



CUY-90-14.90

PID 77332/85531

APPENDIX SU-03

**Survey Control Check
(Reference Document)**

State of Ohio
Department of Transportation
Jolene M. Molitoris, Director

**Innerbelt Bridge
Construction Contract Group 1 (CCG1)**

Date: 11/19/2009

County-Route-Section: CUY-90-INTEBELT BRIDGE

Project Name: INTERBELT BRIDGE PROJECT CONTROL CHECK

PID:

Survey Type: GPS - VRS

Description of Work: Multiple VRS observations to verify control.

File Name:P:\Completed Projects\SFY 2010\CUY\I-90 INTERBELT BRIDGE\Survey\INTERBELT BRIDGE

Project Surveyor: Scott Hawkins

Processed By: Scott Hawkins

Processed Date: 11/19/2009

Field Crew: SJH/TW

Field Dates: 11-18/19-2009

Equipment: TRIMBLE R8 -MODEL 2

Trimble Controller: TSC2

Coordinate System: Ohio State Plane North

Horizontal Datum: NAD83 (NSRS2007)

Vertical Datum: NGVD88

Map Projection: Lambert Conic Conformal

Geoid: GEOID03

Units: US Survey Feet

Coordinates:

Scaled to Ground: NO

Scale Origin: Scale applied at Grid Origin

Scale Factor: 1.0

VRS OBSERVED VALUES (State Plane Grid, CORS96 ADJUSTMENT)				
Point	Northing	Easting	Ortho Height	Feature Code
CPA01	679828.823	2200235.718	579.853	GOVCON
CPB01	679828.824	2200235.718	579.858	GOVCON
CPC01	679828.835	2200235.712	579.851	GOVCON
AVERAGE	679828.827	2200235.716	579.854	
CPA02	678594.753	2198493.620	583.695	GOVCON
CPB02	678594.755	2198493.616	583.694	GOVCON
CPC02	678594.748	2198493.612	583.701	GOVCON
AVERAGE	678594.752	2198493.616	583.697	
CPA03	674623.539	2192857.362	601.087	GOVCON
CPB03	674623.534	2192857.365	601.124	GOVCON
CPC03	674623.524	2192857.356	601.131	GOVCON
AVERAGE	674623.532	2192857.361	601.114	
CPA04	673338.790	2191482.114	582.324	GOVCON
CPB04	673338.804	2191482.122	582.321	GOVCON
CPC04	673338.795	2191482.133	582.316	GOVCON
AVERAGE	673338.796	2191482.123	582.320	
CPA05	667145.489	2192784.074	696.056	GOVCON
CPB05	667145.463	2192784.067	696.061	GOVCON
CPC05	667145.447	2192784.058	696.034	GOVCON
AVERAGE	667145.466	2192784.066	696.050	
CPA06	666503.422	2193639.323	695.524	GOVCON
CPB06	666503.421	2193639.313	695.528	GOVCON
CPC06	666503.430	2193639.306	695.532	GOVCON
AVERAGE	666503.424	2193639.314	695.528	
CPA07	MONUMENT HAS BEEN DESTROYED			
CPB07				
CPC07				
AVERAGE				
CPA08	665131.362	2199021.273	676.722	GOVCON
CPB08	665131.352	2199021.264	676.750	GOVCON
CPC08	665131.353	2199021.275	676.702	GOVCON
AVERAGE	665131.356	2199021.271	676.725	
CPA09	663132.425	2190203.200	697.608	GOVCON
CPB09	663132.442	2190203.208	697.619	GOVCON
CPC09	663132.445	2190203.208	697.634	GOVCON
AVERAGE	663132.437	2190203.205	697.620	
CPA10	662169.389	2189726.424	694.373	GOVCON
CPB10	662169.392	2189726.430	694.367	GOVCON
CPC10	662169.388	2189726.443	694.335	GOVCON
AVERAGE	662169.390	2189726.432	694.358	
CPA11	651660.318	2181855.972	714.430	GOVCON
CPB11	651660.322	2181855.985	714.426	GOVCON
CPC11	651660.319	2181855.997	714.433	GOVCON
AVERAGE	651660.320	2181855.985	714.430	
CPA12	652183.049	2183060.582	688.765	GOVCON
CPB12	652183.056	2183060.578	688.775	GOVCON
CPC12	652183.059	2183060.582	688.762	GOVCON
AVERAGE	652183.055	2183060.581	688.767	

COORDINATES PROVIDED BY CONSULTANT (State Plane Grid, 95 ADJUSTMENT)				
Point	Northing	Easting	Orthometric Height	Feature Code
(ALL VALUES PROVIDED BY CONSULTANT WERE CONVERTED TO US SURVEY FEET FROM METERS)				
MON01	679828.792	2200235.774	579.893	GOVCON
MON02	678594.719	2198493.667	583.794	GOVCON
MON03	674623.542	2192857.393	601.192	GOVCON
MON04	673338.706	2191482.213	582.395	GOVCON
MON05	667145.373	2192784.145	696.147	GOVCON
MON06	666503.292	2193639.351	695.572	GOVCON
MON07	664841.393	2200500.804	676.404	GOVCON
MON08	665131.282	2199021.330	676.782	GOVCON
MON09	663132.407	2190203.272	697.664	GOVCON
MON10	662169.362	2189726.477	694.496	GOVCON
MON11	651660.349	2181856.000	714.631	GOVCON
MON12	652182.990	2183060.599	688.921	GOVCON

COORDINATE COMPARISON			
POINT	DELTA NORTHING	DELTA EASTING	DELTA ELEV.
(DERIVED BY SUBTRACTING PROVIDED COORDS FROM THE AVERAGED OBSERVED COORDS)			
MON01	0.036	-0.058	-0.039
MON02	0.033	-0.051	-0.097
MON03	-0.010	-0.032	-0.078
MON04	0.090	-0.090	-0.075
MON05	0.094	-0.079	-0.096
MON06	0.133	-0.037	-0.044
MON07	NA	NA	NA
MON08	0.074	-0.059	-0.057
MON09	0.031	-0.067	-0.044
MON10	0.028	-0.045	-0.138
MON11	-0.030	-0.015	-0.201
MON12	0.064	-0.018	-0.154
AVERAGE	0.049	-0.050	-0.093