

ADDENDUM NO. 1

Date: October 7, 2013
To: All Bidders
From: City of Oak Ridge
Project: Oak Ridge Pedestrian Improvements Project – FY2014-66
Bid Opening: October 10, 2013 at 2:00 pm (Eastern Time)

This Addendum becomes part of the Contract Documents and amends or supplements the original plans and specifications as noted below.

1. The following topics were either discussed at the Pre-bid Meeting on October 1, 2013 or were raised subsequent to the meeting:
 - The new luminaire type and arm at the Oak Ridge Turnpike / Tulane Avenue intersection is to match existing to be removed.
 - The quantity on the bid form for Item No. 730-12.13, Conduit 2” Diameter (Jack and Bore), L.F., is the length of total conduit and not the length of bore. Most bores have multiple conduit runs.
 - Item No. 730-23.31, Pedestal Pole (Pedestrian – Replace Existing), Each, includes removal of existing pedestal pole and installation of new pole on existing foundation, including all incidentals necessary for complete installation. Item does not include pedestrian signal heads, pushbuttons, signs, and wiring.
 - Signal heads shall be either Dialight or GE brand.
 - Substantial and final completion time may be extended due to long lag time in signal pole delivery. This does not include pedestrian pedestal poles.
 - Pages 2-3 were inadvertently omitted from FY2014-66 Bid Form.
2. Pages 2-3 added to FY2014-66 Bid Form. Pages 2-3 of Bid Form are attached.
3. Sheet R0.00 revised to include the addition of the following TDOT Standard Drawings:
 - EC-STR-3B, 08-01-2012, Silt Fence
 - EC-STR-39A, 08-01-2012, Curb Inlet Protection Type 3 & 4Sheet R.00 is attached.
4. Sheet R0.01 revised to include the following changes to the Estimated Construction Quantities:
 - Deleted Item No. 105-01, Construction Stakes, Lines and Grades, LS
 - Deleted Item No. 209-01.10, Erosion and Siltation Controls, LS
 - Added Item No. 105-01.99, Construction Staking, LS
 - Added Item No. 209-08.03, Temporary Silt Fence (Without Backing), L.F.
 - Added Item No. 209-09.43, Curb Inlet Protection (Type 4), EachSheet R.0.01 is attached.
5. Bidders must indicate receipt of this Addendum on Page 1 of the Bid Form.

END OF ADDENDUM NO. 1

UNIT PRICE BID (Footnotes corresponding to numbers in the left margin are below Bid Table)

	ITEM NO.	DESCRIPTION	QTY.*	UNIT	UNIT PRICE	TOTAL PRICE
	105-01.99	CONSTRUCTION STAKING	1	LS		
(1)	201-01	CLEARING AND GRUBBING	1	LS		
(2)	202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS		
	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	100	LF		
	209-09.43	CURB INLET PROTECTION (TYPE 4)	30	EACH		
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	80	TON		
	407-02.15	ASPHALT PAVEMENT REPAIR	1	LS		
(3)	604-07.01	RETAINING WALL (CONCRETE GRAVITY)	36	SF		
(4)	701-01.01	CONCRETE SIDEWALK (4")	530	SF		
(4)	701-02.03	CONCRETE HANDICAP RAMP	2400	SF		
(4)	702-04	CONCRETE COMBINED CURB & GUTTER (MATCH EXISTING)	200	LF		
(4)	702-05	CONCRETE CURB (MATCH EXISTING)	350	LF		
(5)	712-01	TRAFFIC CONTROL	1	LS		
(6)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	1	LS		
	713-15.02	REMOVAL & RELOCATION OF SIGN & SUPPORT	1	EACH		
(7)	713-16.20	SIGNS (R1-5)	3	EACH		
(7)	713-16.21	SIGNS (W11-2 W/W16-7P)	6	EACH		
(7)	713-16.22	SIGNS (W11-2 W/W16-9P)	5	EACH		
(7)	713-16.23	SIGNS (W15-1 W/W13-1P)	1	EACH		
(8)	713-16.24	SIGNS (W15-1 W/W13-1P - SIGN PANEL ONLY)	1	EACH		
(9)	714-01.36	ROADWAY LIGHTING	1	LS		
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	210	LF		
	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	130	LF		
	716-02.23	PLASTIC PAVEMENT MARKING (12IN BARRIER LINE)	100	LF		
	716-02.35	PLASTIC PAVEMENT MARKING (7' LONGITUDINAL CROSS WALK)	320	LF		
	716-02.36	PLASTIC PAVEMENT MARKING (8' LONGITUDINAL CROSS WALK)	1350	LF		
	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	54	SF		
	716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	200	LF		
	716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	110	LF		
	716-10.30	TRUNCATED DOME DETECTABLE WARNING MAT - NEW RAMP	200	SF		
(10)	716-10.31	TRUNCATED DOME DETECTABLE WARNING MAT - EXIST. RAMP	232	SF		
	717-01	MOBILIZATION	1	LS		
(11)	730-01.02	REMOVAL OF SIGNAL EQUIPMENT	1	LS		
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	15	EACH		
	730-02.17	SIGNAL HEAD ASSEMBLY (150A2H WITH BACKPLATE)	6	EACH		
(12)	730-03.21	INSTALL PULL BOX (TYPE B)	13	EACH		
	730-08.01	SIGNAL CABLE-3 CONDUCTOR	1300	LF		
	730-08.02	SIGNAL CABLE-5 CONDUCTOR	3300	LF		
	730-08.03	SIGNAL CABLE-7 CONDUCTOR	5000	LF		
	730-08.04	SIGNAL CABLE-9 CONDUCTOR	500	LF		
	730-12.02	CONDUIT 2" DIAMETER (PVC)	355	LF		
	730-12.03	CONDUIT 3" DIAMETER (PVC)	190	LF		
	730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	2230	LF		
(13)	730-13.08	VEHICLE DETECTOR (INTERSECTION RADAR DETECTION)	2	EACH		
	730-14.01	SHIELDED DETECTOR CABLE	1000	LF		
	730-15.11	MODIFY CABINET (MODIFY FOR PED. SIGNALS)	5	EACH		
(14)	730-23.30	PEDESTAL POLE (PEDESTRIAN - NEW)	5	EACH		
(15)	730-23.31	PEDESTAL POLE (PEDESTRIAN - REPLACE EXISTING)	8	EACH		
(16)	730-23.96	CANTILEVER SIGNAL SUPPORT (1 ARM @ 50')	1	EACH		
(14)	730-26.06	PEDESTRIAN PUSHBUTTON POST	1	EACH		
	730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	44	EACH		
	730-26.09	PEDESTRIAN PUSHBUTTON WITH 15IN SIGN	46	EACH		
(17)	801-01	SEEDING (WITH STRAW MULCH)	2000	SY		
					TOTAL	

FOOTNOTES:

- (1) ITEM INCLUDES STRIPPING AND STOCKPILING OF TOPSOIL. CITY WILL PROVIDE A SITE FOR STOCKPILING TOPSOIL.
- (2) ITEM INCLUDES NECESSARY REMOVAL AND DISPOSAL OF ASPHALT AND CONCRETE PAVEMENTS.
- (3) ITEM INCLUDES ALL CONCRETE, BACKFILL, PIPE, AND INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION OF CONCRETE GRAVITY RETAINING WALL. QUANTITY IS FOR SURFACE AREA OF FACE OF WALL ABOVE THE GROUND LINE.
- (4) ITEM INCLUDES ANY SAWCUTTING AND GRADING (CUT/FILL) REQUIRED.
- (5) ITEM INCLUDES ALL TRAFFIC CONTROL REQUIRED FOR COMPLIANCE WITH MUTCD FOR VEHICULAR AND PEDESTRIAN TRAFFIC.
- (6) ITEM INCLUDES TWO YIELD SIGNS AND TWO PEDESTRIAN WARNING SIGNS AND PLAQUES.
- (7) ITEM INCLUDES SIGN PANELS, "U" SECTION STEEL POSTS, AND INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION.
- (8) ITEM INCLUDES REMOVAL OF EXISTING SIGN PANELS AND INSTALLATION OF NEW SIGN PANELS.
- (9) ITEM INCLUDES REMOVAL OF EXISTING STREET LIGHT AND INSTALLATION OF NEW STREET LIGHT AT TURNPIKE/TULANE INTERSECTION AND ALL WIRING, CONDUIT, AND INCIDENTALS NECESSARY FOR FULLY FUNCTIONAL LUMINAIRE ON NEW SIGNAL POLE.
- (10) ITEM INCLUDES PREPARATION OF CONCRETE SURFACE AND ADHESIVE APPLICATION AND ANY CAULKING AS REQUIRED BY THE CITY.
- (11) ITEM INCLUDES REMOVAL OF ALL MAST ARMS, VEHICULAR SIGNAL HEADS, PEDESTRIAN PEDESTAL POLES, PEDESTRIAN SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, PEDESTRIAN PUSHBUTTON SIGNS, AND ASSOCIATED CONTENTS AS SHOWN ON THE PLANS.
- (12) BOXES SHALL BE QUARTZITE WITH "TRAFFIC SIGNAL" STAMPED ON LID.
- (13) RADAR DETECTION SHALL BE WAVETRONIX BRAND. ITEM INCLUDES ALL DETECTOR UNITS, WIRING, AND INCIDENTALS REQUIRED FOR FULLY FUNCTIONAL INTERSECTION DETECTION AS SHOWN IN THE PLANS.
- (14) ITEM INCLUDES PEDESTAL POLE AND FOUNDATION.
- (15) ITEM INCLUDES NEW PEDESTAL POLE TO BE PLACED ON EXISTING FOUNDATION.
- (16) ITEM INCLUDES CANTILEVER SIGNAL SUPPORT, FOUNDATION AND POLE EXTENSION NEEDED FOR LUMINAIRE ARM ATTACHMENT.
- (17) ITEM INCLUDES TOPSOIL, FERTILIZER, AND WATER AS REQUIRED.

* QUANTITIES MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.

TOTAL OF UNIT PRICE BASE BID

_____ Dollars
and _____ Cents (\$_____)

INDEX OF SHEETS

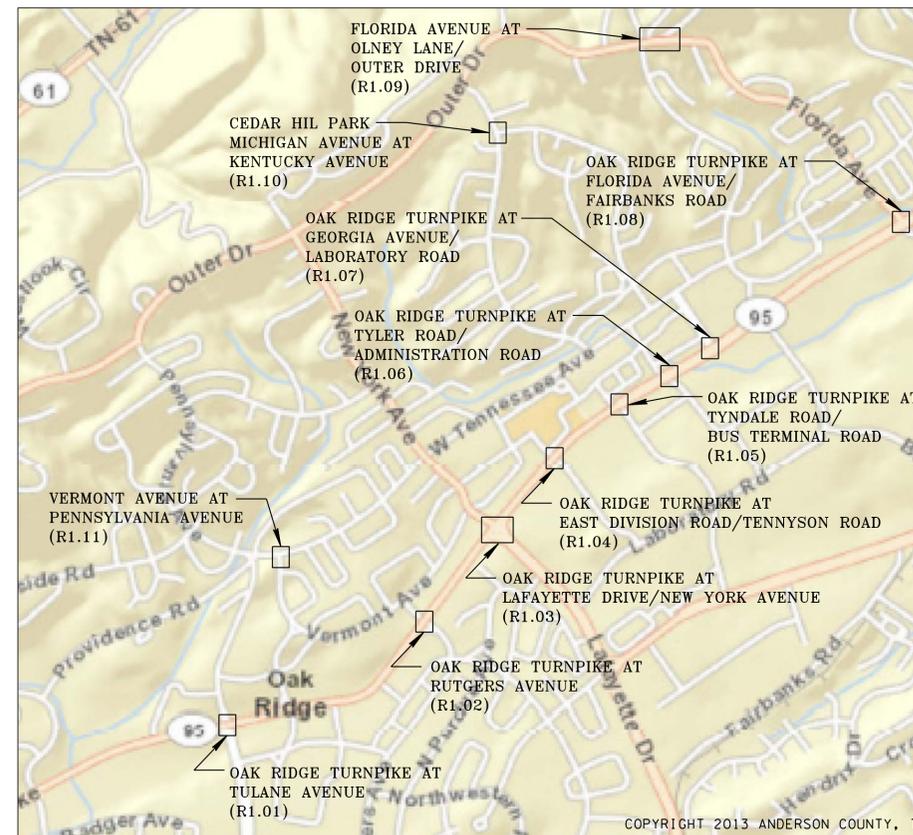
SHEET NAME	SHEET NO.
TITLE SHEET	RO.00
TYPICAL SECTIONS, DETAILS & ESTIMATED CONSTRUCTION QUANTITIES	RO.01
GENERAL NOTES	RO.02
PRESENT AND PROPOSED LAYOUT SHEETS:	
OAK RIDGE TURNPIKE AT TULANE AVENUE	R1.01
OAK RIDGE TURNPIKE AT RUTGERS AVENUE	R1.02
OAK RIDGE TURNPIKE AT LAFAYETTE DRIVE / NEW YORK AVENUE	R1.03
OAK RIDGE TURNPIKE AT EAST DIVISION ROAD / TENNYSON ROAD	R1.04
OAK RIDGE TURNPIKE AT TYNDALE ROAD / BUS TERMINAL ROAD	R1.05
OAK RIDGE TURNPIKE AT TYLER ROAD / ADMINISTRATION ROAD	R1.06
OAK RIDGE TURNPIKE AT GEORGIA AVENUE / LABORATORY ROAD	R1.07
OAK RIDGE TURNPIKE AT FLORIDA AVENUE / FAIRBANKS ROAD	R1.08
FLORIDA AVENUE AT OLNEY LANE / OUTER DRIVE	R1.09
CEDAR HILL PARK	R1.10
VERMONT AVENUE AT PENNSYLVANIA AVENUE	R1.11



OAK RIDGE PEDESTRIAN IMPROVEMENTS PROJECT

TDOT STANDARD ROADWAY AND STRUCTURE DRAWINGS

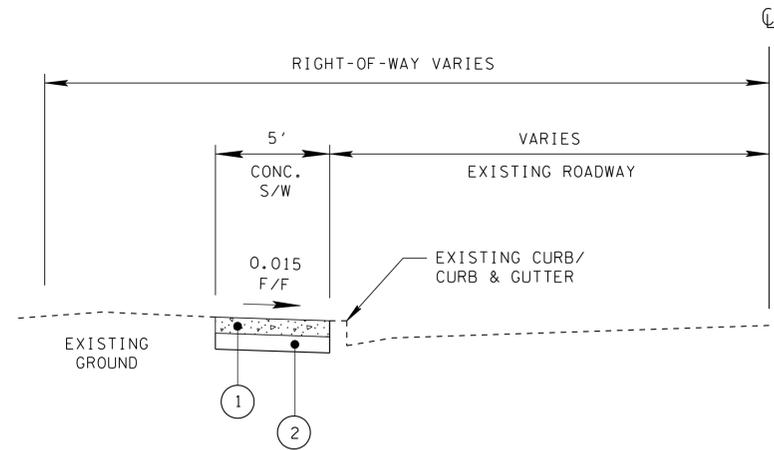
DRAWING NO.	CURRENT REV. DATE	TITLE
<u>ROADWAY DESIGN STANDARDS</u>		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
<u>ROADWAY AND PAVEMENT APPURTENANCES</u>		
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND GUTTERS
RP-NMC-11	02-28-02	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND GUTTERS
RP-H-3	05-08-13	CURB RAMP AND TRUNCATED DOME SURFACE DETAIL
RP-H-4	01-15-13	PERPENDICULAR CURB RAMP
RP-H-5	01-15-13	PARALLEL CURB RAMP
RP-H-6	04-13-11	MEDIAN CROSSING
RP-H-7	05-08-13	PERPENDICULAR CURB RAMP 20' THRU 75' RADIUS
RP-H-8	05-08-13	PERPENDICULAR CURB RAMP 20' THRU 60' RADIUS
RP-H-9	05-08-13	PARALLEL CURB RAMP FOR 20' THRU 60' RADIUS
RP-S-7	05-07-13	DETAILS FOR STANDARD CONCRETE SIDEWALKS
<u>TRAFFIC CONTROL APPURTENANCES</u>		
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS AND PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	11-01-11	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS, FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-16	11-01-11	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-17	10-26-96	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-29-91	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS STEEL DESIGN
T-S-20	11-01-11	SIGN DETAILS
T-S-23C		BREAKAWAY U-POST SIGN SUPPORTS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3A		ALTERNATE DETECTION DETAILS
T-SG-5	07-29-04	CONTROLLER CABINET DETAILS
T-SG-7	11-01-11	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-9	11-16-07	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A		MISCELLANEOUS SIGNAL DETAILS
T-SG-10	05-06-13	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-13-09	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-40	04-02-12	RIGHT LANE CLOSURE AT NEAR SIDE OF INTERSECTIONS
T-L-1SA	07-29-04	STANDARD LIGHTING DETAILS FOR SINGLE ARM SUPPORTS
T-L-4	05-25-11	STANDARD LIGHTING DETAILS CONDUIT, CABLE INSTALLATION
<u>EROSION PREVENTION AND SEDIMENT CONTROL</u>		
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4
EL-W-2	05-27-01	STANDARD GRAVITY-TYPE RETAINING WALLS



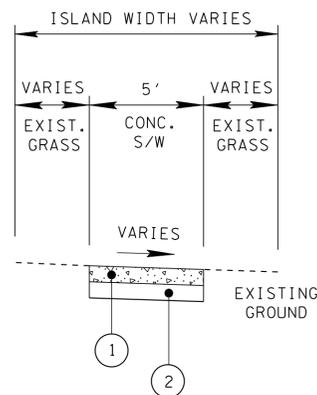
TOM BEEHAN - MAYOR
MARK S. WATSON - CITY MANAGER

CITY OF OAK RIDGE PUBLIC WORKS DEPARTMENT
100 WOODBURY LANE
OAK RIDGE, TENNESSEE 37830

ADDED TDOT STD. DWGS. EC-STR-3B & EC-STR-39A		10-04-13
REVISIONS		DATE
Cannon & Cannon, Inc. Consulting Engineers & Field Surveyors 8550 Kingston Pike Knoxville, Tennessee 37919 Telephone: (865) 670-8555 • Fax: (865) 670-8866 www.cannon-cannon.com		
CLIENT: CITY OF OAK RIDGE		
PROJECT: OAK RIDGE PEDESTRIAN IMPROVEMENTS PROJECT		
TITLE SHEET		
	CCI PROJECT NO.	368-0017
	DATE	08-07-13
	P.M.	JCE
	DRAWN	TRANSPORTATION
	O.C.	JCE
		R0.00



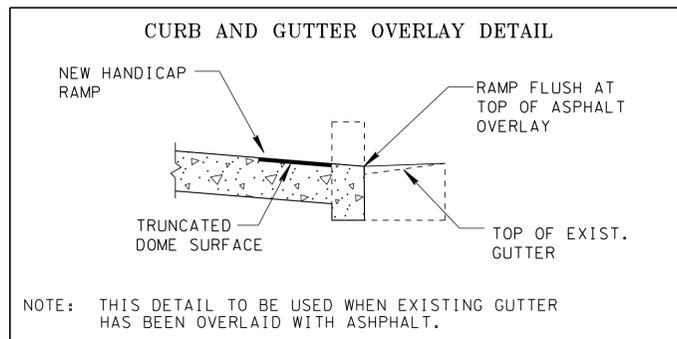
TYPICAL SECTION NO. 1
SIDEWALK BEHIND EXISTING CURB



TYPICAL SECTION NO. 2
SIDEWALK IN GRASS ISLAND

PAVEMENT SCHEDULE

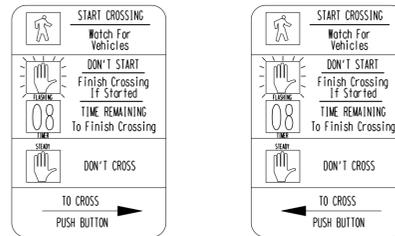
- ① 4" CONCRETE SIDEWALK
TDOT SPEC. SECTION 501 - PORTLAND CEMENT CONCRETE PAVEMENT
- ② MINERAL AGGREGATE BASE @ 4" DEPTH
TDOT SPEC. SECTION 303 - MINERAL AGGREGATE BASE, TYPE A, GRADING D



PEDESTRIAN SIGNAL HEAD ASSEMBLY



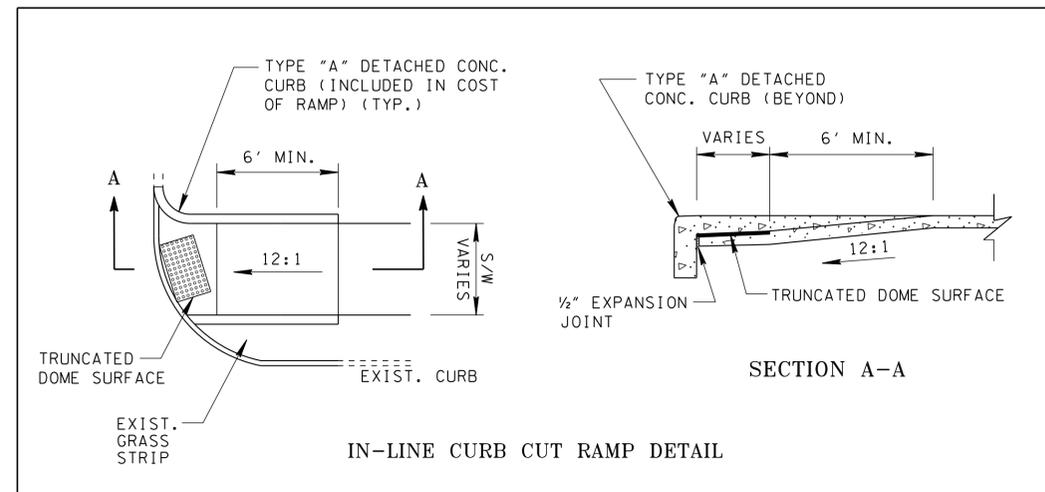
ALL PEDESTRIAN SIGNAL HEADS SHALL HAVE BLACK COLOR HOUSINGS AND LED TYPE DISPLAYS CONFORMING TO CURRENT ITE STANDARDS, WITH WALK/DON'T WALK SYMBOLS DISPLAYED IN THE SAME FACE WITH COUNTDOWN TIMER. THE SYMBOLS SHALL BE FULLY POPULATED, GE BRAND. PED HEAD MOUNTING ON NEW STRAIN POLES SHALL UTILIZE DRILLED ATTACHMENT (BAND MOUNTING NOT ALLOWED).



R10-3e(R)

R10-3e(L)

PEDESTRIAN SIGNAL HEAD ASSEMBLY INCLUDES PUSHBUTTON AND R10-3e SIGN PANEL. PUSHBUTTON SHALL BE CAMPBELL COMPANY MODEL 4 EVR TA.



IN-LINE CURB CUT RAMP DETAIL

ESTIMATED CONSTRUCTION QUANTITIES

ITEM NO.	DESCRIPTION	QTY.	UNIT
(1) 105-01.99	CONSTRUCTION STAKING	1	LS
201-01	CLEARING AND GRUBBING	1	LS
(2) 202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	100	LF
209-09.43	CURB INLET PROTECTION (TYPE 4)	30	EACH
303-01	MINERAL AGGREGATE, TYPE ABASE, GRADING D	80	TON
407-02.15	ASPHALT PAVEMENT REPAIR	1	LS
(3) 604-07.01	RETAINING WALL (CONCRETE GRANTY)	36	SF
(4) 701-01.01	CONCRETE SIDEWALK (4")	530	SF
(4) 701-02.03	CONCRETE HANDICAP RAMP	2400	SF
(4) 702-04	CONCRETE COMBINED CURB & GUTTER (MATCH EXISTING)	200	LF
(4) 702-05	CONCRETE CURB (MATCH EXISTING)	350	LF
(5) 712-01	TRAFFIC CONTROL	1	LS
(6) 713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	1	LS
713-15.02	REMOVAL & RELOCATION OF SIGN & SUPPORT	1	EACH
(7) 713-16.20	SIGNS (R1-5)	3	EACH
(7) 713-16.21	SIGNS (W11-2 W/W16-7P)	6	EACH
(7) 713-16.22	SIGNS (W11-2 W/W16-9P)	5	EACH
(7) 713-16.23	SIGNS (W15-1 W/W13-1P)	1	EACH
(8) 713-16.24	SIGNS (W15-1 W/W13-1P - SIGN PANEL ONLY)	1	EACH
(9) 714-01.36	ROADWAY LIGHTING	1	LS
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	210	LF
716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	130	LF
716-02.23	PLASTIC PAVEMENT MARKING (12IN BARRIER LINE)	100	LF
716-02.35	PLASTIC PAVEMENT MARKING (7' LONGITUDINAL CROSS WALK)	320	LF
716-02.36	PLASTIC PAVEMENT MARKING (8' LONGITUDINAL CROSS WALK)	1350	LF
716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	54	SF
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	200	LF
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	110	LF
716-10.30	TRUNCATED DOME DETECTABLE WARNING MAT - NEW RAMP	200	SF
(10) 716-10.31	TRUNCATED DOME DETECTABLE WARNING MAT - EXIST. RAMP	232	SF
717-01	MOBILIZATION	1	LS
(11) 730-01.02	REMOVAL OF SIGNAL EQUIPMENT	1	LS
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	15	EACH
730-02.17	SIGNAL HEAD ASSEMBLY (150A2H WITH BACKPLATE)	6	EACH
(12) 730-03.21	INSTALL PULL BOX (TYPE B)	13	EACH
730-08.01	SIGNAL CABLE-3 CONDUCTOR	1300	LF
730-08.02	SIGNAL CABLE-5 CONDUCTOR	3300	LF
730-08.03	SIGNAL CABLE-7 CONDUCTOR	5000	LF
730-08.04	SIGNAL CABLE-9 CONDUCTOR	500	LF
730-12.02	CONDUIT 2" DIAMETER (PVC)	355	LF
730-12.03	CONDUIT 3" DIAMETER (PVC)	190	LF
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	2230	LF
(13) 730-13.08	VEHICLE DETECTOR (INTERSECTION RADAR DETECTION)	2	EACH
730-14.01	SHIELDED DETECTOR CABLE	1000	LF
730-15.11	MODIFY CABINET (MODIFY FOR PED. SIGNALS)	5	EACH
(14) 730-23.30	PEDESTAL POLE (PEDESTRIAN - NEW)	5	EACH
(15) 730-23.31	PEDESTAL POLE (PEDESTRIAN - REPLACE EXISTING)	8	EACH
(16) 730-23.96	CANTILEVER SIGNAL SUPPORT (1 ARM @ 50')	1	EACH
(14) 730-26.06	PEDESTRIAN PUSHBUTTON POST	1	EACH
730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	44	EACH
730-26.09	PEDESTRIAN PUSHBUTTON WITH 15IN SIGN	46	EACH
(17) 801-01	SEEDING (WITH STRAW MULCH)	2000	SY

FOOTNOTES:

- (1) ITEM INCLUDES STRIPPING AND STOCKPILING OF TOPSOIL. CITY WILL PROVIDE A SITE FOR STOCKPILING TOPSOIL.
- (2) ITEM INCLUDES NECESSARY REMOVAL AND DISPOSAL OF ASPHALT AND CONCRETE PAVEMENTS.
- (3) ITEM INCLUDES ALL CONCRETE, BACKFILL, PIPE, AND INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION OF CONCRETE GRANTY RETAINING WALL. QUANTITY IS FOR SURFACE AREA OF FACE OF WALL ABOVE THE GROUND LINE.
- (4) ITEM INCLUDES ANY SAWCUTTING AND GRADING (CUT/FILL) REQUIRED.
- (5) ITEM INCLUDES ALL TRAFFIC CONTROL REQUIRED FOR COMPLIANCE WITH MUTCD FOR VEHICULAR AND PEDESTRIAN TRAFFIC.
- (6) ITEM INCLUDES TWO YIELD SIGNS AND TWO PEDESTRIAN WARNING SIGNS AND PLAQUES.
- (7) ITEM INCLUDES SIGN PANELS, "U" SECTION STEEL POSTS, AND INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION.
- (8) ITEM INCLUDES REMOVAL OF EXISTING SIGN PANELS AND INSTALLATION OF NEW SIGN PANELS.
- (9) ITEM INCLUDES REMOVAL OF EXISTING STREET LIGHT AND INSTALLATION OF NEW STREET LIGHT AT TURNPIKE/ULAWNE INTERSECTION AND ALL WIRING, CONDUIT, AND INCIDENTALS NECESSARY FOR FULLY FUNCTIONAL LUMINAIRE ON NEW SIGNAL POLE.
- (10) ITEM INCLUDES PREPARATION OF CONCRETE SURFACE AND ADHESIVE APPLICATION AND ANY CAULKING AS REQUIRED BY THE CITY.
- (11) ITEM INCLUDES REMOVAL OF ALL MAST ARMS, VEHICULAR SIGNAL HEADS, PEDESTRIAN PEDESTAL POLES, PEDESTRIAN SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, PEDESTRIAN PUSHBUTTON SIGNS, AND ASSOCIATED CONTENTS AS SHOWN ON THE PLANS.
- (12) BOXES SHALL BE QUARTZITE WITH "TRAFFIC SIGNAL" STAMPED ON LID.
- (13) RADAR DETECTION SHALL BE WAVEFRONX BRAND. ITEM INCLUDES ALL DETECTOR UNITS, WIRING, AND INCIDENTALS REQUIRED FOR FULLY FUNCTIONAL INTERSECTION DETECTION AS SHOWN IN THE PLANS.
- (14) ITEM INCLUDES PEDESTAL POLE AND FOUNDATION.
- (15) ITEM INCLUDES NEW PEDESTAL POLE TO BE PLACED ON EXISTING FOUNDATION.
- (16) ITEM INCLUDES CANTILEVER SIGNAL SUPPORT, FOUNDATION AND POLE EXTENSION NEEDED FOR LUMINAIRE ARM ATTACHMENT.
- (17) ITEM INCLUDES TOPSOIL, FERTILIZER, AND WATER AS REQUIRED.

* QUANTITIES MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.

MODIFIED STAKING AND EROSION CONTROL ITEMS	10-04-13
MODIFIED PEDESTRIAN SIGNAL DETAIL AND QUANTITIES	09-11-13
REVISIONS	DATE
Cannon & Cannon, Inc. Consulting Engineers • Field Surveyors 8550 Kingston Pike Knoxville, Tennessee 37919 Telephone: (865) 670-8555 • Fax: (865) 670-8866 www.cannon-cannon.com	
CLIENT:	CITY OF OAK RIDGE
PROJECT:	OAK RIDGE PEDESTRIAN IMPROVEMENTS PROJECT
TYPICAL SECTIONS, DETAILS & ESTIMATED CONSTRUCTION QUANTITIES	
CCI PROJECT NO.	368-0017
DATE	08-07-13
P.M.	JCE
DRAWN	TRANSPORTATION
O.C.	JCE
R0.01	