactured from first-grade materials and shall be free from defects that may adversely affect the serviceability of the finished product. When the paint is stored in its container, the pigmented binder shall not liver or settle out to the extent that re-mixing is difficult by standard methods of the application is detrimentally affected.

The paints, Type I, shall meet the following minimum requirements:

<u>REQUIREMENT AND/OR TEST</u>	<u>*TYPE I REGULAR</u>
Color	Yellow
Directional Reflectance (45°)	--
Dry Opacity	--
Viscosity (Stormer-K.U.)	70-80
Bleeding	None
Water Resistance	Satis.
Dry Time (Tack Free)	-30 min.
Abrasion Resistance (Taber):	
18 Hours at 105°C	--
7 Day Dry	-100 mg.
7 Day Wet	-150 mg.
Weatherometer	-150 mg.
Glass Bead Adhesion (TT-P-85d)	--
Flexibility	Satis.
Weatherometer (50 hrs.)	Satis.
Accelerated Settlement	100 mls. in less than 10 min.
Skinning	None
Wet Hiding Power	Complete
Weight/Gallon	11.0- lbs.

\*NOTE: The composition of Type I, regular yellow paint shall be as follows:

Type I - Regular Yellow Paint:

1. Color: The color panel prepared from a 15 mil. wet thickness drawdown shall be reasonable visual match to a Munsell Book Notation 10YR8/14 (ASTM D-1535) when viewed under North Standard Daylight. The comparison shall be made using a completely dry panel.

2. Composition:

	<u>MINIMUM</u>	<u>MAXIMUM</u>
Pigment	50.0%	53.0%
Vehicle	47.0%	50.0%
		100%
Pigment		
Medium Chrome Yellow (87% Grade-Fed. Spec. TT-P-346b, Type III)	26.0%	30.0%
*Titanium Dioxide (Domestic Origin) Inert	12.0%	16.0%
or Extending Pigments	54.0%	62.0%
		100%

\*Upon analysis, the pigment shall show not less than 12.0% pure  $\text{TiO}_2$ .

The siliceous extending pigments shall be Fibrous Magnesium Silicate and/or Diatomaceous Silica. No calcium carbonate or calcium sulfate pigments will be permitted; no barium pigments or zinc pigments are allowed.

The pigments used shall conform to the requirements of ASTM.

Coarse particles (residue retained on a 325 mesh sieve) shall not be greater than 1.0 percent.

<u>Vehicle</u>	<u>Minimum</u>	<u>Maximum</u>
Fixed Drying Oils and Resins	47.0%	--
Volatile Thinner and Drier	--	53.0%

The percentages noted relate to mixture by weight.

3. Weight per Gallon: The paint shall weigh not less than 11.4 lbs./gal.

The percentages noted relate to mixture by weight

Normal spreading rates for Types I, II and III yellow pavement marking paints shall be from 100 to 115 square feet per gallon so as to obtain a wet film thickness of  $15 \pm 1$  mils.

All paint furnished must be shipped in strong, substantial and properly sealed containers. Five gallon steel pails shall have a full diameter hub cover, wire bail and handle and shall conform to I.C.C. specification 37A. Steel drums shall be equipped with a ring and lock closure and removable lid which can be readily resealed after partial use of the contents. Steel drums shall conform to I.C.C. specifications 17-H or 37A.

2.1 Tests:

2.1.1 Viscosity: When tested on the Stormer Viscosimeter at 25°C and at a shearing rate of 100 revolutions per 30 seconds, the paints shall have the following consistencies:

Type I - Regular Yellow - 70 to 80 Krebs Units

Type II - Rapid Dry Yellow - 75 to 110 Krebs Units.

Type III - Fast Dry Yellow - 85 to 120 Krebs Units.

The viscosity test shall be run within 5 minutes after the paint has been thoroughly agitated with a motorized shaker.

2.1.2 Bleeding: The quality of the pigmented binder shall be such that it will cause no bleeding of the asphalt surface, over which it is applied, which may impair the paint's color or visibility.

2.1.3 Water Resistance (Type I only): A wet paint film 0.005 inches thick, applied to glass with a Bird Applicator (blade cap clearance of 0.01 inch) or any other doctor blade that produces a film of the same thickness as the Bird blade is dried for 6 hours at room temperature, then over-dried for 18 hours at 50°C. The dried paint film is then immersed in water, at room temperature, for 24 hours. Immediately after removal from the water, the paint is patted dry with clean cheesecloth and examined. Immersed film shall show only slight softening, slight loss of adhesion, no embrittlement or deterioration, by comparison with a portion of the paint film not immersed.

#### 2.1.4 Drying Time:

A. Type I - Regular Yellow: A wet paint film 0.005 inch thick is applied to glass with a Bird Applicator (blade gap clearance of 0.01 inch) or any other doctor blade that produces the same thickness as the Bird blade. The film shall dry at 70 - 80°F to a tack-free condition (light touch of the finger should not leave a mark nor should the surface be sticky), in not less than 5 nor more than 30 minutes. At the end of one hour, exert a vertical pressure of 20 pounds on the paint film with a clean, dry thumb at an angle of approximately 45°. There shall be no rupture of the film, no loss of adhesion to the glass panel and only a slight impression of the thumb.

#### 2.1.5 Abrasion Resistance:

A. Type I - Regular Yellow: The paint, thinned if necessary with a compatible solvent, is applied to four (4) Taber Plates in such a manner as to give a wet film thickness of approximately 0.010". The paint films are dried for 7 days at a temperature of 70 - 80°F. The corresponding average weight loss of these films, on the four plates, as determined on a Taber Abrader after 1,000 revolutions using 500 gram weights and CS 10 wheels, shall not exceed 100 milligrams. The average weight loss of dried (7 days) films which have been immersed in water for 18 hours, shall not exceed 150 milligrams. The average weight loss of films which have been exposed for 50 hours in the Weatherometer shall not exceed 150 milligrams.

#### 2.1.6 Flexibility:

A. Type I - Regular Yellow: A panel of 3" x 5" dimensions shall be cut from bright tin plate and thoroughly cleaned with benzol. The tin plate shall be of such a thickness that 1 square foot weighs between 6.5 and 8.0 ounces. Paint shall be applied to the panel by a Bird film applicator to a thickness of 0.005 inches (5 mils). Dry in a horizontal position at room temperature for 24 hours. Bake panel in over at 105 - 110°C for 18 hours and cool at room temperature for 15 minutes. The film shall show no cracks when the panel is rapidly bent double over a 3/8" mandrel.

B. Type II - Rapid Dry Yellow: The pigmented binder shall not show cracking or flaking when subjected to the flexibility test of TT-P-85b, §4.4.5.

C. Type III - Fast Dry Yellow: The pigmented binder shall not show cracking or flaking when subjected to the flexibility test of TT-P-115c, §4.3.2.

#### 2.1.7 Weatherometer:

A. Type I - Regular Yellow: The paint, thinned if necessary with a compatible solvent, is applied to four (4) Taber Plates in such a manner as to give a wet film thickness of approximately 0.010". The applied paint film is dried at room temperature for 1/2 hour, then placed in an oven, maintained at 50°C for 4 hours. At the end of this period the test specimens are placed in a weatherometer for 50 hours. The weatherometer cycle is 3 minutes of carbon-arc light and water spray and 17 minutes of carbon-arc light only. After 100 hours in the weatherometer, the paint film is examined for evidence of cracking, checking or discoloring by comparison with the unweathered film. In addition, the abrasion loss, at the end of the weatherometer period of 50 hours, shall not be greater than 150 milligrams. (The weatherometer used for this test is an Atlas Twin Arc, Model DMC-HRC).

B. Type II - Rapid Dry and Tape III - Fast Dry: The pigment binder, thinned if necessary with a compatible solvent, is applied to a flat glass panel at a wet film thickness of approximately 0.010 inch. The applied paint film is dried at room temperature for 1/2 hour, then placed in an oven maintained at a temperature of 50°C for 4 hours. At the end of this period the test specimens are placed in a weatherometer for 50 hours. The weatherometer cycle is 3 minutes of carbon-arc light and water spray and 17 minutes of carbon-arc light only. After 50 hours in the weatherometer, the paint film is examined for evidence of cracking, checking or discoloring by comparison with the unweathered film. (The weatherometer used for this test is an Atlas Twin Arc, Model DMC-HRC).

2.1.8 Accelerated Settlement Test (Type I only): Apparatus - Centrifuge, special paint container and 100 ml. graduate.



The special paint container is a brass or metal cylinder 3" inside diameter by 3-1/8" inside depth, with a flat bottom. Smoldered or braised to the center of the bottom of the container is a male threaded brass plug 3/4" in diameter. A hole 1/8" (0.125 inch) in diameter is drilled through the plug and the bottom of the container and 5/8" long from the inside of the bottom of the container and in the exact center.

A cap with a 1/8" rod attached to its center screws on the male threaded plug, so that the rod fits snugly and fills the 1/8" passage. The top of the rod must be flush with the inside bottom of the container. The container is provided with a screw metal top which is constructed to suspend the container freely from the centrifuge arm in the centrifuge.

Procedure: A fresh sample of the paint to be tested is thoroughly stirred and then poured to depth of 2-1/2" into the special paint container with the cap in place. The top is screwed on and the container placed in the centrifuge and properly counterbalanced. The centrifuge is then run at speed of 750 r.p.m. for a half hour. At the end of the half hour the container is immediately removed from the centrifuge and set on a ring stand with a 100 ml. graduate under the cap covering the orifice. The cap is removed and the time for the 100 ml. of paint to flow from the container is accurately recorded. One hundred mls. of centrifuged paint shall flow from the orifice of the container in not more than 10 minutes. The paint shall be rejected if it fails to meet the requirements of this accelerated settlement test.

2.1.9 Skinning Test (Type I only): An open quart can three quarters filled with paint shall show no skinning after standing for 2 hours at laboratory air temperature of 75 - 85°F protected from direct air currents.

2.1.10 Wet Hiding Power Test (Type I only): On an impervious black and white checker board (described in Federal Test Method Standard No. 141) apply a paint film of 0.01" thickness with a Bird Applicator, or any other applicator which produces a film of the same thickness. Complete hiding no contrast in brightness) shall be obtained when viewed in good diffuse illumination.

2.1.11 Weight Per Gallon (Type I only): The paint shall weigh not less than 11.0 pounds per gallon.

### 3.0 EXECUTION:

3.1 General: All final, interim and temporary markings and patterns shall be placed as shown on the drawings and in accordance with the New York State Manual of Uniform Traffic Control Devices.

Before any final pavement marking work is begun, a schedule of operations shall be submitted for the approval to the Engineer.

When pavement marking are applied under traffic, the Contractor shall provide all necessary flags, markers, signs etc., to protect the painted marking until thoroughly dry. The application of pavement markings shall be done in the general direction of traffic; striping against traffic shall not be allowed.

The Contractor shall be responsible for removing, to the satisfaction of the Engineer, tracking marks, spilled paint or paint applied in unauthorized areas.

Detour and other temporary markings shall be removed as soon as practicable as directed by and to the satisfaction of the Engineer. If darkness or inclement weather interferes with removal operations, such operations should be accomplished during the next daylight period or as soon thereafter as weather permits.

The method of removal is subject to the approval of the Engineer. Painting out pavement marking will only be approved for very short term use. Grinding, scraping, sandblasting, etc., must be conducted in such a manner that the finished pavement surface is not damaged or left in a pattern that will mislead or misdirect the motorist.

When necessary, the Contractor shall establish marking line points at twenty-five (25') foot intervals throughout the length of the pavement or as directed by the Engineer.

The Contractor shall be responsible for cleaning the pavement, to the satisfaction of the Engineer, of dust, dirt, old pavement markings, concrete curing compounds and other foreign material which may be detrimental to the adhesion of the paint film.

The paint shall be applied only on thoroughly dry pavement surfaces, when the atmosphere temperature is at or above 40°F and when the weather is otherwise favorable in the opinion of the Engineer.

3.2 Application of Pavement Markings: Painted pavement marking shall, unless otherwise noted herein, be applied with atomizing spray type striping machines. The equipment shall be compatible with and suitable for the application of the type of paint being used and shall be approved by the Engineer. Applied markings shall have clean-cut edges, true and smooth alignment and a uniform film thickness of  $15 \pm 1$  mil.

NOTE:

Type I, Regular Yellow paint is designed for application in conventional striping equipment. Drying time for Type I marking paint approximate 30-45 minutes, thus allowing for the application of glass beads by a gravity feed or drop-on type system.

Upon approval by the Engineer, the Contractor may apply Type I, Regular Yellow paint, utilizing rollers and/or brushes for marking gore areas, turn arrows, letters, stop bars, short temporary detours or other such areas as directed by the Engineer.

4.0 MEASUREMENT AND PAYMENT:

4.1 Measurement: Pavement striping will be measured on a lump sum basis.

4.2 Payment: The accepted quantities of marking will be paid for at the contract unit lump sum price bid, which shall include the cost of furnishing all labor, materials, and equipment to satisfactorily complete the work. The cost for maintaining and protecting traffic during the painting operations shall be included in the price bid.

\* \* \* \* \*

ITEM 4.16  
ASPHALT OVERLAY

1.0 SCOPE:

This work shall consist of placing a 1 inch $\pm$  asphalt concrete overlay on the existing pavement as noted on the Contract Drawings.

1.1 References: The publication listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only the most current editions shall apply.

1.2 Reference Standards:

NYSDOT - Section 403 - Hot Mix Asphalt Concrete Pavement

1.3 Submittals: Contractor shall submit certificates of compliance from the manufacturers of the specified materials.

2.0 PRODUCTS:

2.1 Top Course: Top course material shall conform to NYSDOT - Section 401 and Section 403, Type 7.

3.0 CONSTRUCTION DETAILS:

3.1 The construction details shall comply with the requirements specified for Type 9F Top Course (High Friction), §401-3.01 through §401-3.15 shall apply with the following modifications.

1. Surface temperatures in the shade, prior to paving, shall be at least 60°F.
2. The mix shall be compacted by two passes of a ten ton steel wheel tandem roller.

3.2 **Conditioning of Existing Surface:** The surface of the existing pavement shall be cleaned, joints and cracks filled, and the surface leveled to a uniform grade and cross slope in areas designated by the Engineer prior to the application of a new bituminous concrete course. The surface shall be cleaned and the joints and cracks filled under the provisions of section 633, Conditioning Existing Pavement. The expense for cleaning foreign material from the pavement as a result of construction operations shall be borne by the contractor. Leveling of the surface shall be in conformance with the requirements stated below.

Contact surfaces between bituminous mixtures and Portland Cement concrete such as adjacent pavement edges, curbing, gutters, manholes and other structures shall be painted with a thin, uniform coating of bituminous material prior to the bituminous mixture being placed against them.

If an Asphalt Concrete Truing and Leveling Course is specified on the plans, the work shall consist of placing a course of the minimum variable thickness of proper plant mix necessary to bring the surface of the existing pavement to the same transverse slope and longitudinal grade required for the finished pavement surface. The work shall consist of removing irregularities in the old pavement, filing, and patching holes, correcting variations in banked pavement, establishing pavement crowns, etc. All depressions and wheel path ruts shall be filled prior to paving of the truing and leveling course, as directed by the Engineer. For compacted thickness up to 1-1/2 inches, a top course of shim course mix shall be used. For compacted thickness in excess of 1-1/2 inches, the dense binder course mix shall be used; however, where compacted thicknesses 4 inches or greater are required, the Engineer may approve the use of the dense base course mix. Special attention shall be paid to the proper compaction of thin sections. The surface of this course shall be tested in the same manner prescribed in §401-3.14, except that the allowable variation from the true surface after compaction shall not exceed 3/8 inch.

3.3 Any holes or loose asphalt shall be removed and replaced with asphalt concrete binder material, as directed by the Engineer prior to the placement of the asphalt overlay.

3.4 **Tack Coat:** This work shall consist of preparing and treating an existing bituminous or portland cement surface with bituminous tack coat in accordance with these specifications and in reasonably close conformity with the limits shown on the plans or established by the Engineer.

The bituminous tack coat shall meet the requirements of the following designation:

Asphalt Emulsion for Tack Coat

702-90

The bituminous tack coat will be sampled and tested in accordance with the Engineer's written instruction.

3.4.1 Construction Details: The Contractor shall provide a distributor for applying the tack coat. The distributor shall be designed, equipped, maintained and operated so that the tack coat can be heated and applied uniformly on variable widths of surface up to 15 feet at readily determined and controlled rates from 0.05 to 2.0 gallons per square yard, with uniform pressure, and with an allowable variation from any specified rate not to exceed 0.02 gallons per square yard. Distributor equipment shall include a tachometer, accurate metering device or a calibrated tank, and a thermometer for measuring temperatures of tank contents. Distributors shall be equipped with a power unit for the pump, and full circulation spray bars adjustable laterally and vertically.

The distributor may be equipped with an attached bristle broom designed such that it drags on the pavement behind the spray bars. If the broom is used, it shall be adjustable laterally and vertically so that the full width of the applied tack coat is broomed uniformly into the pavement surface.

Distributors shall be equipped with an approved bituminous material sampling valve. The valve shall be installed as described in Engineer's written instructions. When samples are taken through such valves, they shall be considered representative of all material in the tank.

Smaller power spray units of hand spray equipment will be permitted only in areas where the Engineer determines that the use of a distributor is impractical.

The tack coat shall be uniformly applied by a pressure distributor to a prepared clean pavement. The tack coat shall be applied as approved by the Engineer to offer the least inconvenience to traffic and to permit one-way traffic, where practical, to prevent pickup or tracking of the bituminous material.

Tack coat shall not be applied on a wet pavement surface or when the surface temperature is below 45°F. The temperature and areas to be treated shall be approved by the Engineer prior to application. The application rate shall be 0.03 to 0.07 gallons per square yard as approved by the Engineer.

The cost of applying the tack coat shall be included in the price bid per ton for the asphalt concrete overlay.

#### 4.0 METHOD OF MEASUREMENT:

The asphalt concrete overlay will be measured by the number of square yards of compacted material in place.

#### 5.0 BASIS OF PAYMENT:

The unit price bid per square yard for the asphalt concrete overlay shall include the cost of furnishing all materials and all equipment and labor necessary to complete the work.

\* \* \* \* \*

ITEM 4.17  
PIPE BOLLARDS

1.0 SCOPE:

This work shall consist of installing new pipe bollards in front of and adjacent to all values and appurtenances protruding above existing grade along the front face of the loading dock in accordance with the Contract Drawings.

2.0 MATERIALS:

The materials used in this work shall meet the requirements specified in the Contract Drawings.

3.0 CONSTRUCTION DETAILS:

The pipe bollards shall be installed to a minimum depth of 4 feet below ground level and shall extend approximately 4 feet above ground level.

4.0 METHOD OF MEASUREMENT:

The quantity to be paid for will be the number of pipe bollards installed.

5.0 BASIS OF PAYMENT:

The unit price bid for each pipe bollard shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.

\* \* \* \* \*



5.0 BID PROCEDURES

5.1 Pre-Bid Meeting and Site Inspection

- A. All prospective bidders are invited to attend a pre-bid meeting at the Owner's premises on **Monday, August 10, 1992 at 10:00 AM**. A one time only site inspection for all Contractors and Sub-contractors will be held at this time. There will be no other opportunity to inspect the premises, prior to submission of bids.

5.2 Submission of Bids

- A. All bids are to be submitted, in writing, to the attention of Mr. A. J. Williams, Purchasing Manager, Dunlop Tire Corporation, Buffalo, NY 14240, by the designated time and date specified in the Request for Quotations.
- B. All bids to be valid for a period of (60) days from the date of submission.
- C. All bids shall identify the names of the Contractor's intended Sub-Contractors, for the Owner's approval.

5.3 Sales Taxes

Bidders are not to include the sales and compensating use taxes of the State of New York or any City or County in the State of New York for any supplies or materials to be sold to the Owner, which is exempt from such taxes.

5.4 Format of Bids

FORM OF PROPOSAL

A. All Bidders will submit their quotations in the following format:

1. Labor .....\$ \_\_\_\_\_
2. Materials .....\$ \_\_\_\_\_
3. Equipment rental / usage.....\$ \_\_\_\_\_
4. Cost of Performance Bond .....\$ \_\_\_\_\_
5. Cost of Labor & Material Payment Bond...\$ \_\_\_\_\_
- Total Price .....\$ \_\_\_\_\_

B. Names of all Prospective Sub-Contractors

C. The hourly labor rates (straight time and premium time) for all contract and sub-contract labor trades, plus the Contractor's standard markups.

D. The Contractor's standard markups for additional materials and equipment rental which may be required.

E. The Contractors Equipment rental rates.

NOTE: Should it be necessary for the Contractor to perform any additional work on a "time and material" basis, then the rates described above shall apply and daily time sheets will be required.

In NO case will payment be made for any additional labor or materials, without prior, written authorization from the Owner's Project Engineer.

F. Fill in Attachment "A" for items C, D, and E above.

**5.5 Invoices and Payments**

- A. Dunlop will make monthly progress payments, against Contractor's invoice for this project
- B. Invoices covering additional work or materials **must** be submitted monthly **AND FOLLOW THE JOB PROCESS.**
  - 1. Invoices are to be in a format similar to the American Institute of Architects (A.I.A.) Form G702, itemizing the contract amount, all extra work orders to date and their numbers and amounts.
  - 2. Invoices submitted for time and materials work, must be accompanied by photocopies of approved time sheets, and materials invoices.
- C. In no case should invoices exceed payment for actual work completed.

**5.6 Terms and Conditions**

- A. Forms T053 and F-1989, submitted with this Request for Quotation, constitute essential and integral parts of any order and resulting contract.
- B. It is understood that the Owner shall make no payments to the Contractor or Subcontractors for additional cost, for whatsoever reason, **without the prior written authorization and approval of the Project Engineer or his authorized representative.**

**5.7 Overrun at Bid Opening**

If the successful Bid received exceeds the amount of funds available to Owner to fund the Project, the Owner reserves the right to negotiate a lower price with the successful Bidder and/or re-bid the Project.

**1.0 TIME AND MATERIALS RATES****CRAFTS RATES:**

All rates shall include base rate, supervision, equipment, taxes, insurance, fringe benefits, and profit, consumables and all small tools with a value of less than five hundred dollars (\$500.00).

Classification	Straight	Time/Half	Double
Superintendent	_____	_____	_____
Foreman	_____	_____	_____
Journeyman	_____	_____	_____
Apprentice	_____	_____	_____
Others	_____	_____	_____

Straight Time Rate will apply to all hours worked as follows:

\_\_\_\_\_

Time and One-Half Rate will apply to all hours worked as follows:

\_\_\_\_\_

Double Time Rate will apply to all hours worked as follows:

\_\_\_\_\_

**1.1 EQUIPMENT RENTAL RATES**

Rental rates shall include all fuel, lubricants, maintenance, repairs, overhead and profit. Rates shall include operating personnel (if required). State major equipment to be brought on site.

**NOTE:** Bidder to supply rental rate schedule.

The Contractor will show percent markups for the following:

- 1) On material: \_\_\_\_\_
- 2) On third tier work, Contract to Subcontract: \_\_\_\_\_
- 3) Non-owned equipment rental: \_\_\_\_\_

**NOTE:** Copies of original invoices shall be required prior to payment of account.

**SUPPLEMENTAL TERMS AND CONDITIONS**

- 1) Purchase order will be issued by Dunlop Tire Corporation as contractor and agent for the Erie County Industrial Development Agency.

- 2) Insurance Certificate of Vendor will be required as follows:

Dunlop Tire Corporation, the Erie County Industrial Development Agency, the New York State Urban Development Corporation, the State of New York are each to be named as additional insureds on a direct and primary basis as respects work performed for it by, or for, the named insured.

Each insurance policy shall contain a clause providing that in the event of cancellation, change or non-renewal of the policies, the insurance company will give forty-five (45) days advance written notice to the Owner and all parties named as an additional insured.

- 3) Dunlop Tire Corporation will issue a contractor Exempt Purchase Certificate with the purchase order.

The following unit prices for items of work, as specified, will be used in making additions to, or deductions from, the project as shown on the Plans, or as specified.

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT PRICE	
			ADDITION	DEDUCTION
4.1	Clearing and Grubbing	L.S.		
4.2	Unclassified Excavation	C.Y.		
4.3	Existing Ramp Removal	Each		
4.4	Embankment in-place	C.Y.		
4.5	Subbase Course	S.Y.		
4.6	Asphalt Concrete Pavement			
	1" Top Course	S.Y.		
	2" Binder Course	S.Y.		
	3" Binder Course	S.Y.		
4.7	Saw Cutting	L.F.		
4.8	Concrete Pads & Ramps	C.Y.		
4.9	Trailer Relocation	L.S.		
4.10	Fencing	L.F.		
4.11	Perforated Corrugated Metal Pipe			
	6" Diameter	L.F.		
	12" Diameter	L.F.		
	15" Diameter	L.F.		
	Corrugated Metal Pipe			
	15" Diameter	L.F.		
	18" Diameter	L.F.		
4.12	Catch Basins	Each		
4.13	Frames and Grates	Each		
4.14	Adjust Existing Drainage Structures	Each		
4.15	Pavement Markings	L.S.		
4.16	1" Top Course Overlay	S.Y.		
4.17	Pipe Bollards	Each		

## WORK AND SERVICES

If Seller is to perform any work or services for Buyer under this Order, then Seller agrees to the terms and conditions which follow. The terms and conditions are in addition to the other terms and conditions of this order, either as set forth on the Purchase Order itself or on any attachment thereto. If there is any inconsistency, then with respect to work and services to be performed, the terms and conditions which follow shall apply.

### The Work

Seller shall perform all work covered by this Order. Seller represents that it is: (i) fully experienced and properly qualified to perform the work, (ii) properly and adequately equipped, organized and financed to do the work.

Seller acknowledges and agrees that it is an independent contractor and not an agent or employee of Buyer.

Seller shall furnish all labor, supplies, equipment and materials necessary to perform the work covered by this order.

Seller shall provide at all times during the course of the work a competent and qualified representative having general supervision of the work and full power to represent Seller in all matters pertaining to this Agreement and shall furnish necessary technical, supervisory, administrative as well as material and labor control personnel, including reasonable discipline and good order among its employees and shall not employ or continue to employ any unfit person or anyone not skilled in the work assigned to him.

The work shall be executed in good workmanlike manner by qualified, careful and efficient workers in strict conformity with the standards of the industry, and all materials and supplies furnished by Seller and used in connection with the work shall be new and of good quality and shall be in accordance with the plans and specifications approved by Buyer.

Seller shall confine its operations at the premises to limits prescribed by Buyer and shall not unreasonably encumber the premises or interrupt plant operations.

Buyer shall at all times be afforded access to all records, correspondence, instructions, receipts, vouchers and memoranda of every description pertaining to the work.

Seller shall, upon final completion of the work, turn over the work to Buyer in good order, promptly remove all of Seller's tools, machinery, equipment, facilities, and surplus materials and supplies. All surplus materials, tools, machinery, equipment, facilities, and supplies included in the cost of the work and not consumed in the work, if desired by Buyer, will be delivered to Buyer in the condition in which they were received, reasonable wear and tear and damage by the elements excepted.

Seller shall at all times keep the Buyer's premises free from accumulations of waste material or rubbish. At the completion of the work and services covered by this order, Seller shall leave the Buyer's premises broom clean.

Any and all materials included as a part of the work furnished shall be unloaded and stored within the Buyer's premises and shall remain Buyer's property.

Title to all the work completed at the premises or in the course of construction at the premises shall be in Buyer.

Seller shall provide all labor and equipment necessary to test, in accordance with the specifications, all work performed and materials supplied by Seller.

Seller shall inspect the premises and at all times take all necessary measures to protect the safety of all persons (including without limitation Seller's subcontractors and Seller's and subcontractors' employees, agents, suppliers, and invitees) who at Seller's or Buyer's request come onto the premises where Seller's work is to be performed, from all hazards, whether created by Buyer or others.

If work is to be performed hereunder on Buyer's premises, Seller represents that it has examined the premises and any specifications or other documents furnished in connection with the work and services covered by this order and that it has satisfied itself as to the condition of the premises and site and agrees that no allowance shall be made in respect of any error as to such on the part of Seller.

### Compliance With Laws

It is agreed that Seller shall obtain all permits and licenses as necessary, and Seller shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. Seller shall be responsible for any violations of applicable laws, city ordinances and damages to personal property caused by it or its employees, or subcontractors or any employees of the subcontractors.

### Hazardous Materials

Buyer has available to all outside contractors, information to comply with the OSHA Hazardous Communication Standard. This information is available upon request through the Buyer's Safety Department.

Seller is responsible for all chemicals brought on site by it and its subcontractors. Material Safety Data Sheets (29 CFR Part 1910, Subpart 2 - Toxic and Hazardous Substances, Occupational Safety and Health Administration) must be submitted for any hazardous material before it is brought into any facility of Buyer.

### Payments

Unless otherwise provided in this order, Buyer shall make final payment to Seller within thirty (30) days after it falls due, as hereafter specified.

Payments may be withheld on account of (1) defective work not remedied, (2) claims filed, (3) failure of Seller to make payments properly to subcontractors or for labor, materials, or equipment, (4) damage to a third party, or (5) unsatisfactory prosecution of the work by Seller.

Final payment shall not be due until Seller has delivered to Buyer a complete release of all liens, arising out of this order or receipts covering in full all labor, materials and equipment for which a lien could be filed, or, at the discretion of the Buyer, a bond satisfactory to the Buyer indemnifying him against any lien.

## Insurance and Indemnification

- (i) Seller shall keep the premises and work free and clear of all mechanic's liens. Seller hereby waives its right to any mechanic's lien or other lien under any applicable statutes or otherwise for work done or materials furnished in connection with the items. Seller shall obtain from any subcontractor or materialman prior to the performance of any work hereunder or the furnishing of any materials, a written waiver satisfactory to Buyer of its right to any such lien and shall deliver such waiver to Buyer promptly upon receipt thereof. If at any time there shall be evidence of the existence of any lien or claim, Buyer may use moneys then due or to become due to discharge such lien or satisfy such claim and credit such amounts against the amounts due or to become due to Seller.
- (ii) Seller shall perform the work at Seller's sole risk prior to its written acceptance by Buyer and replace at Seller's sole expense all work damaged or destroyed by any cause whatsoever.
- (iii) Seller shall indemnify and hold Buyer and its agents, consignees, employees and representatives harmless against all expenses (including attorneys' fees), damage claims, suits, or liabilities of every kind whatsoever by reason of, arising out of, or in any way connected with the work and services performed or to be performed hereunder, including without limitation the claims for injury or damage to the person, property or employees of Seller, agents, subcontractors, suppliers and representatives and Buyer's employees, agents, consignees and representatives.
- (iv) Seller shall maintain policies of liability insurance of such forms, types and such amounts and with such companies as may be designated by Buyer, which policies shall be written so as to protect Buyer and Seller from the risks enumerated in Section (iii). Such policies of insurance shall not be cancelable (including cancellation for non-renewal) except upon thirty (30) days' written notice to Buyer and proof of such insurance shall be furnished by Seller to Buyer. In addition, such policies shall protect all subcon-

tractors of Seller. Seller agrees to make prompt written report to the insurance company involved of all accidents, occurrences, injuries or losses which may occur and of any and all claims made against the persons insured under said policies of insurance and to send copies of such reports to Buyer within thirty-six (36) hours of the time that Seller obtained knowledge of the occurrence thereof.

- (v) Seller shall pay, as required by applicable laws, all payroll taxes or contributions or payments for unemployment insurance or Workmen's Compensation insurance or old age pensions or annuities, including social security contributions, and shall hold Buyer harmless from any assessments against Buyer in connection therewith. Seller shall fully comply with all applicable employer's liability laws and Workmen's Compensation acts of each state or political subdivision in which the work and services are performed. Seller shall furnish Buyer with evidence of the foregoing satisfactory to Buyer.
- (vi) Seller represents and warrants that (i) no employee, agent or representative of Buyer nor any relative of any employee, agent or representative of Buyer has an ownership, financial or other proprietary interest in Seller or in any subcontractor to be employed or used by Seller in the performance of the work; for the purposes of this subparagraph, relative is defined as the spouse, child, parent, grandparent, brother, sister, aunt, uncle or the spouse or child of any such person; and (ii) all its employees, agents or representatives and those of any subcontractor employed or used by Seller in the performance of the work are eighteen years of age or older.

## Termination

In addition to all rights provided herein or in any attachment hereto or by law, Buyer shall have the right to immediately cancel this order in whole or in part if Seller fails to promptly perform the work covered by, and as specified in this order, or any part thereof. Buyer shall not be liable in any way to Seller or to third parties for any damages which Seller claims result from any such cancellation.





#### EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the supplier agrees as follows:

- (1) The supplier will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The supplier will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The supplier agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.
- (2) The supplier will, in all solicitations or advertisements for employees placed by or on behalf of the supplier, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.
- (3) This supplier will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the supplier's commitment under section 302 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The supplier will comply with all provisions in Executive Order 11246 of September 24, 1965, and all the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The supplier will furnish all information and reports, required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the supplier's noncompliance with the non-discrimination clause of this contract or with any of such rules, regulations, or orders, the contract may be canceled, terminated or suspended in whole or in part and the supplier may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The supplier will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rule, regulation, or order of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The supplier will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that in the event the supplier becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such action by the contracting agency, the supplier may request the United States to enter into such litigation to protect the interests of the United States.

#### AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS

- (a) The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer; recruitment, advertising, layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship.
- (b) The contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
- (c) In the event of the contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.
- (d) The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the goals of employees and employees.
- (e) The contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, that the contractor is bound by the terms of section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.
- (f) The contractor will include the provisions of this clause in every subcontract or purchase order of \$1,000 or more unless exempted by rule, regulation, or order of the Secretary issued pursuant to section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

#### AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA

- (a) The contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam Era in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam Era without discrimination based upon their disability or veteran status in all employment practices such as the following: employment, upgrading, demotion or transfer; recruitment, advertising, layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- (b) The contractor agrees that all contract employment openings of the contractor which occur at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring as an amendment of the contract after the time the contract is being performed but excluding those of independently initiated

corporate entities, shall be posted in an accessible location in the public employment service system wherein the opening occurs. The contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service but are not required to provide those reports set forth in paragraphs (d) and (e).

(c) Listing of employment openings with the employment service pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or other means and shall involve the normal channels which attach to the placing of a bona fide job order, including the accessibility of referrals of veterans and nonveterans. The listing of employment openings does not require the listing of any particular job applicant or from any particular group of job applicants, nor does it require the removal of the contractor from any requirements in Executive Orders or regulations regarding non-discrimination in employment.

(d) The reports required by paragraph (b) of this clause shall include, but not limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall include for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of non-disabled veterans of the Vietnam Era hired, (3) the number of disabled veterans of the Vietnam Era hired, and (4) the total number of non-disabled veterans hired. The reports shall include covered veterans hired for on-the-job training under 38 USC 1787. The contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made on the contract identifying each for each hiring location. The contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after the payment under the contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representative of the contracting office or of the Secretary of Labor. Documentation would include personnel records reflecting job openings, recruitment and placement.

(e) Whenever the contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the contractor is contractually bound to these provisions and has so advised the State system, there is no need to advise the State system of subsequent contracts. The contractor shall advise the State system when it is no longer bound by this contract clause.

(f) This clause does not apply to the listing of employment openings which occur and are filed outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(g) The provisions of paragraphs (b), (d) and (e) of this clause do not apply to openings when the contractor proposes to fill from within his own organization or to fill pursuant to a temporary and traditional employer-union hiring arrangement. This clause does not apply to a particular opening once an employer decides to consider applicants outside of his own organization or employer-union arrangement for that opening.

(h) As used in this clause: (1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: professional and nonprofessional; plant and office workers and mechanics; supervisory and non-supervisory; technical and executive; administrative, and professional openings as are contemplated in the categories of less than \$25,000 per year. This term includes full-time employment, temporary employment of more than 3 days' duration, and on-call employment. It does not include openings which the contractor proposes to fill from within his own organization or to fill pursuant to a temporary and traditional employer-union hiring arrangement for openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise satisfied, where listing would be contrary to national security, or where the requirement of listing would interfere not so far the best interest of the Government. (2) "Appropriate office of the State employment service system" means the local office of the Federal-State system of public employment offices with assigned responsibility for carrying out the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. (3) "Openings when the contractor proposes to fill from his own organization" means employment openings which the contractor proposes to fill from his own personnel outside the contractor's organization (including any affiliates, subsidiaries, and the parent corporation) and includes any openings when the contractor proposes to fill from regularly established "float" lists. (4) "Openings when the contractor proposes to fill pursuant to a temporary and traditional employer-union hiring arrangement" means employment openings which the contractor proposes to fill from union lists, which is part of the temporary and traditional hiring relationship which exists between the contractor and representatives of his employees.

(i) The contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(j) In the event of the contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(k) The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the contractor's obligation under this law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam Era for employment, and the goals of employees and employees.

(l) The contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, that the contractor is bound by the terms of the Vietnam Era Veterans Readjustment Assistance Act, and is committed to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam Era.

(m) The contractor will include the provisions of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rule, regulation, or order of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

DUNLOP TIRE CORPORATION  
BUFFALO PLANT

SAFETY GUIDELINES FOR CONTRACTORS

1.0 INTRODUCTION

1.1 Purpose

This document has been prepared to acquaint contractors and their employees with some of their responsibilities and obligations regarding safety and security matters while on Dunlop Tire property. It will be the responsibility for contractors to read, understand, disseminate and abide by these standards.

1.2 Scope

Contractors, their employees, and subcontractors are required and encouraged during the performance of their contracts to comply with these safety standards.

In the event a contractor or it's employees believe they are being put at risk due to an unsafe event or condition beyond their control, they should immediately contact their supervisor, Dunlop Tire Representative or the Safety Engineer. If the Situation is not corrected to the satisfaction of the contractor, the contract employee should notify his representative and leave the affected area.

1.3 Limitations

Nothing contained in these guidelines is to be construed as relieving or absolving the contractor, subcontractor, or their employees from the duties and obligations imposed on them by law, including the Occupational Safety and Health Act or any relevant regulation.

The standards set forth in these guidelines are not inclusive, but will provide a basis or understanding their responsibilities and cover most tasks that contractors are normally assigned.

OSHA STANDARD 1910 Standard for General Industry, OSHA Standard 1926 Standard for Construction Industry, National Fire Codes, National Electrical Code, American National Standards Institute, et al, should be referenced for safety standards applicable to the contractor's project.

2.0 GENERAL RESPONSIBILITIES

- 2.1 Contractors are responsible for first-aid and transporting of employees to hospital emergency rooms or health providers. The Dunlop Tire Medical Department will respond to emergency situations if needed or requested. Contractors should inform the Dunlop Tire Medical Department in advance which hospital or medical provider they wish their employees referred to.

- 2.2 Possession, use, or sale of any intoxicant, narcotic, barbiturate, mood altering, tranquilizing or hallucinogenic drug on Dunlop's premises is strictly forbidden, or, shall any contractor or subcontractor employee be under the influence of substances that could render that person unsafe for work.
- 2.3 Contractors are responsible to provide to their employees the necessary personal protective equipment necessary by tasks or applicable standard, i.e., hard hats, eye protections, welding hoods gloves, etc. Athletic shoes i.e., "sneakers" are not acceptable footwear. Shoes must be acceptable protective shoes of sturdy construction.
- 2.4 Contractors are responsible for supplying fire extinguishers, welding curtains, or other necessary safety equipment.
- 2.5 All motorized equipment brought on site shall be in good working condition to include hydraulics, exhaust, brakes, lights, horns, etc. Any deficiency such as oil or hydraulic leaks shall be repaired as quickly as possible, and/or removed from service.
- 2.6 Propane and/or electrical powered equipment is preferred for use within the plant interior. In the event diesel or gasoline powered equipment has to be used, prior approval must be obtained and a "hot work permit" form issued by Dunlop for project assigned. Permits not to exceed one week in duration.
- 2.7 At no time will fire arms, ammunition, or any type of explosives, to include power actuated tools be allowed on the premises without the expressed consent of the Dunlop Plant or Safety Engineer.
- 2.8 Fire protection systems, automatic sprinklers, yard hydrants, post indicator valves, fire pumps, fire hose, extinguishers, CO2 systems, shall not be blocked or impaired at any time.
- 2.9 Areas of work shall be kept free from debris and foodstuffs. Containers used for refuse will be emptied to prevent overflow. Scrap, excess, and packaging materials shall be removed from site daily.
- 2.10 All access roads will be kept open to allow for entrance of emergency vehicles.
- 2.11 Smoking is not permitted except in designated areas.
- 2.12 Horseplay is not permitted.
- 2.13 Fighting on Dunlop Tire property is strictly forbidden.
- 2.14 Running on plant property is not allowed.

### 3.0 SPECIFIC RESPONSIBILITIES

- 3.1 Dunlop Tire has in place a written Hazard Communication Program. Prior to any work being performed in an area where hazardous materials are stored or used, contractors and their employees must be made aware of the hazards involved, their location, and where Material Safety Data Sheets can be obtained. Contractors

are responsible for specific training per OSHA Standard 1910.1200.

- 3.2 No materials that could be considered hazardous shall be introduced into the plant or used without prior approval of Dunlop Tire. Approved hazardous materials must be preceded by delivery to Dunlop of Materials Safety data Sheets and prior to arrival on site materials shall be properly labeled per OSHA Standard 1910.1200.
- 3.3 Fire protection systems shall not be altered or shut-off without the approval of the Safety Engineer or appointed designee. If a system must be altered or shut-off, Dunlop Tire has to implement Industrial Risk Insurer's impairment procedure.
- 3.4 Contractors shall ensure all cranes, lifts, backhoes, hoists, etc. have been inspected and found to be in good working condition prior to use in the plant. This is to include all chains, chokers, wire rope, brakes, booms, slings, have been inspected or load tested as required by pertinent OSHA regulations. Crane operators must be licensed in a conference with New York State Regulations.
- 3.5 Welding, burning, brazing, or cutting shall be done in accordance with OSHA Standard 1910.252. Prior to any "hot work" being performed a burning permit will be obtained from the DTC Representative or DTC Engineer and all requirements of the burn permit accomplished. Permits will be issued on a daily basis and turned into the guard house at the end of the work day. This procedure shall include the proper storage, segregation, and use of fuel gas cylinders, and oxygen cylinders.
- At no time will welding or cutting be performed without the use of welding curtains. Any overhead welding or cutting requires that area below be roped off and/or a fire watch be posted. Dry chemical extinguishers will be maintained on site (A & B type) or Co2 extinguishers when work is performed around electrical operations.
- 3.6 Confined space work, i.e., tanks, pits, manholes, sewers, will not occur without the approval of the Dunlop Safety Engineer or his designee. Atmospheres within the confined spaces shall be tested for flammable, toxic vapors, and oxygen levels prior to entry. A safety watch shall be posted at the entrance of confined spaces to monitor all workers within the confined area, and such workers will wear an approved lifeline at all times. Respiratory rescue equipment shall be stationed in the area and personnel trained in the use of such equipment.
- 3.7 Tow motor operations shall be conducted in strict accordance with OSHA Standard 1910.178. Contractors are responsible for training and licensing of their operators. Contractors shall insure equipment is operated at safe speeds, lift personnel in approved and properly attached manlifts, and operate within the capacity of the equipment.
- 3.8 At any time trenching is done, OSHA Standard 1926.66 shall be followed. This will include the shoring of trenching if below

five feet ground level and if the angle of repose cannot be established safely.

- 3.9 When any work performed on equipment or systems that could expose an employee or others to hazards such as moving parts, electrical shock, or the release of hazardous materials, a lock and tag-out procedure shall be used. Zero machine state should be attained prior to any work on equipment that could create hazards.

3.9.1 Temporary wiring to Dunlop power sources must be approved by the Dunlop Engineer, or person in charge of the project. All temporary wiring must be in accordance with National Electric Code Standards.

3.9.2 Ground Fault Interrupters must be used on all hook ups for power tools, lighting, extension cords, etc.

3.9.3 At any time persons must climb above ten feet and the use of manlifts is impossible, safety belts shall be issued and used to include tie-off to existing substantial structures to preclude injuries from a fall.

3.9.4 If any combustible or flammable liquid must be dispensed, only NFPA or UL approved safety cans shall be used. All drums of flammable or combustible liquid shall be properly bonded and grounded and safety spouts used. Gas welders, fork trucks, etc. will be moved outside at least twenty feet for fueling. Plastic containers are not acceptable.

3.9.5 Hazardous materials or hazardous waste will only be disposed of by approved methods and shall be coordinated through Dunlop Tire Environmental Engineering.

3.9.6 During periods when either overhead work is being performed or holes, pits, or trenching are opened, appropriate barriers and signs shall be erected by the contractor to warn of such dangers and only authorized personnel allowed into the area. Barriers must withstand 200 pound force.

3.9.7 In areas which are in or close to production personnel, the production supervisor of the area should be notified as to type of work that shall be performed.

3.9.8 Hard hats are required on all construction projects.

3.9.9 Contractors are required to have a weekly safety meeting with all employees. A copy of the subject material and names of employees and attending must be submitted to the Project Engineer by Friday of each week.

#### 4.0 GENERAL WORK RULES

- 4.1 Satisfactory Contractor insurance certificates must be on file with the Dunlop Tire purchasing department prior to entry to the plant.

- 4.2 Violation of Plant Security procedures shall not be tolerated.
- 4.3 Theft of Dunlop Tire or property of others will be grounds for discharge and possible criminal prosecution.
- 4.4 Willful, careless, or repeated destruction of property, materials, and equipment will not be tolerated.
- 4.5 Contractors shall employ only qualified personnel for all phases of the project work.
- 4.6 Contractors shall be responsible for the actions of all subcontractors, their personnel, and shall take all necessary actions to insure that all plant rules and regulations are followed.
- 4.7 Contractors shall have on site a qualified supervisor at all times when personnel are on site or work being performed.
- 4.8 Each contractor shall appoint a representative for coordination of all project activities and for plant directions and discussions.
- 4.9 Construction and demolition materials shall be transported off-site for proper disposal in a land fill approved for construction and demolition materials - **NO DUMPING ON-SITE.**

#### 5.0 SECURITY GUIDELINES

- 5.1 Contractors shall use the appropriate contractor gate during posted hours. Saturday, Sunday, holidays or off hours contractors will contact Dunlop Security for entry and exit from contractors gate.
- 5.2 Contractors shall inform their employees that all vehicles and packages entering or exiting any gate are subject to search.
- 5.3 Contractors and their employees will be issued a numbered badge so as to identify their employees as the firm by which they are employed. These badges are issued at the contractors gate. These badges must be worn at all times while on Dunlop property.
- 5.4 Contractors shall park in the appropriate contractor's parking lot. Temporary admittance shall be permitted for loading or unloading of vehicles but vehicles must return to the designated area in the parking lot. Additional access will only be allowed by the Plant Engineer, Engineering Manager, or Maintenance Manager. Abuse of vehicle privilege will result in total loss of vehicle access. Unrestricted vehicles shall have their company logo affixed for identification.
- 5.5 Contractors shall make every effort to mark tools, equipment and other property in such a way as to be easily identifiable as to owner. Marking should be done in such a manner as to not easily be erased. Methods to secure tools and equipment should be used such as gang boxes, temporary tool sheds, etc., when not in use.
- 5.6 Contractors shall supply the head of security with a list of

names of all personnel allowed on site, and in the event of dismissal that an employee has been restricted from the site.

5.7 Contractors shall not be allowed in areas other than where their work is being performed.

5.8 At no time shall penetrations of the security fence be permitted without the expressed approval of the Plant Engineering Manager. Perimeter lighting will only be taken out of service with approval of the Plant Engineering Manager.



Dunlop Tire retains the right to revise, modify, or change the rules and regulations as deemed necessary.

I, we the undersigned representing \_\_\_\_\_ have read and understand and will adhere to the safety, work, and security rules as published by Dunlop Tire Corporation, Buffalo Plant. I, We fully recognize that the adherence to the guidelines published by Dunlop Tire, does not diminish our legal and financial obligations in the event of injury or death to a person employed by

\_\_\_\_\_ or it's subcontractors, nor increase the liability of Dunlop tire Corporation, Buffalo Plant, its employees, agents, officials, or representatives.

\_\_\_\_\_  
Representative Signature

\_\_\_\_\_  
Representative Signature

\_\_\_\_\_  
Date

Non-Discrimination; Affirmative Action

Definitions:

For the purpose of this Section, the following terms shall have the meanings set forth below:

"Minority or Minorities" shall mean:

1. Black persons having origins in any of the black African racial groups;
2. Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American descent of either Indian or Hispanic origin, regardless of race;
3. Asian and Pacific Islander persons having origins in any of the Far East Countries, Southeast Asia, the Indian Subcontinent, or the Pacific Islands; or
4. Native American or Alaskan Native persons having origins in any of the original peoples of North America.

"Minority Business Enterprise" (MBE) shall mean a business enterprise, including a sole proprietorship, partnership or corporation that is at least fifty-one percent owned by one or more minority group members; an enterprise in which such minority ownership is real, substantial and continuing; an enterprise in which such minority ownership has and exercises the authority to control and operate, independently, the day-to-day business decisions of the enterprise; and an enterprise authorized to do business in New York State and is independently owned and operated.

The MBE shall be certified under the New York State Certification Program.

"Women Business Enterprise" (WBE) shall mean a business enterprise, including a sole proprietorship, partnership or corporation that is at least fifty-one percent owned by one or more citizens or permanent resident aliens who are women; an enterprise in which the ownership interest of such women is real, substantial, and continuing; an enterprise in which such women ownership has and exercises the authority to control and operate, independently, the day-to-day business decisions of the enterprise; and an enterprise authorized to do business in New York State and is independently owned and operated.

The WBE shall be certified under the New York State Certification Program.

A. Non-Discrimination; Affirmative Action Requirements

Contractor shall include all of the following paragraphs (a) through (e), with respect to the performance of its agreement with the Owner, in every subcontract it enters into for labor services, supplies or equipment in such a manner that such provision shall be binding upon all parties with whom such agreements are entered into:

(a) Contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, ancestry, sex, age, disability or marital status and shall undertake programs of affirmative action to ensure that such employees and applicants are afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other form of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

Contractor shall not discriminate in the selection of any subcontractor on the basis of the owner's, partner's or shareholder's race, color, creed, national origin, sex, age, disability or marital status.

(b) If contractor is directed by the Owner, contractor shall request each employment agency, labor union and authorized representative or workers with which it has a collective bargaining or other agreements or understanding, to furnish it with a written statement that such employment agency, labor union, or representative shall not discriminate because of race, creed, color, national origin, ancestry, sex, age, disability or marital status and that such union or representative shall affirmatively cooperate in the implementation of contractors obligations hereunder.

(c) Contractor shall state in all solicitations or advertisements for employees placed by or on behalf of the contractor that all qualified applicants shall be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, ancestry, sex, age, disability or marital status.

(d) Contractor shall comply with the provisions of the Civil Rights Law of the State, and Sections 291-299 of the Executive Law of the State, shall furnish all information and reports deemed necessary by the Owner, and shall permit access to its books, records and accounts by the Owner, for the purpose of monitoring compliance with these non-discrimination clauses, the Civil Rights Law and such sections of the Executive Law.

- 2 -

(e) Contractor shall take such action in enforcing the foregoing provisions as the Corporation may direct, including sanctions and remedies for non-compliance. If contractor becomes involved in or is threatened with litigation with any party as a result of such direction, contractor promptly shall notify the Owner of such fact, and thereafter, such parties may intervene in such action.

B. Minority and Women-Owned Business Enterprise Utilization

The contractor shall volunteer that with respect to the Construction Contract, MBE's and WBE's will have a total contract dollar value of work to be performed or furnished, equal to fifty percent (50%) of the base bids for such work and as modified by subsequent change orders.

For purposes of determining the total contract value of the work performed by MBE's and WBE's:

(i) Where an MBE/WBE is not a Contractor, the dollar value of the Project Work subcontracted to MBE's or WBE's, provided, however, that where materials are purchased from an MBE or WBE which acts merely as a conduit for goods manufactured or produced by a non-MBE or WBE, only that portion of the price paid for such materials to the MBE or WBE in excess of the price paid by the MBE or WBE to the manufacturer or producer plus any fee received by the MBE or WBE shall be included for the purpose of determining the dollar value of work performed by that MBE or WBE;

(ii) Where Contractor or subcontractor is a joint venture including one or more MBE's or WBE's as joint venturers, such joint venture shall be treated as an MBE or WBE to the extent of the percentage of the joint venture's profit (or losses) which are to accrue to the MBE or WBE joint venturer(s) under the joint venture arrangements; and

(iii) Where an MBE or WBE is Contractor or where Contractor is a joint venture consisting entirely of MBE's/WBE's, the Construction Contract price.

- 3 -

Contractors shall achieve the above through good faith efforts and measures which may include, but shall not be limited to, the following:

(i) Dividing the construction work to be performed in connection with the Construction of the Project into smaller subcontract portions, where economically and technically feasible;

(ii) Actively and affirmatively soliciting bids for subcontractors from qualified MBE's and WBE's including circulation of solicitations to Minority contractor associations.

(iii) Making plans and specifications for prospective construction work to be performed in connection with the construction of the Project available to MBE's and WBE's in sufficient time for thorough review before the required time for submission of proposals;

(iv) Utilizing the services and cooperating with those organizations providing technical assistance to MBE's and WBE's in connection with MBE and WBE participation on the Project;

(v) Utilizing the qualified MBE's and WBE's referred by the Corporation to the contractor for the purpose of soliciting bids for subcontractors;

(vi) Encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors where appropriate to insure that contractor will meet its obligations hereunder; and

(vii) Maintaining records detailing the efforts made to involve MBE's and WBE's including the names and addresses of MBE's and WBE's who were contacted and, if not selected, the reasons for such decision.

The Contractor further agrees to cooperate with the Owner in furnishing it with reports and information on minority/women business enterprise utilization and minority/female workforce participation at monthly intervals on the prescribed forms.

Each bidder shall submit with the bid the requested information as stated below for the Minority Business Enterprises and/or Women-Owned Business Enterprises he/she expects to use in connection with the Contract.

- 4 -

THE BIDDER SHALL SUBMIT THE FOLLOWING INFORMATION WITH THE BID:

FORM A - Schedule of Minority/Women-Owned Business Participation

NOTE: No substitution of certified firms can be made without the prior approval from the Corporation.

RESPONSIBLE LOW BIDDER SHALL SUBMIT THE FOLLOWING PRIOR TO CONTRACT AWARD:

FORM B - MBE/WBE Letter of Intent to Perform

CONTRACTOR MUST SUBMIT THE FOLLOWING MONTHLY REPORTS:

FORM C - Monthly MBE/WBE Utilization Report

FORM D - Monthly Employment Utilization Report

Within thirty (30) days of notice of contract award to the successful bidder, or prior to payment of their first requisition, whichever comes first, a copy of all signed contract or purchase orders with the Minority/Women-Owned Business Enterprises shall be submitted to The Owner. The Corporation will evaluate the adequacy and validity of each such contract or purchase order in relation to achieving M/WBE participation.

C. Minority/Female Workforce Utilization Requirements

All contractors and their subcontractors shall achieve a Minority/Female Workforce participation goal equal to or greater than 10%. "Minority/Female Workforce Participation" shall mean the aggregate number of person-hours worked (including training) by Minorities/Females (including supervisory personnel) with respect to any work in connection with the Agreement.

The Minority/Female Workforce Participation percentage shall be determined by dividing the Minority/Female Workforce Participation by the Total Workforce Participation. For the purposes of this subparagraph, "Total Workforce Participation" shall mean the aggregate number of person-hours worked (including training) by all workers in the building trades (including supervisory personnel) performing work pursuant to the Contract.

# **INSTRUCTIONS FOR FILING MONTHLY EMPLOYMENT UTILIZATION REPORT (CC-257)**

The Monthly Utilization Report is to be completed by each subject contractor (both *Prime and Sub* and signed by a responsible official of the company. The reports are to be filed by the *5th day of each month* during the term of the contract, and they shall include the total work-hours for each employee classification in each trade in the covered area for the monthly reporting period. The prime contractor is responsible for submitting its sub-contractors report, along with its own. (Additional copies of this form may be obtained from the Urban Development Corp.)

- Minority.....Includes Blacks, Hispanics, American Indians, Alaskan Natives, and Asian and Pacific Islanders —both men and women.
1. Current Goals .....As stated Bid conditions.
  2. Reporting Period.....From the first to the end of the month. Due on the 5th day of the following month.
  3. Estimated Completion Date.....Best possible estimation.
  4. Percent of job completed.....% project work contractor or sub-contractor has completed.
  5. Construction Trade.....Only those construction crafts which contractor employs in the covered area.
  6. Work-Hours of Employment (a-e) .....
    - a. The total number of male hours and the total number of female hours worked by employees in each classification.
    - b. -e. The total number of male hours and the total number of female hours worked by each specified group of minority employees in each classification.
  - Classification.....The level of accomplishment or status of the worker in the trade (Journey Worker, Apprentice, Trainee).
  7. Minority Percentage.....The percentage of total minority work-hours of all work-hours (the sum of columns 6b, 6c, 6d and 6e divided by column 6a; just one figure for each construction trade).
  8. Female Percentage.....For each trade the number reported in 6a. F divided by the sum of the numbers reported in 6a. M and F.
  9. Total number of Employees.....Total number of male and total number of female employees working in each classification of each trade in the contractor's aggregate work force during reporting period.
  10. Total Number of Minority Employees .....Total number of male minority employees and total number of female minority employees working in each classification, in each trade in the contractor's aggregate work force during reporting period.
  11. Contractor's Comments.....Any explanation that a contractor would like to point out for the figures on each craft.
  12. Comments (Office Use).....Comments made by reviewing officer on each craft.
  - 13, 14, 15.....These items must be completed.

**NOTE:** The Urban Development Corp. may demand payroll records to substantiate work hours listed on the Monthly Employment Utilization Report; if a discrepancy should arise.

FORM A

SCHEDULE OF MINORITY/WOMEN OWNED BUSINESS PARTICIPATION

(No substitutions may be made on this submission except by prior approval from the N.Y.S. Urban Development Corp.)

Name of Bidding Contractor

Address

Phone No.

Name/Address/Phone # of Minority/Women Owned Business	MBE or WBE?	Joint Venture, Subcontractor, or Supplier?	Scope of Work to be performed	Projected Commencement & Completion Dates	Proposed Contract Price or Purchase Amount

NOTE: FORM A MUST BE SUBMITTED WITH BID

Date

Bidders Signature & Title



FORM B

MBE/WBE LETTER OF INTENT TO PERFORM  
AS CONTRACTOR/SUBCONTRACTOR  
(To be completed by M/WBE and submitted to the Owner  
by successful bidder prior to contract award)

The Undersigned intends to perform work in connection with the  
above project as (check one):

\_\_\_\_\_ a contractor \_\_\_\_\_ a joint venture  
\_\_\_\_\_ a subcontractor \_\_\_\_\_ other

The MBE/WBE status of the undersigned must be confirmed by  
the Owner and the Corporation (UDC) prior to contract award.

The undersigned has agreed to provide the following work or  
services: \_\_\_\_\_

\_\_\_\_\_ at the following price: \_\_\_\_\_

The following commencement and completion dates for such  
work has been projected as follows:

Projected  
Commencement Date

Projected  
Completion Date

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

The undersigned will enter into a formal contract agreement  
with \_\_\_\_\_ for the above work or  
services contingent upon prior execution of a contract between  
said company and the Owner.

\_\_\_\_\_  
Name of Minority/Women Contractor  
(Please Print)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Phone No.

\_\_\_\_\_  
Company Officer Name & Title

Signed: \_\_\_\_\_

## FORM C

## MBE/WBE MONTHLY UTILIZATION REPORT

Company Name: \_\_\_\_\_

Project Name \_\_\_\_\_

Address: \_\_\_\_\_

Contract # \_\_\_\_\_

Period Covered: From \_\_\_\_\_ To \_\_\_\_\_

Contractor's Name, (1)	Type of Contract (2)	Date of Award (3)	Actual Start Date (4)	Est. Comple- tion (5)	% Complete (6)	Contract Amount (7)	Total Amount Paid-to-date (8)	Name, Add., of MBE/WBE (9)	Amount Contracted to MBE/WBE (10)	Amount Paid-to- date to MBE/WBE (11)

Note: FORM C must be submitted monthly to

FORM D

MONTHLY EMPLOYMENT  
UTILIZATION REPORT  
(See reverse side for  
Instructions)

## 1. Current Goals:

MINORITY: \_\_\_\_\_

FEMALE: \_\_\_\_\_

## 2. Reporting Period:

MONTH: \_\_\_\_\_

YEAR: \_\_\_\_\_

3. Estimated  
Completion

DATE: \_\_\_\_\_

Affirmative Action Dept.  
TO: c/o WNYEDC  
Liberty Bldg-Suite 717,  
424 Main Street  
Buffalo, New York 14202

## NAME AND LOCATION OF CONTRACTOR

4. Percent of  
Job completed  
\_\_\_\_\_

5. CONSTRUCTION TRADE	Classifications	6. WORK HOURS OF EMPLOYMENT								9. TOTAL NUMBER OF EMPLOYEES M F	10. TOTAL NUMBER OF MINORITY EMPLOYEES M F	11. CONTRACTORS COMMENTS BY CRAFT	12. COMMENTS (Office Use)				
		6a. TOTAL ALL EMPLOYEES BY TRADE M F		6b. BLACK (Not of Hispanic Origin) M F		6c. HISPANIC M F		6d. ASIAN OR PACIFIC ISLANDERS M F						6e. AMERICAN INDIAN OR ALASKAN NATIVE M F		7. MINORITY PERCENTAGE	8. FEMALE PERCENTAGE
		M	F	M	F	M	F	M	F					M	F		
SUPERVISORY																	
	Journey Worker APPRENTICE TRAINEE SUB-TOTAL																
	Journey Worker APPRENTICE TRAINEE SUB-TOTAL																
	Journey Worker APPRENTICE TRAINEE SUB-TOTAL																
	Journey Worker APPRENTICE TRAINEE SUB-TOTAL																
TOTAL JOURNEY WORKERS																	
TOTAL APPRENTICES																	
TOTAL TRAINEES																	
GRAND TOTAL																	
13. COMPANY OFFICIAL'S SIGNATURE AND TITLE								14. TELEPHONE NUMBER (include area code)				15. DATE SIGNED		PAGE _____ OF _____			