Applicant Checklist For
Low, Medium & High Volume Driveways and Local Roads
Highway Occupancy Permit

The following checklist has been prepared to aid in the preparation and submission of plans for a Highway Occupancy Permit Application other than a minimum use driveway application. These guidelines are not all encompassing nor are they applicable to every application. (References: 67 Pa. Code, Chapter 441; PennDOT Publication 282; and as noted below).

General

- ☐ Project narrative
- ☐ Letter of review/acknowledgement of proposed development from Municipality (Ch. 441.3 (j))
- ☐ Land Use Questionnaire (form M-950MPC) is completed & attached (Sections 619.2 and 1105 of the Municipal Planning Code; Pub. 282, Ch. 3.3)
- ☐ Proof of submission to PHMC (MOU between PA State Historic Preservation Office and PennDOT)
- ☐ E&S Plan approved by the County Conservation District
- ☐ Estimated cost of work within Legal Right-of-way (Pub. 282, Ch. 3.6)
- ☐ Meeting minutes provided for all previous correspondence with PennDOT
- ☐ Within limits of planned PennDOT project
- ☐ Verification of PUC coordination (Title 66 of the PA Consolidated Statutes, Section 2702 (a))
- ☐ TIS/TIA required/approved/signed/sealed
- ☐ Signal plans/traffic signal study required/approved
- ☐ School Zone speed reduction permit required/approved
- ☐ Bridge/structure review/approval
- ☐ Access Covenant (form M-946) required/provided (Ch. 441.6(16))
- ☐ Drainage Release required/provided (Ch. 441.3(h))
- ☐ Permit to be recorded at the County Recorder of Deeds office (Pub. 282)
- ☐ Indemnification required/provided
- ☐ Insp. reqs: PennDOT spot/full time or consultant insp., cost considerations, reimbursement and invoicing.

Application

- ☐ Correct fee received (Ch. 441.4)
- ☐ Permit processing, review, and inspection fees required/submitted (Ch. 441.4)
- ☐ Check is more than 6 months old (Ch. 441.4)
- ☐ Application submitted in the name of property owner (Ch. 441.3(b) and 441.5(b))
- ☐ Copy of the deed, sales agreement, or lease of property (> 15-year lease) is attached (Ch. 441.3(e)(6))
- ☐ M-950 CFO submitted if Applicant not fee owner of property
- ☐ Agent Authorization (form M-950 AA) required/provided
- ☐ Access correctly classified as low/med/high volume with (Ch. 441.1 and Pub. 282)
- ☐ Average daily traffic and broken down by type (Ch. 441.3(i)(7))
- ☐ Business Partner ID completed on application
- ☐ Existing driveways to be removed indicated on application
- ☐ All work proposed within ROW indicated on application

General Notes

- ☐ Applicable general permit notes provided
- ☐ Typical Section notes provided
- ☐ Applicable pavement marking notes provided
- ☐ Applicable MPT notes provided
- ☐ Guiderail removal note required/provided
- ☐ R/W reference note provided (Pub. 14M, Section 2.3.(A)1)
- ☐ ADA Compliance note provided for pedestrian facilities beyond R/W
- ☐ Applicable drainage notes provided
- ☐ Applicable utility notes provided

Plan Presentation

- ☐ North arrow
- ☐ Scale bar, plan view: 1”=50’ or less (1”=50’ and 25’ preferred); details: 1”=20’ or less
- ☐ Existing pavement, travel lanes, and shoulders (type & width) (Ch. 441.3(i))
- ☐ Location & type of existing/proposed highway features (guide rail, curb, drainage, signage, etc.) (Ch. 441.3(i))
- ☐ All affected utilities (all existing & proposed, aboveground & subsurface) (Ch. 441.3(i))
- ☐ Adequate topo along SR and frontage (road edges, buildings, trees, curb, sidewalks, parking, etc.) (Ch. 441.3(i))
- ☐ Dimension proposed driveway and SR if applicable (Ch. 441.3(i)(4))
- ☐ Show existing driveways (Ch. 441.3(i)(4))
- ☐ Show and dimension tapers (lane, shoulder, driveway, etc.) (Ch. 441.3(i)(4))
- ☐ Driveway angle dim. to SR centerline/as close to 90 degrees as possible (Ch. 441.8(b)(1))
- ☐ Show Limits of approved paving in plan (Ch. 441.3(i)(4))
- ☐ SR and Segment/Offsets provided and correct (Pub. 14M)
- ☐ Centerlines and stationing provided for SR and driveways (Pub. 14M)
- ☐ All relevant property owners/lines shown (Ch. 441.3 (i)(5))
- ☐ Limits of work indicated
- ☐ Right-of-Way lines (both sides & width) & type (Legal, Limited Access, etc.) (Pub. 14M, Ch. 3.5.A.1)
- ☐ Distance to nearest driveway & intersection to left/right for both sides of SR (Ch. 441.3.)
- ☐ List ADT’s for each separate driveway (Ch. 441.3(i)(7))
- ☐ Posted speed limit provided on plans (Pub. 14M)
- ☐ Posted speed limit is correct (Pub. 14M)
- ☐ HOP application number referenced on plan
- ☐ Location map provided on the plans (Pub. 14M)
- ☐ Appropriate RC & TC standards/latest date ref. (Pubs 72M, 111; Ch. 441.6 (3))
- ☐ PA One-Call serial number provided (Ch. 441.6(2)(i)(B))
- ☐ Plans/reports signed and sealed by PE/PLS/RLA (49 Pa Code, Ch. 37.59)
- ☐ Plans signed and sealed by PLS
- ☐ No references to Preliminary plan
- ☐ Overall site plan indicating internal traffic patterns (Ch. 441.3(i))
- ☐ Red-Lined plans to be returned

Access Configuration

- ☐ Number of driveways acceptable (Ch. 441.7(e))
- ☐ Justification for more than two (2) driveways (Ch. 441.7(e))
- ☐ Meet Pub. 282, Subchapter 2.4 requirements
- ☐ 10’ tangent distance between end of driveway radius & intersection radius (Ch. 441.8(c)(1))
- ☐ 20’ tangent distance in curbed area between driveway & intersection (Ch. 441.8(c)(2))
- ☐ 30’ tangent distance in uncurbed area between driveway & intersection (Ch. 441.8(c)(2))
- ☐ 20’ between driveways serving the same property (Ch. 441.8(e))
- ☐ 50’ between driveways and ramp of speed change lane (Ch. 441.8(l))
- ☐ Permanent curb defines driveways when multiple driveways are less than 50’ apart (Ch. 441.8(g))
- ☐ Aligns w/ driveways/road/lanes across highway (Ch. 441.7(c))
- ☐ Classified correctly as local road vs. driveway (Ch. 441.7(d))
- ☐ Driveway not to encroach on adjacent property frontage (Ch. 441.8(d))
- ☐ Returns offset per 3R criteria (Pub. 13M, page 1-41)
- ☐ Sufficient for trucks/largest vehicle (Ch. 441.8(a)(2))
- ☐ Any truck restrictions per Title 75 PA. C.S. §4908
- ☐ Radius returns extend full quadrant (Pub. 282, Ch. 2.4)
- ☐ Restricted driveways – radii designed to discourage wrong way movements (Ch. 441.8(a)(2))
- ☐ 16’ min. lane width if channelization island
- ☐ Driveway throat length (Pub. 282, Subchapter 2.4)
- ☐ PC/PT/break points identified/dimensioned
- ☐ Contours needed/provided (Pub. 14M, Ch.2.6)
- ☐ Spot elevations along radii at 10’ intervals

- ☐ Local road width in accordance with Pub. 70M
- ☐ Local road radius returns in accordance with Pub. 70

Access Profile

- ☐ Maintains SR travel lane and shoulder cross slope across the driveway (441.8(i)(4) and Figure 1)
- ☐ Difference between cross slope of roadway shoulder and grade of driveway does not exceed 8% (Ch. 441.8(i)(4))
- ☐ If on high side of superelevation >2%, slope is 2% away (Pub. 13M, Ch.1.2)
- ☐ Provided and meets Pa. Code, Title 67, Ch. 441, Figure 1
- ☐ Existing/proposed grades for SR and driveway (Pub. 14M, Ch. 2.6)
- ☐ Centerline/EOTL/EOP/legal ROW/crosswalk (Pub. 14M, Ch. 2.6)

Sight Distance

- ☐ Available and minimum requirements indicated (Ch. 441.3(i)(6))
- ☐ Meets 441 minimum safe stopping sight distance (Ch. 441.8(h)(2)(iv))
- ☐ Driveway location maximizes sight distance
- ☐ Justification provided for sight distance values that are less than the safe sight distance values
- ☐ Parked cars obstruct sight line for exiting vehicles? (Ch. 441.8(h))
- ☐ Embankment removal – sight line profile provided
- ☐ Sight distance provided for ex. driveways if widened
- ☐ Temporary barrier for traffic control obstructs sight lines
- ☐ Minimum sight distance calculated using 85th percentile speed or posted speed, whichever is greater
- ☐ Continuous sight distance for left-turn ingress shown on plan & profile

Typical Sections

- ☐ Minimum pavement thickness of 4 inches provided within R/W (Ch. 441.8(k))
- ☐ Pavement design provided / min depth requirements met (Pub. 242)
- ☐ Utilize SuperPave/PennDOT descriptions
- ☐ Pavement design approved by PennDOT
- ☐ Pavement history obtained/prop. match ex.
- ☐ Concrete pavement is at least 4 feet wide & dowel rods are used to connect to existing (Pub. 72M, RC-20M)
- ☐ Sawcut full depth pavement noted
- ☐ Open cuts are prohibited in bituminous pavement < 5years old and in all concrete pavement
- ☐ Leveling/ cross-slope correction shown if applicable (Pub. 13M, Ch. 1.5)
- ☐ Minimum 2% cross slopes on widened SR thru and auxiliary lanes (Pub. 13M, Ch. 1.5)
- ☐ Trench restoration detail with pavement design (Pub. 13M, Ch. 1.5)
- ☐ Typical roadway widening detail provided (Pub. 13M, Ch. 1.5)
- ☐ Min. 2' pavement width at tie-in point
- ☐ Seal joints with PG 64-22
- ☐ Bituminous tack coat indicated between each layer
- ☐ Bottom of subbase at or below existing for SR widening
- ☐ Pavement base drain or combination storm/underdrain provided (Pub. 13M, Ch. 1.5)
- ☐ Undercutting note provided if CBR values indicate subgrade is unsuitable

Roadway Geometrics

- ☐ Edge line or centerline milled rumble strips
- ☐ Horizontal curvature info if construction/driveway is along a state highway curve (Pub. 14M, Ch. 2.6)
- ☐ Vertical curvature – ASSHTO criteria (PVI Sta, Elev, VC length, MO, SSD/HLSD, PVC, PVT) (Pub. 14M, Ch. 2.6)
- ☐ Contour/Grading limits (Ch. 441.3(i)(1))
- ☐ Roadway centerline profile (widening) (Pub. 14M, Ch. 10)
- ☐ Centerline (Pub. 14M, Ch. 10)
- ☐ Stationing if improvement to SR are proposed
- ☐ Lane widths – 3R design criteria (Pub. 13M)
- ☐ Intersection alignment
- ☐ Intersection radii

- ☐ Adjustment profile required
- ☐ Milling required
- ☐ Overlay required
- ☐ Permitted Oversize Vehicles considered in the design of roadway/intersection improvements

Shoulders

- ☐ 4% cross slope if curbed or >8' in width; 6%<=8' (Pub. 13M, Ch. 1.5)
- ☐ Low side of superelevation extends at SE cross slope when > required slopes (Pub. 13M, Ch. 1.5)
- ☐ Slopes away from high side of superelevation at 2% (Pub. 13M, Ch. 1.5)
- ☐ 100' of full-depth shoulder upgrade on both sides of driveway (Ch. 441.8(n))
- ☐ Shoulder widths, 3R design criteria, 2' min (Pub. 13M)
- ☐ Through traffic directed over existing shoulder, full-depth paving for rollover/grade break correction

Left Turn Lanes

- ☐ Full width overlay provided within widening limits (Pub. 282, Ch. 7.7)
- ☐ Turn lane lengths, shifting tapers, & bay tapers dimensioned
- ☐ Transverse gore markings required and labeled (Pub. 111, TC-8600)
- ☐ Turn lane lengths = required length in TIS/analysis
- ☐ Shifting tapers per Pub. 111, TC-8600
- ☐ Bay tapers per Pub. 111, TC-8600
- ☐ Offset (opposing) left turn lanes
- ☐ 12' lane widths desirable; 10' min (11'min if trucks)
- ☐ Hour glass effect (provide two-way center left-turn lane)
- ☐ SR profile and cross sections provided every 50' or contours and spot elevations every 20'

Right Turn / Deceleration Lanes

- ☐ 100' (75' in low speed, high traffic area) bay tapers
- ☐ Turn lane lengths, bay taper lengths, & lane widths dimensioned
- ☐ 14' curbed lanes; 12' uncurbed lanes with 3R shoulder
- ☐ Turn lane lengths/bay taper lengths = required lengths in TIS/analysis
- ☐ SR profile and cross sections provided every 50' or contours and spot elevations every 20'

Curb

- ☐ Reference RC-64M and current approval date (Pub. 72M, RC-64M)
- ☐ 5' curb end taper with a 0" reveal at finish grade
- ☐ Provide top/bottom curb elevations every 10'/20'
- ☐ Curb ramps if sidewalk; specifies RC-67M and type (Pub. 72M, RC-67M)
- ☐ Dimension at POT, POC, PT, PC, PCC (Pub. 14M, Ch. 2.6)
- ☐ Eliminate curb along taper if no adjacent curb
- ☐ 4 foot flat area behind curb sloped at 2% in same direction as surrounding terrain
- ☐ Label/dimension depressed curb (Pub. 13M, Ch. 6.11(B))
- ☐ Min. sidewalk width is 5' or 4' with 5'x5' passing areas every 200' (Pub. 72M, RC-67M)

Medians/Islands

- ☐ Driveway medians provided for med/high vol. (Pub.. 282, Subchapter 2.4)
- ☐ Dimensions of islands (lengths, radii, offsets, etc.) provided (Ch. 441.3(i)(4))
- ☐ Type of curbing and proposed material provided (Ch. 441.3(i)(4))
- ☐ Flexible delineators/hazard markers per Pub. 111, TC-8604
- ☐ Medians/islands offset 4' behind edge/curb line (DM-2)
- ☐ Island size sufficient per AASHTO Geometric Design of Highways and Streets

Cross Sections

- ☐ Cross sections provided for SR improvements
- ☐ Match ex but with min. 2% widening slope – tangent roads (Pub. 13M, Ch. 1.2)
- ☐ Match existing superelevated slope – curved roads (Pub. 13M, Ch. 1.5)
- ☐ Centerline and breakpoint elevations provided (Pub. 13M, Ch. 1.5)
- ☐ Existing and proposed cross slopes labeled (Pub. 13M, Ch. 1.5)
- ☐ Cut/fill slopes provided/labeled/acceptable (Pub. 13M, Ch. 1.5)
- ☐ Fill slope benching/detail required/provided (Pub. 13M, Ch. 1.5)
- ☐ Legal/Required ROW locations shown (Pub. 13M, Ch. 1.5)
- ☐ Grading outside of ROW; ROW or easements obtained
- ☐ Full-depth pavement & mill/overlay locations shown (Pub. 13M, Ch. 1.5)
- ☐ Pavement base drain shown (Pub. 13M, Ch. 1.5)
- ☐ Superelevation transition notes provided (Pub. 13M, Ch. 2.13)
- ☐ Superelevation transitions labeled & are in accordance with Pub. 13M, Ch. 2.13
- ☐ 50’ intervals or 25’ intervals in non-uniform areas (Pub. 14M, Ch. 2.7)
- ☐ Scale at 1”=5’ desirable, 1”=10’ max (Pub. 14M, Ch. 2.7)
- ☐ Dimensioned from centerline

Signing

- ☐ Location and size/designation (Pub. 236) of all relocated and proposed signs shown (Ch. 441.3(i))
- ☐ All existing signs shown (Ch. 441.3(i))
- ☐ Existing signs to be relocated or removed labeled (Ch. 441.3.i)
- ☐ Details provided for non-standard signs (Ch. 212.B.101)
- ☐ Stop (R1-1) sign required
- ☐ R3-7 or R3-8 lane use control signs required for auxiliary lanes (Pub. 236)
- ☐ R4-7 and OM1-3 signs for medians (Pub. 236)
- ☐ Do Not Enter (R5-1) & One Way (R6-1L and R6-1R) signs on sign post on each side of access (6 signs) (Pub. 236)
- ☐ No Left Turn (R3-2) signs, near right and far left, entering and exiting (Pub. 236)
- ☐ Do Not Enter (R5-1) sign mounted back-to-back with Stop (R1-1) sign stays within edges of Stop sign (MUTCD 2B.10)
- ☐ Right clearance markers at obstructions required (Pub. 236)

Pavement Markings

- ☐ Type, size, color and orientation indicated/correct
- ☐ Existing type, size, & color shown (Ch. 441.3(i)(1))
- ☐ 24” stop bar provided if necessary (Pub. 46, Ch. 3)
- ☐ Reference TC-8600, current edition
- ☐ Stop bar placed according to turning templates
- ☐ Proposed labeled “match existing” at limits of work
- ☐ Stations or seg/offset for proposed pavement markings (stop bars, lane separation lines, etc.)
- ☐ Crosswalk widths dimensioned (6’ min) (Pub. 111, TC-8600)
- ☐ 6” minimum crosswalk lines (Pub. 111, TC-8600)
- ☐ Min 2 direction arrows per auxiliary lane (MUTCD, Ch. 3, Section 3B.20.21)
- ☐ First direction arrow 20’ from stop bar (Pub. 111, TC-8600)
- ☐ 6” lane dividing lines; 4” edge lines and double yellow lines (Pub. 111, TC-8600)
- ☐ Min of 2 direction arrows with overhead signs provided for lane drops (Pub. 111, TC-8600)
- ☐ No “ONLY” legends for auxiliary lanes unless lane drop (Pub. 111, TC-8600)

Maintenance and Protection of Traffic

- ☐ Sequence/narrative referencing PATA figures (Ch. 441.3(f))
- ☐ TCP provided if necessary
- ☐ Detour required/approved
- ☐ Located near signalized intersection (note provided)

- ☐ PATA figures attached in EPS
- ☐ Drop-off/safety slope protection note or detail provided
- ☐ PATA figure 10a referenced in conjunction with PATA 7
- ☐ Road Users Liquidated Damages

Guiderail

- ☐ Required per Pub. 13M, Ch. 12
- ☐ Impact attenuators provided/shown/correct (Pub. 13M, Ch. 12.8)
- ☐ Can guiderail be eliminated by regrading? (Pub. 13M, Ch. 12)
- ☐ Substandard guiderail (Pub. 408)
- ☐ Weathering steel guiderail not permitted

Right-of-Way

- ☐ Dimension to physical centerline (Pub. 14M, Ch. 3.5.A.1)
- ☐ Dedication to PennDOT required (Pub. 14M, Ch. 3.0.H.)
- ☐ R/W plans approved by PennDOT
- ☐ Drainage/Slope/Temporary construction easements required (Pub. 14M, Ch. 3.1(N), (O), & (R))
- ☐ Convert required R/W to legal R/W on HOP plans
- ☐ Deeds provided with R/W submission
- ☐ Additional R/W necessary for auxiliary lane (Ch. 441.8(j))
- ☐ Conveyance of R/W form (M-950 D1) used
- ☐ Acquisition of R/W from adjacent owners required
- ☐ Points of transition identified on the plan (Pub. 14M, Ch. 3)
- ☐ Legal verification of easements related to HOP provided and referenced in general notes

Access Approval Procedures – Impacts to Access of Neighboring Owners

- ☐ Form M-950R1 required/provided (Pub. 282, Subchapter 2.6)
- ☐ Modification to adjacent frontage (installation of auxiliary lane)
- ☐ Approval letter / plan signature required/provided
- ☐ Modification of adjacent driveway
- ☐ Separate application for impacted driveway required/provided (Ch. 441.3(b))
- ☐ Impacted driveways brought up to code (Ch. 441)

Traffic Signals

- ☐ Municipal awareness letter/permit (Ch. 212.5(b)(v)(A) addresses local municipality responsibility for maintaining signal)
- ☐ Interconnection required
- ☐ System permit plan required
- ☐ 10’ max distance between push button and location where pedestrian would wait for signal (Pub. 13M)
- ☐ 10” max distance between push button and edge of landing area (Pub. 13M)
- ☐ Pedestrian study required (Pub. 149, Ch. 19)
- ☐ Standard notes provided
- ☐ Build volumes match analysis
- ☐ Signal warrants met (MUTCD, Ch. 4)
- ☐ Left-turn warrant (Pub. 149, Ch. 3.1 and Pub. 46, Ch. 4.6)
- ☐ Signal phases work with ped movements
- ☐ Clearance calculations provided
- ☐ Posted speed limit used for clearance calculations (Pub. 149)
- ☐ Correct widths used for clearance calculations
- ☐ Yellow and all-red times rounded to nearest whole second (Pub. 149)
- ☐ Walk/Man indication is at least 7 seconds
- ☐ Pedestrian clearance calculations provided
- ☐ 3.5 ft/s walking speed used in ped clearance calculations (Pub. 46, Ch. 4.3)

- ☐ Width of crossing measured from curb to curb (Pub. 46, Ch. 4.3)
- ☐ Countdown timers
- ☐ 4' pedestrian pathway provided (Pub. 13M)
- ☐ Intersection alignment
- ☐ Mast arm location, size in 5 ft increments, 65 ft max
- ☐ Separate mast arms provided for each approach (Pub. 149, Ch. 8)
- ☐ Mast arm allows for left-turn signal placement (Pub. 149, Ch. 6)
- ☐ Support location in accordance with Pub 149 offsets (Pub. 149, Ch. 5)
- ☐ Controller cabinet shown on plan (Pub. 14M, Ch. 10)
- ☐ Signal equipment within right-of-way or easement
- ☐ Overhead street name signs use Clearview 1W, 2W, or 3W font (Pub. 236)
- ☐ Street name, not development name, used on overhead street name signs (Pub. 236)
- ☐ Proper abbreviations used on overhead street name signs (Pub. 236)
- ☐ Permit General Notes
- ☐ Final conditions shown on the Permit Plan (Pub. 14M, Ch. 10)
- ☐ Revisions shown (Pub. 14M, Ch. 10)
- ☐ Plan Legend complete and accurate (Pub. 14M, Ch. 10)
- ☐ Timing diagram completed and correct
- ☐ "No Turn on Red" required
- ☐ Right-of-way lines shown in accordance with Pub. 14M
- ☐ Right-of-way lines labeled as "Legal Right-of-way line" (Pub.14M)
- ☐ Traffic signal easements labeled as "Legal Traffic Signal Easement" (Pub. 14M)
- ☐ Permit Plan updated to meet current field conditions
- ☐ Speed limits and grades provided on plan (Pub. 14M, Ch. 10)
- ☐ Distances to the nearest signal indicated on plan (Pub. 14M, Ch. 10)
- ☐ Sign chart (plan symbol, series number, size, and sign name) provided/correct (Pub. 236)
- ☐ H, I, O, Q, or U not used for sign plan symbol
- ☐ Pushbutton sign corresponds with ped signal head (Pub. 236)
- ☐ Preemption provided (Pub. 149, Ch. 10)
- ☐ Preemption note (Pub. 149, Ch. 10)

ADA Compliance

- ☐ Upgrade ADA if pedestrian path is changed (Pub. 13M, Ch. 6)
- ☐ Maintain 4' sidewalk width (Pub. 13M, Ch. 6)
- ☐ Proposed sidewalk > 100' must meet current standards (Pub. 13M, Ch. 6.3.B)
- ☐ Upgrade curb ramp w/in 15' of proposed sidewalk (Pub. 13M, Ch. 6.3.B)
- ☐ Upgrade curb ramps w/in 5% of proposed sidewalk (>300') (Pub. 13M, Ch. 6.3.B)
- ☐ ADA access provided (Pub. 13M, Ch. 6.2.C)
- ☐ Pedestrian study required/approved (Pub. 13M, Ch.'s 6, 7, and 9, and MUTCD Section 4E)
- ☐ Proposed sidewalk limits are logical (Pub. 13M, Ch. 6.2)
- ☐ Relocate inlets within curb ramps (Pub. 13M, Ch. 6.10.D)
- ☐ Traffic Control accommodates pedestrians (Pub. 13M, Ch. 6.9.D.11)
- ☐ Technically Infeasible Form included/approved (Pub. 13M, Ch. 6.2.B.4)
- ☐ Cross-slopes do not exceed 2% (Pub. 13M, Ch. 6.5.A.5)
- ☐ Adequate plan details provided (Pub. 72, RC-67M)
- ☐ Inspection form provided/completed (Pub. 13M, Chapter 6.2.B)
- ☐ Accessible push-button
- ☐ Reserved property compliance (Pa Code, Title 75, Ch. 33, §3354)

Drainage - Hydrology

- ☐ Drainage Control Plan required/provided (Ch. 441.3(g) & Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Location and type of existing/proposed drainage features (e.g., pipes, ditches, inlets, manholes, etc.) (Ch. 441.3(i))
- ☐ All drainage features shown with flow arrows

- ☐ Drainage Control Report signed and sealed (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Pre- vs. post-development peak flow analysis
- ☐ Post < or = to Pre (Ch. 441.6(6); Pub. 584, Ch. 13.11.E)
- ☐ Possible to maintain/ not alter Dept. facilities (Ch. 441.6(6))
- ☐ Application from municipality (Pub. 282, Ch. 7)
- ☐ Drainage release required (Ch. 441.3(h))
- ☐ Narrative (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Overall Site Development Plan (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Pre/post drainage area plans (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Proposed flow into/out of ROW consistent with existing grades/flow (Ch. 441.6(6))
- ☐ Time of concentration (5 min. if pipe 30" or less) (Pub. 13M, Ch. 10)
- ☐ TC paths shown on drainage area plans
- ☐ Storm frequency correct (Pub. 13M, Ch. 10.6.E)
- ☐ Rational formula used for drainage areas up to 200 acres (Pub. 13M, Ch. 10.2.C)
- ☐ 'C' coefficients; curve numbers (Pub. 13M, Table 10.2.1)
- ☐ Rainfall intensity rate correct (Pub. 584, Ch. 7, Appendix A, Figures 7A.7 through 7A.16)

Drainage - Inlets

- ☐ TG and invert elevations (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Inlet drainage area plans (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Not located in radius return (Pub. 72M, RC-45M)
- ☐ Inlet capacities (Pub. 13M, Ch. 10.3.A.7)
- ☐ Inlets not sumped
- ☐ Inlet spacing and location (Pub. 13M, Ch. 10.3.A.7)
- ☐ Flanking inlets at low points (Pub. 13M, Ch. 10.3.A.7)
- ☐ Not located in travel lane; convert to manhole or cap (Pub. 584, Ch. 13)
- ☐ Gutter capacity/spread (Pub. 13M, Ch. 10.3.A)
- ☐ Manholes not located in travel lane (Pub. 584, Ch. 13.10.A)
- ☐ Type/size indicated

Drainage - Pipes

- ☐ 1' minimum cover (Pub. 13M, Ch. 10.3.B.2)
- ☐ Pipe capacities analysis
- ☐ Minimum 18" pipe within ROW (Pub. 584, Ch. 13.11.E)
- ☐ Minimum 15" pipe under driveways (Ch. 441.8(i)(2))
- ☐ Minimum 0.35% slope
- ☐ 2" drop across inlets (Pub. 13M, Ch. 10.3.B.2)
- ☐ Storm frequency correct (Pub. 13M, Ch. 10.6.E & Ch. 10.2.C)
- ☐ Cross pipe that is part of a system uses same design storm as remainder of system
- ☐ Pipe profiles provided (type, corrugations, length, slope, inverts, ground profile, min/max fill heights.) (Pub. 584, Ch. 9; Pub. 13M, Ch. 10; SOL 431-10-07)
- ☐ Pipe information provided on plan (size, slope, length, type) (Pub. 584; Pub. 13M, Ch. 10; SOL 431-10-07)
- ☐ Pipe nomenclature consistent with Pub. 13M, Ch. 10; SOL 431-10-07
- ☐ Downstream pipe analysis if increase flow (Drainage Impact Report Guidelines, Pub. 282, App. B)
- ☐ Combination storm sewer and underdrain pipe
- ☐ Culvert analysis; inlet/outlet control
- ☐ Pipe velocity, 3-8 fps
- ☐ Trench restoration detail
- ☐ Extension-same type, slope
- ☐ Misc. details
- ☐ Inspector required for trench backfill in pavement, sidewalk or shoulder (Pub. 408, Sec. 601)

Drainage – Channels and Swales

- ☐ Typical swale section provided (Drainage Impact Report Guidelines, Feb 2004)

- ☐ Capacity analysis (Drainage Impact Report Guidelines, Feb 2004)
- ☐ Encroach upon shoulder/lane (Pub. 13M, Ch. 10.3.A.1)
- ☐ Flow across driveway acceptable; cross driveway pipe required
- ☐ Swale slope acceptable
- ☐ Grading details provided

Drainage – Storm Water Management Basins

- ☐ Detention basin analysis
- ☐ Does not point discharge toward State Highway
- ☐ Minimum 8 feet from ROW because of basin embankment requirements

Utilities

- ☐ Separate application submitted (Pub. 16M)
- ☐ Updated Act 287 note
- ☐ Separate application for street lights (Pub. 16M)
- ☐ Existing utilities that may conflict with proposed construction are noted (Pub. 16M, Ch. 1)
- ☐ Acceptable pole location (Pub. 13M and Pub. 16M, Ch. 1)
- ☐ PennDOT fiber optic impacted
- ☐ Relocated utility positions/pole ID numbers required/provided

Waiver Requests

- ☐ Alternatives considered (Ch. 441.5(e))
- ☐ Right-of-way correspondence/documentation (Ch. 441.5(e))
- ☐ Indemnification (Ch. 441.5(e))
- ☐ Waiver approval
- ☐ Design waiver request required