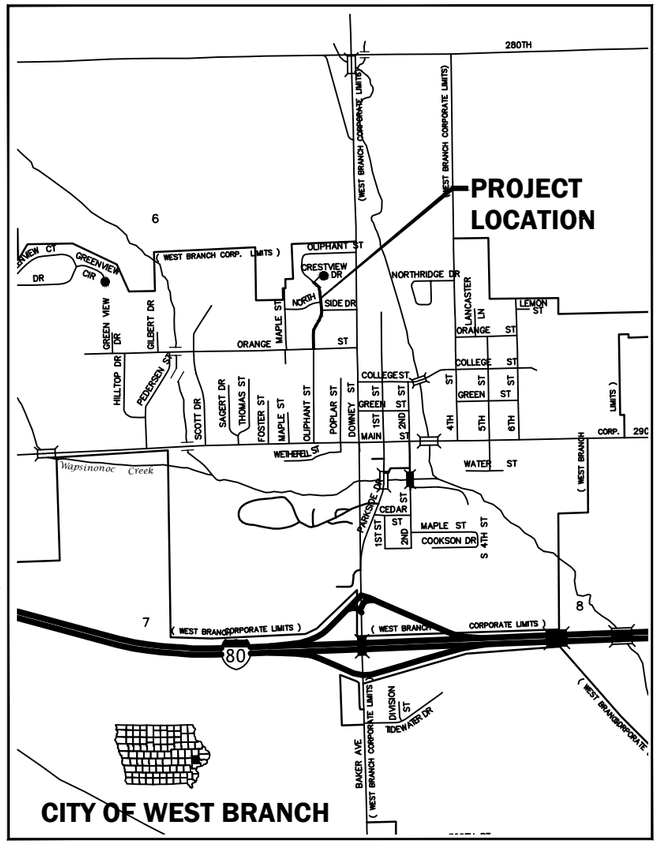
PLANS FOR OLIPHANT STREET SIDEWALK IMPROVEMENTS WEST BRANCH, IOWA



VICINITY MAP

SCALE 1" = 1000'

GENERAL LEGEND

	SURVEY LINE & STATION INDICATOR	12"CMP	CULVERT; SIZE AND TYPE
	CONCRETE SURFACE	OR	FLARED END SECTION
	ASPHALT SURFACE		RAILROAD
	CONCRETE W/ASPHALT OVERLAY		MAILBOX
	LOW GRADE ASPHALT SURFACE		FENCE (MISC.)
	GRANULAR SURFACE		SECURITY FENCE
	DIRT SURFACE		WOOD FENCE
	BRICK SURFACE	SF	SILT FENCE
	SURFACING REMOVAL/REPLACEMENT		CHAIN LINK FENCE
	EARTH SECTION		PROPERTY LINE
	NEW SEWER/MANHOLE		PROPERTY PIN
	NEW SEWER/INTAKE		SECTION CORNER
	NEW WATER MAIN		PLAT BOUNDARY
	NEW FORCE MAIN		BUILDING
	NEW HYDRANT	555.55	ELEVATION MARKER
	NEW WATER VALVE		CENTERLINE
8"S	EXISTING SANITARY SEWER AND SIZE	DIA.	DIAMETER
18"ST	EXISTING STORM SEWER AND SIZE	ELEV.	ELEVATION
8"W	EXISTING WATER MAIN AND SIZE	PVC	POLYVINYLCHLORIDE PIPE
6"FM	EXISTING FORCE MAIN AND SIZE	CI	CAST IRON PIPE
4"G	GAS MAIN AND SIZE	DI	DUCTILE IRON PIPE
UE	UNDERGROUND POWER LINE	CMP	CORRUGATED METAL PIPE
OHE	OVERHEAD POWER LINE	VCP	VITRIFIED CLAY PIPE
T	UNDERGROUND TELEPHONE LINE	RCP	REINFORCED CONCRETE PIPE
CTV	CABLE TELEVISION LINE	RCAP	REINFORCED CONCRETE ARCH PIPE
FO	FIBER OPTICS	LRCP	LINED REINFORCED CONCRETE PIPE
	TOP OF EMBANKMENT	LCPP	LINED CONCRETE PRESSURE PIPE
	TOE OF EMBANKMENT	STA.	STATION
	DRAINAGE COURSE	LA	LINE AHEAD
S	SANITARY MANHOLE	LB	LINE BACK
ST	STORM WATER MANHOLE	BM-2	BENCH MARK AND NUMBER
E	ELECTRIC MANHOLE	ROW	RIGHT-OF-WAY
T	TELEPHONE MANHOLE	PI	POINT OF INTERSECTION
W	WATER MANHOLE	POT	POINT ON TANGENT
OR	CURB INTAKE	LF	LINEAR FEET
OR	AREA OR BEEHIVE INTAKE	TH	TACKED HUB
	EXISTING HYDRANT	SB-2	SOIL BORING AND NUMBER
	EXISTING WATER VALVE	PVC	POINT OF VERTICAL CURVATURE
	GAS VALVE	PVT	POINT OF VERTICAL TANGENCY
	UTILITY POLE	VC	VERTICAL CURVE
	GUY ANCHOR	PC	POINT OF CURVATURE
	STREET LIGHT	PT	POINT OF TANGENCY
	SIGN	MO	MIDDLE ORDINATE
	TELEPHONE CABLE JUNCTION BOX	DWG.	DRAWING
	TRAFFIC SIGNALS	CP-1	CONTROL POINT AND NUMBER
	PEDESTRIAN CONTROL LIGHT	(TYP.)	TYPICAL
	RAILROAD CONTROL LIGHT	HPG	HIGH PRESSURE GAS
	RAILROAD SIGN	IPG	INTERMEDIATE PRESSURE GAS
	UTILITY ACCESS COVER	INV.	INVERT
	PARKING METER	E.W.,E.F.	EACH WAY, EACH FACE
	TREE	E.W.	EACH WAY
	EVERGREEN	@	AT
	STUMP	3	DRAWING NUMBER
OR	BUSH, SHRUB OR HEDGE		

NOTE: THIS IS A GENERAL LEGEND. ITEMS MAY OR MAY NOT APPEAR ON DRAWINGS.

DRAWING INDEX

NO.	DRAWING TITLE
A.01	INDEX AND TITLE SHEET
B.01	DETAILS
D.01	DEMOLITION PLAN
D.02-D.05	PLAN AND PROFILE
S.01-S.03	CURB RAMPS
T.01	TABULATION
X.01-X.05	CROSS SECTIONS

GENERAL NOTES

1. ALL ELEVATIONS ARE TO CITY OF WEST BRANCH DATUM.
2. REMOVE AND REPLACE ALL STREET SIGNS AS DIRECTED BY ENGINEER. COST IS INCIDENTAL TO CONSTRUCTION.
3. SHAPE ALL DITCHES TO DRAIN AFTER CONSTRUCTION.
4. CONFIRM LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES AS REQUIRED TO ELIMINATE CONFLICTS PRIOR TO CONSTRUCTION. ALLOW UTILITY PERSONNEL TO RELOCATE UTILITIES WHERE CONFLICTS OCCUR.
5. DO NOT INTERRUPT EXISTING UTILITIES OR INDIVIDUAL SERVICES UNLESS DIRECTED BY ENGINEER.
6. LOCATIONS OF CONSTRUCTION LIMIT LINES SHOWN ON PLANS ARE APPROXIMATE. ENGINEER WILL LOCATE CONSTRUCTION LIMITS IN FIELD. CONFINE ALL CONSTRUCTION OPERATIONS, INCLUDING ACCESS TO WORK, TO CONSTRUCTION LIMITS.
7. STATIONING IS ALONG RIGHT EDGE SIDEWALK, UNLESS OTHERWISE NOTED.
8. PROTECT UTILITY POLES, LINES AND APPURTENANCES NOT SHOWN FOR RELOCATION.
9. RESET ALL PROPERTY PINS DISTURBED BY CONSTRUCTION; PINS RESET BY REGISTERED LAND SURVEYOR; COST IS INCIDENTAL TO CONSTRUCTION.
10. PROTECT ALL SURFACING, NOT INDICATED BY SHADING FOR REMOVAL AND REPLACEMENT FROM DAMAGE DURING CONSTRUCTION.

PROTECTION OF VEGETATION

TREES AND OTHER VEGETATION WHICH MAY BE REMOVED ARE MARKED WITH AN "X" OVER THE APPROPRIATE SYMBOL. FOR EXAMPLE 12" INDICATES THE REMOVAL OF A 12" TREE. REPLACEMENT, BY CONTRACTOR, OF THESE ITEMS IS NOT REQUIRED. TUNNEL, INSTALL TIGHT SHEETING, HAND EXCAVATE OR EMPLOY OTHER MEANS APPROVED BY ENGINEER TO PROTECT EXPOSED PORTIONS AND ROOT SYSTEMS OF TREES AND OTHER VEGETATION NOT SCHEDULED FOR REMOVAL. IF TREES AND OTHER VEGETATION NOT SCHEDULED FOR REMOVAL ARE DAMAGED DURING CONSTRUCTION, REPLACE IN KIND AND SIZE AT NO COST TO CITY OR PROPERTY OWNER.

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: David R. Schechinger
NAME: David R. Schechinger
DATE: 07-23-2012
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2012
PAGES COVERED BY THIS SEAL: ALL

LICENSED PROFESSIONAL ENGINEER
David R. Schechinger
No.16538
IOWA

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
ISSUED FOR	CONSTRUCTION

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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

INDEX AND TITLE SHEET

DWG. NO. A.01

PROJECT 36863/1

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X-REFS: west branch_cl
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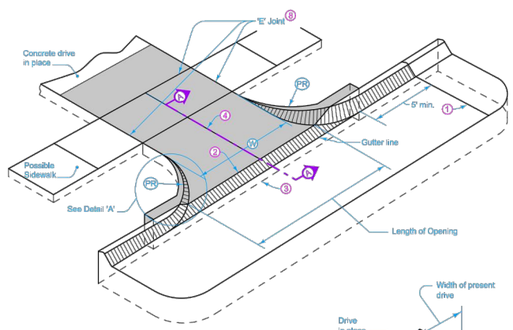
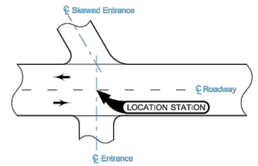
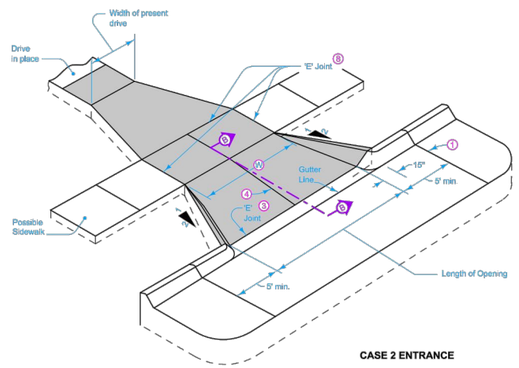


CASE 1 ENTRANCE



ENTRANCE LOCATION



CASE 2 ENTRANCE

Special details for entrances other than Cases 1 and 2 are included in the detail plans. The shape and surface of driveways and alleys will vary to fit individual conditions.

Use unreinforced concrete pavement mix with a minimum thickness of 6 inches, unless specified otherwise for driveways and alleys. If an alley drains toward the roadway, use a 2 inch inverted crown; otherwise, use flat surface for driveway pavement.

Construct sidewalk within the limits of the driveway using the same thickness as the driveway and a maximum 2% cross-slope.

W is measured at the street side of sidewalk. If sidewalk is not present, W is to be measured at the end of the returns for Case 1 and 10 feet back of curb for Case 2.

1. Transverse Pavement Joints as per detail Project Plans.
2. 'K' Pavement Joint (Refer to PV-101) from end of radius to end of radius.
3. Line at the Back of Curb.
4. 'C' Joint on Centerline.
8. If the sidewalk is in place at the time of construction, place 'E' Joint along the front edge of the sidewalk. If the sidewalk is reconstructed with the driveway entrance, place 'E' Joint along the back edge of the sidewalk and a 'C' Joint sawed or formed along the front edge of the sidewalk. Refer to PV-101 for joint details.

Possible Contract Items:
Driveway, P.C. Concrete
Driveway, Reinforced P.C. Concrete
Removal of Paved Driveway

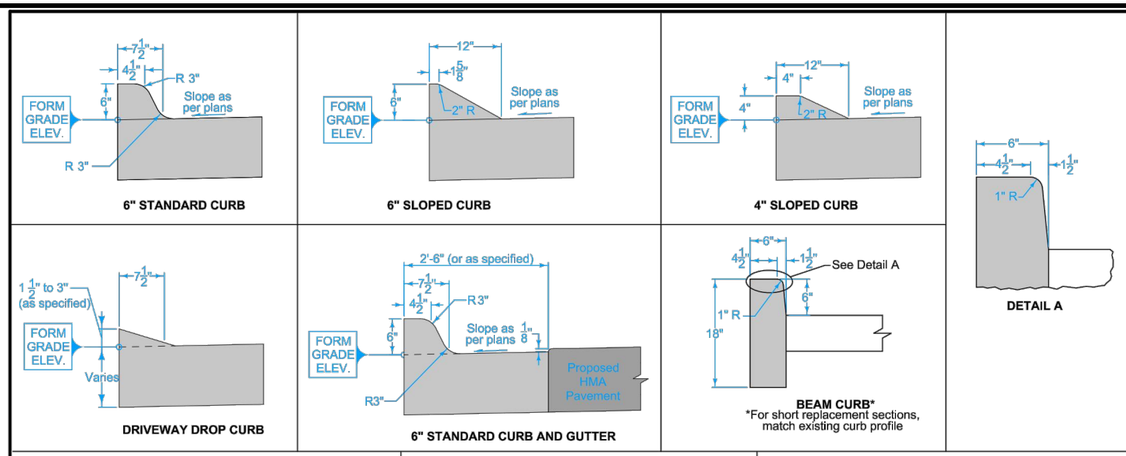
Possible Tabulation:
102-3

Iowa Department of Transportation	REVISION	
STANDARD ROAD PLAN	2	04-19-11
	MI-210	
	SHEET 1 of 2	

REVISIONS: Updated references to renamed standards.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

PCC DRIVEWAYS AND ALLEYS



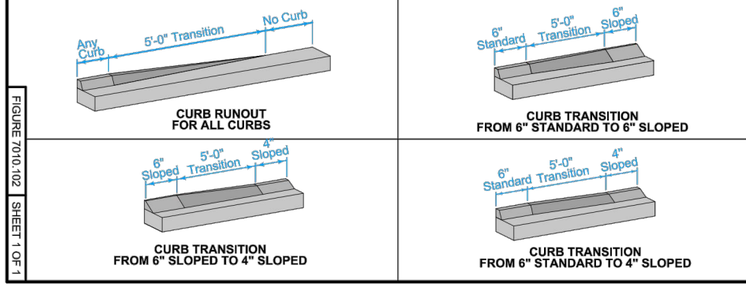


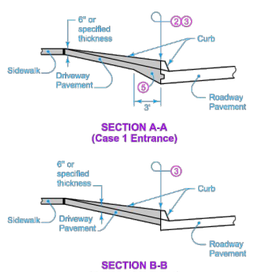
FIGURE 7010.102 SHEET 1 OF 1

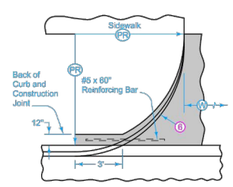
SUDAS	Iowa Department of Transportation	REVISION	
FIGURE 7010.102	STANDARD ROAD PLAN	New	04-19-11
		PV-102	
		SHEET 1 of 1	

REVISIONS: New. Replaces PV-2. Added Beam Curb and Detail A and combined with BUDAS.

Paul D. Wiegand — DESIGN STANDARDS ENGINEER
Deanna Maifield — DESIGN METHODS ENGINEER

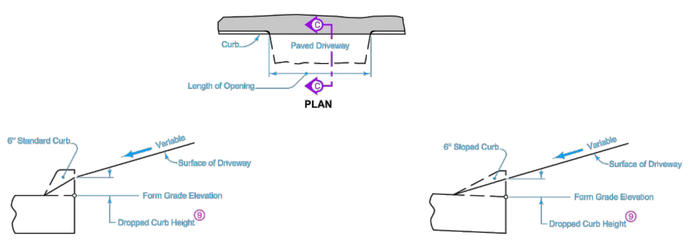
PCC CURB DETAILS





DETAIL 'A'
CASE 1 ENTRANCE

2. 'K' Pavement Joint (Refer to PV-101) from end of radius to end of radius.
3. Line at the Back of Curb.
5. Taper to Pavement Thickness.
6. Lip curb varies from either 4½ inch or 3 inch at back of curb to 0 inch at front of sidewalk.
9. Refer to Tabulation 102-3.



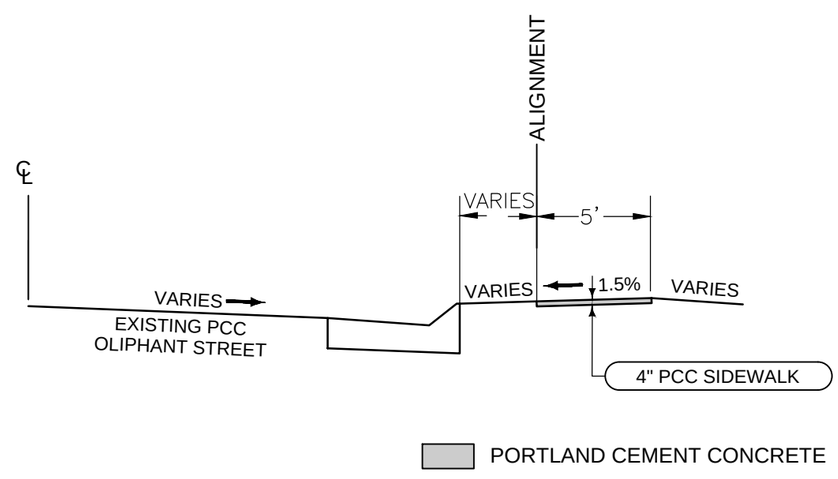
DROPPED CURB

Iowa Department of Transportation	REVISION	
STANDARD ROAD PLAN	2	04-19-11
	MI-210	
	SHEET 2 of 2	

REVISIONS: Updated references to renamed standards.

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

PCC DRIVEWAYS AND ALLEYS



TYPICAL SIDEWALK SECTION

NOT TO SCALE

DATE	REVISIONS		
		SCALE	AS NOTED
		DRAWN	ALG
		CHECKED	DRS
		APPROVED	DRS
		DATE	07-23-12
		ISSUED FOR	CONSTRUCTION

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DETAILS

DWG. NO. B.01

PROJECT 36863/1

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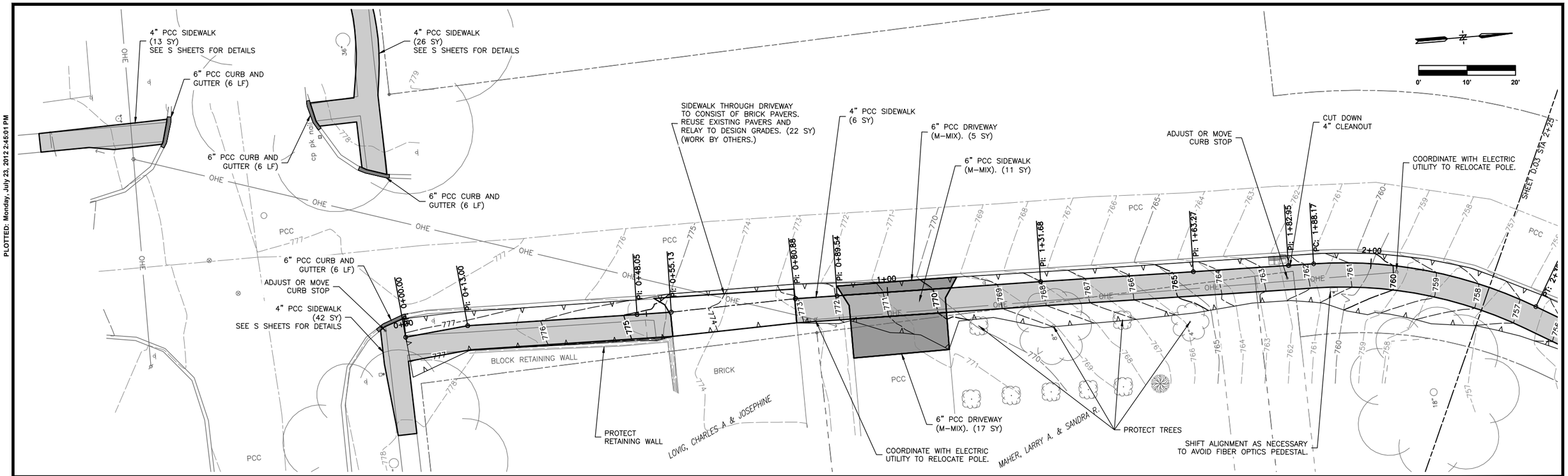
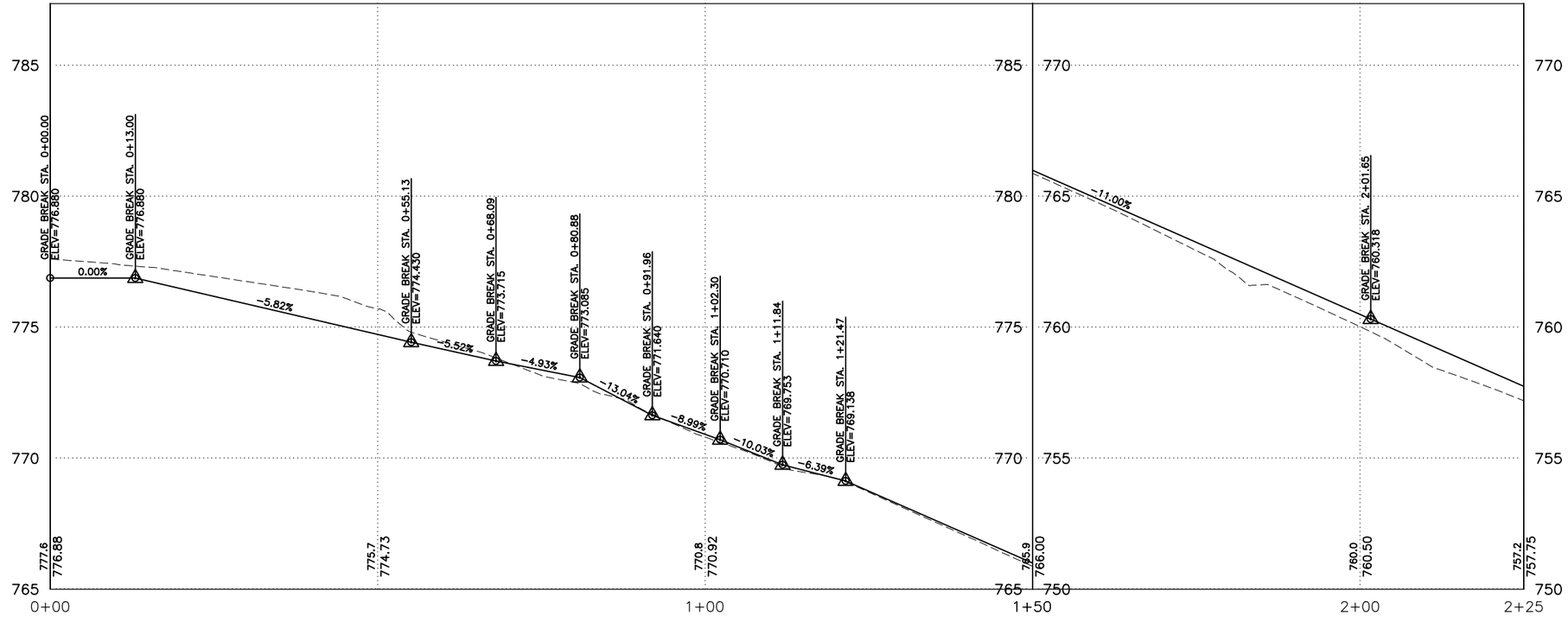
OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

DEMOLITION PLAN

DWG. NO.
D.01

PROJECT 36863/1





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APPROVED	DRS
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

PLAN AND PROFILE

DWG. NO.
D.02

PROJECT 36863/1

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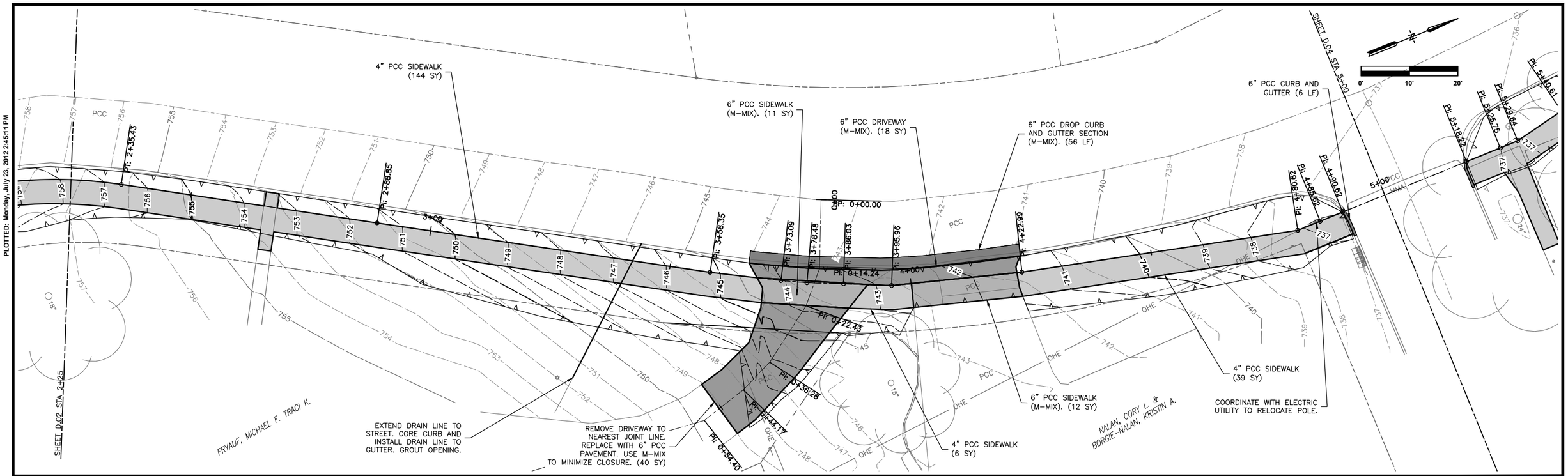

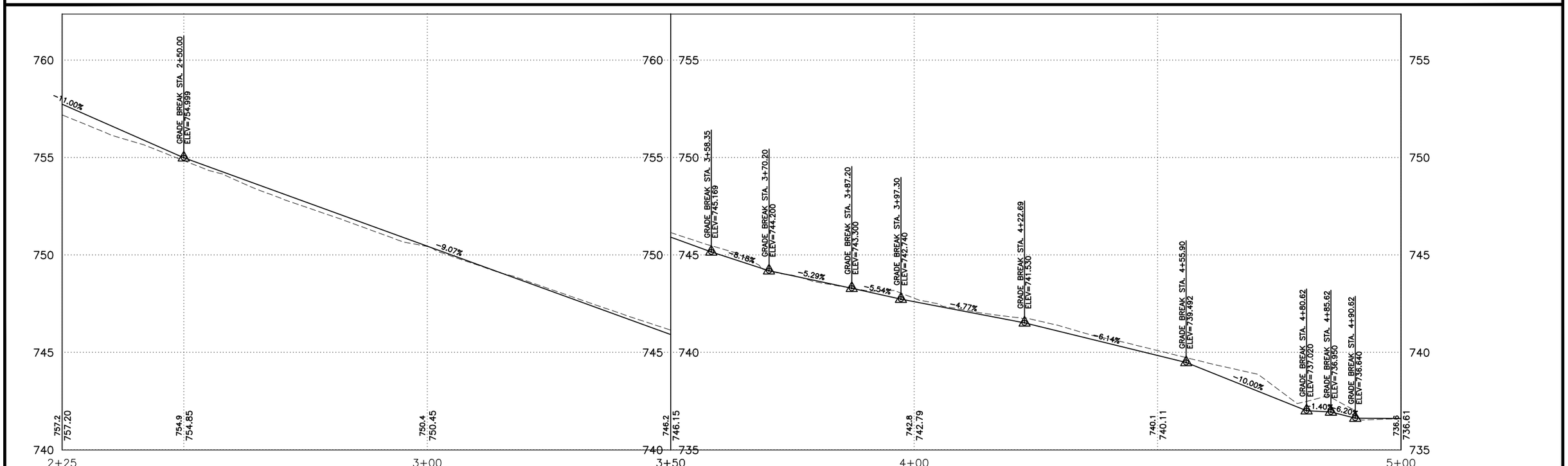

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APPROVED	DRS
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

PLAN AND PROFILE

DWG. NO.
D.03

PROJECT 36863/1

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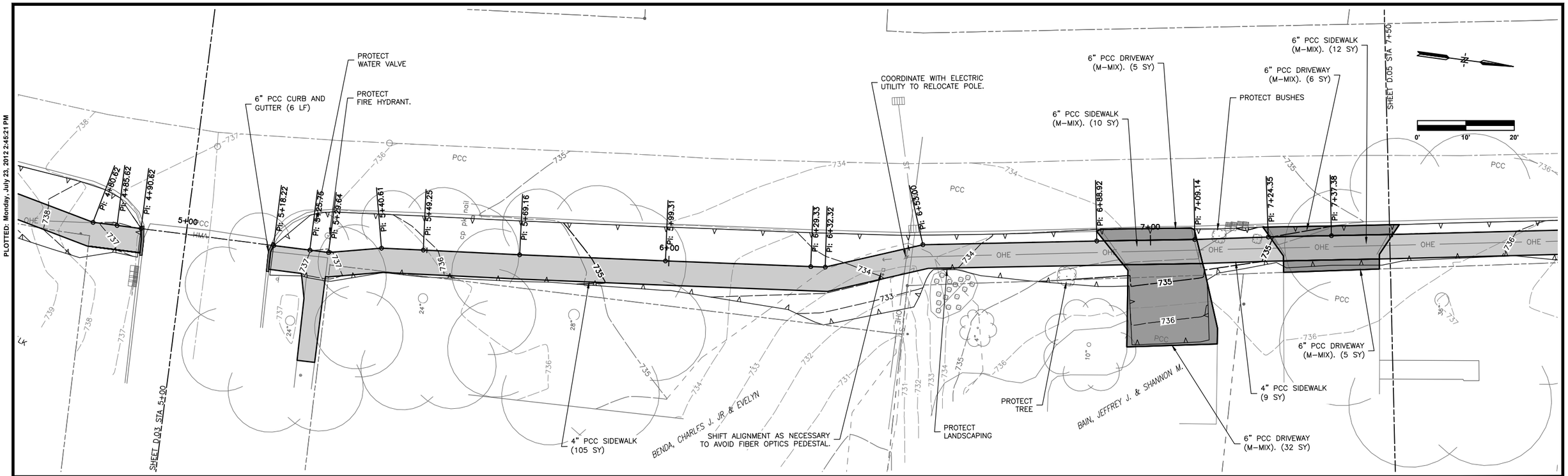

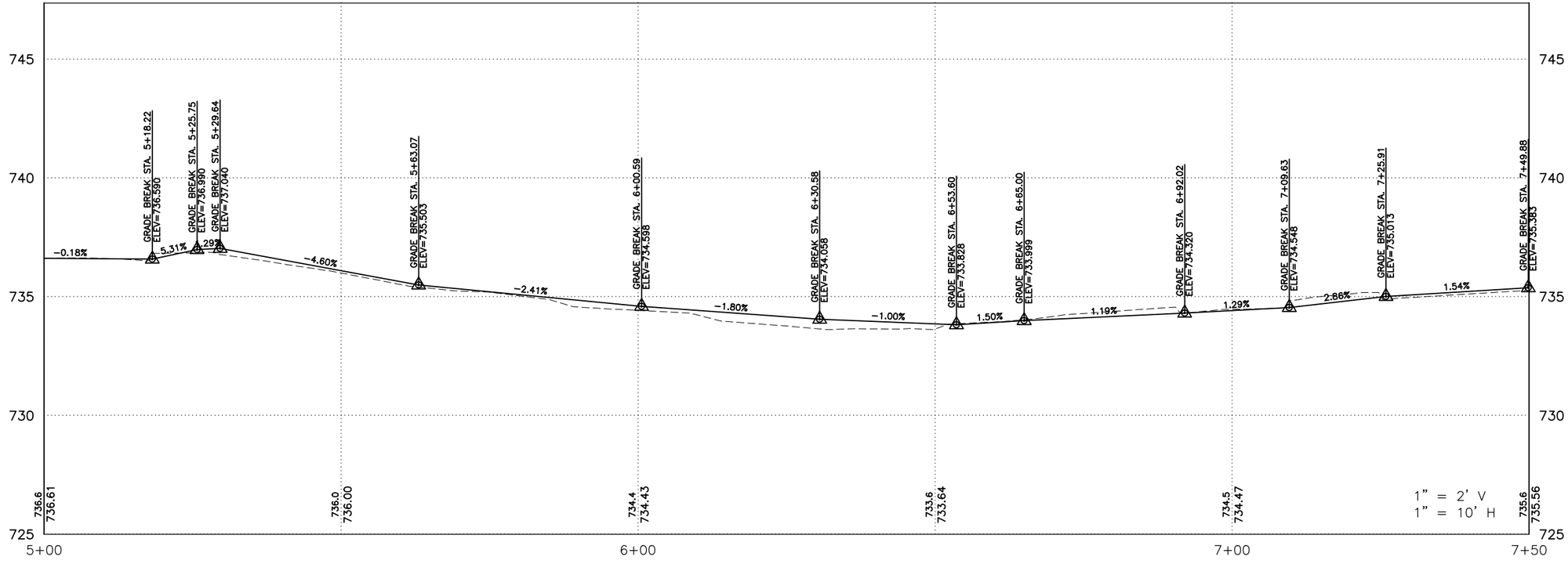

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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

PLAN AND PROFILE

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D.04

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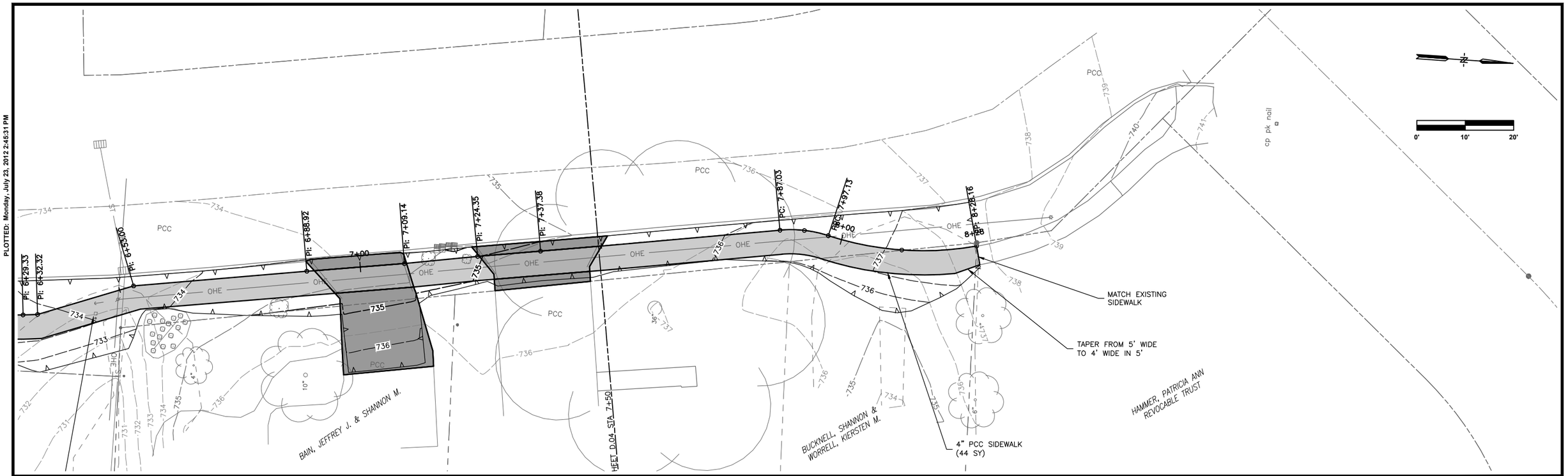

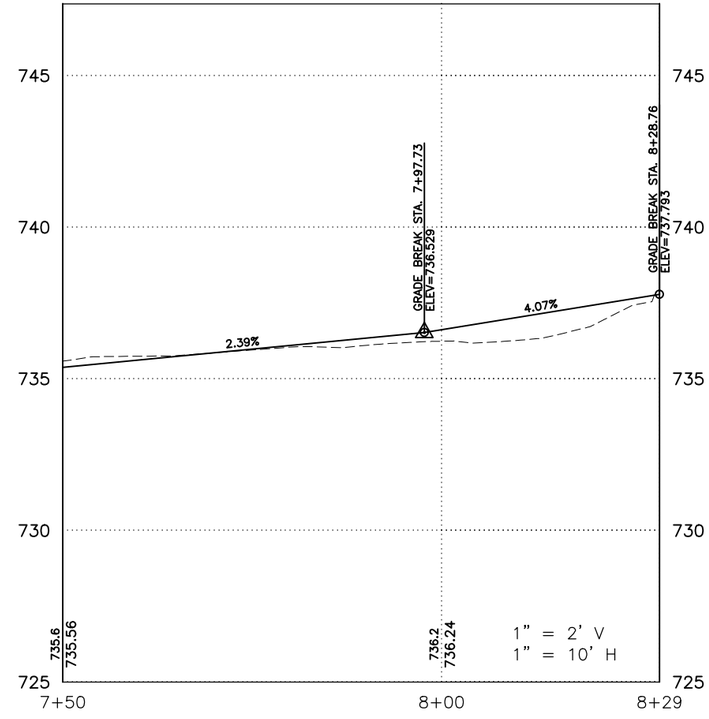

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OLIPHANT STREET SIDEWALK IMPROVEMENTS
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PLAN AND PROFILE

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SIDEWALK COMPLIANCE

113-10
06-22-11

* DO NOT INCLUDE CURB

SEE S SHEETS

POINT TO POINT		SIDEWALK DESCRIPTION	DISTANCE* FT	ELEVATION FT	SLOPE %	RANGE %	REMARKS	FOR INFORMATION ONLY: POINT	NORTHING	EASTERN	ELVATION	
1102	1103	RAMP RUNNING SLOPE	5.00	-0.31	-6.20%	5.0% to 8.3%		1101	617456.41	2228045.73	776.57	EXISTING
1103	1104	RAMP CROSS SLOPE	5.00	0.08	1.60%	1.5% to 2%		1102	617453.98	2228045.80	776.54	RAMP
1104	1105	RAMP RUNNING SLOPE	5.00	0.31	6.20%	5.0% to 8.3%		1103	617448.98	2228045.95	776.85	LANDING
1105	1102	RAMP CROSS SLOPE	5.00	-0.08	-1.60%	1.5% to 2%		1104	617449.12	2228050.94	776.77	LANDING
1103	1107	LANDING	5.00	0.08	1.60%	1.5% to 2%		1105	617454.12	2228050.80	776.46	RAMP
1107	1111	LANDING	5.00	0.07	1.40%	1.5% to 2%		1106	617455.00	2228050.77	776.42	EXISTING
1111	1104	LANDING	5.00	-0.07	-1.40%	1.5% to 2%		1107	617443.98	2228046.09	776.77	LANDING
1104	1103	LANDING	5.00	-0.08	-1.60%	1.5% to 2%		1108	617428.99	2228046.51	774.79	EXISTING
1107	1111	RAMP CROSS SLOPE	5.00	0.07	1.40%	1.5% to 2%		1109	617429.10	2228050.35	774.77	EXISTING
1107	1108	RAMP RUNNING SLOPE	15.00	1.98	13.20%	5.0% to 8.3%	Match Point	1110	617439.10	2228050.23	776.12	RAMP
1108	1109	RAMP CROSS SLOPE	3.84	0.02	0.52%	1.5% to 2%		1111	617444.13	2228051.09	776.70	LANDING
1109	1110	RAMP RUNNING SLOPE	10.00	-1.35	-13.50%	5.0% to 8.3%	Match Point	1201	617484.61	2228044.85	777.29	EXISTING
1110	1111	RAMP RUNNING SLOPE	5.10	-0.58	-11.37%	5.0% to 8.3%	Match Point	1202	617486.75	2228044.78	777.37	RAMP
								1203	617494.42	2228044.55	777.85	LANDING
1202	1203	RAMP RUNNING SLOPE	7.67	-0.48	-6.26%	5.0% to 8.3%		1204	617494.57	2228049.55	777.78	LANDING
1203	1204	RAMP CROSS SLOPE	5.00	0.07	1.40%	5.0% to 8.3%		1205	617486.90	2228049.78	777.30	RAMP
1204	1205	RAMP RUNNING SLOPE	7.68	0.48	6.25%	5.0% to 8.3%		1206	617494.90	2228059.92	777.22	EXISTING
1205	1202	RAMP CROSS SLOPE	5.00	-0.07	-1.40%	5.0% to 8.3%		1207	617494.87	2228059.03	777.26	RAMP
1203	1204	LANDING	5.00	0.07	1.40%	1.5% to 2%		1208	617499.57	2228049.39	777.85	LANDING
1204	1208	LANDING	5.00	-0.07	-1.40%	1.5% to 2%		1209	617499.87	2228058.87	777.33	RAMP
1208	1211	LANDING	5.00	-0.08	-1.60%	1.5% to 2%		1210	617499.95	2228061.60	777.26	EXISTING
1211	1203	LANDING	5.00	0.08	1.60%	1.5% to 2%		1211	617499.41	2228044.40	777.93	LANDING
1207	1204	RAMP RUNNING SLOPE	9.49	-0.52	-5.48%	5.0% to 8.3%		1212	617499.95	2228040.39	778.08	RAMP
1204	1208	RAMP CROSS SLOPE	5.00	-0.07	-1.40%	1.5% to 2%		1213	617498.84	2228020.29	778.83	EXISTING
1208	1209	RAMP RUNNING SLOPE	9.48	0.52	5.48%	5.0% to 8.3%		1214	617494.66	2228020.40	778.85	EXISTING
1209	1207	RAMP CROSS SLOPE	5.00	0.07	1.40%	1.5% to 2%		1215	617495.13	2228040.16	778.02	RAMP
1211	1212	RAMP RUNNING SLOPE	4.04	-0.15	-3.71%	5.0% to 8.3%		1216	617499.70	2228025.35	778.64	RAMP
1212	1213	RAMP RUNNING SLOPE	20.13	-0.75	-3.73%	5.0% to 8.3%		1217	617495.35	2228025.74	778.56	RAMP
1213	1214	RAMP CROSS SLOPE	4.18	-0.02	-0.48%	1.5% to 2%		1301	617495.90	2228091.97	776.81	EXISTING
1214	1215	RAMP RUNNING SLOPE	19.76	0.83	4.20%	5.0% to 8.3%		1302	617495.93	2228092.82	776.85	RAMP
1215	1203	RAMP RUNNING SLOPE	4.45	0.17	3.82%	5.0% to 8.3%		1303	617495.99	2228094.81	776.88	LANDING
1212	1216	RAMP RUNNING SLOPE	15.04	-0.56	-3.72%	5.0% to 8.3%		1304	617496.14	2228099.81	776.95	LANDING
1216	1213	RAMP RUNNING SLOPE	5.14	-0.19	-3.70%	5.0% to 8.3%		1305	617497.76	2228114.77	778.06	EXISTING
1214	1217	RAMP RUNNING SLOPE	5.38	0.29	5.39%	5.0% to 8.3%		1306	617501.61	2228114.65	778.05	EXISTING
1217	1215	RAMP RUNNING SLOPE	14.42	0.54	3.74%	5.0% to 8.3%		1307	617501.14	2228099.66	776.95	RAMP
								1308	617500.99	2228094.66	776.88	LANDING
1302	1303	RAMP RUNNING SLOPE	2.00	-0.03	-1.50%	5.0% to 8.3%		1309	617500.92	2228092.66	776.85	RAMP
1303	1308	RAMP CROSS SLOPE	5.00	0.00	0.00%	1.5% to 2%		1310	617500.91	2228089.95	776.93	EXISTING
1308	1309	RAMP RUNNING SLOPE	2.00	0.03	1.50%	5.0% to 8.3%		2101	617966.69	2228206.73	736.60	EXISTING
1309	1302	RAMP CROSS SLOPE	5.00	0.00	0.00%	1.5% to 2%		2102	617966.08	2228206.73	736.64	RAMP
1303	1304	LANDING	5.00	-0.07	-1.50%	1.5% to 2%		2103	617961.08	2228206.76	736.95	RAMP
1304	1307	LANDING	5.00	0.00	0.00%	1.5% to 2%		2104	617961.11	2228211.75	737.02	RAMP
1307	1308	LANDING	5.00	0.07	1.50%	1.5% to 2%		2105	617966.11	2228211.73	736.71	RAMP
1308	1303	LANDING	5.00	0.00	0.00%	1.5% to 2%		2106	617967.01	2228211.72	736.53	EXISTING
1304	1305	RAMP RUNNING SLOPE	15.04	-1.11	-7.35%	5.0% to 8.3%		2107	617956.08	2228206.79	737.02	LANDING
1305	1306	RAMP CROSS SLOPE	3.85	0.01	0.17%	1.5% to 2%		2108	617956.12	2228211.79	737.10	LANDING
1306	1307	RAMP RUNNING SLOPE	15.00	1.10	7.33%	5.0% to 8.3%		2201	617993.18	2228206.56	736.55	EXISTING
1307	1304	RAMP CROSS SLOPE	5.00	0.00	0.00%	1.5% to 2%		2202	617993.69	2228206.56	736.59	RAMP
								2203	618000.10	2228206.53	736.99	RAMP
2102	2103	RAMP RUNNING SLOPE	5.00	-0.31	-6.25%	5.0% to 8.3%		2204	618000.13	2228211.52	737.07	RAMP
2103	2104	RAMP CROSS SLOPE	4.99	-0.07	-1.50%	1.5% to 2%		2205	617993.72	2228211.56	736.66	RAMP
2104	2105	RAMP RUNNING SLOPE	5.00	0.31	6.25%	5.0% to 8.3%		2206	617992.87	2228211.57	736.58	EXISTING
2105	2102	RAMP CROSS SLOPE	5.00	0.07	1.50%	1.5% to 2%		2207	618005.10	2228206.49	737.04	LANDING
2103	2107	LANDING	5.00	-0.07	-1.50%	1.5% to 2%		2208	618005.14	2228211.49	737.12	LANDING
2107	2108	LANDING	5.00	-0.08	-1.50%	1.5% to 2%		2209	618005.18	2228216.49	736.86	EXISTING
2108	2104	LANDING	5.00	0.08	1.50%	1.5% to 2%		2210	618001.34	2228216.52	736.88	EXISTING
2104	2103	LANDING	4.99	0.07	1.50%	1.5% to 2%						
2202	2203	RAMP RUNNING SLOPE	6.41	-0.40	-6.25%	5.0% to 8.3%						
2203	2204	RAMP CROSS SLOPE	4.99	-0.07	-1.50%	1.5% to 2%						
2204	2205	RAMP RUNNING SLOPE	6.41	0.40	6.25%	5.0% to 8.3%						
2205	2202	RAMP CROSS SLOPE	5.00	0.07	1.50%	1.5% to 2%						
2203	2207	LANDING	5.00	-0.05	-1.00%	1.5% to 2%						
2207	2208	LANDING	5.00	-0.07	-1.50%	1.5% to 2%						
2208	2204	LANDING	5.01	0.05	1.00%	1.5% to 2%						
2204	2203	LANDING	4.99	0.07	1.50%	1.5% to 2%						
2208	2209	RAMP RUNNING SLOPE	5.00	0.26	5.10%	5.0% to 8.3%						
2209	2210	RAMP CROSS SLOPE	3.83	-0.02	-0.50%	1.5% to 2%						
2210	2204	RAMP RUNNING SLOPE	5.15	-0.19	-3.61%	5.0% to 8.3%						

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

CURB RAMPS - TABULATION

DWG. NO. S.01

PROJECT 36863/1

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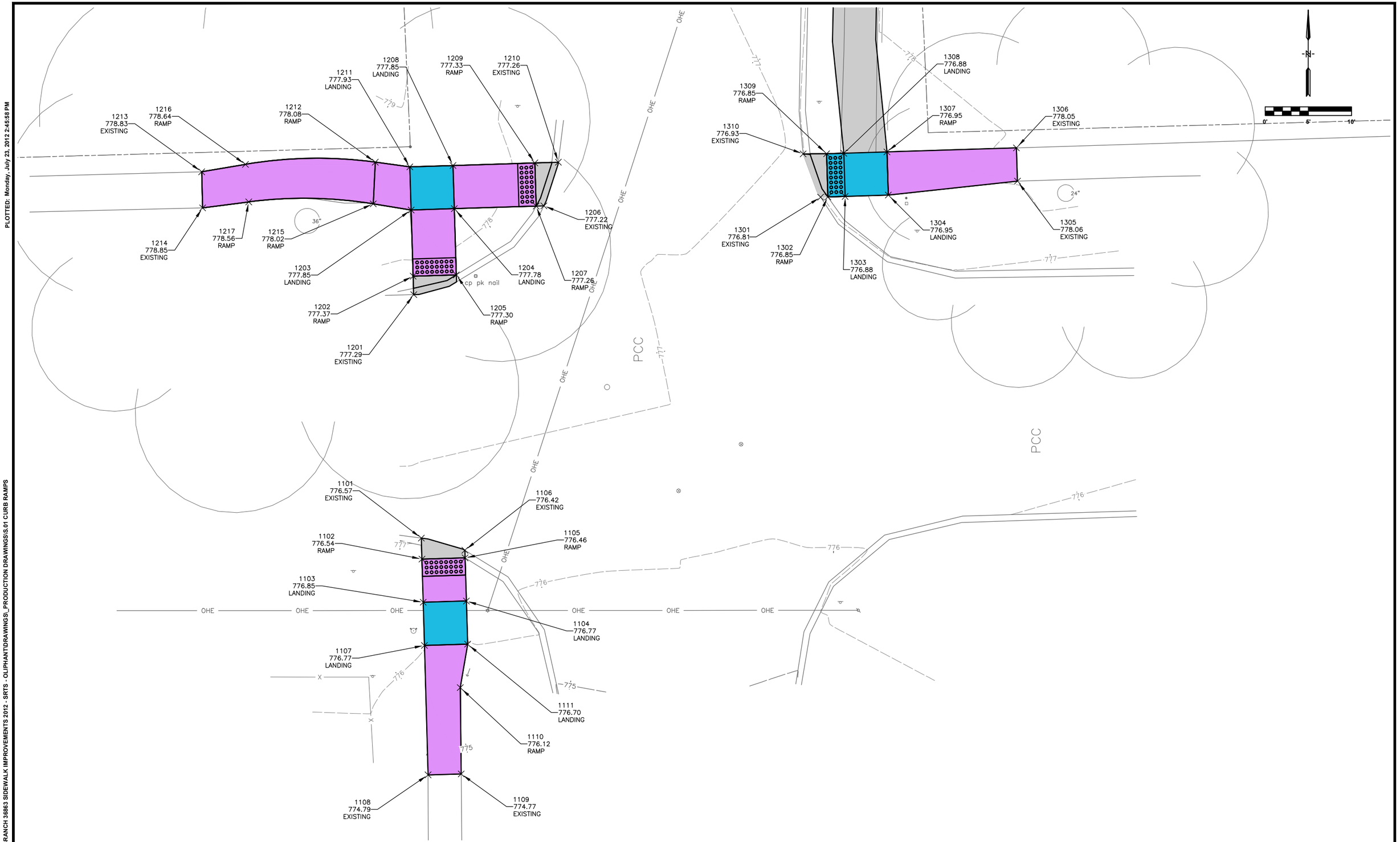

DATE	REVISIONS

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CURB RAMPS - ORANGE ST

DWG. NO.
S.02

PROJECT 36863/1

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DATE	REVISIONS		
		SCALE	AS NOTED
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		CHECKED	DRS
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		DATE	07-23-12
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

CURB RAMPS - NORTHSIDE DR

DWG. NO.
S.03

PROJECT 36863/1

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Total Volume Table

Station	Cut Area (SF)	Fill Area (SF)	Cut Vol (CY)	Fill Vol (CY)	Cumulative Cut Vol (CY)	Cumulative Fill Vol (CY)	Net Vol (CY)
0+00.00	6.62	0.00	0.00	0.00	0.00	0.00	0.00
0+13.00	3.20	0.00	2.36	0.00	2.36	0.00	2.36
0+25.00	5.09	0.00	1.81	0.00	4.17	0.00	4.17
0+48.05	6.87	0.00	5.10	0.00	9.28	0.00	9.28
0+55.13	1.77	0.00	1.13	0.00	10.41	0.00	10.41
0+68.09	0.36	0.06	0.51	0.01	10.92	0.01	10.91
0+75.00	0.00	0.92	0.05	0.12	10.97	0.14	10.83
0+80.88	0.00	0.95	0.00	0.20	10.97	0.34	10.62
0+89.54	0.57	0.00	0.09	0.15	11.06	0.49	10.56
0+91.97	0.17	0.00	0.03	0.00	11.09	0.49	10.60
1+00.00	0.89	0.20	0.16	0.03	11.25	0.52	10.72
1+11.83	2.35	0.13	0.71	0.07	11.96	0.60	11.36
1+25.00	1.90	0.02	1.04	0.04	12.99	0.64	12.36
1+31.68	2.77	0.05	0.58	0.01	13.57	0.65	12.92
1+50.00	1.95	0.18	1.60	0.08	15.17	0.72	14.45
1+63.27	1.48	0.27	0.84	0.11	16.02	0.83	15.19
1+75.00	0.00	1.26	0.32	0.33	16.34	1.16	15.18
1+82.95	0.00	4.76	0.00	0.89	16.34	2.05	14.29
1+88.17	0.03	4.99	0.00	0.94	16.34	2.99	13.35
2+00.00	0.00	5.80	0.01	2.27	16.35	5.26	11.09
2+25.00	0.00	5.62	0.00	5.08	16.35	10.34	6.01
2+25.00	0.00	5.62	0.00	5.08	16.35	10.34	6.01
2+35.43	0.00	3.46	0.00	1.70	16.35	12.04	4.31
2+75.00	0.23	0.86	0.17	3.16	16.51	15.20	1.31
2+88.85	0.35	0.64	0.15	0.38	16.66	15.59	1.08
3+00.00	3.59	0.04	0.81	0.14	17.47	15.73	1.75
3+25.00	6.10	0.00	4.48	0.02	21.96	15.75	6.21
3+50.00	8.02	0.00	6.53	0.00	28.49	15.75	12.74
3+58.35	8.28	0.00	2.52	0.00	31.01	15.75	15.26
3+70.20	13.70	0.00	4.94	0.00	35.95	15.75	20.20

Total Volume Table

Station	Cut Area (SF)	Fill Area (SF)	Cut Vol (CY)	Fill Vol (CY)	Cumulative Cut Vol (CY)	Cumulative Fill Vol (CY)	Net Vol (CY)
3+73.09	12.11	0.03	1.38	0.00	37.33	15.75	21.58
3+78.48	7.70	0.09	2.10	0.01	39.43	15.76	23.67
3+86.03	2.70	0.03	1.54	0.02	40.97	15.78	25.19
3+87.32	3.08	0.01	0.14	0.00	41.11	15.78	25.33
3+95.96	6.39	0.00	1.52	0.00	42.63	15.78	26.85
4+00.00	2.87	0.00	0.76	0.00	43.39	15.78	27.61
4+11.34	1.55	0.01	0.93	0.00	44.32	15.78	28.53
4+22.99	3.84	0.00	1.16	0.00	45.48	15.79	29.69
4+50.00	4.11	0.00	4.00	0.00	49.48	15.79	33.69
4+75.00	4.93	0.00	4.18	0.00	53.66	15.79	37.87
4+80.62	4.12	0.00	0.94	0.00	54.60	15.79	38.81
4+85.62	4.91	0.00	0.83	0.00	55.43	15.79	39.65
4+90.62	1.44	0.00	0.59	0.00	56.02	15.79	40.24
5+18.22	1.59	0.00	1.55	0.00	57.57	15.79	41.78
5+25.75	0.00	1.15	0.22	0.16	57.79	15.95	41.84
5+29.64	0.00	1.95	0.00	0.22	57.79	16.17	41.62
5+40.61	0.00	1.10	0.00	0.62	57.79	16.79	41.00
5+49.25	0.06	0.54	0.01	0.26	57.80	17.06	40.74
5+69.16	0.00	1.11	0.02	0.61	57.82	17.66	40.16
5+75.00	0.00	0.37	0.00	0.16	57.82	17.82	40.00
5+99.31	0.00	2.02	0.00	1.08	57.82	18.90	38.92
6+25.00	0.00	5.14	0.00	3.41	57.82	22.31	35.52
6+29.33	0.00	6.77	0.00	0.95	57.82	23.26	34.56
6+32.32	0.00	8.59	0.00	0.85	57.82	24.11	33.71
6+50.00	0.00	6.16	0.00	5.12	57.82	29.23	28.59
6+53.00	0.06	0.88	0.00	0.39	57.83	29.62	28.20
6+75.00	2.83	0.00	1.14	0.35	58.96	29.97	28.99
6+88.92	4.08	0.00	1.78	0.00	60.74	29.97	30.77
6+95.87	8.53	0.00	1.62	0.00	62.37	29.97	32.40
7+01.62	7.85	0.00	1.74	0.00	64.11	29.97	34.14

Total Volume Table

Station	Cut Area (SF)	Fill Area (SF)	Cut Vol (CY)	Fill Vol (CY)	Cumulative Cut Vol (CY)	Cumulative Fill Vol (CY)	Net Vol (CY)
7+09.14	7.21	0.00	2.10	0.00	66.21	29.97	36.24
7+24.35	1.20	0.00	2.39	0.00	68.60	29.97	38.63
7+27.99	0.13	0.26	0.09	0.02	68.69	29.99	38.70
7+37.38	0.11	0.27	0.04	0.09	68.73	30.08	38.65
7+47.72	0.17	0.29	0.05	0.11	68.79	30.19	38.60
7+75.00	0.08	0.04	0.13	0.17	68.92	30.36	38.56
7+87.03	0.00	2.03	0.02	0.46	68.94	30.82	38.12
7+97.13	0.00	3.68	0.00	0.95	68.94	31.77	37.17
8+23.16	0.00	5.60	0.00	4.61	68.94	36.38	32.56
8+28.16	0.00	0.00	0.00	0.53	68.94	36.91	32.03

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

TABULATIONS

DWG. NO.
T.01

PROJECT 36863/1

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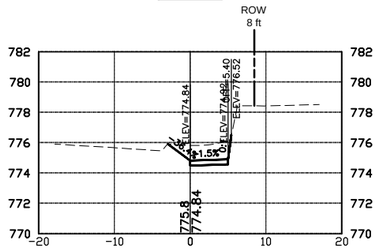

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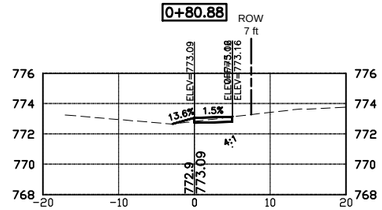

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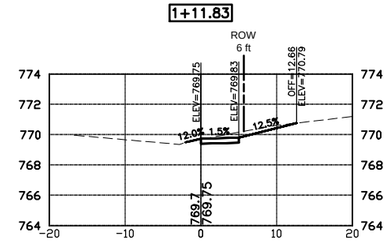

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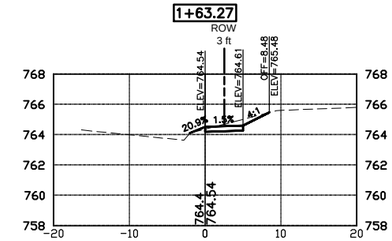

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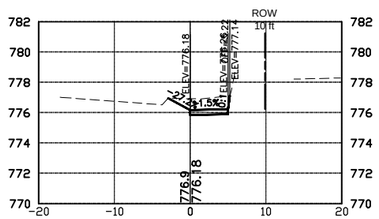

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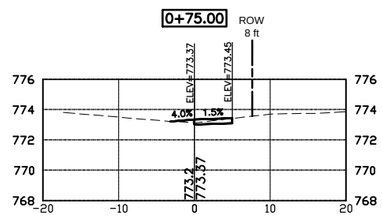

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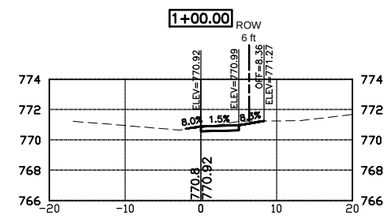

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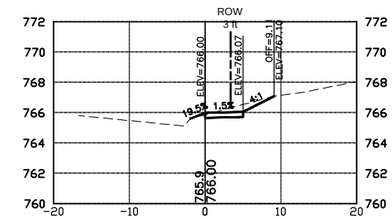

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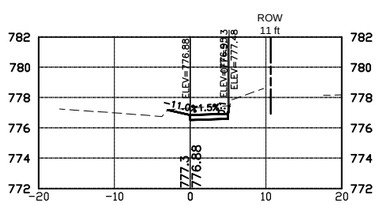

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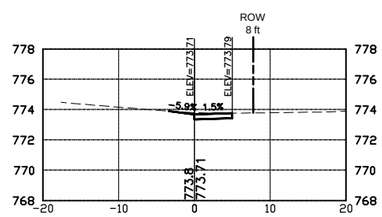

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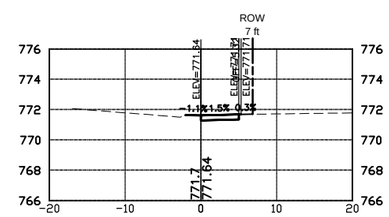

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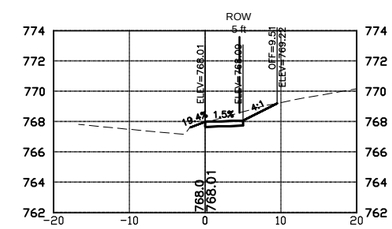

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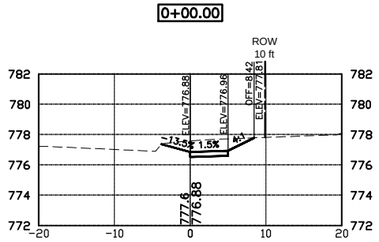

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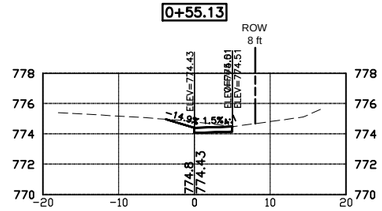

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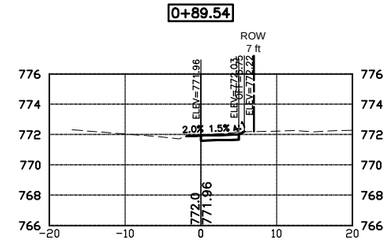

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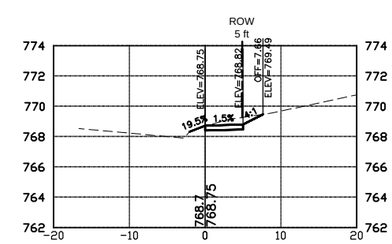

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
ISSUED FOR	CONSTRUCTION

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

CROSS SECTIONS

DWG. NO.
X.01

PROJECT 36863/1

PLOTTED: Monday, July 23, 2012 2:46:23 PM

X-REFS: VK Topo 2009 & Boundary (edg) 2012 AUTOCAD & arieal & Easement & S.01 Curb Ramps & Design Coorridor 2012-07-19 BENDA ALIGNMENT
FILE PATH: Z:\WEST BRANCH 36863 SIDEWALK IMPROVEMENTS 2012 - SRTS - OLIPHANT\DRAWINGS_PRODUCTION DRAWINGS\DESIGN COORIDOR

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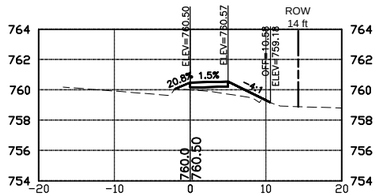

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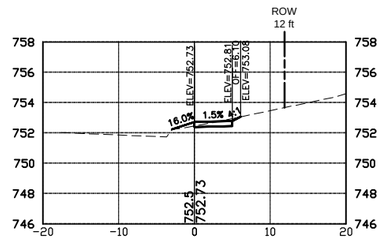

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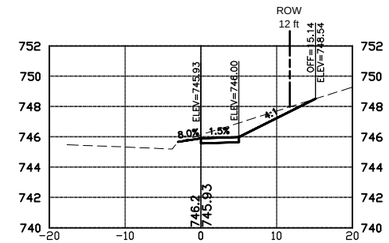

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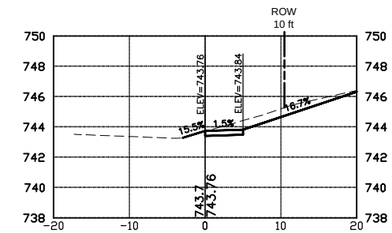

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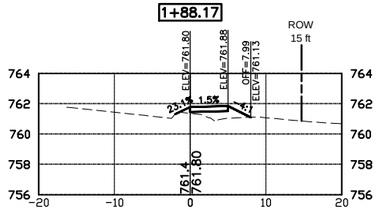

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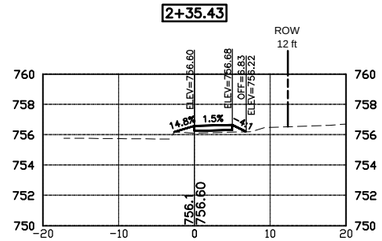

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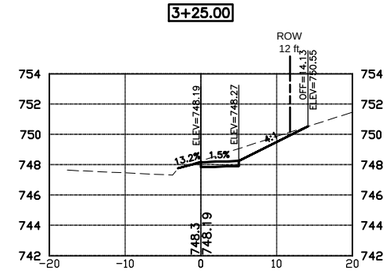

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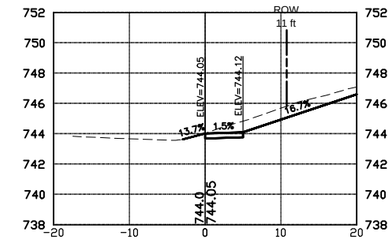

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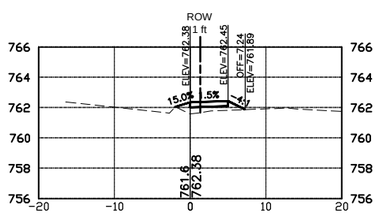

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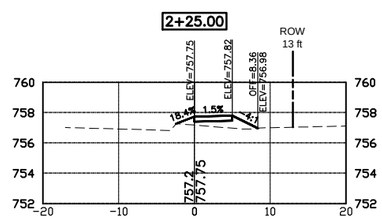

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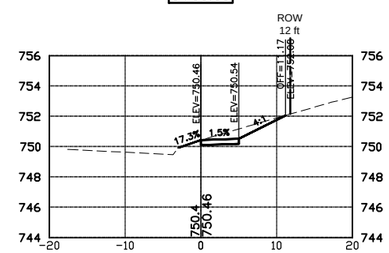

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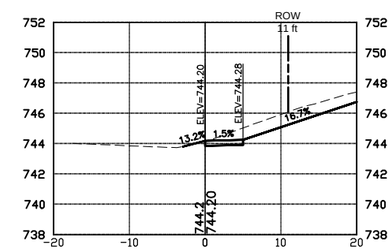

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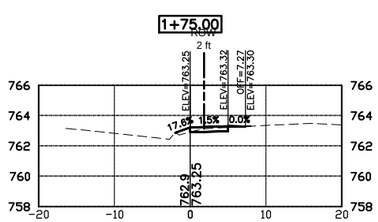

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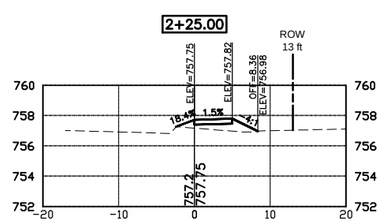

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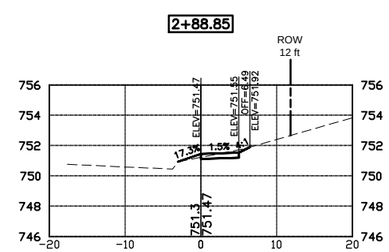

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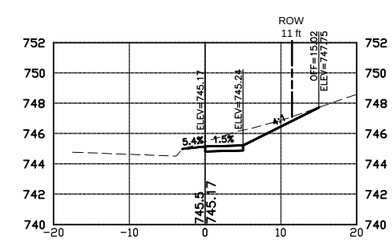

DATE	REVISIONS

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DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
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VEENSTRA & KIMM, INC.

OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

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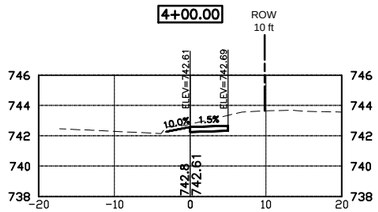
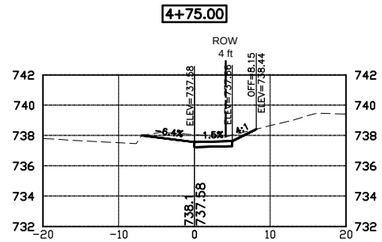
CROSS SECTIONS

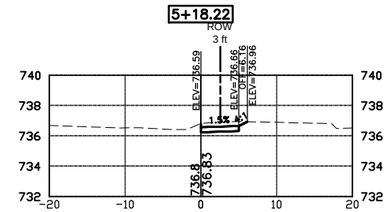
DWG. NO.
X.02

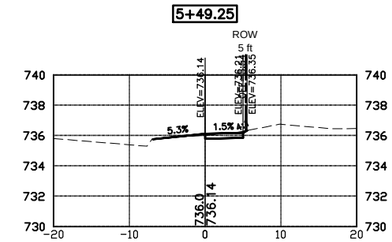
PROJECT 36863/1

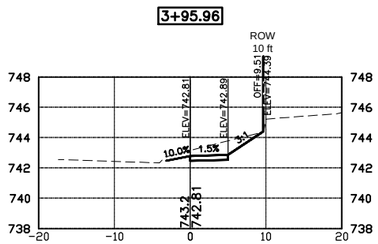
PLOTTED: Monday, July 23, 2012 2:46:28 PM

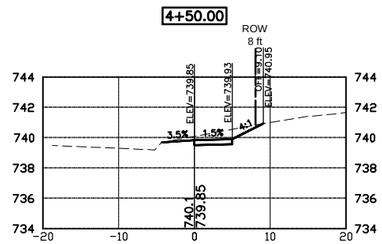


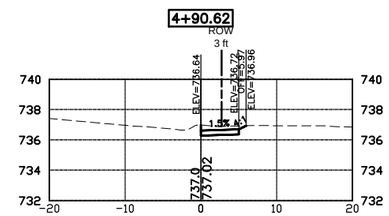


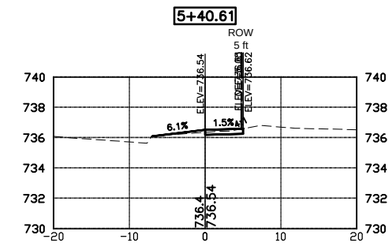


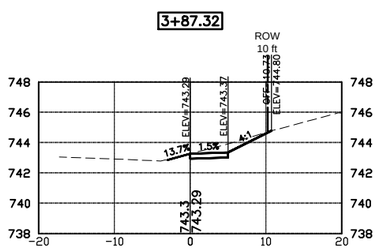


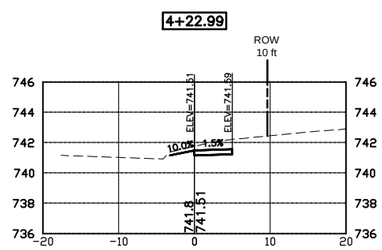


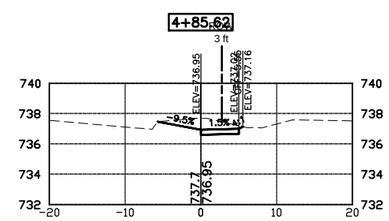


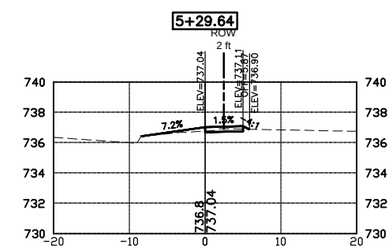


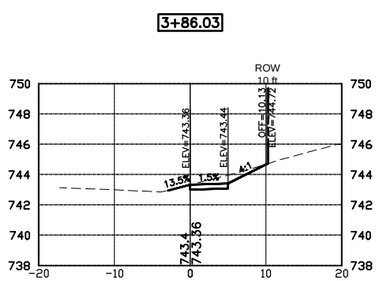


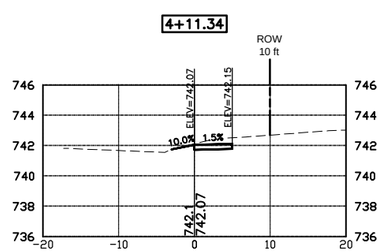


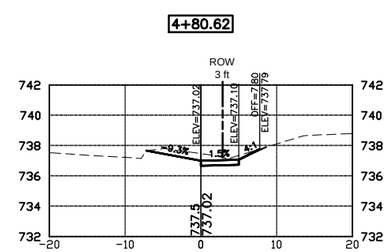


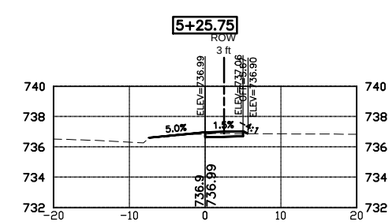












X-REFS: VK Topo 2009 & Boundary (edg) 2012 AUTOCAD & arieal & Easement & S.01 Curb Ramps & Design Coorior 2012-07-10 BENDA ALIGNMENT
FILE PATH: Z:\WEST BRANCH 36863 SIDEWALK IMPROVEMENTS 2012 - SRTS - OLIPHANT\DRAWINGS_PRODUCTION DRAWINGS\DESIGN COORIDOR

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

CROSS SECTIONS

DWG. NO.
X.03

PROJECT 36863/1

PLOTTED: Monday, July 23, 2012 2:46:33 PM

X-REFS: VK Topo 2009 & Boundary (edg) 2012 AUTOCAD & aerial & Easement & S.01 Curb Ramps & Design Coorior 2012-07-10 BENDA ALIGNMENT
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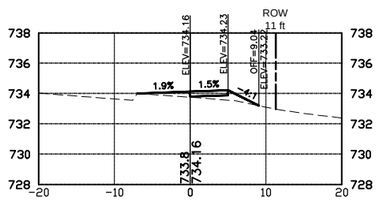

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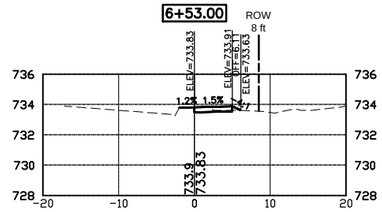

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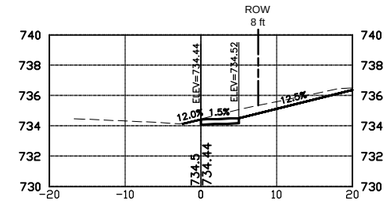

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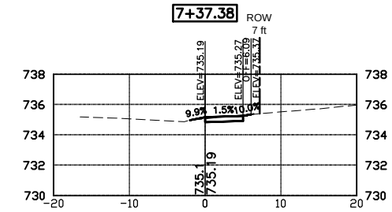

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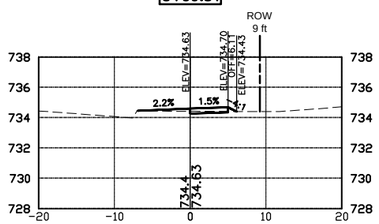

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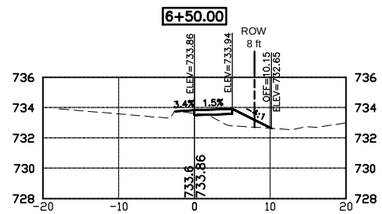

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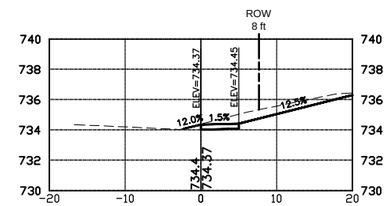

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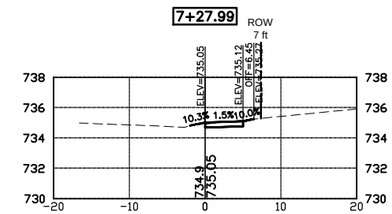

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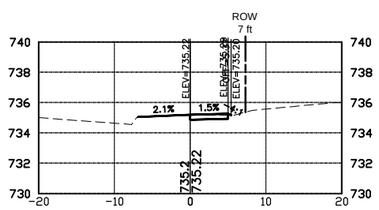

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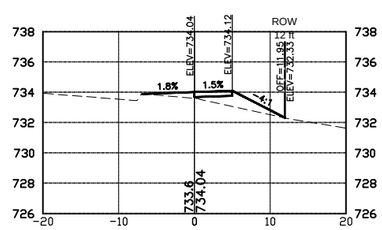

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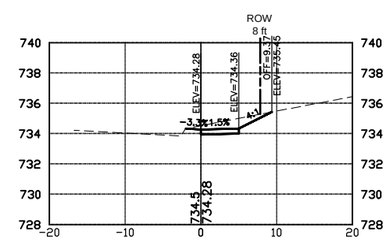

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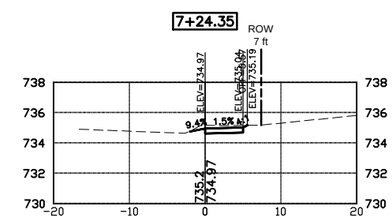

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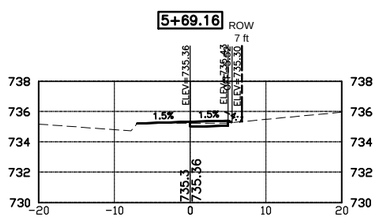

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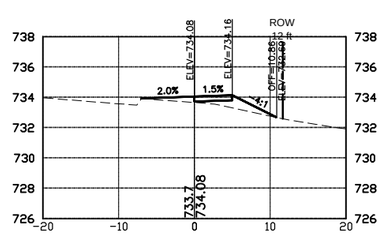

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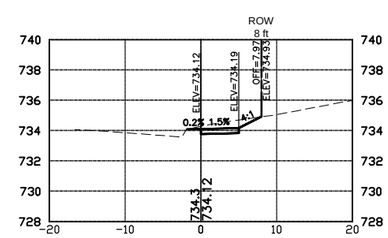

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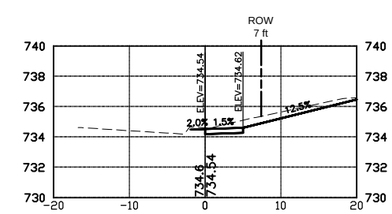

DATE	REVISIONS

SCALE	AS NOTED
DRAWN	ALG
CHECKED	DRS
APPROVED	DRS
DATE	07-23-12
ISSUED FOR	CONSTRUCTION

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
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OLIPHANT STREET SIDEWALK IMPROVEMENTS
CITY OF WEST BRANCH

CROSS SECTIONS

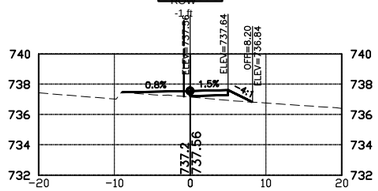
DWG. NO.
X.04

PROJECT 36863/1

PLOTTED: Monday, July 23, 2012 2:46:38 PM

X-REFS: VK Topo 2009 & Boundary (edg) 2012 AUTOCAD & arial & Easement & S.01 Curb Ramps & Design Coorridor 2012-07-10 BENDA ALIGNMENT
FILE PATH: Z:\WEST BRANCH 36863 SIDEWALK IMPROVEMENTS 2012 - SRTS - OLIPHANT\DRAWINGS_PRODUCTION DRAWINGS\DESIGN COORIDOR

8+23.16



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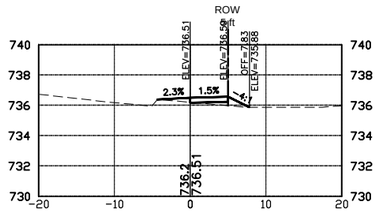

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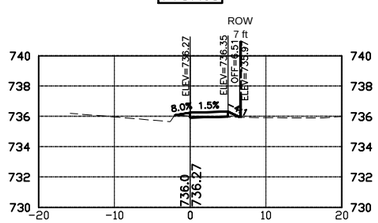

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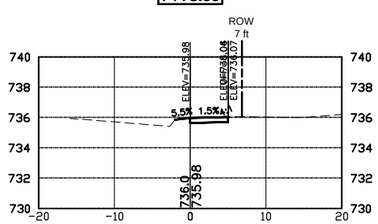

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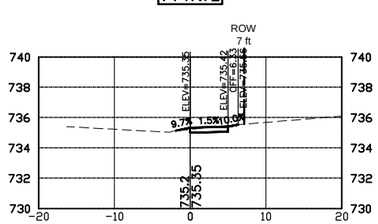

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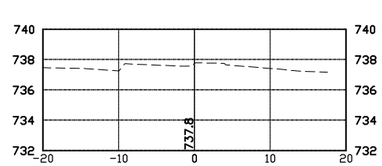

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