

DOCUMENT 01100

MINIMUM CONCEPTUAL DRAWING REQUIREMENTS

PART I: SUBMITTAL

1.1 CITY OF FRIENDSWOOD (COF)

- A. Submit four (4) copies of drawings.
- B. Submit by 5:00 PM a minimum of fourteen calendar days (14 cD) prior to the next regularly scheduled meeting of the commission.

1.2 GALVESTON COUNTY CONSOLIDATED DRAINAGE DISTRICT (GCCDD)

- A. Submit six (6) copies of drawings.
- B. Submit by 5:00 PM a minimum of fourteen working days (14 wD) prior to the next regularly scheduled meeting in which project will be discussed.

PART II: REFERENCES

2.1 CITY OF FRIENDSWOOD

- A. City of Friendswood Code of Ordinances (COFCO).
- B. City of Friendswood Design Criteria Manual (COFDCM).
- C. City of Friendswood Standard Details (COFSD).
- D. City of Friendswood Technical Specifications (COFTS).

2.2 GALVESTON COUNTY CONSOLIDATED DRAINAGE DISTRICT

- A. Galveston County Consolidated Drainage District Design Criteria Manual (GCCDD – DCM).

2.3 HARRIS COUNTY FLOOD CONTROL DISTRICT

- A. Harris County Flood Control District Design Criteria Manual (HCFCD – DCM).

PART III: DRAWINGS

3.1. GENERAL REQUIREMENTS

- A. All drawings shall have a title block.
- B. All drawings shall have a sheet number.
- C. All drawings shall be printed on twenty-four inch by thirty-six inch (24 In x 36 In) nominal paper.
- D. All drawings shall have a graphic scale.
- E. Current Flood Zone Determination statement.

3.2 ALL OTHER DRAWINGS

- A. Scale shall be a minimum of one inch equals one hundred feet (1" = 100') and shall be a graphic depiction.
- B. COF Standard Signature Block.
- C. GCCDD Signature Block on Drainage Work Drawings (if applicable).
- D. HCFCD Signature Block on Drainage Work Drawings (if applicable).
- E. Revisions.
- F. Date.
- G. Benchmark, reference and adjustment data.
- H. Show plan and profile for all water, sanitary sewer and storm sewer utilities.
- I. Seal, date and original signature of the Professional Engineer licensed by the State of Texas.

3.3 OVERALL LAYOUT AND PLAT

- A. Show Boundaries of Ownership.
- B. Adjacent landowners shall be identified.
- C. Contour lines shall be at one-half foot (1/2 Ft) intervals on the proposed development site and one foot (1 Ft) intervals surrounding the proposed development site. Contour lines shall extend two hundred feet (200 Ft)

beyond proposed development site.

- D. Public Land shall be identified including but not limited to reserves and parks, ROW and easements,
- E. Legal Description of proposed development site.
- F. Total Acreage.
- G. Tracts larger than one hundred acres (100 Ac) or cut out of a tract larger than one hundred acres (100 Ac) shall have a Drainage Impact Study completed and approved.
- H. Tracts larger than one hundred acres (100 Ac) or cut out of a tract larger than one hundred acre (100 Ac) shall have a Master Conceptual Plan.
- I. Benchmark, reference and adjustment data.

3.4 DRAINAGE

- A. Show limits of one hundred year (100-Yr) flood plain.
- B. Location of drainage pipes, ditches and easements.
- C. Contour lines shall be at one-half foot (1/2 Ft) intervals on the proposed development site and one foot (1 Ft) intervals surrounding the proposed development site. Contour lines shall extend two hundred feet (200 Ft) beyond proposed development site.
- D. All drainage pipes, ditches, channels, arteries, etc. within two hundred feet (200 Ft) of the proposed development site.
- E. Location of Inlets and Manholes.
- F. Current Flood Zone determination statement.
- G. Inlet capacity table.

3.5 WATER AND SEWER

- A. Location of waterlines, sewer lines, manholes, valves and fire hydrants.
- B. Location of water and sewer service leads.
- C. Location of Force Mains and Lift Stations.

- D. Location of all water and sewer within two hundred feet (200 Ft) of the proposed development site.

3.6 STREETS

- A. Location of all streets.
- B. Name of all streets.
- C. Location of Rights-of-way and width.
- D. Location of Street Signage and Traffic Control Devices.
- E. Location of all streets and rights-of-way within two hundred feet (200 Ft) of the proposed development site.
- F. Location of Sidewalks.

3.7 UTILITIES (CABLE, GAS, ELECTRIC AND TELEPHONE)

- A. Location and types of all utilities and utility easements.
- B. Location of all utilities and types within two hundred feet (200 Ft) of the proposed development site.

END OF DOCUMENT

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**MINIMUM CONSTRUCTION DRAWING REQUIREMENTS
FOR PRELIMINARY REVIEW/APPROVAL**

PART I: SUBMITTAL

1.1 CITY OF FRIENDSWOOD (COF)

- A. Submit four (4) copies of drawings.
- B. Submit by 5:00 PM a minimum of fourteen calendar days (14 cD) prior to the next regularly scheduled meeting of the City's Planning and Zoning Commission.

1.2 GALVESTON COUNTY CONSOLIDATED DRAINAGE DISTRICT (GCCDD)

- A. Submit six (6) copies of drawings.
- B. Submit by 5:00 PM a minimum of fourteen working days (14 wD) prior to the next regularly scheduled meeting of the District's Board at which project will be discussed.

1.3 HARRIS COUNTY FLOOD CONTROL DISTRICT (HCFCD)

- A. Submit three (3) copies of the drawings.
- B. Submit drawings to the Harris County Public Infrastructure Department, Architecture and Engineering Division, Permits.

PART II: REFERENCES

2.1 CITY OF FRIENDSWOOD

- A. City of Friendswood Code of Ordinances (COFCO).
- B. City of Friendswood Design Criteria Manual (COFDCM).
- C. City of Friendswood Standard Details (COFSD).
- D. City of Friendswood Technical Specifications (COFTS).

2.2 GALVESTON COUNTY CONSOLIDATED DRAINAGE DISTRICT

- A. Galveston County Consolidated Drainage District Design Criteria

Manual (GCCDD – DCM).

2.3 HARRIS COUNTY FLOOD CONTROL DISTRICT (HCFCD)

- A. Harris County Flood Control District Design Criteria Manual (HCFCD – DCM).

PART III: DRAWINGS

3.1. GENERAL REQUIREMENTS

- A. All drawings shall have a title block.
- B. All drawings shall have a sheet number.
- C. All drawings shall be printed on twenty-four inch by thirty-six inch (24 In x 36 In) nominal paper.
- D. All drawings shall have a graphic scale.
- E. Current Flood Zone Determination statement.

3.2 TITLE SHEET

- A. Proposed Name of Project or Subdivision.
- B. Detailed area key and vicinity map.
- C. Owner:
 - 1. Name: If a corporation, also list a contact person.
 - 2. Address (include City, ST and ZIP).
 - 3. Phone Number.
- D. Engineer:
 - 1. Company Name.
 - 2. Address (include City, ST and ZIP).
 - 3. Phone Number.
 - 4. Contact Person.
 - 5. NOTE: Shall be licensed by the State of Texas.

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E. Surveyor:

1. Company Name.
2. Address (include City, ST and ZIP).
3. Phone Number.
4. Contact Person.
5. NOTE: Shall be licensed by the State of Texas.

F. Date.

3.3 GENERAL NOTES

- A. Use current COF General Notes Standard Detail Drawing.
- B. Add GCCDD General Notes to all drainage sheets (if applicable).
- C. Add HCFCD General Notes to all drainage sheets (if applicable).

3.4 DETAILS AND SPECIFICATIONS

- A. Use the current COF Standard Details.
- B. Use the current COF Technical Specifications.
- C. There shall be no deviations from City of Friendswood Standard Details. If the development has other details that apply to the specific project that are not shown on COF Standard Details they shall be submitted on separate sheet and listed as "Special Details".
- D. There shall be no deviations from City of Friendswood Technical Specifications. If the development has other details that apply to the specific project that are not shown on COF Technical Specifications they shall be submitted on separate paper and listed as "Special Specifications".

3.5 ALL OTHER DRAWINGS

- A. Scale shall be a minimum of one inch equals one hundred feet (1" = 100') and shall be a graphic depiction.
- B. COF Standard Signature Block.

- C. GCCDD Signature Block on Drainage Work Drawings (if applicable).
- D. HCFCD Signature Block on Drainage Work Drawings (if applicable).
- E. Revisions.
- F. Date.
- G. Benchmark, reference and adjustment data.
- H. Show plan and profile for all water, sanitary sewer and storm sewer utilities.
- I. Seal, date and original signature of the Professional Engineer licensed by the State of Texas.

3.6 OVERALL LAYOUT AND PLAT

- A. Show Boundaries of Ownership.
- B. Adjacent landowners shall be identified.
- C. Contour lines shall be at one-half foot (1/2 Ft) intervals on the proposed development site and one foot (1 Ft) intervals surrounding the proposed development site. Contour lines shall extend two hundred feet (200 Ft) beyond proposed development site.
- D. Public Land shall be identified including but not limited to reserves and parks, ROW and easements.
- E. Legal Description of proposed development site.
- F. Total Acreage.
- G. Tracts larger than one hundred acres (100 Ac) or cut out of a tract larger than one hundred acres (100 Ac) shall have a Preliminary Engineering Report completed and approved.
- H. Tracts larger than one hundred acres (100 Ac) or cut out of a tract larger than one hundred acres (100 Ac) shall have a Master Conceptual Plan.
- I. Benchmark, reference and adjustment data.

3.7 DRAINAGE

- A. Show limits of one hundred year (100-Yr) flood plain.

- B. Location of drainage pipes, ditches and easements.
- C. Location of major drainage arteries and detention facilities.
- D. Contour lines shall be at one-half foot (1/2 Ft) intervals on the proposed development site and one foot (1 Ft) intervals surrounding the proposed development site. Contour lines shall extend two hundred feet (200 Ft) beyond proposed development site.
- E. Points of crossing major existing arteries.
- F. All drainage pipes, ditches, channels, arteries, etc. within two hundred feet (200 Ft) of the proposed development site.
- G. Location of Inlets and Manholes.
- H. COF Storm Sewer Standard Details Drawing.
- I. Current Flood Zone determination statement.
- J. Inlet capacity table.
- K. Five year (5-Yr) storm table.
- L. Detention facility (if applicable).

3.8 WATER AND SEWER

- A. Location of waterlines, sewer lines, manholes, valves and fire hydrants.
- B. Location of water and sewer service leads.
- C. Location of Force Mains and Lift Stations.
- D. Location of all water and sewer within two hundred feet (200 Ft) of the proposed development site.
- E. COF Water Standard Details Drawing.
- F. COF Sanitary Sewer Standard Details Drawing.

3.9 STREETS

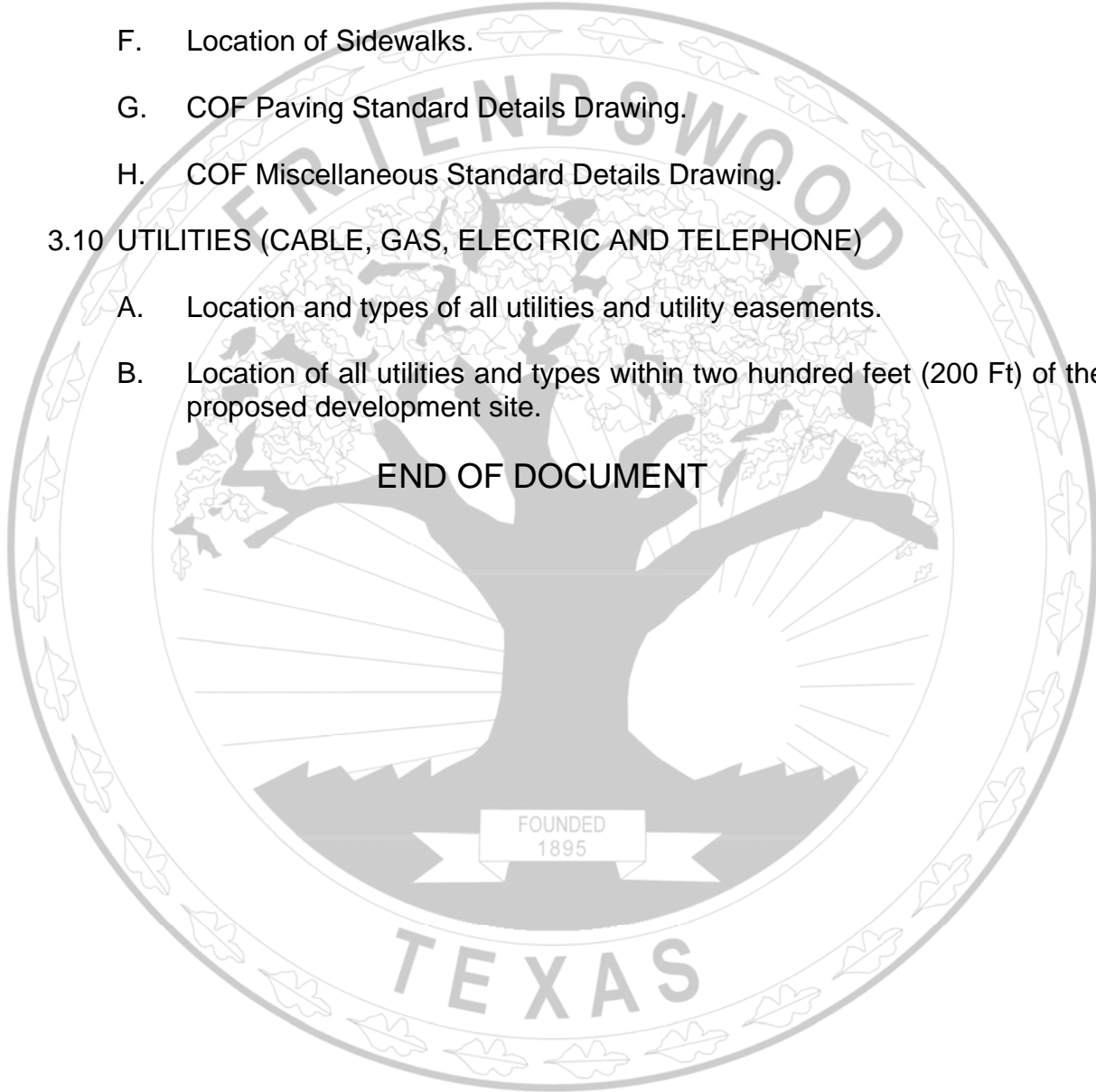
- A. Location of all streets.
- B. Name of all streets.

- C. Location of Rights-of-way and width.
- D. Location of Street Signage and Traffic Control Devices.
- E. Location of all streets and right-of-way within two hundred feet (200 Ft) of the proposed development site.
- F. Location of Sidewalks.
- G. COF Paving Standard Details Drawing.
- H. COF Miscellaneous Standard Details Drawing.

3.10 UTILITIES (CABLE, GAS, ELECTRIC AND TELEPHONE)

- A. Location and types of all utilities and utility easements.
- B. Location of all utilities and types within two hundred feet (200 Ft) of the proposed development site.

END OF DOCUMENT



SECTION 01110

SUMMARY OF WORK

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Summary of the Work including work by the City, City-furnished Products, work sequence, future work, Contractor use of Premises, special conditions for substantial completion and City occupancy.

1.2 REFERENCES

- A. CFTS – City of Friendswood Technical Specifications.
 - 1. Document 00300 – Unit Price Form.
 - 2. Document 00400 – Standard Agreement for Contracting Services.
 - 3. Section 00500 – General Conditions.
 - 4. Section 01140 – Work Restrictions.
 - 5. Section 01315 – Coordination and Meetings.
 - 6. Section 01745 – Site Restoration.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of the Contract is for construction of {INSERT PROJECT NAME}.

1.4 CASH ALLOWANCES

- A. Include the following specific Cash Allowances in Contract Price under provision of General Conditions:
 - 1. List short description of each Cash Allowance, as listed in Document 00300 – Unit Price Form, Paragraph 3.4 and a more detailed description of each, as appropriate. Do not include dollar amounts.]

1.5 ALTERNATES

- A. From the following list of Alternates, amount included in Contract Price

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for only those Alternates accepted by the City and listed in the fully executed Document 00400 – Standard Agreement for Contracting Services, Article 5:

1. [List short description of each Alternate, as listed in Document 00300 – Unit Price Form, and a more detailed description of each, as appropriate.]

1.6 CITY-FURNISHED PRODUCTS

- A. Items Furnished by the City for Installation and final connection by Contractor: Water meter.
- B. Contractor's Responsibilities:
 1. Arrange and pay for product delivery to the site.
 2. Receive and unload products at the site; jointly with the City, inspect for completeness or damage.
 3. Handle, store, install, and finish products.
 4. Repair or replace damaged items.

1.7 WORK SEQUENCE

- A. Construct the Work in phases during the construction period; coordinate construction schedule and operations with the City:
 1. Phase 1: [].
 2. Phase 2: [].
 3. Phase 3: [].
- B. For projects with no phases, do not disturb more than 50% of total project linear feet of disturbed right-of-way and easement until site restored in accordance with Section 01745 – Site Restoration.
- C. Coordination of the Work: Refer to Section 01315 – Coordination and Meetings.

1.8 CONTRACTOR USE OF PREMISES

- A. Comply with procedures for access to the site and Contractor's use of rights-of-way as specified in 01140 – Work Restrictions.

- B. Construction Operations: Limited to the City's rights-of-way provided by the City and areas shown or described in the Contract Documents.
- C. Utility Outages and Shutdown: Provide a minimum of forty-eight hours (48 Hrs) notice to the City and private utility companies (when applicable), excluding weekends and holidays, in advance of required utility shutdown. Coordinate all work as required.

1.9 STREET CUT ORDINANCE

- A. Excavations on or under pavement in the City's right-of-way must have a permit. Comply with City of Friendswood, Texas Ordinance No. 2000-1115, an ordinance amending Chapter 40 of the Code of Ordinances, Friendswood, Texas, relating to excavating in the public right-of-way.
- B. Comply with the latest edition of New Pavement Repair and Pavement Replacement details for street cuts.
- C. Quantities are included for street cut pavement repair and replacement in applicable Specification sections for Unit Price contracts.
- D. Include payment for street cut pavement repair and replacement in lump sum bid for Stipulated Price contracts.

1.10 WARRANTY

- A. Comply with warranty requirements in accordance with Section 00500 – General Conditions.

1.11 ADDITIONAL CONDITIONS FOR SUBSTANTIAL COMPLETION

- A. In addition to requirements outlined in Section 00500 – General Conditions, for Contractor to be substantially complete with the Work and call for inspection by Project Manager to confirm, the following conditions must be met or completed:

Edit the following list to add Project-specific conditions that must be met for Substantial Condition to be granted by the City. These conditions shall be in addition to conditions already stipulated elsewhere in the Contract Documents and should not be a duplication. Do not repeat a requirement that is stated elsewhere in the Contract Documents, but include a reference that points to that requirement. The following are possible examples.

1. Demonstrate the ability to receive and monitor video and Supervisory Control and Data Acquisition (SCADA) data from all remote sites (ground water plants, pressure points, fire stations, etc).
 2. All testing shall be completed and accepted by Project Manager.
 3. All SCADA and security equipment shall be installed, accepted by manufacturer's representative and approved for operation.
 4. Draft O&M manuals shall be delivered to Project Manager.
 5. Training shall be conducted, utilizing draft O&M manuals.
 6. All Safety related work including pavement stripping, signing and signalization.
 7. All safety-related systems and equipment shall be installed, accepted by manufacture's representative and approved for use.
 8. All pay items complete report.
 9. Contractor shall contact Construction Project Manager to complete Texas Department of Licensing and Regulation Post Construction Inspection of pedestrian elements for Texas Accessibility Standards.
 10. Describe other conditions that must be met or completed by Date of Substantial Completion.
- B. No additional condition described in Paragraph 1.10 may be included in Contractor's punch list.

PART II: PRODUCTS – NOT USED.

PART III: EXECUTION – NOT USED.

END OF SECTION

SECTION 01140

WORK RESTRICTIONS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. General use of the site including properties inside and outside the rights-of-way, work affecting road, ramps, streets and driveways and notification to adjacent occupants.

1.2 RIGHTS-OF-WAY

- A. Confine access, operations and storage areas to rights-of-way provided by the City and as stipulated in Section 00500 – General Conditions; trespassing on abutting lands or other lands in area shall not be allowed.
- B. Make arrangements, at no cost to the City, for temporary use of private properties. The Contractor and the Surety shall indemnify and hold harmless the City against claims or demands rising from such use of properties outside of rights-of-way. Submit a copy of agreement between private property owner and the Contractor prior to use of area. Agreements between private property owners and the Contractor shall be notarized or bear the signatures of two (2) witnesses.
- C. No material shall be stored in esplanades or medians without prior written approval by the Project Manager.
- D. Restrict total length of distributed materials along the route of construction to one thousand linear feet (1000 Lf) unless otherwise approved by the Project Manager in writing.

1.3 PROPERTIES OUTSIDE THE RIGHTS-OF-WAY

- A. Do not alter the condition of properties adjacent to and along rights-of-way.
- B. Do not use ways, means, methods, techniques, sequences or procedures that result in damage to properties or improvements.
- C. Restore damaged properties outside of rights-of-way at no cost to the City to as good as or better than the original condition prior to

construction.

1.4 USE OF SITE

- A. Obtain approvals from governing authorities prior to impending or closing public roads and streets. Do not close more than two (2) consecutive intersections at one (1) time.
- B. Notify the Project Manager a minimum of five working days (5 wD) prior to closing a street or street crossing. Obtain any required permits for street closures in advance.
- C. Maintain ten foot (10 Ft) wide minimum access for emergency vehicles including access to Fire Hydrants.
- D. Avoid obstructing drainage ditches or inlets. When obstruction is unavoidable due to requirements of the Work, provide grading and temporary drainage structures to maintain unimpeded flow.
- E. Locate, document and protect private and public lawn sprinkler systems that may exist within the site. Repair or replace all damaged systems to original or better conditions at the start of the Work.
- F. Conform to daily clean-up requirements as specified in these Technical Specifications and Section 00500 – General Conditions.
- G. Beware of overhead power lines existing in the area and in close proximity of the Work. When ten feet (10 Ft) of clearance between energized power line and construction-related activity cannot be maintained, request that the power company responsible for the power line de-energize or move the conflicting overhead power line. Schedule, coordinate and pay costs associated with de-energizing or moving the conflicting overhead power lines. When there is no separate pay item for this work, include these costs in various items of bid that make such work necessary.

1.5 NOTIFICATION OF ADJACENT OCCUPANTS

- A. Notify individual occupants in the areas to be effected by the Work of construction and time schedule. Notify not less than seventy-two hours (72 Hrs) no more than two weeks (2 Wks) prior to work being performed within two hundred feet (200 Ft) of homes and/or businesses.
- B. Include in notification nature of the Work, and names and telephone numbers of two (2) company representatives for resident contact that shall be available on twenty-four hour (24 Hr) call.

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- C. Submit proposed notification to the Project Manager for approval t least of twenty-four hours (24 Hrs) in advance of schedule timed to notify adjacent occupants.

1.6 PUBLIC, TEMPORARY AND CONSTRUCTION ROADS AND RAMPS

- A. Construct and maintain temporary detours, ramps and roads to provide for normal public traffic flow when it is necessary to close public roads or streets.
- B. Provide mats or other means to prevent overloading or damage to existing roadways from tracked equipment, large tandem axle trucks and/or equipment that will damage existing roadway surfaces.
- C. Construct and maintain access roads and parking areas as specified in Section 01505 – Temporary Facilities and Controls.

1.7 EXCAVATION IN STREETS AND DRIVEWAYS

- A. Avoid hindering or inconveniencing public travel on streets and roadways for more that two hours (2 Hrs) at one (1) time, except with prior written approval by the Project Manager.
- B. Obtain the approval of the Director of Community Development and the Director of Public Works when the nature of the Work requires closure of an entire street. Permits required for street closure are the Contractor's responsibility. Avoid unnecessary inconvenience to adjacent property owners.
- C. Remove surplus materials and debris and open each block for public use as work in that block is complete.
- D. Acceptance of any portion of the Work shall not be based solely on the return of the street to public use.
- E. Do not obstruct the ingress/egress of driveways or entrances to private properties without prior written approval by the Project Manger.
- F. Provide temporary crossings or complete excavation and backfill in one (1) continuous operation to minimize the duration of obstruction when excavation is required to cross driveways and entrances.
- G. Provide barricades and signs in accordance with Section VI of the State of Texas Manual on Uniform Traffic Control Devices – latest addition.

1.8 TRAFFIC CONTROL

- A. Comply with traffic regulation as specified in Section 01555 – Traffic Control and Regulation.
- B. Install traffic control devices as shown in the Traffic Control Sheet of the Drawings.

1.9 SURFACE RESTORATION

- A. Restore the site to as good or better than the condition existing before construction or better.
- B. Repair paved areas per the specifications of Section – 02845 Pavement Repair and Resurfacing.
- C. Repair damaged turf, level with bank sand conforming to Section 02125 – Excavation and Backfill for Utilities, or topsoil conforming to Section – 02905 Topsoil and re-sod in accordance with Section 02915 – Sodding. Water and level newly sodded areas with adjoining turf using appropriate steel wheel rollers for sodding. Do not use spot sodding, checkerboard sodding or sprigging unless otherwise specified or directed by the Project Manager.

1.10 LIMITS OF CONSTRUCTION

- A. Confine operations to lands within construction work limits shown on the Drawings. Unless otherwise noted on the Drawings adhere to the following:
 - 1. Where utility alignment is within esplanade or median, and construction limits are shown on the Drawings to extend to the edge of the esplanade or median, keep equipment, materials and stockpiles a minimum of five feet (5 Ft) from back of curb.
 - 2. Where construction limits shown on the Drawings extend to the property line, keep sidewalks free of equipment, materials and stockpiles.

1.12 EQUIPMENT AND MATERIAL SALVAGE

- A. Upon completion of the Work, carefully remove salvageable equipment and material. Deliver them to the City of Friendswood as directed by the Project Manager. Dispose of all other equipment not designated to be salvaged offsite at no additional cost to the City.

1.13 WORKING TIME

- A. Normal work hours shall be from seven (7) A.M. to eight (8) P.M. Monday through Friday, Central Standard Time. Daylight Savings Time shall not amend these working hours.
- B. Work hours for work that does not require inspection shall be from nine (9) A.M. to six (6) P.M. on Saturdays, Sundays and Holidays.
- C. No work shall be done at any other time than those stated above without prior written approval by the Project Manager.
- D. No work that is need of inspection shall be undertaken beyond the time listed in paragraph 1.13.A in this Section.
- E. The Contractor can request that unusual circumstances require work, which must be inspected, that must be accomplished out side of the normal hours listed in paragraph 1.13.A in this Section. In such circumstances the request shall be a minimum of forty-eight hours (48 Hrs) before the day requested and the following shall apply:
 - 1. The Contractor shall request in writing approval to work beyond the normal work hours. In this request, the Contractor shall state the reason for each request. Permission is at the sole discretion of the Director of Community Development.
 - 2. The Contractor shall pay to the City for the Project Manager or other City Personnel in accordance with the City's Adopted Fee Schedule.
 - 3. The Contractor shall also pay for the Independent Testing Laboratory if needed.
- F. Request to work on days other than normal working days does not constitute an approval to do so. Work on Saturday, Sunday and/or Holidays shall only be done after such request has been approved by the Director of Community Development.

1.14 REFERENCES

- A. CFTS – City of Friendswood Technical Specifications.
 - 1. Section 00500 – General Conditions.
 - 2. Section 01505 – Temporary Facilities and Controls.

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- 3. Section 01555 – Traffic Control and Regulation.
- 4. Section 02125 – Excavation and Backfill for Utilities.
- 5. Section 02845 – Pavement Repair and Resurfacing.
- 6. Section 02905 – Topsoil.
- 7. Section 02915 – Sodding.

END OF SECTION

