

## **PART 1 - GENERAL**

### **1.1 LOCATION:**

The work to be performed as described in the Request for Proposal (RFP) is located at 7115 Greenback Lane, Citrus Heights, CA 95621 (APN #243-0020-055-0000).

### **1.2 DESCRIPTION OF PROJECT:**

#### **A. Scope of Work:**

1. This Section specifies the labor, materials, equipment and incidentals required for the demolition, and disposal of all structure, building materials, equipment and accessories to be removed as shown on the Drawings (see Appendix A) and as specified herein.
2. There may be existing and active fire, irrigation, sewer, electrical, stormwater, sewer, water and other facilities on site as indicated on the Drawings. It is essential that these facilities be removed from active service prior to demolition. It is the Contractor's responsibility to, with sufficient notice, coordinate with the various utility agencies for the service shut-off of all utility infrastructure.
3. Demolition generally includes:
  - a. Complete demolition and removal of all site improvements within the area of demolition work as shown on the Drawings including but not limited to paving, curbs, sidewalks, retaining walls, fencing, irrigation, vegetation, manholes, valve vaults, fountain pits, utility infrastructure piping, and mechanical and electrical equipment.
  - b. Complete demolition and removal of all above and below ground structures, concrete slabs and foundations, basements, vaults, and underground utilities (water, sewer, electrical, storm drain etc.) as shown on the Drawings and specified herein.
  - c. All material, equipment, rubble, debris and other products of the demolition shall become the property of the Contractor for his disposal off-site in accordance with all applicable laws and ordinances at the Contractor's expense. The sale of salvageable materials by the Contractor shall only be conducted off-site. The sale of removed items on the site is prohibited by the City.
  - d. Following demolition, the Contractor shall import fill from the City-designated borrow area, and fill and compact all open holes, voids left by pipe and structure removal; and the site shall be graded to level of adjoining parking lot (6315 Fountain Square Drive) and adjoining sidewalks and planters and as shown on the Drawings. The Geotechnical Engineer has tested the off-site dirt and provided a Geotechnical Report (see Appendix C).

1.3 TIME OF COMPLETION:

- A. For the purpose of this contract, all work under this contract shall be completed within **30 WORKING DAYS** from the date of issuance of the Notice to Proceed.

1.4 LIQUIDATED DAMAGES:

- A. For the purpose of this contract, Liquidated Damages shall be set at the amount of **One Thousand Dollars (\$1,000.00)** per calendar day.

1.5 INSURANCE REQUIREMENTS:

- A. The City's general requirements regarding insurance and liability are outlined in detail in the Special provisions (see Section E, beginning on page SP-16). Please see the Insurance and Surety Information Sheet in the Appendix for specific requirements that apply to this project.

1.6 EROSION CONTROL PLAN (SWPPP):

A. REQUIREMENTS:

1. The Contractor's attention is directed to Section 10-4 "Erosion, Sediment and Water Pollution Control" of the County Standard Construction Specifications. The Contractor shall conform to all applicable provisions of the referenced section and these Technical Specifications. The Contractor shall comply with Section 7-1.01G Water Pollution, of the State Standard Specifications.
2. This project shall conform to the requirements of General Permit No. CAS000002 issued by the Regional Water Quality Control Board. This permit, hereafter referred to as the "Permit", regulates storm water discharges associated with construction activities. The City submitted a Notice of Intent (NOI) to the State Water Resources Control Board to allow the project to be constructed under the Permit.
3. Unless arrangements for disturbance of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility whatsoever to the Contractor or property owner with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.
4. The Contractor shall be responsible for the costs and for liabilities imposed by law as result of the Contractor's failure to comply with the provisions set forth in this section "Erosion, Sediment, and Water Pollution Control", including but not limited to, compliance with the

applicable provisions of the 2009 approved Stormwater Quality Improvement Plan (SQIP); the Permit, and Federal, State and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the County or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

5. At reasonable times and upon presentation of credentials and other documents as may be required by law, the Contractor shall allow authorized agents of the California Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental protection Agency and the local storm water management agency to:
  - a. Enter upon the construction site and the Contractor's facilities pertinent to the work;
  - b. Have access to and copy records that must be kept as specified in the permit;
  - c. Inspect the construction site and related soil stabilization practices and sediment control measures; and
  - d. Sample or monitor for the purpose of ensuring compliance with the Permit.
6. Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor or otherwise access the project side or the Contractor's records.

**B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)  
PREPARATION, APPROVAL & UPDATES**

1. The City has prepared the initial Storm Water Pollution Prevention Plan (SWPPP) included in Appendix D and applied for the Notice of Intent to obtain coverage under the State Water Resources Control Board Order 2009-0014-DWQ (Construction General Permit, amended). The City will provide a Qualified Stormwater Developer (QSD) and Qualified Stormwater Practitioner (QSP) to monitor SWPPP implementation and file all State required reports throughout the project. This does not relieve the contractor from his or her duties under the General Permit including, but not limited to, recommending amendments to the SWPPP as necessary, implementing the measures outlined in the SWPPP, performing regular inspections and implementing required corrections, within three (3) business days, or prior to any forecast rain event of 50% or greater, per NOAA.
2. This project is a Risk Level 2. The specific measures required of Risk Level 2 projects are found in Attachment D of the Construction General

Permit (CGP).

3. Within 7 working days after the approval of the contract, the Contractor shall, review the initial SWPPP, recommend amendments to address contractor operations including, but not limited to, construction staging yards, material stock piles and concrete washout basins and submit the amended SWPPP to the City Engineer for review and approval. Note: Erosion and sediment control shall conform to the requirements of the current edition of the "Storm Water Quality Design Manual for the Sacramento and South Placer Regions" which is available on the Sacramento County Department of Water Resources website.
4. The City Engineer will have **5 working days** to review the proposed SWPPP amendments. If revisions are required, as determined by the City Engineer, the Contractor shall revise and resubmit the SWPPP within **3 working days** of receipt of the City Engineer's comments. The City Engineer will have **3 working days** to review the revisions. Upon the City Engineer's approval of the amended SWPPP, two additional copies of the SWPPP, incorporating the required changes shall be submitted to the City Engineer. In order to allow construction activities to proceed, the City Engineer may conditionally approve the SWPPP while minor revisions are being completed. A copy of the SWPPP shall be kept on the job site (in the job trailer) at all times.
5. Soil stabilization Best Management Practices (BMPs) shall be maintained on any area disturbed. All BMPs shall be installed/implemented and maintained year round. These BMPs shall include (but not be limited to) the BMPs checked on the Construction Site BMPs Consideration Checklist shown in Table 1 below:

| <b>Table 1<br/>CONSTRUCTION SITE BMPs<br/>CONSIDERATION CHECKLIST</b> |   |                |               |
|---|---|----------------|---------------|
| <b>TEMPORARY SOIL STABILIZATION BMPs</b>                              |   |                |               |
| Check if used   | BMP   | Caltrans BMP # | County Detail |
| ✓   | Storm Water Pollution Prevention Plan (SWPPP) Preparation | N/A            |               |
| ✓   | Scheduling  | SS-1           |               |
| ✓   | Preservation of Existing Vegetation                       | SS-2           |               |
| <b>CONSTRUCTION SITE BMPs</b>   |   |                |               |

| CONSIDERATION CHECKLIST                                |  |                |               |
|--|--|----------------|---------------|
| <b>TEMPORARY SOIL STABILIZATION BMPs</b>               |  |                |               |
| Check if used  | BMP  | Caltrans BMP # | County Detail |
| ✓  | Storm Water Pollution Prevention Plan (SWPPP) Preparation    | N/A            |               |
| ✓  | Scheduling   | SS-1           |               |
| ✓  | Preservation of Existing Vegetation                          | SS-2           |               |
| ✓  | Hydraulic Mulch  | SS-3           |               |
| ✓  | Hydro seeding  | SS-4           |               |
| ✓  | Binded Fiber Matrix  | SS-5           |               |
| ✓  | Straw Mulch  | SS-6           |               |
| ✓  | Geotextiles, Plastic Covers, & Erosion Control Blankets/Mats | SS-7           | 11-10A/B      |
| ✓  | Wood Mulching  | SS-8           |               |
| <b>Temporary Concentrated Flow Conveyance Controls</b> |  |                |               |
|  | Earth Dikes/Drainage Swales & Lined Ditches                  | SS-9           |               |
| ✓  | Outlet Protection/ Velocity Dissipation Devices              | SS-10          |               |
|  | Slope Drains   | SS-11          |               |
|  |  |                |               |
| <b>TEMPORARY SEDIMENT CONTROL BMPs</b>                 |  |                |               |
| Check if used  | BMP  | Caltrans BMP # | County Detail |
|  | Silt Fence   | SC-1           | 11-5          |
|  | Sediment Trap (Stabilized Outlet)                            | SC-2           | 11-3          |
|  | Sediment Trap (Vegetated Outlet)                             | SC-3           | 11-2          |
|  | Check Dam  | SC-4           |               |
| ✓  | Fiber Rolls  | SC-5           | 11-4          |
| ✓  | Gravel Bag Berm  | SC-6           | 11-7          |
| ✓  | Street Sweeping and Vacuuming                                | SC-7           |               |
| ✓  | Gravel Bag   | SC-8           | 11-7          |
|  |  |                |               |
| ✓  | Storm Drain Inlet Filter Bag                                 | SC-10          | 11-9          |
|  |  |                |               |
| <b>WIND EROSION CONTROL BMPs</b>                       |  |                |               |

|  |  |               |               |
|--|--|---------------|---------------|
| ✓  | Wind Erosion Control   | WE-1          |               |
| <b>TRACKING CONTROL BMPs</b>                                 |  |               |               |
| Check if used  |  | Caltrans BMP# | County Detail |
| ✓  | Stabilized Construction Entrance/Exit                        | TC-1          | 11-1          |
| ✓  | Stabilized Construction Roadway                              | TC-2          |               |
| ✓  | Entrance/Outlet Tire Wash                                    | TC-3          |               |
| <b>NON-STORM WATER MANAGEMENT BMPs</b>                       |  |               |               |
|  | <b>BMP</b>   | Caltrans BMP# | County Detail |
| ✓  | Water Conservation Practices                                 | NS-1          |               |
|  | Dewatering Operations  | NS-2          |               |
| ✓  | Paving and Grinding Operations                               | NS-3          |               |
| ✓  | Temporary Stream Crossing                                    | NS-4          |               |
|  | Clear Water Diversion  | NS-5          |               |
| ✓  | Illicit Connection/Illegal Discharge Detection and Reporting | NS-6          |               |
| ✓  | Potable Water/Irrigation                                     | NS-7          |               |
| <b>Vehicle and Equipment Operations</b>                      |  |               |               |
| ✓  | Vehicle and Equipment Cleaning                               | NS-8          |               |
| ✓  | Vehicle and Equipment Fueling                                | NS-9          |               |
| ✓  | Vehicle and Equipment Maintenance                            | NS-10         |               |
| <b>WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs</b> |  |               |               |
|  | <b>BMP</b>   | Caltrans BMP# | County Detail |
| ✓  | Material Delivery and Storage                                | WM-1          |               |
| ✓  | Material Use   | WM-2          |               |
| ✓  | Asphalt Concrete Stockpiles                                  | WM-3          |               |
| ✓  | Spill Prevention and Control                                 | WM-4          |               |
| ✓  | Solid Waste Management                                       | WM-5          |               |
| ✓  | Hazardous Waste Management                                   | WM-6          |               |
| ✓  | Contaminated Soil Management                                 | WM-7          |               |

|   |                                  |       |      |
|---|----------------------------------|-------|------|
| ✓ | Concrete Waste Management        | WM-8  | 11-6 |
| ✓ | Sanitary/Septic Waste Management | WM-9  |      |
| ✓ | Liquid Waste Management          | WM-10 |      |

6. The Contractor shall provide a QSP to perform regular inspection of the site and the installed BMPs. The Contractor's QSP shall place a record of all inspections in the project SWPPP binder within 24 hours of any inspection. The project SWPPP binder shall be made available to the City for review at any time during normal working hours. The Contractor shall submit all inspection and monitoring documentation to the Owner anytime it is requested.
7. Erosion and sediment control BMPs shall be placed, monitored for effectiveness, and maintained throughout the construction process
8. The following precautions shall be implemented regardless of the season:
  - a. A stabilized construction site access should be constructed at any construction staging and/or stockpile site as determined appropriate by the Engineer.
  - b. Temporary stockpiling of construction materials, including vehicles and portable equipment, supplies, fuels and chemicals, will be restricted to designated construction staging areas within the project area.
  - c. Any wet season requirement shall be implemented if conditions exist which may cause erosion and sedimentation.
  - d. The contractor shall not be limited to the requirements listed above, but shall be responsible for implementing whatever measures are necessary to prevent erosion and sedimentation.
9. The Contractor shall recommend amendments to the SWPPP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems or when deemed necessary by the Engineer. The SWPPP shall be amended by the City's QSD if the SWPPP is in violation of any condition of the Permit, or has not effectively achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially approved SWPPP, which are required on the project to control water pollution effectively. Amendments to the SWPPP shall be submitted to the Engineer for review and approval in the same manner specified for the initially approved SWPPP. Approved amendments shall be dated

and logged in the SWPPP. Upon approval of the amendment, the Contractor shall implement the additional control measures or revised operations within 3 business days or prior to any forecast rain event of 50% or greater per NOAA.

10. If the project is in non-compliance at any time, the Contractor shall make a written report to the City Engineer within 15 days of identification of non-compliance.

C. SWPPP IMPLEMENTATION AND MAINTENANCE

1. Upon approval of the amended SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the SWPPP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the City Engineer or specified in these Technical Specifications, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 5-21, "Temporary Suspension of Work," of the Standard Construction Specifications.
2. Soil-disturbed area of the project site shall be not more than 3 acres. The Engineer may approve, on a case-by-case basis, expansions of the active, soil-disturbed area limit. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control measures to protect soil-disturbed areas on the project site before the onset of precipitation. A quantity of soil stabilization and sediment control materials shall be maintained on site equal to 100 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site. A detailed plan for the mobilization of sufficient labor and equipment shall be maintained to fully deploy control measures required for the protection of soil-disturbed areas on the project site prior to the onset of precipitation. A current inventory of control measure materials and the detailed mobilization plan shall be included as part of the SWPPP.
3. Soil-disturbed areas of the project site shall be considered to be non-active whenever soil disturbance activities are to be discontinued for a period of 20 or more days and the areas are fully protected. Areas that will become non-active during the wet season shall be fully protected with soil stabilization practices and sediment control measures within 10 days of the discontinuance of soil disturbing activities or prior to the onset of precipitation, whichever is first to occur.
4. Private property grading areas shall be stabilized by permanent erosion



control seeded blanket.

5. Soil-disturbed areas of the project site shall be fully protected at the end of each day with soil stabilization practices and sediment control measures unless fair weather is predicted through the following workday. The Contractor shall monitor the weather forecast on a daily basis. The National Weather Service (NOAA) forecast shall be used. If precipitation is predicted at 50% or greater within 48 hours, and during business hours, the City's QSP shall develop a Rain Event Action Plan (REAP) and deliver to the Contractor. The Contractor shall implement the REAP 24 hours prior to the forecast rain event, and shall maintain a paper copy of the REAP on site. Construction scheduling shall be modified, as required, and functioning control measures shall be deployed prior to the onset of the precipitation.
6. The Contractor shall comply with all provisions of the Construction General Permit, including inspection and maintenance during the life of the project, including any work stoppages for any reason, including weather, holidays, moratorium, utility conflicts, etc.
7. If the Contractor or the City Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the City Engineer in writing, but not later than the onset of subsequent precipitation. The correction of deficiencies shall be at no additional cost to the County.

1.7 QUALITY ASSURANCE

- A. Permits and Licenses: Contractor shall obtain all necessary permits and licenses for performing the Work and shall furnish a copy of same to the City prior to commencing the Work. The Contractor shall comply with the requirements of the permits.
- B. Notices: Contractor shall issue written notices of planned demolition to companies or local authorities owning utility conduit, wires, or pipes running to or through the project site. Copies of said notices shall be submitted to the City.
- C. Utility Services: Contractor shall notify and coordinate with utility companies or local authorities furnishing gas, water, electrical, telephone, or sewer service to remove any equipment in the structures to be demolished and to remove, disconnect, cap, or plug their services to facilitate demolition.

1.8 SUBMITTALS:

- A. The Contractor shall submit to the Engineer at minimum ten (10) days prior of using said demolition work the work plan, schedules and certificates as noted in these specifications. Submittals will be reviewed and one (1) copy will be returned to the Contractor with conditions and/or approvals. Other reports and certificates for materials furnished may be requested by the Engineer.
- B. Submit to the City Engineer for their approval, 4 copies of the work plan, schedules and all documents required by the Planning Division Requirements Mitigation Measures.

1.9 PRESERVATION OF PROPERTY

- A. Attention is directed to the provisions in Section 6-21, "Preservation of Property," of the City Standard Construction Specifications and these special provisions. Existing curb, gutter, sidewalks, and other improvements, that are not to be removed as shall be protected from damage. Any improvements to remain that are injured or damaged by reason of the Contractor's operations shall be replaced by the Contractor. Replacement planting shall conform to the requirements in Section 20-4.07, "Replacement," of the State Standard Specifications. Damaged or injured improvements and plants etc., shall be removed and disposed of outside the road right of way in accordance with the provisions in Section 7-I.13 of the State Standard Specifications.

1.10 DEMOLITION ENTRANCE

A. REQUIREMENTS:

- 1. A temporary demolition entrance shall be constructed, maintained, and later removed at the locations shown on the approved Storm Water Pollution Prevention Plan, prepared by the contractor, in conformance with "Water Pollution Control" of these specifications, and in conformance with details shown on the plans and specifications. Number of temporary construction entrances shall as per "Water Pollution Control" and as required by the regulatory agencies. Temporary construction entrance shall be one of the water pollution control practices for tracking control. The Storm Water Pollution Prevention Plan shall include the use of temporary construction entrance. At the option of the contractor, temporary construction entrance shall be Type 1 or Type 2.
- 2. Temporary entrance fabric shall be manufactured from polyester, nylon or polypropylene material or any combination thereof. Temporary

entrance fabric shall be a nonwoven, needle punched fabric, free of any needles which may have broken off during the manufacturing process. Temporary entrance fabric shall be permeable and shall not act as a wicking agent. Temporary entrance fabric shall be manufactured from virgin or recycled, or a combination of virgin and recycled polymer material. No virgin or recycled material shall contain biodegradable filler material that can degrade the physical or chemical characteristics of the finished fabric. The Engineer may order tests to confirm the absence of biodegradable filler material in conformance to the requirements in ASTM Designation E-204 (Fourier Transformed Infrared Spectroscopy-FTIR). Temporary entrance fabric shall conform to the following requirements:

| Specifications  | Requirements |
|---|--------------|
| Mass per unit area, grams per square meter, min.<br>ASTM Designation: D 5261      | 235          |
| Grab tensile strength (25-mm grip), kilonewtons, min.<br>ASTM Designation: D4632* | 0.89         |
| Elongation at break, percent min<br>ASTM Designation: D4632*                      | 50           |
| Toughness, kilonewtons, min<br>(percent elongation x grab tensile strength)       | 53           |

*\*Or appropriate test method for specific polymer*

- Rocks shall be angular to sub-angular in shape, and shall conform to the material quality requirements in Section 72-2.02, "Materials," of the Standard Specifications for apparent specific gravity, absorption, and durability index. Rocks used for temporary entrance shall conform to the following sizes:

| Square Screen Size (in) | Percentage Passing |
|-------------------------|--------------------|
| 6                       | 100                |
| 3                       | 0-20               |

- Corrugated Steel Panels:  
Corrugated steel panels shall be prefabricated and shall be pressed or shop welded, with a slot or hooked section to facilitate coupling at the ends of the panels

5. Temporary construction entrance shall be installed as follows:
  - a. Prior to placing the temporary entrance fabric, the areas shall be cleared of all trash and debris. Vegetation shall be removed to the ground level. Trash, debris, and removed vegetation shall be disposed of in conformance with the provisions in Section 7-1-13, "Disposal, of Material outside the Highway Right of Way," of the Standard Specifications.
  - b. A sump shall be constructed within 20 feet of each temporary construction entrance as shown on the plans. The exact location of the sump will be determined by the Engineer.
  - c. Before placing the temporary entrance fabric, the ground will be graded to a uniform plane. The relative compaction of the top 18 inches shall not be less than 90 percent. The ground surface shall be free of sharp objects that may damage the temporary entrance fabric, and shall be graded to drain to the sump.
6. Temporary entrance shall be positioned longitudinally along the alignment of the entrance, as directed by the Engineer.
  - a. The adjacent ends of the fabric shall be overlapped a minimum of 12 inches.
  - b. Rocks to be placed directly over the fabric shall be spread in the direction of traffic, longitudinally and along the alignment of the temporary construction entrance.
  - c. During spreading of the rocks, vehicle or equipment shall not be driven directly on the fabric. A layer of rocks of minimum 6 inches shall be placed between the fabric and the spreading equipment to prevent damage to the fabric.
  - d. For type 2 temporary construction entrances, a minimum of 6 coupled panel sections shall be installed for each temporary construction entrance. Prior to installing the panels, the ground surface shall be cleared of all debris to ensure uniform contact with the ground surface. Fabric damaged during rock placement shall be repaired by placing a new piece of fabric over the damaged area. The piece of fabric shall be large enough to cover the damaged area and provide a minimum 18 inches overlap on all edges. Details for alternative temporary construction entrance shall be submitted to the Engineer for approval at least 7 days prior to installation.
  - e. If buildup of soil and sediment deter the function of the temporary

construction entrance, the Contractor shall immediately remove and dispose of the soil and sediment, and install additional corrugated steel panels and spread additional rocks to increase the capacity of the temporary construction entrance at the Contractor's expense.

- f. When no longer required as determined by the Engineer, temporary construction entrances shall become the property of the Contractor and be removed and disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.
- g. Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary construction entrance, including the sumps, shall be backfilled and repaired in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications.
- h. While the temporary construction entrances are in use, pavement shall be cleaned and sediment removed at least once a day, and as often as necessary when directed by the Engineer. Soil and sediment or other extraneous material tracked onto existing pavement shall not be allowed to enter drainage facilities

## B. MAINTENANCE

- 1. The contractor shall maintain temporary construction entrance throughout the contract or until removed. The Contractor shall prevent displacement or migration of the rock surfacing or corrugated steel panels. Any significant depressions resulted from settlement or heavy equipment shall be repaired by the Contractor, as directed by the Engineer. Temporary construction entrance shall be maintained to minimize tracking of soil and sediment onto existing public roads.
- 2. Temporary construction entrance shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary entrance resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.
- 3. All in-place BMPs shall remain in-place at the conclusion of the demolition contract. The site will otherwise be clean and level for a follow-on contractor to assume control of the site.

## 1.11 SITE CONDITIONS

- A. Prior to demolition, the Contractor shall obtain written verification from the utility owner(s) that the existing utilities, including stormwater, fire water, sewer, and/or water facilities, are not operational and are ready for demolition
- B. The City assumes no responsibility for the actual condition of the structures to be demolished or relocated.
- C. Conditions existing at the time of inspection for bidding purposes will be maintained by the City insofar as practicable. However, variations within each site may occur prior to the start of demolition work.
- D. No additional payment will be made for pumping or other difficulties encountered due to water.
- E. Certain information regarding the reputed presence, size, character and location of existing underground structures, pipes and conduit has been shown on the Drawings. There is no certainty of the accuracy of this information, and the location of underground structures shown may be inaccurate and other obstructions than those shown may be encountered. The Contractor hereby distinctly agrees that the City is not responsible for the correctness or sufficiency of the information given; that in no event is this information to be considered as a part of the Contract; that he shall have no claim for delay or extra compensation on account of incorrectness of information regarding obstructions either revealed or not revealed by the Drawings; and that he shall have no claim for relief from any obligation or responsibility under this Contract in case the location, size, or character of any pipe or other underground structure is not as indicated on the Drawings, or in case any pipe or other underground structure is encountered that is not shown on the Drawings.

#### 1.12 RESTRICTIONS

- A. No building, or structure, or any part thereof, shall be demolished until an application has been filed by the Contractor with the City Building Department and a permit issued. The fee for this permit shall be the Contractor's responsibility. Demolition shall be in accordance with applicable provisions of the Building Code of the State of California Building Code Title 24.
- B. No explosives shall be used at any time during the demolition. No burning of combustible material will be allowed.
- C. Contractor work hours are limited to 7 am to 5 pm, Monday through Friday. Saturday work is limited 8 am to 5 pm. Contractor may not backfill trenches or the basements on Saturdays.

- D. Truck traffic shall not use Stock Ranch Road for ingress or egress.

#### 1.13 CONSTRUCTION WASTE

- A. All materials not designated to remain, shall become the Contractor's property and shall be removed off-site. The Contractor must dispose of all waste in conformance with the State of California Green Building Code.
- B. Contractor must dispose of construction waste in accordance with the 2013 California Green Building Code Standards.
- C. City contact for specific questions regarding construction waste disposal:

Greg Anderson, Chief Building Official, (916) 727-4760 or  
ganderson@citrusheights.net

#### 1.14 TRAFFIC CONTROLS

- A. This work shall include signage, flagging, traffic-handling equipment, devices and other related items to provide for safety and convenience to the public and traffic during construction. Prior to performing any work that requires a lane closure, a Traffic Control Plan, prepared by the Contractor, shall be reviewed and approved by the City of Citrus Heights.
- B. Materials
  - 1. All traffic control devices shall conform to Section 12 of the Caltrans Standard Specifications.
  - 2. All traffic control shall be in accordance with the County of Sacramento Standard Construction Specifications (Sept. 2001 edition), Section 12 "Construction Area Traffic Control" and this Section.
  - 3. Traffic Control Plans (hereinafter "TCP") shall be developed for the Project to assure that adequate consideration is given to the safety and convenience of motorists, pedestrians, and workers during construction. The TCP shall be in accordance with the County of Sacramento Standard Construction Specifications (Sept. 2001 edition), Section 6-14 "Traffic Control Plans" and this Section. The TCP shall include all work within the City rights-of-way. The TCP shall be submitted to the Engineer at the pre-construction meeting. Non-compliance with any stipulation of this Section will be justification for the City to stop work.
- C. Execution:
  - 1. Installation of all traffic control devices shall conform to Section 12 the County of Sacramento Standard Construction Specifications (Sept. 2001 edition).
  - 2. The Contractor shall be responsible for the safety of traffic within the

project limits and on the approaches to the project.

3. The Contractor shall notify the fire department, police department, schools, and other agencies required by the Engineer as to the road closure and the expected duration.
  4. Driveways shall be usable at all times, unless the contractor has made special arrangements with the property owner to close the driveway. The City shall be provided a written copy of the arrangement approved by the property owner.
  5. Pedestrian access facilities shall be provided through construction areas within the right of way.
  6. On-Street Parking – Contractor will provide, install, maintain and remove “No Parking” signs in areas where the Contractor’s work will require restricted parking. The Contractor shall place notification for the elimination of on-street parking, if required, at least forty-eight (48) hours, but not more than seventy-two (72) hours prior to the start of work. The signs shall clearly show the date(s) and hours of the parking prohibition, as well as the date and time the signs were posted. The notification shall include the Contractor's phone number and the phrase "VEHICLES WILL BE TOWED PURSUANT TO CVC SECTION 22654 (d)". This notice shall be affixed to a Type II barricade that is placed in the lane of the road, near lip of gutter, (max. 200 ft. spacing) used for on-street parking. No other location or method of placement is acceptable. The notification shall be in a form approved by the Engineer. Non-compliance with any stipulation of this section will be justification for the City to stop work.
- D. In the event that towing is required after proper notifications have been delivered and posted, and reasonable attempt have been made to the property owner or resident, the contractor will be responsible for contacting the Citrus Heights Police Department (916) 568-5115 to dispatch a towing company. It will be the contractor’s responsibility to determine if towing is required. The City will not be responsible for any claims made as a result of towing from the contractor.

#### 1.15 PROTECTION

- A. Conduct operations to minimize damage by falling debris or other causes to adjacent buildings, structures, roadways, other facilities, and persons. Provide interior and exterior shoring, bracing, or support to prevent movement or settlement or collapse of structures to be demolished and adjacent facilities to remain.



- B. Protect and maintain the chain link fence surrounding the site. Secure the access gate when no one is on-site.

1.16 DAMAGE

- A. Promptly repair damage caused to adjacent facilities by demolition operations as directed by the City at no cost to the City.

1.17 UTILITIES

- A. Maintain existing utilities as shown on the Drawings and directed by the City to remain in service and protect against damage during demolition operations.
- B. Do not interrupt existing utilities serving occupied or operational facilities, except when authorized by the City approved work plan. Provide temporary services during interruptions to existing utilities as acceptable to the City.
- C. The Contractor shall cooperate with the City to shut off utilities serving structures of the existing facilities as required by demolition operations.
- D. The Contractor shall be solely responsible for making all necessary arrangements and for performing any necessary work involved in connection with the interruption of all public and private utilities or services.
- E. All utilities being abandoned shall be terminated at the back of walk or as shown on the Drawings in conformance with the requirement of the utility companies or the municipality owning or controlling them.
- F. Establish a temporary storm drain system for the project. Stormwater leaving the site must be conveyed through a piped system and not over the sidewalk in accordance with the Drainage plan (Appendix E).

1.18 DUST CONTROL

- A. Dust control shall conform to the provisions in Section 17, "Dust Control," of the City Standard Construction Specifications and Mitigation Measure 4.2-1.
- B. Clean adjacent structures and improvements of all dust and debris caused by demolition operations as directed by the City. Return areas to conditions existing prior to the start of Work.

1.19 CONSTRUCTION AREA SIGNS

- A. Construction area signs shall conform to the requirements of Section 12-

3.08 "Construction Area Signs" of the City Standard Construction Specifications.

- B. The Contractor shall not erect any signs on private property without prior written approval from private property owner.
- C. Construction area and detour signs associated with pedestrians shall conform to requirements of Standard Specifications.
- D. The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include but are not limited to the following:

| Notification Center                                 | Telephone Number                 |
|---|----------------------------------|
| Underground Service Alert-Northern California (USA) | 1-800-642-2444<br>1-800-227-2600 |

- E. Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes

1.20 PAYMENT

- A. The contract price paid for all demolition work as described on the Drawings and in these Specifications shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in demolishing the site within the area of work boundaries as shown on the Drawings, including, but not limited to, removal of all buildings, structures, associated foundations, basements, pits, retaining walls, fences, wood and steel arbors, monument signs, mechanical and electrical equipment, utility infrastructure, sidewalks, driveways and slabs, trees, plants, irrigation, vegetation and all improvements and structures on the parcel disposal offsite, importing fill material, backfilling holes and grading site to drain, and as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Project Engineer.
- B. No adjustment of compensation will be paid for any decrease in quantity in buildings to be demolished.

## **PART 2 - PRODUCTS – NOT USED**

## **PART 3 – EXECUTION**

### **3.1 GENERAL**

- A. Storm Water Pollution Prevention Plan (SWPPP): The City will provide a Qualified SWPPP Developer (QSD) to develop the SWPPP for the demolition phase of the project. The QSD will also submit the Notice of Intent in SMARTS and all the required reports as well as prepare the REAPs. The QSP or QSD shall perform all the required testing and monitoring based for the project based on the SWPPP and applicable laws.
- B. Full compensation for daily cleanup and maintaining a neat and presentable appearance in the project limits will be considered as included in the prices paid for the various contract items of work and no separate payment will be made therefor.
- C. The Contractor is responsible for securing all permits for the demolition of the existing buildings from all appropriate agencies, including the City Building Division.
- D. Contractor shall fully cooperate with all utilities, including but not limited to, Sacramento Municipal Utility District, Pacific Gas and Electric, Citrus Heights Water District, and Sacramento Metropolitan Fire District.
- E. Contractor shall coordinate with Cardno for any SS, FW, DW, or SD being used for new development of Medical Office Building. The City will provide the appropriate contact information at the Pre-Construction Conference.
- F. Work hours are restricted to 7:00 a.m. through 5:00 p.m., Monday through Friday. If necessary, weekend work must be approved in writing by the Project Manager prior to commencement of weekend work. Weekend hours are restricted to 8:00 a.m. through 6:00 p.m.

### **3.2 PLANNING DIVISION REQUIREMENTS**

- A. The Contractor shall conform all demolition work of this contract to the requirements of the Planning Division as specified herein:
- B. Mitigation Measure 4.2-1:
  - 1. The City's inspector will conduct visual inspections throughout construction to ensure the following measures are implemented appropriately throughout the demolition process:

- a. All exposed surfaces shall be watered two times daily. Exposed surfaces include, but are not limited to, soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- b. Haul trucks transporting soil, sand, or other loose material on the site shall be covered and/or shall maintain at least two feet of free board space. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- c. Wet power vacuum street sweepers shall be used to remove any visible trackout of mud dirt onto adjacent public roads at least once per day. Use of dry power sweeping is prohibited.
- d. Vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour.
- e. After grading, lie seeding or soil binders where future building pad will be located.

C. Mitigation Measure 4.2-2:

1. The contractor shall submit a proposed construction schedule to the City's Project Manager by the date of the pre-construction conference. The construction schedule shall indicate the various subdivisions of work and the date of commencement and completion of each. The Project Manager shall approve the proposed construction schedule prior to the start of work. At the Project Manager's discretion, should the work not conform to the Contractor's progress schedule, the Project Manager may request, in writing, a new schedule reflecting the work as currently progressing. The Contractor shall provide the new schedule within one week of the written request. The construction schedule shall:
  - a. Preclude any overlap of the site preparation phases for the Medical Office Building and City Hall projects; or
  - b. Should concurrent site preparation be necessary, ensure that the total number of pieces of off-road construction equipment in use in one day (for both sites combined) shall be no more than six tractors/loaders/backhoes (or similar equipment) and no more than four rubber-tired dozers (or similar equipment). With operation of these maximum numbers of construction equipment during site preparation, daily NOx emissions would remain below.

D. Mitigation Measure 4.4-1:

1. Prior to commencement of site clearing and project grading, the City will retain a qualified archaeologist to train construction personnel on the types of cultural resources (such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural

remains) that could be encountered during construction activities. If resources are uncovered, the Contractor shall implement the following measures:

- a. Comply with City of Citrus Heights General Plan Policy 42.1 by halting construction activities within 50 feet of the resources, and immediately notifying the City's Community and Economic Development Director and coordinating any necessary investigation of the site with a qualified archaeologist to assess the nature and extent of the resources of concern.
- b. Should potential impacts to the resources be found to be significant, the project applicant shall implement any management recommendations made by the qualified archaeological professional, including providing sufficient time before resuming construction activities within 50 feet of the find to appropriately implement the management recommendations, and shall pay all costs associated with any recovery activities.

Management recommendations for historical or unique archaeological resources will follow all applicable requirements contained in California Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4, depending on the nature of the resource, and could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects.

E. Mitigation Measure 4.4-2:

1. Prior to commencement of site clearing and project grading, the City will retain a qualified paleontologist to train construction personnel on the types of fossils that could be encountered during construction activities. If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, all work within 50 feet of the find shall stop immediately and the developer shall consult with a qualified paleontologist to assess the significance of the find. If any find is determined to be significant by the qualified paleontologist, then representatives from the City and the qualified paleontologist and/or paleontologist would meet to determine the appropriate course of action to avoid significant impacts to the greatest extent feasible.

F. Mitigation Measure 4.4-3:

1. The contractor shall implement MM 4.4-1 and 4.4-2, which require that

construction work be halted if potential archaeological, historic, prehistoric, and/or paleontological resources are detected and additional actions be undertaken to avoid significant impacts to the greatest extent feasible.

G. Mitigation Measure 4.5-1:

1. The City has completed a comprehensive survey for the presence of asbestos-containing material (ACM) and lead-based paint (LBP) – see Appendix F. Demolition of buildings containing ACM and/or LBP and disposal of these materials must be conducted in accordance with state and federal regulations, including the U.S. Environmental Protection Agency's (EPA's) Asbestos National Emissions Standards for Hazardous Air Pollutants, the California Occupational Safety and Health Administration's Construction Lead Standard (8 CCR 1432.1), and California Department of Toxic Substances Control and EPA requirements for disposal of hazardous waste. Disposal of any ACM and/or LBP found on the site shall be carried out by a contractor trained and qualified to conduct lead- or asbestos-related construction work and in accordance with the appropriate state and federal standards to ensure that these materials are not released into the air in the project vicinity.

H. Mitigation Measure 4.8-1:

1. Prior to issuance of demolition, grading, or building permits, Contractor shall prepare a Traffic Control Plan (TCP) that shall be subject to approval by the City's General Services Department. The goal of the TCP will be to minimize traffic impacts to public streets and maintain a high level of safety for all roadway users. In addition to requirements listed in Section 1.14 Traffic Controls, the plan shall include: the number and size of trucks per day, expected arrival/departure times, truck circulation patterns, location of truck staging areas, employee parking, and the proposed use of traffic control/partial street closures on public streets. Additionally, the following performance standards in the TCP Plan shall be adhered to:
  - a. Delivery trucks do not idle/stage on Greenback Lane and Fountain Square Drive.
  - b. All delivery trucks shall use Greenback Lane and Fountain Square Drive (versus Stock Ranch Road) to access the project site. An exception will be allowed for local trucks coming from destinations to the north.
  - c. Any lane closures on westbound Greenback Lane during City Hall demolition are limited to a single lane during off-peak hours (8:30

- a.m. to 3:30 p.m.).
  - d. All construction employees shall park onsite or in designated lots owned by the City of Citrus Heights.
  - e. Roadways, sidewalks, crosswalks, and bicycle facilities shall be maintained clear of debris (such as rocks) that could otherwise impact travel and public safety.
- I. The Contractor must retain and protect the Italian Cypress trees along the western boundary and palm trees along the sidewalks as directed by the arborist (see Appendix A and Appendix H).
- J. The Contractor shall adhere to all measures identified in the Arborist and Tree Impact Assessment Reports (see Appendix G and Appendix H) to ensure the long-term health and safety of all trees that will remain.
- K. The Contractor shall install a minimum of a six-foot high chain link fence (or acceptable alternative such as mesh) at the outermost edge of the tree protection zone for each tree or group of trees. Signs must be installed by the applicant on the temporary fence at least two (2) equidistant locations to be clearly visible from the lot. The size of each sign shall be a minimum of two feet (2') by two feet (2') and must contain the following language:
- “WARNING: THIS FENCE SHALL NOT BE REMOVED OR  
RELOCATED WITHOUT WRITTEN AUTHORIZATION  
FROM THE PLANNING DIVISION”
- L. The Contractor shall contact the Planning Division and certified project arborist to inspect and approve the temporary fencing and signs around the protected zone before beginning any construction.
- M. Any watering or deep root fertilization which the arborist deems necessary to protect the health of the tree due to the construction impacts shall be completed by the Contractor.
- N. The following information must be located on-site during construction activities:
- 1. Arborist reports.
  - 2. Approved site plan including fencing plan and clearing denoting trees planned for removal, relocation or retention.

3. Conditions of approval for the Tree Permit.

- O. A certified arborist shall monitor any excavation within the dripline of any tree, including off-site trees if their protected zone extends into the project site.
- P. All finished grading shall ensure that no water will collect within the dripline of any native oak trees.
- Q. Storage of materials, equipment and vehicles is not permitted within the dripline of any tree. Vehicles and other heavy equipment shall not be operated within the dripline of any tree.
- R. The certified arborist shall immediately treat any severed or damaged roots (NOTE: Without exception, all digging shall be done using hand tools, no machine trenching shall be allowed in the dripline of any tree). Minor roots less than one (1) inch in diameter may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area. Major roots over one (1) inch in diameter may not be cut without approval of an arborist and any arborist recommendations shall be implemented.
- S. The temporary fencing shall remain in place throughout the entire construction period and shall not be removed without obtaining written authorization from the Planning Division. In no event shall the fencing be removed before the written authorization is received from the Planning Division.

3.3 SEQUENCE OF WORK

- A. The sequence of demolition and relocation of existing facilities shall be in accordance with the approved work plan schedule.

3.4 MOBILIZATION

- A. Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.



- B. Mobilization shall conform to Section 11 of the Caltrans Standard Specifications.
- C. Pedestrian access facilities shall be provided through construction areas within the right of way on the existing public sidewalks. Public sidewalks and driveway curb cuts shall be protected in place. If the contractors operations require the closure of the public walkways, then another walkway shall be provided nearby, off the traveled roadway.
- D. Full compensation for mobilization and for providing pedestrian facilities shall be considered as included in the prices paid for the various contract items of work and no separate payment will be made therefor.

### 3.5 CLEARING AND GRUBBING

- A. Clearing and grubbing shall conform to Section 16, "Clearing and Grubbing," of the State Standard Specifications.
- B. Clearing and grubbing shall include the removal and proper disposal of all existing trees and shrubs as directed by the Engineer. Trees to remain shall be cleared of ground landscape and fence protected 3' from the base. Any root cutting of trees to remain shall be per the direction of a certified arborist. Roots for trees, with the exception of tree to remain, be removed to a minimum depth of 12 (twelve) inches below the grading plane typically.
- C. All vegetation, including shrubs and tree, on all parcels where the buildings are demolished shall be cleared and grubbed. All trees and plants not marked to be saved with a white painted ring are to be removed and disposed of.
- D. Vegetation growth from the clearing and grubbing shall be disposed of offsite.
- E. Full compensation for clearing and grubbing shall be considered as included in the in the prices paid for the various contract items of work and no separate payment will be made therefor.

### 3.6 ABANDON AND REMOVE SEWERS

- A. Existing sewers serving the buildings to be demolished shall be abandoned and removed in accordance with Section 306-5 of Greenbook Standard Specifications for Public Works Construction. The Contractor shall coordinate the location of waste water discharge for asbestos removal with the sewer abandonment.
- B. Contractor must place a temporary waterproof cap on the existing 4" sewer

lateral serving the onsite buildings to be demolished.

- C. Sewers will be abandoned only if these buildings are vacant at that time and buildings are authorized to be demolished.
- D. The Contractor shall prepare an abandonment plan for approval by the Engineer. Work on the sewer and water lines shall not commence until the plan is approved by the Engineer. The Contractor shall allow 2 weeks after complete plan is submitted for review for existing lines to be removed and disposed of. Resulting openings into existing structures that are to remain in place shall be plugged with commercial quality concrete containing not less than 300 kg of cement per cubic meter {506 pounds of cement per cubic yard}.

### 3.7 DEMOLISH UTILITY INFRASTRUCTURE

- A. All fire water, domestic water, storm, electrical, gas, low-voltage and miscellaneous piping above ground and underground lines shall be completely demolished and removed from within the boundaries of the area of demolition work as shown on the Drawings. Demolition of utility infrastructure shall include boxes, fittings, valves, manholes and other in-line devices. Connections to existing piping to remain shall be plugged by mechanical means (M.J. plugs, tie-rods, or thrust blocks).
- B. Preserve and protect utility infrastructure shown on the Drawings to remain temporarily during phasing of the demolition work.

### 3.8 ASBESTOS, LEAD AND OTHER HAZARDOUS MATERIAL

- A. Asbestos, lead and any other hazardous materials encountered during the demolition of buildings shall be removed in accordance with "ASBESTOS REQUIREMENTS," "REQUIREMENTS FOR THE DISTURBANCE OF LEAD," and "HAZARDOUS MATERIALS" in Appendix F.

### 3.9 DEMOLISH BUILDINGS

- A. Existing buildings, where shown on the Drawings to be demolished, shall be completely removed and disposed of, including but not limited to structures, substructures, basements, floor slabs, equipment, tanks, pipes, fittings, mechanical equipment, electrical systems, light poles, wiring, underground conduits and wiring, isolated slabs, and sidewalks as indicated on the Drawings.
- B. All pieces of concrete, metal, and any other demolished material shall be completely removed below existing grade. Broken pieces of concrete may

be size reduced by an on-site crusher, but in any event must be removed from the project site.

- C. Public sidewalk and driveway curb cuts shall not be removed.
  - 1. Before commencing structural demolition, remove all mechanical, electrical, piping, and miscellaneous appurtenances. Completely remove the structure by thoroughly breaking up concrete into pieces no more than 2-feet across the largest dimension.
- D. All demolished materials and construction waste shall be considered property of the Contractor and completely removed from the site in accordance with the Construction Waste requirements of this Specification.
- E. The Contractor shall provide utility services needed to perform demolition. The Contractor shall confirm that all utilities to the buildings to be demolished have been shut off prior to commencement of work.

### 3.10 SITE FILL, COMPACTION AND GRADING

- A. After demolition and removal of all materials and waste of the site work area boundary, the Contractor shall fill and compact all holes and depressions and grade the site to the elevations shown on the Drawings.
- B. Fill material will be required to balance the site. The Contractor shall import fill material from the property owned by Capital Partners Development Company located at 6360 Fountain Square Drive. Contractor must coordinate with Capital Partners Development Company prior to removal of dirt. Contact information will be provided at Pre-Construction Conference.
- C. All fill material shall conform to the requirements below and as required by the Geotechnical Reports in Appendix B and Appendix C.
- D. FILL MATERIAL: All fill material shall be subject to approval of the City Engineer. All fill material shall be soil or soil-rock mixture which is free from organic matter and other deleterious substance. It shall be of granular nature with sufficient binder to form a firm and stable, unyielding subgrade. It shall contain no rocks or lumps over three inches in greatest dimension. Engineered fill R value = 40, Plasticity index 8, passing the #4 sieve 100%, passing the #200 sieve 3% maximum. Fill shall have a coefficient of expansion of not more than 3% from air dry to saturation under a surcharge of 60 pounds per square foot at 90% compaction. Provide fill material per requirements of the Soils Report.
- E. PLACING FILL:
  - 1. Place backfill and fill materials in layers not more than 8" in loose depth.
  - 2. Before compacting, moisten or aerate each layer as necessary to

provide the optimum moisture content.

3. Do not place backfill or fill material on surfaces that are muddy, frozen or contain frost or ice.
4. Place backfill or fill material evenly adjacent to structures, to required elevations.
5. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around the structure to approximately the same elevation in each lift.

F. COMPACTING (Verify values below with Soils Report):

1. Control soil compaction during construction to provide the minimum percentage of density specified for each area as determined according to ASTM D1557.
2. Provide not less than the following maximum density of soil material compacted at optimum moisture content for the actual density of each layer of soil material in place and as approved by the City Engineer.
3. Compact the top 8" of subgrade and each layer of fill material or backfill material at 90% of maximum dry density.
4. Moisture control:
  - a. Where subgrade or layer of soil material must be moisture conditioned before compacting, uniformly apply water to surface of subgrade or layer of soil material to prevent free water appearing on surface during or subsequent to compacting operations.
  - b. Remove and replace, or scarify and air dry, soil material that is too wet to permit compacting to the specified density.
  - c. Soil material that has been removed because it is too wet to permit compacting may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value as determined by moisture-density relation tests approved by the Architect.
5. Field Quality Control:

If, in the City Engineer's opinion, based on reports of the testing laboratory, subgrade or fills which have been placed are below specified density, provide additional compacting to meet compaction standards

G. GRADING:

1. Uniformly grade the areas within the limits of the work area boundary to the elevations as shown on the Drawings. Smooth the finished surfaces within specified tolerance.
2. Where a change of slope is indicated on the Drawings, construct a rolled

transition section having a minimum radius of approximately 8'0", unless adjacent construction will not permit such a transition, or if such a transition defeats positive control of drainage.

END OF TECHNICAL SPECIFICATIONS