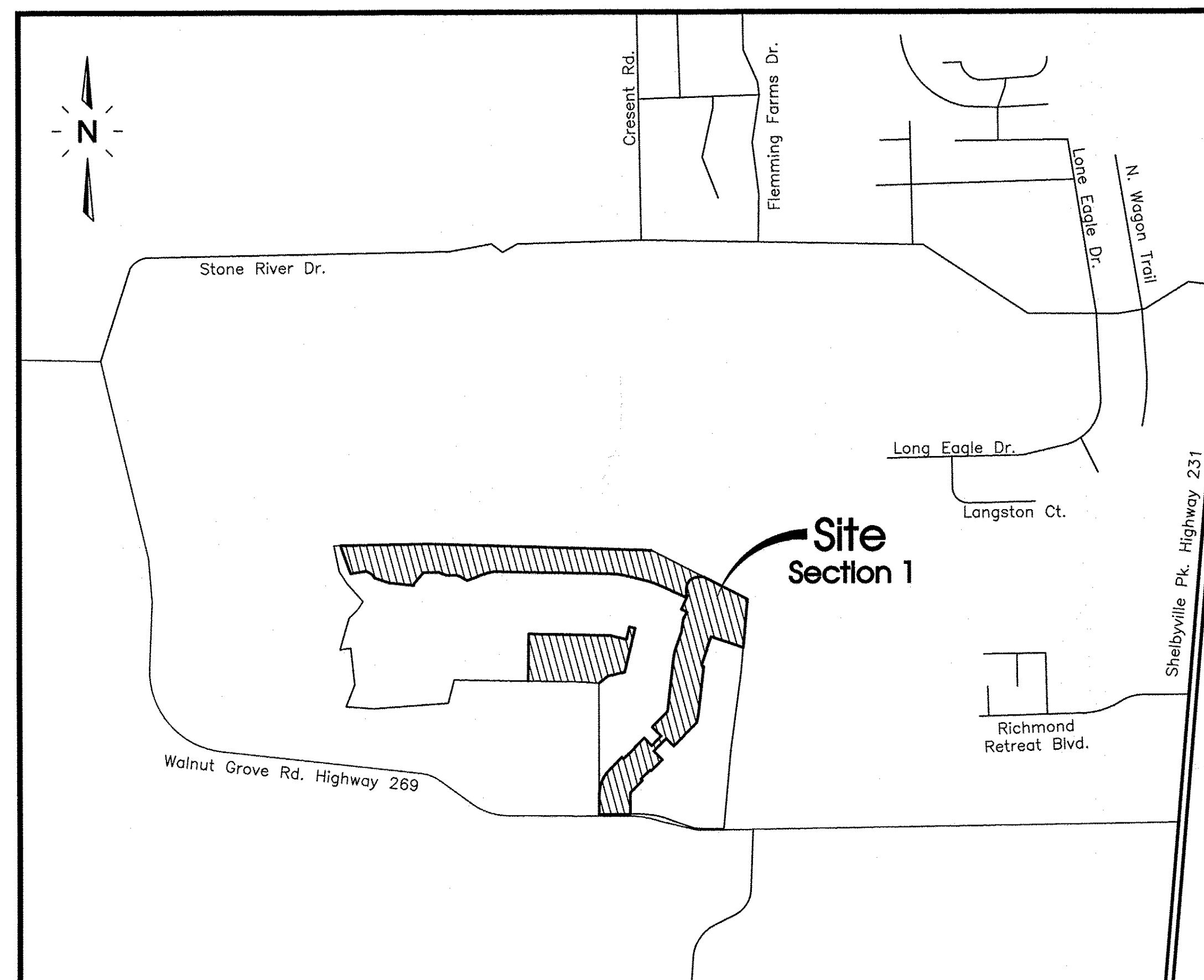


# Clearview Acres Section 1

## Rutherford County, Tennessee S.O.P. No. 16018 Preliminary Plan and Construction Drawings

### Drawing Index

Sheet No.	Title
1	Cover Sheet
2	General Notes
3	Mater Plan
4	Existing Conditions and Initial EPSC Plan
5	Intermediate EPSC Plan
6-7	Preliminary Plan
8-10	Grading and Final EPSC Plan
11-12	Road Profiles
13-14	Details



Site Location Map

Not To Scale

Drainage Basin: West Fork Stones  
River Upper

### Owner/Developer:

Clearview Acres LP  
2127 Tabasco Way  
Murfreesboro, TN 37128-8255  
(615) 531-1173  
Contact: Bud George

### Floodplain Note:

A Portion Of This Site Lies Within The 100 Year Flood Plain Per F.E.M.A.  
Community Panel No. 47149C0377H and 47149C0381H38 and 47149C0383H,  
Dated Jan. 5 2007.

### Total Site Land Data:

Zoning: PUD  
Total 272 Lots on 142.46± Acres  
Total 267 Buildable Lots  
Section 1: 56 Lots on 18.67± Acres  
Section 1: 55 Buildable Lots

### STEP Land Data:

STEP Area = 37.52 Acres

### Yard Requirements:

Front: 35'  
Side: 7.5' (15' Separation Between Buildings)  
Rear: 20'

### Deed Reference:

The property shown hereon is Tax Maps:  
Map 159, Parcel 6.00  
8th Civil District in Rutherford County, as recorded in Record Bk. 606, Pg 664.

### STEP Design:

Design Flow = 270 Lots x 300 gpd = 81,000 gpd  
Design Loading Soil Rate = 0.15 gal/sf  
Required Land Application Area = 12.40 Acres  
Proposed Land Application Area = 12.40 Acres  
Required 50% Reserve Application Area = 6.20 Acres  
Provided 56% Reserve Application Area = 9.29 Acres

### Note:

All lots are critical lots and will require a plot  
plan to be submitted and approved by CUD  
prior to building permits being released.

Sheet 1 of 14  
Clearview Acres, Section 1  
Construction Drawings  
S.E.C. Project #14300  
Date: 9-22-16  
Revised: 10-13-16

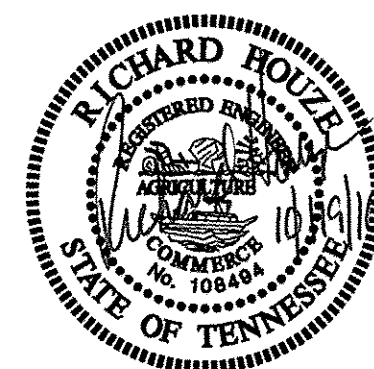
**SEC, Inc.** SITE ENGINEERING CONSULTANTS  
ENGINEERING • SURVEYING • LAND PLANNING

850 MIDDLE TENNESSEE BOULEVARD MURFREESBORO, TENNESSEE 37129

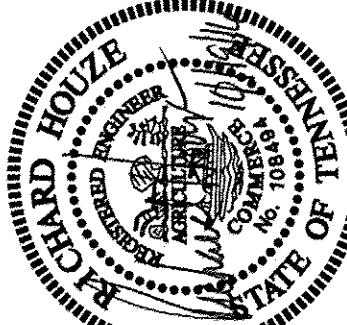
PHONE: (615) 890-7901 E-MAIL: RHOUZE@SEC-CIVIL.COM FAX: (615) 895-2567

NO PORTION OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF S.E.C. INC.

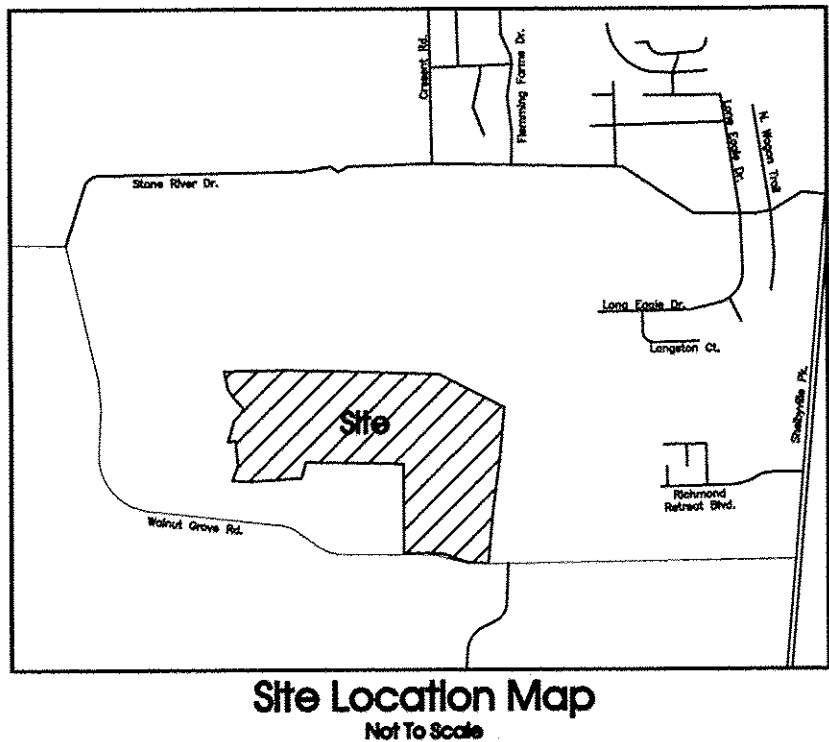
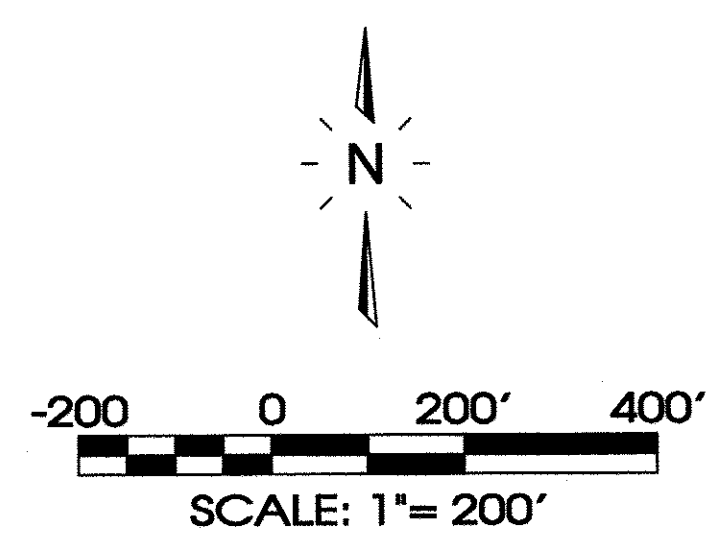
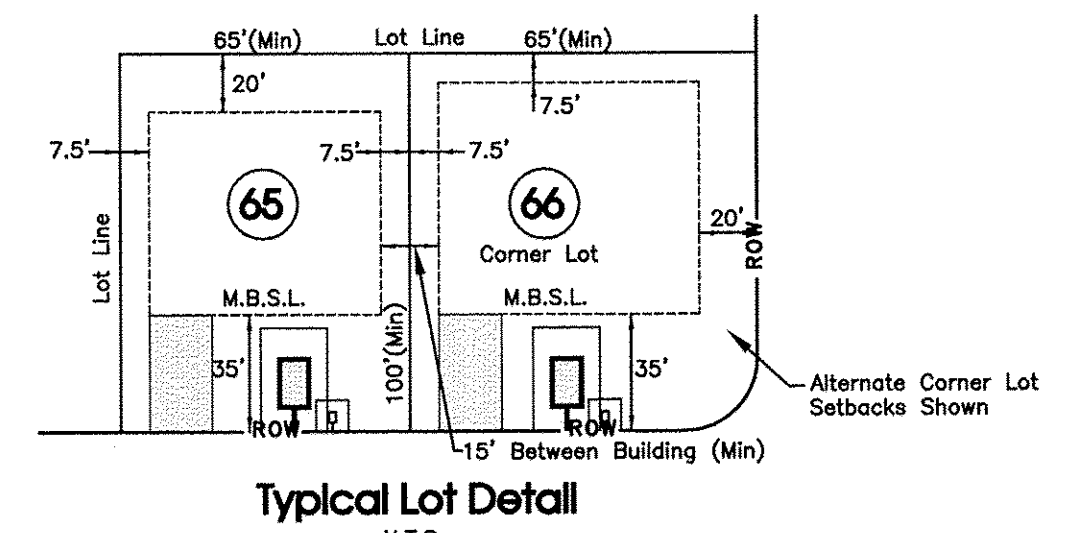
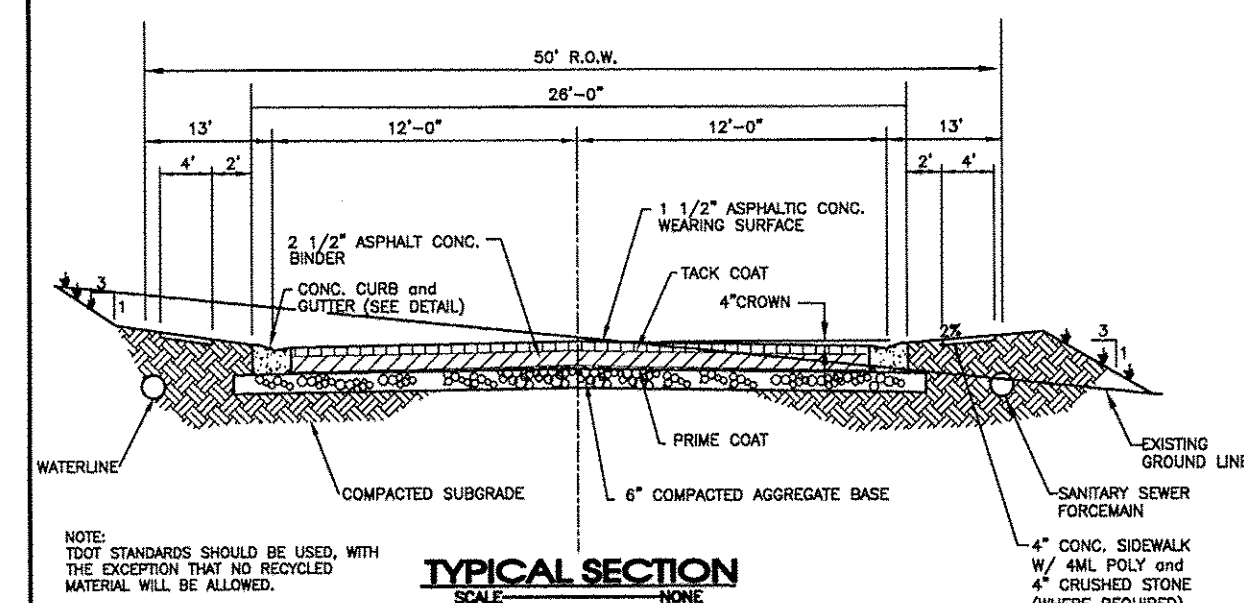
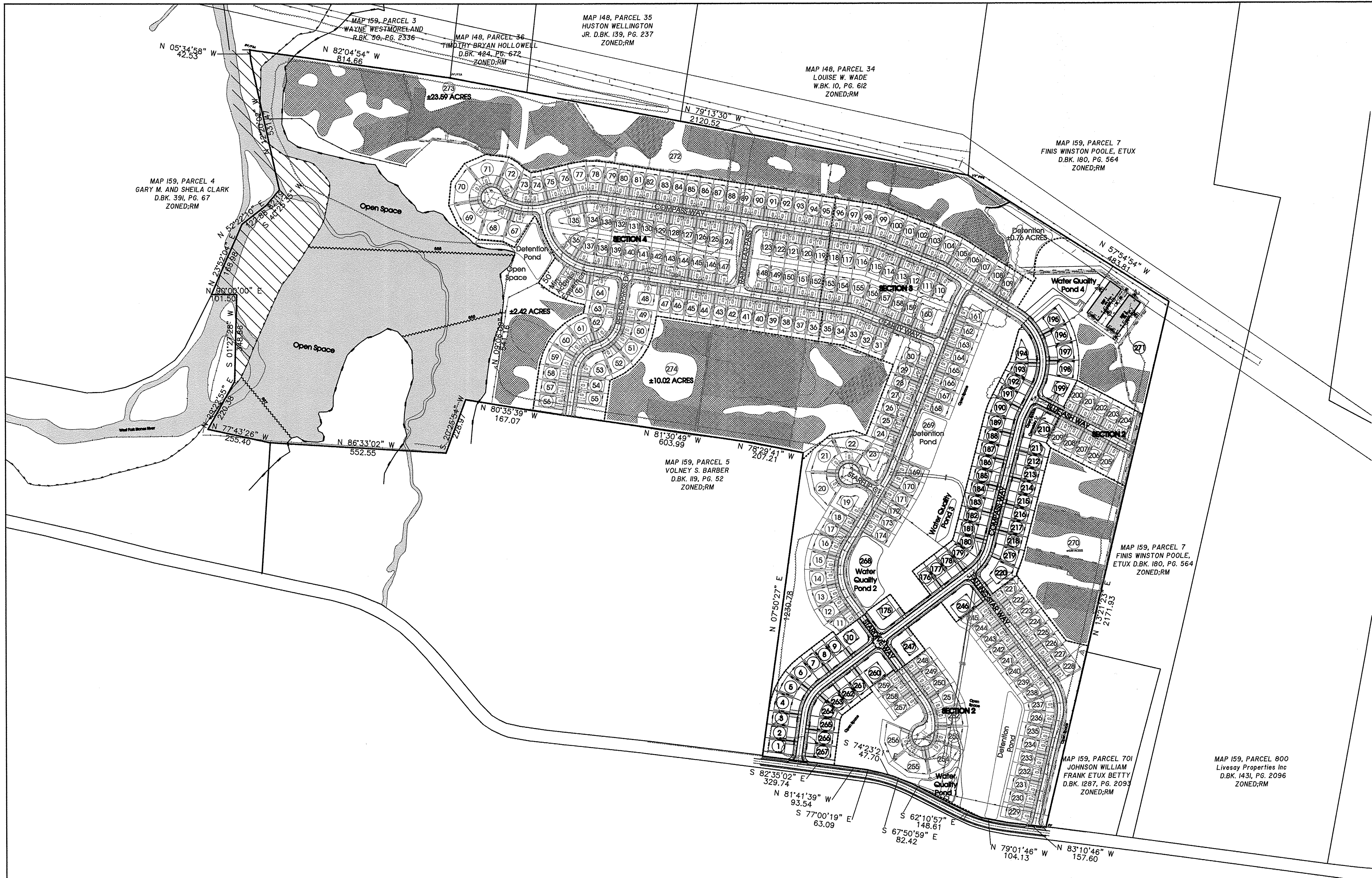
By: Richard Houze Date: 10/19/16  
Richard Houze, P.E. T.N. Reg. #108494





<div><b>Site Clearing and Demolition Notes:</b> 1. Before starting demolition operations, refer to the Existing Conditions and Initial EPSC. 2. Demolition includes the following within the property lines:     1) Transfer benchmark control to new locations outside the disturbed area prior to commencing demolition operations (when applicable)     2) Provide temporary barricades and other forms of protection as required to protect owner's personal property and general public from injury due to demolition work.     3) Demolition and removal of site improvements.     4) Disconnecting, capping or sealing, and abandoning/removing site utilities in place (whichever is applicable) 3. Promptly remove waste materials, unsuitable and excess topsoil and other clearing debris from Owner's property and dispose of off site. 4. Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain. 5. Existing foundations and utilities may be encountered across the site. If encountered, these items will require removal. Resulting excavations should be backfilled with properly compacted select fill. 6. Removal includes digging out stumps and roots. Remove all stumps, roots over 4-inches in diameter and matted roots within the limits of grubbing to depths as follows:     1) Footings: 18 inches     2) Walls: 12 inches     3) Roads: 18 inches     4) Parking Areas: 12 inches     5) Lawn Areas: 18 inches     6) Fills: 12 inches 7. Remove, reinstall, and relocate: items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage reinstall items in locations indicated. 8. Provide protection necessary to prevent damage to existing improvements indicated to remain in place. Protect benchmarks, existing structures, roads, sidewalks, paving and curbs against damage from vehicular or foot traffic.     1) Protect improvements on adjoining properties and on the Owner's property.     2) Restore damaged improvements to their original condition, as acceptable to parties having jurisdiction. 9. Contractor shall schedule demolition activities with the construction project manager. 10. Comply with applicable requirements of federal, state and local laws, regulations and codes of the authorities having jurisdiction for the disposal of trees, shrubs and other cleared material. 11. Conduct site clearing operations to ensure minimum interference with roads, streets, walks and other adjacent occupied or used facilities. Do NOT close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction. 12. Obtain approved borrow soil materials off-site when sufficient satisfactory soil materials are not available on-site. 13. Maintain existing utilities indicated to remain in service and protect them against damage throughout construction operations.     1) Do not interrupt exist utilities serving occupied or operating facilities, except when authorized in writing by engineer and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to owner and to governing authorities.     2) Contractor shall coordinate with appropriate utility owner when disconnecting, removing, or relocating existing utility services. 14. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area.     1) Erect temporary protection, barricades as per local governing authorities.     2) Protect existing site improvements and appurtenances to remain. 15. Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skimming of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to remain in place.     1) Protect tree root systems from damage due to deleterious materials caused by run-off or spillage during mixing, use or discarding of construction materials or drainage from stored materials. Protect root systems from compaction, flooding, erosion or excessive wetting.     2) Engage a qualified tree surgeon to remove branches from trees, if required, to clear for new construction. Where cutting is required, tree surgeon shall cut branches and roots with sharp pruning instruments; do not break or chop. 16. Explosives: use of explosives will not be permitted. 17. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas. 18. Clean adjacent buildings and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to same condition existing before start of demolition. 19. Damages: Promptly repair damages to adjacent facilities caused by demolition operations at the contractors cost. 20. Remove existing above-grade and below-grade improvements necessary to permit construction and other work as indicated. 21. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site. 22. Do NOT Burn or bury materials on site. 23. Contractor to sawcut existing pavement to remain prior to curb, gutter, pavement, etc. removal. 24. In Tennessee it is a requirement per "The Underground Utility Damage Prevention Act" that anyone who engages in excavation must notify all known utility owners, no less than three nor more than ten working days, prior to their intended excavation. A list of these utility owners may be obtained from the county register of deeds. Those utility owners who participate in the Tennessee One Call System can be notified toll free at 1-800-351-1111. 25. Utilities shown are based on visual observations and utility markings. Contractor shall call TN One Call and confirm locations prior to starting work.</div>	<div><b>Site Plan Notes:</b> 1. Contractor shall immediately notify the engineer of any discrepancies found between these plans, the architectural plans, and/or field conditions prior to construction. 2. Apparent errors, discrepancies, or omissions on the drawing shall be brought to the attention of the owner prior to bid submittal. The contractor may not use apparent errors, discrepancies, or omissions present on the drawings presented for bidding for additional charges after bids have been submitted. The architect shall be permitted to make corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the contract documents. 3. The contractor shall stake all improvements using the geometric data provided in the drawings. It is the sole responsibility of the contractor to completely stake and check all improvements to ensure adequate positioning, both horizontal and vertical, prior to the installation of any improvements. No digital file will be provided. 4. The notes and plans shown call attention to certain required features of the construction but do not claim to cover all details of design and construction. The contractor shall furnish and install the work complete and ready for operation. 5. After completion of construction, the contractor shall perform site cleanup to remove all trash, debris, excess materials, equipment, and other deleterious materials associated with construction. The contractor is expressly responsible for ensuring the site is clean and in operable condition at the time of final acceptance. 6. The contractor is responsible for the protection and replacement of all property pins on this site. 7. These drawings are intended for use on this site only and as an integrated set for this specific project. These drawings may not be used in whole or in part on any other project under the professional engineer's seal. The owner shall hold harmless and indemnify the architect and engineer from and against any and all claims of any nature whatsoever arising from such use. 8. All dimensions and radii are given to face of curb unless otherwise noted. 9. Asphalt paving: do not apply prime and tack coats when temperature is below 50° F, or when base is wet. Apply asphalt paving only when temperature is above 40° F and when base is dry. 10. Materials:     10A) Subgrade: Cohesive subgrade shall be compacted to 95% compaction. Cohesion less subgrade shall be compacted to 100% compaction.     10B) Subbase: Unless otherwise noted on these plans, base shall consist of water bonded limestone, crushed rock or DGA.     10C) Asphalt: Bituminous concrete hot plant mix binder course and asphalt topping plant mix shall be applied over base, minimum temperature time of placement shall be 225° F. 11. Cost in place concrete: All concrete work shall conform to all requirements of American Concrete Institute ACI 301 and applicable sections of ASTM C-94 (latest ed.) for ready mixed concrete. 12. All concrete shall be in-transit mixed concrete, 3% to 5% air-entrained and shall attain a minimum compressive strength of 4,000 p.s.i. in twenty-eight (28) days. 13. Slump: Maximum allowable slump will be five (5) inches. 14. Concrete Materials:     14A) Portland cement: Gray portland cement, ASTM C-150 (latest ed.) type 1. All concrete shall contain not less than five bags of cement per cubic yard.     14B) Aggregates: ASTM C-33 (latest ed.)     14C) Sand: Hard, durable, clean, natural sand free from clay, loam, dust or organic matter.     14D) Water: Clean, potable, free from oil, acids, alkali, organic matter and other deleterious substances.     14E) Admixtures: Air type to meet ASTM C-260 (latest ed.) 15. Reinforcing materials shall be uncoated and free from excessive rust, mill scale, oil, grease and other deleterious matter. 16. All above grade exterior concrete surfaces shall be cured with curing compound sprayed on in strict compliance with manufacturer's directions. 17. Weather Requirements:     17A) Hot Weather Placing: No concrete shall be placed when the air temperature is greater than 90° F unless the following special procedures have been included in the contract and reviewed by the engineer: temperature of the concrete when placed shall not be greater than 90° F. Precautions for cooling, retarding and protecting in-place concrete during hot weather shall be in accordance with ACI 305. Provide special procedures required to control concrete temperature and to protect surfaces from drying out, mixing and placing shall be such that the temperature of concrete when placed shall be equal to or below the temperature provided water equivalent of ice is calculated to total amount of mixing water, use of liquid nitrogen to cool concrete is the contractor's option.     17B) Cold Weather Placing: Do not mix or place when atmospheric temperature will fall below 40° F, or when conditions indicate temperature will fall below 40° F within 72 hours. Concrete deposited shall have temperature not less than 60° F. Reinforcement, forms and ground which concrete will contact shall be completely free of frost. Keep concrete and form work at a temperature not less than 50° F for not less than 72 hours after pouring. Comply with requirements of ACI 305 (latest ed.) for cold weather protection. 18. Concrete tests shall be authorized by the owner on an as needed basis. 19. All exterior curb shall have expansion joints at 100'-0" O.C., and construction joints at 10'-0" O.C. (unless otherwise specified on the detail sheets). 20. All concrete shall have a medium transverse finish. 21. Subgrade shall be free of extraneous materials. Proof-roll soil subgrade with heavy, pneumatic tired equipment immediately prior to placing stone base. Any soft or unstable zones detected thereby shall be undercut to firm soil and backfilled with engineered earth fill compacted as specified. The subgrade for all pavements shall be uniformly stable before any stone base is installed. No base materials shall be placed if the subgrade indicates pumping. 22. Surface preparation, spreading and laying, compacting and rolling operations shall conform with asphalt institute recommended specification. 23. Insect area to be paved and insure that all subgrade conditions are sufficiently carried out to insure a good paving job. A finished surface shall not vary more than 1/8" in 10 feet when tested with a straight edge applied parallel with, or at right angle, to centerline of asphalt surface. Humps or depressions which exceed specified tolerances or which retain water shall be immediately corrected by removing the defective work and replacing it with new material at the contractor's expense.</div>	<div><b>General Utility Notes:</b> 1. Contractor shall contact all utility companies immediately after bid is awarded and ensure the utility companies have the essentials required for complete service installation. Contractor shall notify construction manager and engineer of any time frames established by utility companies which will not meet opening date. 2. Existing utility lines shown are approximate locations only. Contractor shall verify the size, location, invert elevation, and condition of existing utilities which are intended to be utilized as a connection point for all proposed utilities (see sheet), prior to any construction. Contractor to ensure existing utilities are in good condition and free flowing (if applicable). If elevations, size, or location differ from what is shown on sheet, contractor shall notify engineer immediately. 3. The contractor will provide all necessary protective measures to safeguard existing utilities from damage during construction of this project. In the event that special equipment is required to work over and around the utilities, the contractor will be required to furnish such equipment. The cost of protecting utilities from damage and furnishing special equipment will be included in the price bid for other items of construction. 4. The contractor shall notify each individual utility owner of his plan of operation in the area of the utilities, prior to commencing work, the contractor shall contact the utility owners and request them to properly locate their respective utility on the ground. This notification shall be given at least three (3) business days prior to commencement of operations around the utility. 5. The contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with the regulatory agency as to location and scheduling of tie-ins/connections to their facilities. 6. All underground utilities (water, sewer, storm sewer, electrical conduit, irrigation sleeves, and any other miscellaneous), shall be in-place prior to the placement of base course material. 7. Utility contractor will be responsible for all tap and tie on fees required, as well as cost of underground service connections. 8. No more than 25 percent of the dollar amount of the contract may be awarded to subcontractors. 9. The contractor shall provide a suitable office near the site for his use and at which copies of the specifications and drawings shall be kept. The contractor shall also designate to the owner a person to be notified in Murfreesboro in case of emergencies other than during working hours and on holidays and weekends. 10. Streets shall be graded to subgrade before water lines and sanitary sewers are installed. 11. All waterline taps are to be made by C.U.D. 12. Contractor shall comply with all requirements of the latest edition of C.U.D.'s specifications. 13. In Tennessee it is a requirement per "The Underground Utility Damage Prevention Act" that anyone who engages in excavation must notify all known utility owners, no less than three nor more than ten working days, prior to their intended excavation. A list of these utility owners may be obtained from the county register of deeds those utility owners who participate in the Tennessee one call system can be notified toll free at (800) 351-1111.</div> <div><b>Waterline Notes:</b> 1. All water mains shall be hydrostatically tested and disinfected before acceptance. 2. All trenches, pipe laying, and backfilling shall be in accordance with federal O.S.H.A. regulations. 3. Contractor shall comply with all requirements of the latest edition of the CUD specifications. 4. Utility contractor shall have approval of all governing agencies having jurisdiction over this system prior to installation. 5. The developer must post bond, \$2,000 or \$250 for each valve box (whichever is greater), whenever the subject project has valve boxes that are located within pavement upon completion of the proposed water system extension. 6. The owner/developer for budget purposes should contact CUD for related fees to project which may be substantial. 7. Water Service materials shall be copper type "K" unless otherwise noted on plans. Diameter shall be as noted on these plans and shall be installed with a minimum cover of 42" or below frost line, whichever is greater. 8. Construction and Materials Provided By The Water Company:     - Tap Main.     - Furnish and install curb stop and box and water meter.     - Coordinate all work with the City of Murfreesboro, Greg Harvey and 615-848-3200.     - Coordinate fire metering with the Consolidated Utility District (CUD), Bryant Bradley ● 615-225-3340. 9. Construction and Materials Provided By The Contractor:     - Furnish and install copper service line from meter to building.     - All trenching and backfilling.     - Coordinate all work with the City of Murfreesboro, Greg Harvey ● 615-848-3200     - Coordinate with Bill Dammill (CUD) ● 615-867-7302 for water meter specifications.     - Coordinate fire metering with the Consolidated Utility District, Bryant Bradley ● 615-225-3340</div> <div><b>Natural Gas Notes:</b> 1. Construction And Materials Provided By The Gas Company:     - Furnish and install copper service line from meter to building.     - Furnish and install mainline extension, including all trenching and backfilling.     - Furnish and install meter.     - Coordinate all work with Atmos Energy, Jerry Burke ● 615-566-3085 or Stephen Morris ● 615-893-5672 2. Construction and Materials Provided By The Contractor:     - Furnish and install service lateral, including all trenching and backfilling.     - Contractor shall include all fees required by the gas company to provide a complete working service.</div> <div><b>S.T.E.P. System General Notes:</b> 1. The location of treatment system components as shown are general in nature. Minor field adjustments may be necessary. The contractor may request to modify the location of the components through the owner and the Tennessee Division of Water Pollution Control. 2. This design is for the treatment and disposal of wastewater collected from 260 single family residential lots. Lots shown hereon this plan are preliminary only. 3. All flows for this system shall be controlled and monitored by the MVD (Smart) Panel. This monitoring shall be considered the flow meter for this system. 4. The minimum horizontal separation between the closest two points of the water and sewer line is ten (10) feet. The minimum vertical separation between the closest two points of the water and sewer line shall be 18 inches, with waterlines being above sewer lines. 5. Contractor shall comply with the most current requirements, specifications, and detail drawings for the installation of STEP system collection lines as outlined in the WPC Design Criteria Section 2.4.1. 6. All trenches, pipe laying, and backfilling shall be in accordance with federal O.S.H.A. regulations. 7. Utility contractor shall have approval of all governing agencies having jurisdiction over this system prior to installation. 8. All tanks shall be one-piece, structurally sound, watertight tanks as manufactured by Jarrett Concrete Products, or approved equal. 9. Testing procedure for water tightness is as follows. Fill tank 2" into the riser. After a period of 24 hours, the water level should have lowered no more than 1/8". 10. Collection foreman shall be 2" and 3" SDR21 purple PVC pipe (color to be coordinated with C.U.D.). Foreman shall be tested and rated for a 150 PSI working pressure.</div>
<div><b>General Plan Notes:</b> 1. Prior to starting construction the contractor shall be responsible for making sure that all required permits and approvals have been obtained. No construction or fabrication shall begin until the contractor has received and thoroughly reviewed all plans and other documents approved by all of the permitting authorities. 2. All work shall be performed in accordance with these plans, specifications, and the requirements and standards of the local governing authority. The soils report and recommendations set forth therein are a part of the required construction documents and take precedence unless specifically noted otherwise on the plans. The contractor shall notify the construction/project manager of any discrepancy between soils report and plans, etc. 3. The locations of underground facilities shown on the plan are based on field surveys and city records. It shall be the contractor's full responsibility to contact the various utility companies to locate their facilities prior to the starting of construction. No additional compensation shall be paid to the contractor for work having to be redone due to information shown incorrectly on these plans if such notification has not been given. 4. All work within the rights of way shall be in accordance with the governing jurisdiction and specifications. 5. Contractor shall coordinate any maintenance of traffic with the owner's representative and the local jurisdiction prior to construction. 6. Contractor shall at all times ensure that SWPPP measures protecting existing drainage facilities be in place prior to the commencement of any phase of the site construction or land alteration. 7. Upon completion of project, contractor shall clean the paved areas prior to removal of temporary sediment controls, as directed by the city and/or construction/project manager. If power washing is used, no sediment laden water shall be washed into the storm system. All sediment laden material on pavement or within the storm system shall be collected and removed from the site at contractor's expense. 8. Rock may be present at shallow depths requiring some rock excavation for utility installation. No extra compensation shall be given for rock excavation. 9. These project construction documents shall not constitute a contractual relationship between the engineer and the contractor. 10. The engineer shall not be responsible for construction safety, means, methods, techniques, sequences, or procedures utilized by the contractor or subcontractors.</div>	<div><b>Grading And Drainage Plan Notes:</b> 1. The site work contractor shall coordinate the installation of all underground utilities with his work. All underground utilities (water, sanitary sewer, storm sewer, electrical conduit, irrigation sleeves, and any other miscellaneous underground utilities, devices, or structures), shall be in-place prior to the placement of base course material. 2. The contractor shall cut existing pavement as necessary to assure a smooth fit and continuous grade. 3. The contractor shall verify the horizontal and vertical location of all existing storm sewer structures, pipes and all utilities prior to construction. 4. Clearing and grubbing limits shall include all areas disturbed by grading operation. 5. The soil materials shown hereon may be disturbed by cutting or filling operations performed during or before development. Therefore, the builder of any proposed structure shall investigate the current conditions and consult with a geotechnical expert or other qualified person as he deems appropriate to assure himself that the design of the proposed foundation is adequate. 6. A Portion Of This Site Lies Within The 100 Year Flood Plain Per F.E.M.A. Community Panel No. 47149C0377H and 47149C0381H38 and 47149C0383H, Dated Jan. 5 2007. 7. Prior to site construction activity, the contractor shall install all SWPPP measures to protect existing drainage facilities. Contractor shall prevent siltation from leaving the site at all times. 8. Strip building and pavement areas of all organic topsoils. Stockpile suitable topsoils for respreading onto landscape areas. All excess excavated materials shall be removed from the site at the contractor's expense. 9. Site grading shall be performed in accordance with these plans and specifications and the recommendations set forth in this plan set. The contractor shall be responsible for removing all soft, yielding or unsuitable materials and replacing with suitable materials. 10. It is the earthwork contractor's responsibility to maintain the site soils and engineered fills with a workable moisture content range to obtain the required in-place density. Scarifying and drying operation should be included in the contractor's price and should not be considered an extra for the contract. The contractor shall review and be aware of all moisture concerns and soil remediations requirements. 11. Following grading of subsoil to subgrade elevations the contractor shall place topsoil to a 6" depth in all disturbed areas which are not to be paved. Smoothly finish grade to meet surrounding lawn areas and ensure positive drainage. Stockpile topsoil prior to respreading. Topsoils shall be free of subsoil, debris, brush and stones larger than 1" in any dimension. Rock hounding in place will not be permitted. All excess topsoil shall be legally disposed of off site. 12. After fine grading topsoil, contractor shall seed, mulch, fertilize and water until a healthy stand of grass is obtained. The restoration shall closely follow construction. 13. Elevations given are at bottom face of curb and/or finished pavement grade unless otherwise specified on grading plan. All pavement shall be laid on a straight, even, and uniform grade with a minimum of 1% slope toward the collection points unless otherwise specified on the grading plan. DO not allow negative grades or ponding of water. 14. Contractor shall provide butt and joint to meet existing pavement in elevation at drive returns and ensure positive drainage.</div>	<div><b>SEC, Inc.</b> <b>SITE ENGINEERING CONSULTANTS</b> ENGINEERING • SURVEYING • LAND PLANNING 850 MIDDLE TENNESSEE BOULEVARD MURFREESBORO, TENNESSEE 37129 PHONE: (615) 890-7901 E-MAIL: RHOUZE@SEC-CIVIL.COM FAX: (615) 895-2667 NO PORTION OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF S.E.C. INC.  Clearview Acres Section 1 Rutherford County, TN General Notes</div> <div><div>REVISIONS: DRAWN: MLG DATE: 9-22-16 CHECKED: RH FILE NAME: 14300projectP1 SCALE: None JOB NO. 14300 SHEET: 2 of 14</div></div>





Legend:		
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<input type="checkbox"/>	IRON PIN FOUND (I.P.F.)	V.A. VAN ACCESSIBLE HANDICAP DESIGNATION
<input type="checkbox"/>	EXIST. SIGN POST	HC SIGN
<input type="checkbox"/>	EXIST. SEWER CLEANOUT	PROPOSED SIGN POST
<input type="checkbox"/>	EXIST. MANHOLE (SEWER and PHONE)	CONCRETE BOLLARD
<input type="checkbox"/>	EXIST. CATCH BASIN (STORM SEWER)	WHEEL STOP
<input type="checkbox"/>	EXIST. WATER/GAS VALVE	CONCRETE SIDEWALK
<input type="checkbox"/>	EXIST. TELEPHONE RISER	EXTRUDED CURB
<input type="checkbox"/>	EXIST. GAS RISER	CURB and GUTTER
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<input type="checkbox"/>	EXIST. FIRE HYDRANT	DRAINAGE STRUCTURE DESIGNATION
<input type="checkbox"/>	POST INDICATOR VALVE	DRAINAGE PIPE DESIGNATION
<input type="checkbox"/>	BLOW OFF VALVE	RIP RAP
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<input type="checkbox"/>	CONCRETE THRUST BLOCK	PROPOSED SPOT ELEVATION
<input type="checkbox"/>	DOUBLE DETECTOR CHECK VALVE	EXIST. SPOT ELEVATION
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<input type="checkbox"/>	FIRE HYDRANT	CATCH BASIN
<input type="checkbox"/>	GATE VALVE and BOX	CURB INLET
<input type="checkbox"/>	WATER METER	AREA DRAIN
<input type="checkbox"/>	GAS METER	HEADWALL
<input type="checkbox"/>	GREASE TRAP	WINGED HEADWALL
<input type="checkbox"/>	EXTERIOR CLEANOUT ECO	CONCRETE SWALE
<input type="checkbox"/>	MANHOLE	TYPE- X- HEADWALL
EXISTING PHONE PH		
EXISTING ELECTRIC OH		
PROPERTY LINE		
EASEMENTS		
RIGHT OF WAY ROW		
EROSION CONTROL SILT FENCE SF SF		
EROSION EEL E E E E		
EXISTING TREELINE		
EXISTING FENCELINE X X		
MINIMUM BUILDING SETBACK LINE MBSL		
PHASE BOUNDARY		
EXISTING GAS LINE GAS GAS		
PROPOSED GAS LINE GAS GAS		
EXISTING STORM STM STM		
PROPOSED STORM STM STM		
EXISTING CONTOUR LINES 601		
PROPOSED CONTOUR LINES 601		
EXISTING SANITARY SEWER SS SS		
PROPOSED SANITARY SEWER SS SS		
EXISTING WATER W W		
PROPOSED WATER W W		

SEC, Inc.

SITE ENGINEERING CONSULTANTS

ENGINEERING • SURVEYING • LAND PLANNING

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E-MAIL: RHOUIZE@SEC-CIVIL.COM  
FAX: (615) 895-2567  
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Clearview Acres

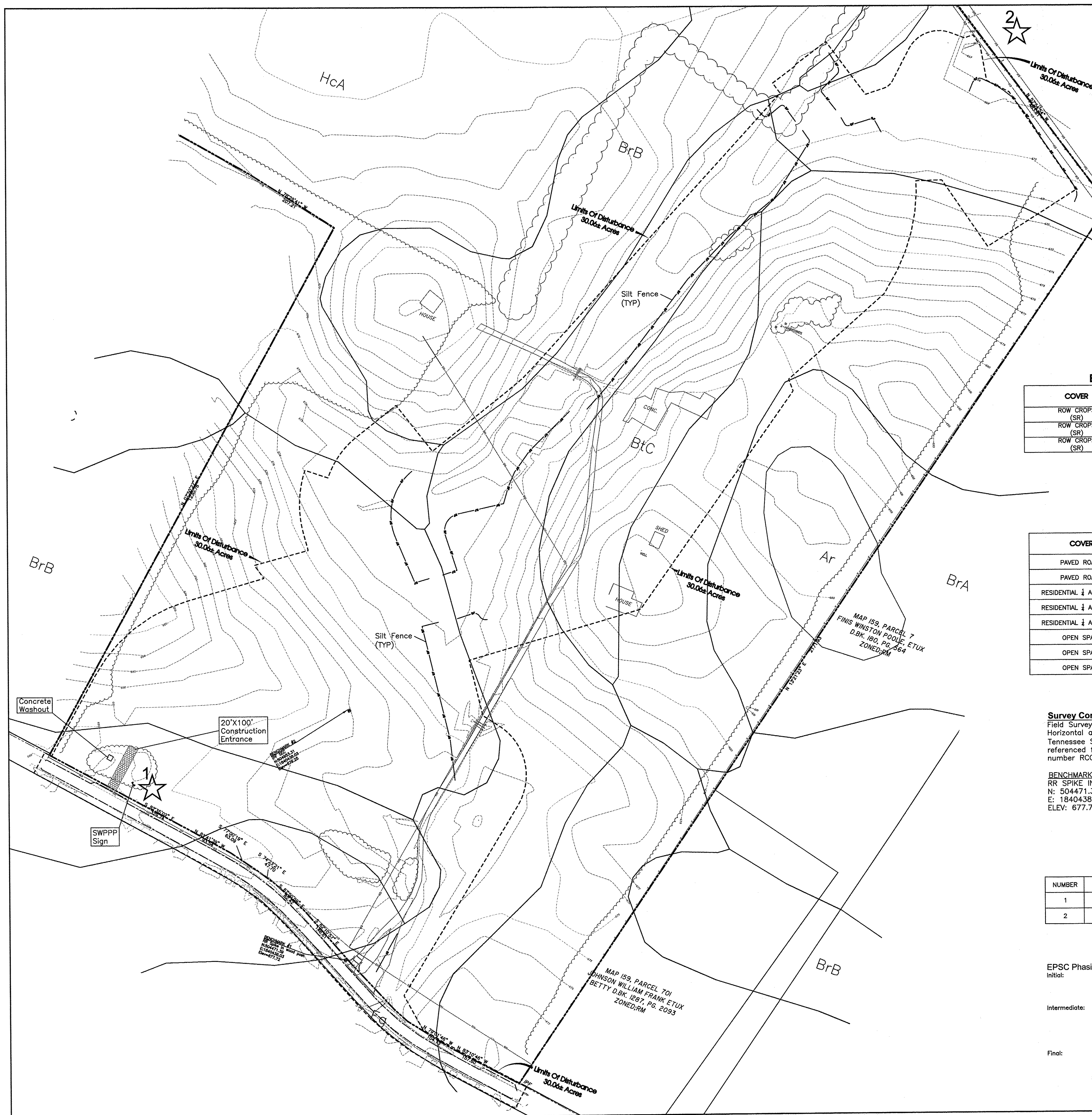
Section 1

Rutherford County, TN

Master Plan

3 of 14





<b>BMP</b>	<b>TYPE</b>
SILT FENCE	TEMPORARY, SEDIMENT CONTROL
CONSTRUCTION ENTRANCE	TEMPORARY, SEDIMENT CONTROL
VEGETATION	PERMANENT, EROSION PREVENTION
INLET PROTECTION	TEMPORARY, SEDIMENT CONTROL
DETENTION POND	PERMANENT, WATER QUALITY
TREE PROTECTION	TEMPORARY, PROTECTION
EROSION EEL	TEMPORARY, SEDIMENT CONTROL

EXISTING ON-SITE CONDITIONS		
COVER	SCS CLASSIFICATION	AREA (Ac)
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION B SOILS, CN=78	0.57
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION C SOILS, CN=85	26.61
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION D SOILS, CN=89	2.88
		COMPOSITE, CN=85

PROPOSED ON-SITE CONDITIONS		
COVER	SCS CLASSIFICATION	AREA (Ac)
PAVED ROADS	ROADS, CN=98	4.00
PAVED ROADS	ROADS, CN=92	1.33
RESIDENTIAL ¼ ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS B SOILS, CN=75	0.03
RESIDENTIAL ¼ ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS C SOILS, CN=83	12.65
RESIDENTIAL ¼ ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS D SOILS, CN=87	0.21
OPEN SPACE	OPEN SPACE B SOILS, CN=69	0.55
OPEN SPACE	OPEN SPACE C SOILS, CN=79	8.83
OPEN SPACE	OPEN SPACE D SOILS, CN=84	2.47
		COMPOSITE CN=82

### Survey Control

**Survey Control**  
Field Survey performed from: 09-6 to 09-27, 2016.  
Horizontal and vertical survey control is tied to the  
Tennessee State Plane coordinate system (NAD83/NAVD88),  
referenced from Rutherford County Control monument  
number RCC-020.

BENCHMARK #1:	BENCHMARK #2:
RR SPIKE IN WOOD POST	IPF SEC
N: 504471.39	N: 504953.31
E: 1840438.03	E: 1840265.95
ELEV: 677.72	ELEV: 679.25

OUTFALLS					
NUMBER	DESCRIPTION	DRAINAGE AREA			RECEIVING FEATURE
		DISTURBED	DIVERSED	TOTAL	
1	TEMP. CONSTRUCTION EXIT	0.10 Ac.	0.00 Ac.	0.10 Ac.	WEST FORK STONES RIVER UPPER
2	EXISTING DRAIN AT NORTHEAST CORNER	29.96 Ac.	141.75 Ac.	171.71 Ac.	WEST FORK STONES RIVER UPPER

EPSC Phasing  
Initial: Silt

Initial: Silt Fence Along Downgradient  
Perimeter Construction Entrance  
Check Dams In Existing Ditches  
Filter Fabric Inlet Protection

Intermediate: Temporary Seeding  
Filter Fabric Inlet Protection  
Check Dams in Proposed Ditches  
Silt Fence To Protect Ditches  
Erosion Control Blanket Installation  
At Prescribed Locations

Final: Seeding And Stabilization Of All Disturbed Areas

## ----- LIMITS OF DISTURBANCE

[illegible]

Know what's below.  
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-100' 0 100' 200'

SCALE: 1" = 100'

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Clearview Acres  
Section 1  
Rutherford County, TN

REUSED:					
DRAWN: MLG					
DATE: 9-22-16					
CHECKED:					
RH					
FILE NAME:					
14300projectP1					
SCALE:					
1" = 100'					

4 of 14

The site as shown on these construction drawings is intended to achieve specific engineering design criteria and objectives. It is the sole responsibility of the owner/developer to ensure that the construction of the site shown on these construction drawings is in total accordance with the design as noted, described, and illustrated. The engineer assumes no administrative liability or responsibility in connection with the construction plans.



**Survey Control**  
Field Survey performed from: 09-6 to 09-27, 2016.  
Horizontal and vertical survey control is tied to the  
Tennessee State Plane coordinate system (NAD83/NAVD88),  
referenced from Rutherford County Control monument  
number RCC-020.

**BENCHMARK #1:**  
RR SPIKE IN WOOD POST  
N: 504471.39  
E: 1840438.03  
ELEV: 677.72

**BENCHMARK #2:**  
IPF SEC  
N: 504853.31  
E: 1840285.95  
ELEV: 679.25

OUTFALLS					
NUMBER	DESCRIPTION	DRAINAGE AREA			RECEIVING FEATURE
		DISTURBED	DIVERTED	TOTAL	
1	TEMP. CONSTRUCTION EXIT	0.10 Ac.	0.00 Ac.	0.10 Ac.	WEST FORK STONES RIVER UPPER
2	EXISTING DRAIN AT NORTHEAST CORNER	29.96 Ac.	141.75 Ac.	171.71 Ac.	WEST FORK STONES RIVER UPPER



Outfall

LIMITS OF DISTURBANCE

#### PROPOSED BMP'S

BMP	TYPE
SILT FENCE	TEMPORARY, SEDIMENT CONTROL
CONSTRUCTION ENTRANCE	TEMPORARY, SEDIMENT CONTROL
CONCRETE WASH OUT	TEMPORARY, SEDIMENT CONTROL
EROSION EELS	TEMPORARY, SEDIMENT CONTROL
DRY DETENTION POND	PERMANENT, EROSION PREVENTION
VEGETATION	PERMANENT, EROSION PREVENTION
EROSION CONTROL FABRIC	PERMANENT, EROSION PREVENTION

#### EXISTING ON-SITE CONDITIONS

COVER	SCS CLASSIFICATION	AREA (Ac)
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION B SOILS, CN=78	0.57
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION C SOILS, CN=85	26.61
ROW CROPS (SR)	ROW CROPS (SR) GOOD CONDITION D SOILS, CN=89	2.88
		COMPOSITE CN=85

#### PROPOSED ON-SITE CONDITIONS

COVER	SCS CLASSIFICATION	AREA (Ac)
PAVED ROADS	ROADS, CN=98	4.00
PAVED ROADS	ROADS, CN=92	1.33
RESIDENTIAL 1/4 ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS B SOILS, CN=75	0.03
RESIDENTIAL 1/4 ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS C SOILS, CN=83	12.65
RESIDENTIAL 1/4 ACRE LOTS	RESIDENTIAL 30% IMPERVIOUS D SOILS, CN=87	0.21
OPEN SPACE	OPEN SPACE B SOILS, CN=69	0.55
OPEN SPACE	OPEN SPACE C SOILS, CN=79	8.83
OPEN SPACE	OPEN SPACE D SOILS, CN=84	2.47
		COMPOSITE CN=82

#### Storm Water Pollution Prevention Notes:

- Before starting demolition or construction operations, refer to the Initial EPSC, Intermediate EPSC and SWPPP Plan sheets.
- The site contractor is responsible for establishing and maintaining suitable erosion and sediment control devices on-site during construction as required to prevent silt from leaving site. Silt will not be allowed beyond construction limits.
- The contractor is responsible for removing silt from site if not reusable on-site and ensuring plan alignment and grade in all ditches at completion of construction.
- Erosion control measures shall be provided for all cut and fill operations within the limits of the construction site, throughout the construction period to provide the site with maximum protection from erosion at all times.
- Erosion control measures are to be installed prior to any grading on-site and are to be maintained in place until stabilization of erodible soils has been accomplished.
- The Storm Water Pollution Prevention Plan (SWPPP) is an integral part of the Erosion Prevention and Sediment Control (EPSC) Plan and should be followed during all phases of construction (bidding, site work, final stabilization).
- Any graded or disturbed areas shall have 4 inches of topsoil, seed, mulch, fertilizer and water applied until a healthy stand of grass is obtained unless otherwise noted on plans. The restoration shall closely follow construction.
- The construction drawings shall be made available on site at all times and presented upon request. If unforeseen stormwater pollution prevention is encountered, additional Storm Water Pollution Prevention (SWPPP) measures may be requested by the owner, city engineer, project engineer, or soil conservation service representative at anytime. Such requests shall be implemented immediately at contractor's expense.
- All Storm Water Pollution Prevention items shall be installed as shown or noted in these plans.
- Apply temporary seeding and mulching in all areas that shall be inactive for 15 days or more. All disturbed and eroded earth shall be regraded and seeded within 7 days, as defined above and as shown on the table below to establish stability and provided sediment control.

Seeding Dates	Seed Type	Application Rate Per 1,000 Sq.Ft.
March 1 - August 15	Oats Perennial Rye Grass Or Tall Fescue	3#
August 16 - November 1	Rye, Wheat or Perennial Rye Grass Tall Fescue	1#
After November 1	Straw or Hay Mulch	2-3 Bales
Seed Bed Preparation	Lines 100-10 or 12-12-12 Fertilizer	100# 12-15#

- Permanent vegetation shall be installed within 7 days of the completion of any graded area, weather permitting.
- At such time rough grading or the site is complete and drainage diverts to inlets, inlet sediment filters shall be installed at all inlet structures to keep piping systems free of silt.
- Silt barriers shall be installed around all existing or new storm inlets, catch basins, yard drains. Install rock check dams for headwall inlets for storm water pollution prevention.
- Storm water pollution prevention measures shall be installed around all dirt or topsoil stockpiles and other temporarily disturbed areas.
- Contractor shall inspect all SWPPP measures daily and repair as necessary to prevent erosion. Siltation shall be removed from areas where failures have occurred and corrective action taken within 24 hours to maintain all SWPPP items.
- Silt barriers, construction entrances, and silt fences shall remain in place until a good stand of grass has been obtained and/or paving operations are complete. Contractor shall keep silt from entering any storm drainage system. Once site has been completely stabilized, silt in pipes and drainage swales shall be removed within 10 days.
- Temporary sedimentation and stormwater pollution prevention measures must be inspected and logged by the contractor for inspection, inspections and logging shall be weekly and after rain storms.
- Utility companies must comply with all stormwater pollution prevention measures as defined on the storm water pollution prevention plans, details and notes.
- The total area of disturbance for the project is 20.91 Acres.
- All stormwater pollution prevention practices shall be installed before any other earth moving occurs.
- The contractors shall use temporary sediment filter bags as necessary to control sediment runoff.
- The following stormwater pollution prevention and sediment control measures will be used on this site:  
A) Sediment control barrier  
B) Filter fabric inlet protection  
C) Construction entrance  
D) Concrete washout facility  
E) Check dams  
F) Temporary seeding  
G) Erosion control blanket  
H) Permanent seeding or sodding
- Sediment shall be removed from sediment controls as necessary but at least when the design capacity of the control has been reduced by 50%.

#### EPSC Phasing

- Initial: Silt Fence Along Downgradient  
Construction Entrance  
Concrete Washout Area  
Detention Pond/Temp. Sediment Trap
- Intermediate: Temporary Seeding  
Filter Fabric Inlet Protection  
Check Dams In Proposed Ditches  
Erosion Control Blanket Or Grass Sod  
Installation At Prescribed Locations
- Final: Seeding And Stabilization Of All  
Disturbed Areas

- Construction Sequence:**
- Stake and/or flag limits of clearing.
  - During preconstruction meeting all erosion and sediment control facilities and procedures shall be discussed.
  - Clear and grub, as necessary, for installation of perimeter controls.
  - Install perimeter sediment controls as shown on plans.
  - Install construction entrance and concrete washout facility, if conditions are such that mud is collecting on vehicle tires, the tires must be cleaned before the vehicles enter the public roadway. The site entrance shall be maintained in a condition that will prevent the tracking or flow of mud onto the public right-of-way. All materials spilled, dropped, washed or tracked from vehicles onto the roadway must be removed promptly.
  - Clear and grub the remaining site as necessary.
  - Refer to construction SWPPP plan sheet.

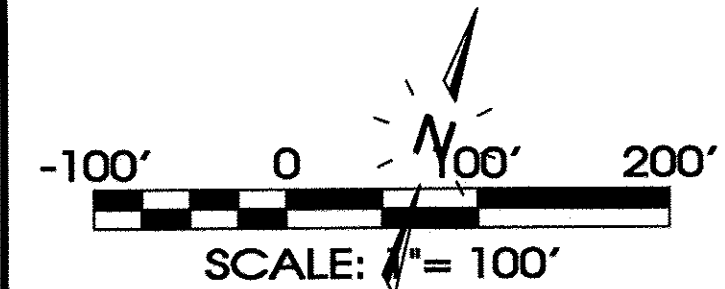
#### Legend:

EXIST. CONCRETE MONUMENT	IRON PIN SET (I.P.S.)	IRON PIN FOUND (I.P.F.)	EXIST. SIGN POST	EXIST. SEWER CLEANOUT	EXIST. MANHOLE (SEWER AND PHONE)	EXIST. CATCH BASIN (STORM SEWER)	EXIST. WATER/GAS VALVE	EXIST. TELEPHONE RISER	EXIST. GAS RISER	ELECTRICAL ENCLOSURE	EXIST. WATER METER	EXIST. UTILITY POLE	EXIST. FIRE HYDRANT	POST INDICATOR VALVE	BLOW OFF VALVE	REDUCER	REMOTE FIRE DEPT. CONNECTION	CONCRETE THRUST BLOCK	DOUBLE DETECTOR CHECK VALVE	FIRE DEPT. CONNECTION	FIRE HYDRANT	GATE VALVE and BOX	WATER METER	GAS METER	GREASE TRAP	EXTERIOR CLEANOUT ECO	MANHOLE
BENCHMARK	HANDICAP RAMP SYMBOL	VAN ACCESSIBLE HANDICAP DESIGNATION	HC SIGN	PROPOSED SIGN POST	CONCRETE BOLLARD	WHEEL STOP	CONCRETE SIDEWALK	EXTRUDED CURB	CURB and GUTTER	TRAFFIC ARROW	TURN LANE ARROWS	REVISION NUMBER	DRAINAGE STRUCTURE DESIGNATION	DRAINAGE PIPE DESIGNATION	RIP RAP	RUNOFF FLOW ARROW	INLET FILTER PROTECTION	PROPOSED SPOT ELEVATION	EXIST. SPOT ELEVATION	SEWER/STORM FLOW DIRECTION	CATCH BASIN	CURB INLET	AREA DRAIN	HEADWALL	WINGED HEADWALL	CONCRETE SWALE	TYPE- X- HEADWALL

EXISTING PHONE	PH
EXISTING ELECTRIC	OH
PROPERTY LINE	
EASEMENTS	
RIGHT OF WAY	ROW
EROSION CONTROL SILT FENCE	SF
EROSION EEL	E
EXISTING TREELINE	
EXISTING FENCELINE	X
MINIMUM BUILDING SETBACK LINE	MBSL
PHASE BOUNDARY	
EXISTING GAS LINE	GAS
PROPOSED GAS LINE	GAS
EXISTING STORM	STM
PROPOSED STORM	STM
EXISTING CONTOUR LINES	601
PROPOSED CONTOUR LINES	601
EXISTING SANITARY SEWER	SS
PROPOSED SANITARY SEWER	SS
EXISTING WATER	W
PROPOSED WATER	W

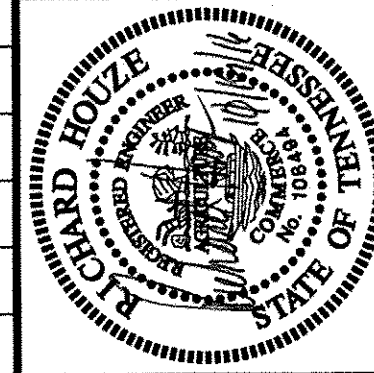


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MURFREESBORO, TENNESSEE 37129  
PHONE: (615) 890-7901 E-MAIL: RHOUTZ@SEC-CIVIL.COM FAX: (615) 895-2567  
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Clearview Acres

Section 1

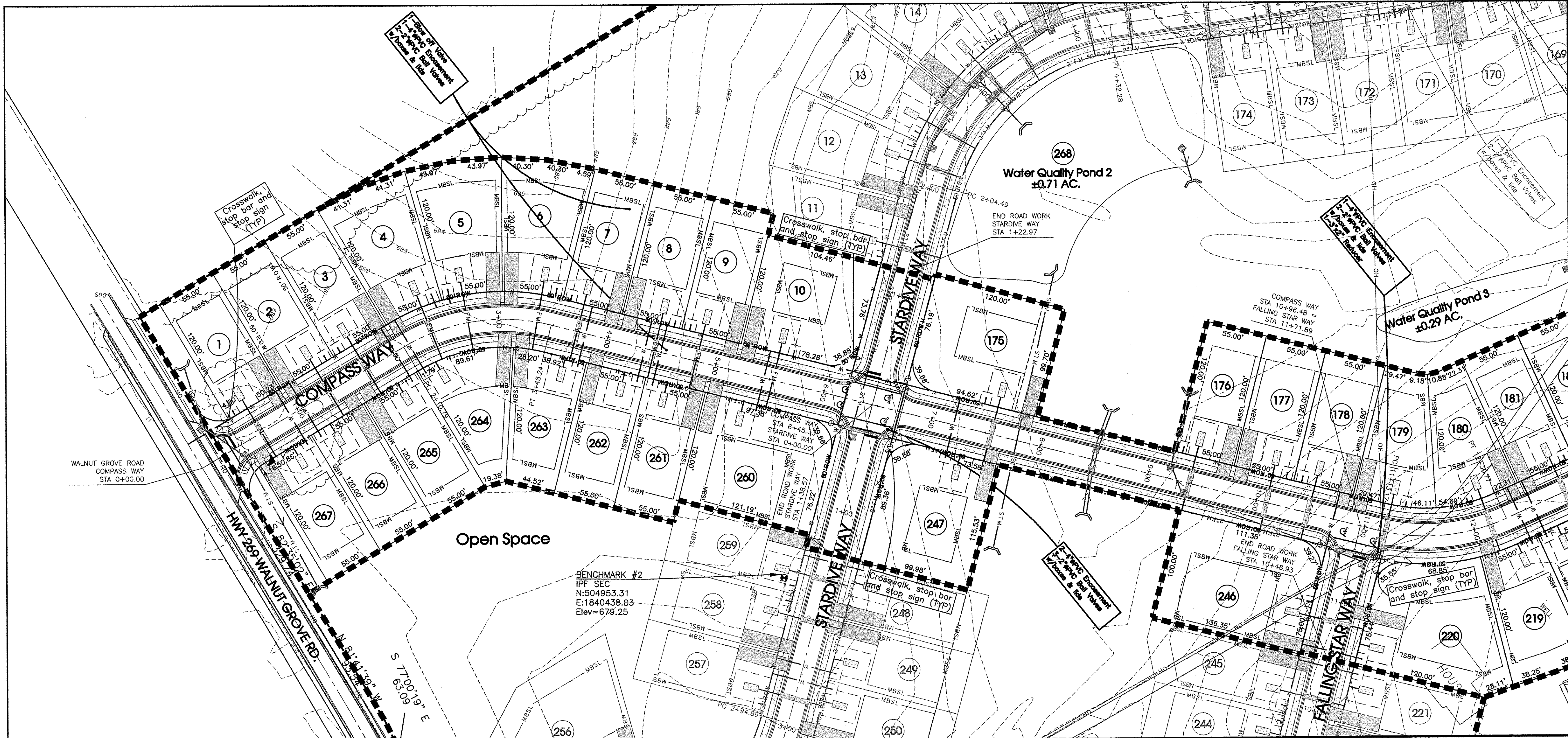
Rutherford County, TN

Intermediate EPSC Plan

REVISION: MLG  
DRAWN: MLG  
DATE: 9-22-16  
CHECKED:  
RH  
FILE NAME:  
14300projectP1  
SCALE:  
1"=100'  
JOB NO.  
14300  
SHEET:

5 of 14





COMPASS WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
2+83.28	175.00'	137.44'	45°00'00.00"	32°44'25.60"	133.94'
11+74.29	175.00'	117.60'	38°30'08.52"	32°44'25.60"	115.40'
17+63.13	175.00'	39.90'	13°03'48.43"	32°44'25.60"	39.81'
21+08.56	225.00'	334.47'	85°10'16.66"	25°27'53.25"	304.51'
25+90.15	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'
28+92.71	175.00'	37.65'	12°19'34.02"	32°44'25.60"	37.58'
40+45.20	225.00'	89.97'	22°54'42.47"	25°27'53.25"	89.38'
42+97.90	225.00'	134.55'	34°15'50.55"	25°27'53.25"	132.56'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+33.39	195.00'	227.80'	66°55'54.48"	29°22'56.82"	215.06'
7+63.38	175.00'	28.54'	09°20'35.09"	32°44'25.60"	28.51'
15+27.77	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+70.41	175.00'	142.58'	46°40'55.36"	32°44'25.60"	138.67'

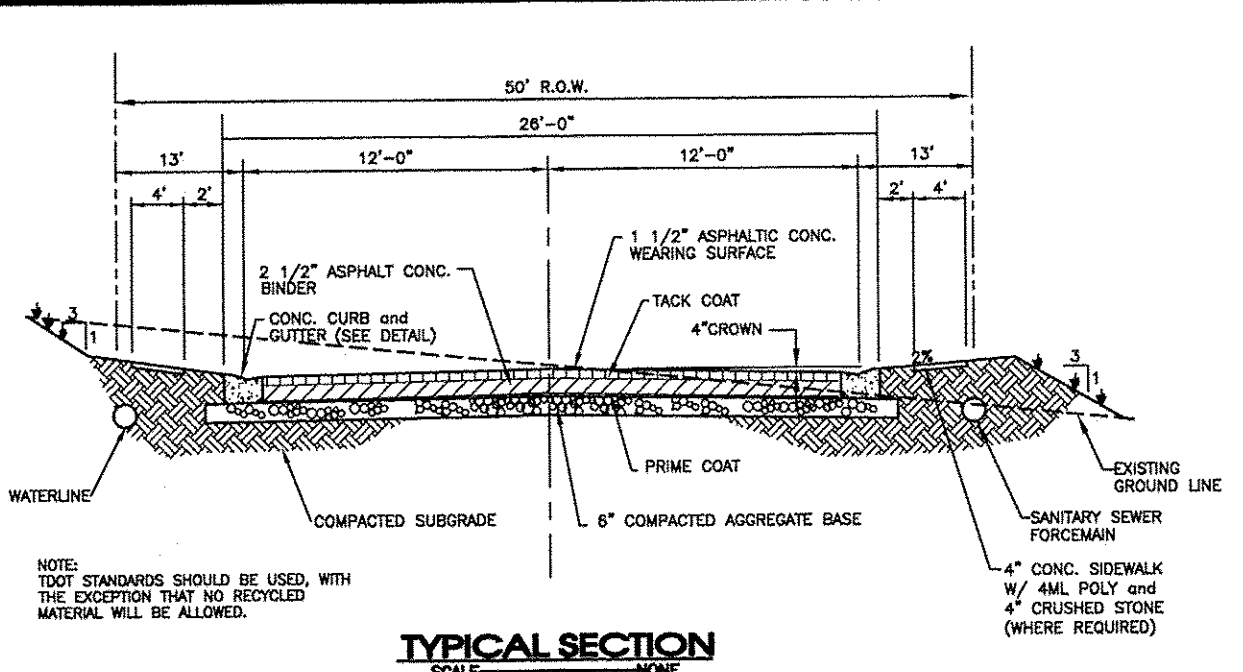
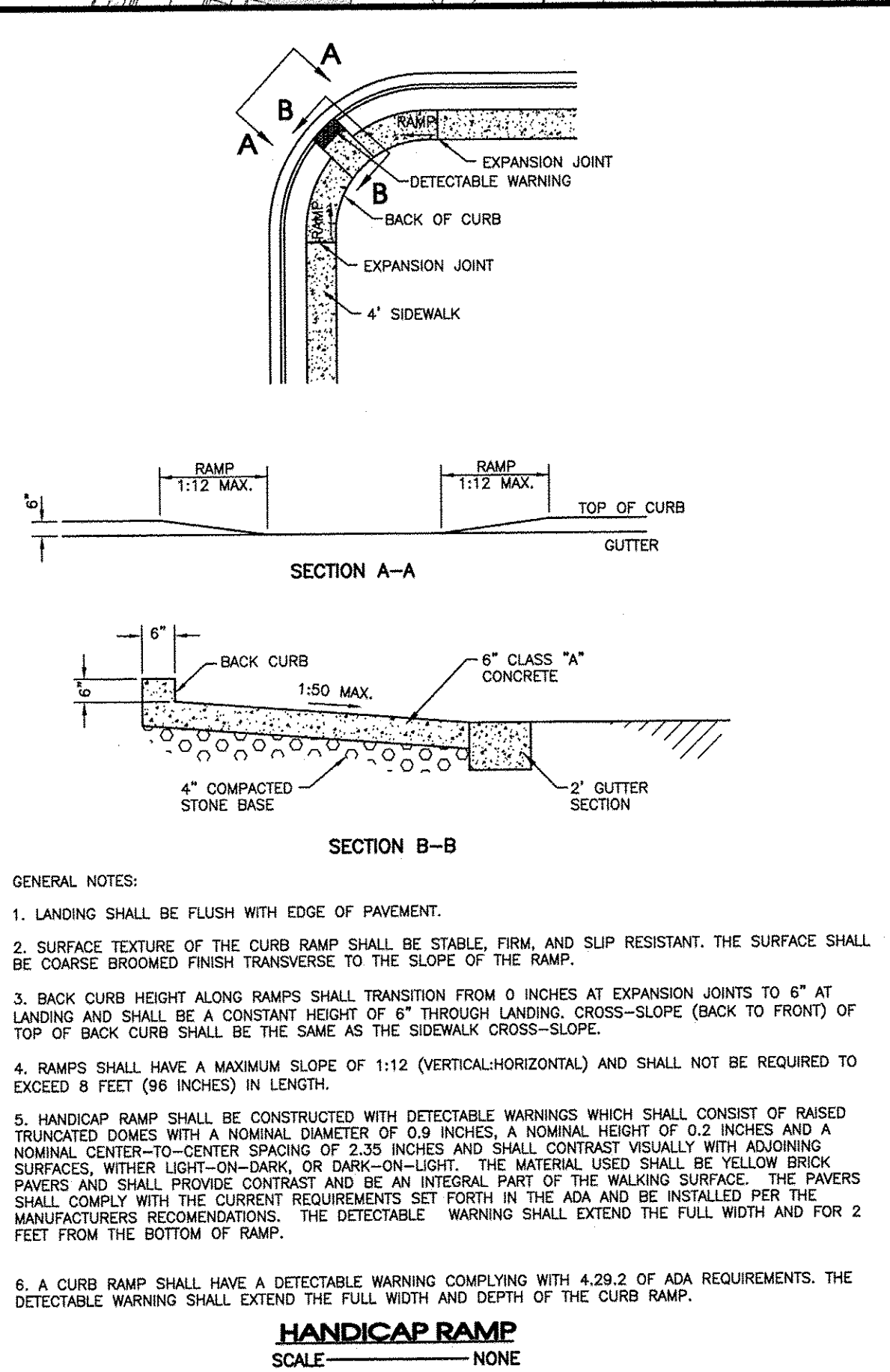
FALLING STAR WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
5+51.23	195.00'	171.31'	50°20'08.53"	29°22'56.82"	165.86'

**Note:**  
Waterline design by Consolidated Utility District (CUD) waterline shown on this plan for reference only. Refer to CUD plans, construction details and specifications for final design.

**Survey Control**  
Field Survey performed from: 09-6 to 09-27, 2016.  
Horizontal and vertical survey control is tied to the Tennessee State Plane coordinate system (NAD83/NAVDS88), referenced from Rutherford County Control monument number RCC-020.

**BENCHMARK #1:**  
RR SPIKE IN WOOD POST  
N: 504471.39  
E: 1840438.03  
ELEV: 677.72

**BENCHMARK #2:**  
IPF SEC  
N: 504953.31  
E: 1840265.95  
ELEV: 679.25



## Owner/Developer:

Clearview Acres LP  
2127 Tabasco Way  
Murfreesboro, TN 37128-8255  
(615) 531-1173  
Contact: Bud George

## Floodplain Note:

A Portion Of This Site Lies Within The 100 Year Flood Plain Per F.E.M.A. Community Panel No. 47149C0377H and 47149C0381H38 and 47149C0383H, Dated Jan. 5 2007.

## Total Site Land Data:

Zoning: PUD  
Total 272 Lots on 142.46± Acres  
Total 267 Buildable Lots  
Section 1: 56 Lots on 18.67± Acres  
Section 1: 55 Buildable Lots

## STEP Land Data:

STEP Area = 37.52 Acres

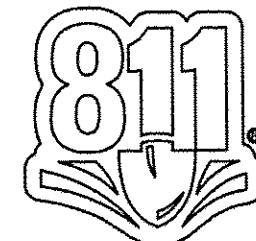
## Yard Requirements:

Front: 35'  
Side: 7.5' (15' Separation Between Buildings)  
Rear: 20'  
**Deed Reference:**  
The property shown hereon is Tax Maps: Map 159, Parcel 6.00  
8th Civil District in Rutherford County, as recorded in Record Bk. 606, Pg 664.

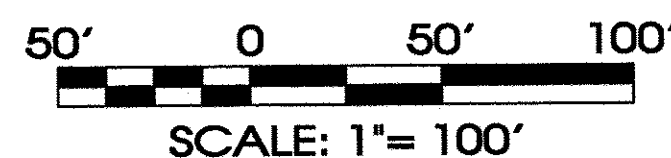
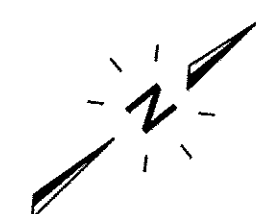
## STEP Design:

Design Flow = 270 Lots x 300 gpd = 81,000 gpd  
Design Loading Soil Rate = 0.15 gal/sf  
Required Land Application Area = 12.40 Acres  
Proposed Land Application Area = 12.40 Acres  
Required 50% Reserve Application Area = 6.20 Acres  
Provided 56% Reserve Application Area = 9.29 Acres

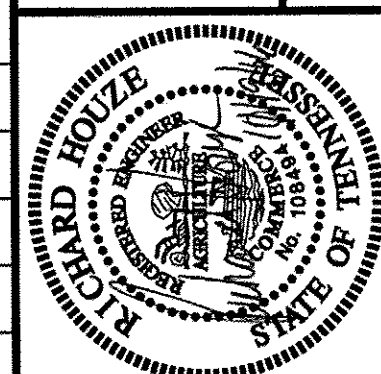
Legend:			
	EXIST. CONCRETE MONUMENT		BENCHMARK
	IRON PIN SET (I.P.S.)		HANDICAP RAMP SYMBOL
	IRON PIN FOUND (I.P.F.)	V.A.	VAN ACCESSIBLE HANDICAP DESIGNATION
	EXIST. SIGN POST		HC SIGN
	EXIST. SEWER CLEANOUT		PROPOSED SIGN POST
	EXIST. MANHOLE (SEWER AND PHONE)		CONCRETE BOLLARD
	EXIST. CATCH BASIN (STORM SEWER)		WHEEL STOP
	EXIST. WATER/GAS VALVE		CONCRETE SIDEWALK
	EXIST. TELEPHONE RISER		EXTRUDED CURB
	EXIST. GAS RISER		CURB AND GUTTER
	ELECTRICAL ENCLOSURE		TRAFFIC ARROW
	EXIST. WATER METER		TURN LANE ARROWS
	EXIST. UTILITY POLE		REVISION NUMBER
	EXIST. FIRE HYDRANT		DRAINAGE STRUCTURE DESIGNATION
	POST INDICATOR VALVE		DRAINAGE PIPE DESIGNATION
	BLOW OFF VALVE		RIP RAP
	REDUCER		RUNOFF FLOW ARROW
	REMOTE FIRE DEPT. CONNECTION		INLET FILTER PROTECTION
	CONCRETE THRUST BLOCK	63.25 x	PROPOSED SPOT ELEVATION
	DOUBLE DETECTOR CHECK VALVE	(63.25) x	EXIST. SPOT ELEVATION
	FIRE DEPT. CONNECTION		SEWER/STORM FLOW DIRECTION
	FIRE HYDRANT		CATCH BASIN
	GATE VALVE AND BOX		CURB INLET
	WATER METER		AREA DRAIN
	GAS METER		HEADWALL
	GREASE TRAP		WINGED HEADWALL
	EXTERIOR CLEANOUT ECO		CONCRETE SWALE
	MANHOLE		TYPE- X- HEADWALL
EXISTING PHONE		_____ PH _____	
EXISTING ELECTRIC		_____ PH _____	
PROPERTY LINE		=====	
EASEMENTS		-----	
RIGHT OF WAY		_____ ROW _____	
EROSION CONTROL SILT FENCE		_____ SF _____ SF _____	
EROSION EEL		_____ E _____ E _____ E _____ E _____	
EXISTING TREELINE			
EXISTING FENCELINE		_____ X _____ X _____	
MINIMUM BUILDING SETBACK LINE		_____ MBSL _____	
PHASE BOUNDARY		■■	



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Clearview Acres

Section 1

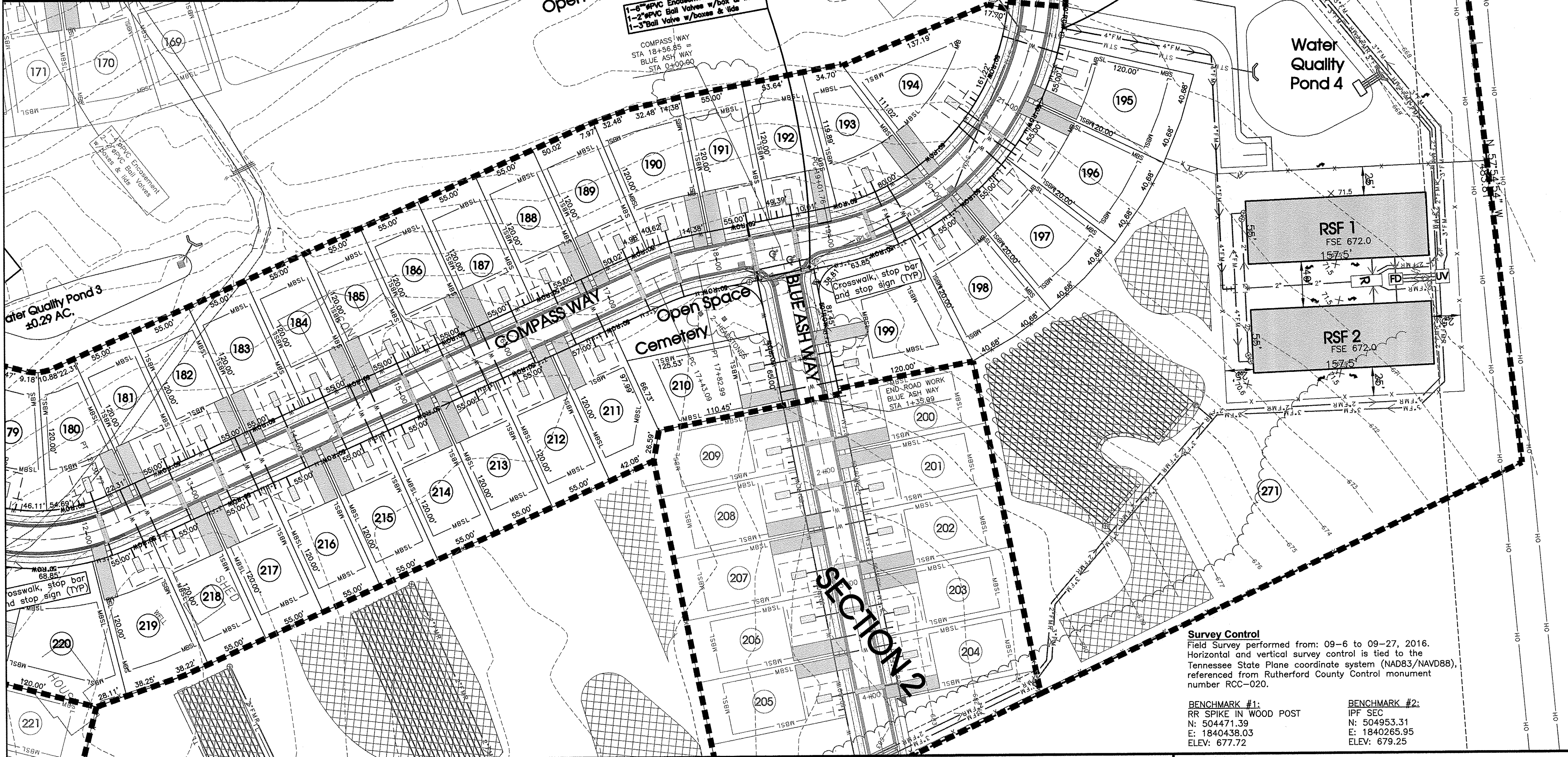
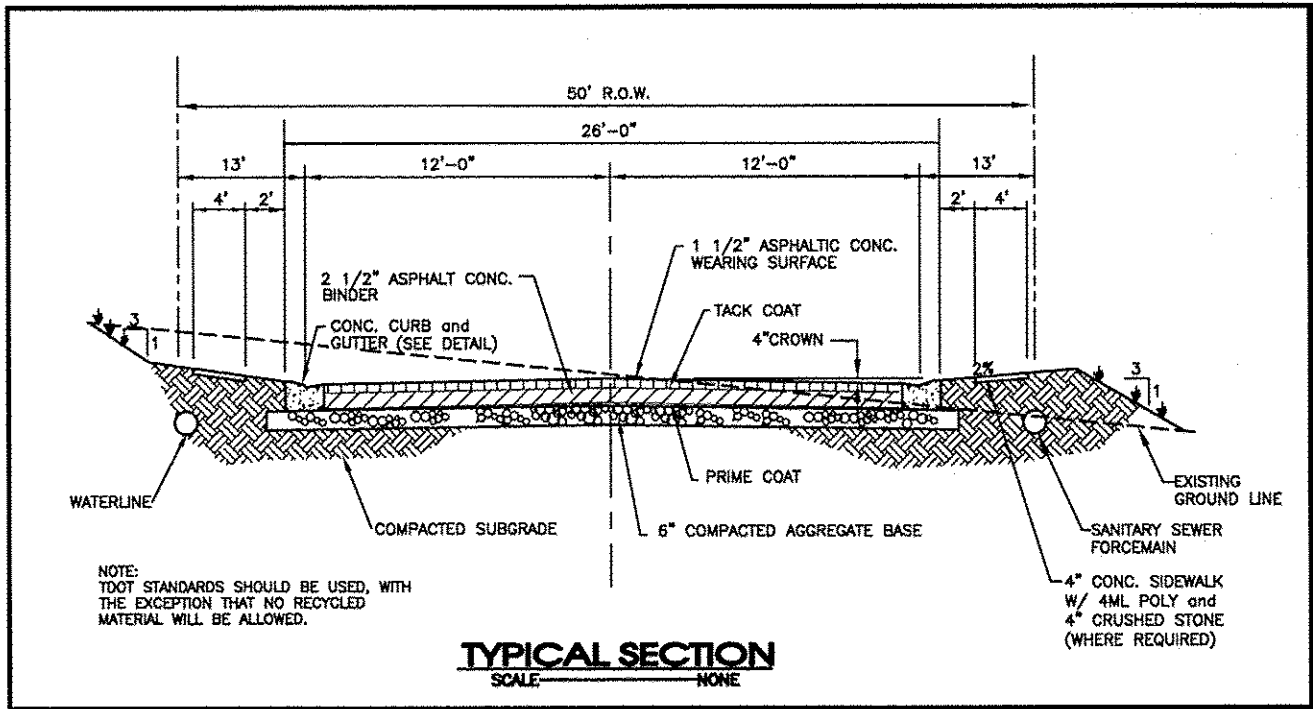
Rutherford County, TN

Preliminary Plan

REVISED:  
DRAWN: MLG  
DATE: 9-22-16  
CHECKED:  
RH  
FILE NAME:  
14300projectP1  
SCALE:  
1"=50'  
JOB NO.  
14300  
SHEET:

6 of 14
























































COMPASS WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
2+83.28	175.00'	137.44'	45°00'00.00"	32°44'25.60"	133.94'
11+74.29	175.00'	117.60'	38°30'08.52"	32°44'25.60"	115.40'
17+63.13	175.00'	39.90'	13°03'48.43"	32°44'25.60"	39.81'
21+08.56	225.00'	334.47'	85°10'16.66"	25°27'53.25"	304.51'
25+90.15	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'
28+92.71	175.00'	37.65'	12°19'34.02"	32°44'25.60"	37.58'
40+45.20	225.00'	89.97'	22°54'42.47"	25°27'53.25"	89.38'
42+97.90	225.00'	134.55'	34°15'50.55"	25°27'53.25"	132.56'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+33.39	195.00'	227.80'	66°55'54.48"	29°22'56.82"	215.06'
7+63.38	175.00'	28.54'	09°20'35.09"	32°44'25.60"	28.51'
15+27.77	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+70.41	175.00'	142.58'	46°40'55.36"	32°44'25.60"	138.67'

FALLING STAR WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
5+51.23	195.00'	171.31'	50°20'08.53"	29°22'56.82"	165.86'

**Note: Waterline design by Consolidated Utility District (CUD) waterline shown on this plan for reference only. Refer to CUD plans, construction details and specifications for final design.**

Legend:			
	EXIST. CONCRETE MONUMENT		BENCHMARK
	IRON PIN SET (I.P.S.)		HANDICAP RAMP SYMBOL
	IRON PIN FOUND (I.P.F.)	V.A.	VAN ACCESSIBLE HANDICAP DESIGNATION
	EXIST. SIGN POST		HC SIGN
	EXIST. SEWER CLEANOUT		PROPOSED SIGN POST
	EXIST. MANHOLE (SEWER AND PHONE)		CONCRETE BOLLARD
	EXIST. CATCH BASIN (STORM SEWER)		WHEEL STOP
	EXIST. WATER/GAS VALVE		CONCRETE SIDEWALK
	EXIST. TELEPHONE RISER		EXTRUDED CURB
	EXIST. GAS RISER		CURB AND GUTTER
	ELECTRICAL ENCLOSURE		TRAFFIC ARROW
	EXIST. WATER METER		TURN LANE ARROWS
	EXIST. UTILITY POLE		REVISION NUMBER
	EXIST. FIRE HYDRANT	#1	DRAINAGE STRUCTURE DESIGNATION
	POST INDICATOR VALVE		DRAINAGE PIPE DESIGNATION
	BLOW OFF VALVE		RIP RAP
	REDUCER		RUNOFF FLOW ARROW
	REMOTE FIRE DEPT. CONNECTION		INLET FILTER PROTECTION
	CONCRETE THRUST BLOCK	63.25 <sup>+</sup>	PROPOSED SPOT ELEVATION
	DOUBLE DETECTOR CHECK VALVE	(83.25) <sup>+</sup>	EXIST. SPOT ELEVATION
	FIRE DEPT. CONNECTION	>	SEWER/STORM FLOW DIRECTION
	FIRE HYDRANT		CATCH BASIN
	GATE VALVE AND BOX		CURB INLET
	WATER METER		AREA DRAIN
	GAS METER		HEADWALL
	GREASE TRAP		WINGED HEADWALL
	EXTERIOR CLEANOUT EGO		CONCRETE SWALE
	MANHOLE		TYPE- X- HEADWALL

EXISTING PHONE	PH
EXISTING ELECTRIC	OH
PROPERTY LINE	
EASEMENTS	
RIGHT OF WAY	ROW
EROSION CONTROL SILT FENCE	SF SF
EROSION EEL	E E E E
EXISTING TREELINE	
EXISTING FENCELINE	X X
MINIMUM BUILDING SETBACK LINE	MBSL
PHASE BOUNDARY	
EXISTING GAS LINE	GAS GAS
PROPOSED GAS LINE	GAS GAS
EXISTING STORM	STM STM
PROPOSED STORM	STM STM
EXISTING CONTOUR LINES	601
PROPOSED CONTOUR LINES	601
EXISTING SANITARY SEWER	SS SS
PROPOSED SANITARY SEWER	SS SS
EXISTING WATER	W W
PROPOSED WATER	W W

### Owner/Developer:

Clearview Acres LP  
2127 Tabasco Way  
Murfreesboro, TN 37128-8255  
(615) 531-1173  
Contact: Bud George

### Floodplain Note:

A Portion Of This Site Lies Within The 100 Year Flood Plain Per F.E.M.A. Community Panel No. 47149C0377H and 47149C0381H38 and 47149C0383H, Dated Jan. 5 2007.

### Total Site Land Data:

Zoning: PUD  
Total 272 Lots on 142.46± Acres  
Total 267 Buildable Lots  
Section 1: 56 Lots on 18.67± Acres  
Section 1: 55 Buildable Lots

### STEP Land Data:

STEP Area = 37.52 Acres

### Yard Requirements:

Front: 35'  
Side: 7.5' (15' Separation Between Buildings)  
Rear: 20'

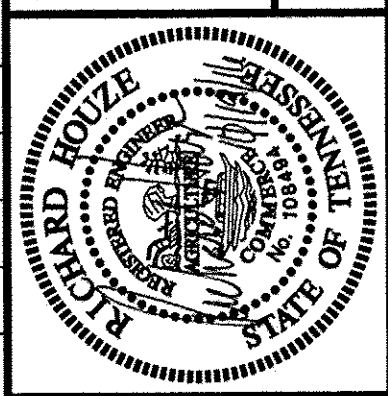
### Deed Reference:

The property shown hereon is Tax Maps: Map 159, Parcel 6.00  
8th Civil District in Rutherford County, as recorded in Record Bk. 606, Pg 664.

### STEP Design:

Design Flow = 270 Lots x 300 gpd = 81,000 gpd  
Design Loading Soil Rate = 0.15 gal/sf  
Required Land Application Area = 12.40 Acres  
Proposed Land Application Area = 12.40 Acres  
Required 50% Reserve Application Area = 6.20 Acres  
Provided 56% Reserve Application Area = 9.29 Acres

**SEC, Inc.**  
SITE ENGINEERING CONSULTANTS  
ENGINEERING • SURVEYING • LAND PLANNING  
850 MIDDLE TENNESSEE BOULEVARD  
MURFREESBORO, TENNESSEE 37129  
PHONE: (615) 890-7901  
E-MAIL: REUTZ@SEC-CIVIL.COM  
FAX: (615) 895-2667  
NO PORTION OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF SEC, INC.

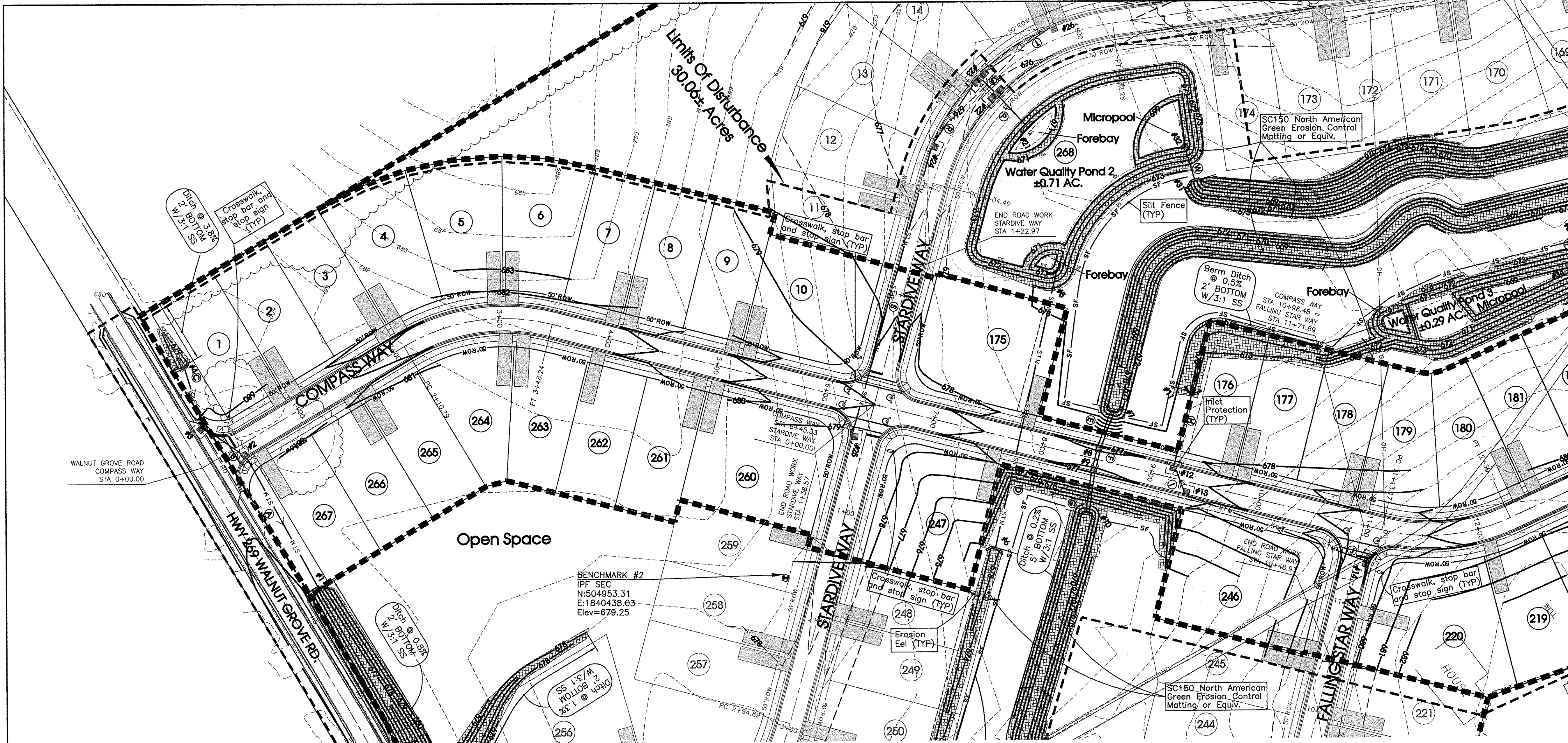


Clearview Acres  
Section 1  
Rutherford County, TN

REVISIONS:  
DRAWN: MLG  
DATE: 9-22-16  
CHECKED: RH  
FILE NAME: 14300projectP1  
SCALE: 1"=50'  
JOB NO. 14300  
SHEET: 7 of 14

Preliminary Plan





Legend:			
	EXIST. CONCRETE MONUMENT		BENCHMARK
	IRON PIN SET (I.P.S.)		HANDICAP RAMP SYMBOL
	IRON PIN FOUND (I.P.F.)	V.A.	VAN ACCESSIBLE HANDICAP DESIGNATION
	EXIST. SIGN POST		HC SIGN
	EXIST. SEWER CLEANOUT		PROPOSED SIGN POST
	EXIST. MANHOLE (SEWER AND PHONE)		CONCRETE BOLLARD
	EXIST. CATCH BASIN (STORM SEWER)		WHEEL STOP
	EXIST. WATER/GAS VALVE		CONCRETE SIDEWALK
	EXIST. TELEPHONE RISER		EXTRUDED CURB
	EXIST. GAS RISER		CURB AND GUTTER
	ELECTRICAL ENCLOSURE		TRAFFIC ARROW
	EXIST. WATER METER		TURN LANE ARROWS
	EXIST. UTILITY POLE		REVISION NUMBER
	EXIST. FIRE HYDRANT	#1	DRAINAGE STRUCTURE DESIGNATION
	POST INDICATOR VALVE		DRAINAGE PIPE DESIGNATION
	BLOW OFF VALVE		RIP RAP
	REDUCER		RUNOFF FLOW ARROW
	REMOTE FIRE DEPT. CONNECTION		INLET FILTER PROTECTION
	CONCRETE THRUST BLOCK	63.25 x	PROPOSED SPOT ELEVATION
	DOUBLE DETECTOR CHECK VALVE	(63.25) x	EXIST. SPOT ELEVATION
	FIRE DEPT. CONNECTION	>	SEWER/STORM FLOW DIRECTION
	FIRE HYDRANT		CATCH BASIN
	GATE VALVE AND BOX		CURB INLET
	WATER METER		AREA DRAIN
	GAS METER		HEADWALL
	GREASE TRAP		WINGED HEADWALL
	EXTERIOR CLEANOUT ECO		CONCRETE SWALE
	MANHOLE		TYPE- X- HEADWALL
EXISTING PHONE		_____ PH _____	
EXISTING ELECTRIC		_____ OH _____	
PROPERTY LINE		_____	
EASEMENTS		_____	
RIGHT OF WAY		_____ ROW _____	
EROSION CONTROL SILT FENCE		_____ SF _____ SF _____	
EROSION EEL		_____ E _____ E _____ E _____	
EXISTING TREELINE		_____	
EXISTING FENCELINE		_____ X _____ X _____	
MINIMUM BUILDING SETBACK LINE		_____ MBSL _____	
PHASE BOUNDARY		_____	
EXISTING GAS LINE		_____ GAS _____ GAS _____	
PROPOSED GAS LINE		_____ GAS _____ GAS _____	
EXISTING STORM		_____ STM _____ STM _____	
PROPOSED STORM		_____ STM _____ STM _____	
EXISTING CONTOUR LINES		_____ 601 _____	
PROPOSED CONTOUR LINES		_____ 601 _____	
EXISTING SANITARY SEWER		_____ SS _____ SS _____	
PROPOSED SANITARY SEWER		_____ SS _____ SS _____	
EXISTING WATER		_____ W _____ W _____	
PROPOSED WATER		_____ W _____ W _____	

DRAINAGE STRUCTURE TABLE			
NAME	T.O.G. ELEV (FT)	DESCRIPTION	J&B&S CASTING #
#1	680.42	CONCRETE WINGED HW	---
#2	680.03	SINGLE BOX	1-3104
#3	679.98	SINGLE BOX	1-3104
#4	679.90	CONCRETE WINGED HW	---
#5	673.49	CONCRETE WINGED HW	---
#6	674.25	CONCRETE WINGED HW	---
#7	673.06	ENERGY DISSIPATING HW	---
#8	676.82	SINGLE BOX	1-3104
#9	676.82	SINGLE BOX	1-3104
#10	673.19	CONCRETE WINGED HW	---
#11	675.50	ENERGY DISSIPATING HW	---
#12	677.26	SINGLE BOX	1-3104V
#13	677.43	SINGLE BOX	1-3104V
#14	678.88	DOUBLE BOX	2-3104
#15	670.50	CONCRETE WINGED HW	---
#16	674.33	SINGLE BOX	1-3104V
#17	675.75	SINGLE BOX	1-3104V
#18	677.04	DOUBLE BOX	2-3104
#19	672.04	CONCRETE WINGED HW	---
#20	677.34	SINGLE BOX	1-3104V
#21	675.00	ENERGY DISSIPATING HW	---
#22	675.65	TRIPLE BOX	3-3104
#23	675.65	TRIPLE BOX	3-3104
#24	676.10	SINGLE BOX	1-3104V
#25	678.43	SINGLE BOX	1-3104
#26	676.09	SINGLE BOX	1-3104V
#27	671.00	ENERGY DISSIPATING HW	---
#28	671.16	CONCRETE WINGED HW	---
#29	674.95	ENERGY DISSIPATING HW	---
#30	676.50	SINGLE BOX	7514
#31	671.40	CONCRETE WINGED HW	---
#32	672.50	SINGLE BOX	7514
#33	671.90	ENERGY DISSIPATING HW	---
#34	671.50	SINGLE BOX	7514
#35	669.60	ENERGY DISSIPATING HW	---
#36	669.25	SINGLE BOX	7514

DRAINAGE STRUCTURE TABLE							
NAME	STRUC (DN)	STRUC (UP)	INV (DN)	INV (UP)	LENGTH (FT)	SLOPE (%)	TYPE
A	#1	#2	676.94	677.34	133	0.30	HDPE
B	#2	#3	677.34	677.48	48	0.29	RCP III
C	#3	#4	677.48	677.65	55	0.31	HDPE
D	#5	#6	671.24	672.00	252	0.30	RCP III
E	#7	#8	669.06	669.11	34	0.15	RCP III
F	#8	#9	669.11	669.15	24	0.15	RCP III
G	#9	#10	669.15	669.21	37	0.15	RCP III
H	#11	#12	673.00	674.26	66	1.91	RCP III
I	#12	#13	674.26	674.43	29	0.56	RCP III
J	#13	#14	674.43	675.88	175	0.83	RCP III
K	#15	#16	668.00	668.88	207	0.43	RCP III
L	#16	#17	671.33	672.75	154	0.92	RCP III
M	#17	#18	672.75	674.04	176	0.73	RCP III
N	#16	#19	668.88	669.04	31	0.50	RCP III
O	#18	#20	674.04	674.34	28	1.08	RCP III
P	#21	#22	672.00	672.58	36	1.62	RCP III
Q	#22	#23	672.58	672.65	24	0.29	RCP III
R	#23	#24	672.65	673.10	74	0.60	RCP III
S	#24	#25	673.10	675.43	270	0.86	RCP III
T	#23	#26	672.65	673.09	80	0.55	RCP III
U	#27	#28	667.00	667.15	101	0.15	RCP III
V	#29	#30	671.95	672.10	30	0.50	RCP III
W	#31	#32	668.90	669.00	30	0.33	RCP III
X	#33	#34	668.90	669.00	20	0.50	RCP III
Y	#35	#36	666.60	666.80	20	1.00	RCP III

**Survey Control**  
Field Survey performed from: 09-6 to 09-27, 2016.  
Horizontal and vertical survey control is tied to the Tennessee State Plane coordinate system (NAD83/NAVD88), referenced from Rutherford County Control monument number RCC-020.

**BENCHMARK #1:**  
RR SPIKE IN WOOD POST  
N: 504471.38  
E: 1840438.03  
ELEV: 677.72

**BENCHMARK #2:**  
IPF SEC  
N: 504953.31  
E: 1840265.95  
ELEV: 679.25

COMPASS WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
2+83.28	175.00'	137.44'	45°00'00.00"	32°44'25.60"	133.94'
11+74.29	175.00'	117.60'	38°30'08.52"	32°44'25.60"	115.40'
17+63.13	175.00'	39.90'	13°03'48.43"	32°44'25.60"	39.81'
21+08.56	225.00'	334.47'	85°10'16.66"	25°27'53.25"	304.51'
25+90.15	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'
28+92.71	175.00'	37.65'	12°19'34.02"	32°44'25.60"	37.58'
40+45.20	225.00'	89.97'	22°54'42.47"	25°27'53.25"	89.38'
42+97.90	225.00'	134.55'	34°15'50.55"	25°27'53.25"	132.56'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+33.39	195.00'	227.80'	66°55'54.48"	29°22'56.82"	215.06'
7+63.38	175.00'	28.54'	09°20'35.09"	32°44'25.60"	28.51'
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FALLING STAR WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
5+51.23	195.00'	171.31'	50°20'08.53"	29°22'56.82"	165.86'

Know what's below.  
Call before you dig.

SCALE: 1"= 100'

**SEC, Inc.**  
SITE ENGINEERING CONSULTANTS  
ENGINEERING • SURVEYING • LAND PLANNING  
850 MIDDLE TENNESSEE BOULEVARD  
MURFREESBORO, TENNESSEE 37129  
PHONE: (615) 890-7801  
E-MAIL: RHOUEZ@SEC-CIVIL.COM  
FAX: (615) 895-2667  
NO PORTION OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF SEC, INC.

The site as shown on these construction drawings is based on existing topographic data and observations. It is the responsibility of the engineer to ensure that the construction of the site shown on these construction drawings is in total accordance with the design as noted, searched, and illustrated. The engineer assumes no additional liability or responsibility in the construction of the site shown on these construction drawings.

**Clearview Acres**  
**Section 1**  
**Rutherford County, TN**

Grading and Drainage and  
Intermediate EPSC Plan

REVISIONS:  
DRAWN: MLG  
DATE: 9-22-16  
CHECKED: RH  
FILE NAME: 14300projectP1  
SCALE: 1"=50'  
JOB NO. 14300  
SHEET: 8 of 14





**Survey Control**  
Field Survey performed from: 09-6 to 09-27, 2016.  
Horizontal and vertical survey control is tied to the Tennessee State Plane coordinate system (NAD83/NAVD88), referenced from Rutherford County Control monument number RCC-020.

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25+90.15	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'
28+92.71	175.00'	37.65'	12°19'34.02"	32°44'25.60"	37.58'
40+45.20	225.00'	89.97'	22°54'42.47"	25°27'53.25"	89.38'
42+97.90	225.00'	134.55'	34°15'50.55"	25°27'53.25"	132.56'

STARDIVE WAY					
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STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
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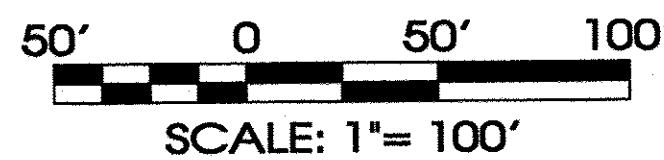
DRAINAGE STRUCTURE TABLE							
NAME	STRUC (DN)	STRUC (UP)	INV (DN)	INV (UP)	LENGTH (FT)	SLOPE (%)	TYPE
A	#1	#2	676.94	677.34	133	0.30	HOPE
B	#2	#3	677.34	677.48	48	0.29	RCP III
C	#3	#4	677.48	677.65	55	0.31	HOPE
D	#5	#6	671.24	672.00	252	0.30	RCP III
E	#7	#8	669.06	669.11	34	0.15	RCP III
F	#8	#9	669.11	669.15	24	0.15	RCP III
G	#9	#10	669.15	669.21	37	0.15	RCP III
H	#11	#12	673.00	674.26	66	1.91	RCP III
I	#12	#13	674.26	674.43	29	0.56	RCP III
J	#13	#14	674.43	675.88	175	0.83	RCP III
K	#15	#16	668.00	668.88	207	0.43	RCP III
L	#16	#17	671.33	672.75	154	0.92	RCP III
M	#17	#18	672.75	674.04	176	0.73	RCP III
N	#16	#19	668.88	669.04	31	0.50	RCP III
O	#18	#20	674.04	674.34	28	1.08	RCP III
P	#21	#22	672.00	672.58	36	1.62	RCP III
Q	#22	#23	672.58	672.65	24	0.29	RCP III
R	#23	#24	672.65	673.10	74	0.60	RCP III
S	#24	#25	673.10	675.43	270	0.86	RCP III
T	#23	#26	672.65	673.09	80	0.55	RCP III
U	#27	#28	667.00	667.15	101	0.15	RCP III
V	#29	#30	671.95	672.10	30	0.50	RCP III
W	#31	#32	668.90	669.00	30	0.33	RCP III
X	#33	#34	668.90	669.00	20	0.50	RCP III
Y	#35	#36	666.60	666.80	20	1.00	RCP III

DRAINAGE STRUCTURE TABLE			
NAME	T.O.G. ELEV (FT)	DESCRIPTION	JBandS CASTING #
#1	680.42	CONCRETE WINGED HW	-
#2	680.03	SINGLE BOX	1-3104
#3	679.98	SINGLE BOX	1-3104
#4	679.90	CONCRETE WINGED HW	-
#5	673.49	CONCRETE WINGED HW	-
#6	674.25	CONCRETE WINGED HW	-
#7	673.06	ENERGY DISSIPATING HW	-
#8	676.82	SINGLE BOX	1-3104
#9	676.82	SINGLE BOX	1-3104
#10	673.19	CONCRETE WINGED HW	-
#11	675.50	ENERGY DISSIPATING HW	-
#12	677.26	SINGLE BOX	1-3104V
#13	677.43	SINGLE BOX	1-3104V
#14	678.88	DOUBLE BOX	2-3104
#15	670.50	CONCRETE WINGED HW	-
#16	674.33	SINGLE BOX	1-3104V
#17	675.75	SINGLE BOX	1-3104V
#18	677.04	DOUBLE BOX	2-3104
#19	672.04	CONCRETE WINGED HW	-
#20	677.34	SINGLE BOX	1-3104V
#21	675.00	ENERGY DISSIPATING HW	-
#22	675.65	TRIPLE BOX	3-3104
#23	675.65	TRIPLE BOX	3-3104
#24	676.10	SINGLE BOX	1-3104V
#25	678.43	SINGLE BOX	1-3104
#26	676.09	SINGLE BOX	1-3104V
#27	671.00	ENERGY DISSIPATING HW	-
#28	671.16	CONCRETE WINGED HW	-
#29	674.95	ENERGY DISSIPATING HW	-
#30	676.50	SINGLE BOX	7514
#31	671.40	CONCRETE WINGED HW	-
#32	672.50	SINGLE BOX	7514
#33	671.90	ENERGY DISSIPATING HW	-
#34	671.50	SINGLE BOX	7514
#35	669.60	ENERGY DISSIPATING HW	-
#36	669.25	SINGLE BOX	7514

Legend:			
	EXIST. CONCRETE MONUMENT		BENCHMARK
	IRON PIN SET (I.P.S.)		HANDICAP RAMP SYMBOL
	IRON PIN FOUND (I.P.F.)		VAN ACCESSIBLE HANDICAP DESIGNATION
	EXIST. SIGN POST		HC SIGN
	EXIST. SEWER CLEANOUT		PROPOSED SIGN POST
	EXIST. MANHOLE (SEWER and PHONE)		CONCRETE BOLLARD
	EXIST. CATCH BASIN (STORM SEWER)		WHEEL STOP
	EXIST. WATER/GAS VALVE		CONCRETE SIDEWALK
	EXIST. TELEPHONE RISER		EXTRUDED CURB
	EXIST. GAS RISER		CURB AND GUTTER
	ELECTRICAL ENCLOSURE		TRAFFIC ARROW
	EXIST. WATER METER		TURN LANE ARROWS
	EXIST. UTILITY POLE		REVISION NUMBER
	EXIST. FIRE HYDRANT		DRAINAGE STRUCTURE DESIGNATION
	POST INDICATOR VALVE		DRAINAGE PIPE DESIGNATION
	BLOW OFF VALVE		RIP RAP
	REDUCER		RUNOFF FLOW ARROW
	REMOTE FIRE DEPT. CONNECTION		INLET FILTER PROTECTION
	CONCRETE THRUST BLOCK		PROPOSED SPOT ELEVATION
	DOUBLE DETECTOR CHECK VALVE		EXIST. SPOT ELEVATION
	FIRE DEPT. CONNECTION		SEWER/STORM FLOW DIRECTION
	FIRE HYDRANT		CATCH BASIN
	GATE VALVE and BOX		CURB INLET
	WATER METER		AREA DRAIN
	GAS METER		HEADWALL
	GREASE TRAP		WINGED HEADWALL
	EXTERIOR CLEANOUT EOO		CONCRETE SWALE
	MANHOLE		TYPE- X- HEADWALL
EXISTING PHONE			
EXISTING ELECTRIC			
PROPERTY LINE			
EASEMENTS			
RIGHT OF WAY			
EROSION CONTROL			
SILT FENCE			
EROSION EEL			
EXISTING TREELINE			
EXISTING FENCELINE			
MINIMUM BUILDING SETBACK LINE			
PHASE BOUNDARY			
EXISTING GAS LINE			
PROPOSED GAS LINE			
EXISTING STORM			
PROPOSED STORM			
EXISTING CONTOUR LINES			
PROPOSED CONTOUR LINES			
EXISTING SANITARY SEWER			
PROPOSED SANITARY SEWER			
EXISTING WATER			
PROPOSED WATER			



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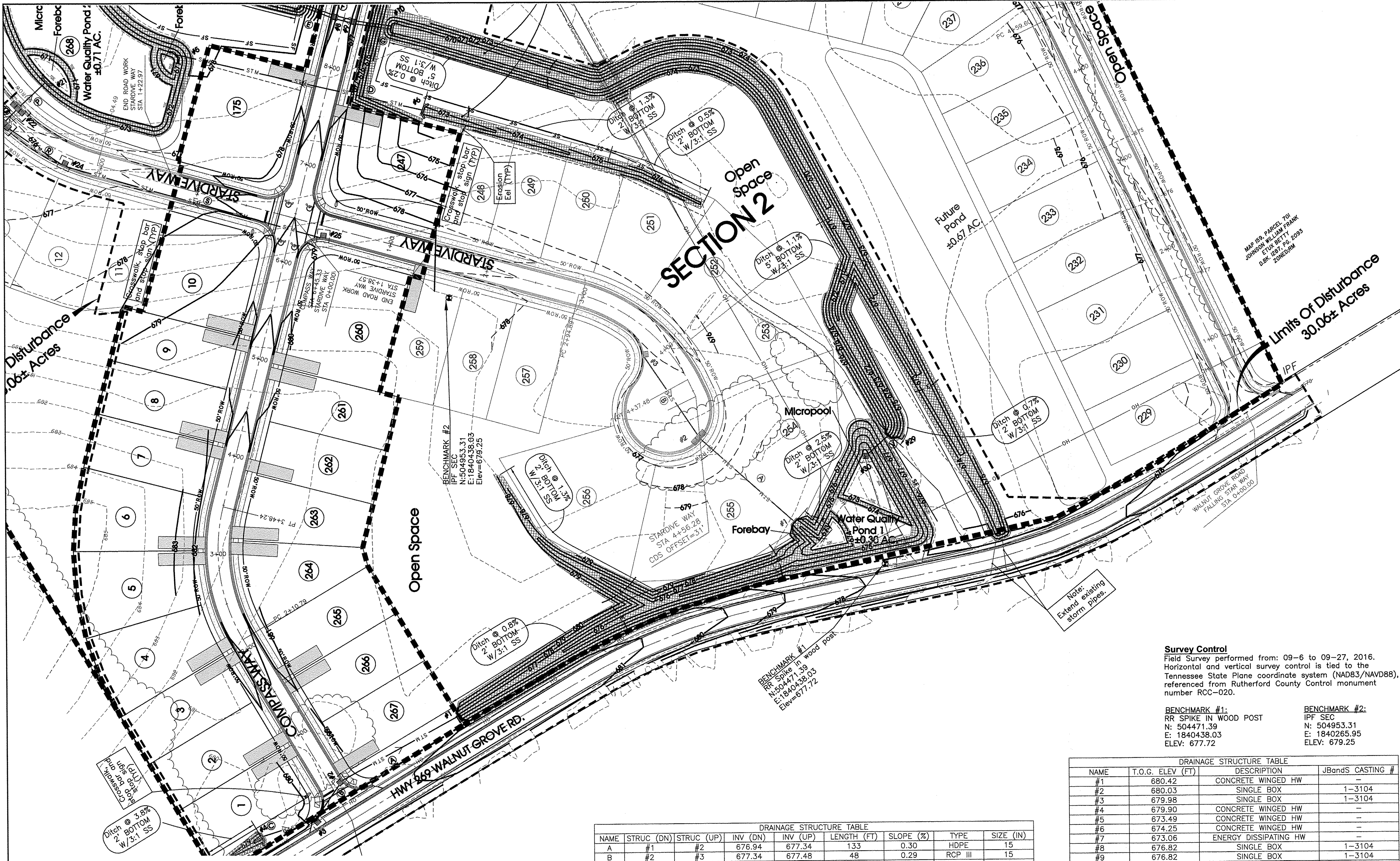
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ENGINEERING • SURVEYING • LAND PLANNING  
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Clearview Acres  
Section 1  
Rutherford County, TN

Grading and Drainage and  
Intermediate EPSC Plan

REVISIONS:  
DRAWN: MLG  
DATE: 9-22-16  
CHECKED:  
RH  
FILE NAME:  
14300projectP1  
SCALE:  
1"=50'  
JOB NO.  
14300  
SHEET:  
9 of 14





**Legend:**

EXIST. CONCRETE MONUMENT	BENCHMARK
IRON PIN SET (I.P.S.)	HANDICAP RAMP SYMBOL
IRON PIN FOUND (I.P.F.)	V.A. VAN ACCESSIBLE HANDICAP DESIGNATION
EXIST. SIGN POST	HC SIGN
EXIST. SEWER CLEANOUT	PROPOSED SIGN POST
EXIST. MANHOLE (SEWER AND PHONE)	CONCRETE BOLLARD
EXIST. CATCH BASIN (STORM SEWER)	WHEEL STOP
EXIST. WATER/GAS VALVE	CONCRETE SIDEWALK
EXIST. TELEPHONE RISER	EXTRUDED CURB
EXIST. GAS RISER	CURB and GUTTER
ELECTRICAL ENCLOSURE	TRAFFIC ARROW
EXIST. WATER METER	TURN LANE ARROWS
EXIST. UTILITY POLE	REVISION NUMBER
EXIST. FIRE HYDRANT	#1 DRAINAGE STRUCTURE DESIGNATION
POST INDICATOR VALVE	DRAINAGE PIPE DESIGNATION
BLOW OFF VALVE	RIP RAP
REDUCER	RUNOFF FLOW ARROW
REMOTE FIRE DEPT. CONNECTION	INLET FILTER PROTECTION
CONCRETE THRUST BLOCK	PROPOSED SPOT ELEVATION
DOUBLE DETECTOR CHECK VALVE	EXIST. SPOT ELEVATION
FIRE DEPT. CONNECTION	SEWER/STORM FLOW DIRECTION
FIRE HYDRANT	CATCH BASIN
GATE VALVE and BOX	CURB INLET
WATER METER	AREA DRAIN
GAS METER	HEADWALL
GREASE TRAP	WINGED HEADWALL
EXTERIOR CLEANOUT ECO	CONCRETE SWALE
MANHOLE	TYPE- X- HEADWALL

EXISTING PHONE	PH
EXISTING ELECTRIC	OH
PROPERTY LINE	
EASEMENTS	
RIGHT OF WAY	ROW
EROSION CONTROL SILT FENCE	SF SF
EROSION EEL	E E E E
EXISTING TREELINE	
EXISTING FENCELINE	X X
MINIMUM BUILDING SETBACK LINE	MBSL
PHASE BOUNDARY	
EXISTING GAS LINE	GAS GAS
PROPOSED GAS LINE	GAS GAS
EXISTING STORM	STM STM
PROPOSED STORM	STM STM
EXISTING CONTOUR LINES	601
PROPOSED CONTOUR LINES	601
EXISTING SANITARY SEWER	SS SS
PROPOSED SANITARY SEWER	SS SS
EXISTING WATER	W W
PROPOSED WATER	W W

COMPASS WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
2+83.28	175.00'	137.44'	45°00'00.00"	32°44'25.60"	133.94'
11+74.29	175.00'	117.60'	38°30'08.52"	32°44'25.60"	115.40'
17+63.13	175.00'	39.90'	13°03'48.43"	32°44'25.60"	39.81'
21+08.56	225.00'	334.47'	85°10'16.66"	25°27'53.25"	304.51'
25+90.15	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'
28+92.71	175.00'	37.65'	12°19'34.02"	32°44'25.60"	37.58'
40+45.20	225.00'	89.97'	22°54'42.47"	25°27'53.25"	89.38'
42+97.90	225.00'	134.55'	34°15'50.55"	25°27'53.25"	132.56'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+33.39	195.00'	227.80'	66°55'54.48"	29°22'56.82"	215.06'
7+63.38	175.00'	28.54'	09°20'35.09"	32°44'25.60"	28.51'
15+27.77	175.00'	33.28'	10°53'51.14"	32°44'25.60"	33.23'

STARDIVE WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
3+70.41	175.00'	142.58'	46°40'55.36"	32°44'25.60"	138.67'

FALLING STAR WAY					
PI Station	Radius Length	Arc Length	Delta Angle	Degree of Curve	Chord Length
5+51.23	195.00'	171.31'	50°20'08.53"	29°22'56.82"	165.86'

DRAINAGE STRUCTURE TABLE							
NAME	STRUC (DN)	STRUC (UP)	INV (DN)	INV (UP)	LENGTH (FT)	SLOPE (%)	SIZE (IN)
A	#1	#2	676.94	677.34	133	0.30	HOPE 15
B	#2	#3	677.34	677.48	48	0.29	RCP III 15
C	#3	#4	677.48	677.65	55	0.31	HOPE 15
D	#5	#6	671.24	672.00	252	0.30	RCP III 15
E	#7	#8	669.06	669.11	34	0.15	RCP III 2-36
F	#8	#9	669.11	669.15	24	0.15	RCP III 2-36
G	#9	#10	669.15	669.21	37	0.15	RCP III 2-36
H	#11	#12	673.00	674.26	66	1.91	RCP III 15
I	#12	#13	674.26	674.43	29	0.56	RCP III 15
J	#13	#14	674.43	675.88	175	0.83	RCP III 15
K	#15	#16	668.00	668.88	207	0.43	RCP III 18
L	#16	#17	671.33	672.75	154	0.92	RCP III 18
M	#17	#18	672.75	674.04	176	0.73	RCP III 18
N	#16	#19	668.88	669.04	31	0.50	RCP III 18
O	#18	#20	674.04	674.34	28	1.08	RCP III 18
P	#21	#22	672.00	672.58	36	1.62	RCP III 18
Q	#22	#23	672.58	672.65	24	0.29	RCP III 18
R	#23	#24	672.65	673.10	74	0.60	RCP III 18
S	#24	#25	673.10	675.43	270	0.86	RCP III 18
T	#23	#26	672.65	673.09	80	0.55	RCP III 18
U	#27	#28	667.00	667.15	101	0.15	RCP III 2-36
V	#29	#30	671.95	672.10	30	0.50	RCP III 24
W	#31	#32	668.90	669.00	30	0.33	RCP III 18
X	#33	#34	668.90	669.00	20	0.50	RCP III 24X38
Y	#35	#36	666.60	666.80	20	1.00	RCP III 4-24

DRAINAGE STRUCTURE TABLE			
NAME	T.O.G. ELEV (FT)	DESCRIPTION	JBANDS CASTING #
#1	680.42	CONCRETE WINGED HW	-
#2	680.03	SINGLE BOX	1-3104
#3	679.98	SINGLE BOX	1-3104
#4	679.90	CONCRETE WINGED HW	-
#5	673.49	CONCRETE WINGED HW	-
#6	674.25	CONCRETE WINGED HW	-
#7	673.06	ENERGY DISSIPATING HW	-
#8	676.82	SINGLE BOX	1-3104
#9	676.82	SINGLE BOX	1-3104
#10	673.19	CONCRETE WINGED HW	-
#11	675.50	ENERGY DISSIPATING HW	-
#12	677.26	SINGLE BOX	1-3104V
#13	677.43	SINGLE BOX	1-3104V
#14	678.88	DOUBLE BOX	2-3104
#15	670.50	CONCRETE WINGED HW	-
#16	674.33	SINGLE BOX	1-3104V
#17	675.75	SINGLE BOX	1-3104V
#18	677.04	DOUBLE BOX	2-3104
#19	672.04	CONCRETE WINGED HW	-
#20	677.34	SINGLE BOX	1-3104V
#21	675.00	ENERGY DISSIPATING HW	-
#22	675.65	TRIPLE BOX	3-3104
#23	675.65	TRIPLE BOX	3-3104
#24	676.10	SINGLE BOX	1-3104V
#25	678.43	SINGLE BOX	1-3104
#26	676.09	SINGLE BOX	1-3104V
#27	671.00	ENERGY DISSIPATING HW	-
#28	671.16	CONCRETE WINGED HW	-
#29	674.95	ENERGY DISSIPATING HW	-
#30	676.50	SINGLE BOX	7514
#31	671.40	CONCRETE WINGED HW	-
#32	672.50	SINGLE BOX	7514
#33	671.90	ENERGY DISSIPATING HW	-
#34	671.50	SINGLE BOX	7514
#35	669.60	ENERGY DISSIPATING HW	-
#36	669.25	SINGLE BOX	7514

Know what's below.  
Call before you dig.

50' 0 50' 100'  
SCALE: 1"= 100'

REVISIONS:

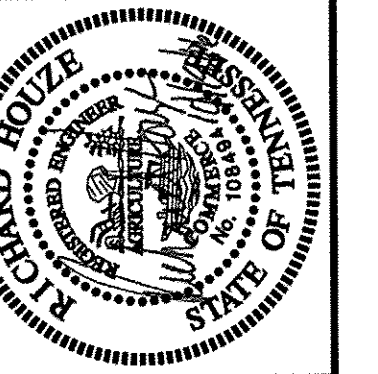
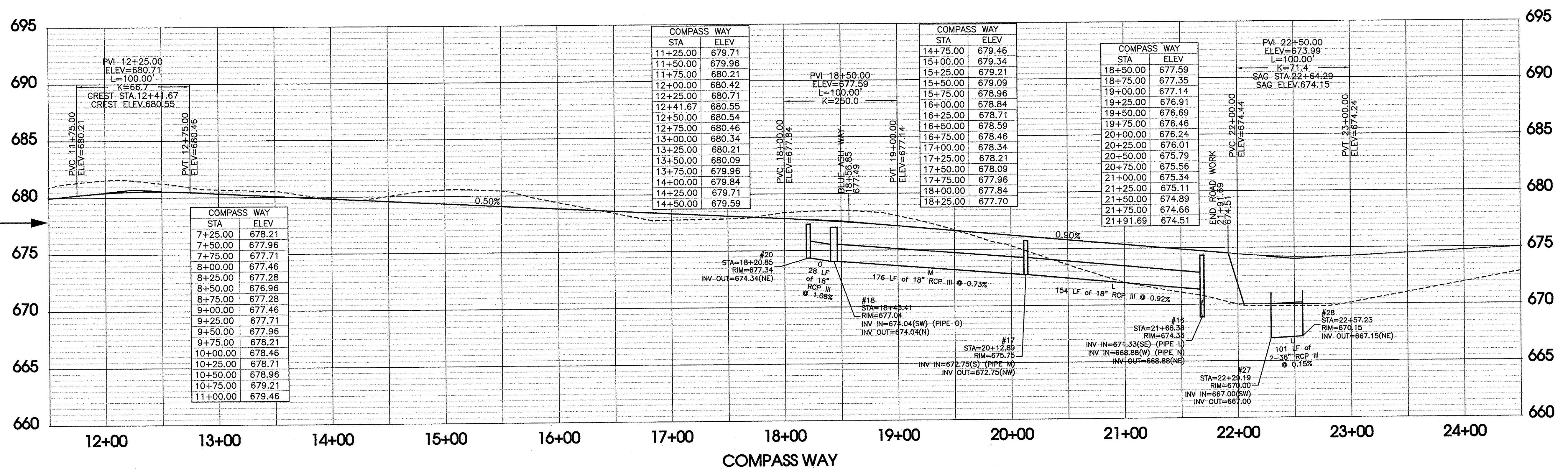
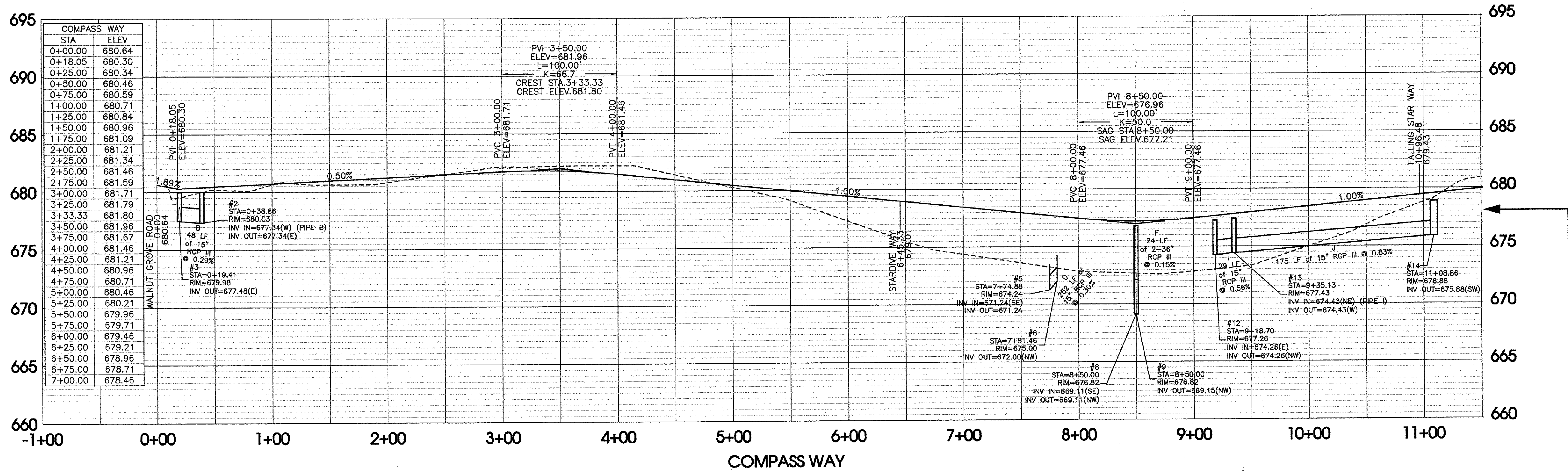
DATE: 9-22-16
CHECKED: RH
FILE NAME: 14300projectP1
SCALE: 1"=50'
JOB NO. 14300
SHEET: 10 of 14

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Section 1  
Rutherford County, TN

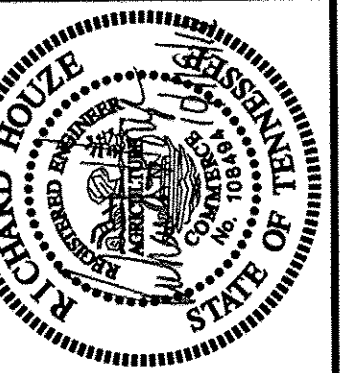
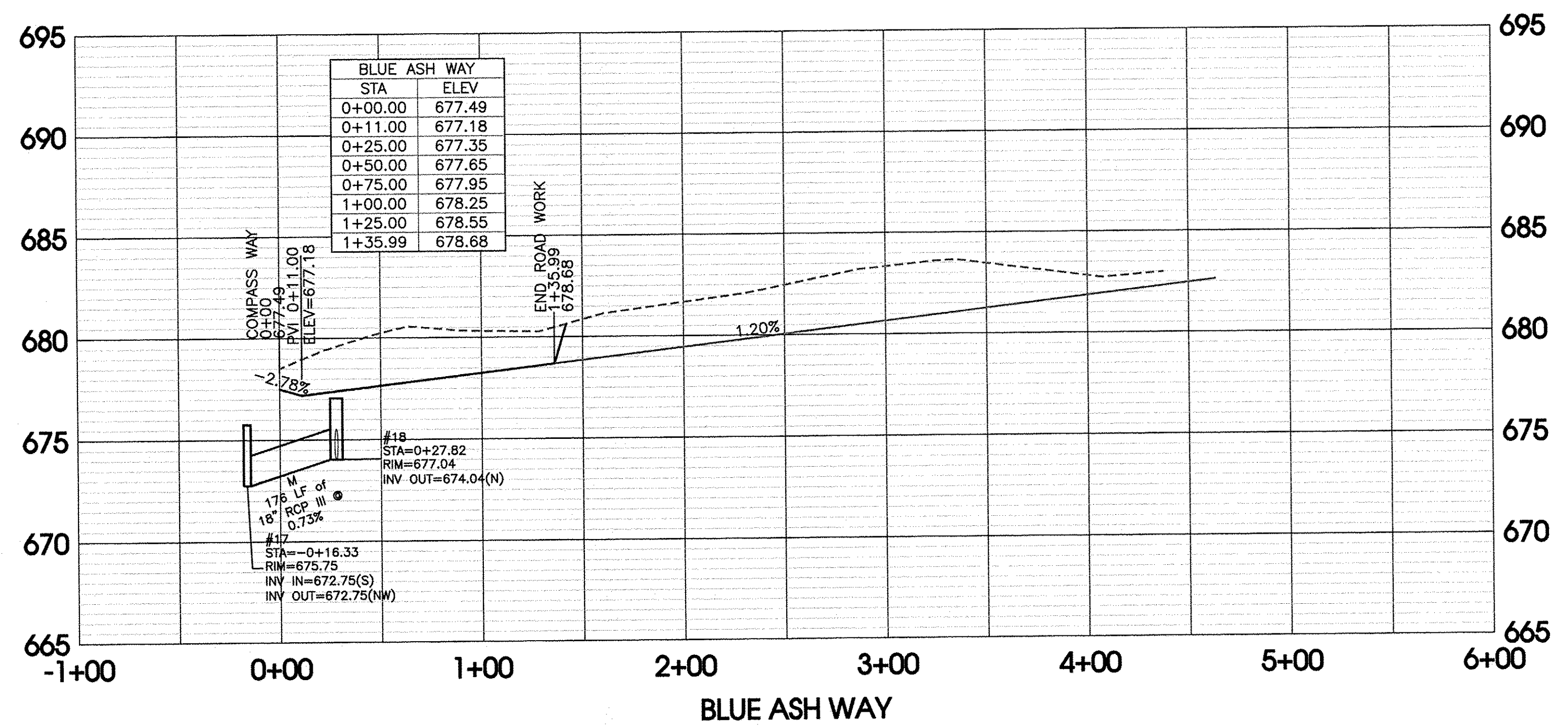
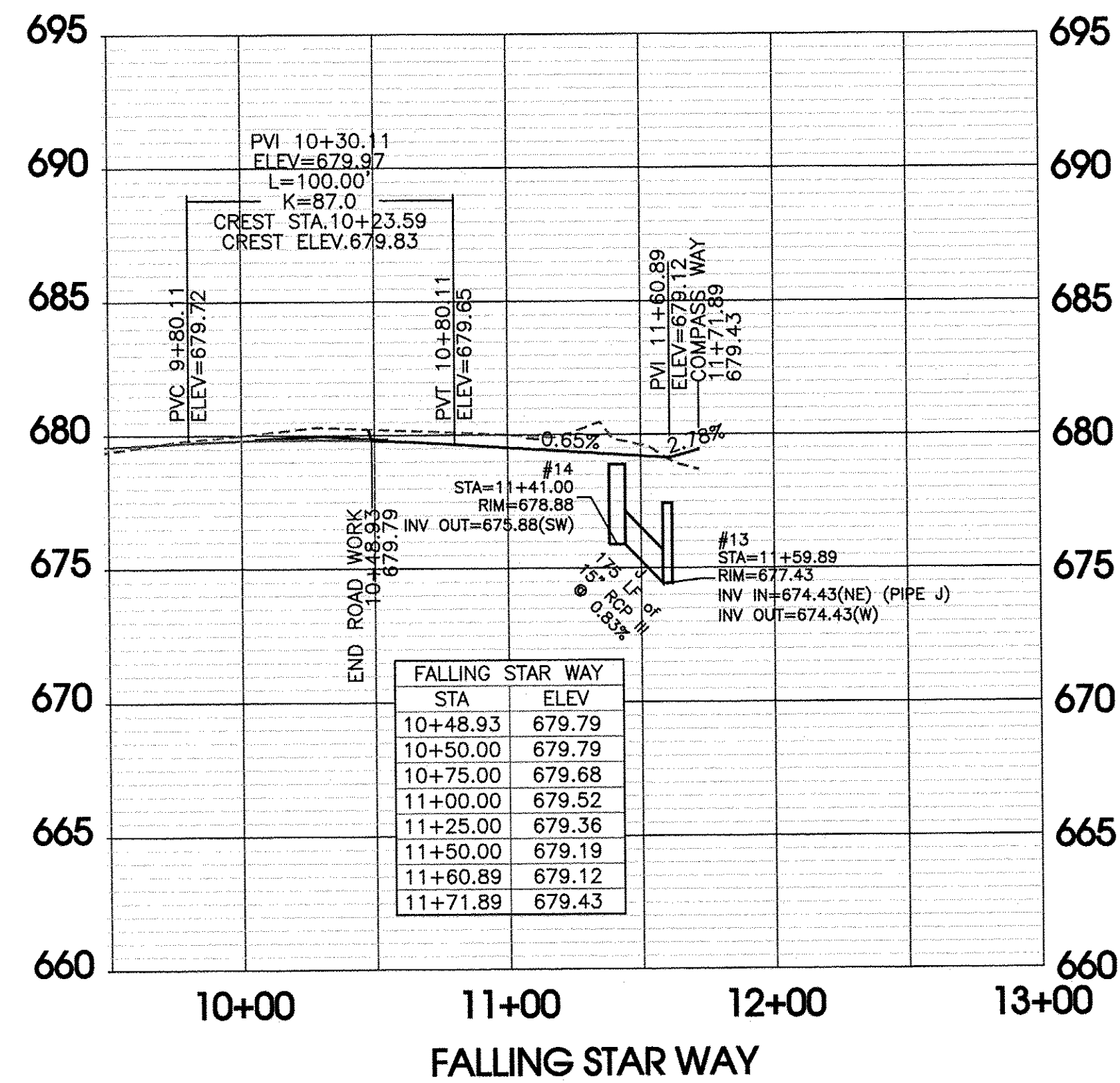
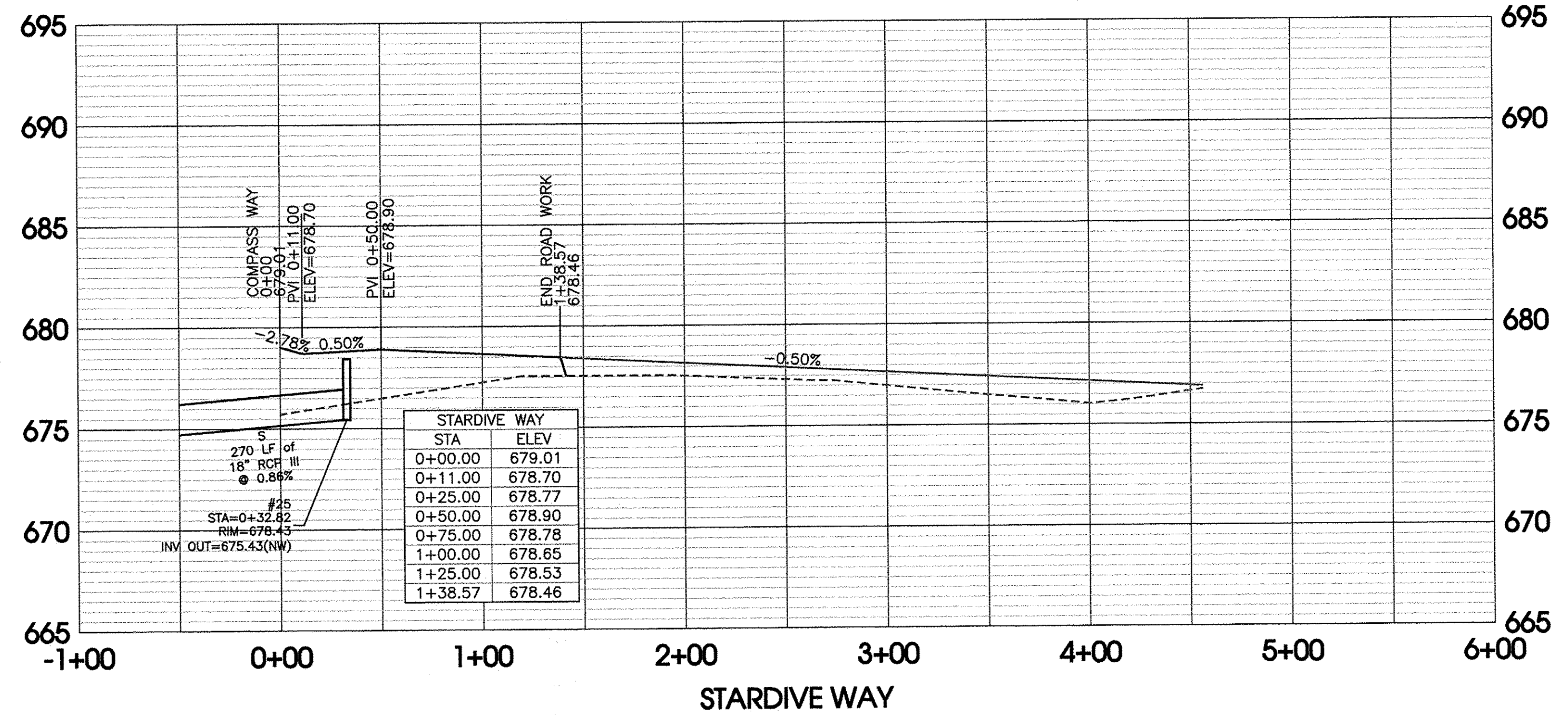
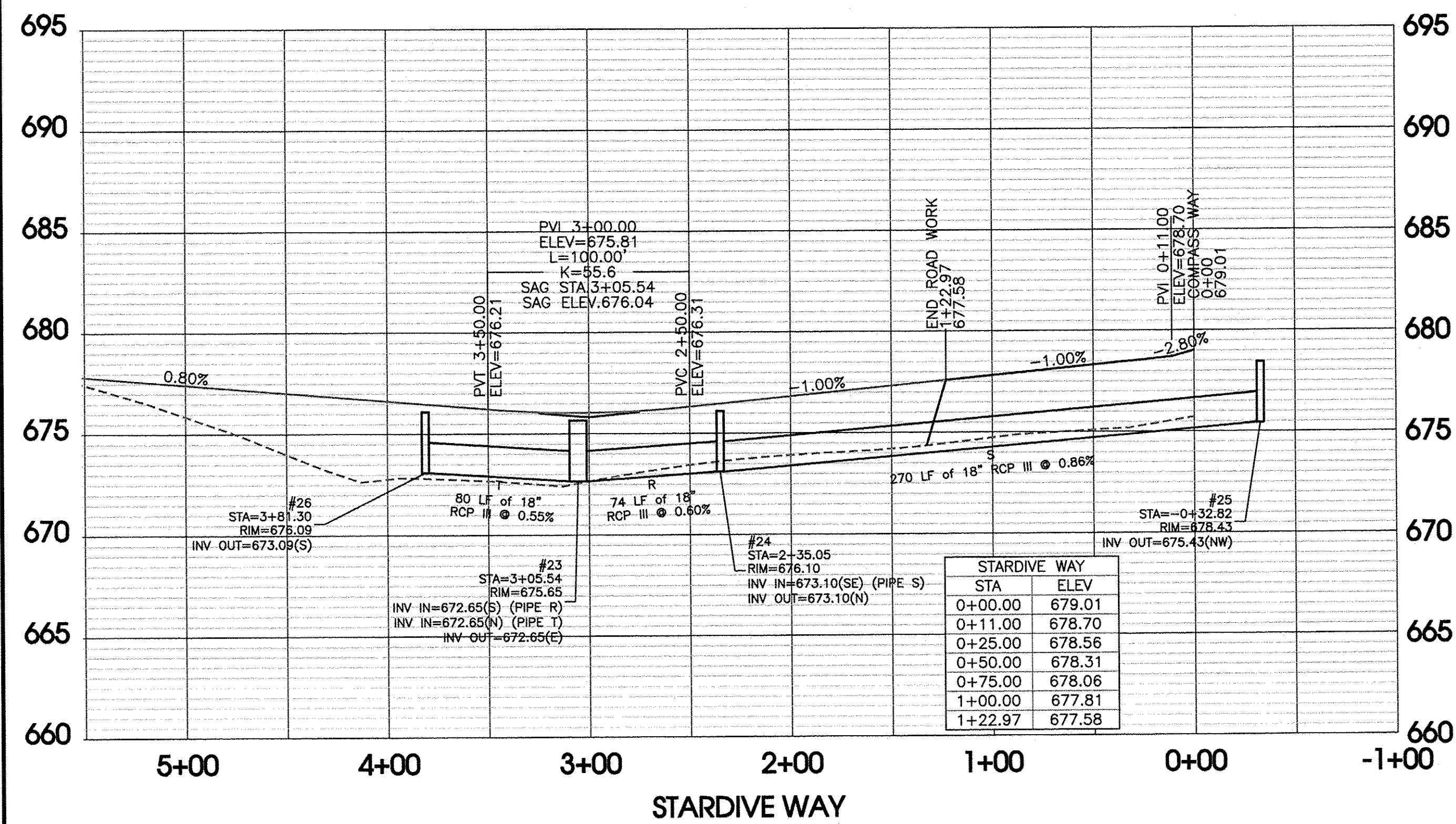
**Grading and Drainage and Intermediate EPSC Plan**



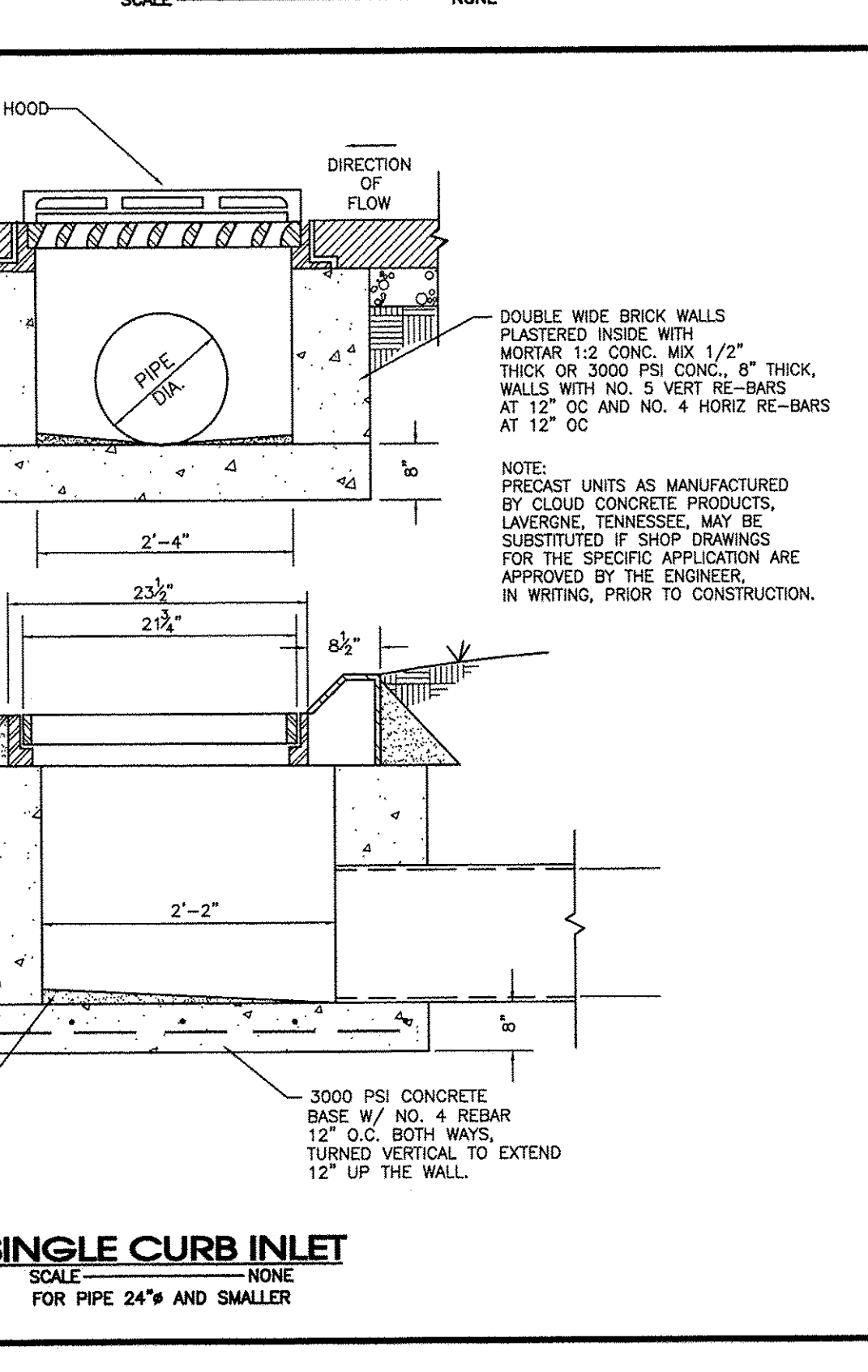
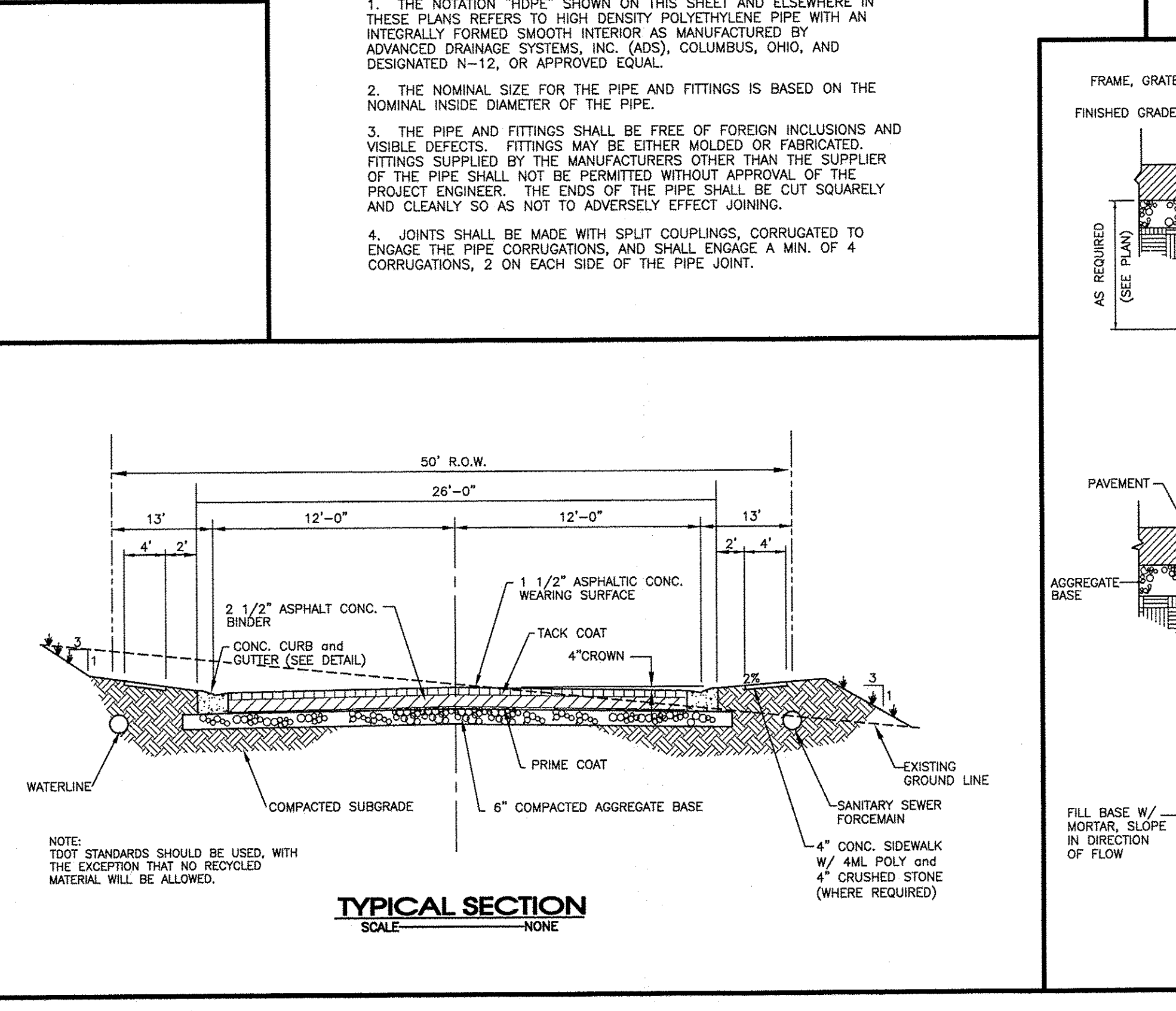
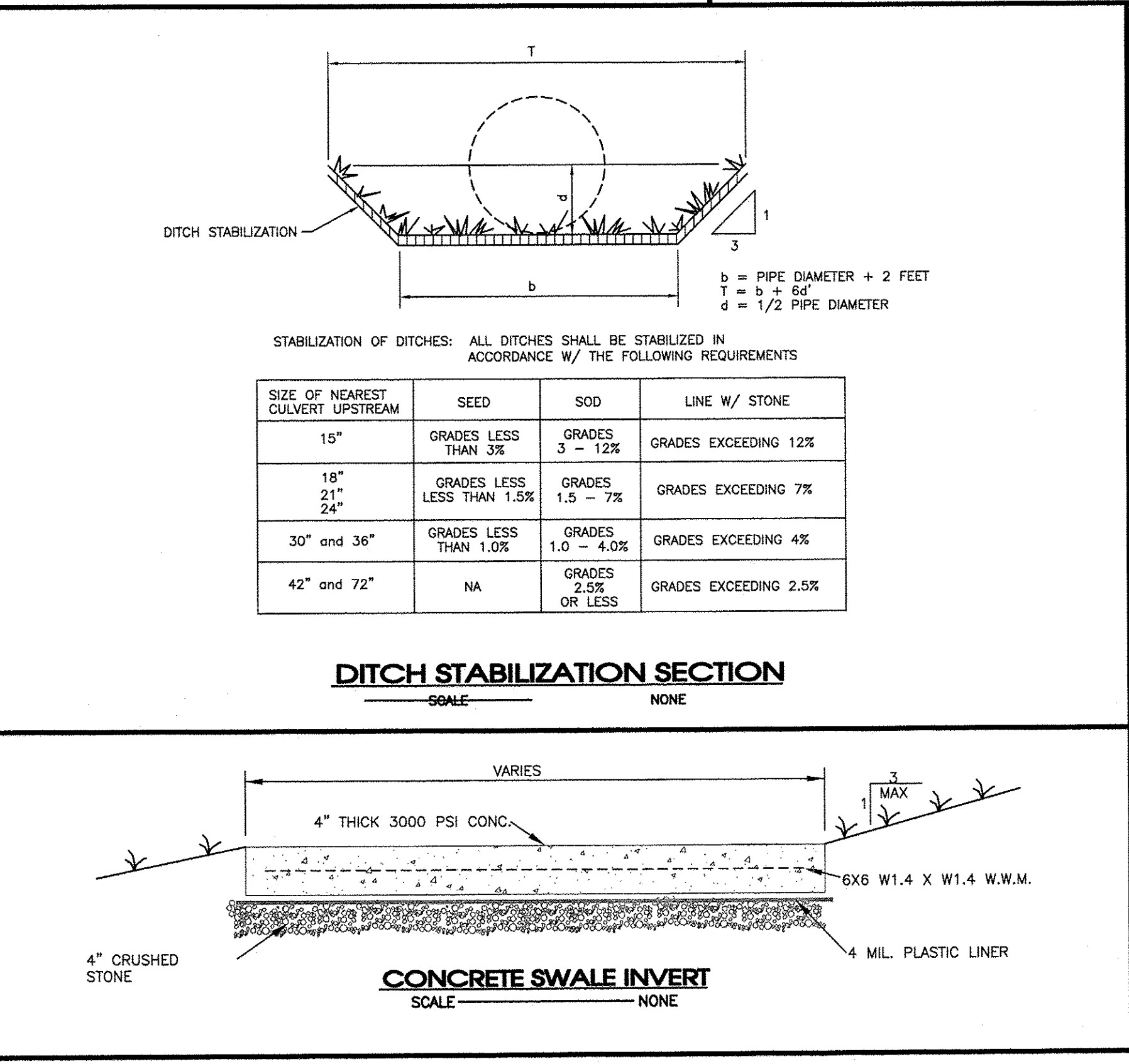
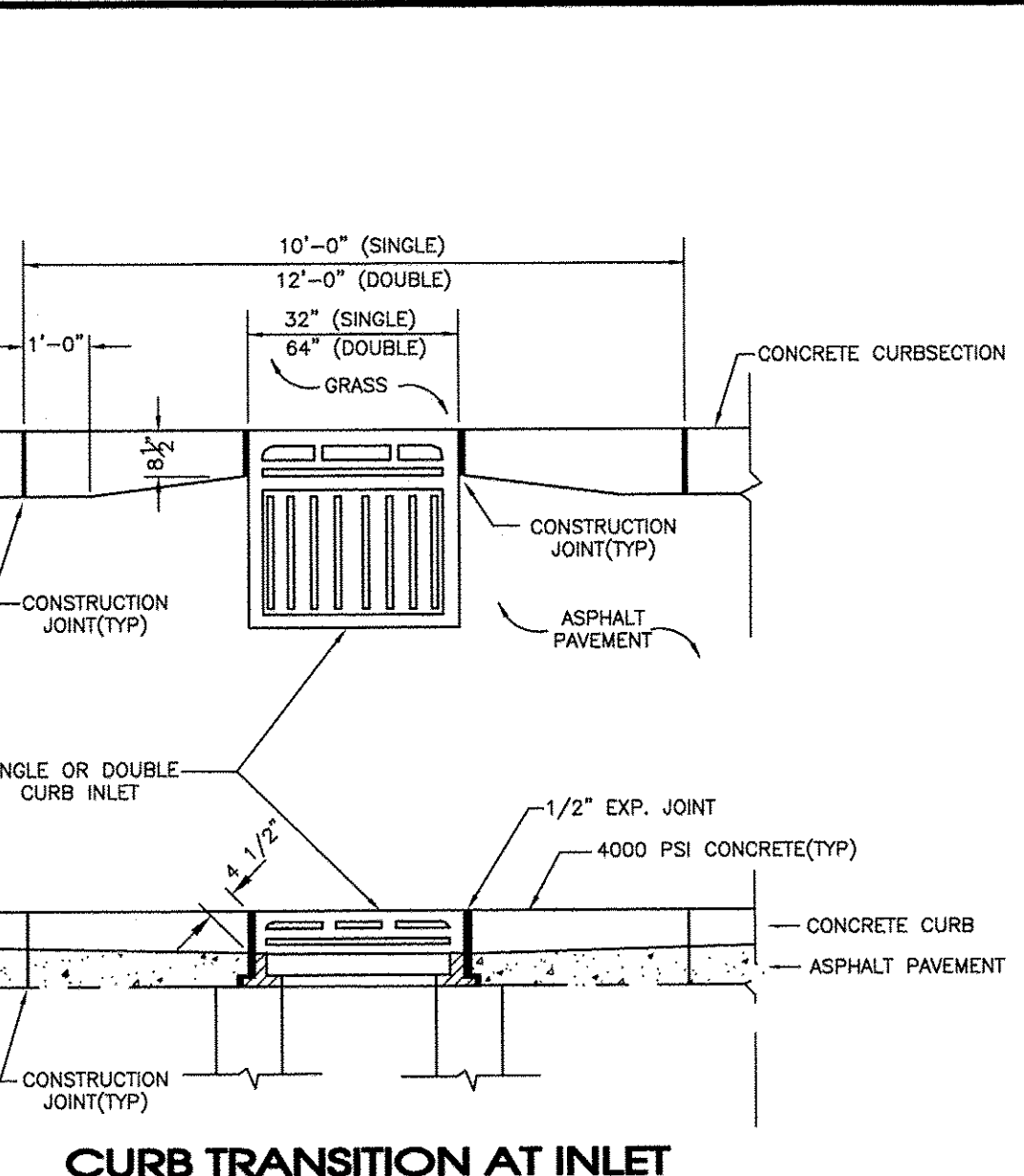
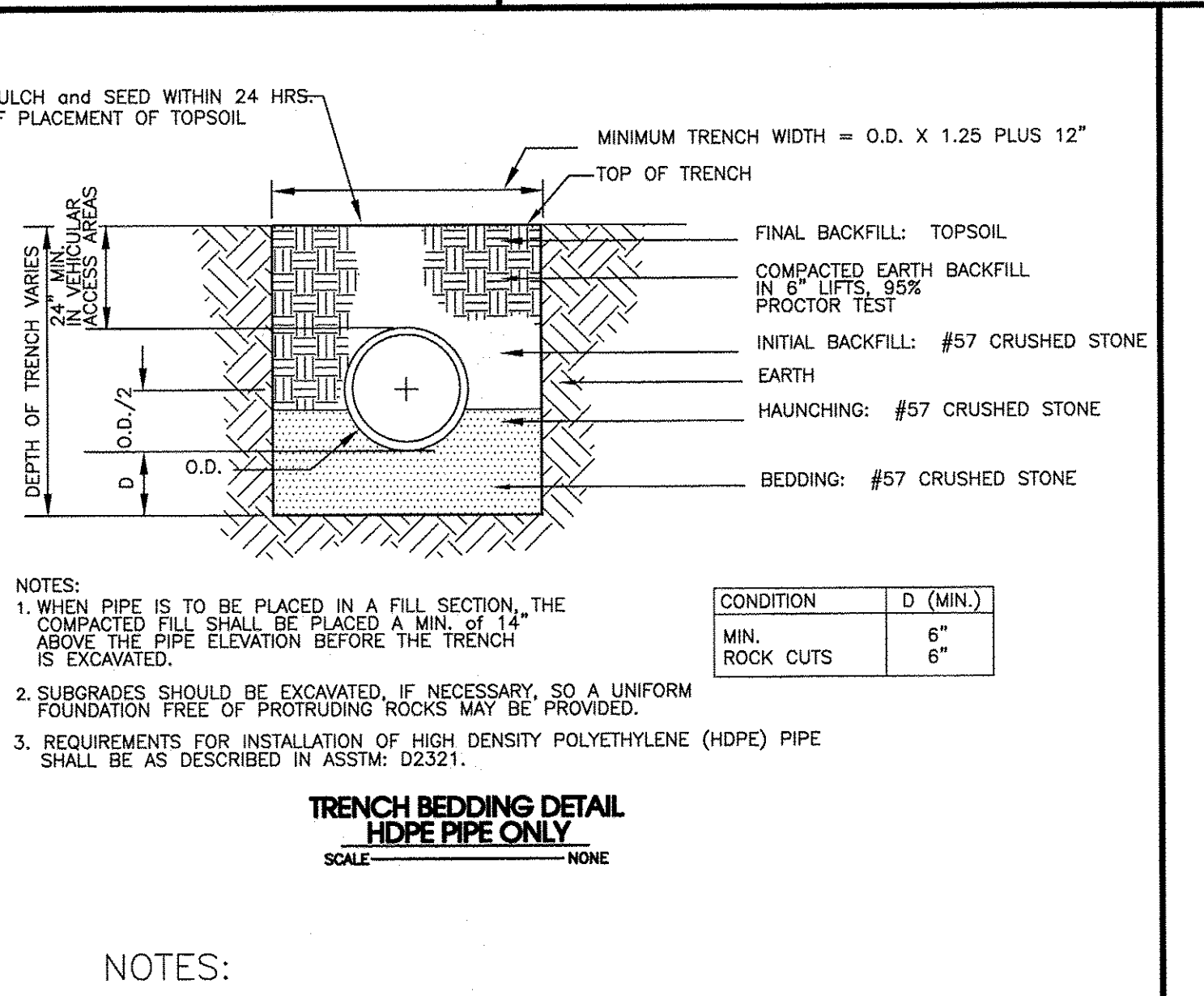
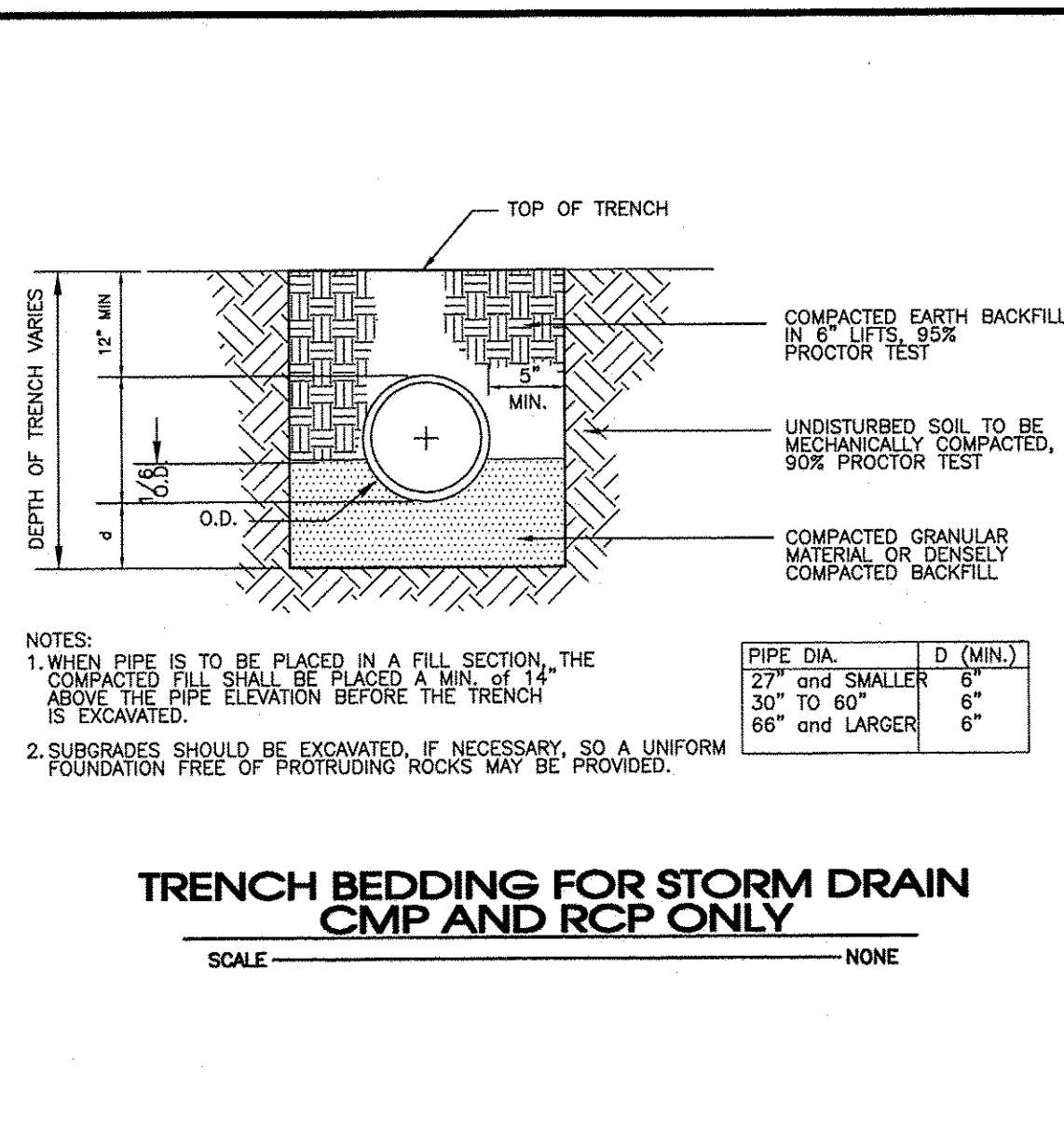
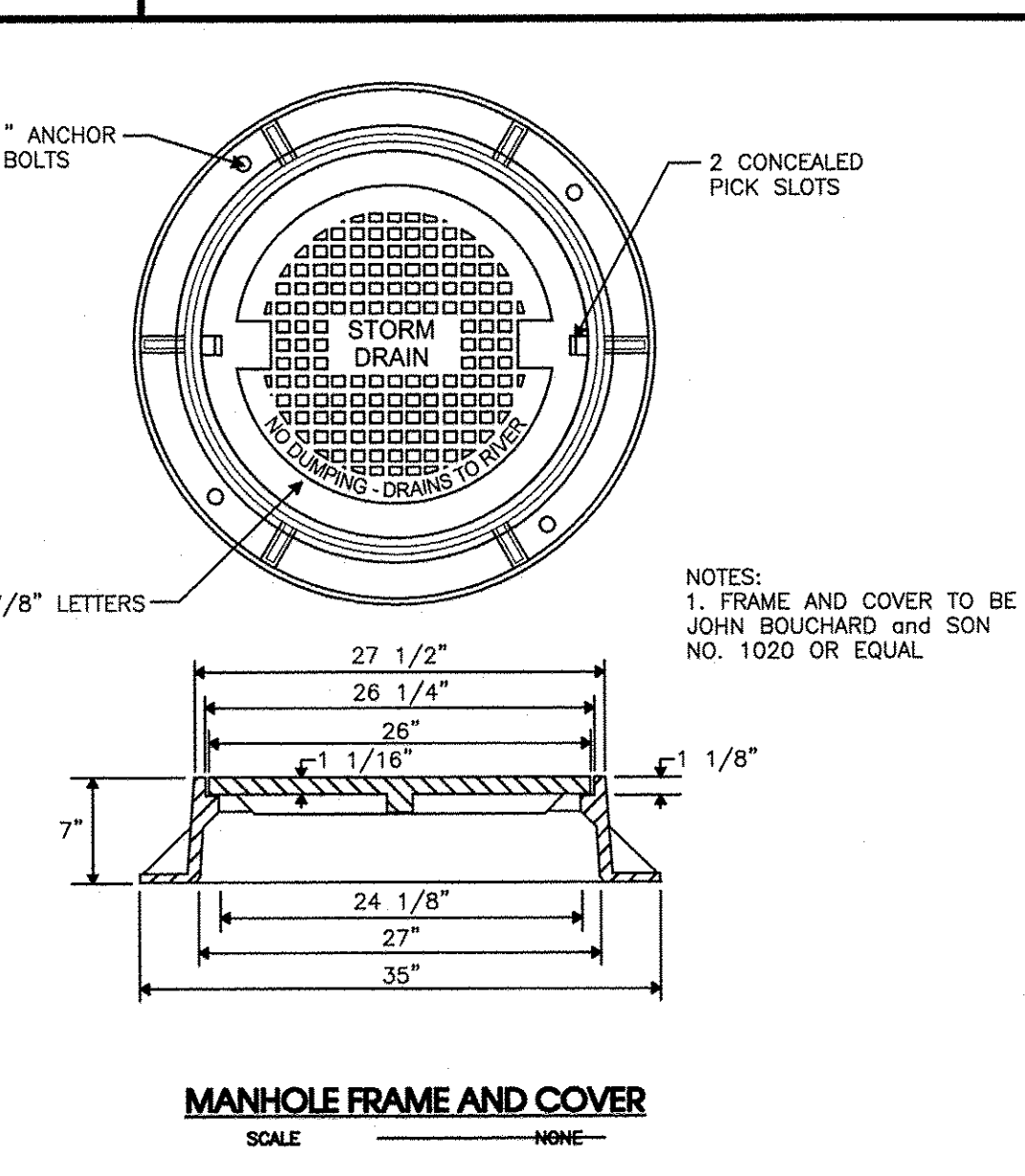
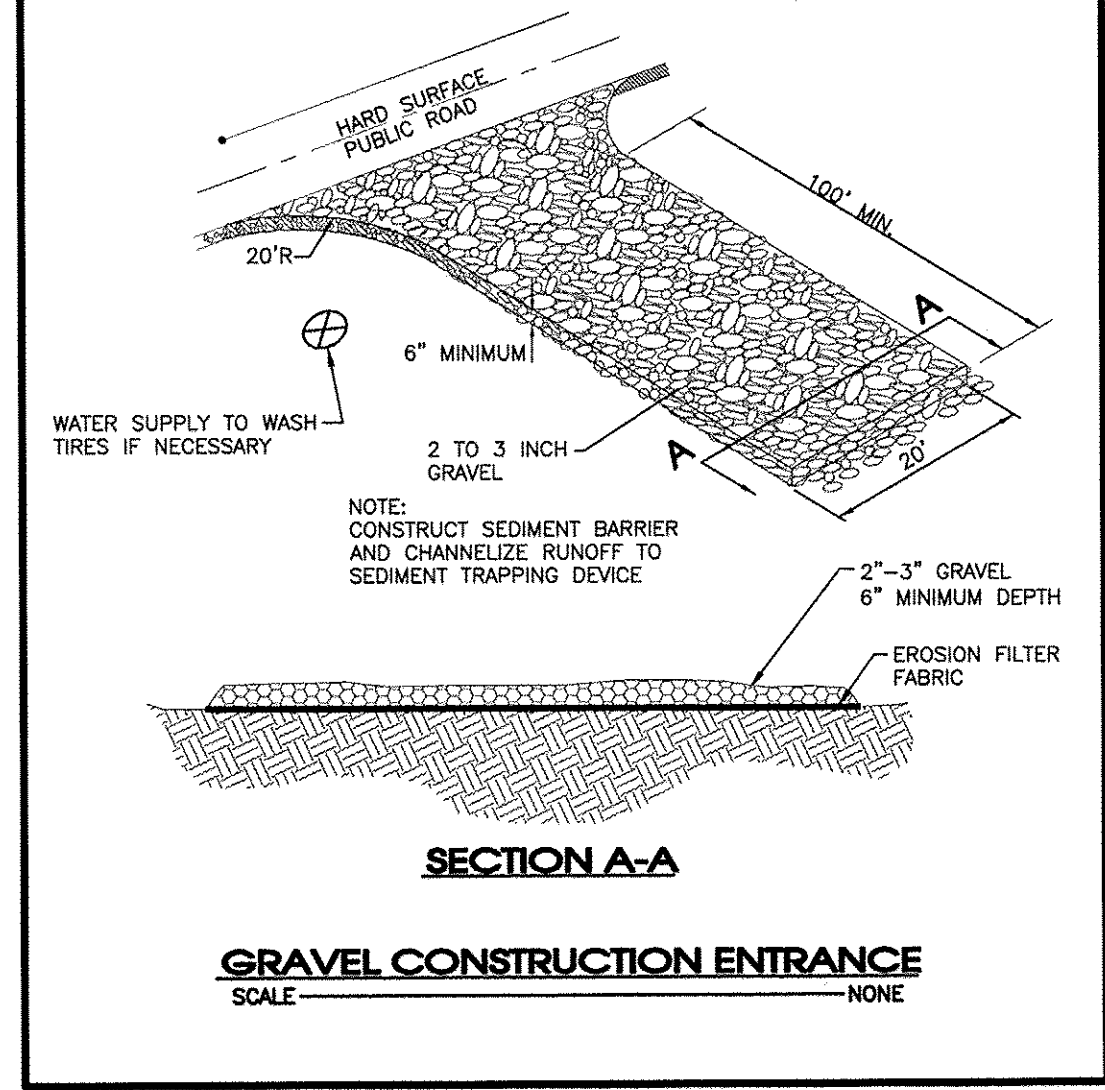
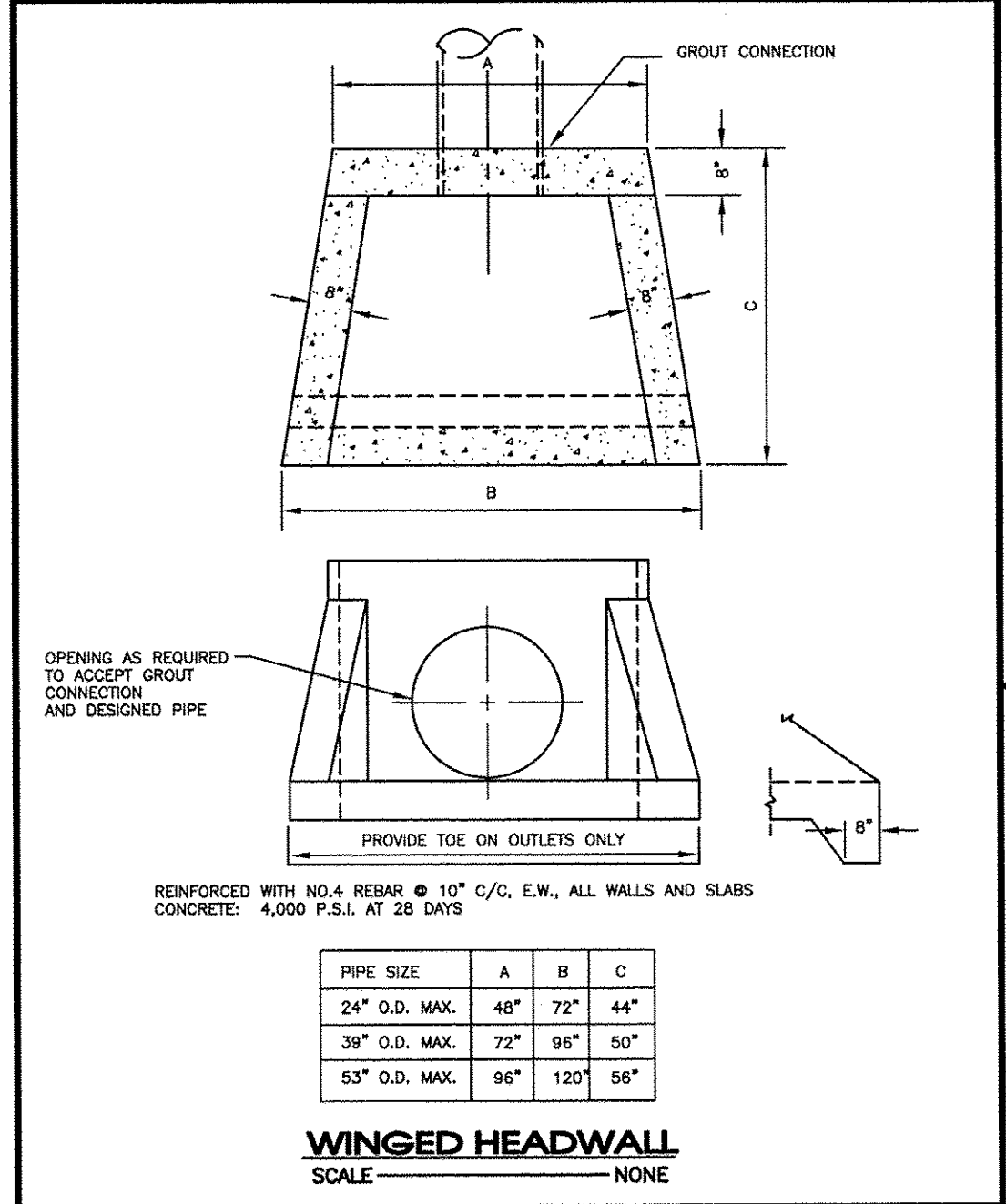
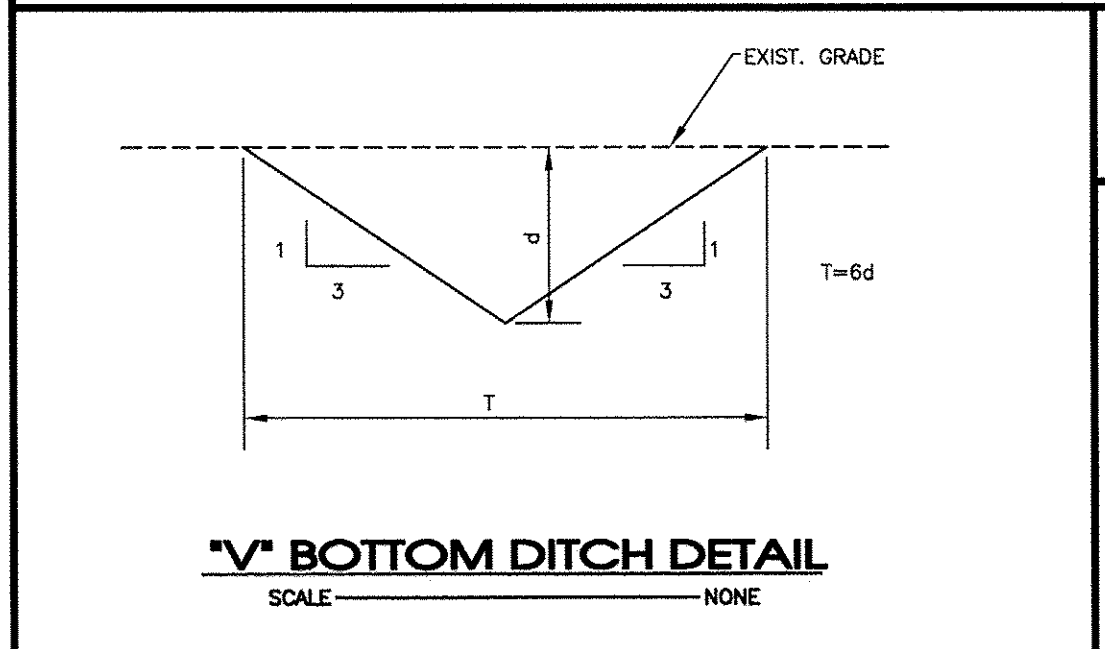
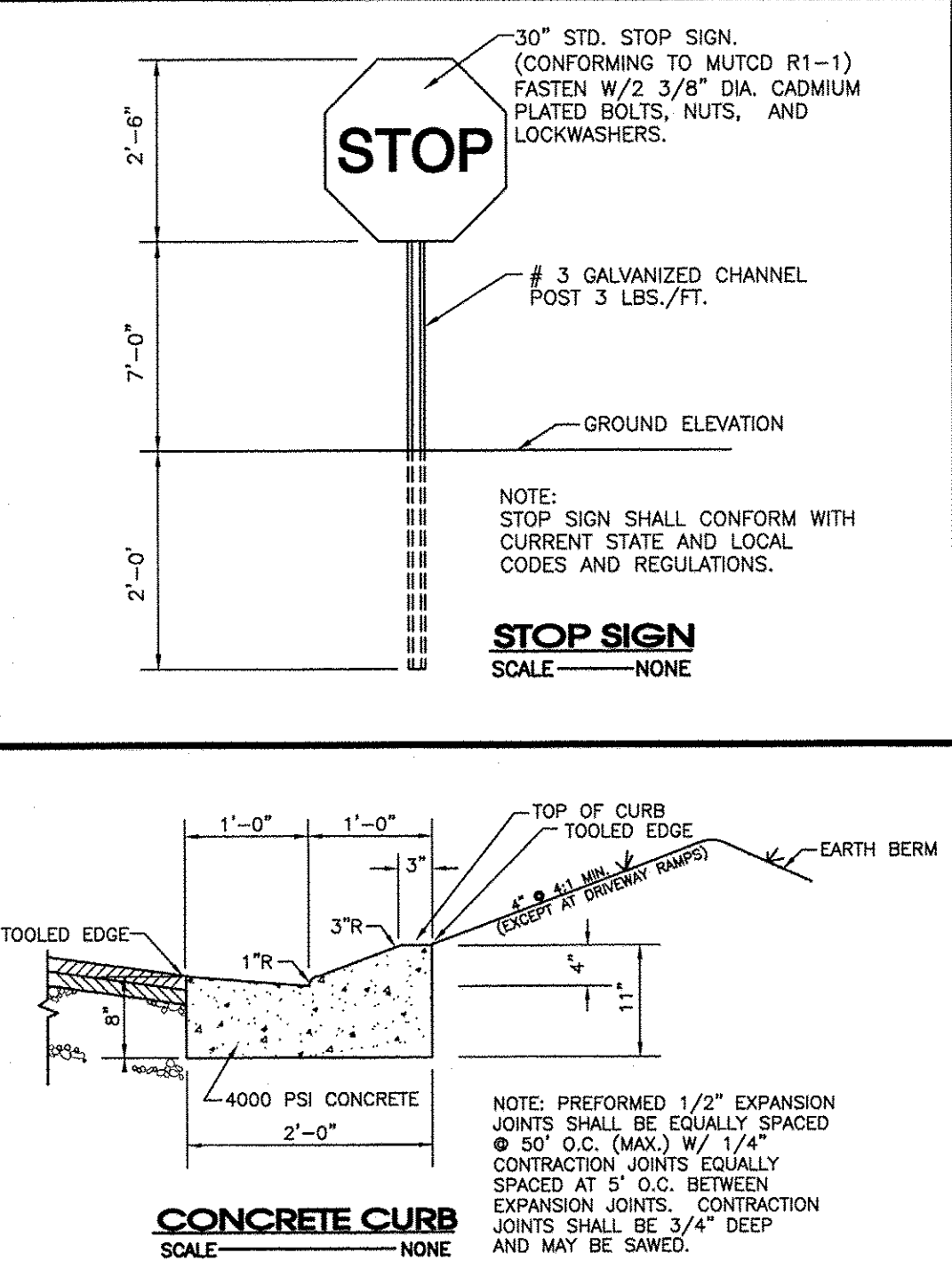
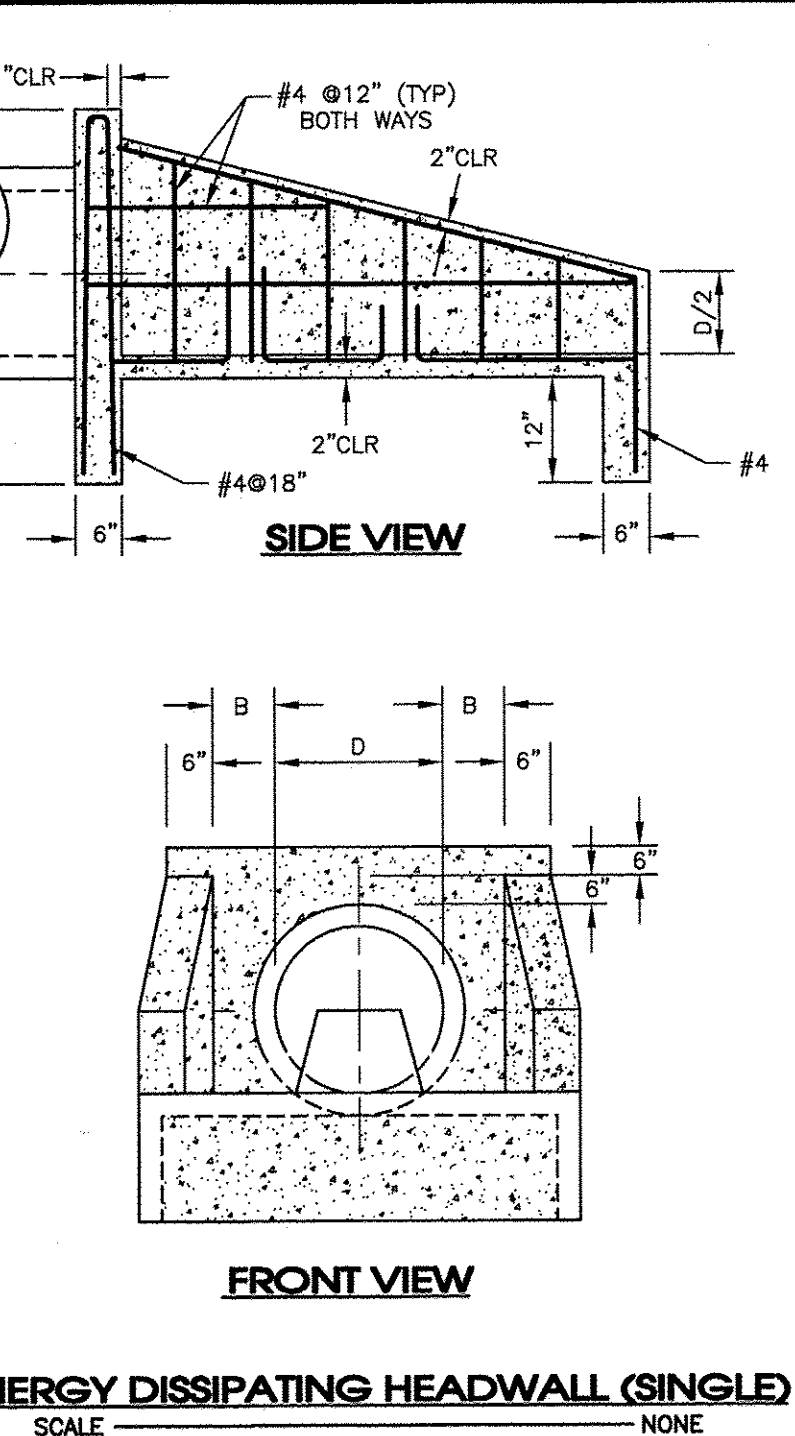
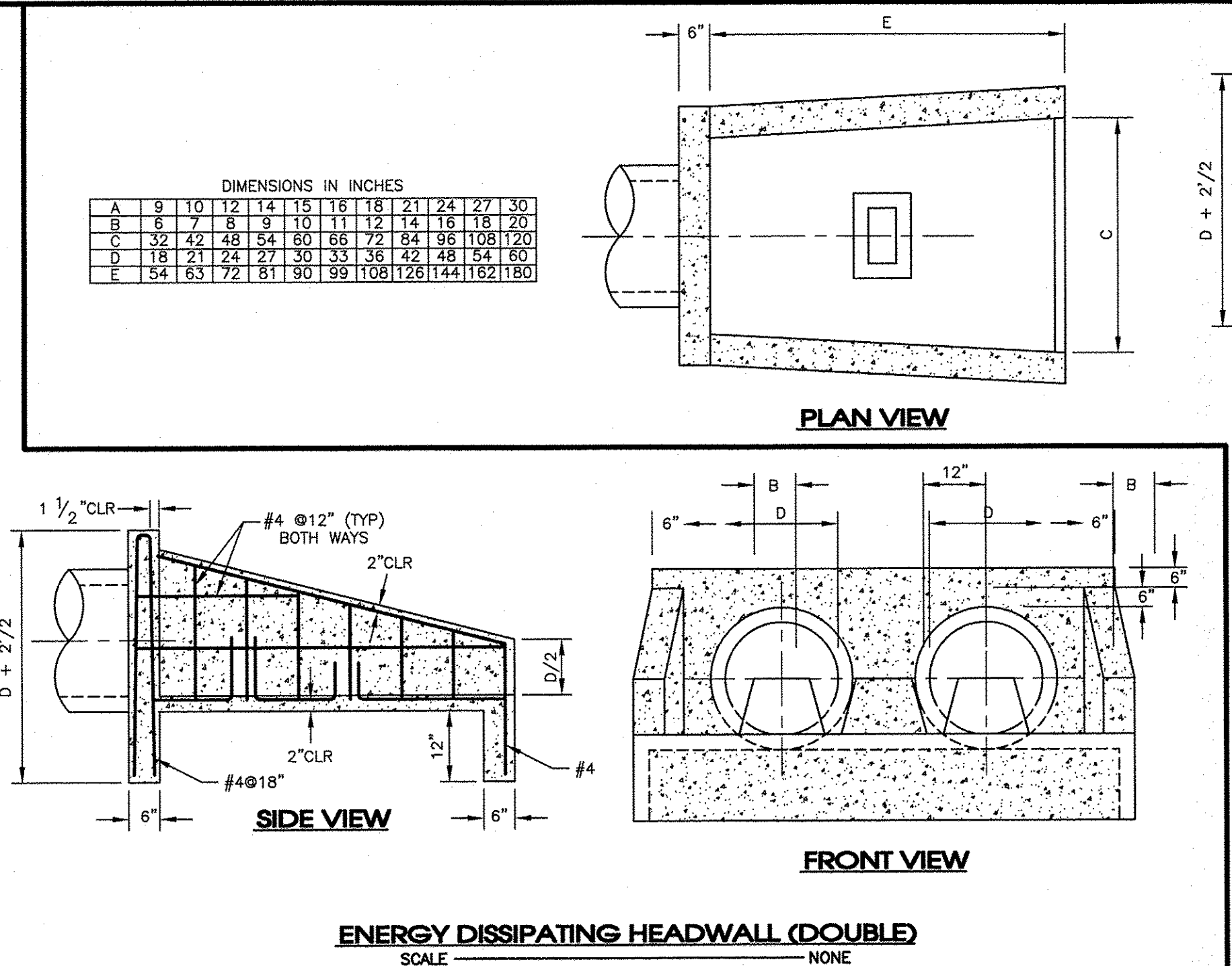
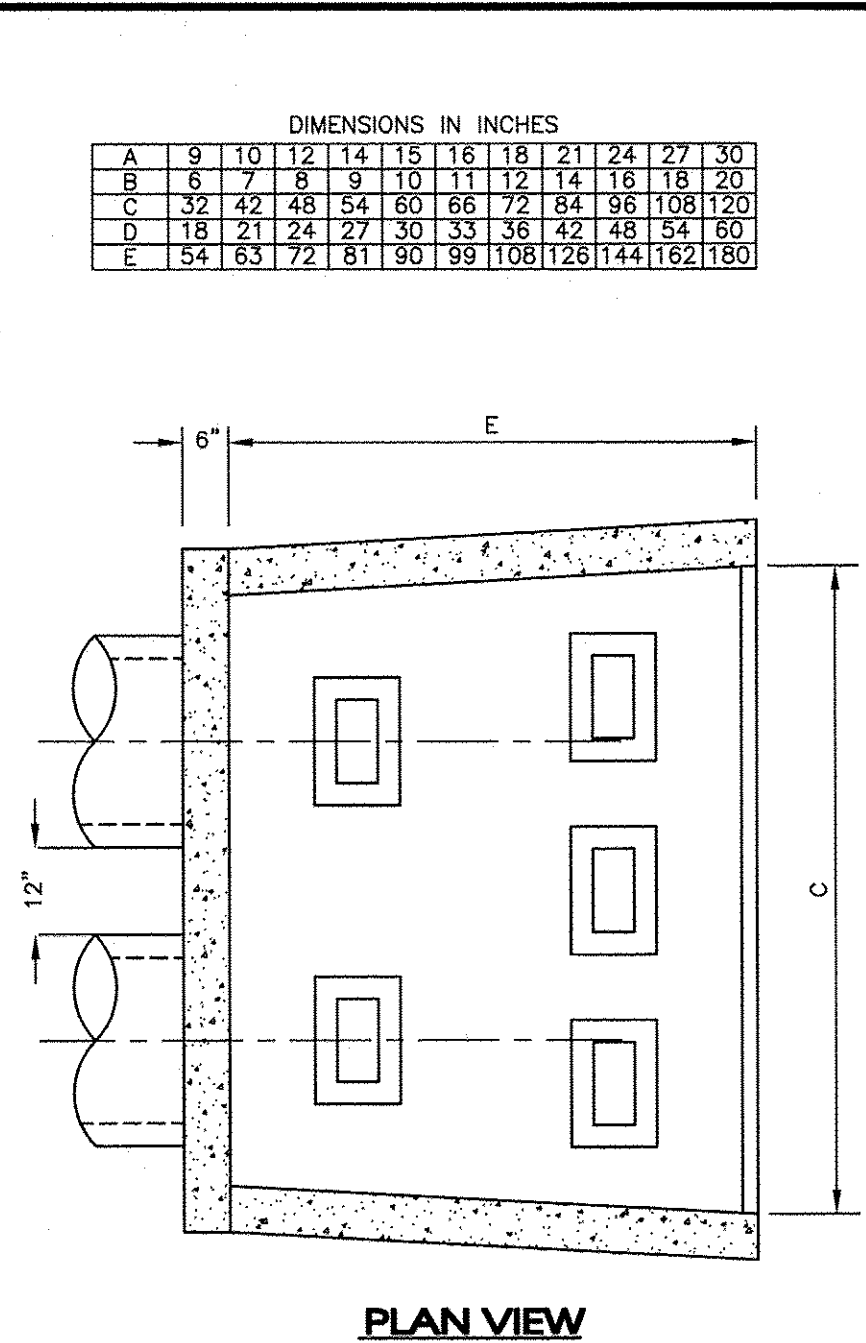
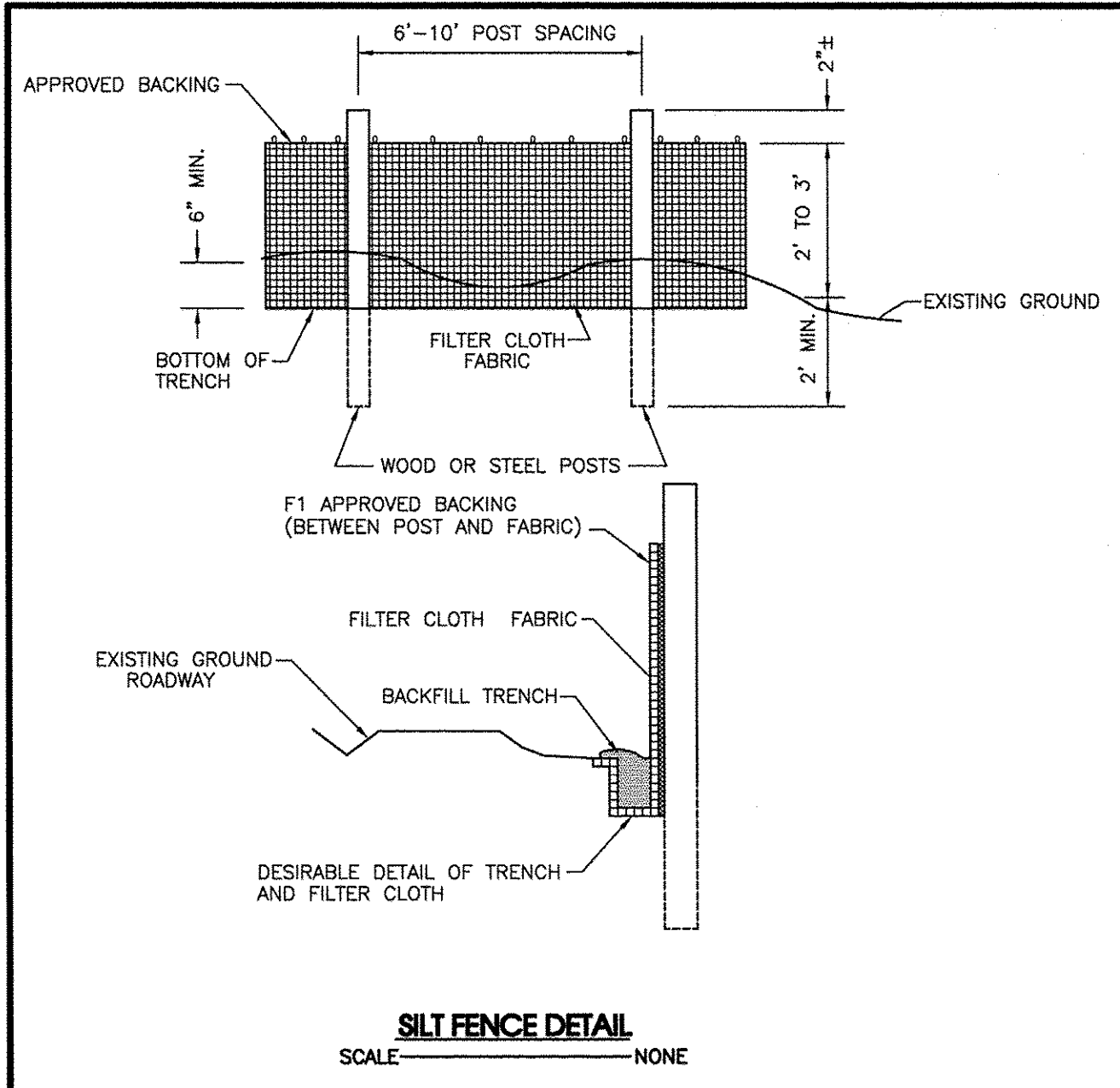


**Clearview Acres**  
**Section 1**  
 Rutherford County, TN









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STATE OF TENNESSEE

Cleanview Acres

Section 1

Rutherford County, TN

Details

REVISIONS:

DRAWN: MLG

DATE: 9-22-16

CHECKED:

RH

FILE NAME:

14300projectP1

SCALE:

None

JOB NO.

14300

SHEET:

13 of 14



