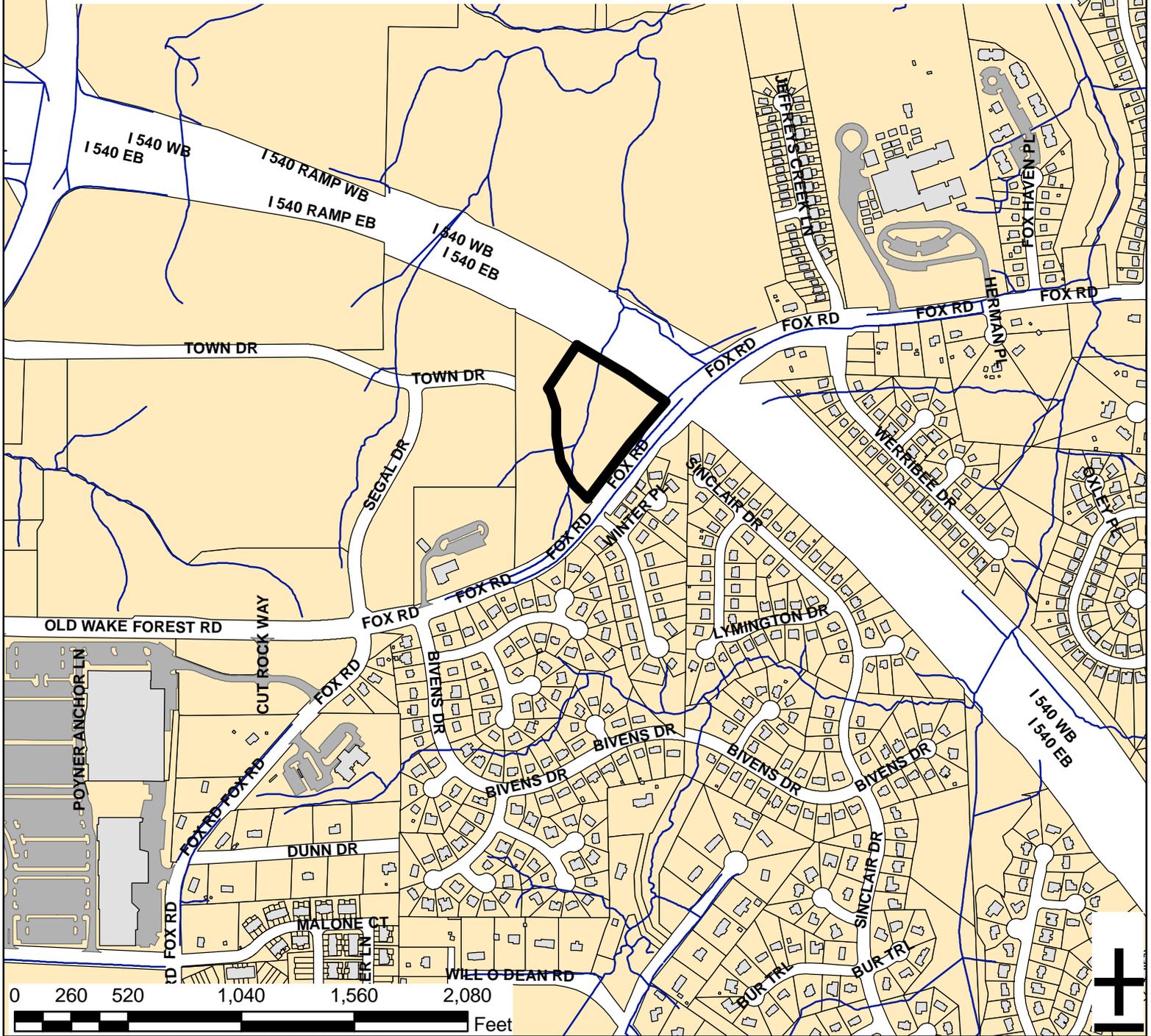
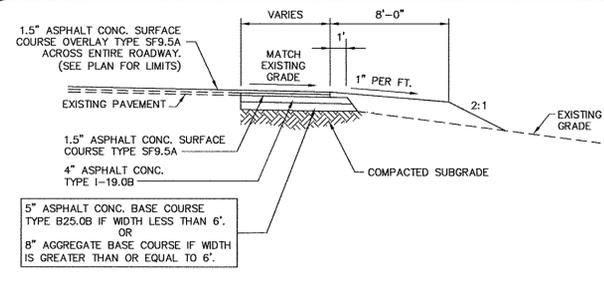


THALES ACADEMY- FOX ROAD SP-24-2010

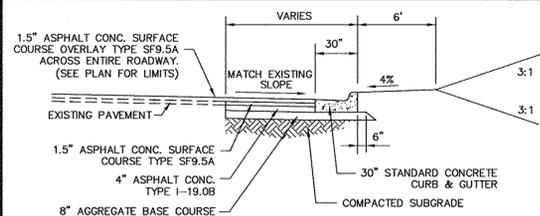


| | |
|---------------------------------|--|
| Zoning: R-15 CUD/ SHOD-1 | Proposed Use/ Sq. Ft. Private School/ 31250 sq. ft. |
| CAC: Northeast | Planner: Jacque Baker |
| Drainage Perry Creek | Phone: (919) 516-2630 |
| Basin: | Applicant Contact: Civil Consultants, Inc. |
| Acreage: 4.87 | Phone: (919) 453-2386 |



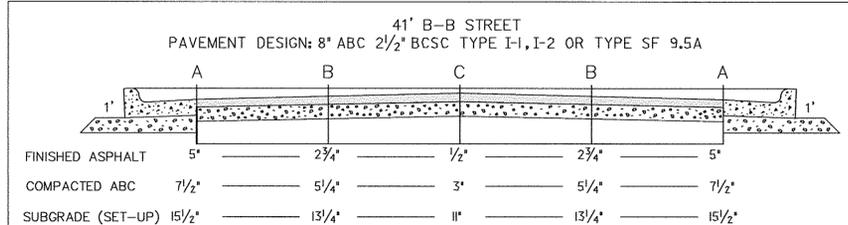
N.C.D.O.T. PAVEMENT WIDENING SECTION WITHOUT CURB & GUTTER TYPICAL AT FILL SECTIONS

NOT TO SCALE



TYPICAL N.C.D.O.T. PAVEMENT WIDENING SECTION WITH CURB & GUTTER

NOT TO SCALE



NOTES: A. AT BASE OF CURB B. 9' FROM BASE OF CURB C. 18' (PEAK OF CROWN)

THE PURPOSE OF THIS DETAIL IS TO PROVIDE THE PROJECT SUPERINTENDENT/INSPECTOR WITH A QUICK AND EASY METHOD OF CHECKING VARIOUS CRITICAL MEASUREMENTS USING A STRINGLINE PULLED TIGHTLY FROM BACK OF CURB TO BACK OF CURB. MEASUREMENTS ARE BASED ON A NORMAL CROWN OF 1/4" PER FOOT.

Table with columns for REVISIONS, DATE, and DRAWN BY. It lists revisions for the 41' Residential Street Stringline Reference.

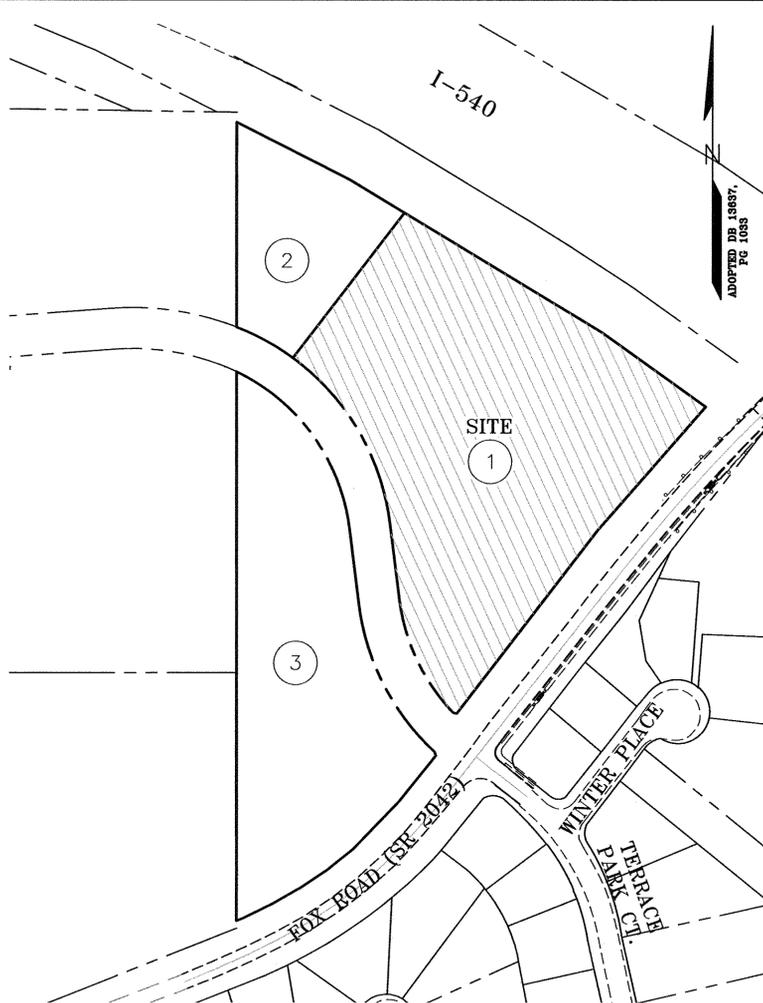
- NOTES: 1. ALL MANHOLES AND WATER VALVES ARE ALSO TO BE CHECKED FROM BACK OF CURB AND GUTTER. 2. ALL MEASUREMENTS FOR VALLEY CURB WILL BE 2" LESS THAN STANDARD CURB & GUTTER WITH STRING PULLED FROM BACK OF CURB.

LEGEND

Legend table showing symbols for NEW and EXISTING items: Drainage Structure, Sanitary Sewer Manhole, Water Valve, Fire Hydrant, Overhead Utility Line, Underground Electric Line, Fiber Optic Cable, Gas Line, Storm Drainage Pipe, Sanitary Sewer Line, Water Line, Surface Elevation Contour, Clearing Limit/Tree Line, Electrical Transformer Pad, Single Wheel Chair Ramp, Double Wheel Chair Ramp, Single Depressed Curb, Double Depressed Curb.

PLAN ABBREVIATIONS

Table of plan abbreviations including ABC (Aggregate Base Course), B-B (Back to Back), BOA (Blow-off Assembly), CATV (Cable Television), CBG (Curb and Gutter), CB (Catch Basin), CFS (Cubic Feet per Second), CI (Curb Inlet), CL (Center Line), CMP (Corrugated Metal Pipe), CONC (Concrete), DCV (Double Check Valve), DC (Depressed Curb), DDC (Double Depressed Curb), DDV (Double Detector Check Valve), DWR (Double Wheel Chair Ramp), DIP (Ductile Iron Pipe), EASE (Easement), EX (Existing), FES (Flared End Section), FH (Fire Hydrant), FM (Force Main), FO (Fiber Optic), FT (Feet), FT/SEC (Feet per Second), GALV (Galvanized), GV (Gate Valve), INV (Invert Elevation), JB (Junction Box), LEN (Length), LF (Linear Feet), LS (Landscape), MH (Manhole), NW (New/Proposed), PED (Pedestal), PAVT (Pavement), PP (Power Pole), PVC (Polyvinyl Chloride), R (Radius), RCP (Reinforced Concrete Pipe), R/W (Right-of-Way), RED (Reducer), RPZ (Reduced Pressure Zone), SD (Storm Drainage), SDMH (Storm Drain Manhole), SS (Sanitary Sewer), SSMH (Sanitary Sewer Manhole), STA (Station), TDD (Temporary Diversion Ditch), TELE (Telephone), TSB (Temporary Sediment Basin), UG (Underground), W (Waterline), WCR (Wheel Chair Ramp), WL (Water Line), WM (Water Meter), WV (Water Valve), X (Existing), YI (Yard Inlet).



THALES ACADEMY - FOX ROAD PRELIMINARY SITE PLAN Raleigh, North Carolina

DRAWING INDEX:

- C1 COVER SHEET
C2 EXISTING CONDITIONS & DEMOLITION PLAN
C3 SITE PLAN
C4 GRADING & STORM DRAINAGE PLAN
C5 UTILITY PLAN
C6 FOX ROAD WIDENING AND PAVEMENT MARKING PLAN
C7 LIGHTING PLAN
D1 MISCELLANEOUS DETAILS
D2 ROADWAY DETAILS
D3 WATER AND SANITARY SEWER DETAILS
D4 SANITARY AND STORM SEWER DETAILS
D5 WATER AND SANITARY SEWER DETAILS
D6 STORM DRAINAGE DETAILS
D7 STORMWATER POND DETAILS
D8 BIOFILTRATION CELL DETAILS
LS1 LANDSCAPE PLAN & DETAILS

GENERAL SITE NOTES:

- 1. THERE ARE NO HISTORIC OR NATURAL INVENTORY SITES ON THE PROPERTY.
2. THERE ARE NO GREENWAYS OR TRAILS ON THE PROPERTY AS SHOWN IN THE RALEIGH TRAILS AND GREENWAYS MASTER PLAN.
3. TRAFFIC IMPACT ANALYSIS HAS BEEN DETERMINED BY THE TRANSPORTATION DEPARTMENT TO BE REQUIRED.
4. THERE ARE NO WETLANDS MEETING THE STANDARDS FOR REQUIRED WETLANDS BUFFERS WITHIN THE PROJECT.
5. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.

TRANSPORTATION NOTES:

- 1. RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 50 FEET OF THE RESIDENTIAL ROAD OR RESIDENTIAL INTERSECTION. THE RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 100 FEET OF ALL OTHER STREET INTERSECTIONS.
2. HANDICAP RAMPS TO BE CONSTRUCTED AT ALL INTERSECTIONS IN ACCORDANCE WITH CITY OF RALEIGH ENGINEERING STANDARD DETAIL 20.11.
3. SIGHT TRIANGLES TO BE LOCATED AT ALL INTERSECTIONS IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS, AREAS WHERE SIGHT TRIANGLES ARE LOCATED OUTSIDE THE RIGHT-OF-WAY SHALL BE RECORDED AS SIGHT EASEMENTS. FINAL LAYOUT OF SIGHT TRIANGLES TO BE APPROVED WITH CONSTRUCTION DRAWINGS.
4. NO SIGHT OBSTRUCTING OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERM, PARKED VEHICLES, SIGN OR OTHER OBJECTS BETWEEN THE HEIGHTS OF 2 FEET AND 8 FEET ABOVE THE CURB LINE ELEVATION, OR NEAREST TRAVELED WAY IF NO CURBING EXISTS, SHALL BE PLACED WITHIN A SIGHT TRIANGLE.
5. ALL STREET SECTIONS SHALL MEET OR EXCEED SPECIFICATIONS DETAILED IN THE CITY OF RALEIGH ENGINEERING STANDARD 20.31.
6. ALL STREETS AND RIGHT-OF-WAYS WITHIN AND ADJACENT TO TO THE PROJECT ARE CONSISTANT WITH THE RALEIGH COMPREHENSIVE PLAN WITH REGARD TO PROPOSED ROADWAY LOCATIONS AND RIGHT-OF-WAY REQUIREMENTS.
7. TURNOUT RADI TO BE A MINIMUM OF 35' AT ALL PUBLIC STREET INTERSECTIONS, DRIVEWAY TURNS TO BE A MINIMUM OF 28'.
8. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

SITE DATA:

OWNER/DEVELOPER: THALES ACADEMY, INC. 4841 PARAGON PARK ROAD RALEIGH, NC 27616
APPLICANT/DEVELOPER: CIVIL CONSULTANTS, INC. 3206 HERITAGE TRADE DRIVE, SUITE 100 WAKE FOREST, NC 27587
PROJECT LOCATION: 6601 FOX ROAD RALEIGH, NC 27616
PROJECT: TYPE OF PROJECT: PRIVATE ELEMENTARY SCHOOL PUBLIC ROADWAY PUBLIC UTILITIES
CITY LIMITS: NO - ANNEXATION REQUIRED
OVERLAY ZONING: SPECIAL HIGHWAY OVERLAY DISTRICT (SHOD-1)
RIVER BASIN: NEUSE RIVER BASIN
NO. OF LOTS: 3
OPEN SPACE LOTS: 0
BUILDING SETBACKS REQUIRED (LOT 1): 10' FRONT MIN 5' (AGGREGATE =15') SIDE 20' REAR
BUILDING SETBACKS PROVIDED: (LOT 1) 20' FRONT 20' SIDE 20' REAR
ADDITIONAL RIGHT-OF-WAY: 10 FOOT (FOX ROAD) 704 LF (TOWN DRIVE) 738 LF 8" DIP 60 LF
MAXIMUM BUILDING HEIGHT: MAXIMUM SETBACK HEIGHT =40'
MINIMUM LOT SIZE REQUIRED: 5000 SQ FT
EXISTING IMPERVIOUS SURFACE: 0
PARKING SUMMARY LOT 1 ELEMENTARY SCHOOL 1/5 SEATS IN PRINCIPAL ASSEMBLY ROOM =500/8 =62 SPACES REQUIRED 78 PARKING SPACES REQUIRED HANDICAP PARKING: REQUIRED 4 (1 VAN) PROVIDED 4 (2 VAN)
BUILDING: 2 STORY
USE: 15,825 S.F./FLOOR PROPOSED ELEMENTARY SCHOOL
FAR: 0.15
LANDSCAPED STREETScape: LOT 1 REQUIRED = 8,908 S.F. (0.20 Ac.) PROVIDED = 8,912 S.F. (0.20 Ac.)
AUTOMOBILE STACKING: DROP OFF/PICK UP = 900 LF

CALL BEFORE YOU DIG... IT'S THE LAW. CALL N.C. ONE-CALL(1-800-632-4949) FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING. NORTH CAROLINA GENERAL STATUTE 87-102

PRELIMINARY NOT FOR CONSTRUCTION C1 SITE PLANS

Civil Consultants logo and contact information: LAND PLANNERS + CIVIL ENGINEERS WWW.CIVILCONSULTANTS.COM 3708 LYCKAN PARKWAY, SUITE 201, DURHAM, NC 27707 919.480.1645 PHONE 919.403.0336 FAX 919.453.2386 PHONE LIC. #C-1030

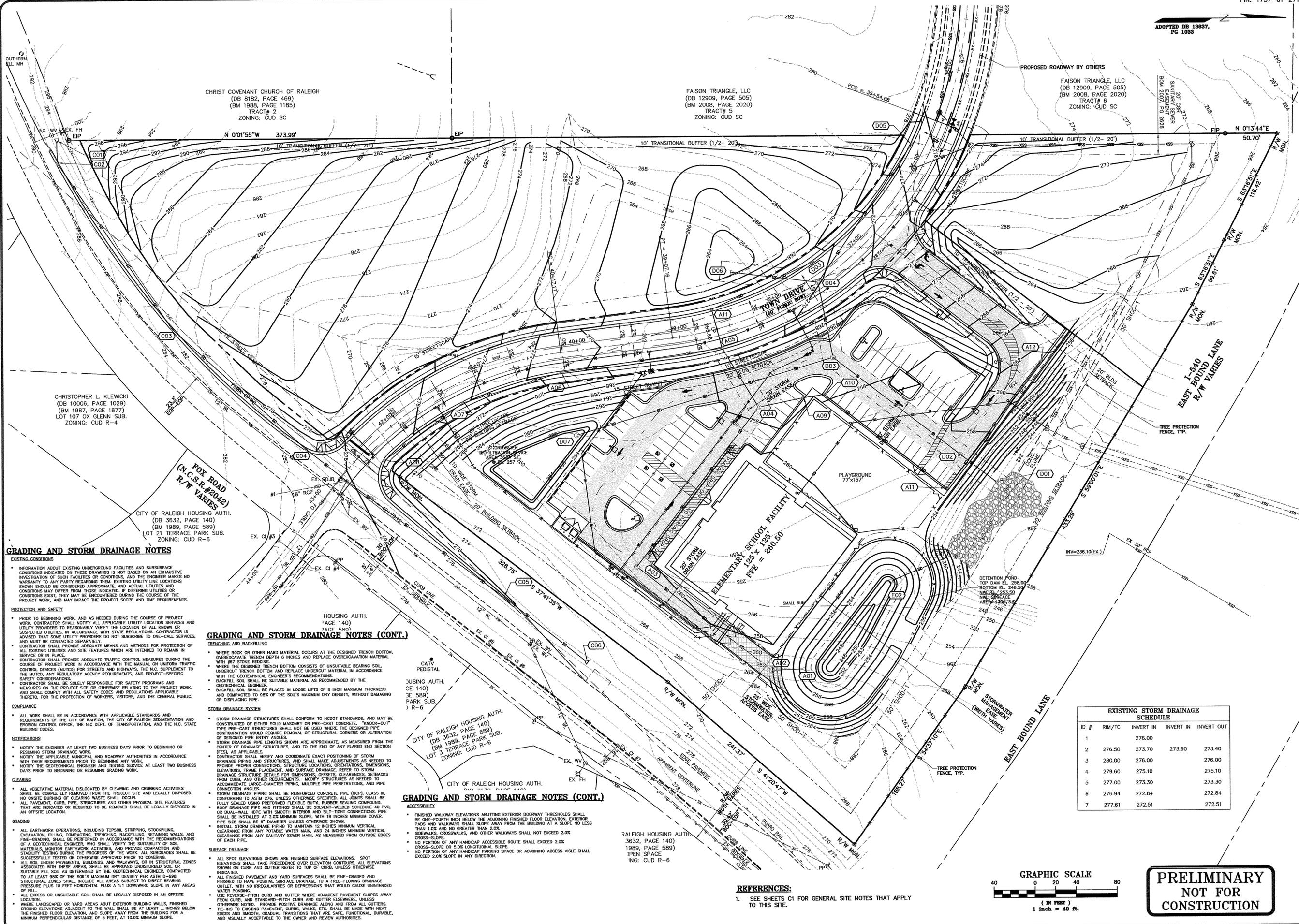


THALES ACADEMY FOX ROAD RALEIGH, NORTH CAROLINA COVER SHEET

Table with columns: REV, DATE, DESCRIPTION. It lists revisions for the drawing.

DATE: APRIL 1, 2010
HORIZONTAL SCALE: N/A
VERTICAL SCALE: N/A
PROJECT MANAGER: RPS
DRAWN BY: MF
PROJECT NO.: 16508
DRAWING NAME: 16508.DWG

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GRADING AND STORM DRAINAGE NOTES

EXISTING CONDITIONS

- INFORMATION ABOUT EXISTING UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS NOT BASED ON AN EXHAUSTIVE INVESTIGATION OF SUCH FACILITIES OR CONDITIONS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PARTY REGARDING THEM. EXISTING UTILITY LINE LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE, AND ACTUAL UTILITIES AND CONDITIONS MAY DIFFER FROM THOSE INDICATED. IF DIFFERING UTILITIES OR CONDITIONS EXIST, THEY MAY BE ENCOUNTERED DURING THE COURSE OF THE PROJECT WORK, AND MAY IMPACT THE PROJECT SCOPE AND THE REQUIREMENTS.

PROTECTION AND SAFETY

- PRIOR TO BEGINNING WORK, AND AS NEEDED DURING THE COURSE OF PROJECT WORK, CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY LOCATION SERVICES AND UTILITY PROVIDERS TO REASONABLY VERIFY THE LOCATION OF ALL KNOWN OR SUSPECTED UTILITIES, IN ACCORDANCE WITH STATE REGULATIONS. CONTRACTOR IS ADVISED THAT SOME UTILITY PROVIDERS DO NOT SUBSCRIBE TO ONE-CALL SERVICES, AND MUST BE CONTACTED SEPARATELY.
- CONTRACTOR SHALL PROVIDE ADEQUATE MEANS AND METHODS FOR PROTECTION OF ALL EXISTING UTILITIES AND SITE FEATURES WHICH ARE INTENDED TO REMAIN IN SERVICE OR IN PLACE.
- CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES DURING THE COURSE OF PROJECT WORK IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, THE N.C. SUPPLEMENT TO THE MUTCD, ANY REGULATORY AGENCY REQUIREMENTS, AND PROJECT-SPECIFIC SAFETY CONSIDERATIONS.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY PROGRAMS AND MEASURES ON THE PROJECT SITE OR OTHERWISE RELATING TO THE PROJECT WORK, AND SHALL COMPLY WITH ALL SAFETY CODES AND REGULATIONS APPLICABLE THEREIN, FOR THE PROTECTION OF WORKERS, VISITORS, AND THE GENERAL PUBLIC.

COMPLIANCE

- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARDS AND REQUIREMENTS OF THE CITY OF RALEIGH, THE N.C. DEPT. OF TRANSPORTATION, AND THE N.C. STATE BUILDING CODES.

NOTIFICATIONS

- NOTIFY THE ENGINEER AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING STORM DRAINAGE WORK.
- NOTIFY THE APPLICABLE MUNICIPAL AND ROADWAY AUTHORITIES IN ACCORDANCE WITH THEIR REQUIREMENTS PRIOR TO BEGINNING ANY WORK.
- NOTIFY THE GEOTECHNICAL ENGINEER AND TESTING SERVICE AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING WORK.

CLEARING

- ALL VEGETATIVE MATERIAL DISLOCATED BY CLEARING AND GRUBBING ACTIVITIES SHALL BE COMPLETELY REMOVED FROM THE PROJECT SITE AND LEGALLY DISPOSED. NO ON-SITE BURNING OF CLEARING WASTE SHALL OCCUR.
- ALL PAVEMENT, CURB, PIPE, STRUCTURES AND OTHER PHYSICAL SITE FEATURES THAT ARE INDICATED OR REQUIRED TO BE REMOVED SHALL BE LEGALLY DISPOSED IN AN OFFSITE LOCATION.

GRADING

- ALL EARTHWORK OPERATIONS, INCLUDING TOPSOIL STRIPPING, STOCKPILING, EXCAVATION, FILLING, COMPACTING, TRENCHING, BACKFILLING, RETAINING WALLS, AND FINE-GRADING, SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER, WHO SHALL VERIFY THE SUITABILITY OF SOIL MATERIALS, MONITOR EARTHWORK ACTIVITIES, AND PROVIDE COMPACTION AND STABILITY TESTING DURING THE PROGRESS OF THE WORK. ALL SUBGRADE SHALL BE SUCCESSFULLY TESTED OR OTHERWISE APPROVED PRIOR TO COVERING.
- ALL SOIL UNDER PAVEMENTS, BUILDINGS, AND WALKWAYS, OR IN STRUCTURAL ZONES ASSOCIATED WITH THESE AREAS, SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE SOIL'S MAXIMUM DRY DENSITY PER ASTM D-698.
- STRIPED ZONES SHALL INCLUDE ALL AREAS SUBJECT TO DIRECT BEARING PRESSURE PLUS 10 FEET HORIZONTAL PLUS A 1:1 DOWNWARD SLOPE IN ANY AREAS OF FILL.
- ALL EXCESS OR UNSUITABLE SOIL SHALL BE LEGALLY DISPOSED IN AN OFFSITE LOCATION.
- WHERE LANDSCAPED OR YARD AREAS ADJACENT TO BUILDINGS, FINISHED GROUND ELEVATIONS ADJACENT TO THE WALL SHALL BE AT LEAST 12 INCHES BELOW THE FINISHED FLOOR ELEVATION, AND SLOPE AWAY FROM THE BUILDING FOR A MINIMUM PERPENDICULAR DISTANCE OF 5 FEET, AT 10.0% MINIMUM SLOPE.

GRADING AND STORM DRAINAGE NOTES (CONT.)

TRENCHING AND BACKFILLING

- WHERE ROCK OR OTHER HARD MATERIAL OCCURS AT THE DESIGNED TRENCH BOTTOM, OVEREXCAVATE TRENCH DEPTH 6 INCHES AND REPLACE OVEREXCAVATION MATERIAL WITH #67 STONE BEDDING.
- WHERE THE DESIGNED TRENCH BOTTOM CONSISTS OF UNSUITABLE BEARING SOIL, UNDERCUT TRENCH BOTTOM AND REPLACE UNDERCUT MATERIAL IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- BACKFILL SOIL SHALL BE SUITABLE MATERIAL AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- BACKFILL SOIL SHALL BE PLACED IN LOOSE LIFTS OF 8 INCH MAXIMUM THICKNESS AND COMPACTED TO 98% OF THE SOIL'S MAXIMUM DRY DENSITY, WITHOUT DAMAGING OR DISPLACING PIPE.

STORM DRAINAGE SYSTEM

- STORM DRAINAGE STRUCTURES SHALL CONFORM TO MCDOT STANDARDS, AND MAY BE CONSTRUCTED OF EITHER SOLID MASONRY OR PRE-CAST CONCRETE. "KNOCK-OUT" TYPE PRE-CAST STRUCTURES SHALL NOT BE USED WHERE THE DESIGNED PIPE CONFIGURATION WOULD REQUIRE REMOVAL OF STRUCTURAL CORNERS OR ALTERATION OF DESIGNED PIPE ENTRY ANGLES.
- STORM DRAINAGE PIPE LENGTHS SHOWN ARE APPROXIMATE, AS MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND TO THE END OF ANY FLARED END SECTION (FES), AS APPLICABLE.
- CONTRACTOR SHALL VERIFY AND COORDINATE EXACT POSITIONING OF STORM DRAINAGE PIPING AND STRUCTURES, AND SHALL MAKE ADJUSTMENTS AS NEEDED TO PROVIDE PROPER CONNECTIONS, STRUCTURE LOCATIONS, ORIENTATIONS, DIMENSIONS, ELEVATIONS, FRAME PLACEMENT, AND SURFACE DRAINAGE. REFER TO STORM DRAINAGE STRUCTURE DETAILS FOR DIMENSIONS, OFFSETS, CLEARANCES, SETBACKS FROM CURBS, AND OTHER REQUIREMENTS. MODIFY STRUCTURES AS NEEDED TO ACCOMMODATE LARGE-DIAMETER PIPING, MULTIPLE PIPE PENETRATIONS, AND PIPE CONNECTION ANGLES.
- STORM DRAINAGE PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS II, CONFORMING TO ASTM C78, UNLESS OTHERWISE SPECIFIED. ALL JOINTS SHALL BE FULLY SEALED USING PREFORMED FLEXIBLE BUTYL RUBBER SEALING COMPOUND.
- ROOF DRAINAGE PIPE AND FITTINGS SHALL BE SOLVENT-WELDED SCHEDULE 40 PVC, OR DUAL-WALL HDPE WITH SMOOTH INTERIOR AND SILENT-TIGHT CONNECTIONS. PIPE SHALL BE INSTALLED AT 2.0% MINIMUM SLOPE, WITH 18 INCHES MINIMUM COVER. PIPE SIZE SHALL BE 6" DIAMETER UNLESS OTHERWISE SHOWN.
- INSTALL STORM DRAINAGE PIPING TO MAINTAIN 12 INCHES MINIMUM VERTICAL CLEARANCE FROM ANY POTABLE WATER MAIN, AND 24 INCHES MINIMUM VERTICAL CLEARANCE FROM ANY SANITARY SEWER MAIN, AS MEASURED FROM OUTSIDE EDGES OF EACH PIPE.

SURFACE DRAINAGE

- ALL SPOT ELEVATIONS SHOWN ARE FINISHED SURFACE ELEVATIONS. SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER ELEVATION CONTOURS. ALL ELEVATIONS SHOWN ON CURB AND GUTTER REFER TO TOP OF CURB, UNLESS OTHERWISE INDICATED.
- ALL FINISHED PAVEMENT AND YARD SURFACES SHALL BE FINE-GRADED AND FINISHED TO HAVE POSITIVE SURFACE DRAINAGE TO A FREE-FLOWING DRAINAGE OUTLET, WITH NO IRREGULARITIES OR DEPRESSIONS THAT WOULD CAUSE UNINTENDED WATER PONDING.
- USE REVERSE-PITCH CURB AND GUTTER WHERE ADJACENT PAVEMENT SLOPES AWAY FROM CURB, AND STANDARD-PITCH CURB AND GUTTER ELSEWHERE, UNLESS OTHERWISE NOTED. PROVIDE POSITIVE DRAINAGE ALONG AND FROM ALL GUTTERS. TE-IN TO EXISTING PAVEMENT, CURBS, WALKS, ETC. SHALL BE MADE WITH NEAT EDGES AND SMOOTH, GRADUAL TRANSITIONS THAT ARE SAFE, FUNCTIONAL, DURABLE, AND VISUALLY ACCEPTABLE TO THE OWNER AND REVIEW AUTHORITIES.

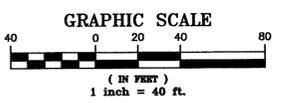
GRADING AND STORM DRAINAGE NOTES (CONT.)

ACCESSIBILITY

- FINISHED WALKWAY ELEVATIONS ADJACENT TO EXTERIOR DOORWAY THRESHOLDS SHALL BE ONE-FOURTH INCH BELOW THE ADJACENT FINISHED FLOOR ELEVATION. EXTERIOR PAVEMENT AND WALKWAYS SHALL SLOPE AWAY FROM THE BUILDING AT A SLOPE NO LESS THAN 1.0% AND NO GREATER THAN 2.0%.
- SIDEWALKS, CROSSWALKS, AND OTHER WALKWAYS SHALL NOT EXCEED 2.0% CROSS-SLOPE.
- NO PORTION OF ANY HANDICAP ACCESSIBLE ROUTE SHALL EXCEED 2.0% CROSS-SLOPE OR 5.0% LONGITUDINAL SLOPE.
- NO PORTION OF ANY HANDICAP PARKING SPACE OR ADJACENT ACCESS AISLE SHALL EXCEED 2.0% SLOPE IN ANY DIRECTION.

RALEIGH HOUSING AUTH.
3632, PAGE 140
1989, PAGE 589
OPEN SPACE
ING: CUD R-6

| EXISTING STORM DRAINAGE SCHEDULE | | | | |
|----------------------------------|--------|-----------|-----------|------------|
| ID # | RIM/TC | INVERT IN | INVERT IN | INVERT OUT |
| 1 | | 276.00 | | |
| 2 | 276.50 | 273.70 | 273.90 | 273.40 |
| 3 | 280.00 | 276.00 | | 276.00 |
| 4 | 279.60 | 275.10 | | 275.10 |
| 5 | 277.00 | 273.30 | | 273.30 |
| 6 | 276.94 | 272.84 | | 272.84 |
| 7 | 277.61 | 272.51 | | 272.51 |



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civil consultants
LAND PLANNERS & CIVIL ENGINEERS
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3206 HERITAGE TRADE DRIVE, SUITE 100, WAKE FOREST, NC 27787
919.453.2380 PHONE
Lic. #C-1059



**THALES ACADEMY
FOX ROAD
WAKE COUNTY, NORTH CAROLINA
GRADING AND STORM
DRAINAGE PLAN**

REV. DATE DESCRIPTION

DATE: APRIL 1, 2010
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: N/A
PROJECT MANAGER: KPG
DRAWN BY: MP
PROJECT NO.: 16508
DRAWING NAME: 16508.DWG

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SHEET NO.
C4
SITE PLAN

UTILITY NOTES

EXISTING CONDITIONS

INFORMATION ABOUT EXISTING UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS NOT BASED ON AN EXHAUSTIVE INVESTIGATION OF SUCH FACILITIES OR CONDITIONS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PARTY REGARDING THEM.

PROTECTION AND SAFETY

PRIOR TO BEGINNING WORK, AND AS NEEDED DURING THE COURSE OF PROJECT WORK, CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY LOCATION SERVICES AND UTILITY PROVIDERS TO REASONABLY VERIFY THE LOCATION OF ALL KNOWN OR SUSPECTED UTILITIES, IN ACCORDANCE WITH STATE REGULATIONS.

COMPLIANCE

ALL WATER SYSTEM AND SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
REQUIREMENTS OF THE CITY OF RALEIGH, INCLUDING THE LATEST EDITION OF CONSTRUCTION STANDARDS AND SPECIFICATIONS.

NOTIFICATIONS

NOTIFY THE ENGINEER AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING WATERLINE OR SANITARY SEWER WORK. THE ENGINEER MUST OBTAIN NECESSARY PERMITS AND APPROVALS PRIOR TO BEGINNING WORK.

TRENCHING AND BACKFILLING

WHERE ROCK OR OTHER HARD MATERIAL OCCURS AT THE DESIGNED TRENCH BOTTOM, OVEREXCAVATE TRENCH DEPTH 6 INCHES AND REPLACE OVEREXCAVATION MATERIAL WITH #17 STONE BEDDING.

STORAGE AND HANDLING

PIPING, FITTINGS, GASKETS, AND OTHER MATERIALS SHALL BE KEPT CLEAN WHILE BEING STORED AND DURING CONSTRUCTION ACTIVITIES.

CLEARANCES

SANITARY SEWER MAINS AND POTABLE WATER MAINS SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL CLEARANCE OF 10 FEET BETWEEN THE OUTSIDE EDGES OF EACH PIPE.

WATER SYSTEM

WATER MAIN PIPING SHALL BE DUCTILE IRON PIPE PER AWWA C151, PRESSURE CLASS 350, WITH INTERIOR CEMENT MORTAR LINING AND EXTERIOR BITUMINOUS SEAL.

UTILITY NOTES (CONT.)

BACKFLOW PREVENTION

BACKFLOW PREVENTER ASSEMBLIES AND ENCLOSURES SHALL CONFORM TO ALL LOCAL WATER AUTHORITY REQUIREMENTS, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

FIRE PROTECTION

WATER MAINS SHALL BE INSTALLED AND MADE OPERATIONAL AS SOON AS PRACTICAL TO PROVIDE ACTIVE FIRE HYDRANT SERVICE DURING BUILDING CONSTRUCTION.

SANITARY SEWER

SANITARY SEWER MAIN PIPING SHALL BE DUCTILE IRON PIPE PER AWWA C151, PRESSURE CLASS 350, WITH INTERIOR EPOXY LINING AND EXTERIOR BITUMINOUS SEAL.

CONNECTIONS

FOR CONNECTIONS TO EXISTING UTILITY AND DRAINAGE LINES, CONTRACTOR SHALL VERIFY EXISTING PIPE SIZE AND MATERIAL, AND PROVIDE APPROPRIATE CONNECTION FITTINGS.

UTILITY NOTES (CONT.)

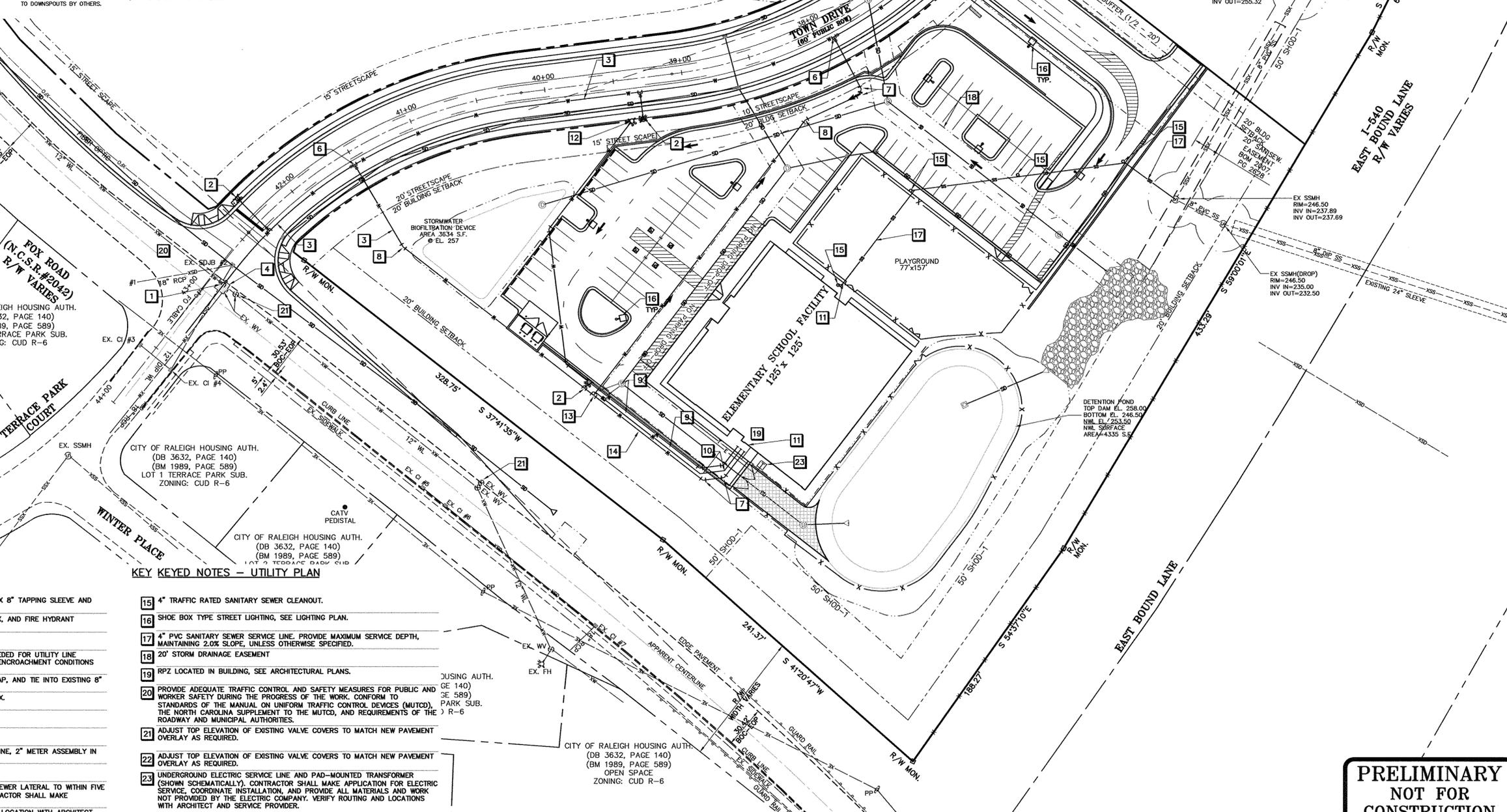
TESTING AND ACCEPTANCE

THE GEOTECHNICAL ENGINEER SHALL PROVIDE MATERIAL AND DENSITY TESTING DURING THE COURSE OF THE WORK, PRIOR TO PLACEMENT OF ANY BASE OR PAVEMENT.

OTHER

CONTRACTOR SHALL PROVIDE PRIMARY COORDINATION WITH UTILITY SERVICE PROVIDERS FOR BUILDING UTILITY SERVICES.

FAISON TRIANGLE, LLC (DB 12909, PAGE 505) (BM 2008, PAGE 2020) TRACT # 5 ZONING: CUD SC



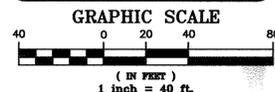
KEY KEYED NOTES - UTILITY PLAN

- 1 CONNECT TO EXISTING 12" WATERLINE USING 12" X 8" TAPPING SLEEVE AND (2) 8" TAPPING VALVE.
2 8" X 6" MJ TEE, 6" GATE VALVE WITH VALVE BOX, AND FIRE HYDRANT ASSEMBLY.
3 8" DIAMETER DIP WATERLINE.

KEY KEYED NOTES - UTILITY PLAN

- 15 4" TRAFFIC RATED SANITARY SEWER CLEANOUT.
16 SHOE BOX TYPE STREET LIGHTING, SEE LIGHTING PLAN.
17 4" PVC SANITARY SEWER SERVICE LINE. PROVIDE MAXIMUM SERVICE DEPTH, MAINTAINING 2.0% SLOPE, UNLESS OTHERWISE SPECIFIED.

PRELIMINARY NOT FOR CONSTRUCTION



REFERENCES: 1. SEE SHEET C1 FOR GENERAL SITE NOTES.

civil consultants LAND PLANNERS + CIVIL ENGINEERS WWW.CIVILCONSULTANTS.COM



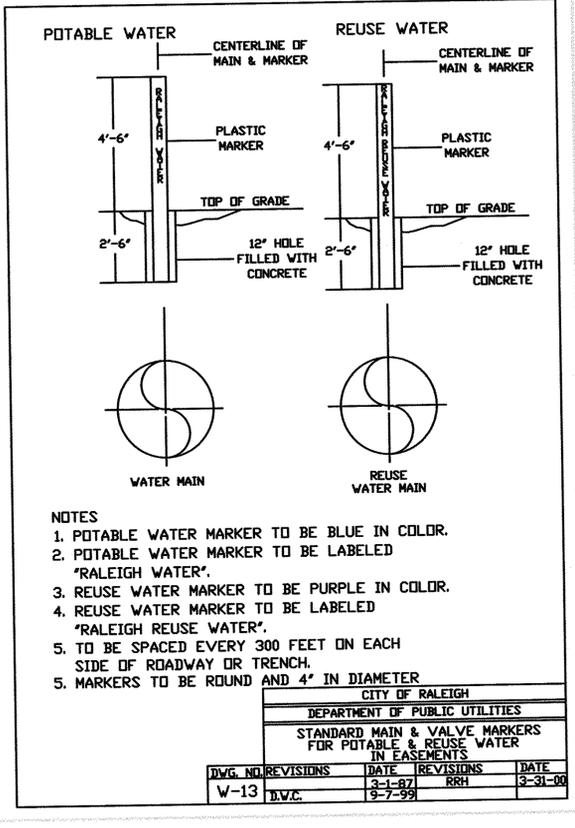
THALES ACADEMY FOX ROAD WAKE COUNTY, NORTH CAROLINA UTILITY PLAN

Revision table with columns for REV, DATE, DESCRIPTION. Includes project information: DATE: APRIL 1, 2010; HORIZONTAL SCALE: 1" = 40'; VERTICAL SCALE: N/A.

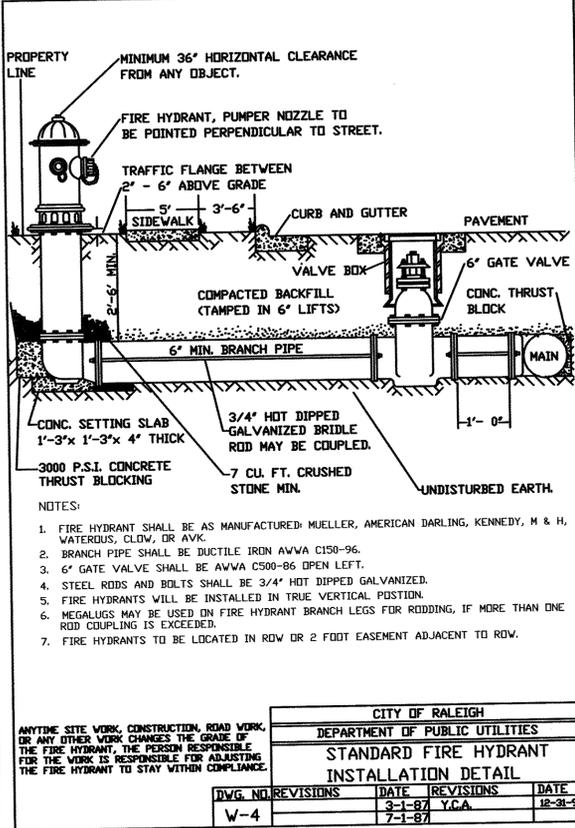


THALES ACADEMY - FOX ROAD
 RALEIGH, NORTH CAROLINA
WATER AND SANITARY SEWER DETAILS

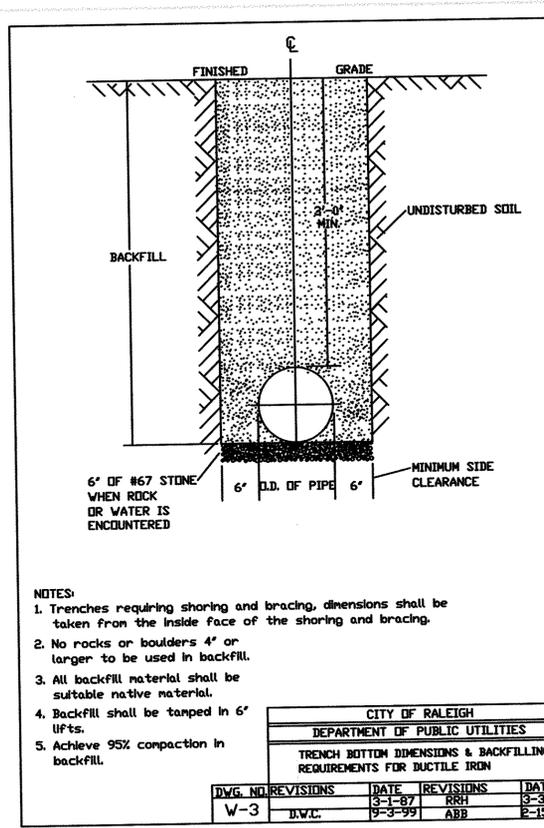
| REV. | DATE | DESCRIPTION |
|------|------|-------------|
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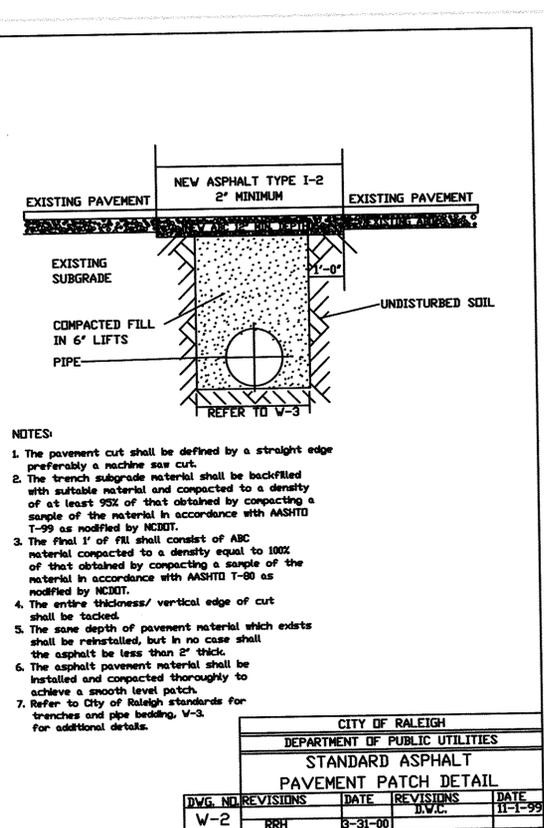
- NOTES**
- POTABLE WATER MARKER TO BE BLUE IN COLOR.
 - POTABLE WATER MARKER TO BE LABELED "RALEIGH WATER".
 - REUSE WATER MARKER TO BE PURPLE IN COLOR.
 - REUSE WATER MARKER TO BE LABELED "RALEIGH REUSE WATER".
 - TO BE SPACED EVERY 300 FEET ON EACH SIDE OF ROADWAY OR TRENCH.
 - MARKERS TO BE ROUND AND 4" IN DIAMETER.
- | CITY OF RALEIGH | | | |
|--|-----------|--------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| STANDARD MAIN & VALVE MARKERS FOR POTABLE & REUSE WATER IN EASEMENTS | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| W-13 | D.V.C. | 3-1-87 | RRH |
| | | 9-7-99 | RRH |



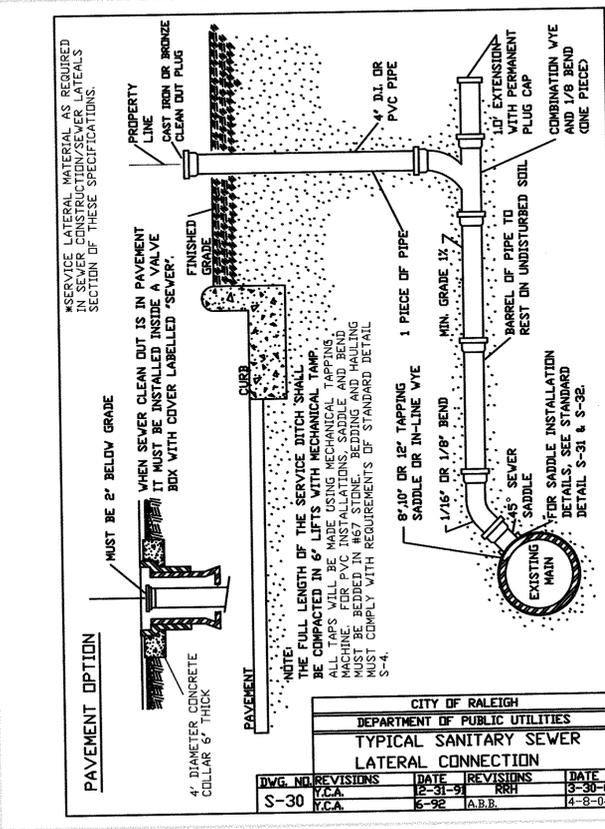
- NOTES**
- FIRE HYDRANT SHALL BE AS MANUFACTURED: MUELLER, AMERICAN DARLING, KENNEDY, M & H, WATERBUS, CLOW, OR AVK.
 - BRANCH PIPE SHALL BE DUCTILE IRON AWVA C150-96.
 - 6" GATE VALVE SHALL BE AWVA C500-86 OPEN LEFT.
 - STEEL RODS AND BOLTS SHALL BE 3/4" HOT DIPPED GALVANIZED.
 - FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
 - MEGALUGS MAY BE USED ON FIRE HYDRANT BRANCH LEGS FOR RODDING, IF MORE THAN ONE ROD COUPLING IS EXCEEDED.
 - FIRE HYDRANTS TO BE LOCATED IN ROW OR 2 FOOT EASEMENT ADJACENT TO ROW.
- ANYTIME SITE WORK, CONSTRUCTION, ROAD WORK, OR ANY OTHER WORK CHANGES THE GRADE OF THE FIRE HYDRANT, THE PERSON RESPONSIBLE FOR THE WORK IS RESPONSIBLE FOR ADJUSTING THE FIRE HYDRANT TO STAY WITHIN COMPLIANCE.
- | CITY OF RALEIGH | | | |
|---|-----------|----------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| STANDARD FIRE HYDRANT INSTALLATION DETAIL | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| W-4 | D.V.C. | 7-1-87 | RRH |
| | | 12-31-91 | RRH |



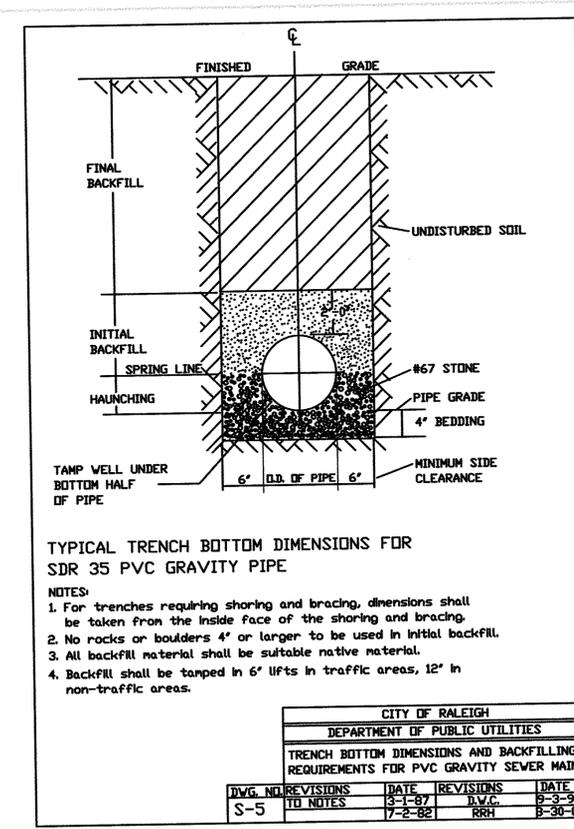
- NOTES**
- Trenches requiring shoring and bracing, dimensions shall be taken from the inside face of the shoring and bracing.
 - No rocks or boulders 4" or larger to be used in backfill.
 - All backfill material shall be suitable native material.
 - Backfill shall be tamped in 6" lifts.
 - Achieve 95% compaction in backfill.
- | CITY OF RALEIGH | | | |
|--|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| W-3 | D.V.C. | 9-3-99 | ARR |
| | | 3-31-00 | RRH |
| | | 2-15-05 | RRH |



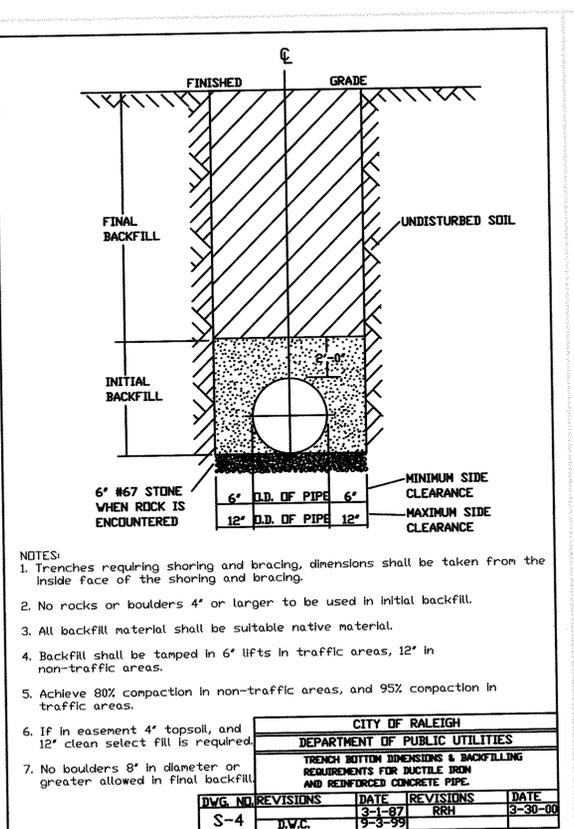
- NOTES**
- The pavement cut shall be defined by a straight edge preferably a machine saw cut.
 - The trench subgrade material shall be backfilled with suitable material and compacted to a density of at least 95% of that obtained by compacting a sample of the material in accordance with AASHTO T-99 as modified by MCDOT.
 - The first 1" of fill shall consist of ABC material compacted to a density equal to 100% of that obtained by compacting a sample of the material in accordance with AASHTO T-99 as modified by MCDOT.
 - The entire thickness/ vertical edge of cut shall be tacked.
 - The same depth of pavement material which exists shall be reinstalled, but in no case shall the asphalt be less than 2" thick.
 - The asphalt pavement material shall be installed and compacted thoroughly to achieve a smooth level patch.
 - Refer to City of Raleigh standards for trenches and pipe bedding, W-3, for additional details.
- | CITY OF RALEIGH | | | |
|--|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| STANDARD ASPHALT PAVEMENT PATCH DETAIL | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| W-2 | RRH | 3-31-00 | D.V.C. |
| | | 11-1-99 | RRH |



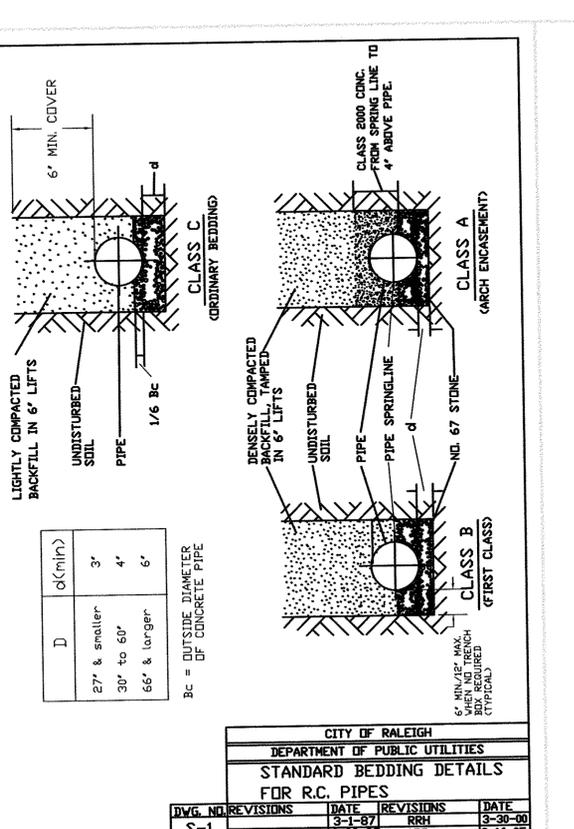
- NOTES**
- FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
 - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
 - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
 - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
- | CITY OF RALEIGH | | | |
|--|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS FOR PVC GRAVITY SEWER MAIN | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| S-5 | D.V.C. | 7-2-82 | RRH |
| | | 8-3-99 | RRH |
| | | 8-30-00 | RRH |



- NOTES**
- TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
 - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
 - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
 - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
- | CITY OF RALEIGH | | | |
|---|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| S-4 | D.V.C. | 9-3-99 | ARR |
| | | 3-1-87 | RRH |
| | | 3-30-00 | RRH |



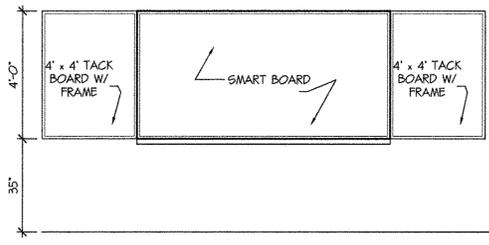
- NOTES**
- TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
 - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
 - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
 - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
 - ACHIEVE 80% COMPACTION IN NON-TRAFFIC AREAS, AND 95% COMPACTION IN TRAFFIC AREAS.
 - IF IN EASEMENT 4" TOPSOIL, AND 12" CLEAN SELECT FILL IS REQUIRED.
 - NO BOULDERS 8" IN DIAMETER OR GREATER ALLOWED IN FINAL BACKFILL.
- | CITY OF RALEIGH | | | |
|---|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| STANDARD BEDDING DETAILS FOR R.C. PIPES | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| S-1 | D.V.C. | 6-29-93 | ARR |
| | | 3-1-87 | RRH |
| | | 8-16-00 | RRH |



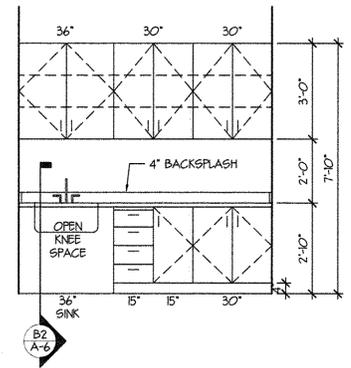
- NOTES**
- TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
 - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
 - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
 - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
 - ACHIEVE 80% COMPACTION IN NON-TRAFFIC AREAS, AND 95% COMPACTION IN TRAFFIC AREAS.
 - IF IN EASEMENT 4" TOPSOIL, AND 12" CLEAN SELECT FILL IS REQUIRED.
 - NO BOULDERS 8" IN DIAMETER OR GREATER ALLOWED IN FINAL BACKFILL.
- | CITY OF RALEIGH | | | |
|--|-----------|---------|-----------|
| DEPARTMENT OF PUBLIC UTILITIES | | | |
| TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON | | | |
| DWG. NO. | REVISIONS | DATE | REVISIONS |
| W-3 | D.V.C. | 9-3-99 | ARR |
| | | 3-1-87 | RRH |
| | | 3-31-00 | RRH |

**PRELIMINARY
NOT FOR CONSTRUCTION**

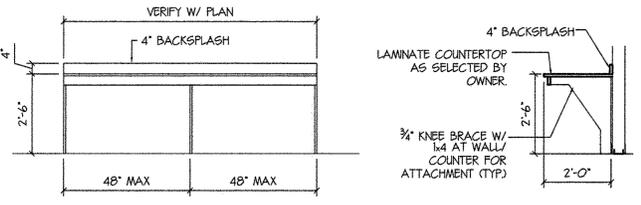
Consultants



A1 TYP. DISPLAY WALL ELEVATION
A-1 SCALE: 3/8" = 1'-0"

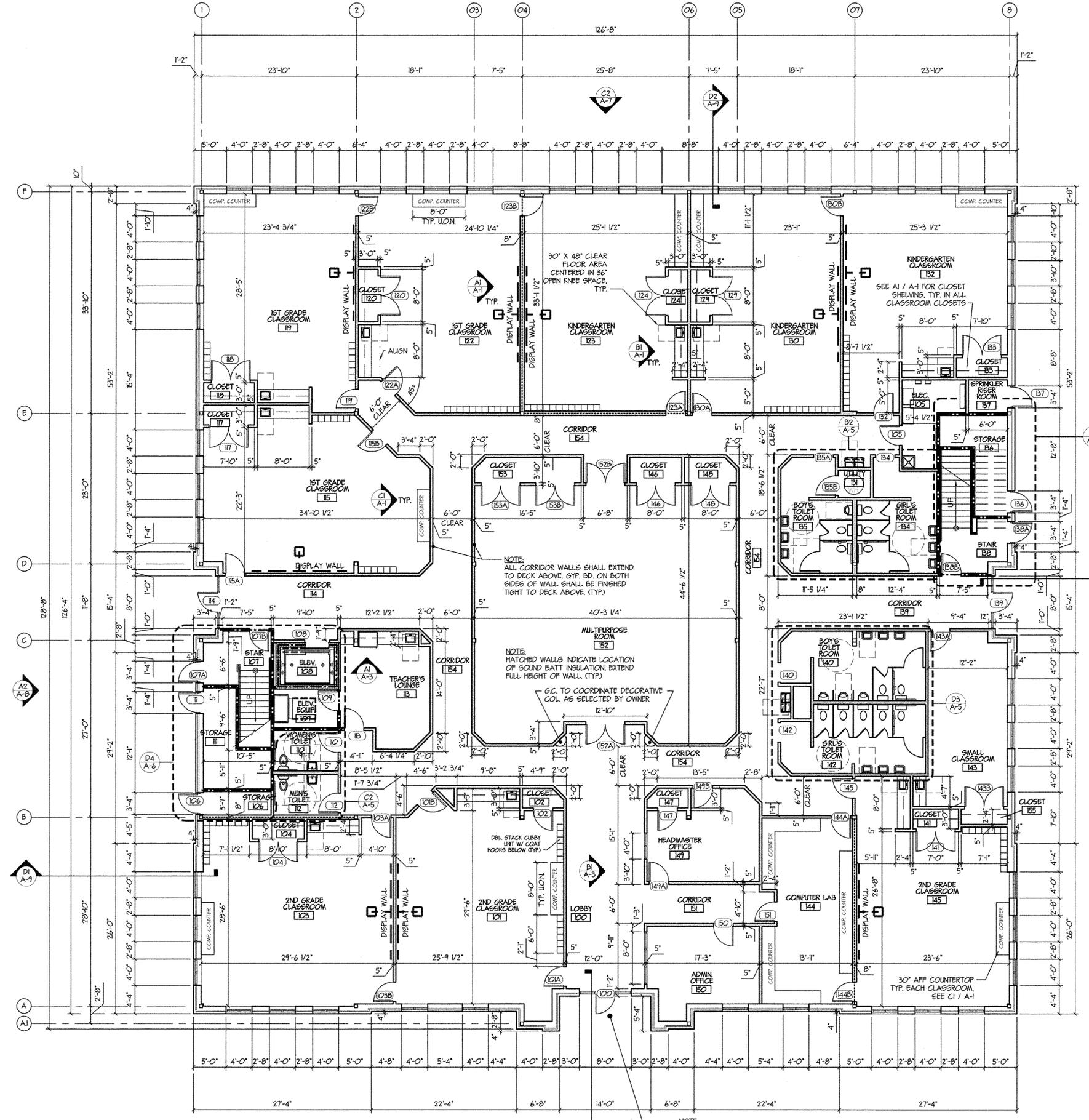


B1 CLASSROOM CASEWORK
A-1 SCALE: 3/8" = 1'-0"



C1 CLASSROOM COMPUTER COUNTER
A-1 SCALE: 3/8" = 1'-0"

- GENERAL NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING & FIELD VERIFYING ALL EXISTING CONDITIONS. CONTRACTOR SHALL REVIEW ALL CONST. DOCUMENTS (ALL DISCIPLINES) PRIOR TO THE START OF CONST. & REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR CLARIFICATION.
 - ALL DIMENSIONS ARE NOMINAL UNLESS OTHERWISE INDICATED.
 - IN ALL CASES MAINTAIN AN 18" CLEAR SURFACE ADJACENT TO LATCH ON PULL SIDE OF DOORS. IF DOOR IS PROVIDED WITH CLOSER, ALSO MAINTAIN A 12" CLEAR SURFACE ADJACENT TO LATCH ON PUSH SIDE OF DOORS.
 - ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF RALEIGH REGULATIONS AND THE NC STATE BUILDING CODES.
 - MOUNT ROOM IDENTIFICATION & DIRECTIONAL SIGNAGE WITH RAISED CHARACTERS & BRAILLE 60" AFF TO THE CENTER OF SIGN ON THE LATCH SIDE OF DOORS.
 - FIELD VERIFY ALL DIMENSIONS.
 - COORDINATE ALL ARCHITECTURAL DRAWINGS W/ WORK OF OTHER DISCIPLINES.
 - PROVIDE ADEQUATE BLOCKING FOR ALL WALL MOUNTED EQUIP.
- WALL LEGEND:**
- INDICATES WALLS TO BE 3 3/8" METAL STUDS @ 16" O.C. W/ 3/8" GYP.BD. EACH SIDE TO DECK ABOVE.
 - INDICATES 1 HR RATED WALLS TO BE 3 3/8" METAL STUDS @ 16" O.C. W/ 3/8" GYP. BD. EACH SIDE, TO DECK ABOVE.
 - INDICATES BRACED BAY - FRAME AROUND BRACING W/ 8" METAL STUDS @ 16" O.C. W/ 3/8" GYP. BD. EA. SIDE TO DECK ABOVE.
 - INDICATES LOCATION OF SOUND BATT INSULATION: EXTEND FULL HEIGHT OF WALL. WALLS TO BE 3 3/8" METAL STUDS @ 16" O.C. W/ 3/8" GYP. BD. EACH SIDE.



D2 FIRST FLOOR PLAN
A-1 SCALE: 1/8" = 1'-0"

| No. | Revision | Date |
|-----|-------------------------------|-----------|
| 0 | For Permitting & Construction | 4/19/2010 |
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0779 A-1.dwg E. Gilstrap
File Name: Drawn By

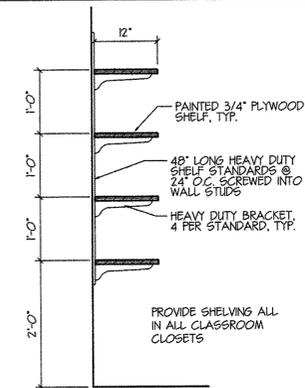
Client/ Project
CADE, Inc./
**THALES
ACADEMY**
Fox Rd. Location
Raleigh, North Carolina

Sheet Title
**FIRST FLOOR PLAN
& GENERAL NOTES**

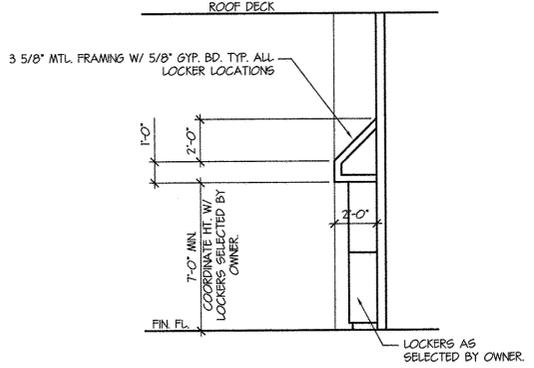
Project No. 10005 Scale AS NOTED
Revision 0 Drawing No. A-1

**PRELIMINARY
NOT FOR CONSTRUCTION**

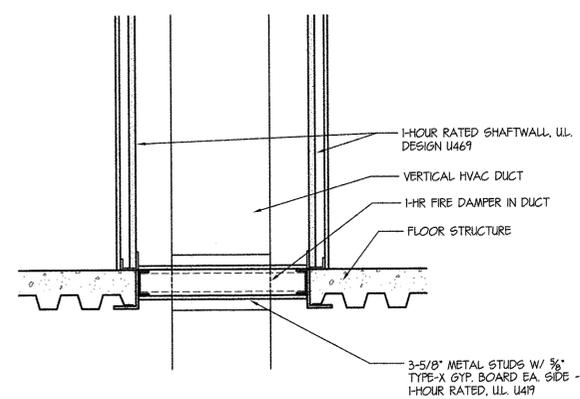
Consultants



A1 CLOSET SHELF DETAIL
A-2 SCALE: 3/4" = 1'-0"

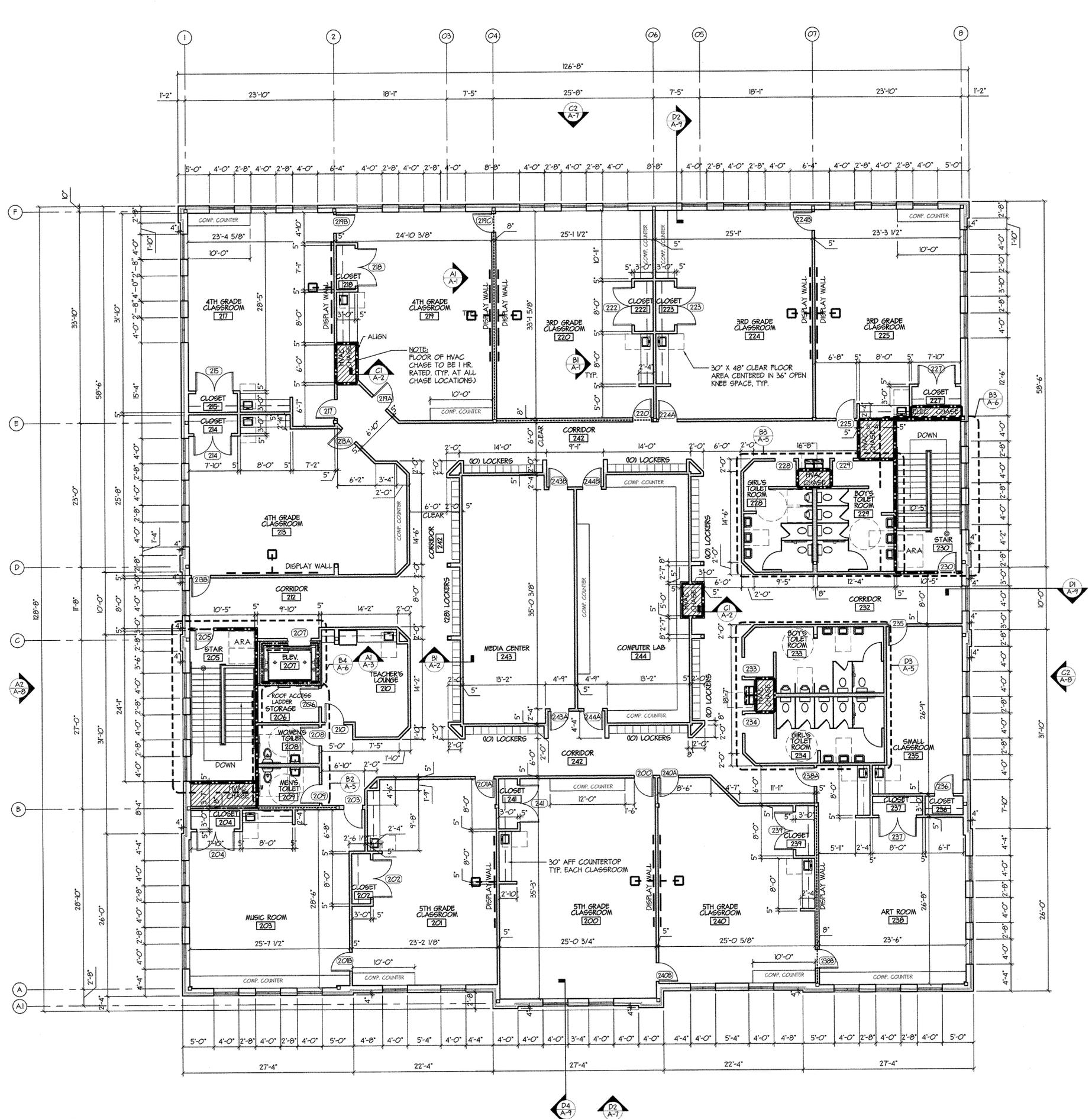


B1 WALL SECTION @ LOCKERS
A-2 SCALE: 1/4" = 1'-0"



C1 HVAC CHASE DETAIL
A-2 SCALE: 1" = 1'-0"

- GENERAL NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING & FIELD VERIFYING ALL EXISTING CONDITIONS. CONTRACTOR SHALL REVIEW ALL CONST. DOCUMENTS (ALL DISCIPLINES) PRIOR TO THE START OF CONST. & REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR CLARIFICATION.
 - ALL DIMENSIONS ARE NOMINAL UNLESS OTHERWISE INDICATED.
 - IN ALL CASES MAINTAIN AN 18" CLEAR SURFACE ADJACENT TO LATCH ON PULL SIDE OF DOORS. IF DOOR IS PROVIDED WITH CLOSER, ALSO MAINTAIN A 12" CLEAR SURFACE ADJACENT TO LATCH ON PUSH SIDE OF DOORS.
 - ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF RALEIGH REGULATIONS AND THE NC STATE BUILDING CODES.
 - MOUNT ROOM IDENTIFICATION & DIRECTIONAL SIGNAGE WITH RAISED CHARACTERS & BRAILLE 60" AFF TO THE CENTER OF SIGN ON THE LATCH SIDE OF DOORS.
 - FIELD VERIFY ALL DIMENSIONS.
 - COORDINATE ALL ARCHITECTURAL DRAWINGS W/ WORK OF OTHER DISCIPLINES.
 - PROVIDE ADEQUATE BLOCKING FOR ALL WALL MOUNTED EQUIP.
- WALL LEGEND:**
- INDICATES WALLS TO BE 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" GYP. BD. EACH SIDE TO DECK ABOVE.
 - INDICATES 1 HR RATED WALLS TO BE 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" GYP. BD. EACH SIDE, TO DECK ABOVE.
 - INDICATES BRACED BAY - FRAME AROUND BRACING W/ 8" METAL STUDS @ 16" O.C. W/ 5/8" GYP. BD. EA. SIDE TO DECK ABOVE.
 - INDICATES LOCATION OF SOUND BATT INSULATION: EXTEND FULL HEIGHT OF WALL. WALLS TO BE 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" GYP. BD. EACH SIDE.



D2 SECOND FLOOR PLAN
A-2 SCALE: 1/8" = 1'-0"

| No. | Revision | Date |
|-----|-------------------------------|-----------|
| 0 | For Permitting & Construction | 4/19/2010 |
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| 10 | | |

7/5: Revise Set 3-30-2010
No. Issued Date

0779 A-2.dwg L. Kent
File Name: E. Gillespie
Drawn By

Client/Project
CADE, Inc./
**THALES
ACADEMY**
Fox Rd. Location
Raleigh, North Carolina

Sheet Title
**SECOND FLOOR
PLAN & GENERAL
NOTES**

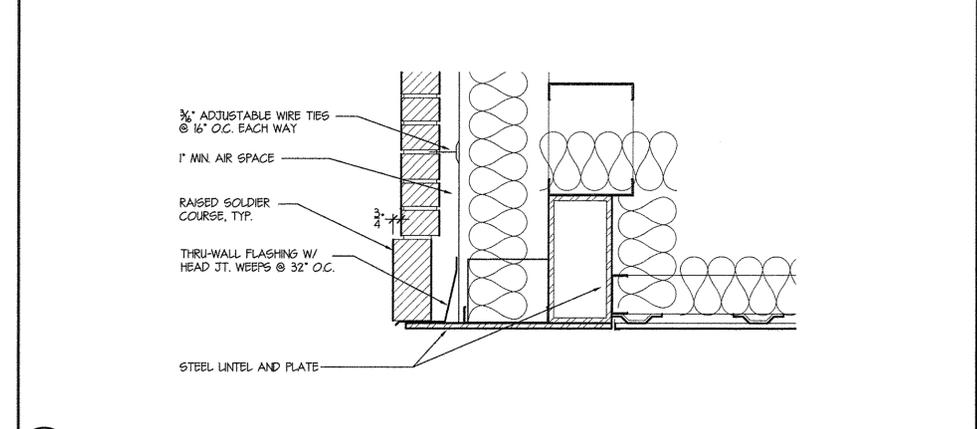
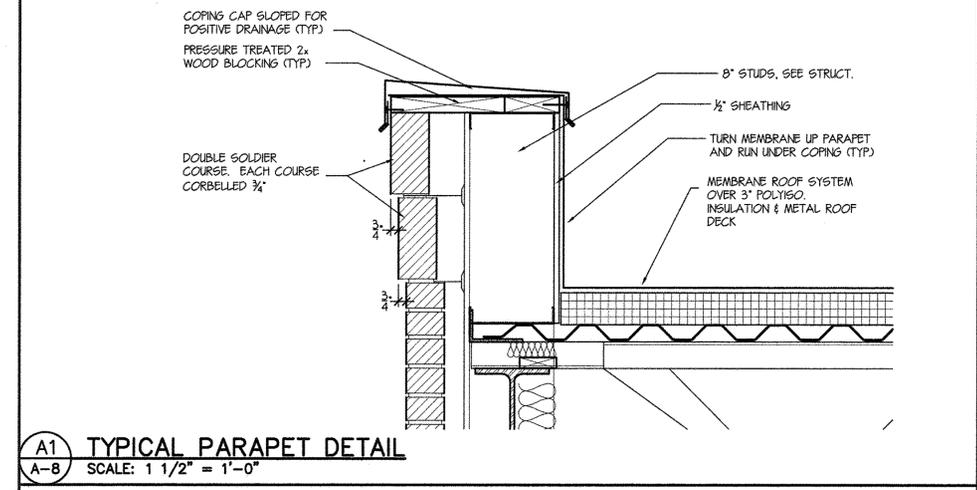
Project No. 10005
Revision 0
Scale AS NOTED
Drawing No. A-2

PRELIMINARY
NOT FOR CONSTRUCTION

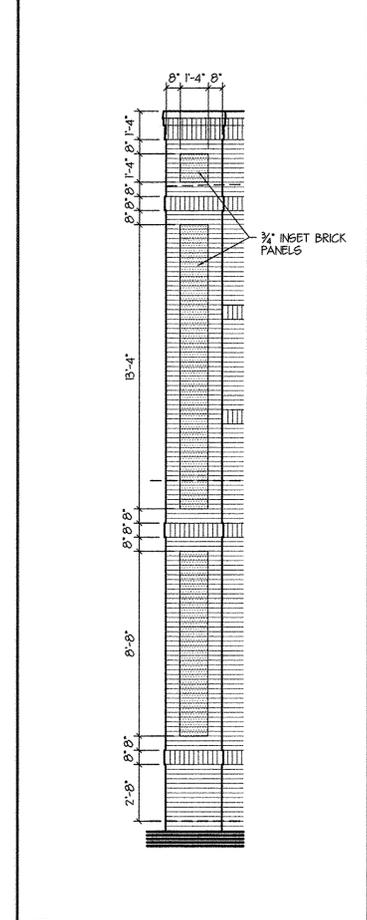
Consultants

| No. | Revision | Date |
|-----|-------------------------------|-----------|
| 1 | For Permitting & Construction | 4/19/2010 |
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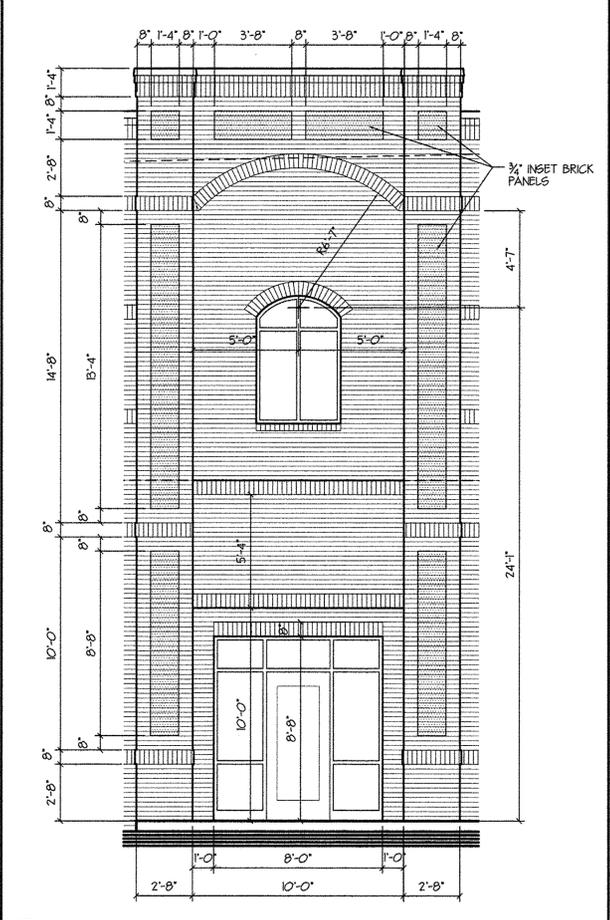
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File Name: Drawn By
Client/ Project
CHASE, Inc./
THALES
ACADEMY
Fox Rd. Location
Raleigh, North Carolina
Sheet Title
EXTERIOR
ELEVATIONS &
DETAILS
Project No. 10005 AS NOTED
Revision Drawing No.
0 A-8



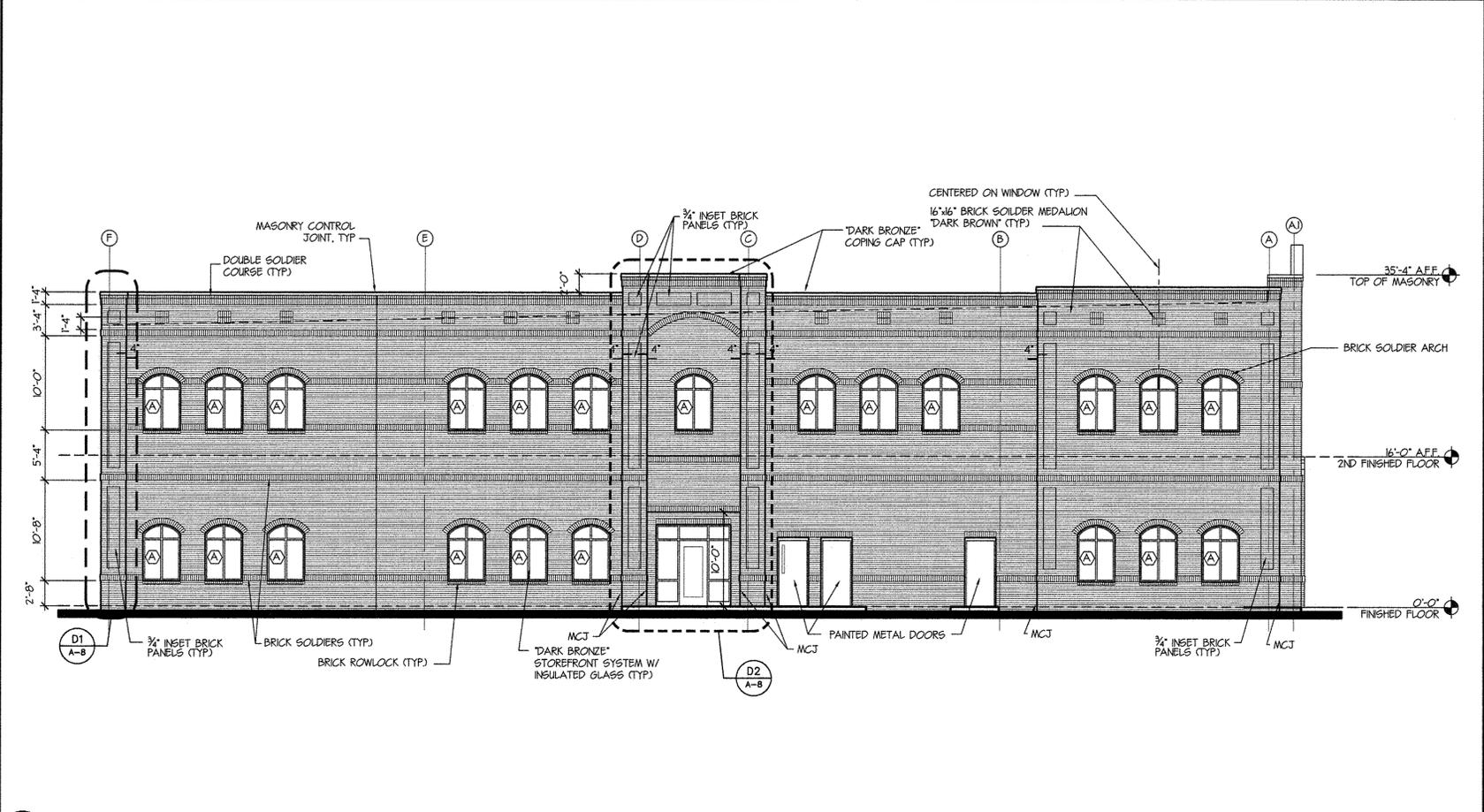
B1 ENTRY LINTEL DETAIL
A-B SCALE: 1 1/2" = 1'-0"



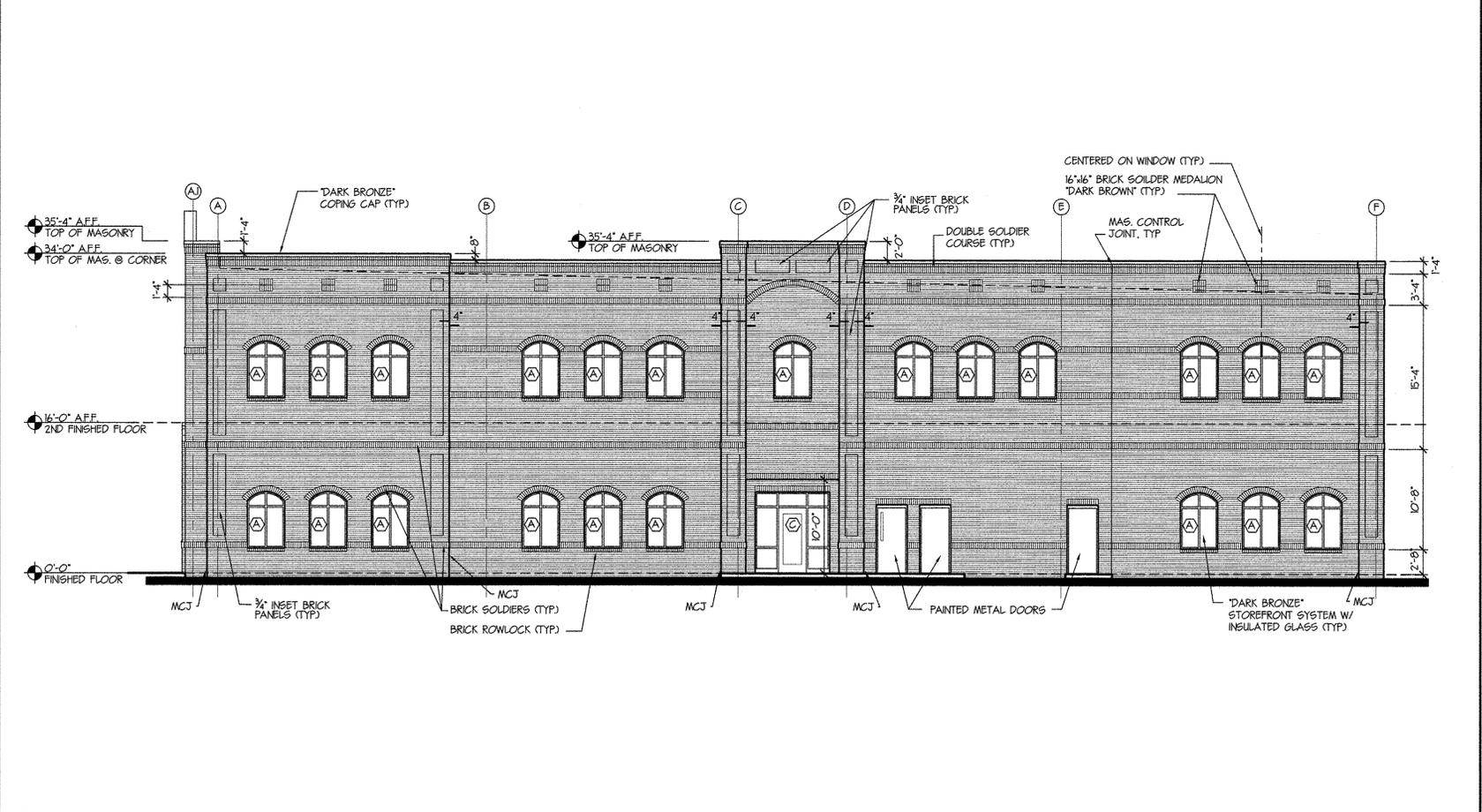
D1 ELEVATION DETAIL
A-B SCALE: 1/4" = 1'-0"



D2 SIDE ELEVATION DETAIL
A-B SCALE: 1/4" = 1'-0"



B3 LEFT EXTERIOR ELEVATION
A-B SCALE: 1/8" = 1'-0"



D3 RIGHT EXTERIOR ELEVATION
A-B SCALE: 1/8" = 1'-0"



SP-24-2010

SITE PLAN

FOR PRELIMINARY SITE PLAN APPROVAL BY STAFF, PLANNING COMMISSION OR CITY COUNCIL (This page may also be used as site data sheet for permit review)

| |
|---|
| Check if infill site plan <input type="checkbox"/> |
|---|

City of Raleigh, NC
Development Plans Review Center

P. O. Box 590, Raleigh, N. C. 27602
One Exchange Plaza 3rd Floor
Telephone: (919) 516-2626 FAX: (919) 516-2684

Visit us at our web site:
www.raleighnc.gov/planning/dprc

Section A. SITE DATA SHEET

ALL PLANS REQUIRE THE FOLLOWING INFORMATION ON THE FRONT COVER OF THE DRAWING SETS:

DEVELOPMENT NAME: Thales Academy – Fox Road
PROPERTY ADDRESS: 6601 Fox Road, Raleigh, NC
WAKE CO. PROPERTY IDENTIFICATION # (PIN): 1737-01-2718

ZONING DISTRICT(S): R-15 CU / S10D7 TOTAL SITE ACRES: 10.2 INSIDE CITY LIMITS: No

If in a conditional use zoning district, place the complete list of zoning conditions on the front cover of the drawing set.

Per section 10-2132, summarize the reason(s) this plan requires Planning Commission (PC) or City Council (CC) Preliminary Approval. City ordinance requires private schools located in a R-15 zoning district to have a special use permit and is considered an allowable use. T

PROPOSED BUILDING USE: Private School EXISTING BUILDING(s) (sq. ft. gross): 0

PROPOSED BUILDING(s) (sq. ft. gross): 31,250 Sq Ft

TOTAL EXISTING AND PROPOSED BUILDING(s) EXPANSION (sq. ft. gross): 0

PROPOSED BUILDING HEIGHT OR HEIGHT OF EACH BUILDING 2-Story

OFF STREET PARKING: REQ'D: 62 PROVIDED: 77

HOTELS: # ROOMS: _____ NUMBER OF DWELLING UNITS IF DEFINED AS EXTENDED STAY _____

APT. / CONDO: # 1BR Units: _____ 2BR: _____ 3BR: _____ 4BR: _____

SHOPPING CENTER: # BUILDINGS _____ # LOTS _____

CLIENT (Owner or Developer):

Name(s) Thales Academy, Inc.
Address: 4641 Paragon Park Rd., Raleigh, NC 27616 ZIP _____
Telephone: (919) 882-2410 ext 302 FAX: _____
E-Mail Address: Bob.Luddy@Captiveaire.com

CONSULTANT / PROJECT MANAGER (Person to act as staff contact for correspondence)

Name(s) Keith P. Gettle, P.E. – Civil Consultants, Inc.
Address: 3206 Heritage Trade Drive, Wake Forest, NC 27587 ZIP _____
Telephone: (919) 453-2387 FAX: (919) 403-0336
E-Mail Address: Keith.Gettle@Civil-Consultants.com

Provide the following if applicable:

Board of Adjustment, rezoning, subdivision, or prior preliminary site plan or subdivision action:
YES _____ NO X _____ If yes, list file number (SP-xx-00, Z-xx-00, A-xx-00, etc.) _____ and affix a list of conditions to the site plan itself.

OWNER'S SIGNATURE*: *In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed site plan as approved by the City. I hereby designate _____*

Trans # 275060
Site Plan Application

to serve as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf and to represent me in any public meeting regarding this application.

Date: MAY 5, 2010

Signed: ROBERT L. LUDDY

Printed Owner's name Robert L. Luddy

* SITE PLAN APPLICATIONS IN OFFICIALLY DESIGNATED CITY REDEVELOPMENT AREAS DO NOT REQUIRE OWNERS' SIGNATURES.

Section B. SUBMITTAL PROCESS AND CHECKLIST

- **PLANS MAY BE SUBMITTED IN THE DEVELOPMENT PLANS REVIEW CENTER, 3rd FLOOR, ONE EXCHANGE PLAZA, IN DOWNTOWN RALEIGH MON-FRI BY 3:00PM.**
- **APPROXIMATELY 10-15 BUSINESS DAYS A PLANNER WILL FORWARD COMMENTS TO YOU BY FAX OR E-MAIL.**
- **AFTER THE 1ST REVIEW COMMENTS ARE COMPLETE, THE COORDINATING PLANNER WILL SCHEDULE FOR REVIEW BY THE APPEARANCE COMMISSION'S DEVELOPMENT REVIEW COMMITTEE WHERE YOU WILL BE RESPONSIBLE FOR ATTENDING AND PRESENTING YOUR PROJECT.**
- **ONCE THE PLANNER IS CONFIDENT THAT YOUR PLANS ARE READY FOR PC OR CC YOU WILL BE ASSIGNED A HEARING DATE. YOU WILL BE RESPONSIBLE FOR NOTIFYING ADJACENT PROPERTY OWNERS AT LEAST TWO WEEKS PRIOR TO YOUR HEARING DATE.**
- **ONCE ALL ISSUES ARE ADDRESSED FROM PC OR CC, WE WILL ISSUE AN APPROVAL LETTER THAT WILL EXPLAIN ANY CONDITIONS OF APPROVAL.**
- **UPON SATISFACTION OF THESE CONDITIONS, FINAL BUILDING AND CONSTRUCTION DRAWINGS MAY BE SUBMITTED FOR PERMIT.**

PLEASE INCLUDE ALL OF THE FOLLOWING (CHECK OFF). Please check the list below carefully before you submit:

- FILING FEE FOR PRELIMINARY PLANS.**
- Checks may be made out to the City of Raleigh.
- Payments may be made by cash, check, Visa or Master Card.

Fees effective February 16, 2010

| | |
|------------------------------------|------------|
| Properties less than 2 acres - | \$307.00 |
| Properties between 2 and 4 acres - | \$821.00 |
| Properties greater than 4 acres - | \$1,592.00 |

Submittal fee covers 2 review cycles and file closeout.

Additional fee equal to the cost of your original submittal fee is required for every single subsequent review after two reviews.

- THIS APPLICATION FORM** completed (Section A) and signed by the **property owner** (agent cannot sign for owner).
- USING "IMAPS", PLEASE SUBMIT A HIGHLIGHTED COPY OF YOUR PARCEL WITH YOUR PIN (PARCEL IDENTIFICATION NUMBER) AND A MOST RECENT AERIAL PHOTO OF THE PARCEL.**
- FOR ALL PRELIMINARY PLANS: TEN SETS OF PROPOSED PLANS.** Maximum sheet size shall be 30" x 42". Plans must be to engineering scale (1" = 20', 1" = 100', etc.). Preliminary plans do not need an engineer's, surveyor's or landscape architect's seal. See Section C of this application for data to be included on preliminary plans.
- COPIES OF PREVIOUS BOARD OF ADJUSTMENT ACTION, SPECIAL USE PERMIT OR CERTIFICATE OF APPROPRIATENESS (if applicable).**



NEW! A DIGITAL COPY OF ONLY THE SITE PLAN AND ELEVATIONS.

The purpose of this image is to illustrate the basic character of the preliminary plan. It should contain only such basic information as: building outline, landscaping, parking and drives, stormwater facilities, lot boundary. The digital image should be provided in the form of pdf on a CD. If the plan was not digitally created, provide an 8 1/2" x 11" reduction of the plan.

Label the CD with the plan name, case file number, and indicate how many times the plan has been resubmitted for review.

NOTE!!! A FINAL DIGITAL OR REDUCED COPY OF THE PLAN IS TO BE SUBMITTED TO THE COORDINATING PLANNER ONCE ALL STAFF REVIEW COMMENTS HAVE BEEN APPROVED. It should contain only such basic information as: building outline, landscaping, parking and drives, stormwater facilities, lot boundary. The digital image should be saved in any of the following formats, listed in order of preference: .jpg, .gif, .pdf on a CD. If the plan was not digitally created, provide an 8 1/2" x 11" reduction of the plan.

Section C. DATA TO BE SHOWN ON PLANS

PLEASE INCLUDE ALL OF THE FOLLOWING (CHECK OFF). Please check the list below carefully before you submit



(a) Sheet size.

The preliminary site plan shall be drawn on one of three (3) standard sheet sizes. These are:

- eighteen (18) by twenty-four (24) inches;
- twenty-four (24) by thirty-six (36) inches;
- thirty (30) by forty-two (42) inches;



(b) Key Information.

- (1) A vicinity sketch or key map at a scale of not more than one thousand (1000) feet to the inch, showing the position of the subdivision with its relation to surrounding streets and properties, and oriented in the same direction as the remainder of the preliminary subdivision plan;
- (2) True north arrow, with north being at the top of the map;
- (3) Scale of the map using engineer's scale (1"=10', 1"=50', etc.) and date of preparation, including all revision dates;



(c) Summary Information

- (1) Project address, PIN number, subdivision name, phase and recorded lot number.
- (2) Zoning districts, overlay district designation, and copy of conditional use ordinance, if applicable.
- (3) Total amount of acreage within the project boundaries.
- (4) Dwelling and/or rooming unit calculations, and calculations for project density and density transfers.
- (5) Building uses and size, both existing and proposed, with calculations for building lot coverage, floor area ratio, and the number of stories in square feet per floor.
- (6) Off street parking calculations, and basis for determination.
- (7) Cumulative expansion calculations, both for gross building square footage and /or vehicular surface area, since 1/1/87.
- (8) Existing easements, including width dimensions and book and page numbers.
- (9) The name of the development, name of the owner and agent, name, address and telephone number and fax number of the designer who prepared the plan;
- (10) All information included in Section A. of this application. (Owner's signature not required on plans);



(d) Building, Structure and Outdoor Use Information

- (1) Building elevations that show maximum height from natural and finished grade, buildings to be removed, and the specific requirements of the Unity of Development statement for an applicable project.
- (2) Site plan with all outdoor uses proposed, including but not limited to accessory uses or structures, storage, water and wastewater facilities, cemeteries.
- (3) Location of refuse, service, loading, utility service areas, and display areas.
- (4) Show all private utilities that serve a project shall be underground and originate from pad mounted or subterranean distribution points located off the public right of way per City of Raleigh Ordinance 10-3059.

(e) **Parking, Vehicular and Pedestrian Access**

- (1) Existing street names, together with state road names, if applicable;
- (2) General horizontal alignment of existing and proposed streets and thoroughfares, showing centerline min. radii, pavement width, surface materials, curb and gutter, ditches and shoulder widths;
- (3) Existing and proposed sidewalks, on both public streets and within site;
- (4) Cross-sections of typical proposed street widening;
- (5) Dimensions of medians, median openings, curb radii;
- (6) Vertical alignment of streets only when deemed necessary by the Transportation Director to properly determine the safety of proposed streets or driveways;
- (7) Driveway and access point locations, existing and proposed, with type, curb radii, dimensions, joint use and directional flow. For proposed driveways and access points, show the location of all: property lines, existing utility service areas, drainage devices, traffic signal control boxes, sewer clean-outs, fire hydrants, meter vaults, utility poles, street lights, catch basins or similar objects within seventeen (17) feet of the proposed centerline of the driveway for residential driveways and within twenty-three (23) feet of the proposed centerline of all other driveways;
- (8) Opposing driveways across public rights-of-way;
- (9) Existing and proposed right-of-way and slope easement dimensions;
- (10) Sight triangles as set forth in §10-2086, including any structures within them, such as existing signs;
- (11) Any rights-of-way proposed to be closed;
- (12) Proposed private streets, dimensions and curb treatments;
- (13) Existing and proposed parking areas, bay dimensions, aisle dimensions and summary of required and provided parking.
- (14) Cross section and diagram of each floor of a parking structure.
- (15) Location of any off site parking.
- (16) Vehicular stacking space areas.

(f) **Open Space and Landscaping**

- (1) Calculations for open space requirements shown in tabular form, and open space shown in plan view.
- (2) Open Space Type Indication of whether open space is to be calculated based on tree preservation or new tree plantings in accordance with Sec. 10-2103(d). An existing tree survey is required if the open space acreage is based on tree preservation.
- (3) Location of any Lakes or Ponds to be used for landscape reduction in accordance with Sec. 10-2103(d)(1)c.
- (4) Landscape plans showing requirements of City Code Chapter 10, Section 10-2082 and 10-2103(d).
- (5) Description of vegetation to be retained and removed in areas of both voluntary and mandatory preservation.
- (6) Identify all protected areas, including but not limited to Conservation Management Districts, natural resource buffer yards, Resource Management Districts and street buffer yards located along Type B Residential Thoroughfares designated in the Comprehensive Plan.
- (7) Natural resource buffer yards and impervious surface coverage in Reservoir Watershed Protection and Metro-Park Overlay Districts. Identify all drainage structures or velocity control devices in all protected and buffer areas.
- (8) Any alternate design request must include, at a minimum, lighting, signage, landscape fenestration and fencing details.
- (9) Location of trees which are designated an historic property, or champion trees designated either on the "National Big Trees List" or the "Champion Big Trees of North Carolina" list as compiled by the North Carolina Division of Forest Resources;

(g) **Stormwater and Floodprone Area Information.**

- (1) Existing and proposed contours of intervals at five (5) feet or less, referred to sea level datum;
- (2) Drainage swales, ditches channels, watercourses, and direction of flow;
- (3) Impoundment or retention / detention structures for stormwater, if required;
- (4) Preliminary two and ten year stormwater runoff quantities entering and leaving the site at each discharge point
- (5) Location of discharge points, velocity dissipation measures;
- (6) Location of existing and proposed storm sewer and inlet structures and culverts;
- (7) Floodway and floodway fringe areas, flood hazard soil boundaries, flood storage area easements, and regulatory flood protection elevations; indicating source of information;
- (8) Summary of Water Quality/Quantity calculations on sheet with a separate more detailed calculation packet included.

(h) **Public Utility Information.**

- (1) Existing and proposed sanitary sewers, manholes, clean-outs, water lines, stubs, fire hydrants, fire lines, valves, backflow prevention devices showing make and model, meters, with pipe sizes and locations indicated as applicable;
- (2) Profiles of sanitary sewer lines only if required by the Public Utilities Director to properly determine the feasibility of a proposed system;
- (3) Well and septic tank locations, community septic system facilities where applicable;

(4) Force mains, pump stations if applicable;

(i) **Special Information.**

- (1) In all Special Highway Overlay Districts, protective yard areas along major access corridors and principal arterials, and distance from interchange if along a side street;
- (2) In Reservoir Watershed Protection Areas, watercourse buffer areas as required in §10-3059(b), square foot amount of existing and proposed impervious surface area per lot, estimated amount of impervious surface area of proposed public and private streets and public improvements, the location of and areas served by facilities used to retain the first one-half (1/2) inch of storm water as required in §10-3052(a), the allocation of impervious surface limitations to lots;
- (3) In Metro Park Protection Overlay Districts, watercourse buffer areas, impervious surface calculations, tree inventory if impervious surface area exceeds 30%, park buffer yards;
- (4) Any other information that may be requested by the reviewing authority.

(k) **Tree Conservation Plan, if applicable, (Refer to TC-07-04 Tree Conservation Ordinance) (NEW).**
TREE CONSERVATION PLAN - REPORT SUBMITTED WITH SUBDIVISION SUBMITTAL

- (1) (Sheet 1) Requires a separate Tree Conservation Map with all proposed tree conservation areas(TCA's), see Section 10-2082.14);
- (2) Label Primary and Secondary Tree Conservation Areas utilizing the "Standardized Designation For Tree Conservation Areas" list.
- (3) (Sheet 2) Show existing and proposed grades, combining an accurate location of tree protection fence, also show acreage calculations of tree conservation areas as listed in Tree Conservation Data Sheet.
- (4) Completed Tree Conservation Data Sheet;
- (5) (Sheet(s) 3+) For the Secondary Tree Conservation Areas include the following;
 - a. Photo panoramic panel of proposed secondary TCA's. Each photo to represent 50 linear feet of tree conservation area. Include **(2 copies)**.
 - b. Certified tree cover report with description of each 50' of TCA. **(2 copies)**.
 - c. Most recent aerial photo.

(l) **Below, provide a description of how your plan conforms to the guidelines of the Comprehensive Plan, including information such as Planning District, Small Area Plan, Corridor Plan, oversized focus area, PBOD, focus area and recommended use(s) for the property. (NEW)**

THE 2030 COMPREHENSIVE PLAN INDICATES THE PROPERTY TO BE ZONED MEDIUM DENSITY RESIDENTIAL. THE PROPOSED USE IS ALLOWED UNDER CURRENT AND FUTURE ZONING GUIDELINES. THE EXTENSION OF TOWN DRIVE PROVIDES A COLLECTOR ROAD BETWEEN FOX ROAD AND TRIANGLE TOWN BLVD AS NOTED IN THE TRANSPORTATION PORTION OF THE PLAN.