

SHELBYVILLE, INDIANA

SHELBYVILLE CONSTRUCTION STANDARDS

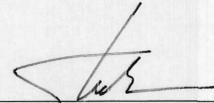
DIRECTIONS FOR USE

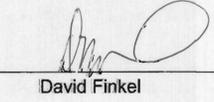
- 1.) The Entire Set Of Signed, Full Size Standards Shall Be Attached To The Site Development Plans And Construction Drawings And Shall Be Considered Part Thereof.
- 2.) Details Prepared By Outside Sources Shall Not Be Included In The Construction Drawings When Said Details Cover Work Which Is Covered By Shelbyville Standards.
- 3.) Individual Shelbyville Standards That Do Not Apply May Be Crossed-out By Design Engineer Through The Placement Of A Single Large 'X' Over Detail. Minor Reference Notations May Be Placed Adjacent To Individual Standard Drawings For Coordination. However, The Standards Themselves Shall Not Be Modified In Any Way.
- 4.) Details Prepared By Outside Sources Covering Work Which Is Not Covered By Shelbyville Standards Are The Sole Responsibility Of The Design Engineer And Shall Be Placed On Sheets Other Than The Shelbyville Standards Sheets.
- 5.) For Details, Specifications, And Design Guidelines Not Covered In These Standards, Refer To The Documents Stated Below. In The Event That These Standards Are Used, Referenced, Or Incorporated Into Any Publicly Or Privately Funded Project And A Conflicting Standard(s) And/Or Specifications(s) Exist, The Following Order Shall Govern:
 - 5.1 Shelbyville Construction Standards
 - 5.2 City Of Shelbyville Unified Development Ordinance
 - 5.3 City Of Shelbyville Stormwater Design Manual
 - 5.4 INDOT Standards And Specifications / Indiana Manual On Uniform Traffic Control Devices / INDOT Work Zone Safety Manual.
 - 5.5 "Ten State Standards" Prepared By Great Lakes-Upper Mississippi River Board Of State Public Health And Environmental Managers And Sanitary Engineers
 - 5.6 ASTM And/Or AWWA Standards And Specifications
 - 5.7 Project's Written Specifications
 - 5.8 Project's Plans
- 6.) Design Professional Certifying The Plans For The Project Acknowledges Their Professional Responsibility For Ensuring That All Work Is Correct, Accurate, And Complies With All Applicable Laws, Standards, Regulations, And Ordinances. If Such An Error And/Or Omission Is Found, The Design Professional Accepts Full Responsibility And Shall Determine A Solution That Complies With All Applicable Laws, Standards, Regulations, And Ordinances. If Such An Error Or Omission Is Found, The Developer Is Not Relieved To Comply With All Applicable Laws, Standards, Regulations, And Ordinances.
- 7.) All Requests For Interpretations And/Or Clarification With The Standards Shall Be Done In Writing To The City Engineer. All Official Responses By The City Engineer Will Be Done In Writing.
- 8.) Failure To Properly Execute The Above Directions For Use Will Not Effect The Applicability Nor The Enforcement Of The Individual Shelbyville Standards.
- 9.) The City Of Shelbyville Shall Be Contacted When Required By Calling (317) 392-5102.

Shelbyville Construction Standards Apply To Public & Private Property



BOARD OF PUBLIC WORKS AND SAFETY

APPROVED 
 Tom DeBaur Mayor Date 6-19-2014

APPROVED 
 David Finkel Member Date 6/19/2014

APPROVED 
 Bob Williams Member Date 6/19/14

GENERAL NOTES

- 1.) Contractor Shall Verify The Exact Location Of All Existing Utilities At Least 48 Hours Prior To Any Construction Or Excavation. During Construction, All Utilities Shall Be Adequately Supported To Minimize Damage. The Contractor Shall Be Responsible For Repairing Or Replacing Damaged Utilities To The Satisfaction Of The City Of Shelbyville And The Owner Of The Affected Utility. All Utility Main Lines And All Utility Service Lines/Laterals Are Included In The Definition Of All Utilities.
- 2.) Contractor Shall Obtain A R/W Permit From The Engineering Dept. Prior To Starting Any Work Within City R/W. R/W Permits Require A Minimum 2 Working Days For Internal Review Prior To Approval. A \$10K Maintenance & Performance Bond Shall Be Posted With R/W Permit Application. The City Reserves The Right To Require A Larger Maintenance & Performance Bond Based On Project Scope If Deemed Necessary By The City. Failure To Obtain The Proper Permits As Required May Result In Penalties As Provided In City Ordinance 10.99.
- 3.) Project Plans Shall Be Provided For Review By The Technical Review Committee (TRC). Any Project With Public Works Infrastructure Improvements Shall Commence With Construction No Later Than 2 Years From TRC Approval, Or Shall Be Subject To A Subsequent TRC Approval.
- 4.) The Contractor Shall Notify The City And All Other Applicable Governmental Agencies At Least 48 Hours Prior To Starting Or Resuming Work On A Project.
- 5.) The Contractor Is Responsible For Maintaining A Safe Construction Site And For Keeping Surrounding And Adjacent Streets Neat And Clean. The Contractor Shall Provide All Traffic Control, In Accordance With Most Recent Version Of The INDOT Workzone Safety Manual, Required On Public Ways Near The Project.
- 6.) All Erosion Control /Stormwater Pollution Prevention Measures Shall Meet Or Exceed The Requirements Set Forth In The Indiana Storm Water Quality Manual. Contractor Is Responsible For Maintaining Such Measures In Compliance With All Applicable IDEM, DNR, And City Of Shelbyville MS4 Standards And Regulations.
- 7.) All Street Cuts Shall Be Square And Neat. Jagged Or Irregular Street Cuts Are Not Permitted And Shall Be Repaired By The Contractor At No Cost To The City.
- 8.) Installation Of, Or Provisions For The Installation Of All Underground Utilities (Including Service Laterals) To Be Placed Under Pavement Areas Shall Be Established Prior To The Construction Of The Pavements. The City Reserves The Right To Require Trenchless Construction For Crossing Of Existing Streets. No Open Cut Construction Of New Pavement, Curb, Or Sidewalk Will Be Allowed.
- 9.) All Benchmarks And Elevations Shall Be Based On The City/County G.I.S. Datum.
- 10.) Whenever Proprietary Equipment Is Specified, All Proposals For Substitution Shall Be Submitted In Writing To The Shelbyville Engineering Department For Review.
- 11.) As-Built Record Drawings Shall Be Submitted To The Shelbyville Plan Commission Office. Two Full Hard-Copy Sets, One Full-Size PDF Set, And One Electronic AutoCAD Set Shall Be Submitted To The Shelbyville Plan Commission Office. Electronic AutoCAD Drawings Shall Be Compliant With The State Plane Coordinate System With Units Provided In U.S. Survey Feet. All Benchmarks And Elevations Shall Be Based On The City/County G.I.S. Datum. As-Built Drawings Shall Be Certified By A Registered Land Surveyor Or Engineer. As-Built's Are Required For Sanitary Sewer Systems, Storm Sewers Systems, Water Systems, Conduits, Lights, Roadways, And All Other Infrastructure Within Public Right-Of-Ways And/Or Easements.
- 12.) All Construction Within Public Right-Of-Ways Shall Comply With The Most Recent Version Of The Requirements Of The Americans With Disabilities Act (ADA). Construction Shall Meet The Standards Set Forth In The Current ADA Accessibility Guidelines (ADAAG) And Public Right-Of-Ways Guidelines (PROWAG).

| Sheet # | DESCRIPTION |
|---------|--|
| 1 | DIRECTIONS FOR USE, GENERAL NOTES, AND REVISION LOG |
| 2 | RIGHT-OF-WAY |
| 3 | RIGHT-OF-WAY, SITE DEVELOPMENT STANDARDS |
| 4 | PAVEMENT DETAILS AND NOTES |
| 5 | CURB AND DRIVEWAY DETAILS AND NOTES |
| 6 | SIDEWALK AND ADA RAMPS DETAILS AND NOTES |
| 7 | TRENCH BACKFILL AND STREET CUT DETAILS AND NOTES |
| 8 | STORM SEWER BEDDING AND PIPE DETAILS AND NOTES |
| 9 | STORM SEWER AND DRAINAGE DETAILS AND NOTES |
| 10 | STORM SEWER STRUCTURES DETAILS AND NOTES |
| 11 | SANITARY SEWER BEDDING AND PIPE DETAILS AND NOTES |
| 12 | SANITARY SEWER DETAILS AND NOTES |
| 13 | SANITARY SEWER DETAILS AND NOTES |
| 14 | SANITARY SEWER LIFT STATION STANDARDS AND GUIDELINES |
| 15 | FIRE DEPT. & WATER STANDARD DETAILS |
| 16 | SIGNS, MARKINGS, & MONUMENTATION DETAILS |
| 17 | ARTERIAL/COLLECTOR ROUNDABOUT STANDARDS AND DETAILS |
| 18 | LOCAL ROUNDABOUT STANDARDS AND DETAILS |



| Rev. No. | Description | Date |
|----------|---|------------|
| 1 | Entire Set | 07/26/2011 |
| 2 | ADA Compliance Notes, References To New UDO | 01/14/2014 |
| | | |
| | | |



CITY OF SHELBYVILLE
**DIRECTIONS FOR USE,
 GENERAL NOTES, &
 REVISION LOG**

SHEET
 1
 OF
 18

GENERAL NOTES

- The Right-Of-Way Widths, Pavement Widths, And Easement Widths Indicated On This Sheet Are Minimum Distances Required By The City Of Shelbyville. Greater Widths May Be Provided Or Required. Additional Right-Of-Way Width May Be Required By The City In The Proximity Of Intersections With Thoroughfare Or Arterial Roads. The City Of Shelbyville Unified Development Ordinance, Section 6.20, Provides For The Specific Details For Right-Of-Way, Pavement, and Sidewalk Widths. The Contractor Shall Review The Plat And The Plans To Confirm The Various Widths Indicated On This Sheet And Shall Report Any Discrepancy To The City Engineer Prior To Proceeding With Construction.
- Local Street Pavement Width (Excluding Curb & Gutter) May Be Required To Be Wider Than Specified When Directed By The Shelbyville Plan Commission And / Or City Engineer. Additional Width Requirement Will Be Considered When Dwelling Density Exceeds 4 Lots Per Acre.
- Dimensions Shown On The Street Cross Section Details On This Sheet Are For Two-Lane Streets With No Parking. See Note ② In Table 1 For Street And Right-Of-Way Widths For Streets With Parking.
- If The Width Of A New Sidewalk Is Different Than The Width Of A Connecting Existing Sidewalk, A 5 Ft Sidewalk Taper Or Flare Section Shall Be Constructed To Transition To Existing Sidewalks Having A Different Width.
- All Permits And Easements Shall Be Obtained By The Owner With Any Required Insurance Or Bonds To Be Provided By The Owner Or Contractor Prior To The Start Of Work On The Project.
- Minimum Profile Grade On Streets Shall Be 0.60%. Minimum Length Of Vertical Curves Shall Be 25 Feet. Vertical And Horizontal Design Of Streets Shall Comply With Street Alignment Design Tables As Shown On This Sheet.
- 18" Minimum Vertical Separation And 10'-0" Minimum Horizontal Separation Shall Be Maintained Between Watermains, Hydrants, And All Sewers (Storm and Sanitary).
- Standard Pavement Markings Shall Be Placed In Streets / Roads As Shown In Accordance With The Most Recent Version Of The Indiana Manual On Uniform Traffic Control Devices (MUTCD). For Asphalt Pavements, All Pavement Markings Shall Be Thermoplastic. For Concrete Pavements, All Pavement Markings Shall Be Epoxy.
- Top Of Manhole Frames Shall Be Set To Meet The Finished Yard Or Sidewalk Grade When Located In Front Yard Area Of Lot Or Right-Of-Way.
- Snowplowable Raised Pavement Markers (RPMs) Shall Be Placed On All Arterial Roads, In Accordance With The Most Recent Version Of The Indiana Manual On Uniform Traffic Control Devices (MUTCD). Blue RPMs Shall Be Used When Adjacent To A Fire Hydrant.
- Arterial Streets And All Divided Streets Shall Be Coordinated With The City Engineer And Plan Commissioner And Shall Be In Accordance With The Minimum Design Standards Outlined By The Unified Development Ordinance.
- Residential Streets Are Defined As Streets Serving Only Residential Properties. Non-Residential Streets Are Defined As Streets Serving Non-Residential Properties Or Any Combination Of Residential And Non-Residential Properties.
- Street Classifications Shall Be Confirmed With The City Plan Commission Office.
- Refer To The Shelbyville Unified Development Ordinance Section 6.18 For Cul-De-Sac Design Standards.

TABLE 1: STREET DESIGN STANDARDS

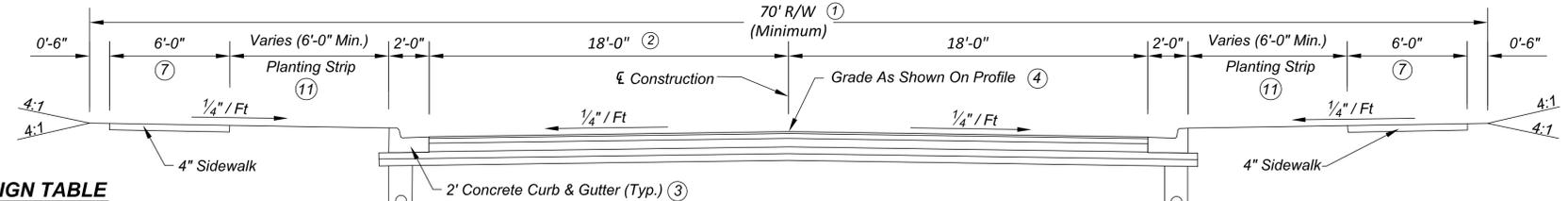
| | Local Street - Residential | | | Local Street - Non-Residential | | | Collector Street - Residential | | | Collector Street - Non-Residential | | | Arterial Street | Rural Collector Street |
|--|----------------------------|------------------------|-------------------------|--------------------------------|------------------------|-------------------------|--------------------------------|------------------------|-------------------------|------------------------------------|------------------------|-------------------------|-----------------|---|
| | No Parking | Parking On 1 Side (12) | Parking On 2 Sides (12) | No Parking | Parking On 1 Side (12) | Parking On 2 Sides (12) | No Parking | Parking On 1 Side (12) | Parking On 2 Sides (12) | No Parking | Parking On 1 Side (12) | Parking On 2 Sides (12) | No Parking | To Be Determined By The City Based On Traffic Volume and Design Speed |
| ① Right-Of-Way Width | 50 | 56 | 66 | 52 | 62 | 70 | 50 | 60 | 70 | 54 | 64 | 72 | 70 | |
| ② Pavement Width | 22 | 31 | 40 | 24 | 34 | 44 | 24 | 34 | 44 | 26 | 36 | 46 | 36/48 | |
| ③ Curb Requirement (Type) | I/II | I/II | I/II | II | II | II | II | II | II | II | II | II | II | |
| ④ Grade (Min. - Max.) | 0.6% - 7% | 0.6% - 7% | 0.6% - 7% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% | 0.6% - 5% |
| ⑤ Minimum Tangent Distance | (10) 100 | (10) 100 | (10) 100 | (10) 150 | (10) 150 | (10) 150 | (10) 200 | (10) 200 | (10) 200 | (10) 250 | (10) 250 | (10) 250 | (10) 300 | (10) 300 |
| ⑥ Minimum Corner Radius | (10) 25 | (10) 25 | (10) 25 | (10) 30 | (10) 30 | (10) 30 | (10) 35 | (10) 35 | (10) 35 | (10) 45 | (10) 45 | (10) 45 | (10) 50 | (10) 50 |
| ⑦ See Also Note #4 (Single Family 4'-0" Width), (Multi-Family 5'-0" Width), (Commercial 6'-0" Width), (Industrial 4'-0" Width). | | | | | | | | | | | | | | |
| ⑧ Care Should Be Taken To NOT Disturb Lot Corner Pins When Constructing Sidewalks. | | | | | | | | | | | | | | |
| ⑨ 2 Lane Arterial Street Standards Shown - All Other Arterial Street Designs Shall Be Consistent With The Requirements Of The City Engineer And INDOT. | | | | | | | | | | | | | | |
| ⑩ Subject To Additional Requirements And Any Alternate Standards Established By The City Engineer And/Or INDOT, Based On Design Speed. | | | | | | | | | | | | | | |
| ⑪ Pavement / Sidewalk Separation May Be Reduced To 4 Feet In Commercial Areas Where Parking Is Provided On Both Sides Of The Street. | | | | | | | | | | | | | | |
| ⑫ Street Widths Are Based On Parallel Parking Only. Other Parking Configurations Must Be Approved By The City Engineer And Plan Commission Office. | | | | | | | | | | | | | | |

TABLE 2: ROADWAY GEOMETRIC DESIGN TABLE

| DESIGN SPEED (MPH) | MINIMUM HORIZONTAL CURVE RADIUS (ft) ¹ | CREST K VALUE (Minimum) ² | SAG K VALUE (Minimum) ³ | Max. Permitted Grade Change Without Vertical Curve ⁴ |
|--------------------|---|--------------------------------------|------------------------------------|---|
| 20 | 100 | 12 | 17 | 2.00% |
| 25 | 250 | 19 | 26 | 1.85% |
| 30 | 400 | 29 | 37 | 1.30% |
| 35 | 600 | 44 | 49 | 0.95% |
| 40 | 800 | 61 | 64 | 0.75% |
| 45 | 1000 | 84 | 79 | 0.55% |
| 50 | 1200 | 114 | 96 | 0.45% |

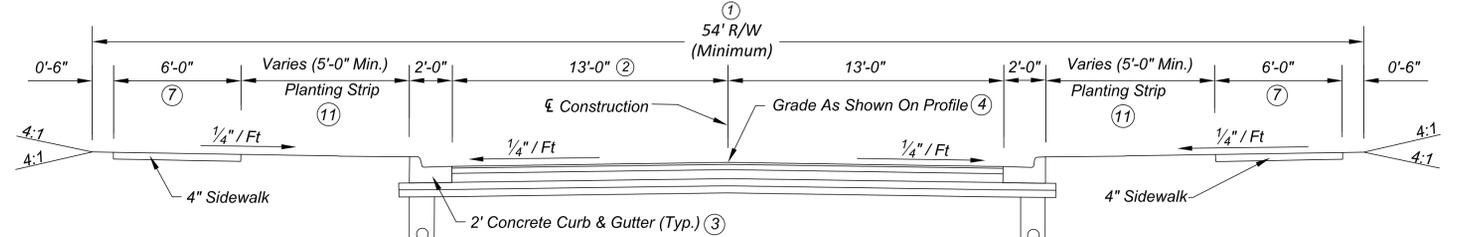
NOTES:

- City Engineer And/Or Plan Commissioner May Require A Longer Curve Radius
- If Curbs Are Present, And K>150, Proper Pavement Drainage Should Be Ensured Near The High Point Of The Curve.
- If Curbs Are Present, And K>150, Proper Pavement Drainage Should Be Ensured Near The Low Point Of The Curve.
- Applies to Local Streets Only. Minimum Required Distance Between Consecutive Deflections Is 100 ft.



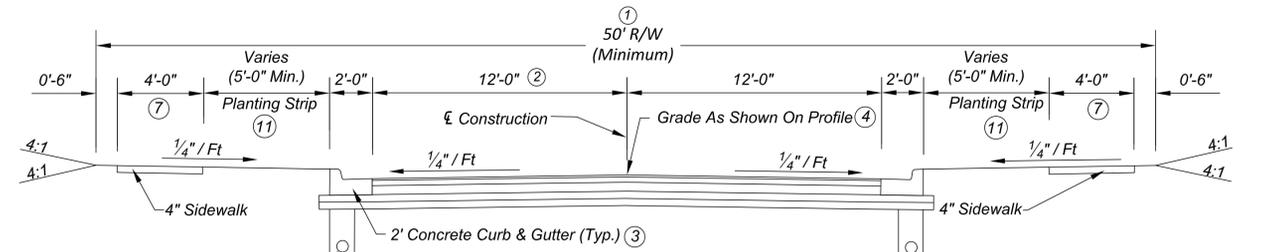
ARTERIAL STREETS

Scale: 1/4" = 1'-0"



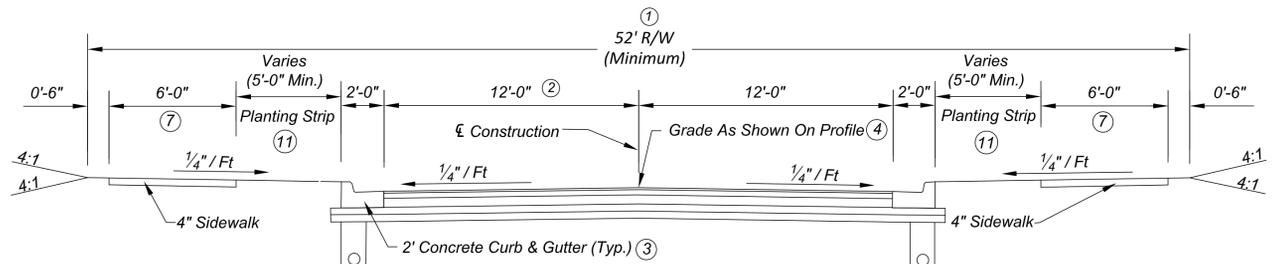
NON RESIDENTIAL COLLECTOR STREETS

Scale: 1/4" = 1'-0"



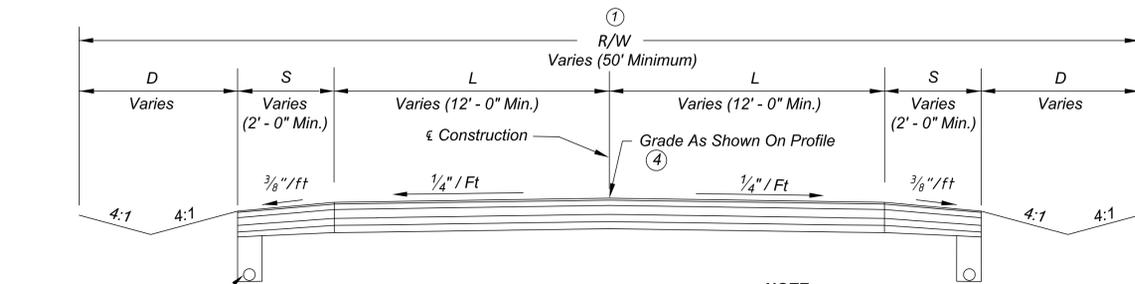
RESIDENTIAL COLLECTOR STREETS

Scale: 1/4" = 1'-0"



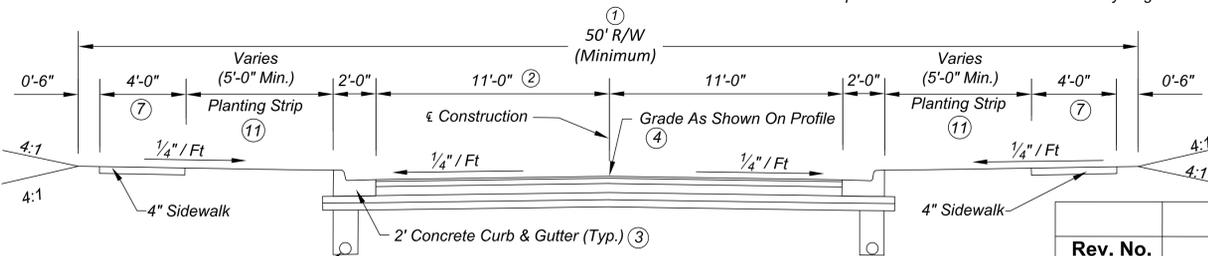
NON-RESIDENTIAL LOCAL STREETS

Scale: 1/4" = 1'-0"



RURAL STREETS

Scale: 1/4" = 1'-0"

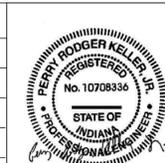


RESIDENTIAL LOCAL STREETS

Scale: 1/4" = 1'-0"

REVISIONS

| Rev. No. | Description | Date |
|----------|---|------------|
| 1 | Entire Set | 07/26/2011 |
| 2 | References To New UDO, Added Rural Section, Revised Design Tables | 01/10/2014 |



CITY OF SHELBYVILLE

RIGHT-OF-WAY

SHEET
2
OF
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