

# THE PARK AT STONE CREEK

## CONSTRUCTION PLANS

### CITY OF ROCKWALL, TEXAS

TPWD PROJECT #50-000454

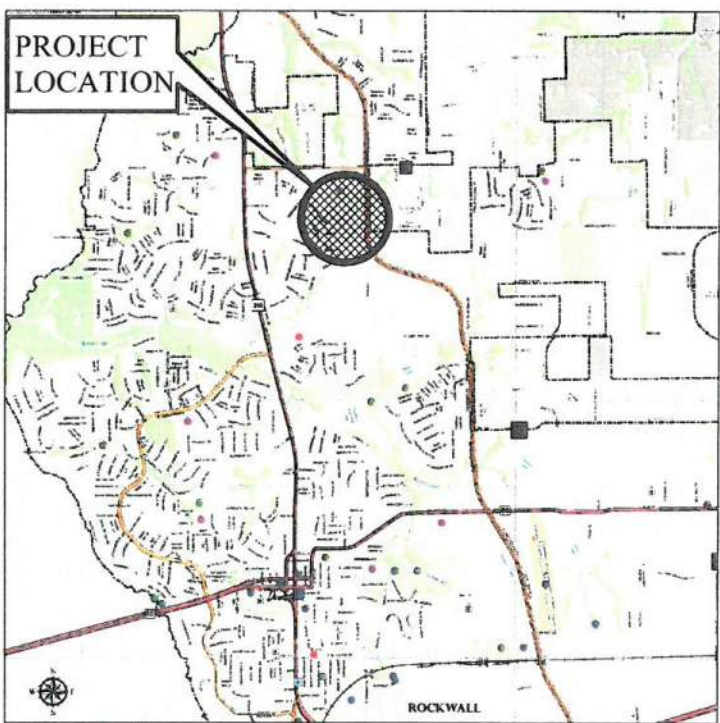
ROCKWALL COUNTY

FEBRUARY 2016

\*\*\* NOTICE TO CONTRACTORS \*\*\*

THE CONTRACTOR SHALL NOTIFY THE CONSULTANT IMMEDIATELY, IN WRITING, OF ANY DISCREPANCIES OR OMISSIONS TO THE TOPOGRAPHIC INFORMATION. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION (HORIZONTAL/VERTICAL) OF ANY BURIED CABLES, CONDUITS, PIPES, AND STRUCTURES (STORM SEWER, SANITARY SEWER, WATER, GAS, TELEVISION, TELEPHONE, ETC.) WHICH IMPACT THE CONSTRUCTION SITE. THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND CONSULTANT IF ANY DISCREPANCIES ARE FOUND BETWEEN THE ACTUAL CONDITIONS VERSUS THE DATA CONTAINED IN THE CONSTRUCTION PLANS. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL LOCATION (HORIZONTAL/VERTICAL) OF SAID CABLES, CONDUITS, PIPES, AND STRUCTURES SHALL BE BORNE BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND CONSULTANT IF ANY ERRORS OR DISCREPANCIES ARE FOUND ON THE CONSTRUCTION DOCUMENTS (PS&E), WHICH NEGATIVELY IMPACT THE PROJECT. CONSULTANT AND OWNER SHALL BE INDEMNIFIED OF PROBLEMS AND/OR COST WHICH MAY RESULT FROM CONTRACTOR'S FAILURE TO NOTIFY CONSULTANT AND OWNER.

LOCATION



**MHS**  
PLANNING & DESIGN, LLC

\*\*\* STOP! CALL BEFORE YOU DIG! \*\*\*

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT," TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

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212 West Ninth Street  
Tyler, Texas 75701  
903-597-4406  
903-597-0517 Fax  
TBPE No. F-14571

**MHS**  
PLANNING & DESIGN, LLC

CONSTRUCTION PLANS  
THE PARK AT STONE CREEK  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006



# REFERENCE BENCHMARK:

THE BOUNDARY SURVEY, TOPOGRAPHIC SURVEY, BENCHMARKS AND LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, TREES AND IMPROVEMENTS WERE PROVIDED BY THOMPSON AND ASSOCIATES, INC.

## T.B.M. No. 1

X Set in the southwest corner of concrete for a drop inlet located on the west side of State Highway No. 205 Bypass (John King Boulevard) and being located South 11°55'55" East a distance of 104.27 feet from a 2" iron pipe fence corner post near the northeast corner of the subject tract. Said benchmark having a Texas State Plane Coordinate Value of (X= 2,596,352.27; Y= 7,038,932.54)TNC and an Elevation of 529.11 feet.

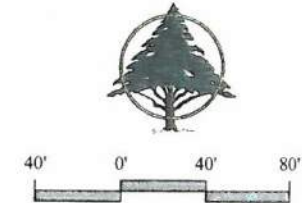
## T.B.M. No. 2

X Set in the northwest corner of concrete for a drop inlet located on the north side of Feather Stone Drive and being located South 75°18'43" East a distance of 70.93 feet from the southeast corner of a wing wall near the south line of the subject tract. Said benchmark having a Texas State Plane Coordinate Value of (X= 2,595,913.75; Y= 7,038,591.29)TNC and an Elevation of 527.60 feet.

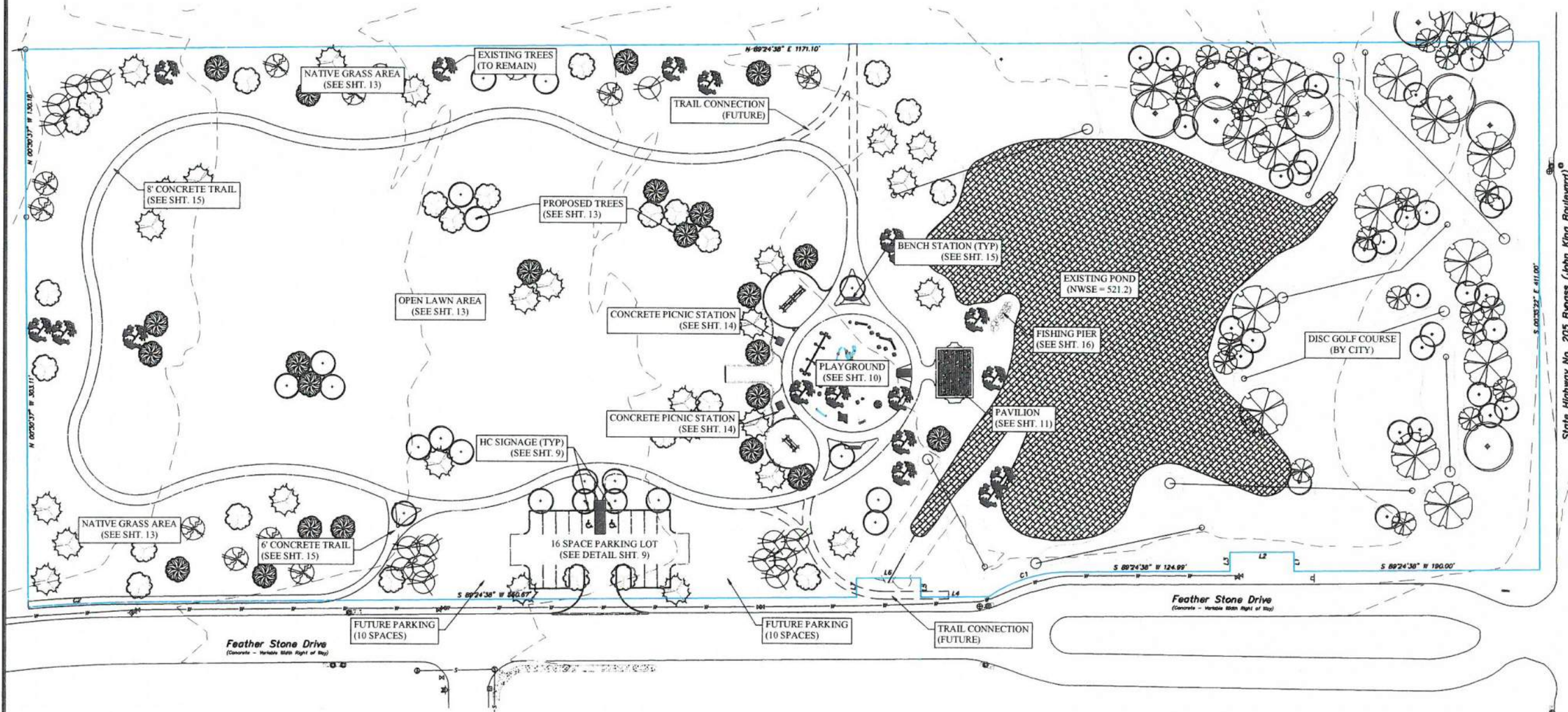
# GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF ROCKWALL PLANS AND SPECIFICATIONS, EXCEPT AS NOTED HEREIN AND APPROVED BY THE CITY.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH.
3. THE LOCATION OF ALL UTILITIES LOCATED ON THESE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS OR PROVIDED BY THOMPSON AND ASSOCIATES, INC. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.
4. EROSION CONTROL SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION. ALL PROPOSED GRADES IN LANDSCAPE AREAS ARE FINISHED GRADE ELEVATIONS. CONTRACTOR TO ALLOW FOR SEEDING OR SODDING OF THESE AREAS.
5. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CONTRACT DOCUMENTS, TECHNICAL SPECIFICATIONS, OR CITY STANDARDS FOR THE PROJECT UNLESS OTHERWISE INDICATED IN THIS PLAN SET.
6. DURING CONSTRUCTION OF THESE PUBLIC IMPROVEMENTS, ANY DEVIATION FROM THESE SPECIFICATIONS WILL REQUIRE APPROVAL FROM THE OWNER OR HIS DESIGNEE BEFORE ANY CONSTRUCTION INVOLVING THAT DECISION COMMENCES. ASSUMPTIONS ABOUT WHAT THESE DECISIONS MIGHT BE THAT ARE MADE DURING THE BIDDING PROCESS WILL HAVE NOT BEARING ON THE DECISION.
7. ALL FACILITIES IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CITY OF ROCKWALL STANDARD CONSTRUCTION DETAILS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES DURING THE CONSTRUCTION OF THE PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
8. DRAINAGE SHOULD BE MAINTAINED AWAY FROM THE FOUNDATIONS, BOTH DURING AND AFTER CONSTRUCTION.
9. BACKFILL FOR UTILITY LINES SHOULD BE CAREFULLY PLACED SO THAT THEY WILL BE STABLE. WHERE UTILITY LINES PASS THROUGH THE PARKING LOT, THE TOP 6" SHOULD BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHOULD BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
10. IF ROCK IS ENCOUNTERED IN THE TRENCH, ROCK SPOILS SHALL NOT BE USED IN THE UPPER 1.5' OF THE TRENCH.
11. ALL SIDEWALK AND CROSSWALK SLOPES SHALL CONFORM TO ADA REQUIREMENTS AS FOLLOWS:  
1.20 LONGITUDINAL (ALONG THE WALK) MAX  
1.50 TRAVERSE (ACROSS THE WALK) MAX
12. ALL EARTHWORK OPERATIONS SHALL CONFORM TO THE RECOMMENDATIONS PER THE GEOTECHNICAL INVESTIGATION (PROJECT NO. 15-0416) BY D & S ENGINEERING (OCTOBER 2015).

North



GRAPHIC SCALE  
1" = 40'



## CAUTION!!! EXISTING UTILITIES

EXISTING UTILITIES, OVERHEAD AND UNDERGROUND, INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

# SITE PLAN THE PARK AT STONE CREEK CITY OF ROCKWALL, TEXAS

**MHS**  
PLANNING & DESIGN, LLC

DRAWN: WHS  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006







REFERENCE BENCHMARK:  
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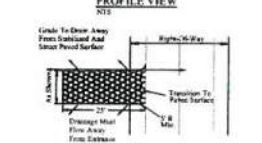
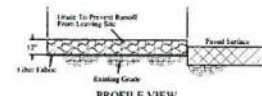
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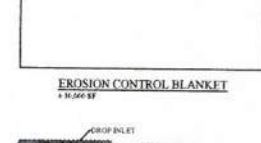
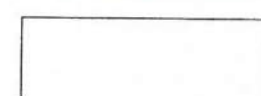
**STABILIZED CONSTRUCTION ENTRANCE**

- CONSTRUCTION ENTRANCE NOTES:**
1. STONE SHALL BE 4 TO 6 INCHES DIAMETER CRUSHED ROCK.
  2. WHEN NECESSARY, VEHICLES SHALL BE CLEARED TO REMOVAL SEGMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEGMENTS SHALL BE PREVENTED FROM POTENTIAL ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
  3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOES OF SEDIMENT ONTO PAVED SURFACES. THE MAINTENANCE SHALL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SHALL BE REMOVED IMMEDIATELY. SURFACES MUST BE REMOVED IMMEDIATELY.
  4. THE ENTRANCE MUST BE PROPERLY GRADED, OR INCORPORATE A SEDIMENT TRAP TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
  5. CONTRACTOR SHALL PROTECT EXISTING CURB FROM BEING DAMAGED WHERE CONSTRUCTION ENTRANCE CONNECTS TO EXISTING ROADWAY.



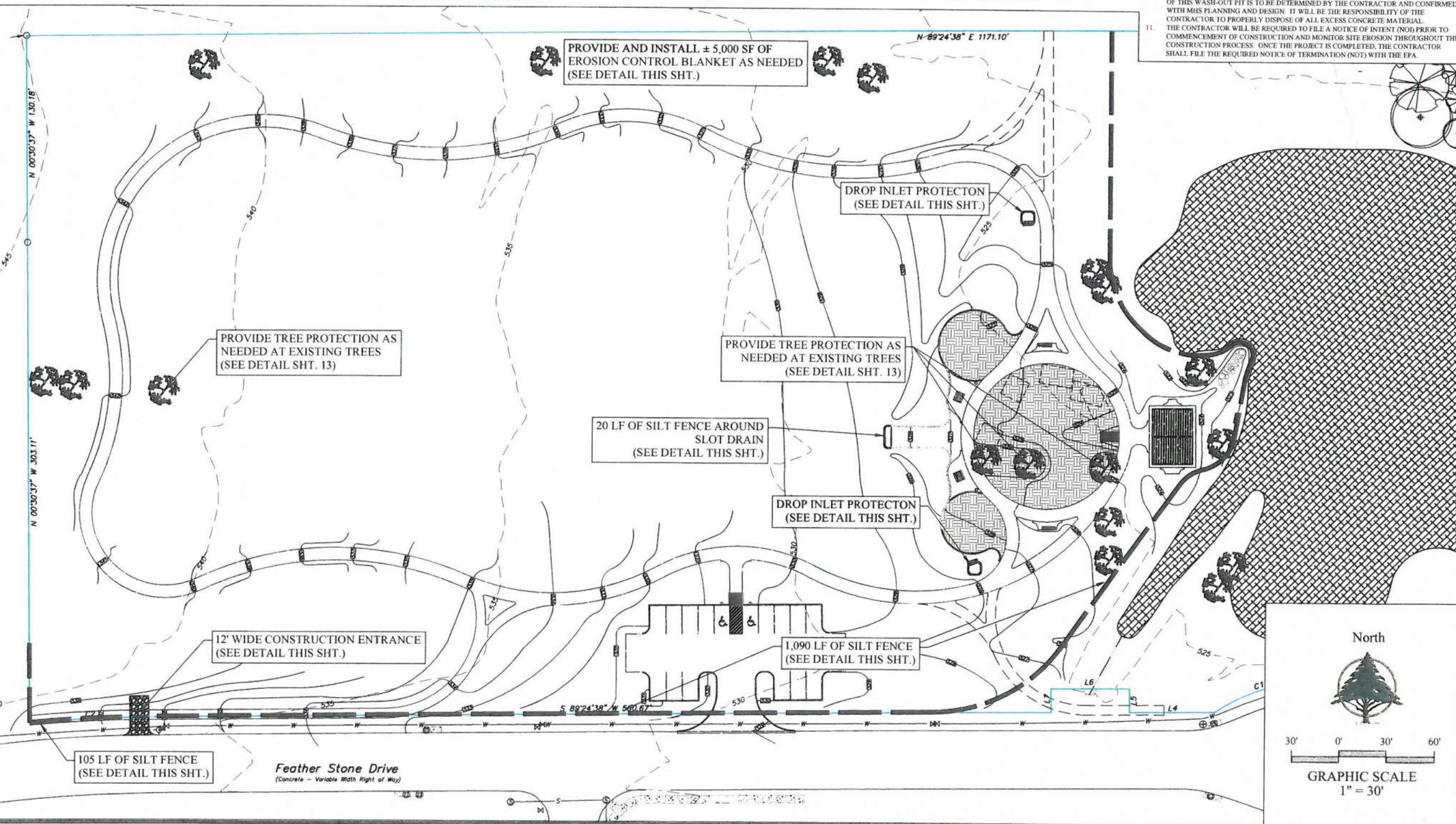
**DROP INLET PROTECTION**

- BLOCK AND GRAVEL PROTECTION**
- CONCRETE BLOCKS ARE TO BE PLACED ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. WITH EACH ADJUTING OPENING IN THE BLOCKS SHOULD FACE OUTWARD, NOT UPWARD. WIRE MESH SHALL THEN BE PLACED OVER THE OUTSIDE FACE OF THE BLOCKS COVERING THE HOLES. FILTER STONE SHALL THEN BE PLACED AGAINST THE WIRE MESH TO THE TOP OF THE BLOCKS WITH THE HEAD OF THE STONE BEING A MINIMUM OF 18 INCHES FROM THE BLOCKS. PERIODICALLY, WHEN THE STONE FILTER BECOMES CLOGGED, THE STONE MUST BE REMOVED AND CLEANED IN A PROPER MANNER OR REPLACED WITH NEW STONE AND FILL BACK AGAINST THE WIRE MESH.



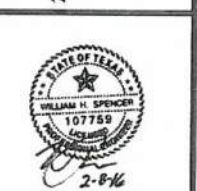
**DROP INLET PROTECTION**

- EROSION CONTROL BLANKET**
- EROSION CONTROL BLANKET SHALL BE PLACED ON THE SOIL SURFACE AROUND THE PERIMETER OF THE INLET. WITH EACH ADJUTING OPENING IN THE BLOCKS SHOULD FACE OUTWARD, NOT UPWARD. WIRE MESH SHALL THEN BE PLACED OVER THE OUTSIDE FACE OF THE BLOCKS COVERING THE HOLES. FILTER STONE SHALL THEN BE PLACED AGAINST THE WIRE MESH TO THE TOP OF THE BLOCKS WITH THE HEAD OF THE STONE BEING A MINIMUM OF 18 INCHES FROM THE BLOCKS. PERIODICALLY, WHEN THE STONE FILTER BECOMES CLOGGED, THE STONE MUST BE REMOVED AND CLEANED IN A PROPER MANNER OR REPLACED WITH NEW STONE AND FILL BACK AGAINST THE WIRE MESH.



- GENERAL NOTES**
1. THE SPECIFIC PLANT MATERIALS PROPOSED TO PROTECT FILL AND EXCAVATED SLOPES SHALL BE AS INDICATED ON THE PLANS. PLANT MATERIALS MUST BE SUITABLE FOR USE UNDER LOCAL CLIMATE AND SOIL CONDITIONS. IN GENERAL, HYDROSEEDING OR SODDING BERMUDA GRASS IS ACCEPTABLE DURING THE SUMMER MONTHS (MAY 1ST TO AUGUST 31ST). WINTER RYE OR FESCUE GRASS MAY BE PLANTED DURING TIMES OTHER THAN THE SUMMER MONTHS AS A TEMPORARY MEASURE UNTIL SUCH TIME AS THE PERMANENT PLANTING CAN BE MADE.
  2. PRIOR TO COMMENCING ANY CONSTRUCTION, A CONSTRUCTION ENTRANCE AND PERIMETER SILT FENCE SHALL BE INSTALLED AT THE LOCATION(S) SHOWN.
  3. THE LOCATION OF ALL UTILITIES LOCATED ON THESE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS OR PROVIDED BY THOMPSON & ASSOCIATES, INC. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.
  4. EROSION CONTROL SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION.
  5. AS INLETS ARE COMPLETED, TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED.
  6. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CONTRACT DOCUMENTS, TECHNICAL SPECIFICATIONS, OR CITY STANDARDS FOR THE PROJECT UNLESS OTHERWISE INDICATED IN THIS PLAN SET.
  7. AT COMPLETION OF THE PAVING AND FINAL GRADING, THE DISTURBED AREA(S) SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS.
  8. SILT FENCE AND INLET SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL REVEGETATION HAS BEEN COMPLETED.
  9. DISTURBED AREAS THAT ARE SEEDED OR SODDED SHALL BE CHECKED PERIODICALLY TO SEE THAT GRASS COVERAGE IS PROPERLY MAINTAINED. DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND RE-SEEDED OR RE-SODDED, IF NECESSARY.
  10. THERE IS TO BE ONE CONCRETE WASH-OUT PIT LOCATED ON THE SITE. THE LOCATION OF THIS WASH-OUT PIT IS TO BE DETERMINED BY THE CONTRACTOR AND CONFIRMED WITH MHS PLANNING AND DESIGN. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY DISPOSE OF ALL EXCESS CONCRETE MATERIAL.
  11. THE CONTRACTOR WILL BE REQUIRED TO FILE A NOTICE OF INTENT (NOI) PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MONITOR SITE EROSION THROUGHOUT THE CONSTRUCTION PROCESS. ONCE THE PROJECT IS COMPLETED, THE CONTRACTOR SHALL FILE THE REQUIRED NOTICE OF TERMINATION (NOT) WITH THE EPA.

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571



**MHS**  
PLANNING & DESIGN, LLC

**EROSION CONTROL PLAN**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: WHS  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006



SANDBLASTING WASTE MANAGEMENT

DESCRIPTION

The objective of the management program is to minimize the potential of storm water quality degradation from sandblasting activities at construction sites. The key issues in this program are prudent handling and storage of sandblast media, dust suppression, and proper collection and disposal of spent media. It is not the intent of this program to outline all of the worker safety issues pertinent to this practice. Safety issues should be addressed by construction safety programs as well as local, state, and and federal regulation. utilized at sites in which Sandblasting waste is present.

INSTALLATION/APPLICATION CRITERIA

Since the media consists of fine abrasive granules, it can be easily transported by running water. Sandblasting activities typically create a significant dust problem which must be contained and collected to prevent off-site migration problem which must be contained and collected to to prevent off-site migration or fines.

Operational Procedures

Use only inert, non-degradable sandblast media.  
Use appropriate equipment for the job, do not over-blast.  
Wherever possible, blast in a downward direction.  
Install a wind sock or other wind direction instrument.  
Cease blasting activities in high winds or if wind direction could transport grit to drainage facilities.  
Install dust shielding around sandblasting areas.  
Collect and dispose of all spent sandblast grit, use dust containment fabrics and dust collection hoppers and barrels.  
Non-hazardous sandblast grit may be disposed in permitted construction debris landfills or permitted sanitary landfills.  
If sandblast media cannot be fully contained, construct sediment traps downstream from blasting area where appropriate.  
Use sand fencing where appropriate in areas where blast media cannot be fully contained.  
If necessary, install misting equipment to remove sandblast grit from the air - prevent runoff from misting operations from entering drainage systems.  
Use vacuum grit collection systems where possible.  
Keep records of sandblasting materials, procedures, and weather conditions on a daily basis.  
Take all reasonable precautions to ensure that sandblasting grit is contained and kept away from drainage structures.

Educational Issues

Educate all on-site employees of potential dangers to humans and the environment from sandblast grit.  
Instruct all on-site employees of the potential hazardous nature of sandblast grit and possible symptoms of overexposure to sandblast grit.  
Instruct operators of sandblasting equipment on safety procedures and personal protection equipment.  
Instruct operators on proper procedures regarding storage, handling, and containment of sandblast grit.  
Instruct operators to recognize unfavorable weather conditions regarding sandblasting activities.  
Instruct operators and supervisors on current local, state, and federal federal regulations regarding fugitive dust and hazardous waste from sandblast grit.  
Have weekly meetings with operators to discuss and reinforce proper operational procedures.  
Establish a continuing education program to indoctrinate new employees.

Material Handling Recommendations

Sandblast media should always be stored under cover away from drainage structures.  
Ensure that stored media or grit is not subject to transport by wind.  
Ensure that all sandblasting equipment as well as storage containers comply with local, state, and federal regulations.  
Refer to Hazardous Waste BMP fact sheet if sandblast grit is known or or suspected to contain hazardous components.  
Capture and treat runoff which comes into contact with sandblasting material or waste.  
Foreman and/or construction supervisor should monitor all sandblasting activities and safety procedures.

Quality Assurance

Educate, and if necessary, discipline workers who violate procedures.  
Take all reasonable precautions to ensure that sandblast grit is not transported off-site or into drainage facilities.

Requirements

Education and awareness program for all employees regarding control of sandblasting and potential dangers to humans and the environment.  
Operator and supervisor education program for those directly involved in sandblasting activities - instructions on material handling, proper equipment operation, personal protective equipment, fugitive dust control, record keeping and reporting, fugitive dust control, record keeping and reporting.  
Proper sandblast equipment for the job.  
Site-specific fugitive dust control and containment equipment.  
Site-specific fugitive dust control procedure.  
Compliance by supervisors and workers.

Costs

Minimal cost for training and monitoring.  
Potential for significant cost for containment procedures on large jobs.  
Potential for significant costs associated with cleanup, correction and remediation if containment occurs.

LIMITATIONS

Site specific solutions to sandblasting problems may be required.  
Sandblasting operations on structures known to contain hazardous materials require special procedures not specifically outlined above including professional hazardous waste specialists.  
Where hazardous materials are known or suspected, a site assessment and remediation plan may be necessary.  
This management program is one part of a comprehensive construction site waste management program.

HAZARDOUS WASTE MANAGEMENT

DESCRIPTION

The hazardous waste management BMP addresses the problem of storm water Polluted with hazardous waste through spills or other forms of contact. The Objective of the Management Program is to minimize the potential of Storm water contamination from common construction site hazardous wastes Through appropriate recognition, handling, storage, and disposal practices.

It is not the intent of this Management Program to supersede or replace normal site assessment and remediation procedures. Significant spills and/or contamination warrant immediate response by trained professionals. Suspected job-site contamination should be immediately reported to regulatory Authorities and protective actions taken. The General Permit requires reporting Of significant spills to the National Response Center (NRC) at (800)424-8802.

PRIMARY USE

These management practices along with applicable OSHA and EPA guidelines Should be incorporated at all construction sites which use or generate Hazardous wastes. Many wastes such as fuel, oil, grease, fertilizer, and pesticide Are present at most construction sites.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA

The hazardous waste management techniques presented here are based on Proper recognition, handling, and disposal practices by construction workers And supervisors. Key elements of the management program are education, Proper disposal practices, as well as provisions for safe storage and disposal. Following are lists describing the targeted materials and recommended procedures:

Targeted Hazardous Waste Materials

Paints  
Solvents  
Stains  
Wood preservatives  
Cutting oils  
Greases  
Roofing tar  
Pesticides  
Fuel and lube oils  
Lead based paints (Demolition)

Storage Procedures

Wherever possible, minimize use of hazardous materials.  
Minimize generation of hazardous wastes on the job-site.  
Segregate potentially hazardous waste from non-hazardous Construction site debris.  
Designate a foreman or supervisor to oversee hazardous materials Handling procedures.  
Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.  
Other enclosed trash container that limits contact with rain and.  
Store waste materials away from drainage ditches, swales, and catch basins.  
Use containment berms in fueling and maintenance areas and where the potential for spills is high.  
Ensure that adequate hazardous waste storage volume is available.  
Ensure that hazardous waste collection containers are conveniently located.  
Do not allow potentially hazardous waste materials to accumulate on the ground.  
Enforce Hazardous waste handling and storage procedures.  
Clearly mark on all hazardous waste containers which materials are acceptable for the container.

Disposal Procedures

Regularly schedule hazardous waste removal to minimize on-site storage.  
Use only reputable, licensed hazardous waste haulers.

Education

Instruct workers in identification of hazardous waste  
Educate workers of potential dangers to humans and the environment from hazardous wastes  
Instruct workers on safety procedures for common construction site hazardous wastes  
Educate all workers on hazardous waste storage and disposal procedures  
Have regular meetings to discuss and reinforce identification, handling and disposal procedures (incorporate in regular safety seminars).  
Establish a continuing education program to indoctrinate new employees

Quality Assurance

Foreman and/or construction supervisor shall monitor on-site hazardous waste storage and disposal procedures.  
Educate, and if necessary, discipline workers who violate procedures.  
Ensure that the hazardous waste disposal contractor is reputable and licensed.

Requirements

Job-site waste handling and disposal education and awareness program  
Commitment by management to implement hazardous waste management practices.  
Compliance by workers.  
Sufficient and appropriate hazardous waste storage containers.  
Timely removal of stored hazardous waste materials.

Costs

Possible modest cost impact for additional hazardous storage containers.  
Small cost impact for training and monitoring.  
Potential cost impact for hazardous waste collection and disposal by licensed hauler - actual cost depends on type of material and volume.

LIMITATIONS

This practice is not intended to address site-assessments and pre-existing contamination.  
Major contamination, large spills and other serious hazardous waste incidents require immediate response from specialists.  
Demolition activities and potential pre-existing materials, such as asbestos, are not addressed by this program. Site specific information on plans is necessary.  
Contaminated soils are not addressed.  
One part of a comprehensive construction site waste management program.

SOLID WASTE MANAGEMENT

DESCRIPTION

Large volumes of solid waste are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. The solid waste management practice lists techniques to minimize the potential of storm water contamination from solid waste through appropriate storage and disposal practices.

PRIMARY USE

These practices should be a part of all construction practices. By limiting the trash and debris on site, storm water quality is improved along with reduced clean up requirements at the completion of the project.

APPLICATIONS

The solid waste management practice for construction sites is based on proper storage and disposal practices by construction workers and supervisors. Key elements of the program are education and modification of improper disposal habits. Cooperation and vigilance is required on the part of supervisors and workers to ensure that the recommendations and procedures are followed. Following are lists describing the targeted materials and recommended procedures:

Targeted Solid Waste Materials

Paper and cardboard containers  
Plastic packaging  
Styrofoam packing and forms  
Insulation materials (non-hazardous)  
Wood pallets  
Wood cuttings  
Pipe and electrical cuttings  
Concrete, brick, and mortar waste  
Shingle cuttings and waste  
Roofing tar  
Steel (cuttings, nails, rust residue)  
Gypsum board cuttings and waste  
Sheathing cuttings and waste  
Miscellaneous cutting and waste  
Food waste  
Demolition waste

Storage Procedures

Wherever possible, minimize production of solid waste materials.  
Designate a foreman or supervisor to oversee and enforce proper solid waste procedures.  
Instruct construction workers in proper solid waste procedures.  
Segregate potentially hazardous waste from non-hazardous construction site debris.  
Keep solid waste materials under cover in either a closed dumpster or other enclosed trash container that limits contact with rain and runoff.  
Store waste materials away from drainage ditches, swales and catch basins.  
Do not allow trash containers to overflow.  
Do not allow waste materials to accumulate on the ground.  
Prohibit littering by workers and visitors.  
Police site daily for litter and debris.  
Enforce solid waste handling and storage procedures.

Disposal Procedures

If feasible, segregate recyclable wastes from non-recyclable waste materials and dispose of properly.  
General construction debris may be hauled to a licensed construction debris landfill (typically less expensive than a sanitary landfill).  
Use waste facilities approved by local jurisdiction.  
Runoff which comes into contact with unprotected waste shall be directed into structural treatment such as silt fence to remove debris.

Education

Educate all workers on solid waste storage and disposal procedures.  
Instruct workers in identification of solid waste and hazardous waste.  
Have regular meetings to discuss and reinforce disposal procedures (incorporate in regular safety seminars).  
Clearly mark on all solid waste containers which materials are acceptable.

Quality Control

Foreman and/or construction supervisor shall monitor on-site solid waste storage and disposal procedures.  
Discipline workers who repeatedly violate procedures.

Requirements

Jobsite waste handling and disposal education and awareness program  
Commitment by management to implement and enforce Solid Waste Management Program.  
Compliance by workers.  
Sufficient and appropriate waste storage containers.  
Timely removal of stored solid waste materials.  
Possible modest cost impact for additional waste storage containers.  
Small cost impact for training and monitoring  
Minimal overall cost impact.

LIMITATIONS

Only addresses non-hazardous solid waste.  
One part of a comprehensive construction site management program.

CONCRETE WASTE MANAGEMENT

DESCRIPTION

Concrete waste at construction sites comes in two forms; 1) excess fresh concrete mix including truck and equipment washing, and 2) concrete dust and concrete debris resulting from demolition. Both forms have the potential to impact water quality through storm water runoff contact with the waste.

PRIMARY USE

Concrete waste is present at most construction sites. This BMP should be utilized at sites in which concrete waste is present

APPLICATIONS

A number of water quality parameters can be affected by introduction of concrete - especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregate dust are also Generated from both fresh and demolished concrete waste:

Current Unacceptable Waste Concrete Disposal Practices

Dumping in vacant areas on the job-site  
Illicit dumping off-jobsite  
Dumping into ditches or drainage facilities

Recommended Disposal Practices

Avoid unacceptable dumping practices listed above.  
Develop predetermined, safe concrete disposal areas  
Provide a washout area with a minimum of 6 cubic feet of containment area volume for every 10 cubic yards of concrete poured.  
Never dump waste concrete illicitly or without property owners knowledge and consent.  
Treat runoff from storage area through the use of structural controls as required.

Education

Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above).  
Supervisors must be made aware of the potential environmental consequences of improperly handling concrete waste.

Enforcement

The construction site manager or foreman must ensure that employees and pre-mix companies follow proper procedures for concrete disposal and equipment washing.  
Employees violating disposal or equipment cleaning directives must be reeducated or disciplined if necessary.

Demolition Practices

Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters.  
Where appropriate, construct sediment traps or other types of sediment detention devices downstream of demolition activities.

Requirements

Use predetermined disposal for waste concrete.  
Prohibit dumping waste concrete anywhere but predetermined areas.  
Assign predetermined truck and equipment washing areas.  
Educate drivers and operators on proper disposal and equipment cleaning procedures.

Costs

Minimal cost impact for training and monitoring.  
Concrete disposal cost depends on availability and distance to suitable disposal areas.  
Additional costs involved in equipment washing could be significant.

LIMITATIONS

This concrete waste management program is one part of a comprehensive construction site management program.

REVISIONS:

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571



**MHS**  
PLANNING & DESIGN, LLC

**SWPPP NOTES**  
**TEH PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: WHS

CHECKED: MHS

DATE: OCT 2015

SCALE: AS SHOWN

JOB NO.: 15-006

5 OF 16



# REFERENCE BENCHMARK:

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- ALL PAVING OPERATIONS SHALL CONFORM TO THE RECOMMENDATIONS PER THE GEOTECHNICAL INVESTIGATION (PROJECT NO. 15-0416) BY D&S ENGINEERING (OCTOBER 2015).
- PROPOSED SPOT ELEVATIONS LOCATED AT THE CURB ARE FINISHED GUTTER ELEVATIONS. ADD 0.50 FEET TO THE ELEVATION FOR THE PROPOSED TOP OF CURB.
- COMPACT ALL FILL MATERIAL WITH SHEEP FOOT ROLLER TO 95% PROCTOR DENSITY.

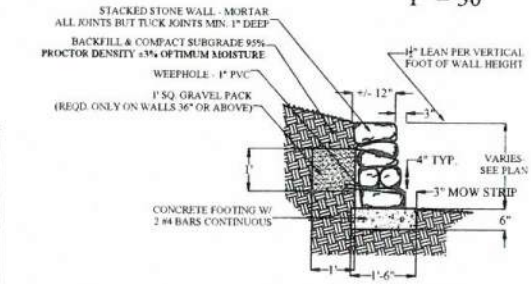
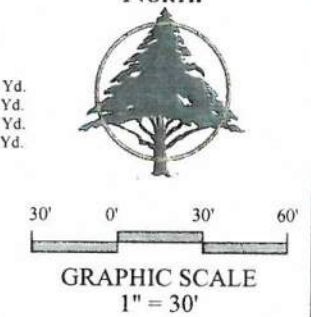
## LEGEND

- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- DIRECTION OF FLOW
- CURB AND GUTTER
- NO CURB
- TC = TOP OF CURB
- G = GUTTER
- FL = FLOW LINE
- TI = TOP OF INLET
- TW = TOP OF WALL
- BW = BOTTOM OF WALL

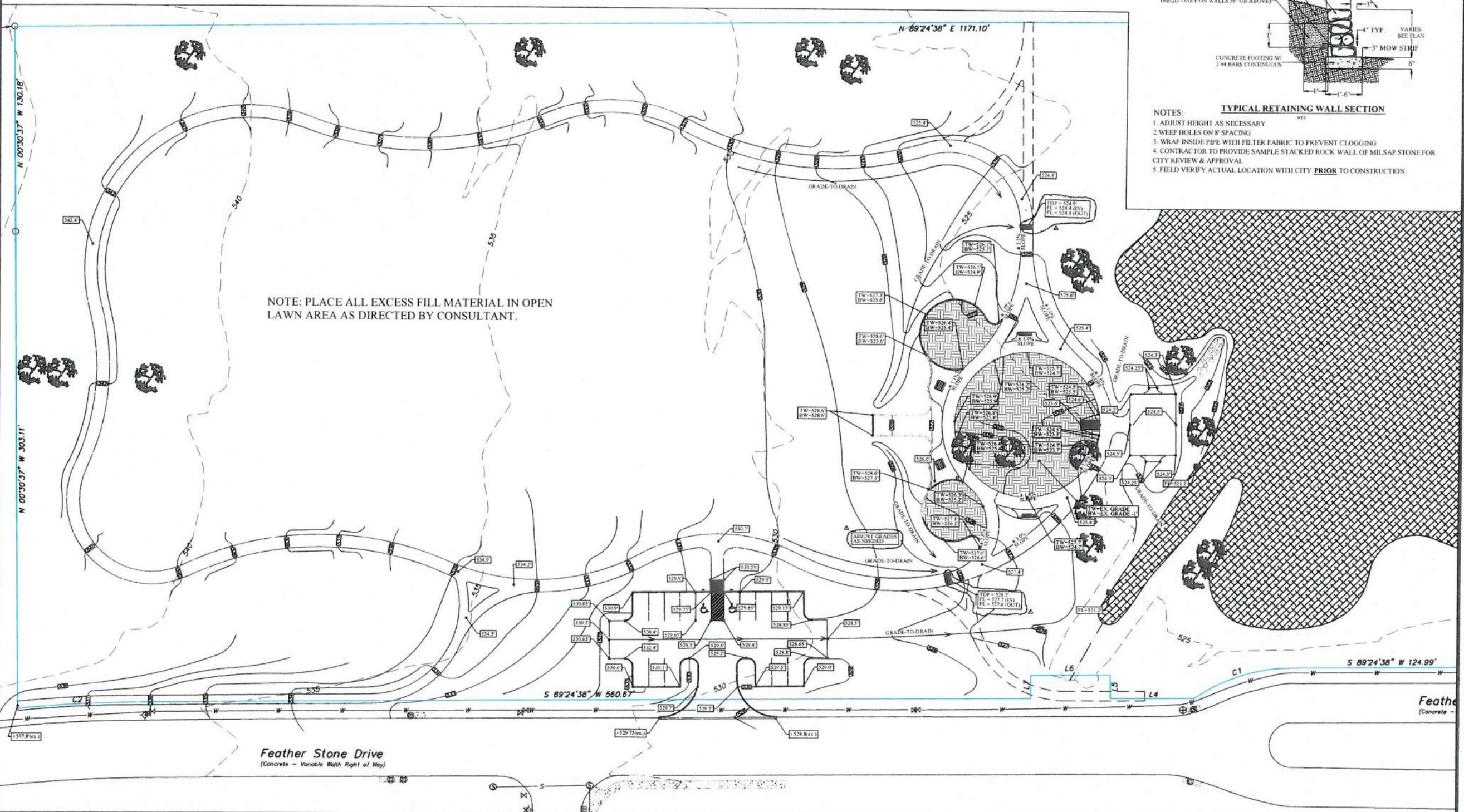
## Volume

Base Surface Existing Surface	
Comparison Surface Proposed Surface	
Cut Factor	1.100
Fill Factor	1.000
Cut volume (adjusted)	2305.72 Cu. Yd.
Fill volume (adjusted)	1355.45 Cu. Yd.
Cut volume (unadjusted)	2096.11 Cu. Yd.
Fill volume (unadjusted)	1355.45 Cu. Yd.

## NORTH



- NOTES:
- ADJUST HEIGHT AS NECESSARY
  - WEEPHOLE ON 8' SPACING
  - WRAP INSIDE PIPE WITH FILTER FABRIC TO PREVENT CLOGGING
  - CONTRACTOR TO PROVIDE SAMPLE STACKED ROCK WALL OF MILSAP STONE FOR CITY REVIEW & APPROVAL
  - FIELD VERIFY ACTUAL LOCATION WITH CITY PRIOR TO CONSTRUCTION



**MHS**  
PLANNING & DESIGN, LLC

**GRADING PLAN**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: TWA  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006



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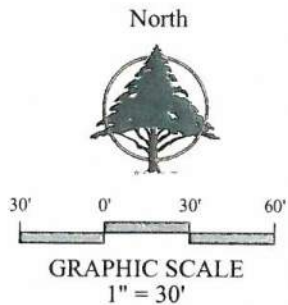
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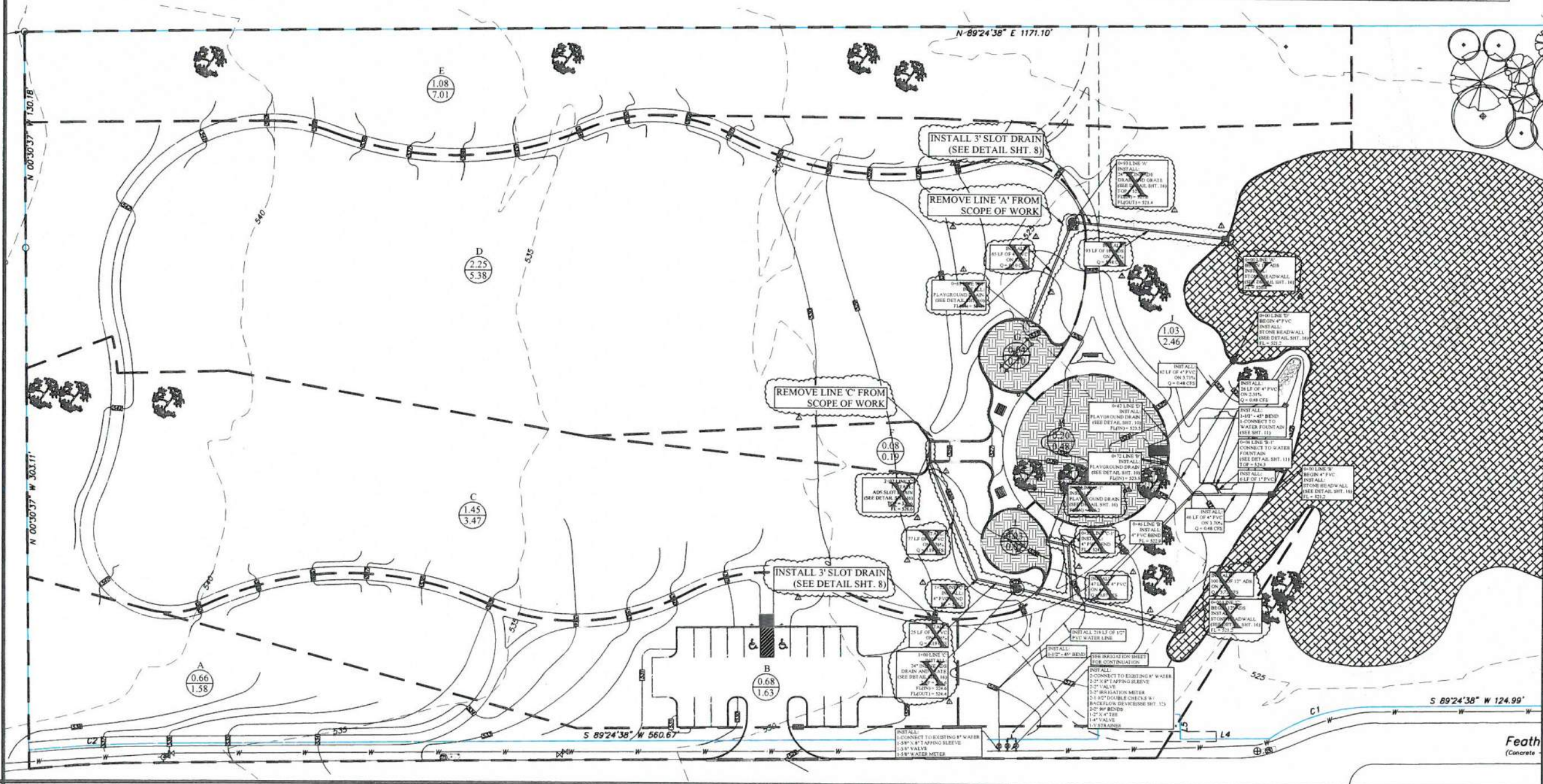
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- IF ROCK IS ENCOUNTERED IN THE TRENCH, ROCK SPOILS SHALL NOT BE USED IN THE UPPER 1.5' OF THE TRENCH. THE UPPER 1.5' OF THE TRENCH IS TO BE BACKFILLED ONLY WITH QUALITY TOPSOIL.
- ANY UTILITY INSTALLED OUTSIDE OF AN EASEMENT SHALL BE INSTALLED BY A PLUMBER AND INSPECTED BY CODE ENFORCEMENT.
- ALL DUCTILE IRON FITTINGS SHALL BE OF THE MECHANICAL JOINT TYPE OR SLIP JOINT AND SHALL BE CLASS D, OR CLASS 250 ON SIZES 12" AND SMALLER IN ACCORDANCE WITH A.W.W.A. SPECIFICATIONS C-110-64 AND C-111-64 UNLESS OTHERWISE APPROVED BY THE CITY.
- ALL 6" AND SMALLER WATER MAINS SHALL HAVE A MINIMUM COVER OF 42"; ALL 8" AND LARGER WATER MAINS SHALL HAVE A MINIMUM COVER OF 48" OR SUFFICIENT COVER TO CLEAR OTHER UTILITIES AS MEASURED FROM TOP OF PIPE TO EXISTING GROUND LEVEL OR FINISHED GRADE, WHICHEVER IS GREATER.
- ALL GATE VALVES SHALL BE CITY APPROVED.
- ALL WATER AND SANITARY MAINS AND SERVICES SHALL HAVE A 10" MIN. LATERAL SEPARATION.
- CONCRETE BLOCKING SHALL BE PROVIDED ON WATER MAINS AT ALL TEES, FIRE HYDRANTS, AND BENDS PER CITY STANDARDS. PAYMENTS FOR CONCRETE BLOCKING SHALL BE SUBSIDIARY TO PIPE INSTALLATION AND SHALL BE INCLUDED IN THE BID PRICE THEREOF.
- CLASS "H" EMBEDMENT, PER SD-20, SHALL BE USED FOR PVC WATER MAINS.
- ALL WATER METERS TO BE PLACED IN A NON-TRAFFIC AREA.

AREA LABEL  
AREA (ac)  
FLOW (cfs)  
 $Q = cIA$   
 $c = 0.35$   
 $I = 6.83 \text{ (in/hr)}$   
 $tc = 20 \text{ (min.)}$



DRAINAGE AREA CALCULATIONS					
DRAINAGE AREA NO.	TOTAL AREA (AC)	RUNOFF COEFFICIENT	TIME OF CONCENTRATION (MIN)	I(100) (IN/HR)	Q(100) CFS
A	0.66	0.35	20	6.83	1.58
B	0.68	0.35	20	6.83	1.63
C	1.45	0.35	20	6.83	3.47
D	2.25	0.35	20	6.83	5.38
E	1.08	0.95	20	6.83	7.01
F	0.08	0.35	20	6.83	0.19
G	0.04	0.35	20	6.83	0.10
H	0.2	0.35	20	6.83	0.48
I	0.03	0.35	20	6.83	0.07
J	1.03	0.35	20	6.83	2.46



REVISIONS

NO.	DATE	REVISION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571

**MHS**  
PLANNING & DESIGN, LLC

UTILITY PLAN  
THE PARK AT STONE CREEK  
CITY OF ROCKWALL, TEXAS

DRAWN: WHS  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006



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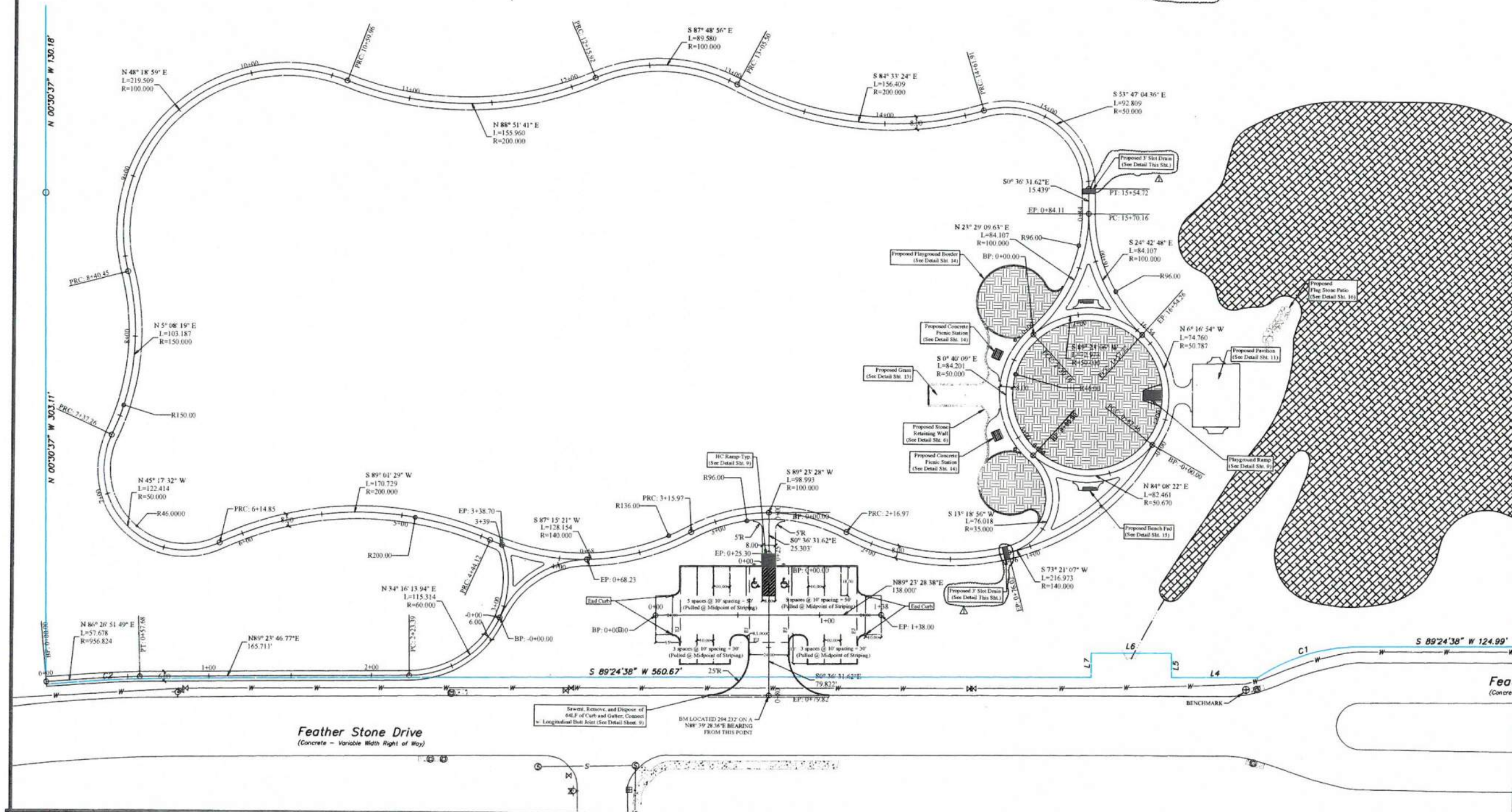
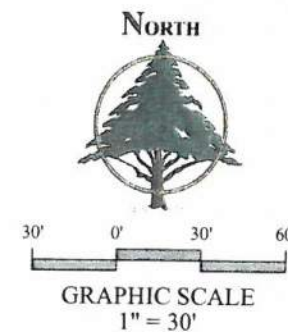
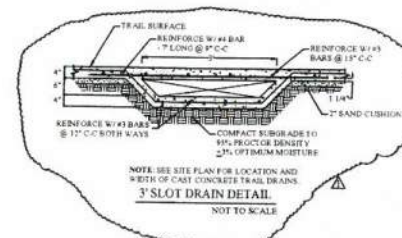
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- NO SAND SHALL BE USED WITH FOR LEVELING OF THE 4" CONCRETE PAVEMENT.

LEGEND

- 6" - 3600 PSI CONCRETE PAVEMENT W/ #3 BARS @ 18" O.C.E. OVER 6" SUBGRADE WITH 6% LIME STABILIZATION (SEE DETAIL SHT. 9 - MIN 6.5 SACK MIX)
- 4" - 3000 PSI CONCRETE PAVEMENT W/ #3 BARS @ 18" O.C.E. OVER 6" COMPACTED SUBGRADE (SEE DETAIL SHT. 15 - MIN 5.5 SACK MIX)
- EXPANSION JOINT
- CURB & GUTTER
- NO CURB

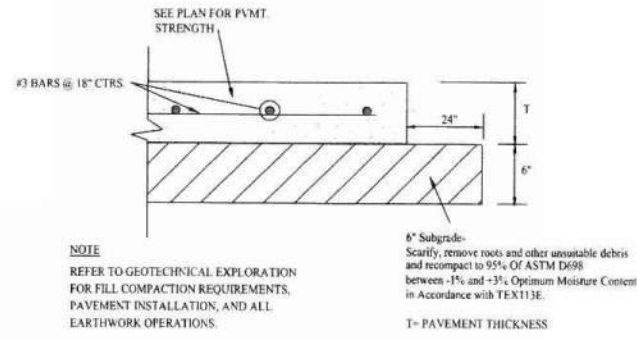


**MHS**  
PLANNING & DESIGN, LLC

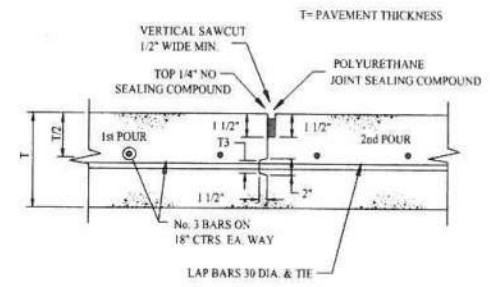
**PAVING AND HORIZONTAL  
CONTROL PLAN**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: WHS  
CHECKED: MHS  
DATE: OCT 2015  
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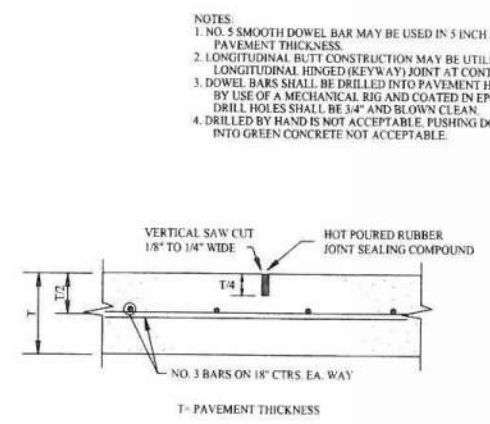




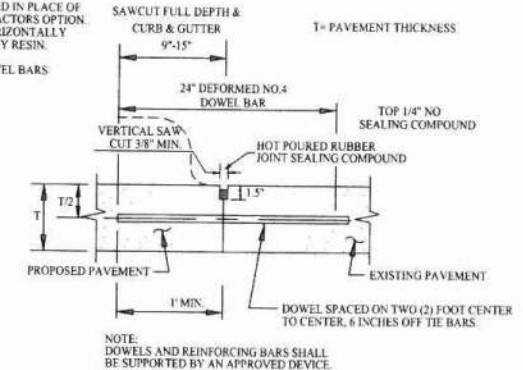
PAVEMENT SECTION W/O CURB  
N.T.S.



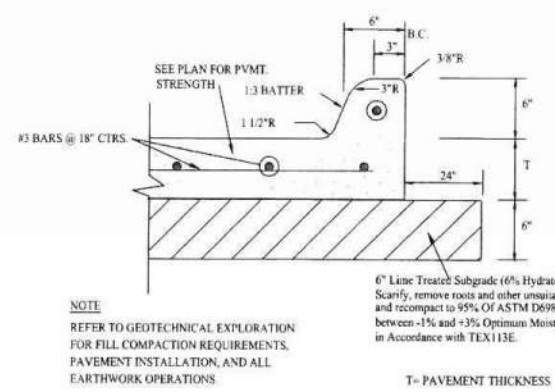
CONSTRUCTION JOINT  
N.T.S.



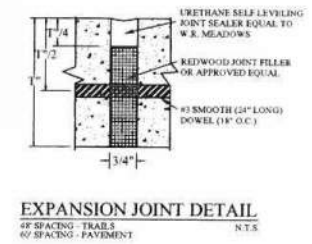
SAWED DUMMY (CONTROL) JOINT  
N.T.S.



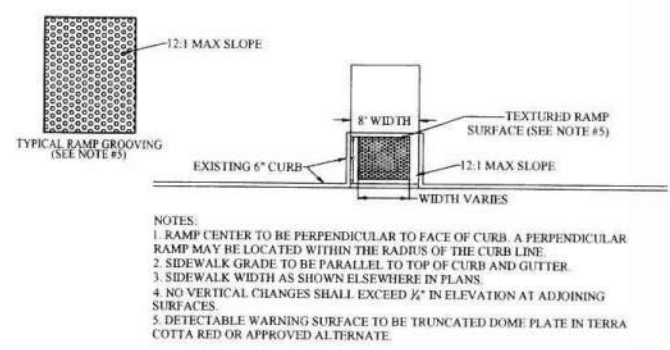
LONGITUDINAL BUTT JOINT  
N.T.S.



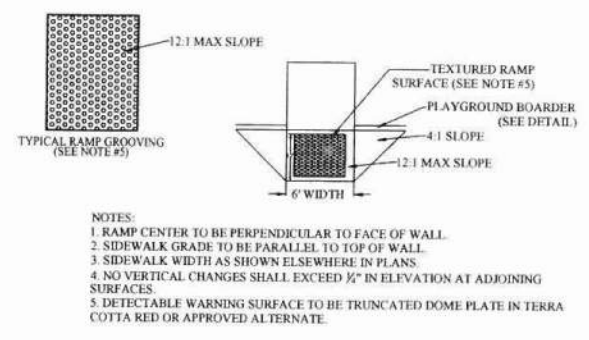
PAVEMENT SECTION WITH 6" CURB  
N.T.S.



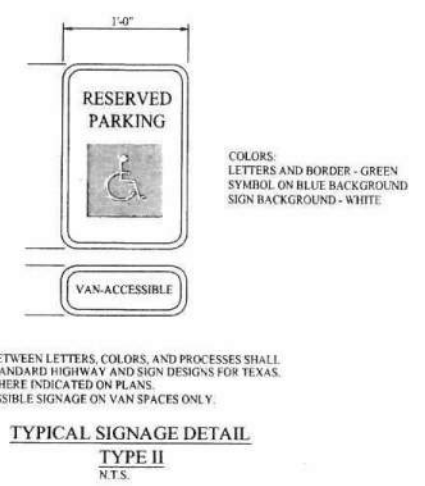
EXPANSION JOINT DETAIL  
N.T.S.



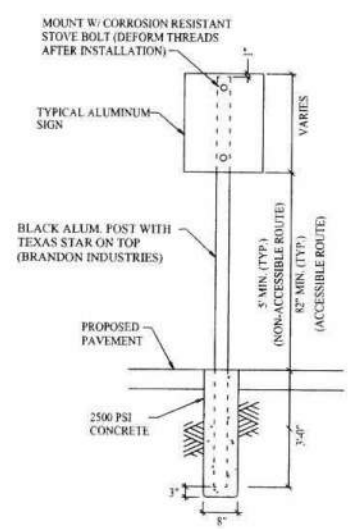
TYPICAL HANDICAP RAMP DETAIL  
N.T.S.



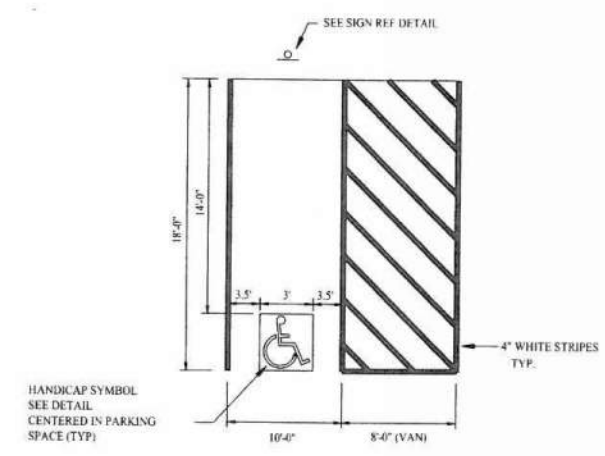
PLAYGROUND HANDICAP RAMP DETAIL  
N.T.S.



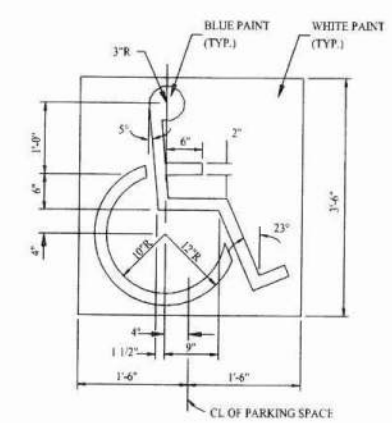
TYPICAL SIGNAGE DETAIL  
TYPE II  
N.T.S.



TYPICAL SIGNAGE MOUNTING DETAIL  
N.T.S.



HANDICAP STRIPING DETAIL  
N.T.S.



HANDICAP SYMBOL DETAIL  
N.T.S.

PAVING DETAIL  
THE PARK AT STONE CREEK  
CITY OF ROCKWALL, TEXAS

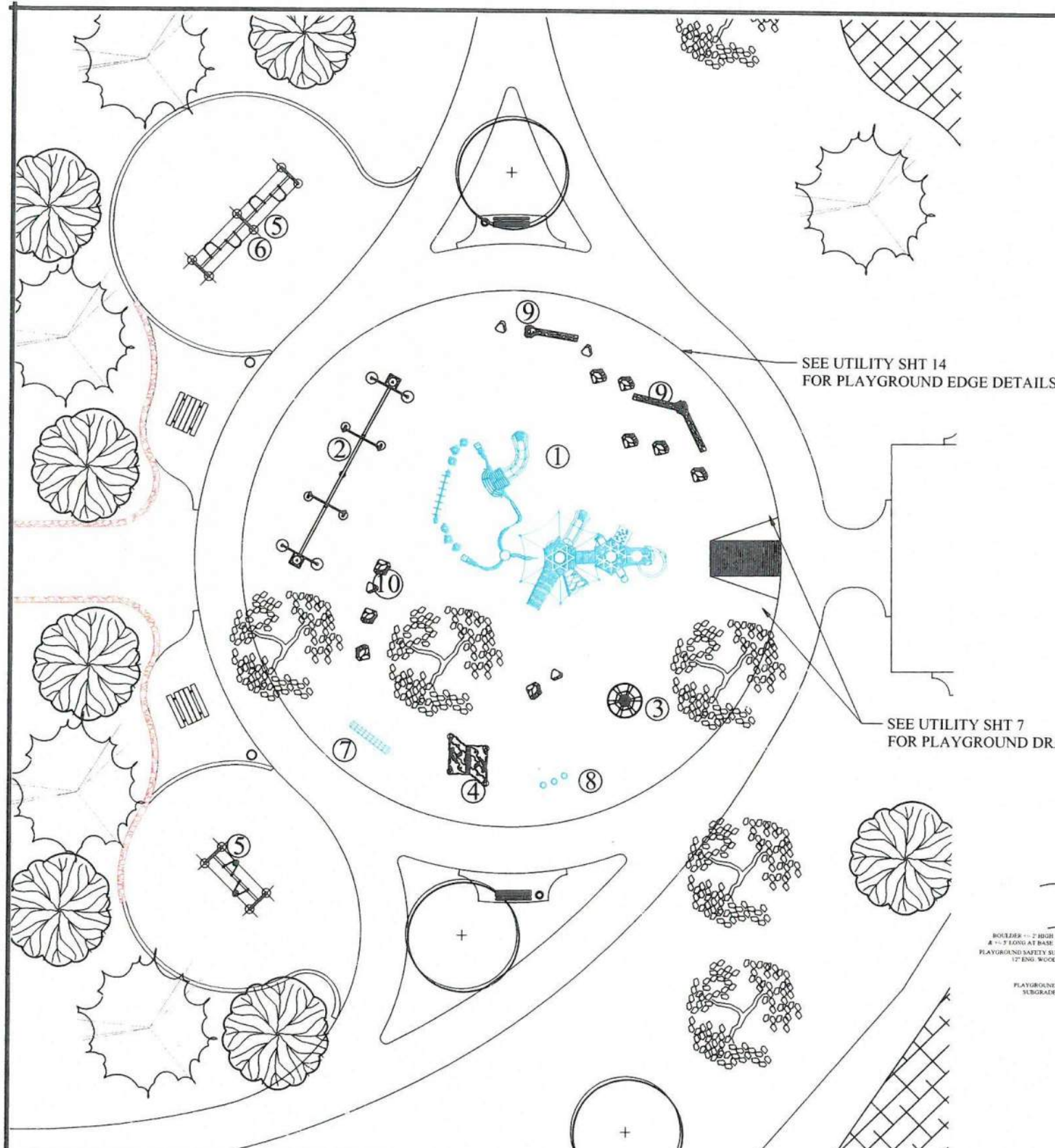
DRAWN: WHS  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: N/A  
JOB NO.: 15-006

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571



MHS  
PLANNING & DESIGN, LLC



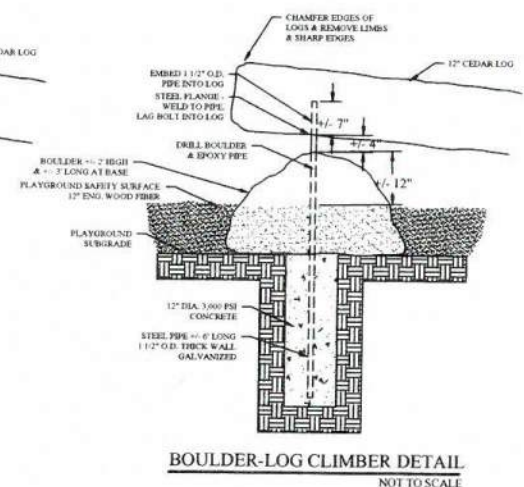
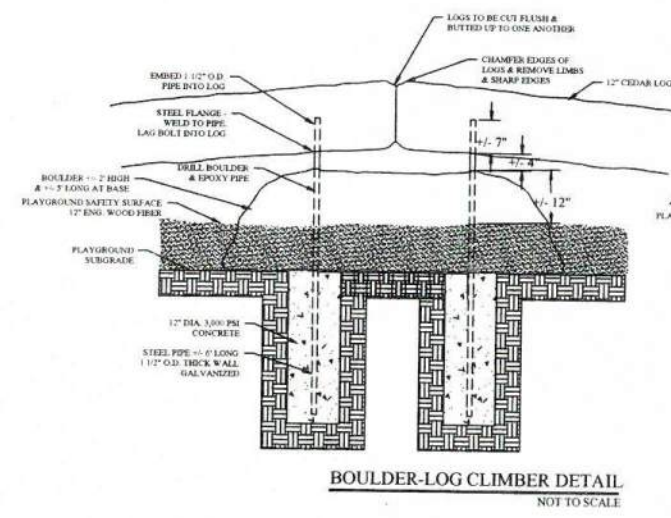


- ### PLAYGROUND ELEMENTS
1. Playwell Predisign Monkey Toes - (1 REQD.)
  2. Gametime Sky Run Zip Track - Zip Seat #90795 (1 REQD.)
  3. Playwell Spinami (1 REQD.)
  4. Playwell Rockblocks Climbing Tunnel (1 REQD.)
  5. Playwell 5" 2-Unit Arch Swings (2 REQD.)
  6. Playwell 5" 2-Unit Arch Swing Add-A-Bay (1 REQD.)
  7. Playwell Sidewalk - (1 REQD.)
  8. Playwell Stationary Buttons - 12" (2 REQD) 18" (1 REQD)
  9. Boulder-Log Climber - See Detail this SHT (3 REQD.)
  10. Boulders (18" min., 36" max.: 13 REQD.)

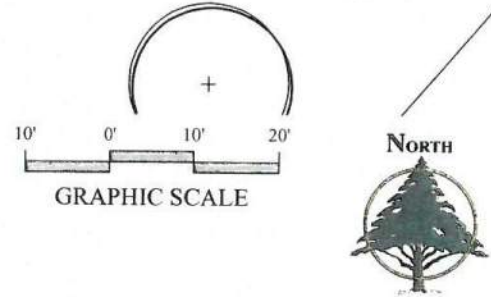
NOTE: EQUIPMENT COLORS TO BE SELECTED BY OWNER FROM STANDARDS.  
ENGINEERED WOOD FIBER (6,650 SQFT) FROM PLAYWELL OR APPROVED EQUAL.

SEE UTILITY SHT 14  
FOR PLAYGROUND EDGE DETAILS

SEE UTILITY SHT 7  
FOR PLAYGROUND DRAIN DETAILS



GAMETIME REPRESENTATIVE: TOTAL RECREATION PRODUCTS, INC.  
BEN SCHAEFFER (936-544-0961)  
PLAYWELL REPRESENTATIVE: ERIC ELDER (972-979-2217)



212 West Ninth Street  
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903-597-6606  
903-597-0517 Fax  
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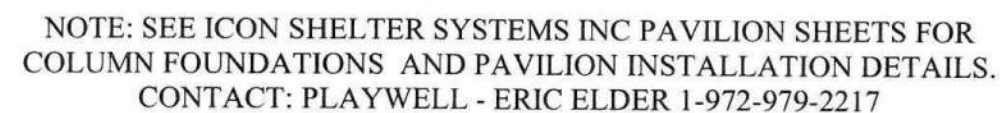
**MHS**  
PLANNING & DESIGN, LLC

**PLAYGROUND DETAILS**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
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ALL SITE FURNITURE TO BE PROVIDED  
& INSTALLED BY CITY



PAVILION TO BE IBC 2009  
PAVILION LOADS TO BE 90 MPH WINDS  
AND 5 LBS SNOW

REVISIONS

212 West Ninth Street  
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903-597-6606  
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2-8-16

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**PAVILION DETAILS**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR

CHECKED: MHS

DATE: OCT 2015

SCALE: AS SHOWN

JOB NO.: 15-006

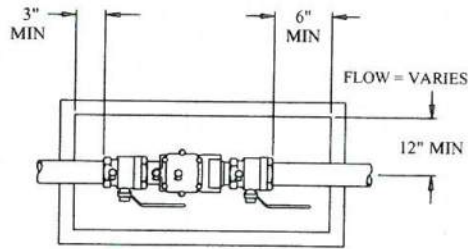
11 OF 16



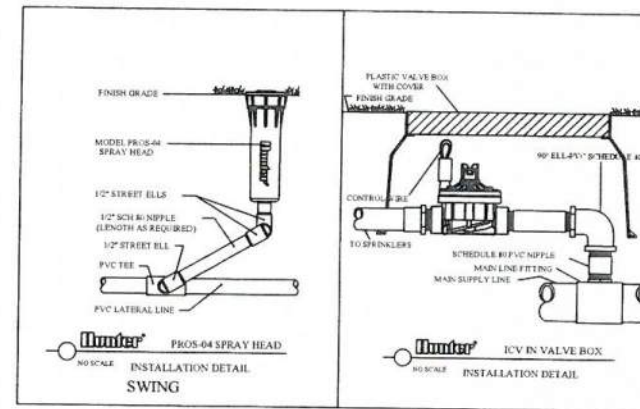
- MAINLINE PIPE CLASS 200 PVC  
3" - INCH SIZE
- LATERAL PIPE CLASS 200 PVC  
(SIZED AS SHOWN)
- HUNTER ELECTRONIC REMOTE CONTROL VALVE  
ICV-201G - 2"
- HUNTER MP3000  
PRESSURE = 30 PSI RADIUS = 27 FEET  
FLOW = VARIES
- HUNTER MP1000  
PRESSURE = 30 PSI RADIUS = 12 FEET  
FLOW = VARIES
- Ⓐ TORO EVOLUTION SERIES  
SPECIFIC MODEL TO MATCH CITY OF ROCKWALL SYSTEM
- WS HUNTER RAIN/FREEZE SENSOR
- ⊗ HOSE BIB W/ VALVE BOX
- ⌵ DCA BACKFLOW PREVENTER - 1 1/2"

+/-1,840 LF  
AS SHOWN

18  
291  
59  
1  
1  
8  
2



**FEBCO MODEL 850**  
Double Check Assembly  
Pit Installation

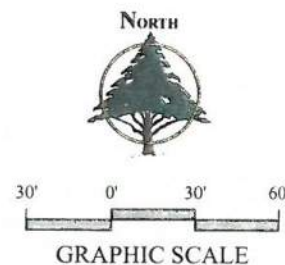
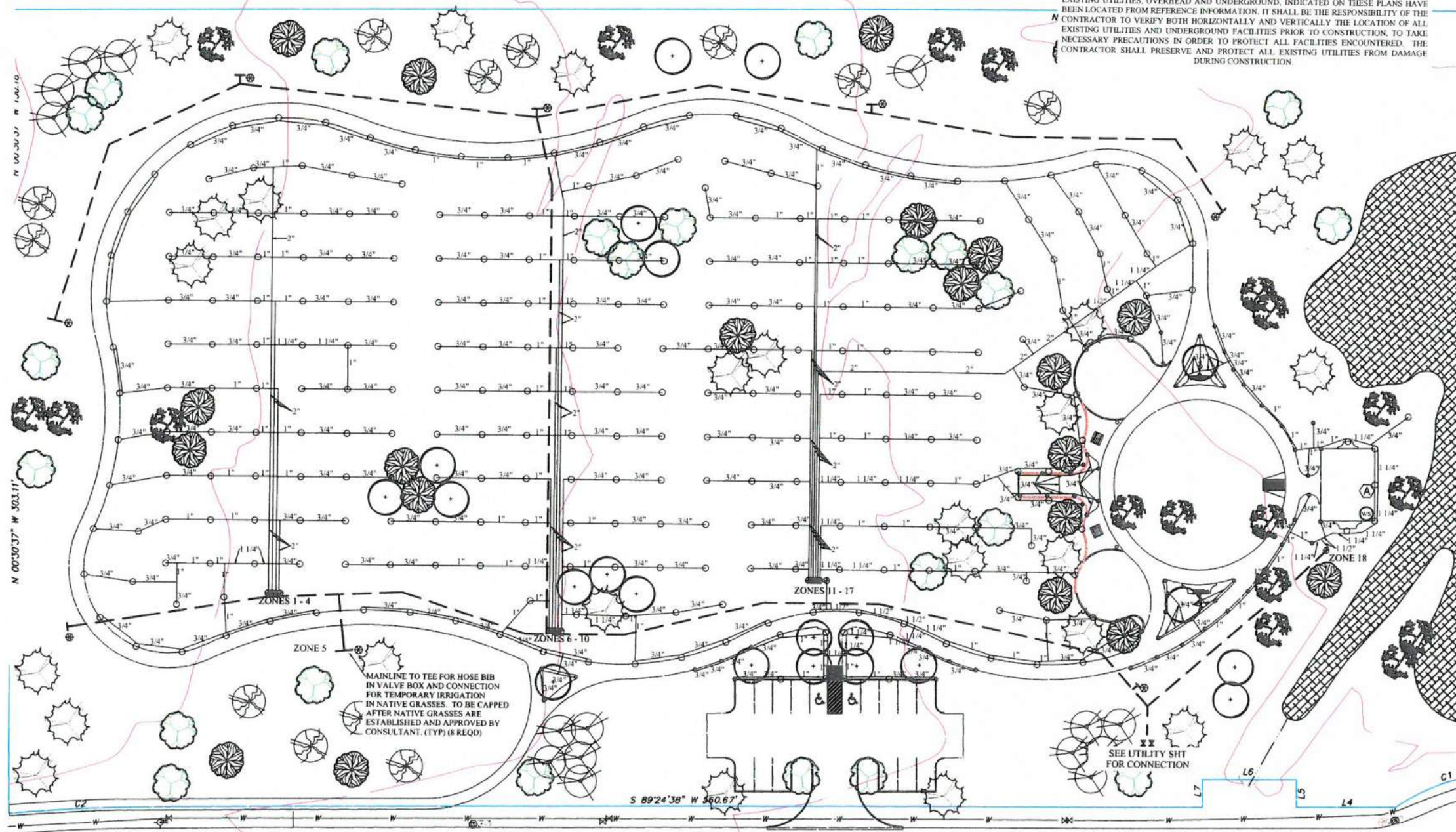


- GENERAL NOTES**
1. SYSTEM BASED ON ASSUMED 50 PSI AT THE PROPOSED METER. NO WATER LINES CURRENTLY EXIST ON SITE. NOTIFY CONSULTANT IF 50 PSI IS NOT AVAILABLE AFTER METER IS INSTALLED.
  2. SPRINKLER AND VALVE LOCATIONS ARE TO SCALE. PIPE LOCATIONS ARE DIAGRAMMATIC.
  3. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISHED GRADE UNLESS OTHERWISE SPECIFIED.
  4. COORDINATE ALL MAINLINE AND LATERAL PIPE INSTALLATION LOCATIONS WITH ELECTRICAL PLANS AND ADJUST AS NECESSARY.
  5. IRRIGATION CONTROLLERS ARE TO BE PLACED IN THE LOCATIONS SHOWN ON THE PLANS. COORDINATE W/ ELECTRICAL DRAWINGS FOR CONTROLLER LOCATION & POWER SOURCE LOCATION.
  6. EXCEPT AS OTHERWISE PROVIDED, THE CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES AND FEES AND GIVE ALL NOTICES NECESSARY & INCIDENTAL TO THE DUE LAWFUL PROSECUTION OF THE WORK.
  7. THE CONTRACTOR SHALL FOLLOW THE CITY OF ROCKWALL SPECIFICATIONS FOR INSTALLATION OF IRRIGATION SYSTEM.
  8. CONTRACTOR SHALL NOTIFY PERTINENT UTILITY COMPANIES 48 HOURS PRIOR TO CONSTRUCTION FOR CURRENT UTILITY LOCATIONS. EXTREME CARE SHALL BE EXERCISED IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION & CONDITION OF ALL UTILITIES AND BE RESPONSIBLE FOR DAMAGE TO ANY UTILITIES.
  9. THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE & THEFT & REPLACE ALL DAMAGED OR STOLEN PARTS UNTIL THE WORK IS ACCEPTED IN WRITING BY OWNER.
  10. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE SPRINKLER AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREAS DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

**CAUTION!!!**  
**EXISTING UTILITIES**  
EXISTING UTILITIES, OVERHEAD AND UNDERGROUND, INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

ALL HEADS ALONG INSIDE TRAIL LOOP TO BE 360° NOZZLES DURING GROW-IN AND REPLACED WITH 180° NOZZLES - EXCEPT AROUND PLAYGROUND AND PATIO AREAS. NO IRRIGATION WATER IS TO BE SPRAYED ONTO PATIO OR PLAYGROUND.

ZONE	FLOW (GPM)
1	53.55
2	53.55
3	53.55
4	53.55
5	22.24
6	50.40
7	53.55
8	37.80
9	28.35
10	53.55
11	53.55
12	50.40
13	53.55
14	53.58
15	53.74
16	32.13
17	34.08
18	39.80



Feather Stone Drive  
(Concrete - Variable Width Right of Way)

**IRRIGATION PLAN**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006









212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax



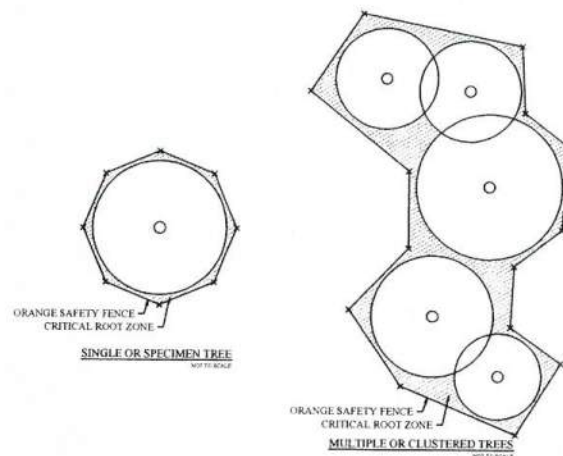
**MHS**  
PLANNING & DESIGN, LLC



# TREE LEGEND

	QUANTITY
 AFGHAN PINE - 2.5" CAL. <i>Pinus eldarica</i>	14
 CEDAR ELM - 2.5" CAL. <i>Ulmus crassifolia</i>	12
 BUR OAK - 2.5" CAL. <i>Quercus macrocarpa</i>	14
 SHUMARD OAK - 2.5" CAL. <i>Quercus shumardi</i>	13
 EASTERN RED CEDAR - 2.5" CAL. <i>Juniperus virginiana</i>	11
 NATIVE PECAN - 2.5" CAL. <i>Carya illinoensis</i>	5
 TREES REMOVED FROM SCOPE OF WORK	53
 EXISTING TREE	





SELECT EXISTING TREES TO REMAIN IN OPEN LAWN AREA.  
SEE TREE REMOVAL PLAN.

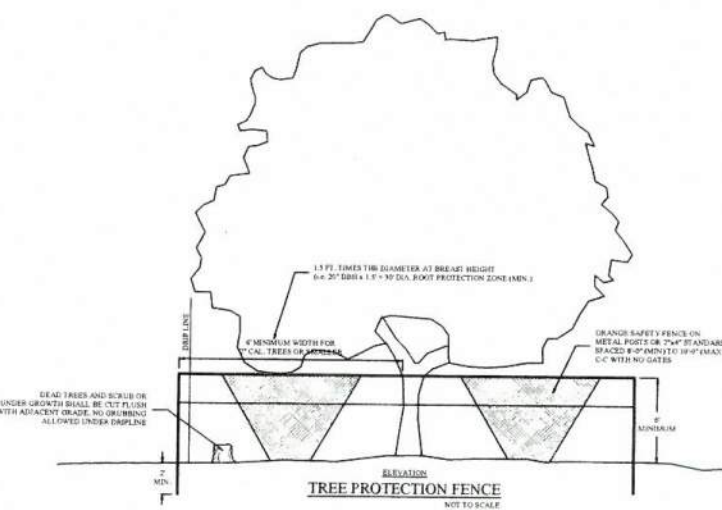
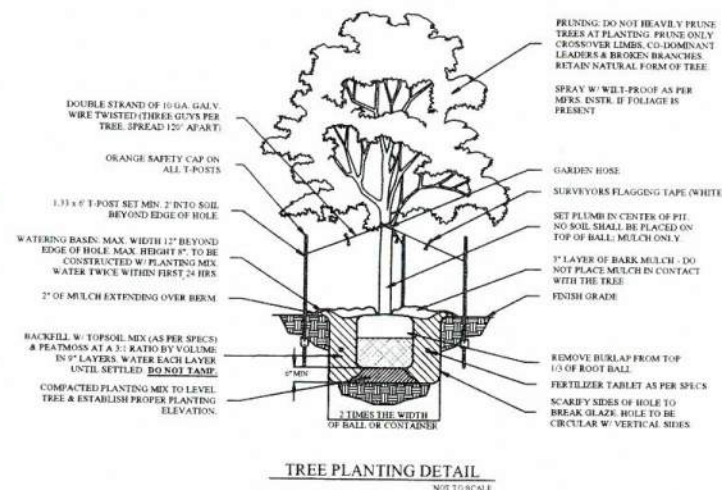


- NOTE: 1.) TREE LOCATIONS ARE SCHEMATIC AND ALL TREES ARE TO BE STAKED ON GROUND AND APPROVED BY CONSULTANT PRIOR TO PLANTING.
- 2.) REFER TO TECHNICAL SPECIFICATIONS SECTION 2930 FOR BED PREP INFORMATION.
- 3.) REFER TO TECHNICAL SPECIFICATIONS SECTION 164 FOR TEXACE SEEDING.
- 4.) TYPICAL PLAQUE BOULDER SIZE:  
30" L  
24" D  
24" H  
BURY BOULDERS MIN. 4" IN NATIVE SOIL.
- 5.) PLANT LITTLE BLUE STEM & BUFFALO GRASSES AT A RATE OF TEN (10) LBS OF PURE LIVE SEED/ACRE.

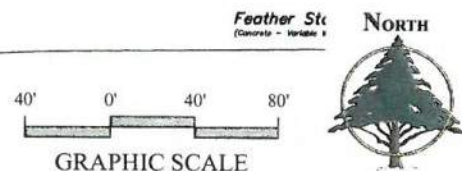
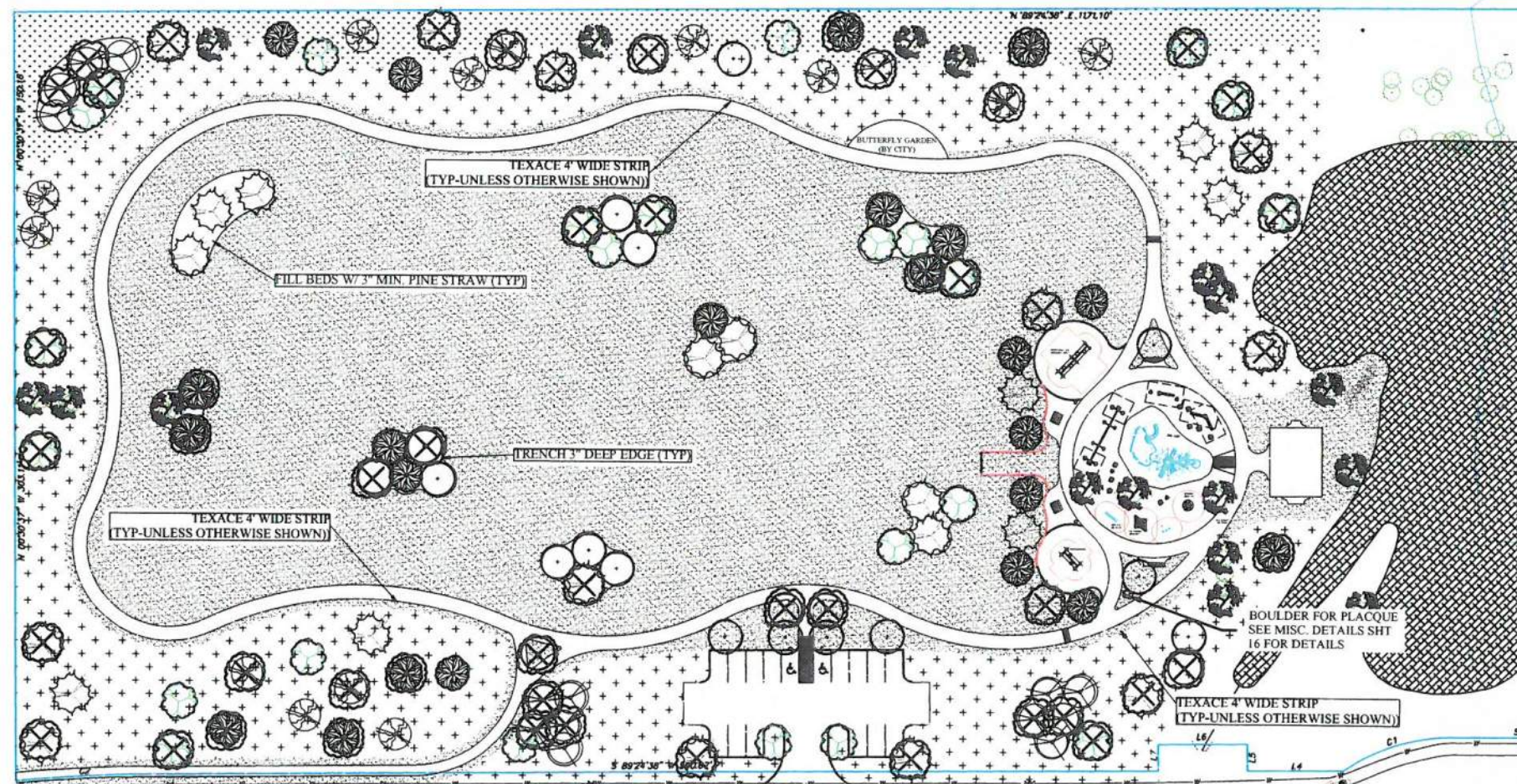
ALL LAWN AREAS TO BE SPRAYED WITH HERBICIDE, CROSS DISCED AND DRAGGED UNTIL SMOOTH PRIOR TO SEEDING.

# LEGEND

	QUANTITY
 TEXACE - HYDROMULCH	150,000 SQ. FT.
 NATIVE GRASSES - BUFFALO	91,200 SQ. FT.
 NATIVE GRASSES - LITTLE BLUE STEM	22,810 SQ. FT.
 PLAQUE BOULDER	1



- NOTES:
1. TREE PROTECTION SHALL BE A MINIMUM OF 6'-0" OR 8'-0" ORANGE SAFETY FENCE MOUNTED ON METAL POSTS OR 2"x4" STAKES BRACED 8'-0" INTO THE GROUND, AT APPROXIMATELY 18'-0" TO 10'-0" MAX. ON CENTER WITH NO GATES.
2. TREE PROTECTION FENCING SHALL BE ERECTED AT THE CRITICAL ROOT ZONE OR BEYOND PRIOR TO THE START OF ANY CLEARING, GRADING OR OTHER CONSTRUCTION ACTIVITY.
3. TREE PROTECTION SHALL NOT BE REMOVED UNTIL COMPLETION OF ALL CONSTRUCTION ACTIVITY.



# REVISIONS

04/2016 - Remove trees from scope of work.

212 West Ninth Street  
Tyler, Texas 75701  
903-597-0606  
903-597-0517 Fax  
TBPE No. F-14571

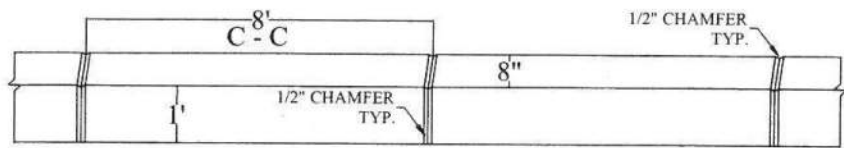
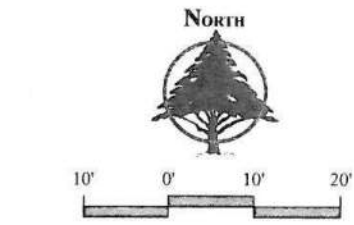
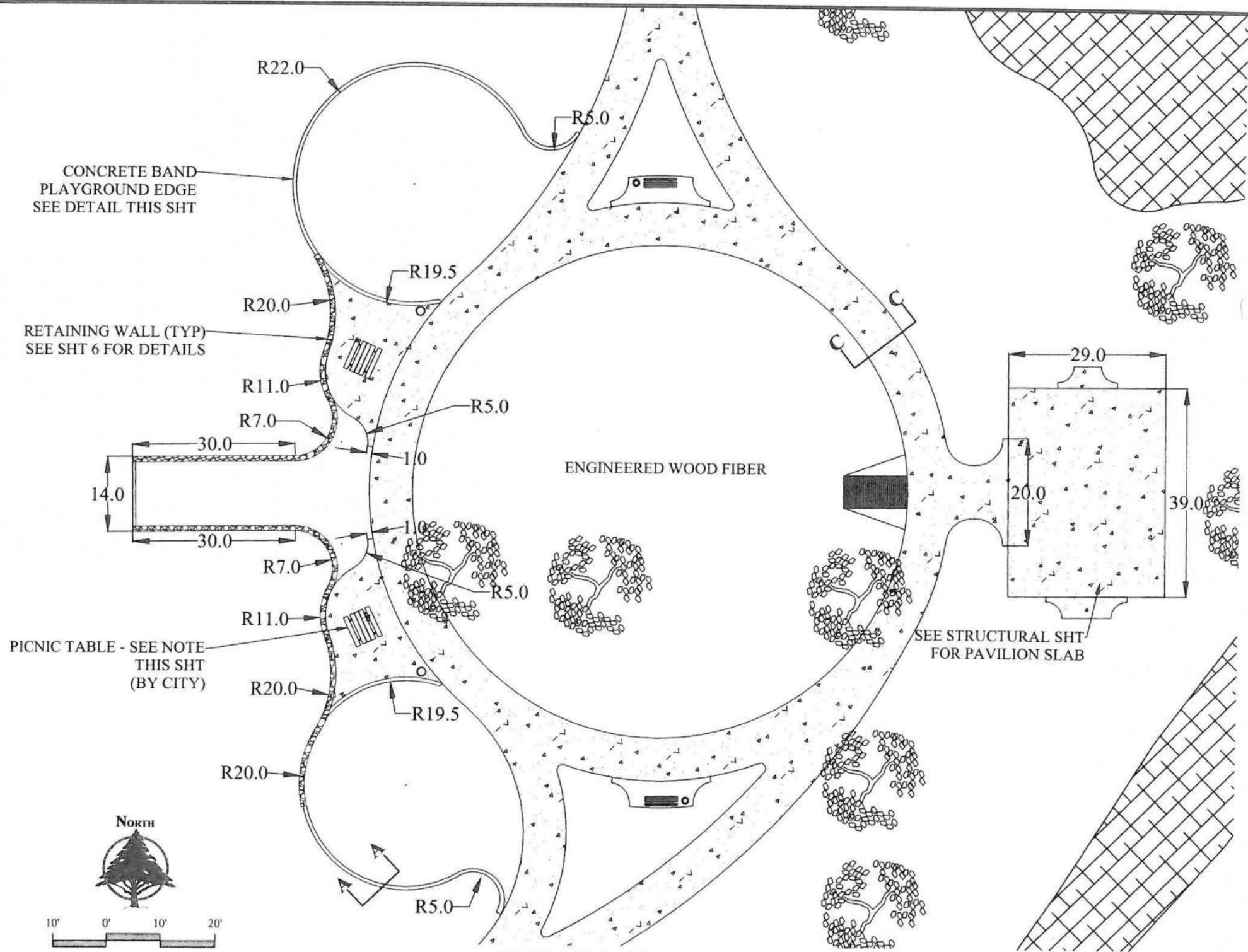


**MHS**  
PLANNING & DESIGN, LLC

**GRASSING & LANDSCAPE PLAN**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006

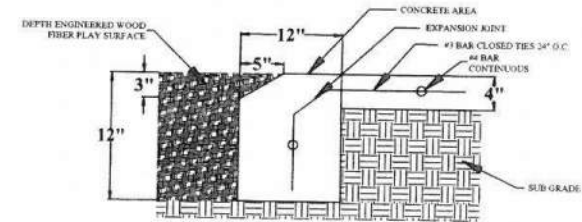




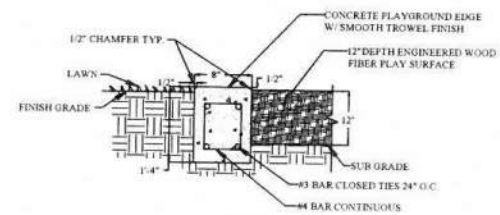
CONCRETE BAND PLAYGROUND BORDER  
NOT TO SCALE  
NOTE: CHAMFER ON TOP & OUTSIDE ONLY

NOTE: PROVIDE & INSTALL PICNIC TABLES ON CONCRETE PATIOS BY PLAYGROUND, BY CITY  
SITESCAPES (888.331.9464) MODEL CV6-4361 (1 REQD) &  
HANDICAPPED MODEL CV6-4381 (1 REQD) - OR APPROVED  
EQUALS. INSTALL PER MANUF. INSTR.

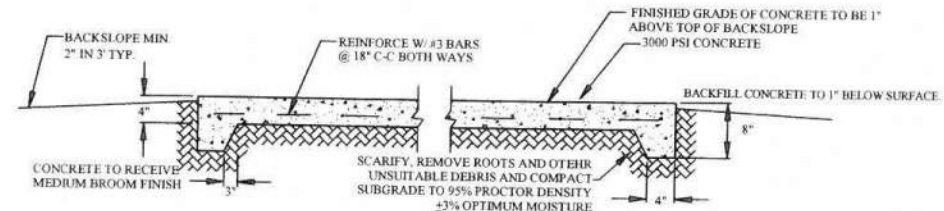
ALL SITE FURNITURE TO BE PROVIDED & INSTALLED BY CITY



SECTION C-C  
PLAYGROUND EDGE DETAIL  
GRAPHIC SCALE



SECTION A-A  
CONCRETE BAND PLAYGROUND EDGE  
NOT TO SCALE



NOTES: CONCRETE NOT TO EXCEED 2% SLOPE IN ALL AREAS.

ALTER CONCRETE SECTION ELEVATION TO ALLOW CROSS DRAINAGE AS  
INSTRUCTED BY THE CONSULTANT.

SECTION  
PICNIC STATION CONCRETE DETAIL  
N.T.S.

CENTERLINE OF TRAIL TO BE 13" ABOVE NATURAL  
GRADE WHERE FINISHED GRADES ARE NOT SHOWN.  
BACKFILL TRAIL TO 1" BELOW SURFACE.

REVISIONS

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571



**MHS**  
PLANNING & DESIGN, LLC

**PICNIC STATION DETAILS**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR

CHECKED: MHS

DATE: OCT 2015

SCALE: AS SHOWN

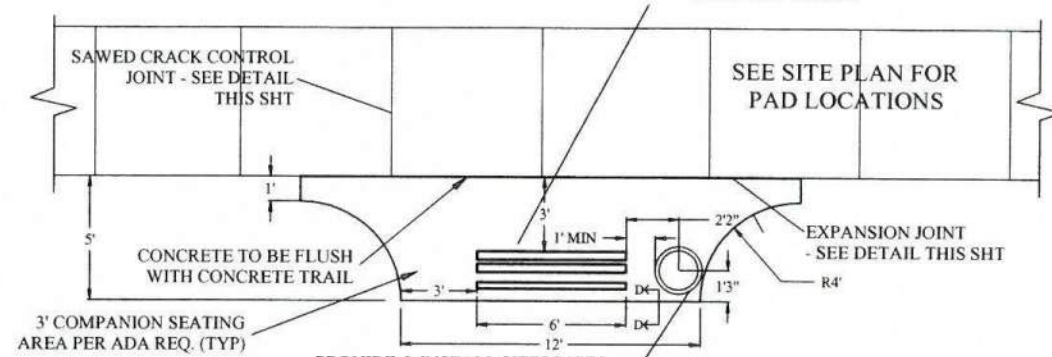
JOB NO.: 15-006

14 OF 16



ALL SITE FURNITURE TO BE PROVIDED  
& INSTALLED BY CITY

PROVIDE & INSTALL SITESCAPES (888.331.9496)  
CITY VIEW 6' BENCH MODEL - #CV1-1200-PF. (2 REQD) INSTALL PER MANUF. WRITTEN  
INSTRUCTIONS. ACTUAL LOCATION TO BE STAKED ON SITE BY CONTRACTOR  
AND FIELD VERIFIED BY CONSULTANT **PRIOR** TO INSTALLATION  
COLOR BY OWNER

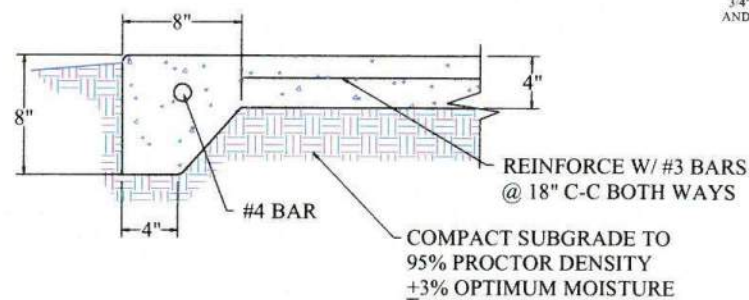


#### PLAN VIEW

### TRAIL BENCH STATION

2 REQD. SCALE: NTS

BENCHES BY OWNER

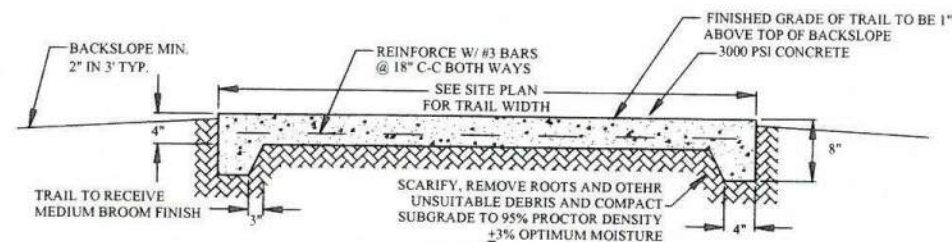


#### SECTION D-D VIEW

### BENCH PAD DETAIL

SCALE: NTS

NOTE: ALL AREAS DISTURBED BY TRAIL  
CONSTRUCTION TO BE SEEDED WITH TEXACE.  
CONTRACTOR TO PROVIDE CURLEX EROSION  
CONTROL MATTING ON ALL SLOPES 4:1 OR  
GREATER.



NOTES: CROSS SLOPE OF TRAIL TO BE ±1% WITH TERRAIN BUT NOT TO EXCEED 2%.  
RUNNING SLOPE OF TRAIL TO BE LESS THAN 5% IN ALL AREAS.

ALTER TRAIL SECTION ELEVATION TO ALLOW CROSS DRAINAGE AS  
INSTRUCTED BY THE CONSULTANT.

#### SECTION

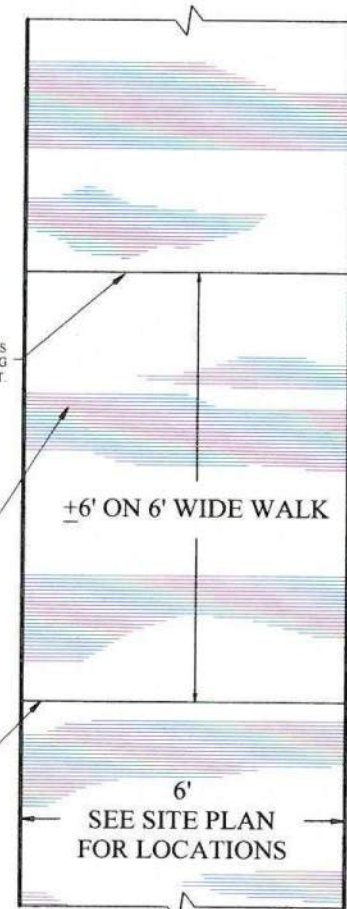
### CONCRETE TRAIL DETAIL

N.T.S.

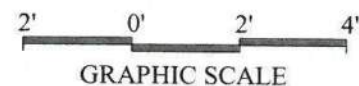
3/4" EXPANSION JOINTS AT 48' MAXIMUM INTERVALS  
AND WHERE SIDEWALK ABUTS PAVEMENT, BUILDING  
STRUCTURES, ETC. SEE DETAILS THIS SHEET.

MED BROOM FINISH  
PERPENDICULAR TO EDGES  
OF CONCRETE TRAIL.

SAWED CRACK CONTROL  
JOINT - TYP. SEE DETAIL -  
TO BE EVENLY SPACED ±6'  
ON 6' WIDE WALKS



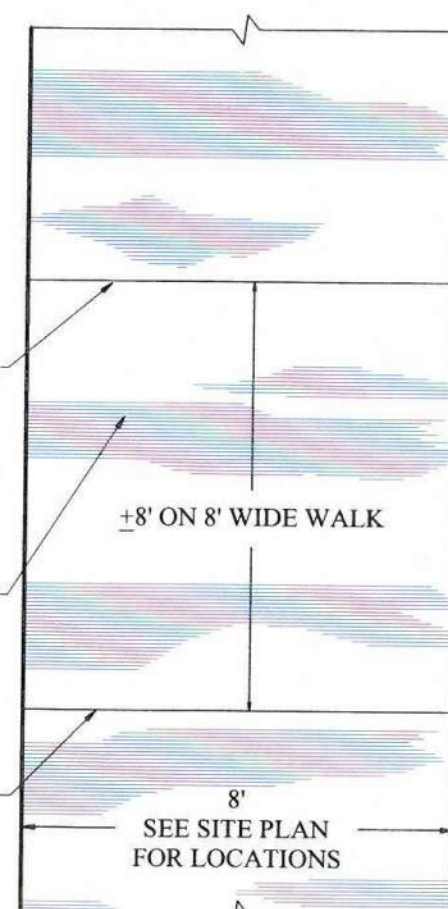
### 6' CONCRETE WALK - FINISH DETAIL



3/4" EXPANSION JOINTS AT 48' MAXIMUM INTERVALS  
AND WHERE SIDEWALK ABUTS PAVEMENT, BUILDING  
STRUCTURES, ETC. SEE DETAILS THIS SHEET.

MED BROOM FINISH  
PERPENDICULAR TO EDGES  
OF CONCRETE TRAIL.

SAWED CRACK CONTROL  
JOINT - TYP. SEE DETAIL -  
TO BE EVENLY SPACED ±8'  
ON 8' WIDE WALKS



### 8' CONCRETE WALK - FINISH DETAIL



212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-4517 Fax  
TBE No. F-14571

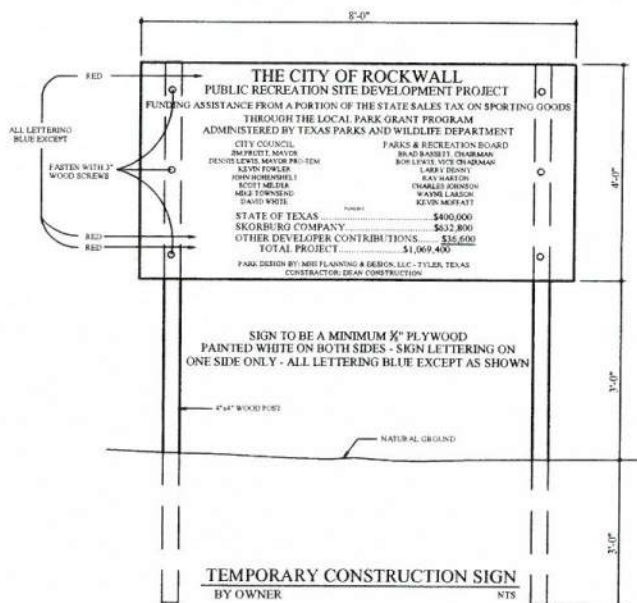


**MHS**  
PLANNING & DESIGN, LLC

**TRAIL DETAILS**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006





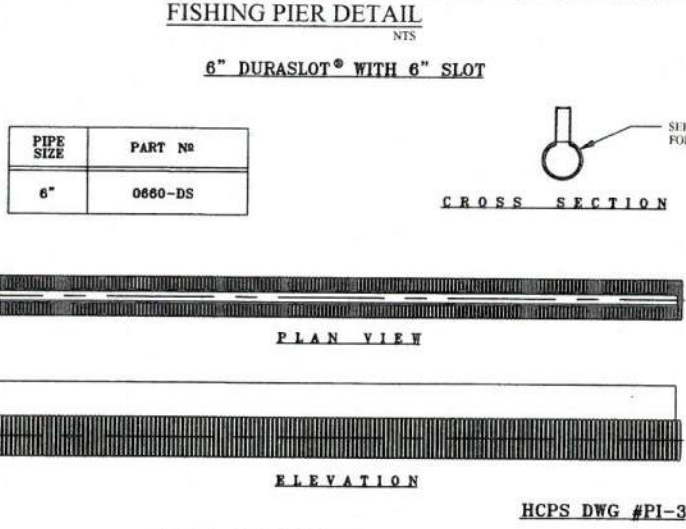
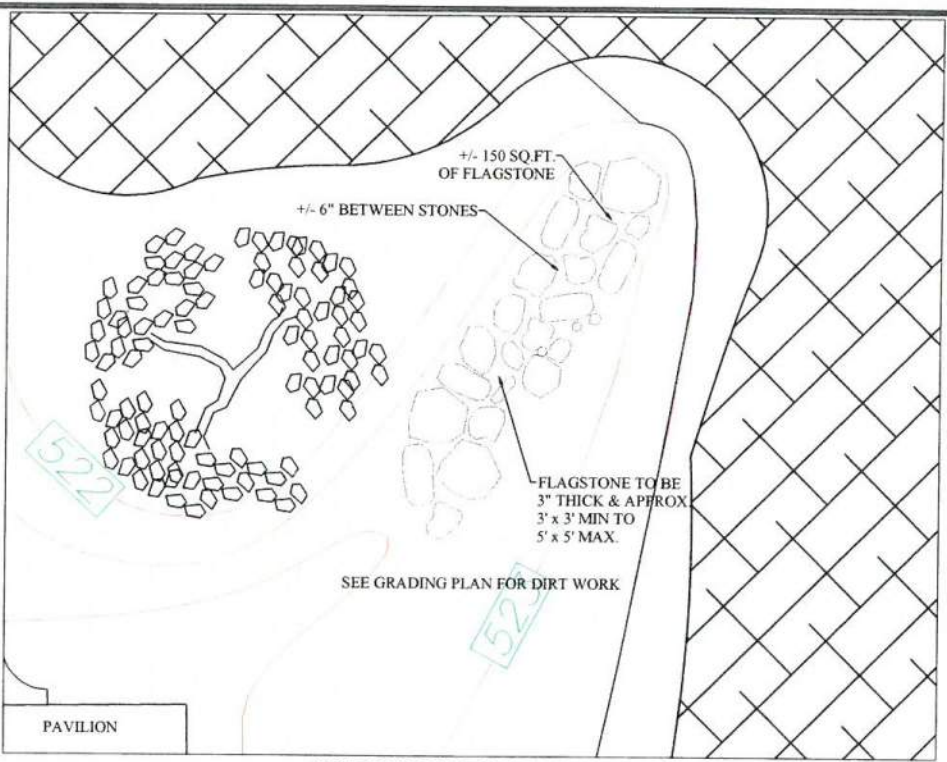
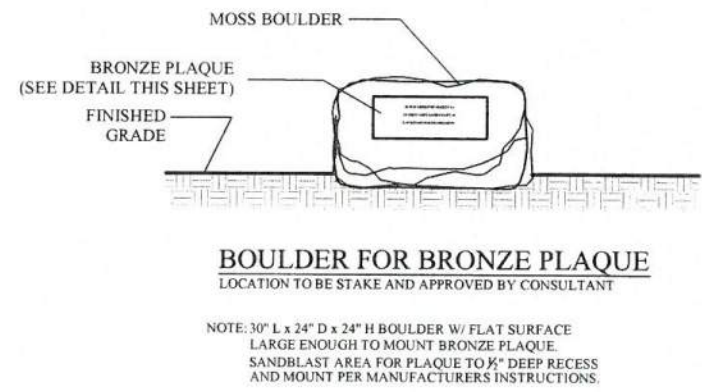
**\*\*\* NOTICE TO CONTRACTORS \*\*\***

THE CONTRACTOR SHALL NOTIFY THE CONSULTANT IMMEDIATELY, IN WRITING, OF ANY DISCREPANCIES OR OMISSIONS TO THE TOPOGRAPHIC INFORMATION. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION (HORIZONTAL/VERTICAL) OF ANY BURIED CABLES, CONDUITS, PIPES, AND STRUCTURES (STORM SEWER, SANITARY SEWER, WATER, GAS, TELEVISION, TELEPHONE, ETC.) WHICH IMPACT THE CONSTRUCTION SITE. THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND CONSULTANT IF ANY DISCREPANCIES ARE FOUND BETWEEN THE ACTUAL CONDITIONS VERSUS THE DATA CONTAINED IN THE CONSTRUCTION PLANS. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL LOCATION (HORIZONTAL/VERTICAL) OF SAID CABLES, CONDUITS, PIPES, AND STRUCTURES SHALL BE BORNE BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND CONSULTANT IF ANY ERRORS OR DISCREPANCIES ARE FOUND ON THE CONSTRUCTION DOCUMENTS (PS&E), WHICH NEGATIVELY IMPACT THE PROJECT. CONSULTANT AND OWNER SHALL BE INDEMNIFIED OF PROBLEMS AND/OR COST WHICH MAY RESULT FROM CONTRACTOR'S FAILURE TO NOTIFY CONSULTANT AND OWNER.

**\*\*\* STOP! CALL BEFORE YOU DIG! \*\*\***

AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT," TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

NOTE: SEE GRASSING PLAN FOR LOCATION OF SIGN & BOULDER



**PLAQUE SPECIFICATIONS**

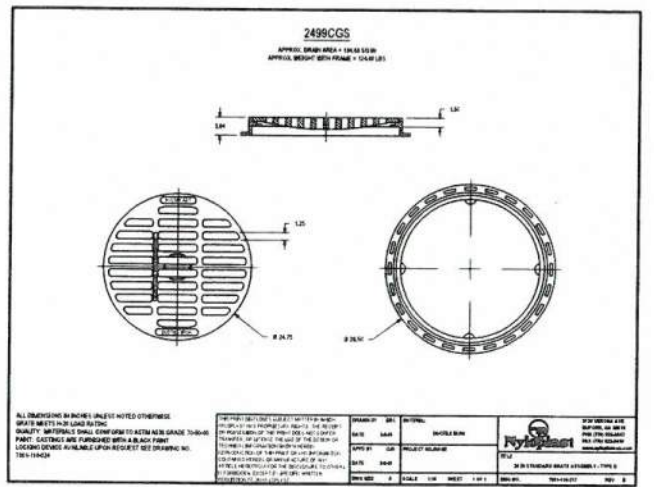
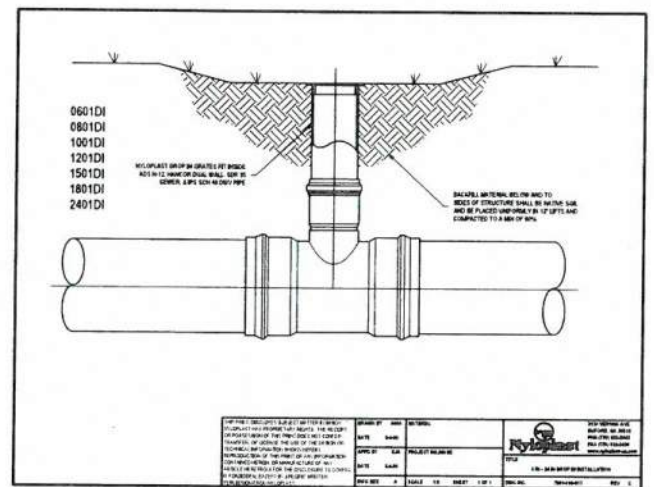
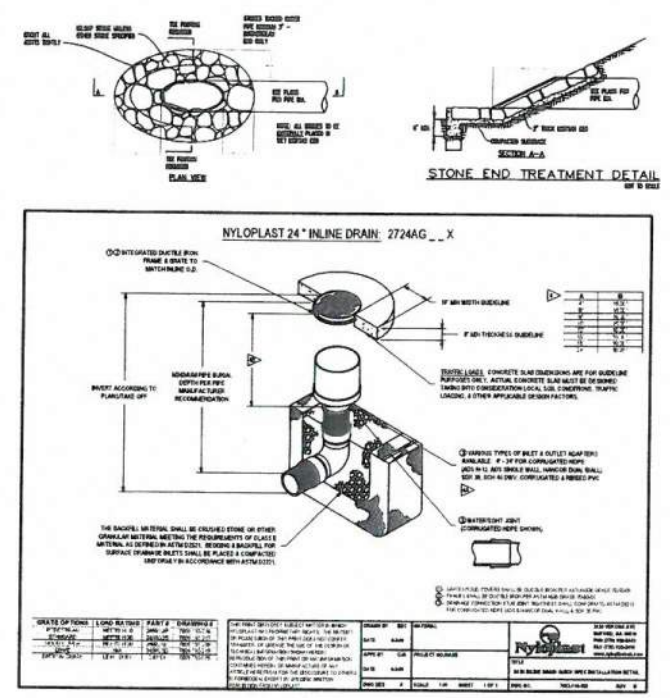
BRONZE TABLET SHALL BE AS MANUFACTURED BY THE SOUTHWELL COMPANY, P.O. BOX 299, SAN ANTONIO, TEXAS 78291-0299, OR APPROVED EQUAL. PLAQUE TO BE CAST OF VIRGIN INGOTS (95-5-5 STD U.S. BRONZE ALLOY). CASTING SHALL BE FREE OF PITS AND GAS HOLES AND ALL LETTERS SHALL BE SHARP AND HAND TOoled. BORDER AND FACES OF RAISED LETTERS ARE TO BE SATIN FINISH AND BACKGROUND IS TO BE LEATHERETTE TEXTURE.

BACKGROUND SHALL BE OXIDIZED. PLAQUE SHALL BE CHEMICALLY CLEANED, AND TWO COATS OF CLEAR ACRYLIC LACQUER SHALL BE SPRAYED ON COMPLETED PLAQUE.

TABLET IS TO BE OF SIZE SHOWN ON PLANS WITH A DOUBLE LINE BORDER DESIGN. LETTER STYLE SHALL BE CLASSIC.

MOUNTING ATTACHMENTS FOR TABLET ON CONCRETE SHALL BE FURNISHED.

CONTRACTOR SHALL FURNISH CONSULTANT WITH RUBBING OF ACTUAL PATTERN FOR APPROVAL PRIOR TO CASTING.



REVISIONS:  
10/20/15 - REVISED PERMANENT SIGN LAYOUT

212 West Ninth Street  
Tyler, Texas 75701  
903-597-6606  
903-597-0517 Fax  
TBPE No. F-14571

STATE OF TEXAS  
WILLIAM H. SPENCER  
107759  
2-8-16

**MHS**  
PLANNING & DESIGN, LLC

**MISCELLANEOUS DETAILS**  
**THE PARK AT STONE CREEK**  
CITY OF ROCKWALL, TEXAS

DRAWN: HNR  
CHECKED: MHS  
DATE: OCT 2015  
SCALE: AS SHOWN  
JOB NO.: 15-006

**16 OF 16**