



THE UNIVERSITY OF MICHIGAN
OFFICE OF THE VICE PRESIDENT
AND GENERAL COUNSEL

November 12, 2010

RECEIVED
NOV 19 2010
OFFICE OF THE CITY ATTORNEY
CITY OF ANN ARBOR

Abigail Elias, Esq.
Chief Assistant City Attorney
City of Ann Arbor
100 N Fifth Avenue
P.O. Box 8647
Ann Arbor, MI 48107

RE: Easement and Maintenance Agreement for Traffic Signal-Corner of E. Medical Drive/E. Hospital Drive, Ann Arbor, MI (between University of Michigan and City of Ann Arbor)

Dear Ms. Elias:

Enclosed please find the Traffic Control Device Easement and Maintenance Agreement between the University of Michigan and City of Ann Arbor. Please secure the necessary signatures from the City of Ann Arbor where indicated. Upon execution of these documents, please return the executed Easement and one fully executed copy of the Maintenance Agreement to my office.

Should you have any questions or comments, please feel free to contact me.

Sincerely,

Ciara Comerford
Assistant General Counsel
Central Campus Legal Office

/dt

Enclosure

cc: Mark Eboch, Real Estate & Space Information
Judy Kirkdorffer, AEC Real Estate

**CENTRAL CAMPUS
LEGAL OFFICE**

The University of Michigan
5010 Fleming Admin. Bldg.
503 Thompson Street
Ann Arbor, MI 48109-1340
Phone: (734) 764-0304
Facsimile: (734) 763-5648

**DEVELOPMENT
LEGAL OFFICE**

The University of Michigan
9000 Wolverine Tower
3003 South State Street
Ann Arbor, MI 48109-1288
Phone: (734) 647-6095
Facsimile: (734) 647-6100

**HEALTH SYSTEM
LEGAL OFFICE**

The University of Michigan
Suite 3B04 N1B
300 North Ingalls, SPC 5476
Ann Arbor, MI 48109-5476
Phone: (734) 764-2178
Facsimile: (734) 647-2781

**OFFICE OF
TECHNOLOGY
TRANSFER**

The University of Michigan
2071 Wolverine Tower
3003 South State Street
Ann Arbor, MI 48109-1280
Phone: (734) 764-4290
Facsimile: (734) 936-1545

**EASEMENT AGREEMENT BETWEEN
THE REGENTS OF THE UNIVERSITY OF MICHIGAN
AND
CITY OF ANN ARBOR FOR TRAFFIC CONTROL DEVICES**

In _____ 2010, in consideration of system betterment and other valuable consideration less than \$100.00 (one hundred dollars), receipt and sufficiency of which is acknowledged, and on the terms and conditions described in this document, Grantor grants to the City of Ann Arbor a permanent easement (except as provided in the termination paragraph, below) on the Easement Area, described below (Agreement).

"Grantor" is:

The Regents of the University of Michigan, a Michigan constitutional corporation c/o Architecture, Engineering & Construction-Real Estate Office, 326 E. Hoover, Ann Arbor, Michigan 48109-1002.

"Grantee" is:

The City of Ann Arbor, a Michigan municipal corporation, whose address is 100 N. Fifth Avenue, Ann Arbor, Michigan 48104.

"Grantor's Land" is located in the City of Ann Arbor, Washtenaw County, Michigan described as: As shown on attached legal description "A", which is attached hereto and made a part hereof.

The "Easement Area" is part of Grantor's Land and is described as: As shown on Exhibit "B", which is attached hereto and made a part hereof:

1. **Purpose.** The purpose of this grant of easement is to allow the Grantee to construct, reconstruct, maintain, operate and install three (3) mast arms with seven (7) traffic signals and two (2) pedestrian signals, three (3) pedestals with one (1) traffic signal and three (3) pedestrian signals, a radio signal traffic detection system, a radio interconnect system to existing City traffic signal, approximately 150 linear feet of directional-drilled conduit, associated fixtures, equipment, controllers and cabinets, conduit and wire, and other appurtenances that may from time to time be required, with perpetual future right of ingress and egress for standard and emergency maintenance on the traffic signal and conduit/wire, in, under, upon, over and across the Easement Area.

2. **Access.** Grantee may access the Easement Area pursuant to the terms of this Agreement.

3. **Use by Grantor.** As owner of the Grantor's Land, Grantor may use the Easement Area in any manner not inconsistent with this Agreement; provided, that Grantor will not construct or allow the construction of any buildings or other permanent structures in the Easement Area without Grantee's written permission, which will be withheld by Grantee only to the extent necessary to maintain the improvements authorized by this Agreement.

4. **Successors and assigns.** This Easement Agreement runs with the land and binds the parties' successors and assigns except as otherwise provided in the termination paragraph, below.

5. **Title.** Title to all improvements that Grantee places on the Easement Area will remain with Grantor.

6. **Environmental.** Grantee will not use PCBs or any other hazardous materials in the Easement Area or on any other property owned by Grantor; will not allow any waste to be committed on the Easement Area or on any other property owned by Grantor; and will comply with all applicable federal, state, and local environmental laws and regulations in all activities within the Easement Area.

7. **Termination.** This Agreement runs with the land and binds and benefits the Grantor's and Grantee's successors and assigns unless and until: (1) Grantor no longer needs or uses the improvements authorized under this Agreement; (2) Grantor has terminated the agreement between Grantor and Grantee for Grantee to maintain the improvements; or (3) the parties mutually agree it is no longer desirable or necessary to maintain the easement. In either circumstance, Grantor will provide written notification to Grantee of Grantor's desire to terminate this grant of easement within one year. Grantor recording an affidavit following such one year period indicating that this grant of easement has terminated will be conclusive evidence of termination. When the grant of easement is terminated, all rights and responsibilities cease.

The undersigned so agree this 10th day of November 2010.

**Regents of the University of Michigan,
A Michigan Constitutional Corporation**

By: 
C2

Timothy P. Slottow

Its: Executive Vice President
and Chief Financial Officer

The City of Ann Arbor

By: _____

John Hieftje

Its: Major

By: _____

Jacqueline Beaudry

Its: City Clerk

Approved as to Substance:

Roger W. Fraser, City Administrator

Sue F. McCormick, Public Services Area
Administrator

Approved as to form:

Stephen K. Postema, City Attorney

STATE OF MICHIGAN
COUNTY OF WASHTENAW

This Easement Agreement was acknowledged before me in Washtenaw County this 10th day of November, 2010, by Timothy P. Slottow, Executive Vice President and Chief Financial Officer of the Regents of the University of Michigan, a Michigan Constitutional Corporation.

DENISE M. TRUESDELL
Notary Public, State of Michigan
County of Washtenaw
My Commission Expires Dec. 01, 2015
Acting in the County of Washtenaw

Denise M. Truesdell
Denise M. Truesdell, Notary Public
Washtenaw County, Michigan
My Commission Expires: 12.1.15

STATE OF MICHIGAN
COUNTY OF WASHTENAW

This Easement Agreement was acknowledged before me in Washtenaw County this ____ day of _____, 2010, by John Hieftje, Mayor of the City of Ann Arbor, and Jacqueline Baudry, City Clerk of the City of Ann Arbor.

_____, Notary Public
Wayne County, Michigan
My Commission Expires: _____

Easement Prepared by: Ciara Comerford, Assistant General Counsel, 4010 Fleming Administration Building, Ann Arbor, MI 48109-1340.

After Recording Return to: Judy Kirkdorffer, University of Michigan AEC- Real Estate Office, 326 E. Hoover Street, Ann Arbor, Michigan 48109-1002.

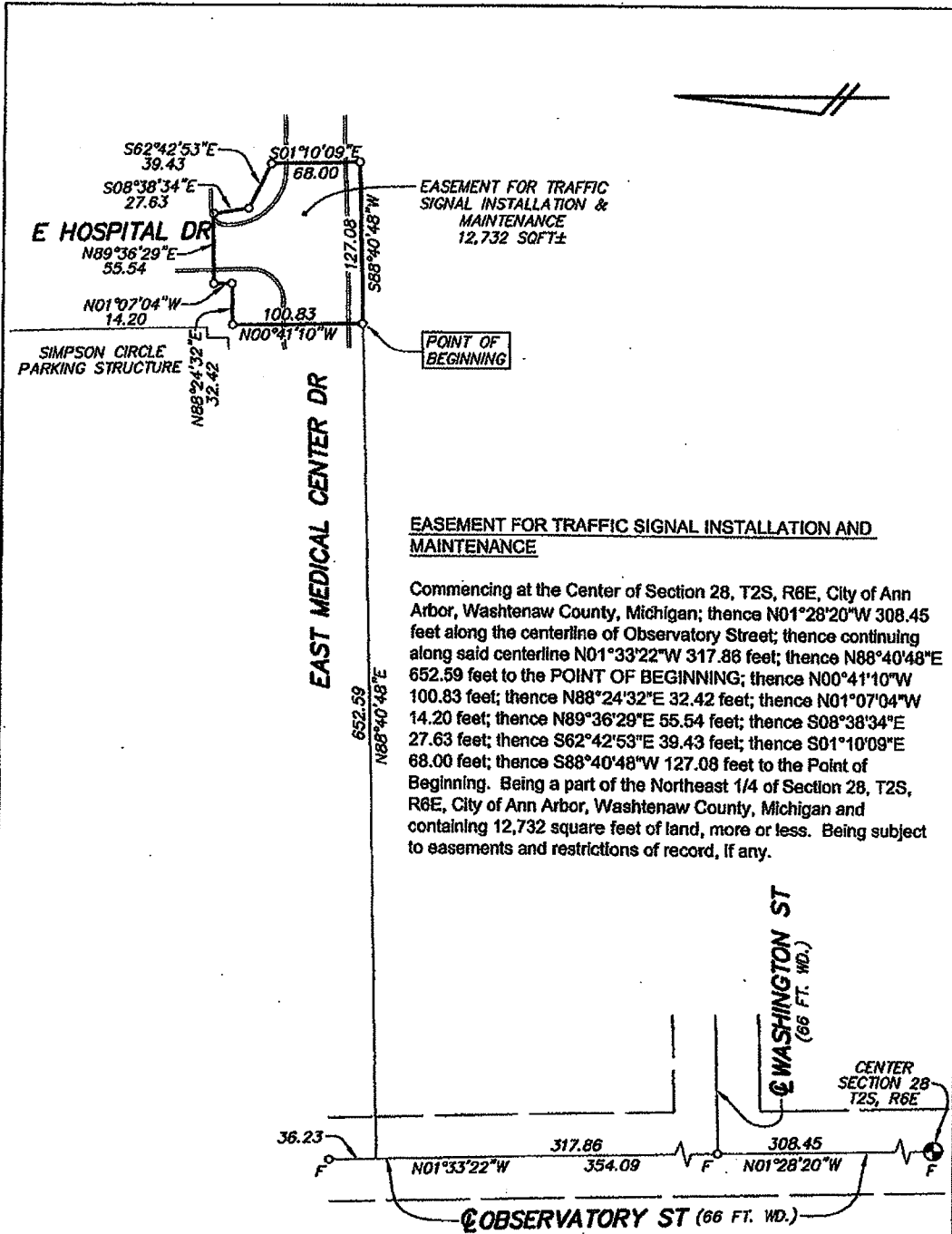
Exhibit A

Parcel: 09-09-28-101-007

Part of the NE ¼ of Section 28, Town 2 South, Range 6 East, located in the City of Ann Arbor, County of Washtenaw, State of Michigan as follows:

Bounded on the North by the New York Central Railroad right of way and the Huron River, on the East by City-owned property commonly known as the Arboretum Nature Area (09-09-28-101-006), on the South by the Washington Heights Addition Subdivision, as recorded in Liber 4, Page 9 of Plats, Washtenaw County Records and by the northern line of the Forest Hill Cemetery, and on the West by the western quarter section boundary line of the NE ¼ of section 28, T2S, R6E, said parcel being split from parcel 09-09-28-101-001 on 2/17/2007.

EXHIBIT B



K:\4607\wg\31327.dwg, Layout, 02/20/10 2:11:54 PM

SCALE: 1 INCH = 100 FEET		 PROFESSIONAL SURVEYOR NO. 24620
LEGEND F = FOUND IRON PIPE S = SET IRON PIPE		
CLIENT: UNIVERSITY OF MICHIGAN SECTION <u>28</u> TOWN <u>2</u> SOUTH + RANGE <u>6</u> EAST CITY OF ANN ARBOR WASHTENAW COUNTY * MICHIGAN		
DATE <u>6-16-10</u>	REV. <u>8-25-10</u>	
DRAWN <u>DJH</u>	JOB <u>31327</u>	
CHECK <u>TLS</u>	F.B. <u>556, 572</u>	
SHEET <u>1 OF 1</u>	FILE NO. <u>R-9771</u>	



WASHTENAW ENGINEERING COMPANY
 CIVIL ENGINEERS * PLANNERS
 SURVEYORS * LANDSCAPE ARCHITECTS
 3526 W. LIBERTY RD, SUITE 400
 ANN ARBOR, MICHIGAN 48103
 TEL: 734-761-8800 FAX: 734-761-9630
 wcco@wengco.com
 www.washtenawengineering.com



**CITY OF ANN ARBOR
TRAFFIC SIGNAL INSTALLATION, MAINTENANCE
AND REPAIR AGREEMENT**

This agreement is entered into this ____ day of _____, 2010 by and between the City of Ann Arbor (City) and the Board of Regents of the University of Michigan (University).

WHEREAS, The University intends to provide traffic signals within its jurisdictional boundaries, but has concluded that contracting with the City to install, maintain and repair those signals is in the best public interest.

WHEREAS, the City is willing to provide those services in accordance with the terms of this agreement.

1) INSTALLATION: The City agrees to install electrical traffic control devices (traffic signals) as shown in the January 14, 2010, plans attached as Exhibit A. The cost of installation will be borne by the University. The City will maintain a current list of all traffic signals installed pursuant to this agreement for administrative and billing purposes.

2) MAINTENANCE: The City agrees to maintain all traffic signals installed pursuant to this agreement in accordance with the State of Michigan Guidelines for Electrical Traffic Control Device Maintenance manual dated April 23, 1993, which is incorporated by reference. The City will keep detailed maintenance records of all work completed on the traffic signal system and will provide the University with a copy of the maintenance records upon request.

3) EMERGENCY REPAIR WORK: The City also agrees to provide unscheduled emergency repair work when a traffic signal becomes disabled or malfunctions.

4) ACCIDENT DAMAGE REPAIRS: If repair or maintenance work is required due to an accident, the City will forward to the University a report of costs, any available accident reports, and other pertinent information from the responsible investigation authorities. The City is not responsible for collections and the University agrees to pay for accident repair costs in the same manner it pays other invoices. Payment to the City will not be delayed or denied based on any action for recovery the University may have against a third party.

5) PERSONNEL, EQUIPMENT, AND FACILITIES: The City shall provide competent personnel, equipment and facilities to perform the installation and maintenance functions specified in this agreement. In performing its obligations, the City will avoid unnecessary costs while utilizing current and accepted practices to maintain the working order of the traffic signals. Nothing in this agreement, however, shall guarantee continuous operation of the traffic signals.

6) SUBCONTRACTS: At its sole discretion, the City may subcontract any portion of the work to be performed under this agreement.

7) REIMBURSEMENT: The University shall reimburse the City for the following costs incurred in the performance of this agreement:

- a. The City's direct labor, fringe benefit, administrative and overhead costs.
- b. Miscellaneous non-stock material for completion of job.
- c. The City's equipment rental costs. Rental costs shall be based on the City's actual equipment costs and total hours of usage and apply to both City-owned and non-City owned equipment.
- d. The City's material costs, including procurement, handling, and storage in accordance with the City's purchasing policy.
- e. Any amounts the City pays to a subcontractor.
- f. The percentage of City engineering and supervision overhead that is normally assessed on all direct labor, equipment, material and subcontractor costs. The engineering and supervision overhead percentage will not apply to those services for which engineering and supervision are charged on a direct basis.

8) PAYMENT: Upon completion of work authorization by this agreement, the City will submit an invoice for payment to the University. This invoice will include those costs referenced in Paragraph 7 and shall be accompanied by a report generated by the City indicating the specified traffic signal or signals involved and detailing the work completed. The University shall pay the invoice in its entirety within thirty (30) days of receipt.

9) VEGETATION AND STRUCTURES: The City is not responsible to the University for damages to or removal of trees or other plant life that is necessary for the installation, repair or maintenance of the traffic signals. The University shall restore any landscape disturbed by the City's activities under this agreement.

10) RESTORATION: If the City or anyone acting on its behalf (including employees, contractors, vehicles or equipment) damages any of the University's property that is necessary for the installation, repair or maintenance of the traffic signals, the University shall be responsible for any costs associated with the restoration of such property.

11) INSURANCE: The City will at all times maintain all appropriate levels and types of insurance commercially prudent for the types of activities and responsibilities the City is assuming under this agreement, including some or all coverage through self-insurance. The City will promptly provide evidence of such insurance upon written request from the University.

12) WORKERS' COMPENSATION COVERAGE: The City agrees to comply with the Michigan Worker's Disability Compensation Law as to all employees performing work under this agreement.

13) COMPLIANCE WITH LAWS: The City agrees that in the performance of work herein enumerated, by itself, or by a subcontractor, or by anyone acting on its behalf, that they will comply with any and all state, federal, and applicable local statutes, ordinances, and regulations, including those governing the furnishing and use of all safeguards, safety devices, and protective equipment. The work will be performed in accordance with good engineering practices with the least possible inconvenience to the University. The City understands that the property of the University, as state property, cannot be subject to liens. The City will not assert any liens against University property and will require its subcontractors to provide performance bonds and payment bonds.

14) EXCAVATION: The City, the University and anyone acting on behalf of either of them must contact MISS DIG (1-800-482-7171) before excavating in an area near to the installations shown on Exhibit A.

15) TERMINATION: This agreement shall continue in effect from year to year unless either party notifies the other of its intent to terminate. Written notice must be given to the other party no less than ninety (90) days before termination. The requirements of Paragraph 15 do not apply to a termination in accordance with Paragraph 16.

16) ACCESS EASEMENTS: If necessary for the City to perform its obligations under this agreement, the University shall grant to the City access or other easements as are required. If the University fails to provide or terminates an easement that is required, this agreement is terminated and the City's obligations under this agreement shall cease. If this agreement is terminated by either party, the University's obligation to continue the grant of an easement required by this agreement shall cease.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed the day and year first written above.

Regents of the University of Michigan,
a Michigan constitutional corporation

By: _____

Timothy P. Slottow
C2 Timothy P. Slottow

Its: Executive Vice President
And Chief Financial Officer

The City of Ann Arbor,
a Michigan municipal corporation

By: _____

Roger W. Fraser, City Administrator

Approved as to substance:

Sue F. McCormick, Public Services Area
Administrator

Approved as to form:

Stephen K. Postema, City Attorney

EXHIBIT A
PAGES 1-5

LEGEND SHEET

UNDERGROUND

- M.H. 1234 EXISTING MANHOLE
- EXISTING HANDHOLE
- EXISTING DUCT RUN
- ABANDON EXISTING DUCT RUN
- BUILD ENCLOSED CONDUIT (E.C.C.) OR DIRECT BURIAL CONDUIT (D.B.) (4'-4" E.C.C. SHOWN)
- BUILD NEW MANHOLE (2-WAY)
- BUILD NEW MANHOLE (3-WAY)
- BUILD NEW MANHOLE (4-WAY)
- BUILD NEW MANHOLE (CORNER)
- BUILD HANDHOLE (ROUND OR SQUARE AS INDICATED ON THE PLANS)
- BUILD POLYMER CONCRETE HANDHOLE
- BUILD TYPE "D" HANDHOLE
- EXISTING DIRECT BURIAL OR PARKWAY CABLE
- ABANDON DIRECT BURIAL OR PARKWAY CABLE
- INSTALL DIRECT BURIAL CABLE (IND. & SIZE AS INDICATED)
- INSTALL DIRECT BURIAL CONDUIT (1'-3" SHOWN)
- EXISTING U.G. - FED ST. LTC. UNIT
- REMOVE U.G. - FED ST. LTC. UNIT & FDM. (EXCEPT AS OTHERWISE INDICATED)
- INSTALL COMB. L.T.C. & ST. LTC. - 6 FT. NEW FDN. INSTALL 400" TYPE LUMINAIRE

OVERHEAD

- EXISTING WOOD POLE (H.B.T. POLE SHOWN)
- REMOVE WOOD POLE (O.E. CO. POLE SHOWN)
- REPLACE WOOD POLE (HEIGHT & CLASS AS INDICATED)
- INSTALL WOOD POLE (HEIGHT & CLASS AS INDICATED) (USE SALVAGED POLE WHERE INDICATED)
- EXISTING OVERHEAD ST. LTC. UNIT
- REMOVE OVERHEAD ST. LTC. UNIT
- INSTALL OVERHEAD ST. LTC. UNIT
- EXISTING OVERHEAD LINE
- REMOVE OVERHEAD LINE
- INSTALL OVERHEAD LINE
- INSTALL & LATER REMOVE OVERHEAD LINE
- INSTALL GUY & ANCHOR (0.5" GUY SHOWN)
- REMOVE GUY & ANCHOR ROD
- INSTALL POLE GUY (0.5" GUY SHOWN)
- INSTALL ARM GUY (0.375" GUY SHOWN)
- REMOVE GUY (TYPE AS SHOWN)
- MATERIAL TO BE INSTALLED
- MATERIAL TO BE REMOVED
- MAKE WOOD POLE SELF-SUPPORTING IN CONCRETE
- CABLE POLE

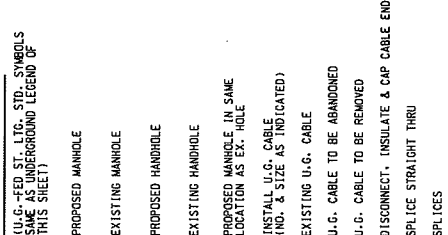
TRAFFIC SIGNAL

- INSTALL 3-SECTION TRAFFIC SIGNAL (1-WAY SHOWN)
- INSTALL 3-SECTION TRAFFIC SIGNAL WITH SALVAGED HEADS (2-WAY SHOWN)
- REMOVE 3-SECTION TRAFFIC SIGNAL (2-WAY SHOWN)
- EXISTING 3-SECTION TRAFFIC SIGNAL (2-WAY SHOWN)
- BACK-OUT LAMPS & HOOD SIGNALS (INCIDENTAL TO INSTALLATION OF T.S. ON THIS CONTRACT)
- REMOVE HOOD & INSTALL LAMPS (INCIDENTAL TO INSTALLATION OF T.S. ON THIS CONTRACT)
- POLE CONTACT HEIGHT OF T.S. SPAN WIRE
- LOW CONTACT HEIGHT OF SPAN WIRE T.S.
- L.C.H.
- INSTALL WARNING SIGN (TYPE AS INDICATED ON PLANS)
- INSTALL LOOP DETECTOR & CABINET (EXCEPT AS OTHERWISE INDICATED)
- REMOVE PREEMPTION DETECTOR
- INSTALL PREEMPTION DETECTOR
- EXISTING 4-WAY ILLUMINATED CASE SIGN
- INSTALL 2-WAY ILLUMINATED CASE SIGN (SALVAGED)
- REMOVE 2-WAY ILLUMINATED CASE SIGN
- EXISTING 2-WAY ILLUMINATED CASE SIGN
- INSTALL 4-WAY ILLUMINATED CASE SIGN (SALVAGED)
- REMOVE 4-WAY ILLUMINATED CASE SIGN
- EXISTING 4-WAY ILLUMINATED CASE SIGN
- INSTALL 2-SECTION PEDESTRIAN (WALK-DON'T WALK) TRAFFIC SIGNAL (2-WAY SHOWN)
- INSTALL 2-SECTION PEDESTRIAN (WALK-DON'T WALK) TRAFFIC SIGNAL WITH SALVAGED HEAD (2-WAY SHOWN)
- REMOVE 2-SECTION PEDESTRIAN (WALK-DON'T WALK) TRAFFIC SIGNAL (1-WAY SHOWN)
- EXISTING 2-SECTION PEDESTRIAN (WALK-DON'T WALK) TRAFFIC SIGNAL (3-WAY SHOWN)
- INSTALL TRAFFIC SIGNAL CONTROLLER (NEW OR SALVAGED AS INDICATED) ON NEW FDN.
- INSTALL TRUSS TYPE MAST ARM STD. & MAST ARM ON NEW FOUNDATION (EXCEPT AS OTHERWISE INDICATED)
- INSTALL & LT. TRAFFIC SIGNAL PEDESTAL ON NEW FOUNDATION (EXCEPT AS OTHERWISE INDICATED)
- EXISTING TRAFFIC SIGNAL CONTROLLER
- EXISTING MAST ARM STANDARD
- EXISTING PEDESTAL
- EXISTING STEEL STRAIN POLE
- INSTALL OVERHEAD PLASTIC JACKETED CABLE
- EXISTING OVERHEAD PLASTIC JACKETED CABLE
- REMOVE OVERHEAD PLASTIC JACKETED CABLE

TRAFFIC SIGNAL

- INSTALL JUNCTION BOX
- INSTALL SALVAGED JUNCTION BOX
- REMOVE JUNCTION BOX
- EXISTING JUNCTION BOX
- BACK-OUT LAMPS & HOOD SIGNALS (INCIDENTAL TO INSTALLATION OF T.S. ON THIS CONTRACT)
- REMOVE HOOD & INSTALL LAMPS (INCIDENTAL TO INSTALLATION OF T.S. ON THIS CONTRACT)
- POLE CONTACT HEIGHT OF T.S. SPAN WIRE
- LOW CONTACT HEIGHT OF SPAN WIRE T.S.
- L.C.H.
- INSTALL WARNING SIGN (TYPE AS INDICATED ON PLANS)
- INSTALL LOOP DETECTOR & CABINET (EXCEPT AS OTHERWISE INDICATED)
- REMOVE PREEMPTION DETECTOR
- INSTALL PREEMPTION DETECTOR

DIAGRAMS



GENERAL

- PROPERTY (ROW) LINE
- PAVEMENT JOINTLINE & CURB
- FUTURE PAVEMENT
- SEWER LINE, MANHOLE & CATCH BASIN
- DET. ED. CO. U.G. LINE & MANHOLE
- MICH. BELL TEL. CO. U.G. LINE & M.H.
- WATERMAIN & GATEWELL (OTHER UTILITIES SIMILAR)
- TRAFFIC SIGNAL
- DIRECT BURIAL
- MANHOLE
- HANDHOLE

CYCLES WITS		STATION WITS	
AUTH. NO.	DRAWN	LEGEND SHEET	CORST SHEET
CONT. SEC.	DATE 01/14/00	ENC OR AT E HOSPITAL DR	UNIVERSITY OF MICHIGAN
ENGINEER PLO	SCALE	M/A	CITY OF ANN ARBOR
SHEET " 0 "	PLUT		(URS-01)

CALL MISS DIG
1-800-487-7777
MISSISSIPPI VALLEY
800-487-7777

URS
Bentley Systems Corporation
Great Maple, Farmington, NH
www.urscorp.com

FEDERAL NUMBERS

PROJECT	ITEM

TRAFFIC SIGNAL

CONTROL SECTION	JOB NUMBER

GENERAL INFORMATION SHEET

GENERAL NOTES

1. ALL TREE TRIMMING REQUIRED TO CLEAR NEW OR SALVAGED ST. LIG. & TRAFFIC SIGNAL STD.'S AND O.H. ST. LIG. & TRAFFIC SIGNAL UNITS SHALL BE INCLUDED IN THE PAY-ITEM & NO EXTRA PAYMENT SHALL BE MADE.
2. EXISTING O.H. & T.S. FACILITIES ARE NOT NECESSARILY SHOWN ON PLANS.
3. ALL TRAFFIC STREET SIGNS SUCH AS "NO PARKING", "NO STANDING" ETC. SHALL BE TRANSFERRED FROM OLD STD. OR POLE TO NEW STD. OR POLE AT SAME LOCATION OR IN CLOSE PROXIMITY BY DEPT. OF TRANSPORTATION OR MAINTAINING AGENCY.
4. CROSSARMS SHALL BE REMOVED AFTER ALL CONTACTS ARE REMOVED. (INCLUDED IN THE REMOVAL OF OVERHEAD LINES).
5. A MINIMUM CLEARANCE OF 3'-6" HORIZONTAL & 1'-0" VERTICAL MUST BE MAINTAINED BETWEEN PROPOSED FACILITIES & EXISTING U.G. WATER FACILITIES.
6. NO CHANGES FROM PLANS IN LOCATION OF SUPPORTING STRUCTURES, SIGNAL HEAD PLACEMENT OR TRAFFIC SIGNAL EQUIPMENT WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE UNIVERSITY OF MICHIGAN.
7. PREVIOUSLY INCLUDED GENERAL NOTES CAN BE FOUND IN THE SPECIAL PROVISION FOR TRAFFIC SIGNAL WORK - CONSTRUCTION METHODS (03TC8201A010).
8. THE FOLLOWING STANDARD PLANS ARE TO BE USED AS REQUIRED IN THE PROJECT.
WORK IS TO BE IN ACCORDANCE WITH THE REFERENCED STANDARD PLAN:
SIGN-210-A (WOOD POST)
SIGN-740-A (MISCELLANEOUS SIGN CONNECTION DETAILS)
WZD-125-D (TEMPORARY TRAFFIC CONTROL DEVICES)
R-28-F (SIDEWALK RAMP AND DETECTABLE LANDING DETAILS)
R-30-E (CONCRETE CURB AND CONCRETE CURB & GUTTER)
9. CONCRETE PAVEMENT REPAIRS SHALL BE CONSTRUCTED IN ACCORDANCE WITH M.D.O.T. STANDARD PLAN R-44-E & "2003 STANDARD SPECIFICATIONS FOR CONSTRUCTION" SEC. 603.
10. FOR ELECTRICAL SERVICE INSPECTION CONTACT THE UNIVERSITY OF MICHIGAN
11. SCHEDULE 80 PVC CONDUIT SHALL BE CONTINUOUS BETWEEN HANDHOLES.
12. ALL ELECTRICAL WORK SHALL BE BY LICENSED ELECTRICIANS.

SH. 1 OF 4
MDOT (E)



GENERAL INFORMATION SHEET

DATE 01/14/10

SCALE

CONT. SEC.

T & S

JOB NO.

CONST.

GENERAL INFORMATION SHEET

GENERAL NOTES

SH. 2 OF 4
MDOT (E)



GENERAL INFORMATION SHEET

DATE 01/14/10

SCALE

CONT. SEC.

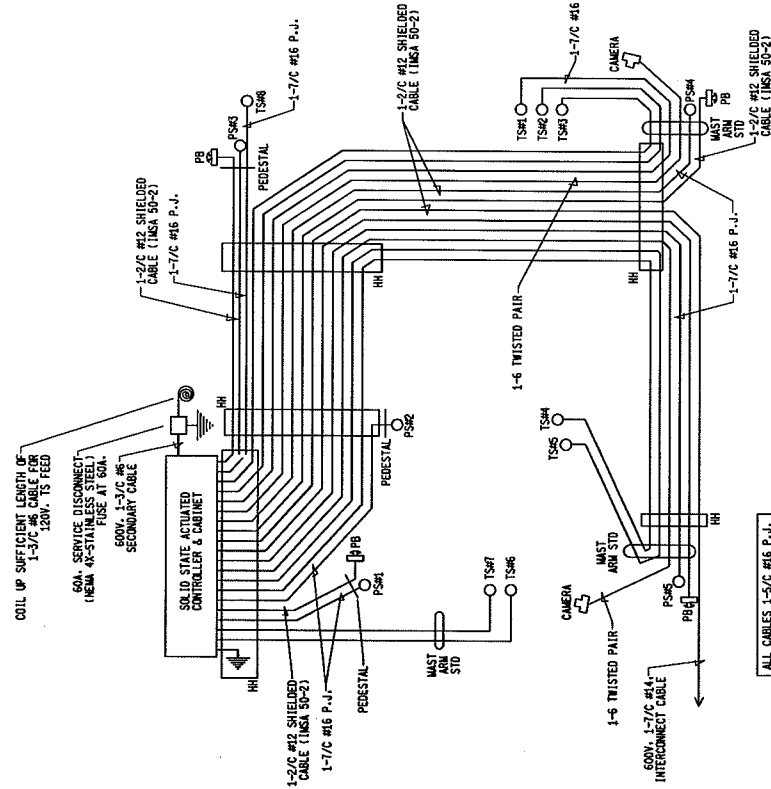
T & S

JOB NO.

CONST.

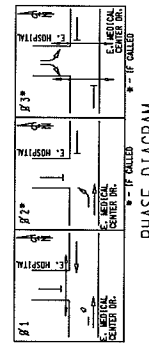
URS.02

- NOTES TO CONTRACTOR:**
1. ALL PEDESTRIAN PUSHBUTTONS SHALL INCLUDE A VISIBLE ACTIVATION INDICATOR.
 2. BACKPLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNALS.
 3. TEMPORARY STEEL CASING SHALL BE USED TO PREVENT CAVING AND TO MITIGATE THE AMOUNT OF GROUNDWATER SEEPAGE WHEN INSTALLING THE MAST ARM FOUNDATIONS.
 4. ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED ELECTRICIANS.
 5. THE CANTILEVER SIGN AT THE INTERSECTION SHALL BE RELOCATED APPROXIMATELY 85' TO THE EAST PRIOR TO THE TRAFFIC SIGNAL INSTALLATION.
 6. SEE THE NEXT SHEET FOR THE INTERCONNECT PLAN.

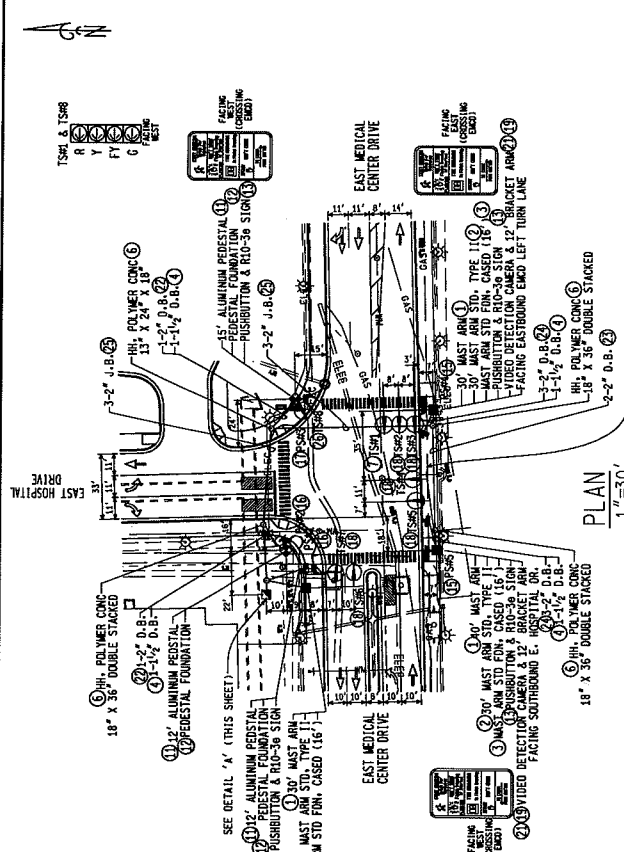


ALL CABLES 1-5/C #16 P.-J. UNLESS OTHERWISE NOTED.

WIRING DIAGRAM
NOT TO SCALE



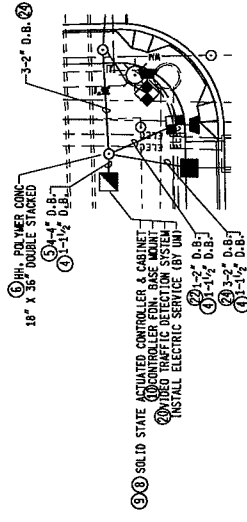
PHASE DIAGRAM



PLAN
1"=30'

NO.	ITEM	QUANTITIES
1	Mast Arm	3 Eg
2	Mast Arm Std	3 Eg
3	Mast Arm Std Fdn. Cased	48 Ft
4	Conduit, DB, 1, 1/2 inch	100 Ft
5	Conduit, DB, 4, 4 inch	10 Ft
6	HH, Polymer Conc	5 Eg
7	TS, One Way Mast Arm Mtd. FYA (LED)	1 Eg
8	Controller and Cabinet, Solid State Actuated	1 Eg
9	Controller Fdn. Base Mount	1 Eg
10	Pedestal, Alum	3 Eg
11	Pedestal, Fdn	3 Eg
12	Serv Disconnect	4 Eg
13	TS, Pedestrian, One Way Pedestal Arm Mtd (LED) Countdown	2 Eg
14	TS, Pedestrian, One Way Pedestal Mtd (LED) Countdown	2 Eg
15	TS, Pedestrian, Two Way Pedestal Mtd (LED) Countdown	1 Eg
16	TS, One Way Mast Arm Mtd (LED)	6 Eg
17	Bracket, Truss, With 12 Foot Arm	2 Eg
18	Video Traffic Detection System	1 Eg
19	Video Traffic Detection Camera	2 Eg
20	Conduit, DB, 1, 2 inch	50 Ft
21	Conduit, DB, 2, 2 inch	60 Ft
22	Conduit, DB, 3, 2 inch	60 Ft
23	Conduit, Jacked Bored, 3, 2 inch	155 Ft
24	TS, One Way Pedestal Mtd. FYA (LED)	1 Eg

LIST OF MATERIAL



DETAIL 'A'
1"=15'

CALL MISS DPG
A WORKING DRAFT MEANS YOU MAY
EXPERIENCE MATERIAL, QUANTITY AND HOLDING
ISSUES

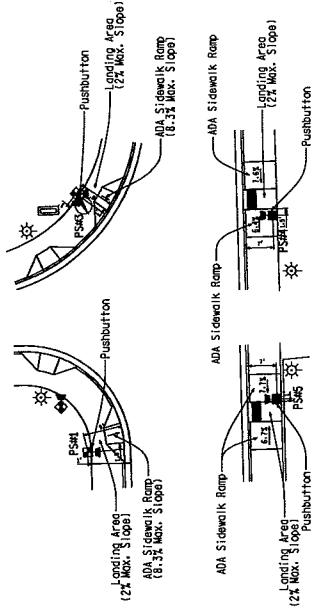
TRAFFIC SIGNAL

DATE	01/14/10	SCALE	1"=30'	CONT. SEC.		JOB NO.		SHEET NO.	URS-03
EAST MEDICAL CENTER DRIVE AT E. HOSPITAL DRIVE					TRAFFIC SIGNAL				

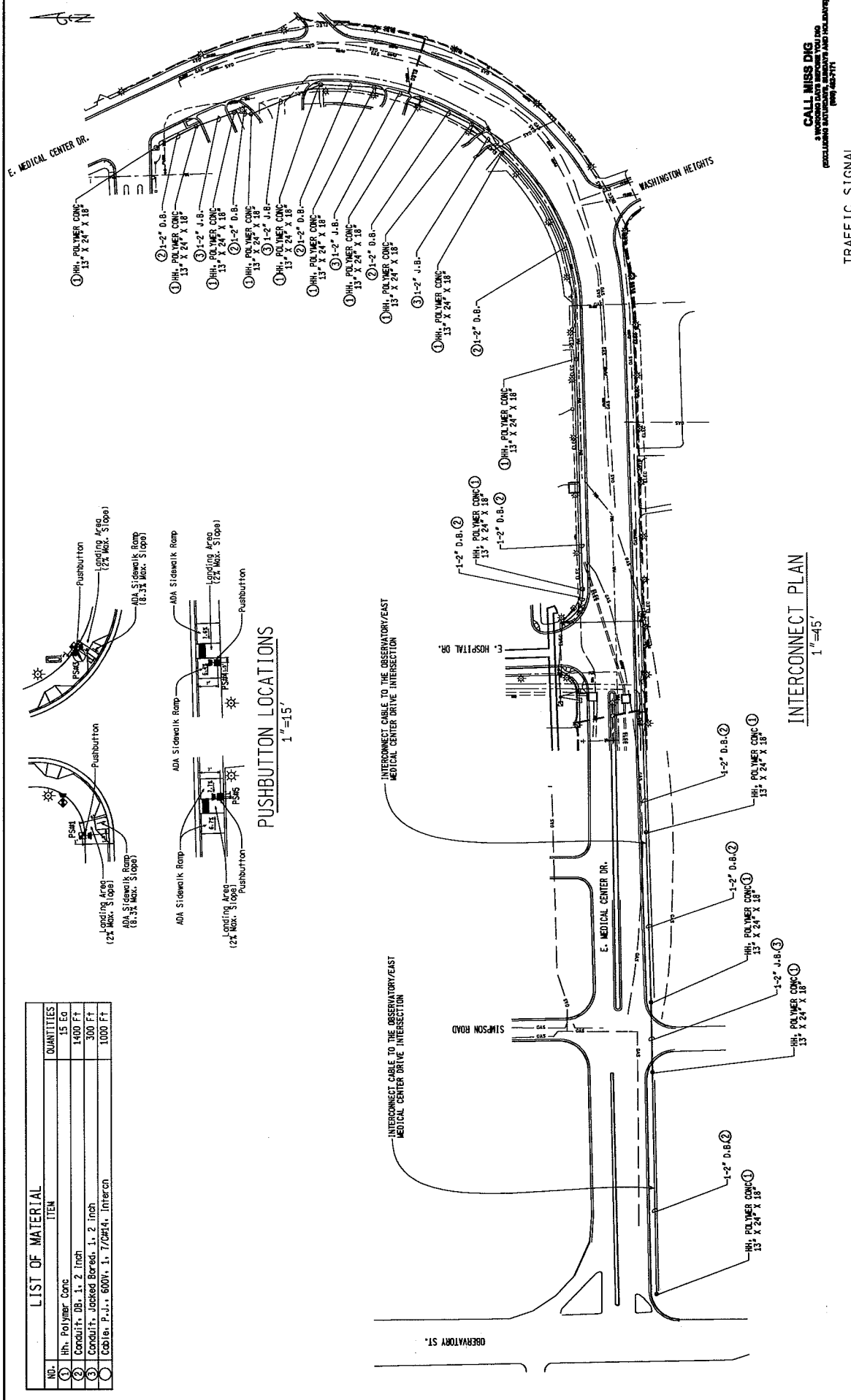
OPENINGS	34	EAST MEDICAL CENTER DRIVE
CYCLIC WAITS	388	AT EAST HOSPITAL DRIVE
STEADY WAITS	128	CITY OF ANN ARBOR
PLAN		WASHTENAW COUNTY

URS
Engineering
Construction
Programs

LIST OF MATERIAL	
NO.	QUANTITIES
① Hh. Polymer Conc	15 Ea.
② Conduitr. Dk. 1, 2 Inch	1400 Ft.
③ Conduitr. Jacketed Bared. 1, 2 Inch	300 Ft.
④ Cable, P.J., 600V, 1, 7/CH4, Intercon	1000 Ft.



PUSHBUTTON LOCATIONS
1" = 15'

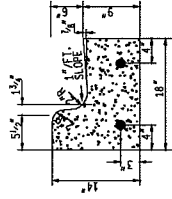


INTERCONNECT PLAN
1" = 45'

CALL MISS DIG
3 WEEKS LATE BEFORE YOU DIG
PROFESSIONAL SURVEYING AND PLANNING
(800) 462-2171

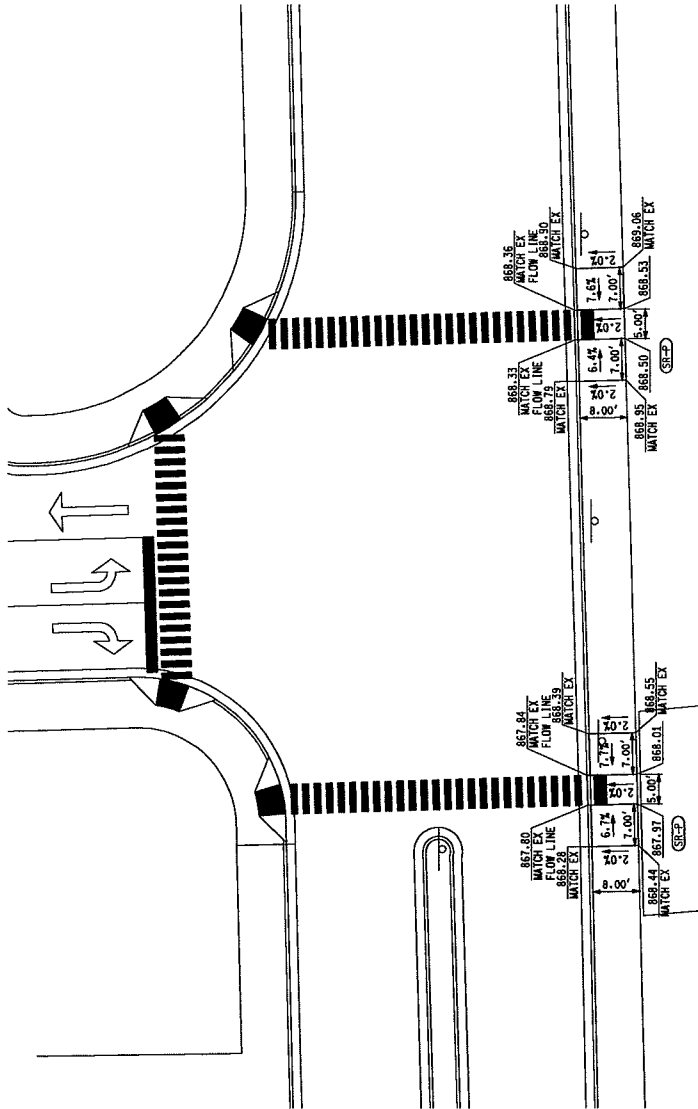
EAST MEDICAL CENTER DRIVE AT EAST HOSPITAL DRIVE CITY OF ANN ARBOR WASHINGTON COUNTY		EAST MEDICAL CENTER DRIVE AT E. HOSPITAL DRIVE		TRAFFIC SIGNAL	
DATE	SCALE	CONT. SEC.	JOB NO.	SHEET NO.	FILE NAME:
01/14/10	1" = 45'				URS-04

FILE NAME: URS-04
SHEET NO.:
JOB NO.:
CONT. SEC.:
DATE: 01/14/10
SCALE: 1" = 45'
TRAFFIC SIGNAL
EAST MEDICAL CENTER DRIVE AT E. HOSPITAL DRIVE
CITY OF ANN ARBOR
WASHINGTON COUNTY



UM ROADWAY CURB & GUTTER (1999)

EAST HOSPITAL DRIVE



EAST MEDICAL CENTER DRIVE

EAST MEDICAL CENTER DRIVE

THIS WORK IS SHOWN FOR INFORMATION ONLY.

ITEM	QUANTITIES
Curb and Gutter, Rem	38 FF
Sidewalk, Rem	34 Syd
Subbase, CIP	6 Cyd
Curb and Gutter, Conc	38 FF
Sidewalk Rmp., ADA	302 SFT

SIDEWALK DETAIL

EAST MEDICAL CENTER DRIVE
AT EAST HOSPITAL DRIVE
CITY OF ANN ARBOR
WASHINGTON COUNTY





DATE	SCALE	CONT. SEC.	JOB NO.	TRAFFIC UNIT	SHEET NO.
01/14/10	1" = 10'			SIGNALS	URS-05

FILE NAME: CHECKED BY: DATE: