# Data Entry Items In PHD

# (**Bold** = required PHD entry)

# Create Screen [Job Information]

- Is JobNet Job?
  - Select <u>Yes</u> for JobNet jobs [projects that were programmed in the JobNet Database and let through the MDOT bid letting system]
  - Or, Select <u>No</u> for Non JobNet jobs [projects that were not programmed in the JobNet Database and not let through the MDOT bid letting system]
- Job ID
  - JobNet job number or Non JobNet ID created by user

#### JobNet Jobs

- The following items must be supplied to create the job in PHD:
  - Simplified CPM?
    - User can select this format for CPM projects with work type code (WTC) from 400 to 499. This format is intended to simplify CPM data entry and requires less information for submittal. This selection is made once, and is set for the duration of data entry and submittal.
    - <u>Cannot</u> use *Simplified CPM* format if the following applies to the job:
      - All lanes <u>do not</u> share the same work, (so work must be the same for all lanes),
      - <u>Has</u> HMA paving, which include layers HMA Base Course, HMA Leveling Course, HMA Top Course, HMA Wedge Course, HMA Ultra-Thin Overlay, and HMA Separator Course.
  - Special project type
    - User can select if the project was CPM Emerging Technology Project, Demonstration Project, etc. Nothing selected if not a special project.
  - **Open to Traffic Date**

#### Non JobNet Jobs

- The following items must be supplied to create the job in PHD:
  - **Non JobNet Job Type** (Maintenance, TWA (Transportation Work Authorization), Warranty, Direct Forces Work, Warranty, Historic, Permit)
  - Work Type Code
  - **Fix Life** (auto filled but can be revised at the user discretion)
  - *Simplified CPM?* (See notes in 'JobNet Jobs' section above for further details)
  - Special project type (See notes in 'JobNet Jobs' section above for further details)
  - Open to Traffic Date

# Road Segment List screen

- Segments are represented and entered by **PR numbers** and **PR milepoints**.
- In JobNet jobs,
  - Initial segments will be generated in PHD corresponding to the JobNet database. The user can change/split these segments and can add/delete segments, all based on the projects' "As built" information.
- In Non JobNet jobs,
  - No segments will be generated. The user must manually create/enter all segments.
- Project Comments Box
  - Optionally used to enter unique project information.
- 'Segment Details' screens are accessed from here.

# Segment Details screen

- 'Shoulder, Curb & Gutter Details' screen is accessed from here.
- 'Lane details' screen is accessed from here.
- Median Overview Box
  - Median Type
    - Undivided, Concrete Barrier, Guardrail, Cable Guardrail, Raised Island with Curb, Thick impenetrable Vegetation, Graded with ditch, Flat (paved and unpaved), N/A (i.e., Ramp), Other

# • Median Width

- Segment Comments Box
  - Optionally used to enter unique segment information of the current segment.
- If using the *Simplified CPM* format:
  - Layers and Layer Attributes
  - Year paved/placed

# Lane Details screen

- Add Left Lane, Add Right Lane, or Remove a Lane.
- When work is done on the Lane, select 'Yes' for the Work Done question. Otherwise, select 'No' (indicates the lane still exists in this segment, but no work was performed in this project).
- For each lane, the following are entered:
  - Surface Type (pavement cross-section)
    - All existing layers underneath the top surface placed with the project are considered.
    - HMA full depth, HMA over existing HMA, HMA over existing Jointed Concrete, HMA over existing CRCP, HMA over existing Brick, JPCP, JRCP, CRCP, Unbonded Concrete Overlay on Existing Concrete, Whitetopping, Brick, Other
  - Lane width
    - Use the width between pavement markings.

- Lane Type
  - Buffer Space, Center Left Turn, Left & Right Turn, Left Turn, Mainline, Median Turnaround, Merge, Off-Ramp, On-Ramp, Passing Flare, Passing Relief, Rest Area Parking Lane, Right Turn, Truck Climbing, Weave
- Year paved/placed
- Partial Width Paving? (yes/no)
  - Partial Paving Width (only shown if Partial Width Paving is Yes)
- Layers and Layer Attributes

#### Shoulder/Curb & Gutter Details screen

- When work is done on the shoulders, select 'Yes' for the **Work Done** question. Otherwise, select 'No' (indicates the shoulder still exists in this segment, but no work was performed in this project).
- For each shoulder, the following are entered:
  - Has Corrugations (Rumble Strip) (Yes/No)
  - Is Parking Lane (Yes/No)
  - Partial Width Paving? (yes/no)
    - **Partial Paving Width** (only shown if Partial Width Paving is Yes)
  - Paved Width
    - This is the paved width of the shoulder (always ≤ Total Width).
  - Total Width
    - This is the total width of the shoulder to the hinge point, including paved shoulder and aggregate-based shoulder.
  - Shoulder Surface Type (pavement cross-section)
    - HMA full depth, HMA over existing HMA, HMA over existing Jointed Concrete, HMA over existing CRCP, HMA over existing Brick, JPCP, JRCP, CRCP, Unbonded Concrete Overlay on Existing Concrete, Whitetopping, Brick, Gravel, Earth, Other
  - Layers and Layer Attributes
- When curb & gutter is placed, select 'Yes' for the **Work Done** question.
  - **Curb Type** (Asphalt, Concrete or Valley)

# Layers and Layer Attributes

(**Bold** = minimum required for that layer)

- Agg. Base Course Cement Stab.
  - Cement content
  - Fly ash content
  - o GGBFS
  - o Portland Cement supplier
  - Portland Cement type
  - Thickness
  - Aggregate class & Source (pit number)

- Aggregate Base Course
  - Thickness
  - Aggregate class & Source (pit number)
- Brick Pavers
  - Thickness
- Brick Seal
  - Brick Seal (yes/no)
- Chip Seal
  - Emulsion
  - Emulsified asphalt supplier
  - Number of courses
  - Aggregate class & Source (pit number)
- Cold In Place Recycled Asphalt
  - Emulsion
  - Thickness
- Cold Milling
  - Cold Milling Depth
  - o Cold Milling Texture (Fine, Micro, Standard)
  - Cold Milling Type
    - Curb Line Milling to match curb.
    - Profile Milling depth variable per slope correction/adjustment (typ. for 1.5% to 2%).
    - Uniform Depth Milling depth held at a constant depth.
- Concrete Pavement Crack/Joint Sealing
  - Crack sealing (yes/no)
  - Resealing longitudinal joints (yes/no)
  - Resealing transverse joints (yes/no)
- Concrete Pavement Repairs (Detail 7's & 8's)
  - Detail 7's placed (yes/no)
  - Detail 7 mix type
  - Detail 8's placed (yes/no)
  - Detail 8 mix type
- Concrete Pavement Repairs (Full Depth)
  - $\circ \quad \text{Cement content} \quad$
  - Concrete grade
  - **o** Portland Cement supplier
  - Portland Cement type
  - Reinforcement steel (yes/no)
  - Thickness
  - Aggregate class & Source (pit number)

• Concrete Pavement Repairs (Partial Depth)

# • Cementitious Repair? (yes/no)

- If <u>Yes</u> (used for cement type material):
  - Prepackaged Mortar? (yes/no)
    - o If <u>Yes</u> (used for prepackaged materials, incl. hydraulic fast set):
      - Prepackaged Mortar Product
    - If <u>No</u> (used for standard concrete mix design):
      - Cement supplier
      - Cement type
- If <u>No</u> (used for non-cement proprietary material):

# • Non-cementitious Product

# • Aggregate class & Source (pit number)

- If prepackaged or non-cementitious is using a proprietary aggregate and does not have an MDOT specified aggregate, then select 'Unknown' & click 'Add Aggregate'
- Concrete Penetrating Sealer
  - o Silane Material
- Crack Relief Interlayer/DRM
  - Thickness
- Cracked and Seated Concrete
  - Thickness
- Crushed and Shaped HMA
  - Thickness
- Diamond Grinding
  - Diamond Grinding (yes/no)
  - Longitudinal Grooving? (yes/no)
- Dowel Bar Retrofit
  - Dowel Bar Retrofit (yes/no)
- FiberMat
  - o Emulsion
  - Emulsified Asphalt Supplier
  - FiberMat type
  - Aggregate class & Source (pit number)
- Fog Seal
  - Fog Seal (yes/no)
- Geotextile Fabric
  - o Geotextile type
- High Friction Surface
  - High Friction Surface placed (yes/no)

- HMA Base Course
  - Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)
- HMA Crack Treatment
  - Cut and seal method
  - HMA Crack Seal Manufacturer
  - HMA Crack Seal Product Name
  - Was Overband also used? (yes/no)
    - If Yes: Overband Crack Fill Product
- HMA Leveling Course
  - Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)

- HMA Separator Course
  - Separator Course Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)
- HMA Skip Patching
  - Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)
- HMA Top Course
  - Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - AWI (Actual)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)

- HMA Ultra-Thin Overlay
  - HMA Ultra Thin Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - o AWI (Actual)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)
- HMA Wedge Course
  - Mix type
  - Mix design number (case sensitive)
  - Application rate
  - Asphalt binder
  - Asphalt binder certified supplier
  - Asphalt % (Total)
  - Asphalt Binder %Added (Virgin)
  - Warm Mix (yes/no)
    - If Warm Mix, Water Foaming? (yes/no)
    - If Warm Mix, select the Additive
  - Shingles used in mix (yes/no)
  - Aggregate class & Source (pit number)
- Hot In Place Recycled Asphalt
  - o AWI (Actual)
  - Asphalt binder
  - o Asphalt binder certified supplier
  - Mix design number
  - Thickness
  - Aggregate class & Source (pit number)
- Joint/Crack Repair Mastic
  - Asphalt Repair Mastic Product
- Micro-surface
  - o Emulsion
  - Emulsified asphalt supplier
  - o Number of courses
  - Rut Fill Layer (yes/no)
  - Aggregate class & Source (pit number)

- Overband Crackfill
  - Overband Crack Fill Product
- Pavement Jacking
  - Poly Pavement Jacking (yes/no)
- Paver Placed Surface Seal
  - AWI (Actual)
  - Application Rate
  - Asphalt binder
  - Asphalt certified supplier
  - PPSS mix type
- PCC Pavement
  - Concrete Grade
  - Portland Cement type
  - Portland Cement supplier
  - Cement content
  - Fly ash content
  - o **GGBFS**
  - Thickness
  - Transverse joint spacing
  - Transverse joints sealed (yes/no)
  - Continuously Reinforced? (Yes/No)
  - Aggregate class & Source (pit number)
- Precast Concrete Pavement
  - Cement Content
  - Fly Ash Content
  - o **GGBFS**
  - Portland Cement supplier
  - Portland Cement type
  - Post-Tensioned? (yes/no)
  - Pre-Stressed? (yes/no)
  - Precast System
  - Reinf Bar Steel, longitudinal
  - Reinf Bar Steel, transverse
  - Reinforcement Steel Mesh? (yes/no)
  - Repair (work <50' & non-cont.)? (yes/no)
  - Slab Length (typ joint spacing)
  - Thickness
  - Transverse joints sealed (yes/no)
  - Aggregate class & Source (pit number)
- Roadway Embankment
  - Embankment placed below pavement? (yes/no)

- Rubblized Concrete Pavement
  - Thickness
  - Rubblizing Equipment Type
- Scrub Seal
  - Emulsion
  - Emulsified asphalt supplier
  - Number of Courses
  - Aggregate class & Source (pit number)
- Subbase
  - Thickness
  - Aggregate class & Source (pit number)
- Subgrade Stabilization
  - Application Rate
  - Stabilization Material
  - Stabilization Material Type
  - o Thickness
- Subgrade Undercut
  - o Thickness
- Void Reducing Asphalt Membrane
  - VRAM Application (per PR dir.) (Left/Right/Both)