CONTRACTOR SHALL CALL THE CITY OF SAN ANTONIO UTILITY DEPT., FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN EASEMENT OR STREET RIGHT-OF-WAY.

SAN ANTONIO WATER SYSTEM (210) 233-2010 CPS ENERGY CPS ENERGY 1-800-545-6005 TELEPHONE 1-800-545-6005 TIME WARNER CABLE 1-800-545-6005

THE CONTRACTOR SHALL NOTIFY THE CITY OF SAN ANTONIO AT LEAST TWENTY—FOUR (24) HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET RIGHT—OF—WAY.

NOT USED

ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL HEALTH AND SAFETY

BARRICADES AND WARNING SIGNS: BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ARE GENERALLY LOCATED TO AFFORD MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT TO ASSURE EXPEDITIOUS TRAFFIC FLOW AT ALL TIMES. RING THE PROGRESS OF WORK, THE CONTRACTOR SHALL PROVIDE ACCESS

CONTRACTOR SHALL PROVIDE ALL REQUIRED PITS AND TRENCHES FOR WATER UTILITY INSTALLATION, CONTRACTOR TO COORDINATE WITH THE CITY OF SAN ANTONIO UTILITY DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR ALL FEES RELATED TO AND

CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ANY AND ALL EXISTING BUILDINGS/STRUCTURES ON SITE AND UTILITY RELOCATION WORK.

10. PROVIDE STAND UP CURB THROUGHOUT THE SITE EXCEPT AS NOTED ON THE PLANS.

11. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AND GRADED TO DRAIN.

12. ALL DEBRIS AND EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE IN MANNER NOT TO DAMAGE THE OWNER PRIOR ACCEPTANCE OF THE PROJECT

13. ALL CONCRETE WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF ACI 301-10.

14. ALL EXPOSED CORNERS FOR CONCRETE WORK SHALL BE CHAMFERED 1".

15. THE INFORMATION CONTAINED ON THESE DRAWINGS IN REGARDS TO EXISTING UTILITIES, TOPOGRAPHY, CONTOURS, OR SUBSURFACE CONDITIONS IS FURNISHED SOLELY AS THE BEST INFORMATION AVAILABLE AT THIS TIME. ITS ACCURACY IS NOT GUARANTEED AND ITS USE IN NO WAY RELIEVES THE CONTRACTOR OF ANY RESPONSIBILITY FOR LOSSES DUE TO ANY INACCURACIES.

16. ALL REQUIRED RELOCATION'S OR ALTERATIONS OF TELEPHONE POLES, UNDERGROUND CONDUIT, POWER POLES, AND ANY OTHER FACILITIES SHALL BE DONE BY THIS CONTRACTOR, UNLESS NOTED AS "BY OTHERS". THIS CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS AND UTILITY COMPANIES SO AS NOT TO DELAY THE PROJECT.

THE CONTRACTOR SHALL NOTIFY THE CITY OF SAN ANTONIO BEFORE BEGINNING ANY UTILITY CONSTRUCTION IN PUBLIC R.O.W. OR PUBLIC EASEMENT. NO PIPE SHALL BE LAID UNTIL THE ASSIGNED INSPECTOR HAS MET WITH THE CONTRACTOR OR HIS REPRESENTATIVE AT THE PROJECT SITE.

18. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

SEQUENCE OF CONSTRUCTION

INSTALL TREE PROTECTION (IF REQUIRED). INSTALL TEMPORARY EROSION SEDIMENTATION CONTROL BEGIN SITE CLEARING/DEMOLITION.

CONSTRUCT SITE UTILITIES.
CONSTRUCT PAVING, PARKING AND BUILDINGS.
COMPLETE CONSTRUCTION.
INSTALL LANDSCAPING AND REVEGETATE
DISTURBED AREAS.

RECEIVE OPERATING PERMIT AND CITY CLEARANCE FOR OCCUPANCY.

20. THE FOLLOWING STORM SEWER PIPES ARE ALLOWABLE (WITH MANUFACTURER'S SPECS FOR BACKFILL FOLLOWED):

A. 12" THRU 48" RCP. D-LOAD DESIGN

B. 6" THRU 12" PVC, SDR 35 OR SCH. 40 C. 12" THRU 18" GALVANIZED CORRUGATED METAL (2-2/3"x)1/2" CORRUGATED) E. 6" THRU 36", HDPE

D. 12" THRU 48" "ULTRAFLO" SPIRAL RIB PIPE (AASHTO

E. TYPE I.R. WITH GALVANIZED STEEL AS PER AASHTO M-218)

SITE CLEARING

CONDUCT SITE CLEARING OPERATIONS TO THE EXTENT SHOWN ON THE DRAWINGS, INCLUDING BUT NOT LIMITED TO: REMOVAL OF TREES AND OTHER VEGETATION, TOPSOIL STRIPPING, CLEARING AND GRUBBING, AND REMOVAL ALL IMPROVEMENTS ABOVE OR BELOW GRADE. REFER TO THE GEOTECHNICAL REPORT FOR THIS PROJECT FOR ADDITIONAL SITE PREPARATION REQUIREMENTS. **EXECUTION:**

1. SITE CLEARING OPERATIONS SHALL NOT DAMAGE OR INTERFERE WITH THE PUBLIC USE OF ROADS, WALKS, ADJACENT LAND OR FACILITIES AND EXISTING IMPROVEMENTS INTENDED TO

2. EXISTING TREES TO REMAIN SHALL BE PROTECTED IN COMPLIANCE WITH LANDSCAPE

3. CONTRACTOR SHALL REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION, IMPROVEMENTS OR OBSTRUCTIONS INTERFERING WITH THE INSTALLATION OF NEW CONSTRUCTION OR AS SHOWN ON PLANS. CLEARING OPERATIONS SHALL INCLUDE REMOVAL OF STUMPS AND ROOTS. 4. CONTRACTOR SHALL STRIP TOPSOIL IN A MANNER APPROPRIATE TO SEGREGATE FROM UNDERLYING SUBSOIL. TOPSOIL STRIPPING NEAR TREES INTENDED TO REMAIN SHALL BE

COMPLETED IN COMPLIANCE WITH LANDSCAPE PROTECTION. 5. SPOIL SHALL BE STORED ONLY IN AREAS SHOWN ON THE PLANS AND SHALL BE MAINTAINED IN ACCORDANCE WITH APPLICABLE POLLUTION PREVENTION PLANS OR PERMITS. 6. WASTE MATERIAL OR EXCESS TOPSOIL GENERATED AS A RESULT OF CLEARING AND GRADING OPERATIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR. APPROPRIATE DISPOSAL OF

ALL SPOIL MATERIAL SHALL BE AT THE CONTRACTOR'S EXPENSE. BURNING ON THE OWNER'S PROPERTY IS NOT PERMITTED.

DEMOLITION NOTES:

FOLLOWING APPROPRIATE SAFETY PROCEDURES, DEMOLISH EXISTING FACILITIES AS SHOWN ON THE PLANS. PROTECTION OF PUBLIC AND PRIVATE PROPERTY AND SAFE DISPOSITION OF SPOIL MATERIAL IS INCLUDED IN THIS ITEM. EXECUTION:

1. CONTRACTOR SHALL SUBMIT FOR APPROVAL TO GOVERNMENTAL AGENCIES AND THE OWNER A DEMOLITION PLAN INCLUDING BUT NOT LIMITED TO THE FOLLOWING: A. METHODS, EQUIPMENT AND SEQUENCE OF OPERATION.

B. CREDENTIALS OF INDIVIDUALS PERFORMING DEMOLITION OPERATIONS, INCLUDING

C. SAFETY MEASURES TO PROTECT WORKERS, PERSONNEL AND THE PUBLIC. D. SAFETY MEASURES TO PROTECT ADJACENT PROPERTIES, LANDSCAPING,

IMPROVEMENTS TO REMAIN OR PUBLIC RIGHTS OF WAY. E. ASBESTOS OR OTHER HAZARDOUS MATERIAL ABATEMENT PLAN.

STORAGE, REMOVAL AND DISPOSITION OF SPOIL MATERIAL. G. EROSION CONTROL MEASURES, INCLUDING NPDES PROCEDURES AND REGULATIONS.

H. POLLUTION AND AIR QUALITY CONTROL MEASURES (DUST CONTROL, ETC.). I. HEALTH DEPARTMENT NOTICE. J. UTILITY COORDINATION WITH ALL AFFECTED UTILITIES, INCLUDING LOCATION OF

2. THE USE OF EXPLOSIVES WILL NOT BE PERMITTED.

3. THE PROJECT SITE SHALL BE CLEANED DAILY. DEBRIS, RUBBISH AND CONTRACTORS SALVAGED MATERIAL SHALL BE REMOVED PROMPTLY.

4. ALL SPOIL MATERIAL REMAINING AFTER OWNER SALVAGE IS COMPLETE AND RESULTING FROM DEMOLITION OPERATIONS BECOMES THE PROPERTY OF THE CONTRACTOR. APPROPRIATE DISPOSAL OF SPOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS OWN EXPENSE. OWNER WILL PROVIDE LIST OF ITEMS TO BE SALVAGED. PLUMBING NOTES:

1. SEE IRRIGATION PLANS FOR LOCATION OF IRRIGATION SYSTEM CONTROLS 2. PROVIDE WATER SERVICE FOR DOMESTIC, IRRIGATION, AND FIRE. INCLUDE SHUTOFF VALVES, METERS (USE SEPARATE METER FOR IRRIGATION SYSTEM), BACK PRESSURE VALVES AND PRESSURE REGULATING VALVE WHEN REQUIRED. COORDINATE THE LOCATION AND ROUTING

3. IF EXISTING UTILITIES CONFLICT WITH PLACEMENT OF WASTEWATER CLEANOUT, THEN CLEANOUT SHALL BE OFF OF A WYE CONNECTION AND PLACED 5.0' FROM BUILDING AND

GENERAL UTILITY NOTES:

WITH SAN ANTONIO WATER SYSTEM.

1. ALL WATER/WASTEWATER IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM AND THESE APPROVED PLANS. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE PLAN REVISIONS AND APPROVAL BY THE CITY OF SAN ANTONIO.

AT LEAST FORTY-EIGHT (48) HOURS BEFORE BEGINNING ANY WATER AND WASTEWATER CONSTRUCTION IN PUBLIC R.O.W. OR PUBLIC EASEMENT, THE CONTRACTOR SHALL NOTIFY SAN ANTONIO WATER SYSTEM FOR MAIN LINE CONSTRUCTION, OR WATER AND

WASTEWATER UTILITY TAPS INSPECTION. 3. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF SAN ANTONIO MAINTENANCE RESPONSIBILITY ENDS AT R.O.W./EASEMENT LINES.

4. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND WASTEWATER

5. FOR PRESSURE TAPS, FURNISH, INSTALL AND AIR TEST THE SLEEVE AND VALVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES TWENTY—FOUR (24) HOURS PRIOR TO MAKING THE WET TAP.

6. THRUST BLOCKING SHALL BE IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM REQUIREMENTS.

7. ALL PUBLIC MAIN AND FIRE LINE PIPE SHALL BE C900 PVC, CLASS 200 FOR PIPES 4" THROUGH 12", C905 IF LARGER THAN 12", OR D.I. PIPE. ALL DOMESTIC WATER PIPE SHALL BE COPPER OR C900 PVC.

8. ALL WASTEWATER PIPE SHALL BE SDR 26 PVC, OR PRESSURE RATED PIPE WHERE REQUIRED

9. ALL PRIVATE WATER AND WASTEWATER LINES WILL COMPLY WITH THE INTERNATIONAL PLUMBING CODE

10. THE TOP OF PROPOSED MANHOLES SHALL MATCH THE FINISHED GRADE ELEVATIONS UNLESS OTHERWISE NOTED.

11. SEE MEP PLANS FOR EXACT LOCATION OF WATER AND WASTEWATER CONNECTIONS TO BUILDINGS.

12. ALL BACKFLOW DEVICES WILL CARRY A MANUFACTURER RATING NOT TO EXCEED A 7 P.S.I. PRESSURE DROP THROUGH BACKFLOW DEVICE.

13. ALL ON—SITE WATER AND WASTEWATER LINES WILL BE EXTENDED TO A MINIMUM OF 5 FEET FROM THE BUILDING.

14. CONCRETE ENCASE ALL WATER LINES THAT CROSS WITHIN 1.5 FEET OF WASTEWATER

15. EXTEND ALL EXISTING UTILITY MANHOLES, BOXES, COVERS, ETC. TO PROPOSED FINISH GRADE, UNLESS APPROVED OTHERWISE.

16. ALL PROPOSED ELECTRIC, PHONE AND CABLE CONDUITS SHALL BE PROVIDED WITH PULL STRINGS.

17. ALL WORK ASSOCIATED WITH PROVIDING NATURAL GAS INCLUDING TRENCHING, CONDUIT INSTALLATION, PAVEMENT REPLACEMENT/BACKFILL AND METER INSTALLATION AS DESCRIBED ON THESE PLANS SHALL BE COORDINATED WITH CPS ENERGY AND SHALL BE INCLUDED WITHIN CONTRACTOR'S SCOPE OF WORK.

SPECIAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL CONTACT THE ONE-CALL BOARD OF TEXAS LOCATOR

2. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181. CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

3. THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48 HOURS PRIOR TO EXCAVATION. CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY PLANT DURING CONSTRUCTION.

EXCAVATION IN THE IMMEDIATE AREA OF WATER LINE AT 233-2010.

5. DAMAGE TO ANY UNDERGROUND DRAINAGE SYSTEM SHALL BE REPORTED TO 210-207-8052 FOR CONSULTATION WITH THE CITY'S DRAINAGE SUPERINTENDENT. THE SUPERINTENDENT WILL INSTRUCT THE DAMAGING PARTY (CONTRACTOR) ON HOW TO REPAIR THE LINE AT

6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROTECTING THE INTEGRITY OF THE POWER POLES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED AT THEIR EXPENSE TO PROVIDE ACCEPTABLE BRACING OF SPECIFIC CITY PUBLIC SERVICE POLES DURING THE CONSTRUCTION OF THIS PROJECT AND/OR PROVIDE AT THEIR EXPENSE FOR CITY PUBLIC SERVICE TO PROVIDE BRACING. IN ADDITION IT IS CRITICAL THE CONTRACTOR WORK CLOSELY WITH CITY PUBLIC SERVICES CONSTRUCTION FORMAN FOR THE SAKE OF SAFETY TO ISOLATE AND/OR PROTECT CONTRACTOR FROM ENERGIZED ELECTRIC CONDUCTORS ABOVE AREAS OF PROPOSED EXCAVATION.

WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS

FURNISH AND INSTALL THE FIRE LINE, DOMESTIC WATER LINE AND WASTEWATER COLLECTION SYSTEM AND ALL RELATED APPURTENANCES FROM THE PUBLIC MAIN TO THE BUILDING PAD(S) AS SHOWN ON THE PLANS, INCLUDING BUT NOT LIMITED TO ALL PIPING, FITTINGS, VAULTS, VALVES, METERS, MANHOLES AND JUNCTION BOXES REQUIRED. **EXECUTION:**

ALL MATERIALS, INSTALLATION, INSPECTION AND TESTING OF WATER METER AND RELATED PIPING AND APPURTENANCES SHALL CONFORM TO IPC STANDARDS, AWWA STANDARDS, TCEQ STANDARDS, AND THE APPLICABLE LOCAL UTILITY COMPANY REGULATIONS. ALL MATERIALS AND INSTALLATIONS REQUIRED FOR FIRE PROTECTION SHALL MEET FACTORY MUTUAL GLOBAL STANDARDS.

2. CONTRACTOR IS RESPONSIBLE FOR TAP AT PUBLIC MAIN AND ALL LINES, FITTINGS AND APPURTENANCES SHOWN ON PLANS OR REQUIRED BY THE LOCAL UTILITY

INSTALLATION OF WASTEWATER LINES SHALL BEGIN AT THE TAP TO THE PUBLIC WASTEWATER SYSTEM AND PROGRESS UPSTREAM. WATER AND WASTEWATER LINES SHALL BE EXTENDED TO SERVICE ENTRANCE INTO BUILDING(S). CONTRACTOR SHALL PROVIDE A WATERTIGHT SLEEVE IN FOUNDATION FOR WATER LINE.

4. TRENCH EXCAVATION SHALL BE PERFORMED AND BACKFILL MATERIAL AND PROCEDURES SHALL BE IN COMPLIANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION 2004 STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES, ITEM 400 - EXCAVATION AND BACKFILL FOR STRUCTURES.

GRAVITY PIPE (STORM & SANITARY SEWER) / WATER LINE CONFLICT NOTE: CONTRACTOR IS RESPONSIBLE TO VERIFY VERTICAL ALIGNMENT OF WATER LINE SO THAT A MINIMUM OF 2' VERTICAL SEPARATION IS PROVIDED BETWEEN GRAVITY PIPE AND WATER PIPE.

EARTHWORK

PREPARE SUBGRADE BY EXCAVATION OR EMBANKMENT FOR BUILDING SLABS, WALKS AND PAVEMENTS. EXCAVATION AND BACKFILL FOR UNDERGROUND UTILITIES AND DRAINAGE FILL COURSE FOR SUPPORT OF BUILDING SLABS ARE INCLUDED IN THIS ITEM.

1. ALL EXCAVATION, BACKFILL AND COMPACTION SHALL BE PERFORMED AS SHOWN IN THE PLANS AND GEOTECHNICAL REPORT FOR THE SITE.

2. EXCESS MATERIAL RESULTING FROM EXCAVATION OPERATIONS IS THE PROPERTY OF THE CONTRACTOR. APPROPRIATE DISPOSAL SHALL BE AT THE CONTRACTOR'S EXPENSE.

3. ALL EXCAVATION SHALL BE PERFORMED AS DIRECTED IN THE PLANS AND IN COMPLIANCE WITH OSHA STANDARDS.

4. OWNER WILL ENGAGE AT THE OWNER'S COST SOIL TESTING AND INSPECTION SERVICE IN ACCORDANCE WITH MATERIAL TESTING SPECIFICATION TO VERIFY COMPLIANCE WITH THE PLANS & SPECIFICATIONS. REPLACEMENT AND RETESTING OF DEFICIENT WORK SHALL BE DONE BY CONTRACTOR AT NO ADDITIONAL COMPENSATION.

5. DATA ON SUBSURFACE CONDITIONS IS AVAILABLE TO THE CONTRACTOR. THE OWNER MAKES NO WARRANTY AS TO THE CORRECTNESS OF THESE REPORTS. THE CONTRACTOR MAY, AT HIS OWN EXPENSE, PERFORM ADDITIONAL TEST BORINGS.

6. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL AFFECTED UTILITY COMPANIES. THIS SHALL INCLUDE LOCATION OF FACILITIES, PROTECTION DURING CONSTRUCTION, DAMAGE REPAIRS AND DISRUPTION OF SERVICE.

7. THE EXCAVATION IS UNCLASSIFIED, AND CONTRACTOR SHALL PERFORM EXCAVATION TO THE ELEVATIONS INDICATED IN THE PLANS, REGARDLESS OF CHARACTER OF MATERIAL, WITH NO ADDITIONAL COMPENSATION FROM THE OWNER. USE OF EXPLOSIVE IS PROHIBITED.

8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING BARRICADES REQUIRED TO WARN AND/OR

PREVENT ACCESS TO CONSTRUCTION AREA. 9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ADJACENT FACILITIES FROM DAMAGE

10. EARTHWORK SHALL BE PERFORMED IN COMPLIANCE WITH LANDSCAPE PROTECTION. 11. OVER-EXCAVATION IS NONCOMPENSABLE, AND SHALL BE BACKFILLED AND COMPACTED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

12. CONTRACTOR SHALL PROVIDE ALL LABOR AND EQUIPMENT NECESSARY TO PROPERLY DEWATER EXCAVATION AREAS - AS REQUIRED.

13. EXCAVATED MATERIAL SHALL BE STOCKPILED WHERE DIRECTED IN THE PLANS. STOCKPILE SHALL BE MAINTAINED IN COMPLIANCE WITH ALL RELEVANT POLLUTION PREVENTION PLANS.

14. EARTHWORK SHALL BE PERFORMED TO THE TOLERANCES SHOWN IN THE PLANS

AND/OR SPECIFIED IN THE GEOTECHNICAL REPORT FOR THE PROJECT. 15. TRENCHES SHALL BE BACKFILLED ONLY AFTER INSPECTION AND APPROVAL OF THE ENGINEER. BACKFILL MATERIAL AND PROCEDURES FOR TRENCHES SHALL BE IN COMPLIANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION 2004 STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES, ITEM 400 - EXCAVATION AND BACKFILL FOR

GRADING NOTES:

STRUCTURES.

1. VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. MINOR ADJUSTMENT TO FINISH GRADE TO ACCOMPLISH SPOT DRAINAGE IS ACCEPTABLE, IF NECESSARY, UPON PRIOR APPROVAL OF THE ENGINEER.

2. REFER TO SITE PLAN FOR HORIZONTAL DIMENSIONS.

3. UNLESS NOTED OTHERWISE, ALL PARKING LOT GRADES ARE TO INVERT OF GUTTER. ADD 0.5' TO GUTTER GRADE FOR TOP OF CURB GRADE EXCEPT WHERE CURB IS FLUSH WITH

4. SITE PREPARATION AND GRADING, FOUNDATION EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.

5. PAVING INSTALLED SHALL "FLUSH OUT" AT ANY JUNCTURE WITH EXISTING PAVING. 6. ALL FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER

PRIOR TO PLACING AND COMPACTING. 7. ALL STORM SEWER INLETS AND STRUCTURES SHALL BE PRECAST UNLESS OTHERWISE

8. REFER TO CIVIL AND/OR LANDSCAPE PLANS FOR RETAINING WALL LOCATIONS AND ELEVATIONS. REFER TO STRUCTURAL RETAINING WALL PLANS FOR CONSTRUCTION DETAILS.

SITE PLAN NOTES:

1. ALL ON-SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY OF SAN ANTONIO SPECIFICATIONS.

2. ALL CONSTRUCTION IN CITY RIGHT-OF-WAYS AND/OR EASEMENTS SHALL BE IN

ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS. 3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS AS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

4. THE CONTRACTOR SHALL GIVE THE CITY A MINIMUM OF 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT.

6. IF CONTRACTOR FINDS A DISCREPANCY WITH THE TOPOGRAPHIC INFORMATION ON THESE PLANS, HE/SHE SHALL CONTACT THE CONSTRUCTION MANAGER/SUPERVISOR AND CIVIL ENGINEER IMMEDIATELY.

7. CONTRACTOR SHALL PROTECT ALL BENCHMARKS AND PROPERTY MONUMENTATION AND SHALL REPLACE OR REPAIR, AT HIS OWN EXPENSE, BENCHMARKS AND MONUMENTATION DISTURBED DURING CONSTRUCTION.

8. IF CONTRACTOR RELOCATES OR SETS NEW BENCHMARKS, THE VERTICAL ELEVATIONS OF THE BENCHMARKS SHALL BE SET TO A TOLERANCE OF 0.010

9. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, BUILDING FACE OF BRICK, STONE AND FACE OF WALLS, UNLESS OTHERWISE NOTED.

10. REFER TO ARCHITECTURAL/STRUCTURAL PLANS FOR DETAILED BUILDING

11. ALL CURB RADII SHALL BE 3.0' UNLESS OTHERWISE NOTED.

SAN ANTONIO AND A.D.A. REQUIREMENTS, AS REQUIRED.

12. THE AMERICANS WITH DISABILITIES ACT (ADA) GUIDELINES, BOTH FEDERAL AND STATE ARE TO BE INCORPORATED IN ALL CONSTRUCTION DOCUMENTS. IF ANY CRITERIA CANNOT BE MET THEN OWNER IS TO BE ALERTED OF THE CONDITION AND INFORMED OF THE MEASURES THAT WOULD BE NECESSARY TO BE IN CONFORMANCE

13. ALL PEDESTRIAN RAMPS TO BE TEXTURED AND PAINTED/STAINED PER CITY OF

14. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING UTILITIES, PAVEMENT AND STRUCTURES WITHIN OR AROUND THE PROPOSED BUILDING PAD LIMITS OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL. RELOCATION AND COORDINATION OF THESE EXISTING UTILITIES, PAVEMENT AND STRUCTURES. CONTRACTOR SHALL CONTACT ENGINEER IF A CONFLICT EXISTS.

15. PROVIDE PAD CERTIFICATION FROM A LICENSED SURVEYOR AND SOIL COMPACTION DOCUMENTATION FROM A GEOTECHNICAL ENGINEER.

16. PUMPING RUNOFF OR RAINWATER FROM A BUILDING EXCAVATION IS NOT AN

17. STANDARD PARKING SPACES ARE 9'x18' AND COMPACT ARE 8'x16' UNLESS

18. REFER TO LANDSCAPE PLANS FOR SIDEWALK DETAILS.

OTHERWISE NOTED

PAVEMENT NOTES:

1. DESIGN MIX SUBMITTALS SHALL BE PROVIDED FOR REVIEW AT LEAST 7 DAYS PRIOR TO PLACEMENT. 2. DO NOT UNLOAD OR USE ANY HEAVY CONSTRUCTION EQUIPMENT ON NEW CONCRETE FOR AT LEAST 72 HOURS AFTER CONCRETE IS POURED.

3. LOCATE AND PLACE LINES OR SLEEVES FOR UNDERGROUND UTILITIES PRIOR TO PLACEMENT OF PAVEMENT BASE.

4. JOINTS SHALL BE PLACED IN ANY PROPOSED CONCRETE PAVEMENT AND CURBING AS RECOMMENDED IN THE GEOTECHNICAL STUDY FOR THIS SITE OR JOINT LAYOUT AND DESIGN SHALL CONFORM TO THE AMERICAN CONCRETE PAVEMENT ASSOCIATION (ACPA) TECHNICAL PUBLICATION

5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK SUCH THAT UTILITIES ARE INSTALLED PRIOR TO PAVEMENT BASE IS INSTALLED OR ELSE PROVIDE ADEQUATE SLEEVING.

6. ALL CONCRETE WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF ACI 330. FLY ASH CAN BE USED IN MIX DESIGNS WHERE SUITABLE. 7. ALL CONCRETE PAVING AND FLATWORK SHALL BE CURED IN CONFORMANCE WITH AMERICAN

CONCRETE PAVEMENT ASSOCIATION GUIDELINES. 8. THESE PLANS REPRESENT PAD PREPARATION AS RECOMMENDED BY THE GEOTECHNICAL REPORT.

PAVEMENT MARKINGS

FURNISH AND INSTALL PAVEMENT MARKINGS OF THE TYPE AND SIZE SHOWN ON THE PLANS AND AS REQUIRED FOR COMPLIANCE WITH GOVERNING CODES. IF NO GOVERNING CODES APPLY, THEN USE TXDOT STANDARDS.

1. CONTRACTOR SHALL CLEAN PAVEMENT OF GREASE, DIRT, OIL, SAND, GRAVEL OR OTHER FOREIGN

MATERIALS PRIOR TO APPLYING MARKINGS AS RECOMMENDED BY PAINT MANUFACTURER. 2. PAVEMENT MARKINGS SHALL BE APPLIED BY MACHINE AT A RATE OF ONE (1) GALLON/100 SQUARE

3. PAVEMENT MARKINGS SHALL NOT BE APPLIED DURING PERIODS OF EXCESS HUMIDITY OR PAVEMENT

4. MINIMUM LINE WIDTH IS 4 INCHES. PAVEMENT MARKINGS MUST COMPLY WITH LOCAL FIRE STANDARDS AND CURRENT ACCESSIBILITY CODE.

TEMPERATURES BELOW 50 DEGREES F.

5. A MINIMUM OF TWO COATS SHALL BE REQUIRED. 6. CLOSE AREAS TO TRAFFIC FOR DURATION OF DRYING TIME, WHICH SHALL BE NO LESS THAN THE

MINIMUM RECOMMENDED BY THE PAINT MANUFACTURER. 7. TRAFFIC PAINT SHALL BE SHERWIN WILLIAMS PRO-MAR TRAFFIC PAINT OR APPROVED EQUAL -COLOR AS SPECIFIED ON PLANS.

STORM SEWER NOTES:

E. 6" THRU 36", HDPE

1. THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. (SEE SITE INFORMATION SHEET FOR UTILITY CONTACTS)

3. COMPLETE OR COORDINATE ADJUSTMENT OF OTHER UTILITIES IN ORDER TO CONSTRUCT STORM

2. VERIFY ALL EXISTING INVERTS AND RIM ELEVATIONS PRIOR TO CONSTRUCTION. CONTACT ENGINEER WITH ANY DISCREPANCIES.

SEWER TO ELEVATIONS PROVIDED. 4. THE FOLLOWING STORM SEWER PIPES ARE ALLOWABLE (WITH MANUFACTURER'S SPECS FOR

BACKFILL FOLLOWED): A. 12" THRU 48" RCP, D-LOAD DESIGN

B. 6" THRU 12" PVC, SDR 35 OR SCH. 40 C. 12" THRU 18" GALVANIZED CORRUGATED METAL (2-2/3"x 1/2" CORRUGATED) D. 12" THRU 48" "ULTRAFLO" SPIRAL RIB PIPE (AASHTO M-36 TYPE I.R. WITH GALVANIZED STEEL AS PER AASHTO M-218)

OR EASEMENT. IF PIPE IS PART OF PUBLIC SYSTEM, PIPE MATERIAL SHALL FOLLOW

A. OPTIONS C & D SHALL NOT BE USED ALONG COASTAL REGIONS OR AREAS WHERE THE EXISTING SOILS ARE CORROSIVE. THE ABOVE SHALL BE FOLLOWED UNLESS PIPES ARE TO BE INSTALLED IN PUBLIC ROW

REQUIREMENTS OF AUTHORITY HAVING JURISDICTION. C. MANNING'S "N" VALVE SHALL BE 0.013 OR LESS.

5. ALL STORM SEWER INLETS/STRUCTURES SHALL BE PRE-CAST. 6. GRATE INLETS LOCATED IN THE PEDESTRIAN ACCESS ROUTE OR HIGH TRAFFIC AREAS SHALL BE

ADA COMPLIANT 7. GROUT/FORM MANHOLE OR INLET TO PROVIDE FOR SMOOTH FLOW OF WATER.

WATER AND WASTEWATER UTILITY NOTES

1. ALL WORK SHALL CONFORM WITH THE CITY OF SAN ANTONIO SPECIFICATIONS.

2. NOTIFY THE CITY AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION. DISRUPTION OF SERVICES SHALL BE COORDINATED WITH THE OWNER AND UTILITY COMPANY 3. COMPLETE ALL REQUIRED RELOCATIONS OR ALTERATIONS OF TELEPHONE POLES, UNDERGROUND CONDUIT, POWER POLES, AND ANY OTHER FACILITIES UNLESS NOTED AS

"BY OTHERS". SCHEDULE AND COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS AND UTILITY COMPANIES SO AS NOT TO DELAY THE PROJECT. 4. ALL PRIVATE WATER AND WASTEWATER LINES WILL COMPLY WITH THE INTERNATIONAL

PLUMBING CODE. 5. ALL WATER PIPE 4"-12" SHALL BE CLASS 200 PVC C900 DR14 OR DUCTILE IRON (D.I.) CLASS 350 (IRRIGATION LINES AND DOMESTIC SERVICE LINES SHOULD BE SDR-21 RATED PIPE). ALL WATER PIPE 14"-36" SHALL BE CLASS 235 PVC 905 DR 18 OR DUCTILE IRON (D.I.) CLASS 250. ALL WATER PIPE LESS THEN 4" SHALL BE COPPER OR SCHEDULE 40

6. ALL PUBLIC MAIN WASTEWATER PIPE SHALL BE SDR 26 PVC., OR PRESSURE RATED PIPE WHERE REQUIRED. SERVICE LATERALS SHALL BE SCHEDULE 40 PVC. 7. INSTALL MECHANICAL JOINT (M.J.) FITTINGS ON DUCTILE IRON (D.I.) PIPE OR PVC

C900 DR14 PIPE OR C905 DR 18 PIPE. 8. RESTRAINED JOINTS SHALL BE INSTALLED ON ALL WATER PIPE 6" AND LARGER.

9. ALL WATER MAINS SHALL BE BURIED MIN. 3'. 10. WHERE PUBLIC WATER AND SANITARY SEWER LINES ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET THE INSTALLATION MUST MEET THE REQUIREMENTS OF

FEET OF WASTEWATER LINE. 11. FOR PRESSURE TAPS, FURNISH, INSTALL AND AIR TEST THE SLEEVE AND VALVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES

TWENTY-FOUR (24) HOURS PRIOR TO MAKING THE WET TAP. 12. SEE MECHANICAL PLANS FOR EXACT LOCATION OF WATER AND WASTEWATER CONNECTIONS TO

13. ALL ON-SITE WATER AND WASTEWATER LINES WILL BE EXTENDED TO A MINIMUM OF 5 FEET

30 TAC 217.53 (DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS) OR 30 TAC

290.44(E) (WATER HYGIENE). CONCRETE ENCASE ALL WATER LINES THAT CROSS WITHIN 1.5

14. ALL BACKFLOW DEVICES WILL CARRY A MANUFACTURER RATING NOT TO EXCEED A 7 P.S.I. PRESSURE DROP THROUGH BACKFLOW DEVICE. 15. PROTECT EXISTING STRUCTURES FROM DAMAGE DURING CONSTRUCTION. PRIOR TO THE

FINAL ACCEPTANCE OF THE PUBLIC MAINS EXISTING STRUCTURES WILL BE INSPECTED FOR

DAMAGE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE. 16. EXTEND ALL EXISTING AND PROPOSED UTILITY MANHOLES, BOXES, COVERS, ETC. TO PROPOSED FINISH GRADE, UNLESS APPROVED OTHERWISE.

17. ALL MAINS SHALL BE TESTED BY THE CONTRACTOR AS REQUIRED BY AUTHORITIES. THE ENGINEER OR INSPECTOR SHALL BE PRESENT DURING THE TEST.

18. ALL WATER MAINS SHALL BE CHLORINATED AS REQUIRED BY AUTHORITIES

Civil Solutions

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JOB NO. <u>2014.01</u> <u>2014-12-0</u> CHECKED C1.0

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