

STANDARDS FOR RIGHT-OF-WAY EASEMENT CONSTRUCTION

INTRODUCTION

The ultimate purpose of these standards is to maintain high quality of restoration of public rights-of-way and easements, to avoid damage to other utilities or improvements, and to provide safety and convenience for the public.

Other goals of these standards are to:

- A. Maximize protection of the public and work force during construction.
- B. Minimize inconvenience to motoring and pedestrian public and to adjacent landowners.
- C. Minimize future maintenance costs to the City.
- D. Minimize time of street closure and interruption of traffic flow.

SECTION I

Definitions:

- A. **BACKFILL** means the restoration of excavated material.
- B. **BLOCK PERMIT** means a permit for work in an area with multiple locations (usually subdivision).
- C. **CITY ENGINEER** means the City Engineer or his authorized representative(s).
- D. **CLOSURE** means a complete closing of one or more lanes of traffic.
- E. **CONSTRUCTION** means excavation, pavement removal, and installation of facilities, boring or jacking of utilities, restoration of pavement cuts, or other work by a utility company or contractor in a public right-of-way or public easement.
- F. **EXCAVATION** means the removal of material below existing grade, public street, parkway, alley or curb paved surface, and include bores.
- G. **PAVEMENT CUT** means a full depth saw cut made into the paved surface of a public street, alley, curb or public easement.
- H. **SUBDIVISION** is defined in the Platting and subdivision Ordinance of the City of Richardson.

- I. **THOROUGHFARE** means any public traffic artery, major street, secondary street or alley.

SECTION II

Acknowledgements

As a condition of the permit, the contractor acknowledges that the City Engineer will:

- A. Establish procedural rules to regulate the issuance of permits, inspection of work sites, traffic control, pavement and public right-of-way restoration.
- B. Determine the time and method of pavement cuts and pavement excavations in order to minimize interference with traffic and to eliminate the unnecessary cutting of pavement.
- C. Inspect pavement cuts, pavement excavations or restorations, embankments and barricades, warning signs, and signal lights.
- D. Order removal of encroachments on the right-of-way, placement of proper barricades and warning devices and repair of substandard restoration work.
- E. Exercise police power in the enforcement of this article.
- F. Suspend or reinstate a permit:
 - 1. The City Engineer may suspend a permit issued to an applicant if said applicant:
 - a. fails to comply with an order of the City Engineer,
 - b. fails to comply with restrictions or requirements placed on the permit by the City Engineer, or
 - c. violates any provisions of this policy.
 - 2. The City Engineer may reinstate a previously suspended permit when the conditions that caused said permit to be previously suspended are remedied by the applicant to the satisfaction of the City Engineer.
- G. Require the contractor to submit barricade plans at the time of permit application if the situation warrants.

- H. At the discretion of the City Engineer, require Utility/Contractor (applicant) to video tape the entire limits of the proposed project and provide a copy of the tape to Engineering Inspection prior to beginning of construction

SECTION III

Permit Requirements

- A. The following procedure shall govern with respect to a permit application:
 - 1. No person or agency may install any utility or other encroachment, make a pavement cut or excavate in a public street, curb, easement, right-of-way or alley without first obtaining a permit form the City Engineer.
 - 2. Application for a permit shall be made no less than two working days prior to the date of the proposed activity unless an emergency exists, in which case immediate notice must be given to the City Engineer.
 - 3. If proposed cut or excavation is to be made in the public right-of way dedicated to the State of Texas, DART, N.T.T.A. or Railroad, a City permit is required in addition to any and all permits required by the State.
 - 4. A City permit is required although specific authority has been granted by the Public Services Department to cut a paved street, curb, or alley as a part of a new construction project.

- B. Street Closure Procedures:
 - 1. No person may close a public street or alley without first obtaining a permit from the City Engineer. Application for a permit shall be made no less than seven working days prior to the date of the proposed closure unless an emergency exists, in which case immediate notice must be given to the City Engineer. If a proposed construction project is in public right-of-way dedicated to the State of Texas, a City permit will be required in addition to any and all permits required by the State.
 - 2. The City Engineer may refuse to issue a permit if proposed construction activity will substantially interfere with vehicular traffic flow on major thoroughfares and is inconsistent with procedures of this article.
 - 3. The City Engineer shall state on the permit the activity for which the permit is issued and any restrictions or requirements, which he determines, are necessary.

- C. If no work has begun on the permitted project within 30 calendar days, the permit will null and void and a new permit will be required.

SECTION IV

Denial of Permit

A permit can be denied for any one of the following reasons:

- A. Not having a bond registered with the City. Franchised utility companies, but not their subcontractors, are exempt from this requirement.
- B. Any Utility/Contractor (Applicant) who has consistently failed to perform in accordance with the requirements of this policy.
- C. Requesting to cut a City maintained street that can be crossed by jacking, boring or tunneling.
- D. The proposed barricading, channelizing, signing, warning or other traffic control procedures or the equipment do not comply with the requirements of the **TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES**, or are not in accordance with this policy.
- E. The activity of the manner in which it is to be performed will violate a City ordinance or a State statute.
- F. Failure to furnish all of the information required by this manual or, except for good cause shown, to file the applications within the time prescribed by this manual.
- G. Misrepresenting or falsifying any information in the applications.
- H. The requested space assignments have already been reserved for future City or other utility construction.
- I. Proposed activity will substantially interfere with vehicular or pedestrian traffic and no procedures, or procedures which are inconsistent with this article, have been implemented to minimize the interference.
- J. The activity will close a traffic lane of any four or six lane thoroughfare, other than the hours of 9:00 a.m. to 3:30 p.m. or can cause a traffic hazard. Emergencies are exempt from this requirement; however, the agency shall notify the City Engineer immediately of the closure.

SECTION V

Requirements for Paving Cuts and Repairs

The following requirements govern paving cuts and repairs:

- A. Any utility/contractor who undertakes any work, which will cut, break or otherwise damage a public street, right-of-way or alley must obtain a right-of-way construction permit.
- B. A cut is allowable prior to obtaining a permit in a valid emergency. However, when an emergency cut is made a permit must be requested not later than the morning of the following workday. Emergency operations are those operations or repairs **necessary to prevent imminent damage or injury** to the health or safety of the public or any person.
- C. Permanent repairs of utility cuts in existing streets, alley, or easements will be completed by the utility/contractor. The following guidelines will be used to determine the utility/contractor's ability to repair. Failure to meet these guidelines may result in refusal by the City to issue future permits to the utility/contractor.
 1. Past quality and performance of contractor's work.
 2. Type and working condition of utility/contractor equipment and capability of utility/contractor personnel.
 3. Bonding and insurance requirements, when applicable, have been met.
 4. The ability of the utility/contractor to perform the work within a mutually agreed time.
 5. The utility/contractor is required to maintain the work for a period of one-year from the date of acceptance by the City.
 6. If the utility/contractor fails to make the requested repairs during the one-year term, further permits may be denied. In the event permits are denied, the utility/contractor may appeal the denial by following the steps outlined in this manual.
 7. If any work is performed on the public right-of-way or easement without a valid permit, the contractor (except franchised utility) may be charged double the cost for necessary repairs.

SECTION VI

Liability for Paving Cuts

- A. Any person granted a permit to use any part of the street, sidewalk, alley, or any other public place for storage of material or for any purpose in connection with the construction or repair of any building or structure, shall indemnify and hold harmless the City from any claims for damages to any person or property that may accrue to or be brought by any person against the City, and shall guarantee the replacement or repair of all sidewalks, pavements and all other public property and public utilities which may be disturbed or removed during the construction work and shall further guarantee the construction of rails and other safeguards during the occupancy of the public space or when work is abandoned and a building site is left in a hazardous condition.
- B. Each person applying for such permit shall furnish evidence that he has procured public liability and property damage insurance in accordance with the requirements of the **STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS** and the special provisions thereof.

Such insurance shall be kept in full force and effect during the period of time for which a permit shall be issued or the space occupied. No insurance shall be required of a franchise holder or their contractors working under the utilities' permit if the franchise holder or their contractors working under the utilities' permit if the franchise fee includes the cost of using the City streets, and said franchise holder provides an insurance or indemnification agreement between the City and the franchise holder.

- C. The utility/contractor shall be responsible for maintaining all paving cuts in such a manner as to avoid a hazard to vehicular and pedestrian traffic until permanently repaired.
1. When emergency repairs are deemed necessary by the City Inspector to correct a situation in which is obviously hazardous to the public, the utility/contractor responsible for the cut shall be notified immediately. If the utility/contractor does not provide acceptable schedule for making the emergency repair within 24 hours of being notified, the repairs will be performed by the City forces and the utility/contractor will be billed for double the actual cost of the work necessary to complete the project including clean up.

2. Utility/contractor will be required to maintain the interim cut repair until they have complete final repairs.
- D. All damage caused directly or indirectly to the street surface or subsurface outside the pavement cut area shall be regarded as a part of the street cut. These areas, as established by the City Inspector, will be included in the total area repaired. When repaired by the City, costs will be billed to the utility/contractor at double the current rates, which reflect actual costs.
 - E. If the backfill settles at any time during the warranty period (one year), causing deformation in the pavement or sidewalk of one-half inch or more vertically measured in any three-foot horizontal direction, utility/contractor will be notified. Upon notification, the affected utility/contractor will schedule appropriate repair and notify the City of anticipated date of repair. If this repair is not made within the agreed upon time schedule, or if no response is received within two week, the repair will be performed by the City and double the cost of the repair shall be billed to the utility/contractor. The utility/contractor must notify the Engineering Department at least 24 hours prior to beginning actual repair operations.
 - F. House Bill 665, enacted by the Legislature of the State of Texas requires:
 1. In a municipality or in the extra territorial jurisdiction of a municipality as provided by the Municipal Annexation Act (Article 970a), **VERNON'S CIVIL STATUTES OF THE STATE OF TEXAS, ANNOTATED**, on construction projects in which trench excavation will exceed a depth of five feet, the bid documents and the contract must include detailed plans and specifications for trench safety systems that meet Occupational Safety and Health Administration standards and that these plans and specifications include a pay item for these same safety systems.
 2. This section does not apply to a contract entered into by a person subject to the safety standards adopted under Article 6053-1, Vernon's Revised Civil Statutes of the State of Texas, Annotated, and the administrative penalty provisions of Article 60533-2, *ibid-* (Transportation of Gas and Gas Pipeline Facilities).

SECTION VII

Restoration Requirements

The **STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS** and the City of Richardson's standard construction details shall govern the cutting and restoration of street and alley pavements in the City. These requirements shall apply equally to any person, contractor, utility or City department who makes cuts and repairs to streets, alleys and sidewalks in the City of Richardson.

SECTION VIII

Responsibility for Barricades

The utility and /or contractor shall meet all requirements for barricading an traffic control as specified in the **TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES**.

SECTION IX

Utility Clearance for Street Paving Projects

A permit will be required when making utility adjustments in preparation for street paving projects. Time limits as specified in this manual will not apply. However, the City Engineer must be contacted at least 24 hours prior to beginning backfill operations so that an inspector can be assigned to approve the backfill. Repair requirements shall be as specified in this manual up to proposed sub grade, except that cold mix asphalt may be used by the utility/contractor in lieu of hot mix asphalt over the cut.

The utility/contractor will be required to maintain the cut until such time that a work order (no longer than six months) authorizing the construction of the street is issued. Upon notification, the affected utility/contractor will schedule appropriate repair to maintain the cut and notify the City of the anticipated date of repair. If this repair is not made within the agreed upon time schedule, or if no response is received within two weeks, the repair will be performed by the City and double the cost of the repair shall be billed to the utility/contractor. If the utility/contractor does not provide an acceptable schedule for making the emergency repair with four hours of being notified, the repairs will be performed by the Street Department and the utility/contractor will be billed for double the actual cost of the work necessary to complete the project including cleanup.

SECTION X

Jacking, Boring or Tunneling

Where pipe is to be installed under a roadway structure, it will be inspected by the appropriate agency. The following will be a guide of procedure for boring operations:

- A. At least four working days prior to scheduled boring operations, plans for the proposed construction must be submitted to the Capital Projects/Engineering Department for approval.
- B. At least 24 hours prior to beginning actual boring operations, the utility/contractor must notify the Capital Projects/Engineering Department of the time the boring will begin.

- C. Construction will be made in such a manner that will minimize interference with vehicular traffic and will not weaken or damage the existing street.
1. The location of the boring pits shall be of sufficient distance from the roadway to prevent undermining of the curb, gutter or shoulder section (normally five feet).
 2. The pit shall be dug to a depth sufficient to maintain a minimum boring depth of 24 inches below the traffic surface. Jetting types of boring equipment will not be allowed.
 3. All boring of streets shall be pressure grouting the entire length of the installation.
 4. The pits or trenches excavated to facilitate this operation shall be backfilled immediately after work has been completed. The backfill shall be placed in 8" inches maximum lifts and compacted to 95% Standard Proctor Density. Copies of density tests to be supplied to the City Engineer.
- D. During construction operations barricades, flashers, signs and other appropriate traffic control devices to safeguard traffic and pedestrians shall be furnished and maintained in accordance with the **TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES**, until the job has been completed, at which time they shall be removed.

SECTION XI

Backfill Operations

The following requirements pertain to backfill operations:

- A. At least 24 hours prior to beginning permanent backfill operations, the person responsible for the work must notify the inspector of the time the backfill of the ditch will begin. The permit number and location of the street cut shall be furnished to the inspector at that time. No backfill will be considered acceptable unless the inspector has an opportunity to check the backfill operation. If the contractor/utility refuses to remove and replace unacceptable backfill under City inspection, then the work will be accomplished by the City forces and double costs charged back to the utility/contractor responsible for other work. After regular hours and on weekends, inspection of backfills is available with 48 hours prior notice to the Capital Projects/Engineering Department.
- B. All excess water and mud must be removed from the trench prior to backfilling. Any backfill placed during a rainy period or at other times where excess water cannot be prevented from entering the trench will be considered temporary and must be

removed as soon as weather permits. All backfill will be compacted and surfaced with a minimum of two inches cold mix asphalt to improve traffic surface until permanent repair can be accomplished. The inspector must be notified of a temporary backfill. Liability remains as under "Liability for Street Cuts."

- C. Following removal of any excess water and mud from the trench, the utility can be installed and bedded with granular material per utility requirements and backfilled with selected materials from excavation or borrow. Material used in backfilling shall be an earth free of any appreciable amount of gravel or stone particles larger than two inches in any dimension. That portion of the backfill which will be within city right-of-way or public easement or other pavement shall be placed in uniform layers not to exceed eight inches in depth (loose measurement) and each layer compacted to not less than 95% of maximum density. Moisture content shall be within minus two to plus four percent of optimum moisture. The use of flooding as a means of obtaining compaction of backfill will not be allowed in existing public right-of-way or easements. If the backfill repairs do not meet these requirements the backfill will be considered unacceptable and will be removed and replaced. In cases where backfill is unacceptable and the utility/contractor refuses to make the backfill acceptable, the work will be accomplished by the street or road authority and double costs charged back to the utility/contractor responsible for the work.

- D. The City may require any material tests needed as indicated by the situations described below:
 - 1. Visual inspection by the inspector shows poor quality of workmanship or materials.
 - 2. Inspector not notified of backfill operation.
 - 3. Any other unusual circumstances that cause the inspector to doubt the quality of work.

All laboratory tests or retests will be the responsibility of the utility/contractor doing the work at its expense, and copies of said tests shall be furnished to the City Engineer.

SECTION XII

Pavement Repairs

A. Flexible Base/Asphalt Surface

- 1. Where existing pavement consists of flexible base shall extend to the bottom of the existing base or must have a minimum depth of 10 inches, which ever is greater. All disturbed base material or any base than has been undermined will be removed.

2. Flexible base with proper moisture shall be placed in approved backfill in six-inch layers and mechanically tamped to not less than 95% Standard Proctor Density. The flexible base will be left two-inches below the pavement surface, then finished with traffic bearing steel plates or temporary cold mix asphalt by the utility/contractor. When the permanent asphalt repair will be made within 24 hours and traffic conditions warrant, the cut may be left barricaded until permanent repairs can be made.
3. The utility/contractor shall clean and remove all debris and barricades from the area and maintain the area until repairs are made. Final pavement repairs will be made by the utility/contractor within two weeks after temporary repairs are made.
4. When repaired by the City, costs will be billed to the utility/contractor at double the current rates.
5. At the option of the utility/contractor, any existing flexible base may be replaced with Class A Portland Cement Concrete having a minimum depth of six inches following the procedures outlined in Subsection B-Concrete Base/Asphalt Surface described below.

B. Concrete Base/Asphalt Surface

Where existing pavement consists of concrete, with an asphalt overlay surface, the existing asphalt will be removed at least 12 inches beyond the edge of the cut. The new pavement shall be Class C Portland Cement Concrete extending to the bottom of existing concrete pavement or must have a minimum depth of six inches whichever is greater. The concrete will be consolidated by vibration and wood floated smooth at a level 1-1/2 inches below the existing asphalt surface. Traffic bearing steel plates will be used during the required 72-hour curing period, the utility/contractor or permanently repaired with 1-1/2 compacted cold mix asphalt by the utility/contractor or permanently repaired in accordance with specifications in this manual. The utility/contractor shall clean and remove all debris and barricades from the area, and maintain the cut for two weeks from the time of acceptance by the inspector. Final pavement repairs will be made by the utility/contractor. The utility/contractor shall provide a schedule and notify the City of the anticipated date for repair. If the repair is not made within the agreed upon time schedule, or if an acceptable schedule cannot be provided, the repair will be performed by the Street Department and double the cost of the repair shall be billed to the utility/contractor at the current rates which are amended as needed the Street Department to reflect double actual costs. When a final repair will be made by the utility/contractor, the utility/contractor shall be made responsible for maintaining the cut until such time as repairs are made. (See Exhibit No. 2 at the back of this manual.)

C. Concrete Pavement

Where the existing pavement is of full depth concrete construction, the concrete will be full depth saw cut and removed to a width of at least 12 inches wider than the excavated trench width. The new pavement shall be Class C 6 sack 3600 P.S.I. Portland Cement Concrete extending to the bottom of the existing pavement or must have a minimum depth of six inches, whichever is greater. The concrete will be consolidated by vibration, floated smooth. The concrete finish shall be similar to the texture of the existing surrounding concrete. The concrete surface will be cured by membrane curing or other approved methods, and all traffic will be kept off the pavement for a minimum of seven days after placing. After the concrete has cured, the utility/contractor shall promptly seal and clean the area and remove all debris and barricades. The inspector will notify the Street Department when the cut area is clear and acceptable. (See Exhibit No. 3 at the back of this manual.)

D. Full Depth Asphalt Pavement

1. Where the existing pavement is “full depth” asphalt, all disturbed base material or any base that has been undermined will be removed and replaced with Class C Portland Cement concrete having a minimum depth of six inches. The concrete will be consolidated by vibration and wood floated smooth at a level of two inches below the existing asphalt surface. The utility cut shall be temporarily repaved with two inches of compacted cold mix asphalt by the utility/contractor. The utility/contractor shall clean and remove all debris and barricades from the area and maintain the cut for two weeks from the time of acceptance by the inspector.
2. Final pavement repairs will be made by the utility/contractor. The utility/contractor shall provide a schedule and notify the City of the anticipated date of repair. If the repair is not made within the agreed upon time schedule, or an acceptable schedule cannot be provided, the repair will be performed by the Street Department to reflect double actual costs. (See Exhibit No. 4 in the back of this manual.)

E. Sidewalk

The replacement will be 3000 P.S.I. concrete placed on a compacted sub grade. A maximum of 1” of leveling sand may be used. One-half inch thick redwood expansion joints with (3) #3-2’ slip dowels with caps shall be placed on 24’ centers for a 4’ wide sidewalk and on 25’ centers for a 5’ wide sidewalk. Dummy joints, 3/8” deep, shall be placed every 4’ for a 4’ wide sidewalk and 5’ for a 5’ wide sidewalk. Reinforcement shall be one layer of No. 3 bars. 24” O.C. each way.

F. Cuts in Alleys

When concrete is encountered, follow concrete pavement requirements under Concrete Pavement. When flexible base with asphalt surface is encountered follow instruction under Flexible Base/Asphalt Surface in Pavement Repairs.

G. Materials for Pavement Repairs

The materials used will be as required in the **STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS.**

Concrete used for all construction (except backfills) shall be a 3600 P.S.I., six sack Class C, transit mix, and held to a maximum slump of four inches. Temperature-time requirements for concrete pavement will be as indicated in Exhibit No. 3. Extremes of temperature will restrict concrete placement as stated in above specifications. All concrete will be cured by membrane curing or other approved means. Traffic will not be allowed on new concrete for a minimum of 72 hours. Large slabs in cold weather may require more curing time. Calcium chloride will not be used. Concrete mix designs shall be submitted for approval before replacement of concrete pavement.

H. Traffic bearing steel plates shall be utilized on all concrete paving cuts until required curing is accomplished. Asphalt shall be used to provide smooth ramps at the edges. Plates or asphalt shall be used for temporary repairs or to re-open streets or alleys at the end of each workday.

I. Median and parking repair where trenches are cut in parkway or median areas, the disturbed area will be restored as indicated in Exhibit No. 5.

SECTION XIII

Utility Locations

Guy Wires, anchors, fire hydrants and other above ground facilities shall not encroach in the sidewalk area and shall be located not less than 2-1/2 feet from the back of street curbs or edge of alley paving. If the encroachment can be located adjacent to the right-of-way line and is in another utility company's location, written approval from the other company is required. If the encroachment is in the sidewalk area, the sidewalk must be widened to provide five feet clearance.

EXHIBIT NO. 1

Replacing Asphaltic Concrete Pavement on Flexible Base

Unless otherwise indicated or specified, when a street surface with asphalted concrete on flexible base is cut, the pavement shall be replaced as follows: the backfill shall be brought up to the bottom of the flexible base and satisfactorily densified. The edges of the existing asphalted concrete paving shall be cut back so as to produce a vertical edge for the full depth of the paving.

The installation of the improvements shall be in accordance with the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS, and STANDARD CONSTRUCTION DETAILS.

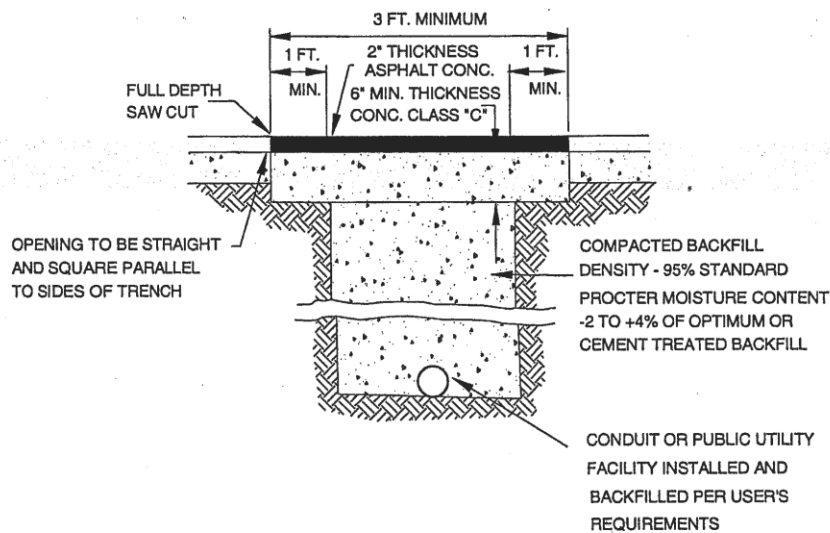


EXHIBIT NO. 2

Replacing Asphaltic Concrete Pavement With Concrete Base

The existing pavement shall be removed to a neat line at least 12" back of the firm banks of trench. The backfill shall be brought up to the bottom of the pavement and satisfactorily densified. Reinforcing bars shall be placed with like size bars lapping 12" minimum. The concrete base shall be replaced with not less than a 6" thickness of 6 sacks per cubic yard of cement (3600 P.S.I. concrete) to a line 2" below the asphaltic concrete surface of the street.

The installation of the asphaltic concrete surface over the concrete base shall be in accordance with the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS and STANDARD CONSTRUCTION DETAILS.

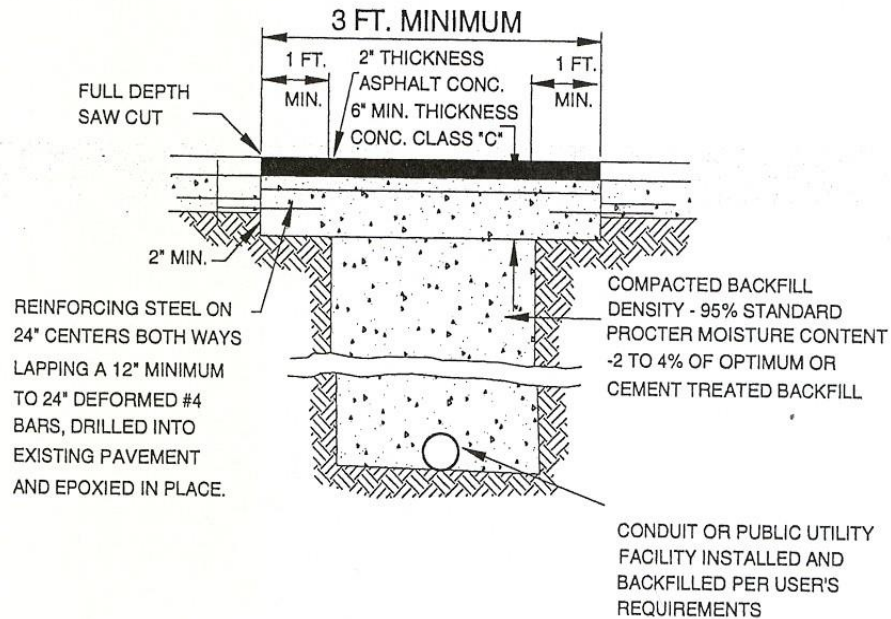


EXHIBIT NO. 3

Replacing Concrete Pavement

The existing pavement shall be sawed and removed to a line at least 12” back of the firm banks of trench. The backfill shall be brought up to the elevation of the bottom of the proposed pavement and satisfactorily densified. Reinforcing bars shall be replaced with like size bars lapping 12” minimum on splices. The concrete pavement shall be replaced with concrete of not less than 6 sacks of cement per cubic yard (3600 P.S.I. concrete) to match the finish and thickness of the existing pavement, but not less than six inches thick.

All concrete construction specified herein shall be protected from vehicular traffic, including vehicles of the contractor, until the concrete is not less than seven days old.

Installation shall be in accordance with the **STANDARD SPECIFICATIONS FOR PUBLIC WORKS NORTH CENTRAL TEXAS, and STANDARD CONSTRUCTION DETAILS.**

EXHIBIT NO. 4

Replacing Full Depth Asphaltic Concrete Pavement on Natural Soil Base

Unless otherwise indicated or specified, when a street or surface with asphaltic concrete on natural soil base is cut, the pavement shall be replaced as follows: The backfill shall be brought up to the bottom of the pavement and satisfactorily densified. The edges of the existing asphaltic concrete paving shall be cut back so as to produce a vertical edge for the full depth of the paving. The cut shall then be based with six sacks per cubic yard of cement (3,600 P.S.I. concrete) to a line 2" below the top of the asphaltic concrete surface.

Installation of the final two-inch thickness of asphaltic concrete surface over the concrete base shall be in accordance with the **STANDARD SPECIFICATIONS FOR PUBLIC WORKS NORTH CENTRAL TEXAS, and STANDARD CONSTRUCTION DETAILS.**

EXHIBIT NO. 5

Replacing Medians and Parkways

Unless otherwise indicated or specified, medians and parkways shall be replaced as shown below.

All work shall be in accordance with the **STANDARD SPECIFICATIONS FOR PUBLIC WORKS NORTH CENTRAL TEXAS**, and **STANDARD CONSTRUCTION DETAILS**.