



**KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION
SUBDIVISION REPORT - CONCEPT**

▶ **FILE #:** 9-SA-15-C

AGENDA ITEM #: 11

AGENDA DATE: 9/10/2015

▶ **SUBDIVISION:** HOLSTON BEND DRIVE EXTENSION

▶ **APPLICANT/DEVELOPER:** THE DEVELOPMENT CORPORATION OF KNOX COUNTY

OWNER(S): Development Corp. of Knox County

TAX IDENTIFICATION: 42 19549

[View map on KGIS](#)

JURISDICTION: County Commission District 8

STREET ADDRESS:

▶ **LOCATION:** Northeast end of Holston Bend Dr., east of Eastbridge Dr.

SECTOR PLAN: Northeast County

GROWTH POLICY PLAN: Planned Growth Area

WATERSHED: Holston and French Broad

▶ **APPROXIMATE ACREAGE:** 486 acres

▶ **ZONING:** I (Industrial)

▶ **EXISTING LAND USE:** Partially developed industrial park and vacant land

▶ **PROPOSED USE:** Public Road

SURROUNDING LAND USE AND ZONING: Development in the area consists of industrial/warehousing uses and a quarry. The zoning in the area is I industrial. Much of this industrially zoned property was once associated with the zinc mining that has occurred in the area.

▶ **NUMBER OF LOTS:** 0

SURVEYOR/ENGINEER: CDM Smith

ACCESSIBILITY: Access is via Holston Bend Dr., a local street with a pavement width of 24' with 6' wide shoulders located within an 80' wide right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:** 1. Construction of a public street without curbs

STAFF RECOMMENDATION:

▶ **APPROVE variance1 because the site's topography restricts compliance with the Subdivision Regulations, and the proposed variances will not create a traffic hazard.**

APPROVE the Concept Plan subject to 4 conditions:

1. Improving the angle of intersection for the proposed utility driveway to meet or exceed the minimum angle of intersection permitted by the Subdivision Regulations
2. Provide a minimum of 1% grade across the cul-de-sac bulb
3. Provide a typical pavement cross-section of a commercial-industrial street or as required by the Knox County Dept. of Engineering and Public Works
4. Meeting all other applicable requirements of the Knox County Dept. Of Engineering and Public Works

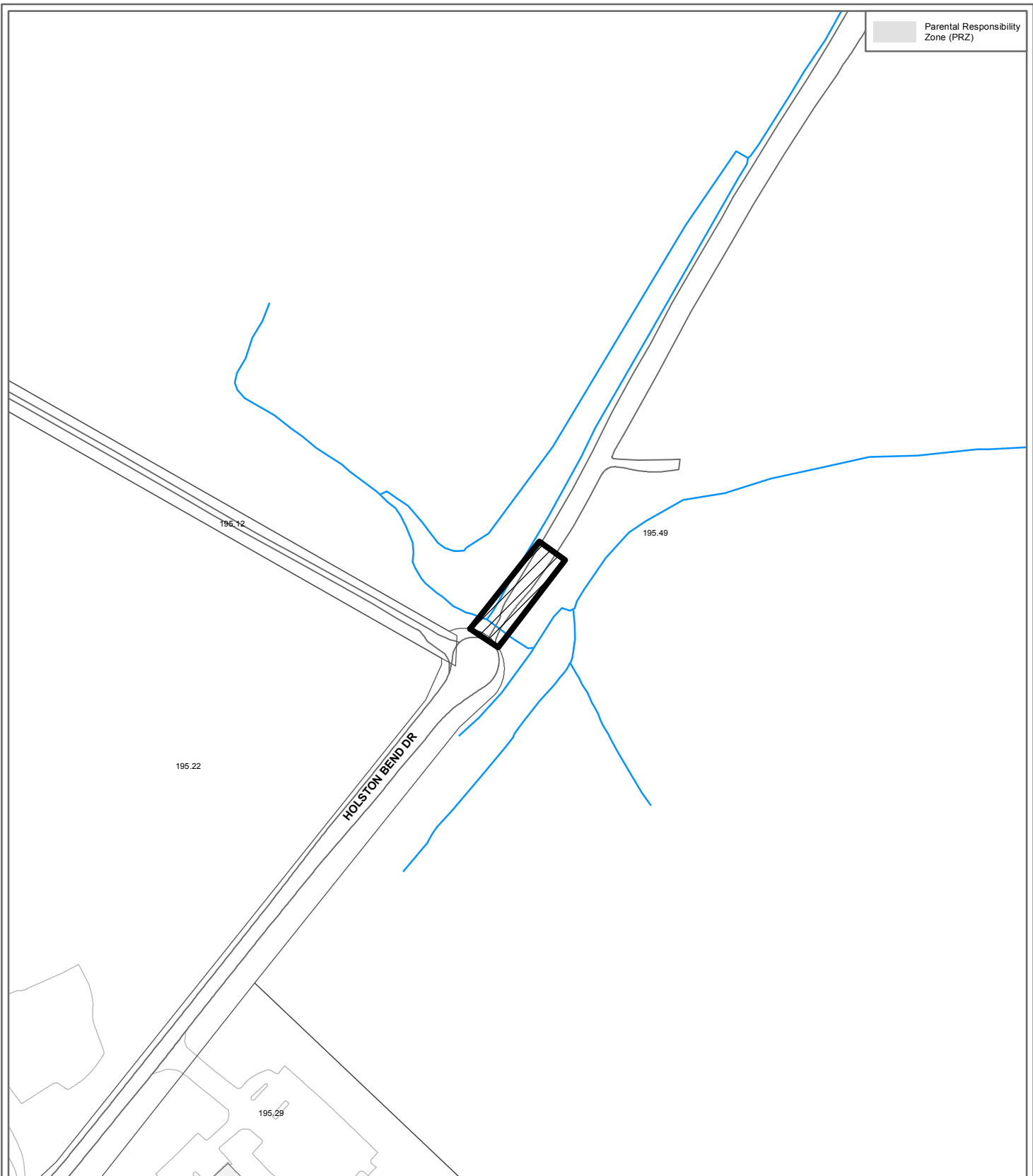
COMMENTS:

The applicant is proposing to extend Holston Bend Dr. in the existing Eastbridge Business Park. Extending this road will open hundreds of acres of industrially zoned land for development. The applicant has requested a variance that will permit this road extension be built without the provision of curbs. The existing portion of Holston Bend Dr. and the other streets in the business park have been constructed without curbs being required.

ESTIMATED TRAFFIC IMPACT: A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

ESTIMATED STUDENT YIELD: Not applicable.

MPC's approval or denial of this request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court appeal hearing will depend on when the appeal application is filed.



**9-SA-15-C
CONCEPT PLAN**

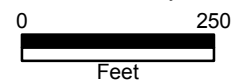
Subdivision: Holston Bend Drive Extension



Approval of Concept Plan

Map No: 42

Jurisdiction: County



Original Print Date: 8/25/2015 Revised:
Metropolitan Planning Commission * City / County Building * Knoxville, TN 37902

THE DEVELOPMENT CORPORATION OF KNOX COUNTY, TENNESSEE

GENERAL NOTES

GRADING

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF THE PROPERTY IN A REGULATORY FLOODWAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING

SEEDING WITH MULCH SHALL BE USED ON ALL DISTURBED AREAS AND SLOPES.

DRAINAGE

THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THE COST SHALL BE PAID UNDER ITEM 203-01.

UTILITIES

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED.

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.

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. SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

MISCELLANEOUS

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS NEAR THE PROPOSED CONSTRUCTION AREA.

SPECIAL NOTES

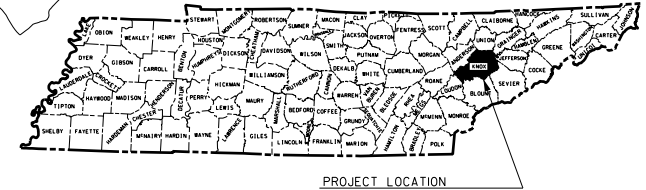
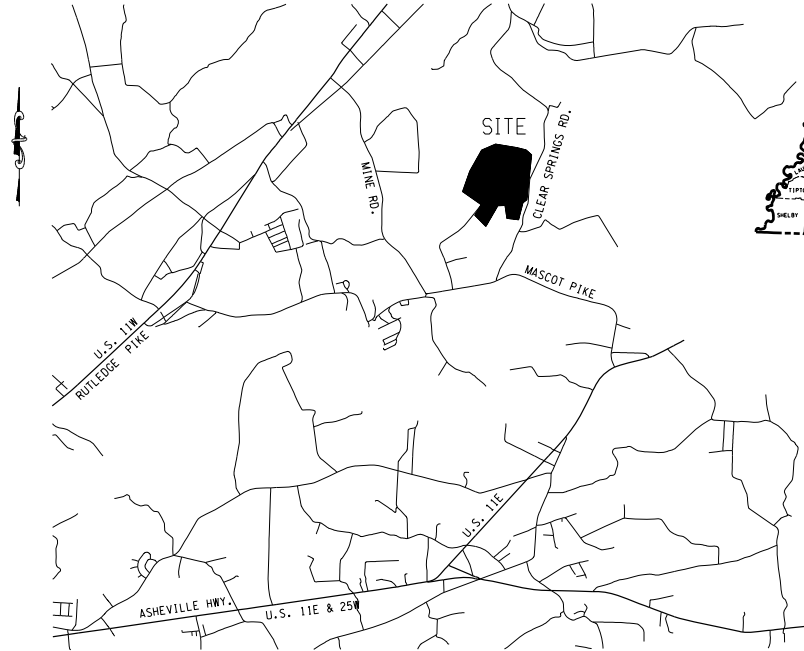
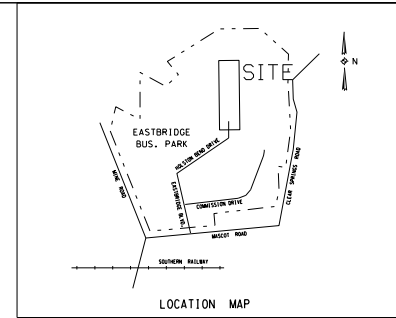
1. GRADING, EROSION CONTROL, AND ALL OTHER ITEMS ARE TO BE CONSTRUCTED ACCORDING TO TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS PROVIDED IN THE PLANS AND IN THE PROPOSAL CONTRACT.
2. THE CONTRACTOR SHALL COMPLY WITH THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL AND HEALTH ACT OF 1970 (OPLR 91-596) AND UNDER SECTION 107 OF THE CONTRACT WORK-HOUSE AND SAFETY STANDARDS ACT (P.L. 90-334) THE CONTRACTOR SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT FOR CONSTRUCTION INDUSTRY (29 CFR PART 1926) UNDER SECTION "S" 650652.

DESIGNED BY: CDM SMITH
ALEXANDER PLACE
100 MARION STREET
SUITE 200
KNOXVILLE, TN 37921
PH. (865) 963-4300 FAX (865) 963-4301

DESIGNED FOR: THE DEVELOPMENT CORPORATION OF KNOX COUNTY

HOLSTON BEND DRIVE EXTENSION CONSTRUCTION

ROADWAY, MINOR GRADING, MINOR DRAINAGE AND PAVING



N. T. S.
PROJECT LOCATION

9-SA-15-C
Revised: 8/26/2015



HOLSTON BEND DRIVE EXTENSION
KNOX COUNTY, TENNESSEE

CDM Smith
1100 MARION STREET, SUITE 200
KNOXVILLE, TENNESSEE 37921
PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 2 |
| | | | |
| | | | |

DWG. NO. CURRENT REV. DATE TITLE

INDEX OF SHEETS

| SHEET NAME | SHEET NO. |
|--|-----------|
| TITLE SHEET, GENERAL & SPECIAL NOTES | 1 |
| INDEX OF SHEETS, STANDARD DRAWINGS AND NOTES | 2 |
| ESTIMATED ROADWAY QUANTITIES | 3 |
| TYPICAL ROADWAY SECTIONS | 4 |
| OVERALL PLAN | 5 |
| PRESENT AND PROPOSED LAYOUT AND ROADWAY PROFILES | 6-8 |
| GRADING AND DRAINAGE DETAIL | 9-11 |
| HOLSTON BEND CROSS SECTIONS | 12-18 |
| ACCESS RD CROSS SECTIONS | 19-28 |
| CULVERT CROSS SECTIONS | 29 |
| EROSION CONTROL | 30-31 |

ROADWAY DESIGN STANDARDS

| | | |
|-------------|----------|--|
| RD-A-1 | 12-18-99 | STANDARD ABBREVIATIONS |
| RD-L-1 | 10-26-94 | STANDARD LEGEND |
| RD-L-2 | 9-5-01 | STANDARD LEGEND FOR UTILITY INSTALLATIONS |
| RD-L-4 | 4-15-04 | STANDARD LEGEND FOR EROSION AND SEDIMENT CONTROL |
| RDOI-S-II | 4-4-03 | DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT |
| RDOI-S-II-A | 10-15-02 | ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION |
| RDOI-TS-1 | 10-15-02 | DESIGN STANDARDS FOR LOCAL ROADS AND STREETS |

CULVERTS AND ENDWALLS

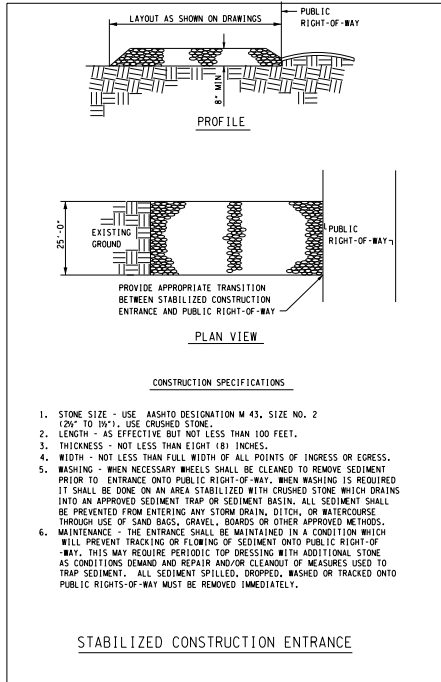
| | | |
|----------------|---------|---|
| D-CE-1 | 7-29-96 | REVISED CONSTRUCTION DETAILS |
| D-PB-1 | 1-2-13 | STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION |
| D-PE-4 | 12-1-14 | STRAIGHT CONCRETE ENDWALL |
| D-SEW-HA | 3-1-12 | SIDE DRAIN CONC.ENDWALL |
| D-PE-30A & 30B | 3-1-12 | 30' CONC.ENDWALL CROSS DRAIN |

ROADWAY AND PAVEMENT APPURTENANCES

| | | |
|--------|----------|--|
| RP-I-5 | 12-18-96 | EXAMPLES OF STREET AND ALLEY INTERSECTIONS |
| RP-R-1 | 5-27-01 | RAMPS TO SIDE ROADS |

EROSION PREVENTION AND SEDIMENT CONTROL

| | | |
|-----------|--------|--|
| EC-STR-1 | 8-1-12 | DEWATERING STRUCTURE |
| EC-STR-3B | 8-1-12 | SILT FENCE |
| EC-STR-3E | 4-1-08 | SILT FENCE FABRIC JOINING DETAILS |
| EC-STR-6 | 8-1-12 | ROCK CHECK DAM |
| EC-STR-7 | 8-1-12 | SEDIMENT TRAP WITH CHECK DAM |
| EC-STR-8 | 8-1-12 | CULVERT PROTECTION TYPE I |
| EC-STR-34 | 8-1-12 | EROSION CONTROL BLANKET FOR SLOPE INSTALLATION |



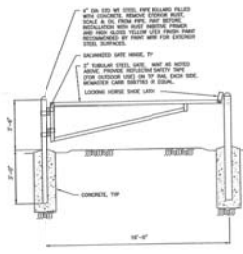
INDEX OF SHEETS, STD DWGS & CONSTRUCTION ENTRANCE DETAIL
HOLSTON BEND DRIVE EXTENSION
KNOX COUNTY, TENNESSEE

CDM Smith
1100 MARION STREET, SUITE 300
KNOXVILLE, TENNESSEE 37901
PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 3 |
| | | | |
| | | | |

| ESTIMATED ROADWAY QUANTITIES | | |
|---|----------|-------|
| ITEM | QUANTITY | UNIT |
| Base Bid - Holston Bend Road Extension | | |
| MOBILIZATION | 1 | L.S. |
| CONSTRUCTION STAKES, LINES, AND GRADES | 1 | L.S. |
| CLEAR & GRUBBING | 1.4 | AC |
| ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | 3858 | C.Y. |
| TEMPORARY SILT FENCE (WITHOUT BACKING) | 1373 | L.F. |
| SEEDING & MULCHING | 105 | UNITS |
| MINERAL AGGREGATE, TYPE A BASE, GRADING D | 1819 | TON |
| ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A | 755 | TON |
| ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING BM-2 | 702 | TON |
| BITUMINOUS MATERIAL FOR PRIME COAT (PC) | 7 | TON |
| BITUMINOUS MATERIAL FOR TACK COAT (TC) | 1 | TON |
| ASPHALT CEMENT (PG64-22) (ACS) GRADING D | 317 | TON |
| 30" CONCRETE PIPE CULVERT | 9 | L.F. |
| 30" ENDWALL (CROSS DRAIN) | 1 | EA. |
| CLASS A CONCRETE (30" INLET ENDWALLS) | 3 | C.Y. |
| REINF. STEEL (30" INLET ENDWALLS) | 90 | LB |
| TURF REINF. MATTING TYPE I | 1100 | SY |
| CHECK DAMS | 800 | SF |
| ENHANCED ROCK CHECK DAM | 1 | EA. |
| 16" CLASS 350 D.I.P. WITH STONE BACKFILL | 130 | L.F. |
| 1" WATER METER ASSEMBLY | 1 | EA. |
| FIRE HYDRANT ASSEMBLY WITH VALVE | 1 | EA. |
| ELECTRICAL CONDUIT - 6" SCH.40 PVC | 150 | L.F. |
| ELECTRICAL CONDUIT - 2" SCH.40 PVC | 100 | L.F. |
| 12" STEEL GAS SLEEVE | 30 | L.F. |
| STREET LIGHTING | 1 | EA. |
| Alternate - Access Road | | |
| ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | 726 | C.Y. |
| TEMPORARY SILT FENCE (WITHOUT BACKING) | 2301 | L.F. |
| SEEDING & MULCHING | 42 | UNITS |
| MINERAL AGGREGATE, TYPE A BASE, GRADING D | 740 | TON |
| ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING BM-2 | 368 | TON |
| BITUMINOUS MATERIAL FOR PRIME COAT (PC) | 11 | TON |
| BITUMINOUS MATERIAL FOR TACK COAT (TC) | 1 | TON |
| ASPHALT CEMENT (PG64-22) (ACS) GRADING D | 6 | TON |
| 18" CONCRETE PIPE CULVERT | 27 | L.F. |
| 18" ENDWALL (SIDE DRAIN) | 2 | EA. |
| RIPRAP | 69 | TON |
| TURF REINF. MATTING TYPE I | 623 | SY |
| TURF REINF. MATTING TYPE II | 934 | SY |
| CHECK DAMS | 1120 | SF |

NOTE: QUANTITIES ARE FOR INFORMATION ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES AND FOR INCLUDING ANY INCIDENTAL ITEMS NOT INCLUDED IN THE ABOVE QUANTITIES. THE CONTRACT WILL BE A LUMP SUM VALUE.



TUBULAR GATE DETAIL
N13

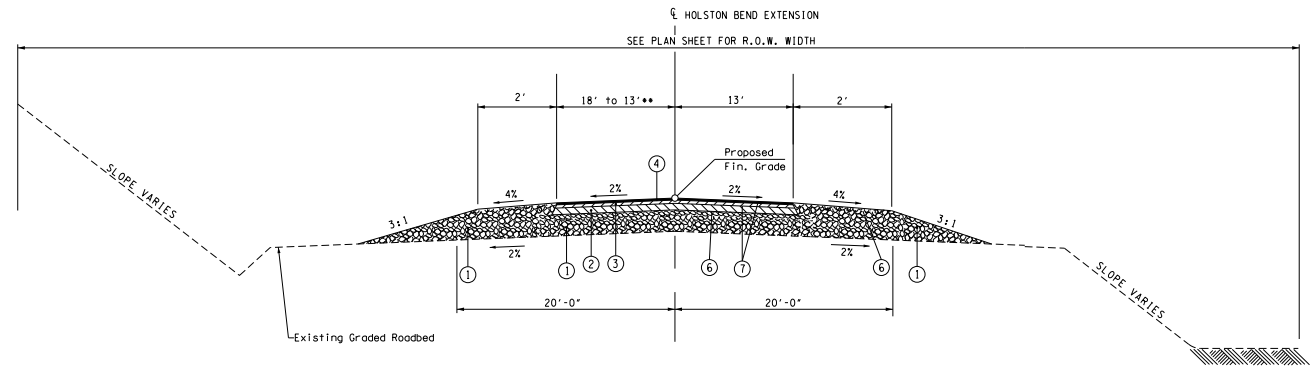
DETAIL 1/3



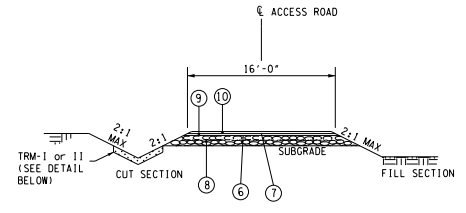
ESTIMATED UTILITIES QUANTITIES
HOLSTON BEND DRIVE EXTENSION
KNOX COUNTY, TENNESSEE
DATE: 7-15-15

CDM Smith
1100 MARION STREET, SUITE 300
KNOXVILLE, TENNESSEE 37901
PHONE: 865-963-4300 FAX: 865-963-4301

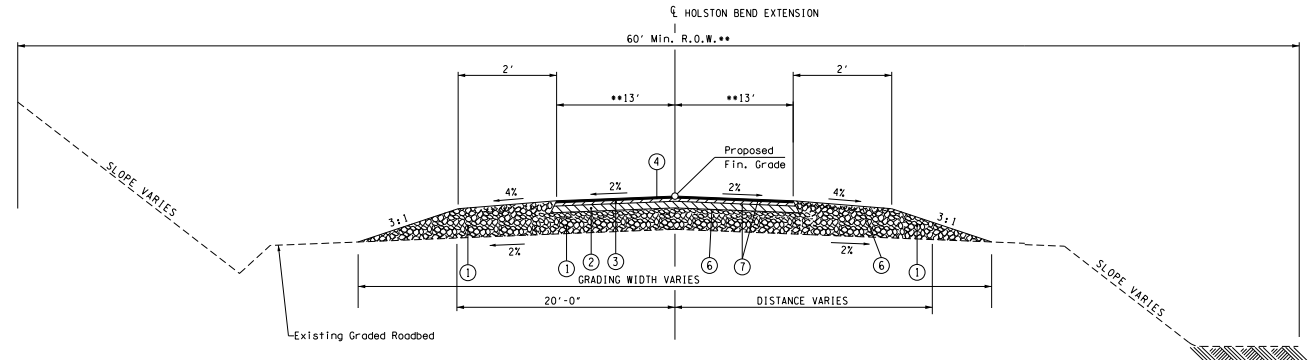
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 4 |
| | | | |
| | | | |



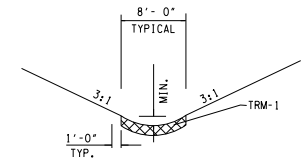
TYPICAL SECTION (2-LANES)
Sta. 100+60.00 To Sta. 101+54.56
to match existing road width



TYPICAL SECTION
ACCESS ROAD



TYPICAL SECTION (2-LANES)
Sta. 102+00.00 To Sta. 109+96.41
**Sta. 109+96.41 To Sta. 111+79.09 (SEE PLAN FOR WIDTHS)



PROP. "V" BOTTOM
DITCH (TRM-I OR II)

| ROAD NAME | FROM STA. | TO STA. | LT/RT |
|------------------------|-----------|------------|-------|
| TRM-I HOLSTON EXT. STA | 103+00 | STA 111+50 | LT |
| TRM-I HOLSTON EXT. STA | 99+00 | STA 102+00 | RT |
| TRM-II ACCESS RD STA | 10+50 | STA 17+97 | LT |
| TRM-I ACCESS RD STA | 18+00 | STA 28+50 | LT |

PROPOSED PAVEMENT SCHEDULE

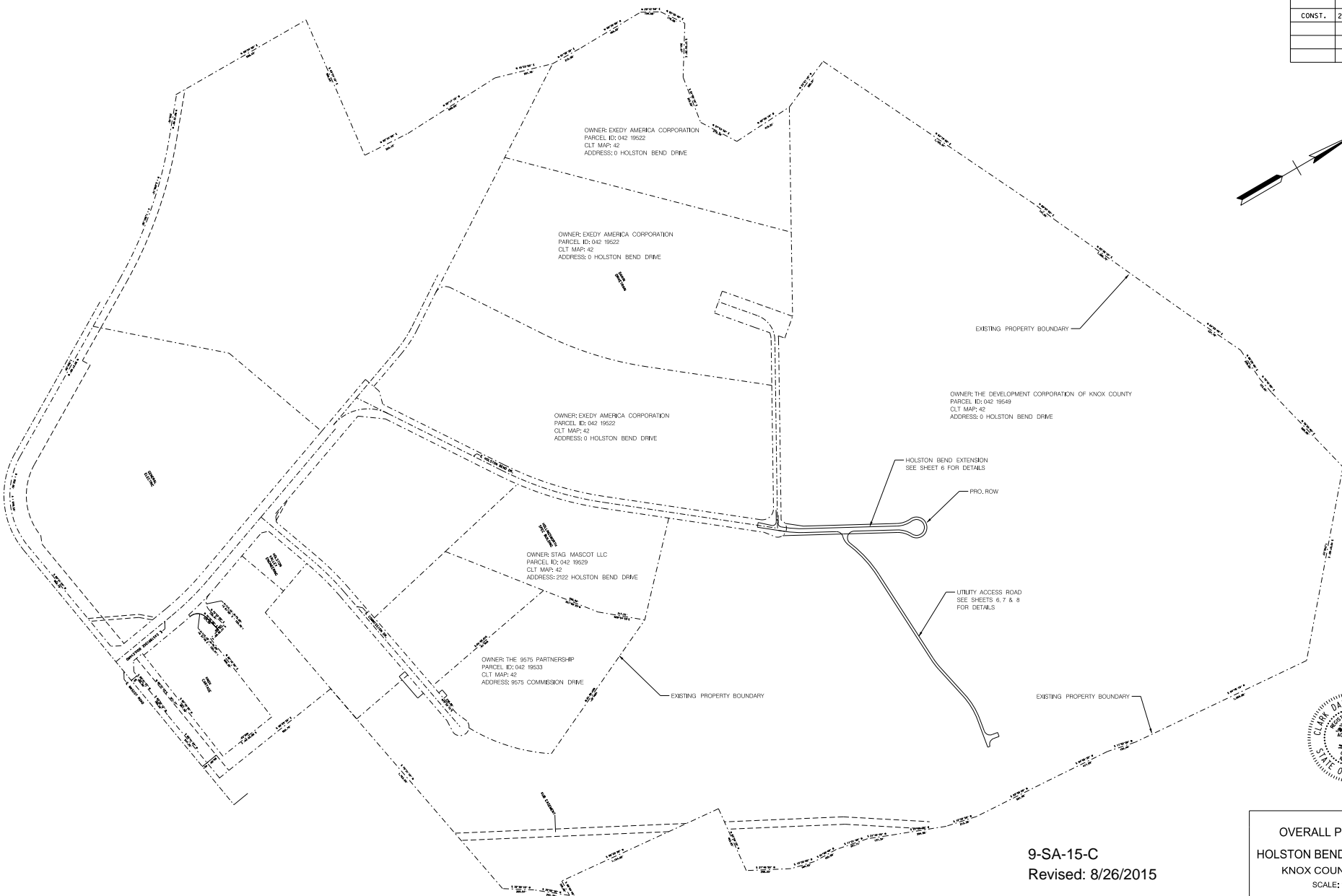
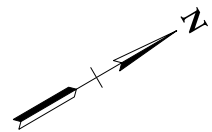
| MINERAL AGGREGATE BASE | | BITUMINOUS SURFACE COURSE | | TACK COAT | |
|--|--|---|--|--|--|
| ① MINERAL AGGREGATE BASE AT 8" THICK UNDER ROADWAY AND FULL DEPTH THROUGH SHOULDERS. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D. | | ③ BITUMINOUS SURFACING (ROADWAY) AT 1 3/4" THICK (159 LBS. PER SQ. YD.) 411-01.01 ASPHALT CEMENT (PG64-22)(ACS) GRADING D | | ⑦ 403-01 BITUMINOUS MATERIAL FOR TACK (TC) AT 0.02 GAL. PER SQ. YD. | |
| | | | | MINERAL AGGREGATE BASE | |
| | | | | ⑧ MINERAL AGGREGATE BASE AT 4" THICK UNDER ROADWAY AND FULL DEPTH THROUGH SHOULDERS. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D. | |
| BITUMINOUS BASE COURSE | | STABILIZED SHOULDER | | BITUMINOUS LEVEL COURSE | |
| ② BITUMINOUS BINDER AT 3" THICK (345 LBS. PER SQ. YD.) 307-01.01 ASPHALT CONCRETE MIX (PG64-22)(BPM-BM) GRADING A | | ③ STABILIZED SHOULDER AT 1 1/2" THICK (161.25 LBS. PER SQ. YD.) 411-01.07 ASPHALT CONCRETE MIX (PG64-22)(ACS) GRADING E | | ⑤ BITUMINOUS LEVELING AT 1 3/4" THICK (197.75 LBS. PER SQ. YD.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22)(BPM-BM) GRADING BM-2 | |
| BITUMINOUS LEVEL COURSE | | PRIME COAT | | BITUMINOUS SURFACE COURSE | |
| ③ BITUMINOUS LEVELING AT 3" THICK (339 LBS. PER SQ. YD.) 307-01.08 ASPHALT CONCRETE MIX (PG64-22)(BPM-BM) GRADING BM-2 | | ④ 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) AT 0.30 GAL. TO 0.35 GAL. PER SQ. YD. | | ⑩ BITUMINOUS SURFACING (ROADWAY) AT 1 1/4" THICK (132.5 LBS. PER SQ. YD.) 411-01.01 ASPHALT CEMENT (PG64-22)(ACS) GRADING D | |
| | | | | ⑪ 411-01.02 AGGREGATE (ACS) GRADING D | |



HOLSTON BEND DRIVE EXTENSION
TYPICAL SECTIONS

CDM Smith
1100 MARION STREET, SUITE 300
KNOXVILLE, TENNESSEE 37901
PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 5 |
| | | | |
| | | | |

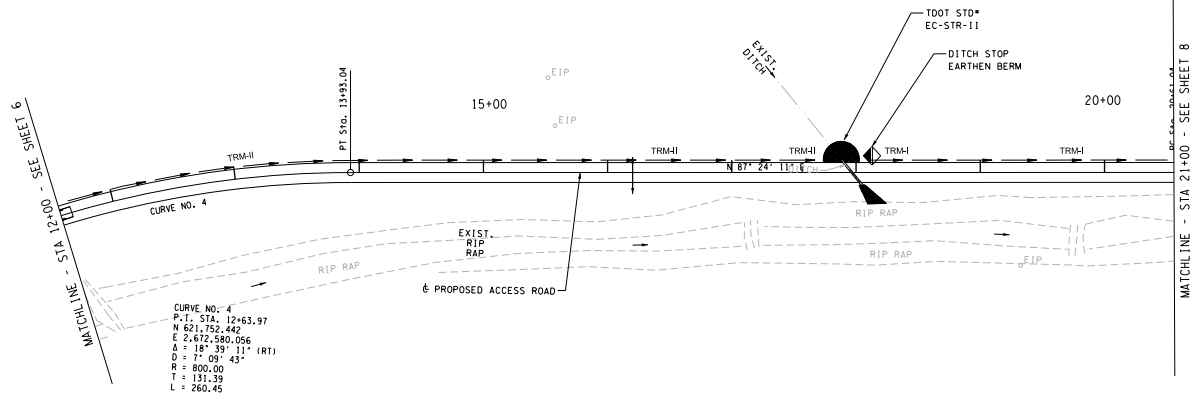


9-SA-15-C
Revised: 8/26/2015

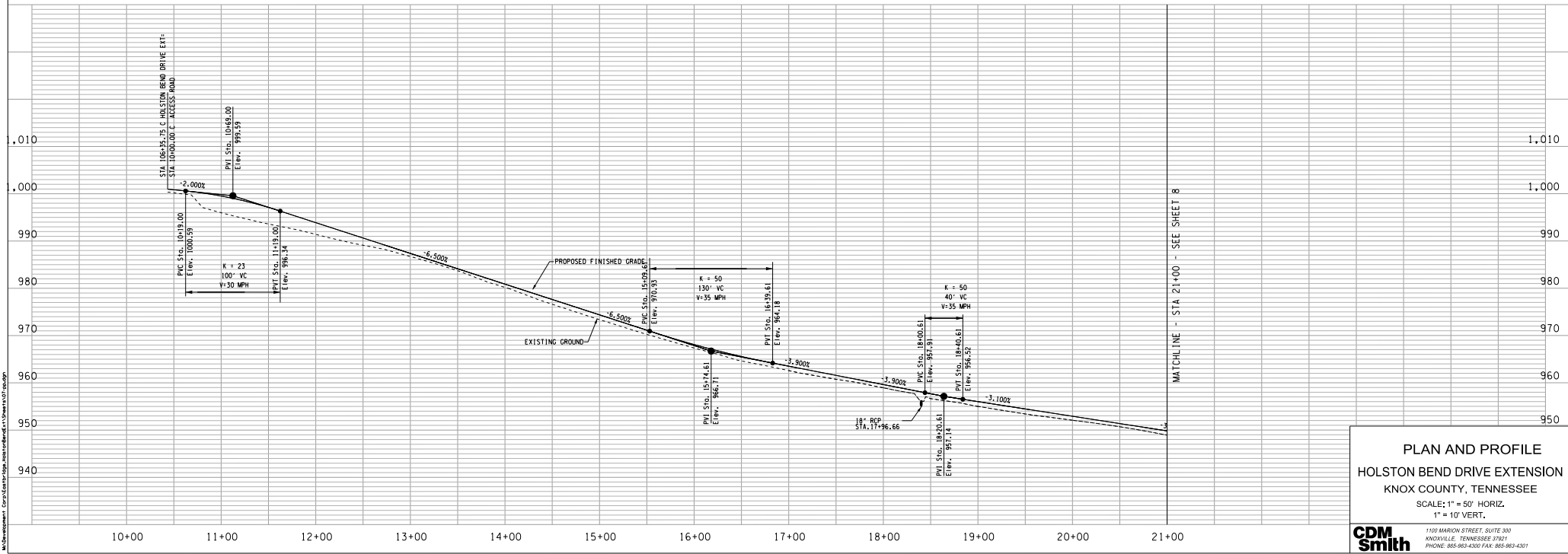
OVERALL PROPERTY PLAN
HOLSTON BEND DRIVE EXTENSION
KNOX COUNTY, TENNESSEE
SCALE: 1" = 300'

CDM Smith
1100 MARION STREET, SUITE 300
KNOXVILLE, TENNESSEE 37921
PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 7 |
| | | | |
| | | | |



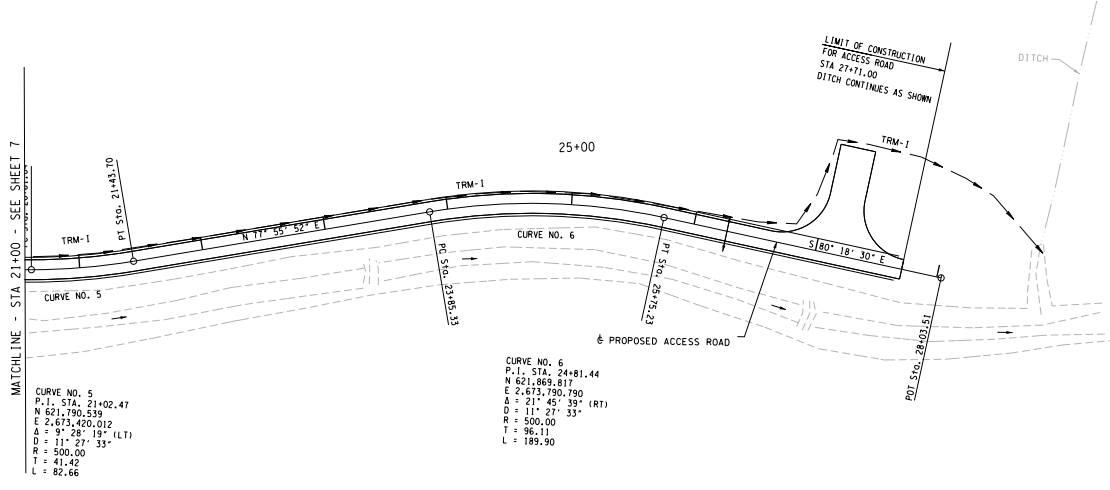
9-SA-15-C
Revised: 8/26/2015



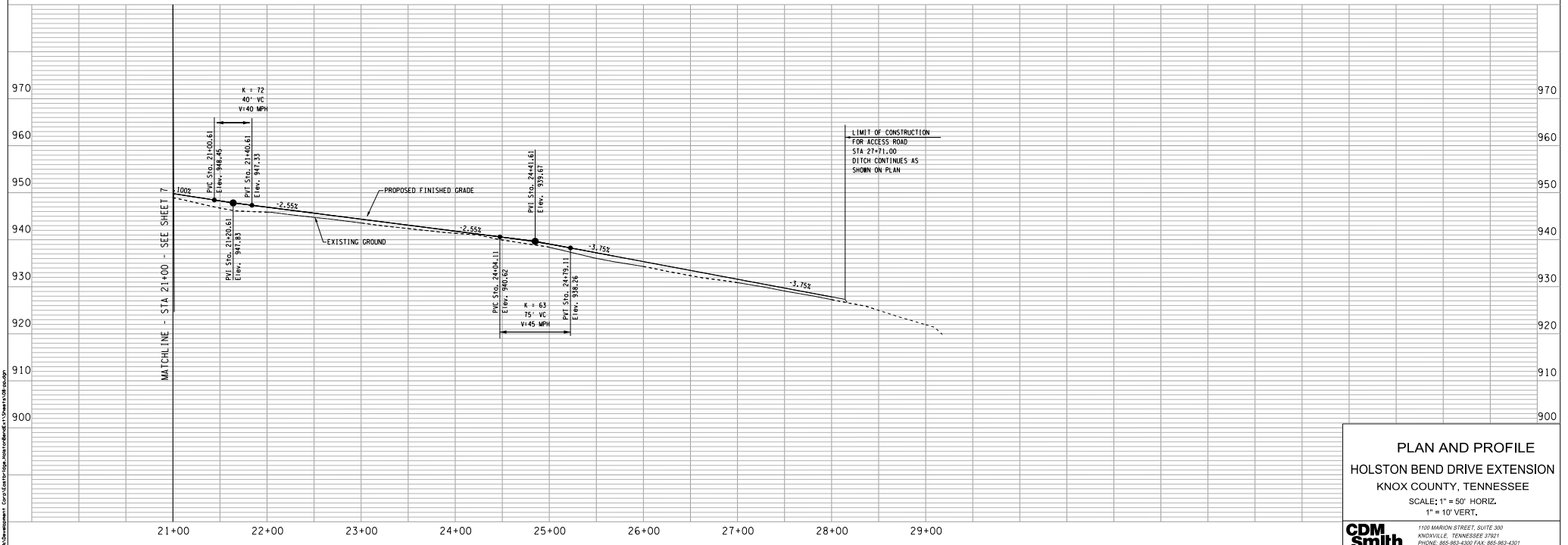
PLAN AND PROFILE
HOLSTON BEND DRIVE EXTENSION
 KNOX COUNTY, TENNESSEE
 SCALE: 1" = 50' HORIZ.
 1" = 10' VERT.

CDM Smith
1100 MARION STREET, SUITE 300
 KNOXVILLE, TENNESSEE 37921
 PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 8 |
| | | | |
| | | | |



9-SA-15-C
 Revised: 8/26/2015

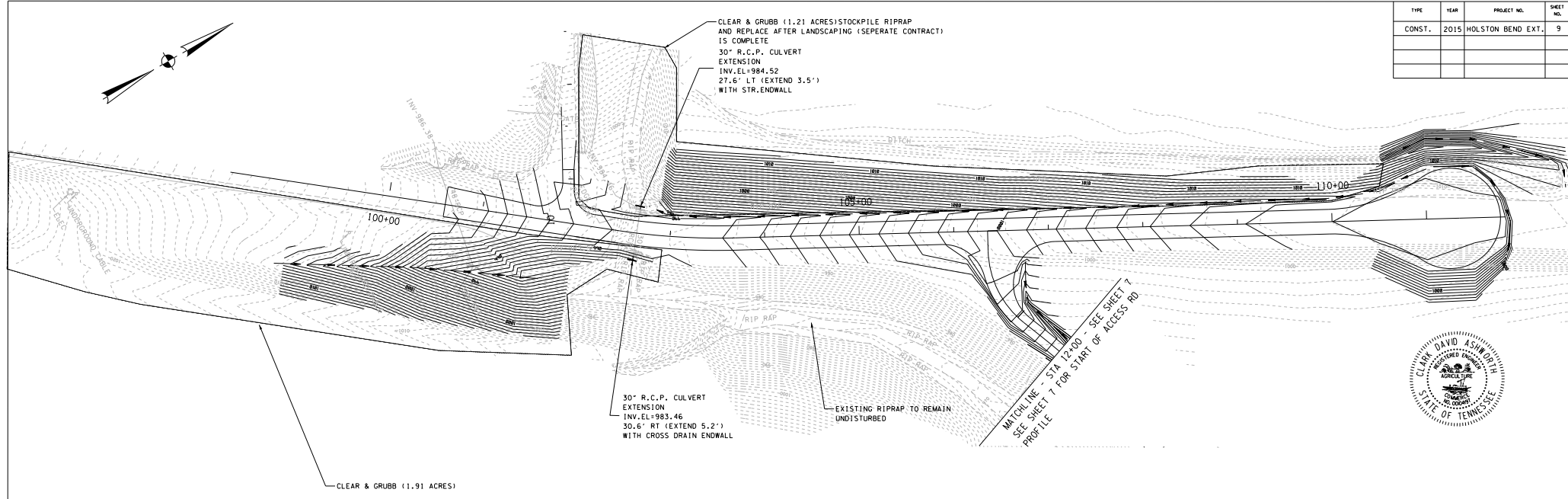


PLAN AND PROFILE
 HOLSTON BEND DRIVE EXTENSION
 KNOX COUNTY, TENNESSEE
 SCALE: 1" = 50' HORIZ.
 1" = 10' VERT.

CDM Smith

1100 MARION STREET, SUITE 300
 KNOXVILLE, TENNESSEE 37921
 PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 9 |
| | | | |
| | | | |

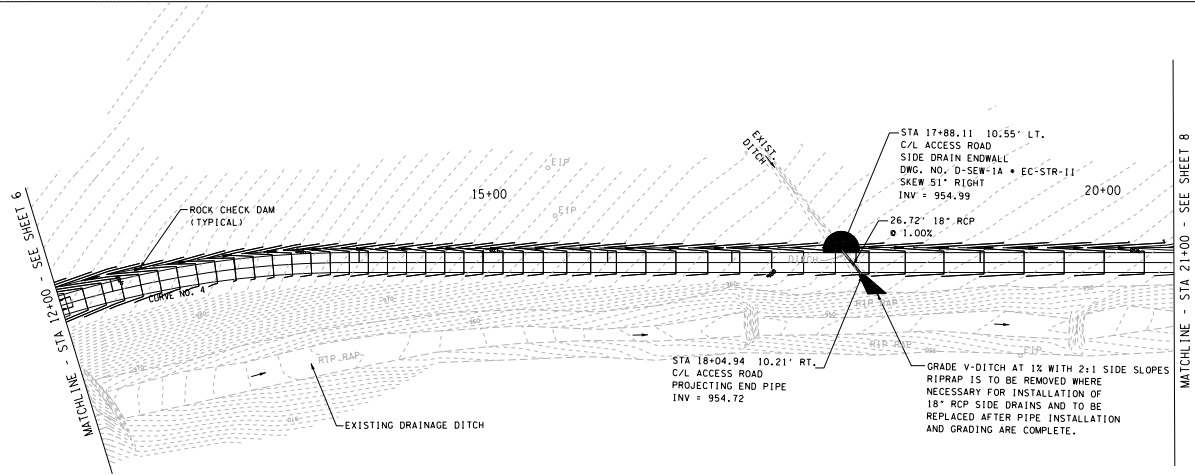


9-SA-15-C
 Revised: 8/26/2015

GRADING & DRAINAGE
 HOLSTON BEND DRIVE EXTENSION
 KNOX COUNTY, TENNESSEE
 SCALE: 1" = 50' HORIZ.
 1" = 10' VERT.

CDM Smith
 1100 MARION STREET, SUITE 300
 KNOXVILLE, TENNESSEE 37921
 PHONE: 865-963-4300 FAX: 865-963-4301

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 10 |
| | | | |
| | | | |

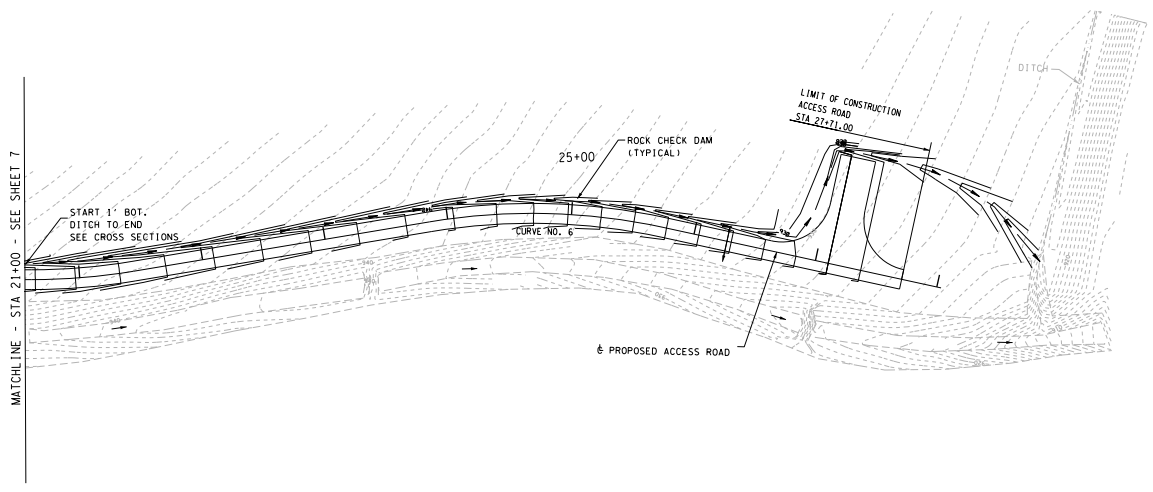


9-SA-15-C
Revised: 8/26/2015

GRADING & DRAINAGE
HOLSTON BEND DRIVE EXTENSION
 KNOX COUNTY, TENNESSEE
 SCALE: 1" = 50' HORIZ.
 1" = 10' VERT.

CDM Smith
 1100 MARION STREET, SUITE 300
 KNOXVILLE, TENNESSEE 37901
 PHONE: 865-963-4200 FAX: 865-963-4201

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-------------------|-----------|
| CONST. | 2015 | HOLSTON BEND EXT. | 11 |
| | | | |
| | | | |



9-SA-15-C
 Revised: 8/26/2015

GRADING AND DRAINAGE
HOLSTON BEND DRIVE EXTENSION
KNOX COUNTY, TENNESSEE
 SCALE: 1" = 50' HORIZ.
 1" = 10' VERT.

CDM Smith
1100 MARION STREET, SUITE 300
 KNOXVILLE, TENNESSEE 37921
 PHONE: 865-963-4200 FAX: 865-963-4201