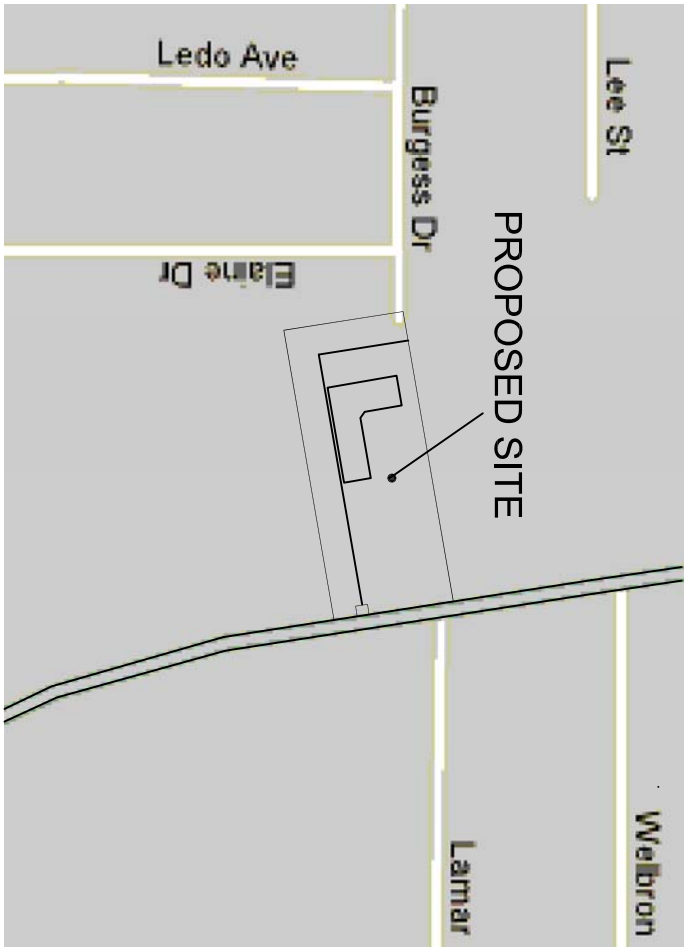


# XXX COMMERCIAL DEVELOPMENT

ENGINEER:

OWNER:

CONTACT INFORMATION



## PROJECT INFORMATION

1. LOT AREA: 2.23 AC TOTAL  
DISTURBED AREA: 1.48 AC  
AREA APPLICABLE FOR NPDES FEES ± 1.48AC ± 405 ± 69,208  
PROPOSED IMPERVIOUS AREA: 1.198 AC  
PROPOSED LOT COVERAGE: IN % = 1.198 AC / 2.23 AC = 53.63%  
MAXIMUM LOT COVERAGE: 60%
2. ZONING: PROPERTY IS ZONED  
C-1 COMMERCIAL DISTRICT
3. TOPOGRAPHIC SURVEY PROVIDED BY
4. THIS DEVELOPMENT CONSISTS OF THE CONSTRUCTION OF A 10796 S.F. RETAINMENT POND, 10796 S.F. OF ASSOCIATED PARKING AND DETENTION POND. THE EXISTING SITE IS 100% PAVED.
5. ALL MATERIAL AND METHODS OF CONSTRUCTION SHALL COMPLY WITH ALL CITY AND COUNTY REGULATIONS.
6. NO PORTION OF THIS SITE IS LOCATED IN A FEMA SPECIAL FLOOD HAZARD AREA PER FEMA FIRM PANEL 1388201CH, EFFECTIVE MAY 7, 2001.
7. THERE ARE NO WETLANDS LOCATED ON THIS SITE.

8. THERE ARE NO STATE WATERS LOCATED ON THIS SITE. THIS SITE DOES NOT ENCROACH UPON ANY STATE WATER BUFFER ZONE AND IS NOT LOCATED WITHIN 25' OF ANY STATE WATERS.
9. ALL FIRE UNITS ARE TO BE INSPECTED BY FIRE SERVICES PRIOR TO COVERING. TO SCHEDULE INSPECTIONS, CALL 404.294.2348.
10. NOTIFY WATER AND SEWER INSPECTOR AT 404.508.3943 PRIOR TO START OF CONSTRUCTION.
11. NOTIFY AT 770.483.2340 BEFORE STARTING CONSTRUCTION.
12. THE OWNER SHALL BE RESPONSIBLE FOR ANY REPAIR OR REPLACEMENT OF ANY DAMAGE TO THE SANITARY SEWER EASEMENT DUE TO MAINTENANCE OF SERVICES BY COUNTY.
13. DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

## LIST OF DRAWINGS

1. COVER SHEET
2. AERIAL
3. SITE PLAN
4. DRAINAGE PLAN
5. UTILITY PLAN
6. E&S PLAN
7. E&S DETAIL SHEET
8. LANDSCAPE PLAN
9. LANDSCAPE DETAILS
10. LIGHTING LAYOUT
11. DETAIL SHEET-1
12. DETAIL SHEET-2
13. DETAIL SHEET-3

REVISIONS										
NO.	BY	DATE	REVISIONS AS PER COUNTY COMMENTS							
1.		02/12/07								

CLIENT DATA

ENGINEER

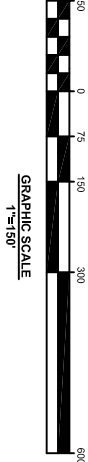
TAX MAP PARCEL #
15.190.01.095

JOB NO.
XXXXXXX

DRAWING TITLE
COVER SHEET

DRAWING NO.
1 OF 13

DESIGN BY:
CHECK BY:
SCALE:
1"=150'
DATE:





REVISIONS		
NO.	BY	DATE
1.		02/12/07

CLIENT DATA

ENGINEER

TAX MAP PARCEL #  
15 190 01 095  
JOB NO.  
XXXXXX

DRAWING TITLE  
AERIAL MAP

DRAWING NO.  
2 OF 13

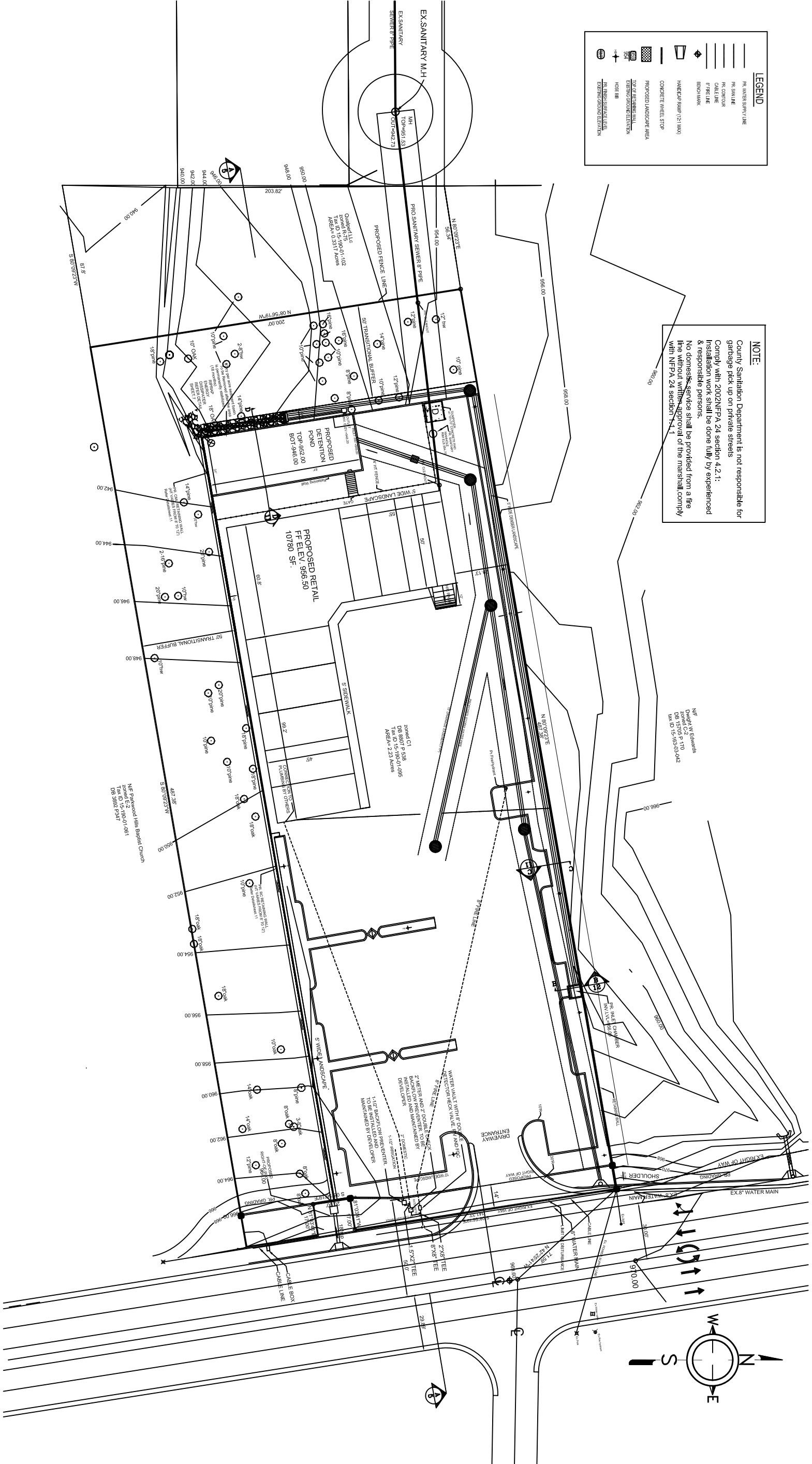
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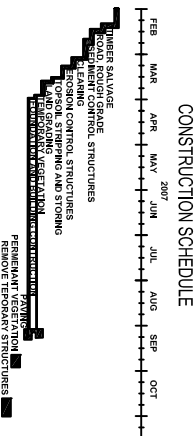




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CLIENT DATA
ENGINEER
TAX MAP PARCEL # 15 190 01 005
JOB NO. XXXXXXXX
DRAWING TITLE UTILITY PLAN
DRAWING NO. 5 OF 13
DESIGN BY:
CHECK BY:
SCALE: 1"=25'
DATE:

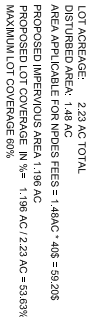
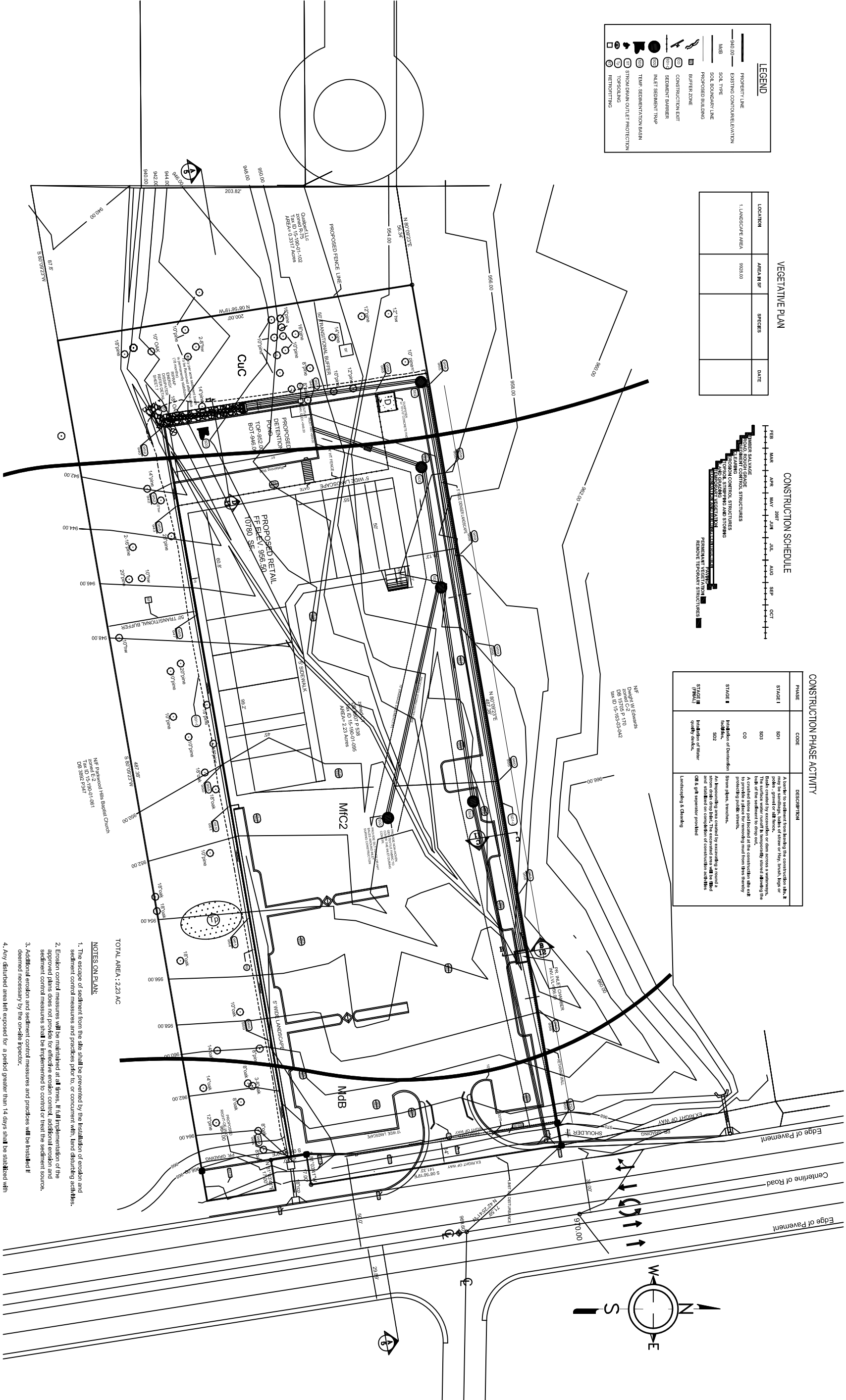
VEGETATIVE PLAN			
LOCATION	AREA IN SF	SPECIES	DATE
1. LANDSCAPE AREA	9028.00		



PHASE	CODE	DESCRIPTION
STAGE I (PMA)	S01	A sample is selected from leaving the construction site. It is a mixture of concrete or clay, sand, gravel or pebbles, gravel or other items.
	S03	Blocks created by excavation of gently sloped alluviums, built out of the sediment to form sand.
	C0	A crushed stone and located at the construction site and to provide a defect for removing mud from this layer by protecting plastic sheets.
STAGE II (PMA)	S02	Initiation of Dendroton The first stage of the process is the initiation of Dendroton. It is a process of creating a new structure from the existing one.
	S04	Initiation of Winter The second stage of the process is the initiation of Winter. It is a process of creating a new structure from the existing one.
		Landscaping & Clearing

[illegible]

CLIENT DATA
ENGINEER
TAX MAP PARCEL # 15 190 01 095
JOB NO. XXXXXX
DRAWING TITLE
EROSION&SEDIMENTATION PLAN
DRAWING NO. 6 OF 13
DESIGN BY:
CHECK BY:
SCALE: 1"=25'
DATE:



1. THE SITE SHALL BE PROPERLY POSTED, INDICATING PERMIT NUMBER, CONSTRUCTION POC, AND CONTACT INFORMATION. (SEE ATTACHED PHOTO FOR EXAMPLE)

TOTAL ACREAGE DISTURBED, AND THE LOCATION OF THE EROSION &amp; SEDIMENT CONTROL PLAN.

**2.A RAIN GAUGE MUST BE INSTALLED ON-SITE TO ACCURATELY MEASURE RAINFALL.**

3. CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING PRACTICES AS NECESSARY TO ENSURE THAT SILT, SEDIMENT, AND EROSION DO NOT

CONSTRUCTION ACTIVITIES ARE NOT TRANSPORTED  
OFFSET OR INFILTRATING SURROUNDING GROUND

LOT ACREAGE: 2.23 AC TOTAL  
DISTURBED AREA: 1.48 AC  
AREA APPLICABLE FOR NPDES FEES = 1.48AC \* 40\$ = 59.20\$  
PROPOSED IMPERVIOUS AREA 1.196 AC  
PROPOSED LOT COVERAGE IN % = 1.196 AC / 2.23 AC = 53.63%  
MAXIMUM LOT COVERAGE 60%

4. ALL DISTURBED AREAS SHALL BE TEMPORARILY SEEDED/MULCHED TO PROVIDE TEMPORARY VEGETATION. PERMANENT SEEDING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN FOR FINAL STABILIZATION.

**5. MAINTENANCE RESPONSIBILITIES OF CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN.**

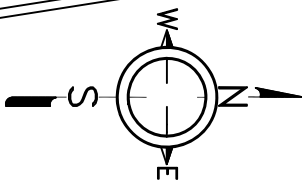
**6. DURING CONSTRUCTION ACTIVITIES, NECESSARY MEASURES FOR DUST CONTROL MUST BE EXERCISED**

**Emergency products for spill or spillable quantity of petroleum products.** All petroleum products should be stored and used in an area that provides a secondary containment feature. Typically, the spill consists of an earthen berm or dike that is constructed around the storage area to contain any spill. The contractor shall help in the construction under facility emergency contact numbers. The contractor shall locate storage facilities in area with the least prescriptive impact if a catastrophic event should occur.

### Pain/Chemical storage, cleanup & Disposal

access to employees only. Clean up and disposal of materials shall be in accordance with all recognized local and federal requirements. All disposal shall be approved off-site waste facilities classified to accept that materials.

## **E&S PLAN**

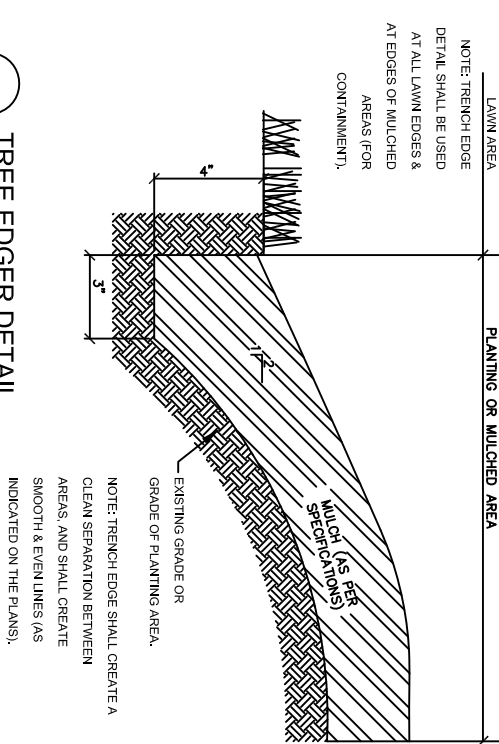
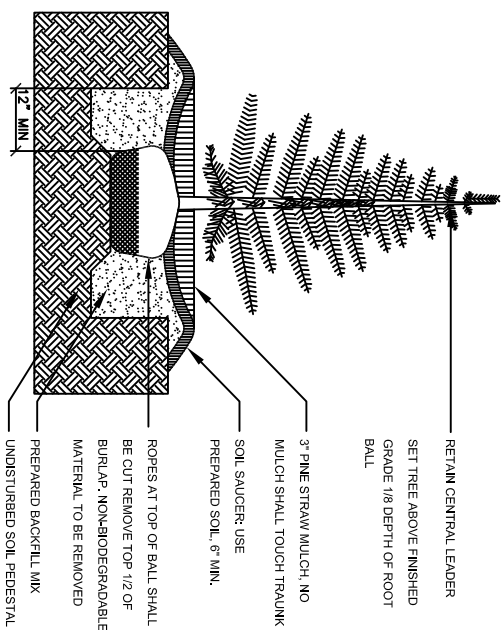
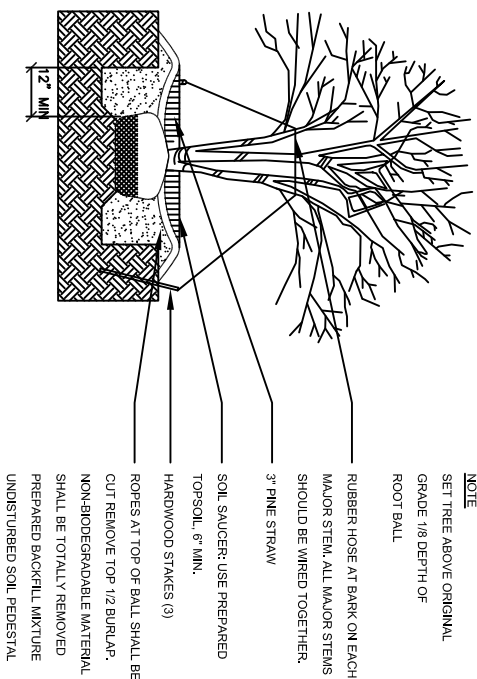
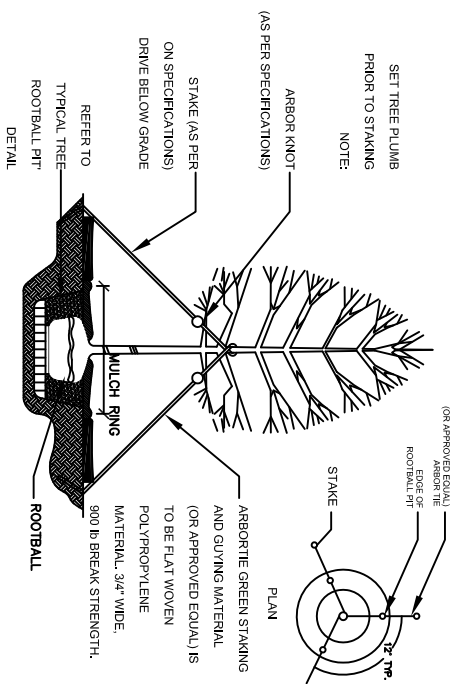
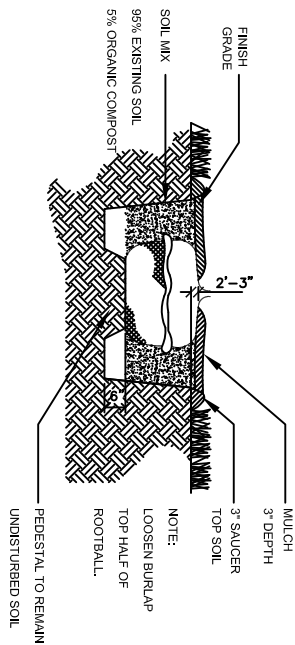












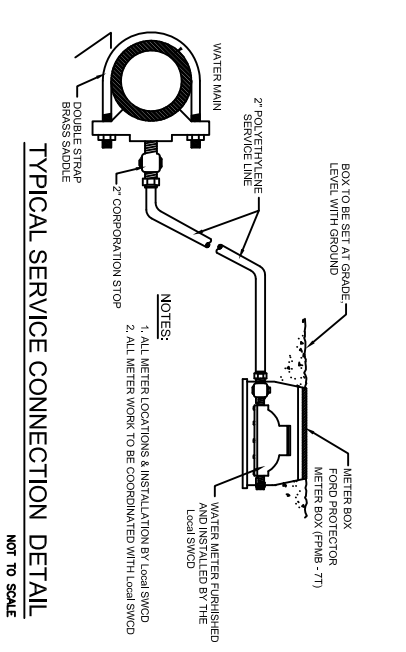
## TREE PROTECTION.

- (1) **Statement of purpose.** The purpose of these standards is to facilitate the preservation and/or replacement of trees as a public resource in the county.
  - (2) The DeKalb County Board of Commissioners hereby finds that the preservation of existing trees is a public purpose that protects the public health, safety, general welfare and aesthetics of DeKalb County and all its citizens.
  - (3) The citizens of the county and their many communities enjoy many benefits that can be directly attributed to our trees.
    - a. Trees produce oxygen, which is essential to the well being of all animal life, including humans.
    - b. Trees help to reduce the amount of airborne pollutants. For example, trees remove carbon dioxide, that is a major environmental concern due to its current high levels.
    - c. Trees and their foliage intercept dust and particulate matter, thereby helping to purify the air and limiting health risks.
    - d. Trees and their root systems reduce soil erosion and storm water runoff. This decreases sedimentation problems and improves water quality.
    - e. Trees provide shade and shelter for desirable birds and wildlife.
    - f. Trees provide moderate air temperature to provide us with a comfortable environment.
    - g. Trees provide scenic amenities to soften the harshness of city buildings and streets. They are aesthetically pleasing to all that view them.
    - h. Trees may affect property values and can have a positive impact upon the economy of an area.
  - (4) Trees can enhance the natural functions of streams and related buffers.
  - (5) Protect scientific and historical trees in a manner consistent with the DeKalb County Tree Protection Administrative Standards which shall be promulgated by the director. The director shall maintain a list and map of these trees in the office of the director through the assistance of the following offices:
    - a. DeKalb County Board of Education.
    - b. DeKalb County Extension Service.
    - c. Fern Bank Science Center.
    - d. DeKalb Chapter, State Conservancy.
    - e. State Forestry Commission.
    - f. Provide standards for the preservation of trees as part of the land development process.
    - g. Prevent clear-cutting and mass grading of land that results in the loss of mature trees and to ensure appropriate replanting when tree loss does occur.
    - h. Protect trees during construction to enhance the quality of life in DeKalb County.
    - i. Protect trees in construction of public facilities and utilities.
  - (6) **General applicability.**
    - (1) The terms and provisions of the tree protection ordinance shall apply to all real property in DeKalb County except as otherwise provided in this section 14-4-9.
    - (2) The terms and provisions of the tree protection ordinance shall further apply to any residential or nonresidential development which requires the issuance of a land disturbance permit, development permit, or building permit, except as otherwise provided in this section 14-4-9.
    - (3) The terms and provisions of the tree protection ordinance shall also apply to development on any county-owned property, including property owned by county agencies, boards, and authorities, except as otherwise provided in this section 14-4-9.
    - (4) **Exemptions.**
      - (i) a. The removal of five (5) or fewer trees, other than specimen trees, on any single-family residential property, within a single calendar year.
      - b. The removal of more than five (5) trees, other than specimen trees, from an owner-occupied, single-family lot may be approved by the county arboretist if the owner must remove trees in order to build a newly permitted structure, or to build an addition to or make improvements to an existing structure, or to improve the health of other trees in the landscape.
    - (5) Zoning conditioned to a specific site plan prior to adoption of the tree protection ordinance on February 9, 1999, provided that said zoning contains specific conditions for both tree preservation and tree replacement.
    - (6) The removal of trees found to be diseased or insect infested by the county extension service, the state forestry commission, a certified arborist, the county arborist or urban forester.
    - (7) **Grandfathered projects:**
      - a. Section 14-4-9 shall not apply to any portion of a property included within the limits of a valid and complete application for a land disturbance permit or preliminary plat approval where said application has proceeded through and completed that could not be reviewed by the development department nor to commercial site plans that have been reviewed and realigned by the development department and which were received by the director prior to February 9, 1999, provided that all time constraints relating to the permit issued shall be observed.
      - b. The requirement of this section 14-4-9 may be waived by the director for a land disturbance permit which is in process with development of a large project, at least seventy-five (75) percent of the land area of which has already received a permit or permit-in-principle, following grandfading activities prior to February 9, 1999.
      - c. In no event shall any grandfathered project be extended for a greater time period than twelve (12) months from February 9, 1999.
  - (7) The board of commissioners may grandfather a project not specifically covered under the foregoing subsections upon application to the arboretist or urban forester, provided that an application submitted pursuant to (1) failing to be affected by the tree protection ordinance shall not substantially harm the public health, safety, aesthetics and welfare of the citizens of DeKalb County. 3) the proposed development activity is otherwise consistent with all pertinent development standards and is compatible with surrounding land uses; and 4) applicant has on file with the county on the effective date of this article an application for a building permit, land disturbance permit or preliminary plat review or its submitted construction plans for development department review. Incomplete applications shall not be processed for hearing before the board of commissioners. Any application by an applicant for whom the department of public works did not have on file an application for a building permit, land disturbance permit or preliminary plat review or construction plans on February 9, 1999, shall not be processed for hearing before the board. Such applications shall stand automatically denied.
  - (8) Upon submission of a written application by the applicant or owner for a hardship waiver to the director, the board of commissioners shall, within twenty-one (21) days of receipt of such application, schedule a public hearing. At said public hearing, the applicant or owner and any other interested parties shall have the opportunity to be heard with regard to the application, and the board of commissioners shall render its decision either granting, with or without conditions, or denying the application prior to the succeeding regularly scheduled meeting of the board of commissioners.
    - f. In the event a hardship waiver is granted by the board, the applicant shall be required to comply with the vegetation protection ordinance in effect immediately prior to February 9, 1999.
    - g. The removal of trees from horticultural properties, such as farms, nurseries or orchards. This exemption shall not include tree harvesting.
    - h. The removal of any tree which has become, or threatens to become, a danger to human life or property.
    - (9) Agricultural activities on land zoned R-200.
    - (10) Approved utility construction without permanent utility easements.
    - (11) Construction, expansion, and operation of county landfills.

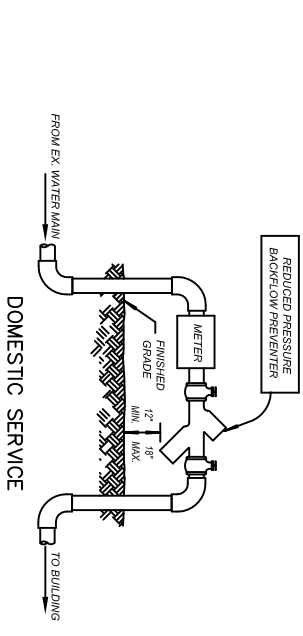






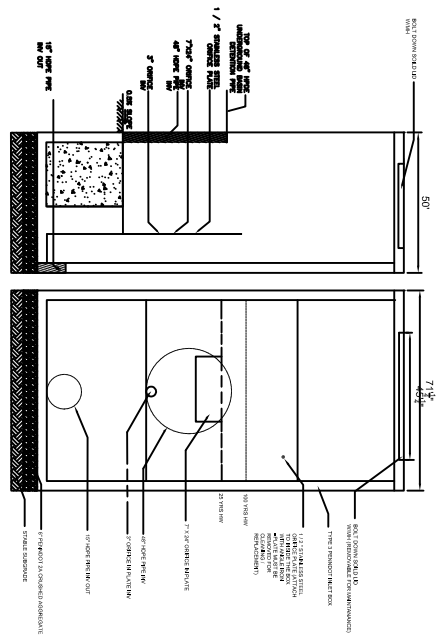


TYPICAL SERVICE CONNECTION DETAIL  
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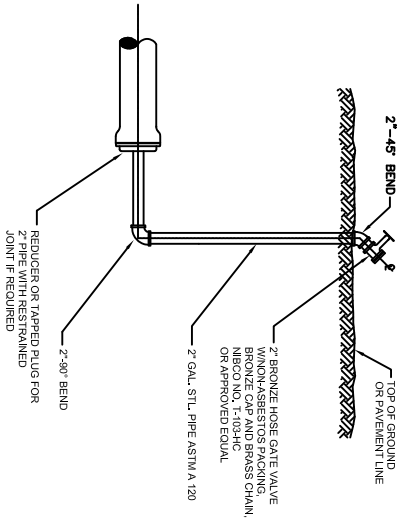


DOMESTIC SERVICE

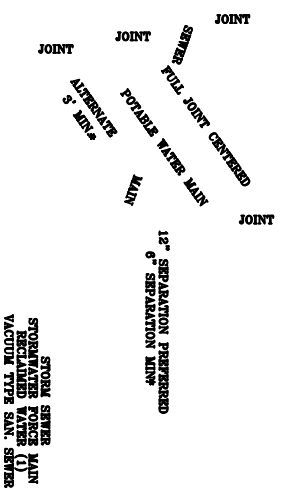
BACKFLOW PREVENTER DETAIL  
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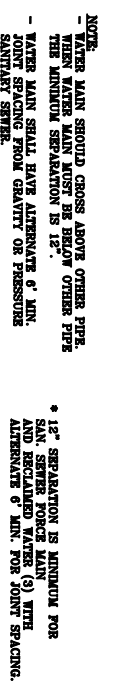
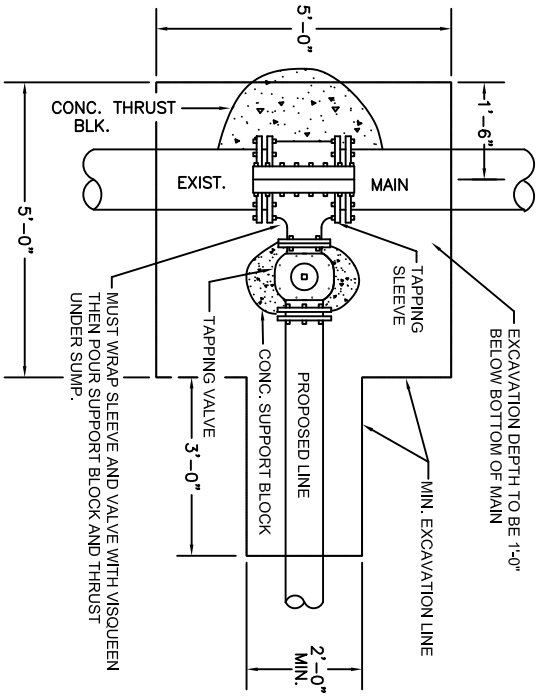
OUTLET CONTROL STRUCTURE TYPE 3 PENNDOT INLET BOX  
NOT TO SCALE



TEMP. BLOWOFF ASSEMBLY DETAIL  
NOT TO SCALE

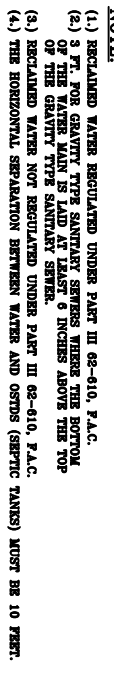


MAIN CONNECTION DETAIL (TAPPED)  
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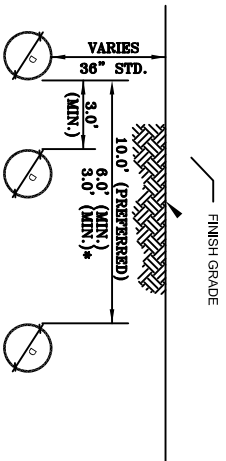


SEWER - WATER MAIN SEPARATION STANDARDS  
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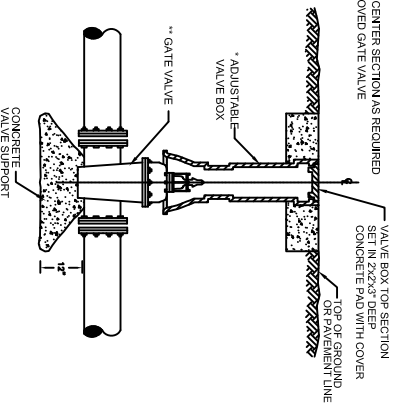
CROSSING  
(WATER OVER SEWER MAIN)



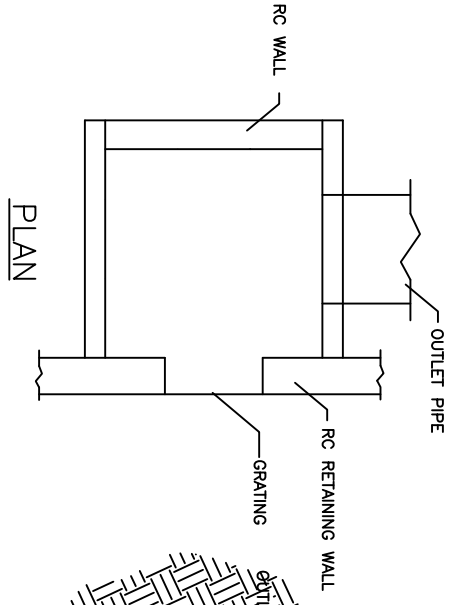
- NOTES:
- 1.) CONNECTION TO MAIN SHALL BE MADE AFTER ENGINEER AND CCU HAVE APPROVED ALL NEW WATER MAIN CONSTRUCTION. CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS PRIOR TO TAPPING.
  - 2.) SEE SPECS. FOR TAPPING SLEEVE AND VALVE. ANY SUBSTITUTIONS SHALL BE APPROVED BY LOCAL COUNTY UTILITIES ENGINEER PRIOR TO CONSTRUCTION.



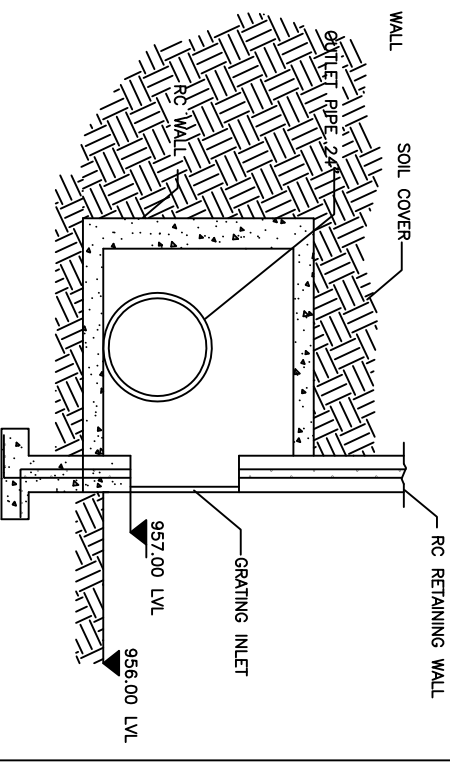
HORIZONTAL SEPERATION  
NOT TO SCALE



TYPICAL UNDERGROUND GATE VALVE  
NOT TO SCALE



PLAN



SECTION



NOT TO SCALE

UTILITY NOTES:

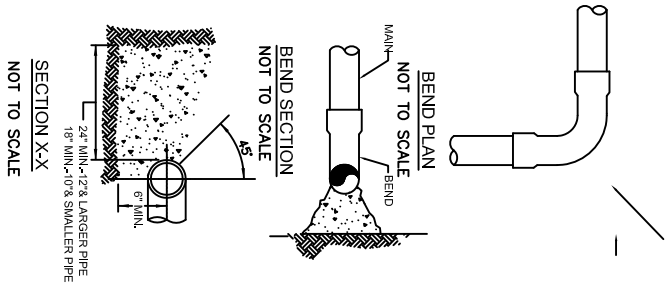
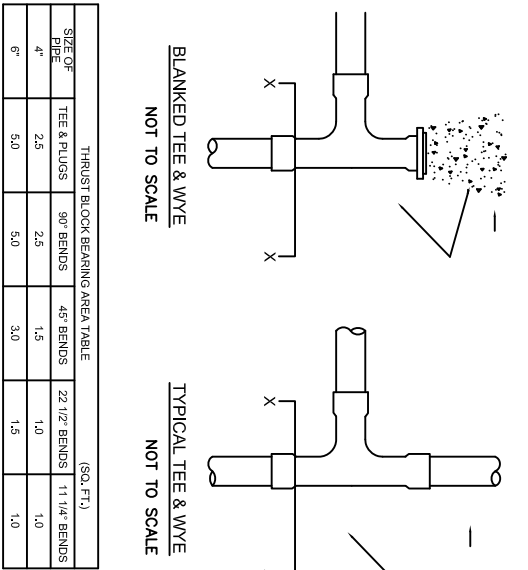
1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE JOB SITE, REVIEW THE UTILITY CONSTRUCTION AND DESIGN REQUIREMENTS, PROJECT PERMITS, AND ALL NECESSARY TO FAMILIARIZE HIMSELF WITH THE ENTIRE PROJECT PRIOR TO BIDDING.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE WATER MANAGEMENT DISTRICT SPECIFICATIONS AND COUNTY STANDARDS.
3. THERE SHALL BE NO CHANGE OR DEVIATION OF THESE PLANS OR SPECIFICATIONS UNLESS PRIOR WRITTEN APPROVAL FROM THE ENGINEER IS OBTAINED.
4. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN INVESTIGATION OF THE EXISTING UTILITIES AND FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE HEREIN AND IS RESPONSIBLE FOR THE COORDINATION OF UTILITY RELOCATION, ALL PROPOSED UTILITIES ARE DESIGNED BY CORRESPONDING UTILITY OWNERS.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL NOTIFY STATE ONE-CALL OF SHAW AT 1.800.282.7411 (STATE WIDE), THREE BUSINESS DAYS PRIOR TO CONSTRUCTION.
7. ALL PUBLIC LAND AND CORNERS WITHIN THE LIMITS OF BEING DESTROYED SHALL BE PROTECTED, IF A MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTling DISTURBED MONUMENTATION BY A REGISTERED SURVEYOR.
8. ALL AREAS THAT WERE IMPROVED PRIOR TO THE START OF CONSTRUCTION AND DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION, WITHIN 90 DAYS OF DISRUPTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILLING, COMPACTING, AND TESTING OF BACKFILL FOR WATER, REUSE, AND FORCE MAIN TRENCHES, IN ACCORDANCE WITH WATER MANAGEMENT DISTRICT AND COUNTY STANDARDS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESSURE TESTING AND PLACEMENT OF TEMPORARY BLOW-OFFS FOR ALL WATER, REUSE, AND FORCE MAINS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR SCHEDULING BACTERIOLOGICAL TEST THROUGH THE WATER MANAGEMENT DISTRICT.
11. ALL WATER, REUSE, AND FORCE MAINS INSTALLATION SHALL CONFORM TO WATER MANAGEMENT DISTRICT SPECIFICATIONS.
12. ALL P.V.C. WATER, REUSE & FORCE MAINS SHALL BE PRESSURE TESTED AT 150 P.S.I., IN ACCORDANCE WITH WATER MANAGEMENT DISTRICT STANDARDS.
13. CONTRACTOR SHALL ADJUST ALL EXISTING VALVE BOXES WITHIN THE LIMITS OF CONSTRUCTION.
14. LOCATING TAPES AND TRACING WIRES SHALL BE INCIDENTAL TO PLACEMENT OF PIPES.
15. ALL FITTINGS SHALL HAVE MEGALUGS AND SHALL BE INCIDENTAL TO PLACEMENT OF PIPES.
16. THE CONTRACTOR SHALL PLACE A 2"x 4" WOODEN MARKER AT ALL CAPPED ENDS, ALL MARKERS SHALL BE MADE OF PRESSURE TREATED LUMBER, AND FOR SAFETY, ALL MARKERS SHALL BE MADE OF PRESSURE TREATED LUMBER.
17. THE CONTRACTOR SHALL REMOVE OLD VALVE BOXES OR ABANDONED LINES AND SHALL NOT BURY OR COVER ACTIVE VALVE BOXES.

REVISIONS			
NO.	BY	DATE	REVISIONS AS PER COUNTY COMMENTS
1.		02/12/07	

CLIENT DATA	
TAX MAP PARCEL #	15 190 01 095
JOB NO.	XXXXXX
DRAWING TITLE	DETAIL SHEET-2
DRAWING NO.	12 OF 13
DESIGN BY:	
CHECK BY:	
SCALE: NTS	
DATE:	

ENGINEER	
DATE	





NOTE:  
1) WRAP ALL FITTINGS WITH PLASTIC BEFORE POURING THRUST BLOCKS. ALL THRUST BLOCKS MUST BE LEFT OPEN FOR INSPECTION BY THE ENGINEER & OWNER.  
2) ALL BEARING SURFACE TO BE CARRIED TO UNDISTURBED SOIL.  
3) THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL, WITH A 2,000 P.S.F. SOIL BEARING (A-1 THRU A-3 CLEAN SAND AND GRAVELS).  
4) POOR SOIL (A-1 THRU A-4 SILTY SOILS, CLAYS, MUCK & FEAT) WILL REQUIRE LARGER THRUST BLOCKS.  
5) THRUST BLOCK SIZES BASED ON 100 P.S.I. HYDROSTATIC TEST PRESSURE.  
6) ALL THRUST BLOCKING TO BE 2500 PSY28 DAY CONCRETE.  
7) CONCRETE SHALL BE READY-MIXED TO ASTM C94, ALTERNATE, NO. HAND MIXING.  
8) VERTICAL BENDS ONLY - 1/2" TIE RODS TO BE ANCHORED TO REACTION BLOCK AND COATED WITH 2 COATS OF BITUMINOUS EPOXY (16 MILS DRY THICKNESS).  
9) VERTICAL BENDS ONLY - FORMED CONCRETE TO BE SIZED BY ENGINEER.  
10) NO THRUST BLOCK REQUIRED WHEN RESTRAINED MECHANICAL JOINT FITTING UTILIZED.  
ALL PIPE CONNECTED TO MECHANICAL JOINT FITTING MUST BE FULL 20' LENGTHS.

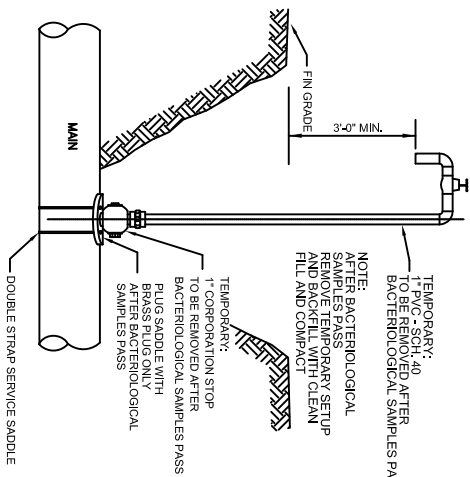
### LOW PRESSURE SEWER THRUST BLOCKING DETAIL

REV. 02/01  
N.L.S.

NOT TO SCALE

### ANCHOR THRUST BLOCK

NOT TO SCALE

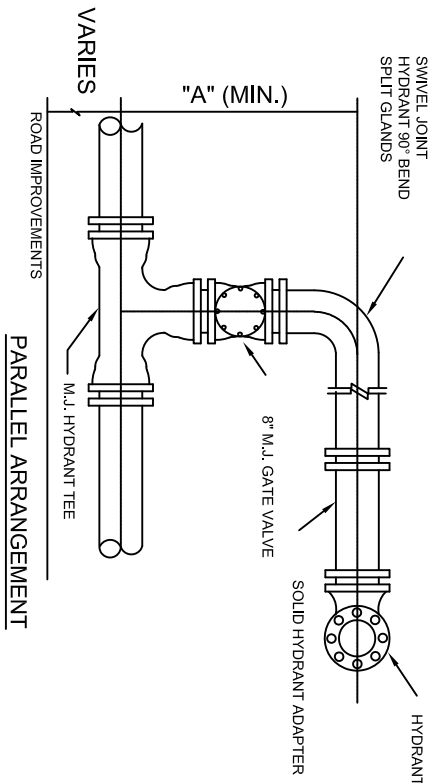


### TYPICAL BACTERIOLOGICAL SAMPLE POINT

N.L.S.

REV. 02/01

NOT TO SCALE



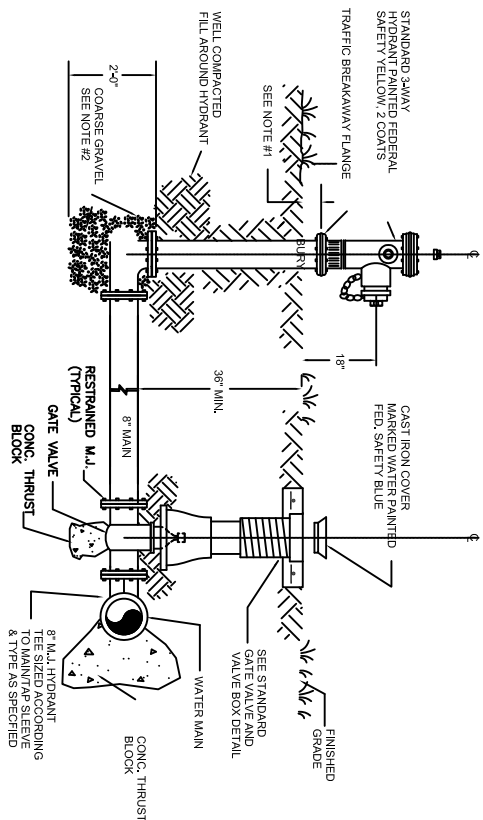
### NOTES:

- MECHANICAL JOINT "HYDRANT TEE" WITH PLAN END BRANCH MAY BE SUBSTITUTED FOR STANDARD TEE AND ELBOW ARRANGEMENT SHOWN ABOVE.
- ALL JOINTS ARE TO BE MECHANICALLY RESTRAINED.
- DIMENSIONS (MINIMUM):

MAIN SIZE (IN)	"A" (MIN.)	"A" WITH "HYDRANT TEE" (SEE NOTE 2)
6"	2'-0"	1'-4"
8"	2'-1 1/2"	1'-6"
10"	2'-2 1/2"	1'-10"
12"	2'-4 1/2"	2'-0"

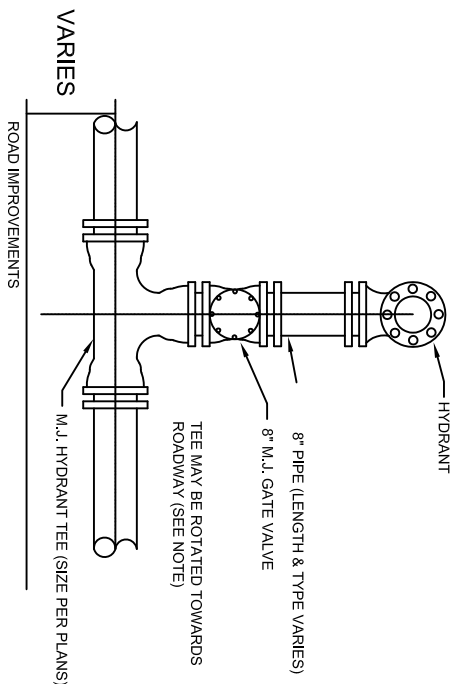
### FIRE HYDRANT ASSEMBLY PLAN ARRANGEMENTS

NOT TO SCALE



### LOW PRESSURE CLEAN-OUT ASSEMBLY

NOT TO SCALE



### PERPENDICULAR ARRANGEMENT

NOT TO SCALE

NO.		BY	DATE	REVISIONS	
1.			02/12/07	REVISIONS AS PER COUNTY COMMENTS	

CLIENT DATA	
ENGINEER	
TAX MAP PARCEL #	15 190 01 085
JOB NO.	XXXXXX
DRAWING TITLE	
DETAIL SHEET-3	
DRAWING NO.	13 OF 13
DESIGN BY:	
CHECK BY:	
SCALE:	
DATE:	