

GENERAL NOTES:

1. The Contractor is responsible for the cost of uncovering or hand digging around utilities as necessary, incidental to the respective contract pay item.
2. Exact signal location may be modified in the field to avoid existing utilities, as directed by the City Engineer.
3. All signal bases shall be located a minimum of 6 feet from the face of the curb unless approved otherwise by the City Engineer.
4. All mast arm pole bases shall be protected by a stainless steel mesh screening around the base bolts to prevent rodent entry. The mesh shall be secured to the base by stainless steel banding as incidental to the individual mast arm assembly pay item.
5. No additional compensation will be allowed for placing conduit at greater than 2 feet minimum depth to avoid obstacles such as underground utilities.
6. A 10 gauge stranded THHN wire shall be furnished and left in place in all conduits that are empty or contain fiber optic cable with six (6) feet of slack at each hand hole as incidental to the conduit pay item.
7. Drilling holes through existing curb and gutter, inserting conduit and filling with approved sealer for detector loops is incidental to the detector loop pay item.
8. All mast arm mounted signal heads on each individual mast arm shall be mounted so that the red indications are level with each other.
9. All bracket mounted heads shall be mounted on side of pole as directed by the City Engineer in order to minimize vehicle damage.
10. All LED signal lenses shall be of the same type, design and appearance and be from the same manufacturer for any given intersection.
11. The electrical conductors for all traffic signal heads shall be 14 gauge solid, soft copper.
12. The proposed traffic signal control cabinet shall be furnished with a door switch, conflict flash and manual flash inputs wired to the appropriate controller 'D' connector inputs. The cabinet shall also be furnished with a manual control switch and manual cord within the police compartment door as incidental to the controller pay item.
13. An Innovative Technologies model HS-P-SP-120A-30A-RJ suppressor or approved equal with a 3 position terminal block shall be mounted on an aluminum plate below the cabinet power distribution panel. Incoming power shall connect to the terminal block which shall feed the IT suppressor through 10 gauge solid copper wire (AC+, AC-, Gnd.) with approximately ten 1.5 to 2 inch coils in the AC+ and AC- lines.
14. All detector loop amplifiers shall be rack mounted and shall be labeled on the edge of the shelf below the amplifier with their respective directions, phases, loop terminals and controller inputs.
15. Contractor shall submit shop drawings for all signal components to the City of Bloomington for approval prior to ordering.
16. The Contractor shall be responsible for obtaining electrical service for the traffic signals and street lighting. The Contractor shall contact the power supplier prior to beginning work in order to meet the power supplier's requirements. Contractor shall notify the Engineer a minimum of 72 hours before the circuit is energized.
17. Mast arm luminaire service shall be energized from the opposite transformer phase of the traffic signal service.
18. The Engineer shall be notified at least 72 hours prior to signal turn on.
19. The Contractor shall arrange for a factory or supplier representative to be present at the intersection when the signals are turned on as incidental to the controller pay item.
20. The City reserves the right to cancel any turn on if the City deems the situation unsafe for reasons such as bad weather, peak hour traffic conditions or road conditions.
21. The Contractor shall be responsible for having the cabinet energized and fully functional with field displays turned off a minimum of 24 hours prior to scheduled signal turn on.
22. Signal turn on shall be scheduled between 9 and 10 am.
23. The City Electricians shall assist with the programming of the traffic signal controller. The Contractor shall notify the City Electricians by contacting (309)434-2225 a minimum of 72 hours prior to controller being ready for programming. The Contractor shall be responsible for the programming of all video detection parameters.
24. The Contractor shall provide the Engineer with the controller, conflict monitor and one set of the cabinet prints a minimum of 72 hours prior to energizing the cabinet

SUMMARY OF QUANTITIES

Y031-1F

ITEM NO.	ITEM	UNITS	PLAN QTY
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SF	215
42400800	DETECTABLE WARNINGS	SF	24
44000600	SIDEWALK REMOVAL	SF	100
67100100	MOBILIZATION	LS	1
70102625	TRAFFIC CONTROL AND PROTECTION - 701606	LS	1
70102635	TRAFFIC CONTROL AND PROTECTION - 701701	LS	1
70102640	TRAFFIC CONTROL AND PROTECTION - 701801	LS	1
72000200	SIGN PANEL - TYPE 2	SF	70
80500100	SERVICE INSTALLATION, TYPE A	EA	1
81012400	CONDUIT IN TRENCH, 1/4" DIA., PVC	LF	500
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	LF	1100
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	LF	65
81013100	CONDUIT IN TRENCH, 5" DIA., PVC	LF	10
81021330	CONDUIT PUSHED, 2" DIA., PVC	LF	35
81021340	CONDUIT PUSHED, 2 1/2" DIA., PVC	LF	15
81021370	CONDUIT PUSHED, 4" DIA., PVC	LF	195
81021380	CONDUIT PUSHED, 5" DIA., PVC	LF	105
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EA	12
81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EA	1
81900200	TRENCH & BACKFILL FOR ELECTRICAL WORK	LF	1805
85700205	FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EA	1
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EA	1
86400100	TRANCEIVER - FIBER OPTIC	EA	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2/C	LF	1300
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3/C	LF	1400
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5/C	LF	1700
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7/C	LF	1600
87301305	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	LF	8900
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	LF	50
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EA	1
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT	EA	1
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT	EA	2
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT	EA	1
87800100	CONCRETE FOUNDATION, TYPE A	LF	3
87800200	CONCRETE FOUNDATION, TYPE D	LF	3
87800415	CONCRETE FOUNDATION, TYPE E 36 - INCH DIAMETER	LF	50
87900200	DRILL EXISTING HANDHOLE	EA	1
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 3 SEC, MAM	EA	8
88040130	SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 5 SEC, W 1 DUAL IND SEC, MAM	EA	4
88040140	SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, 5 SEC, W 1 DUAL IND SEC, BM	EA	4
88102717	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1 FACE, BM W/CNT DWN TIMER	EA	8
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EA	12
88500500	INDUCTION LOOP DETECTOR AMPLIFIER	EA	28
88500525	INDUCTION LOOP DETECTOR AMPLIFIER W/ SYSTEM OUTPUT	EA	12
88600100	DETECTOR LOOP, TYPE I	LF	1700
88700200	LIGHT DETECTOR	EA	4
88700300	LIGHT DETECTOR AMPLIFIER	EA	4
88800100	PEDESTRIAN PUSH-BUTTON	EA	8
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1 C	LF	550

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT



SCALE 1:250

DESIGN BY: AES
DRAWN BY: JCK
REVISED: 9-4-2009
APPROVED BY: KAK
DATE: 9-4-2009

SUMMARY OF QUANTITIES & GENERAL NOTES
HERSHEY ROAD & COLLEGE AVE. TRAFFIC SIGNALS SECTION NO. 05-00331-00-TL

SHEET
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