



DRAFT CONCEPTUAL DESIGN PLANS

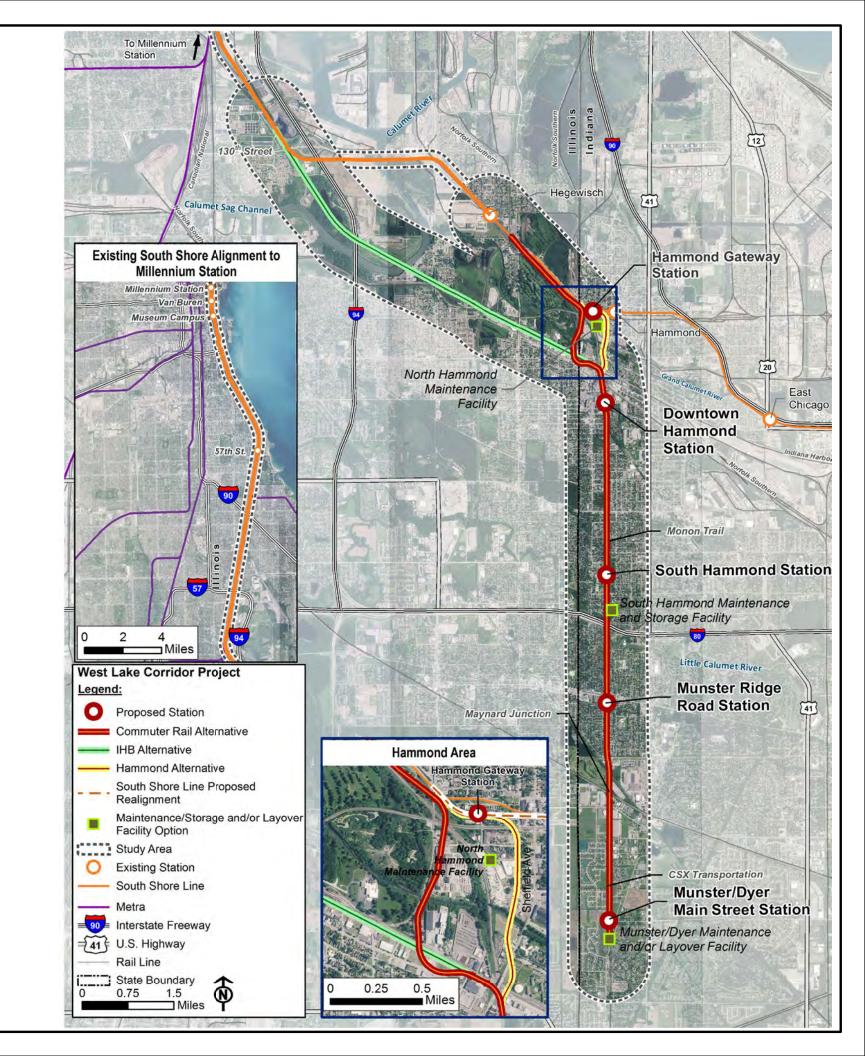
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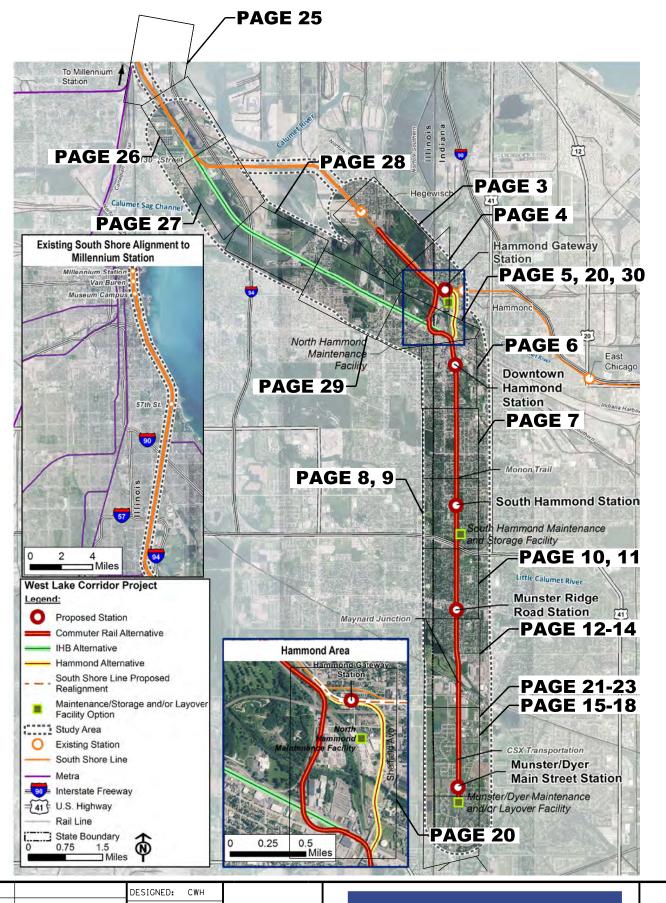
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JUNE 1, 2016







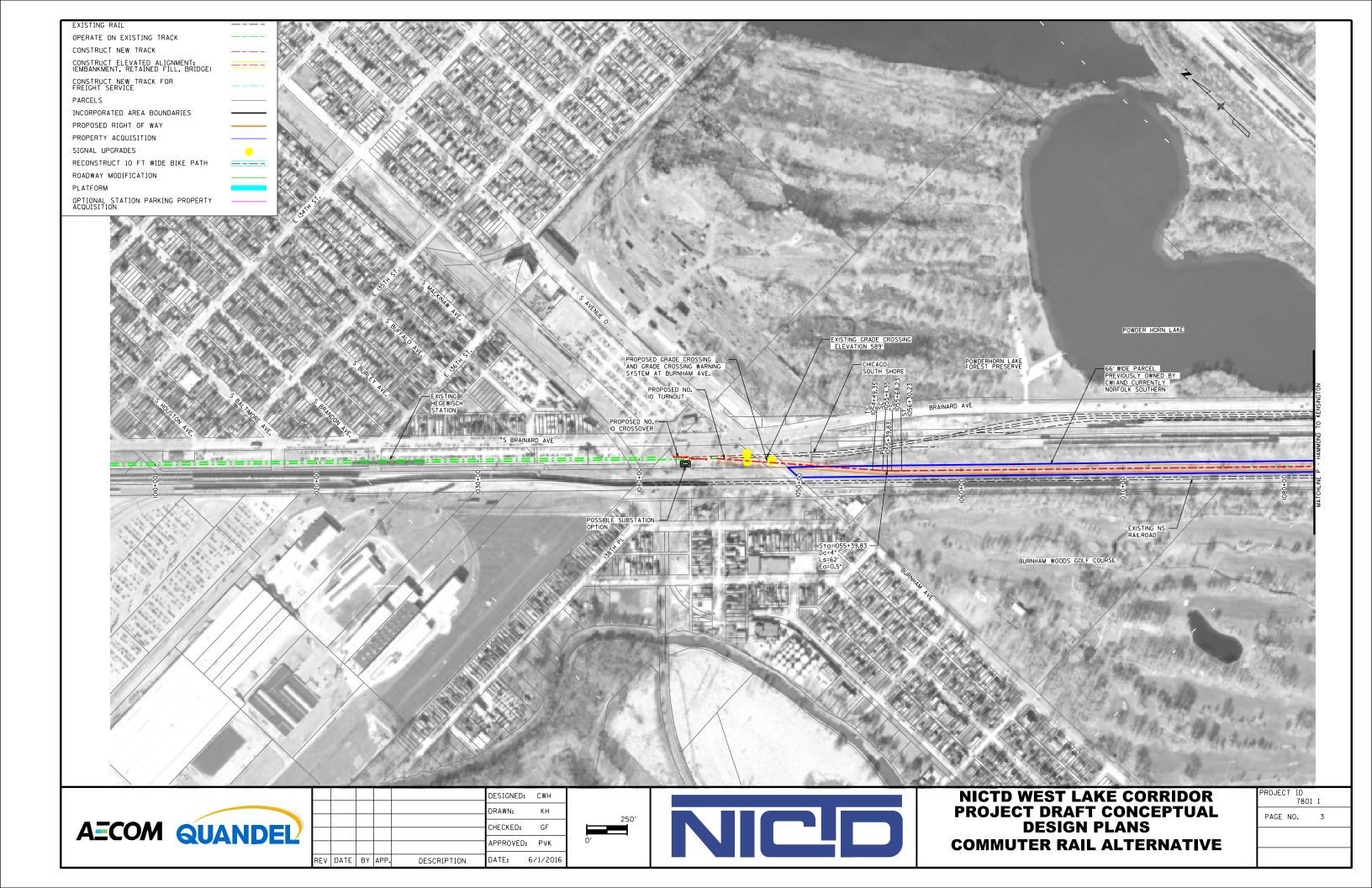


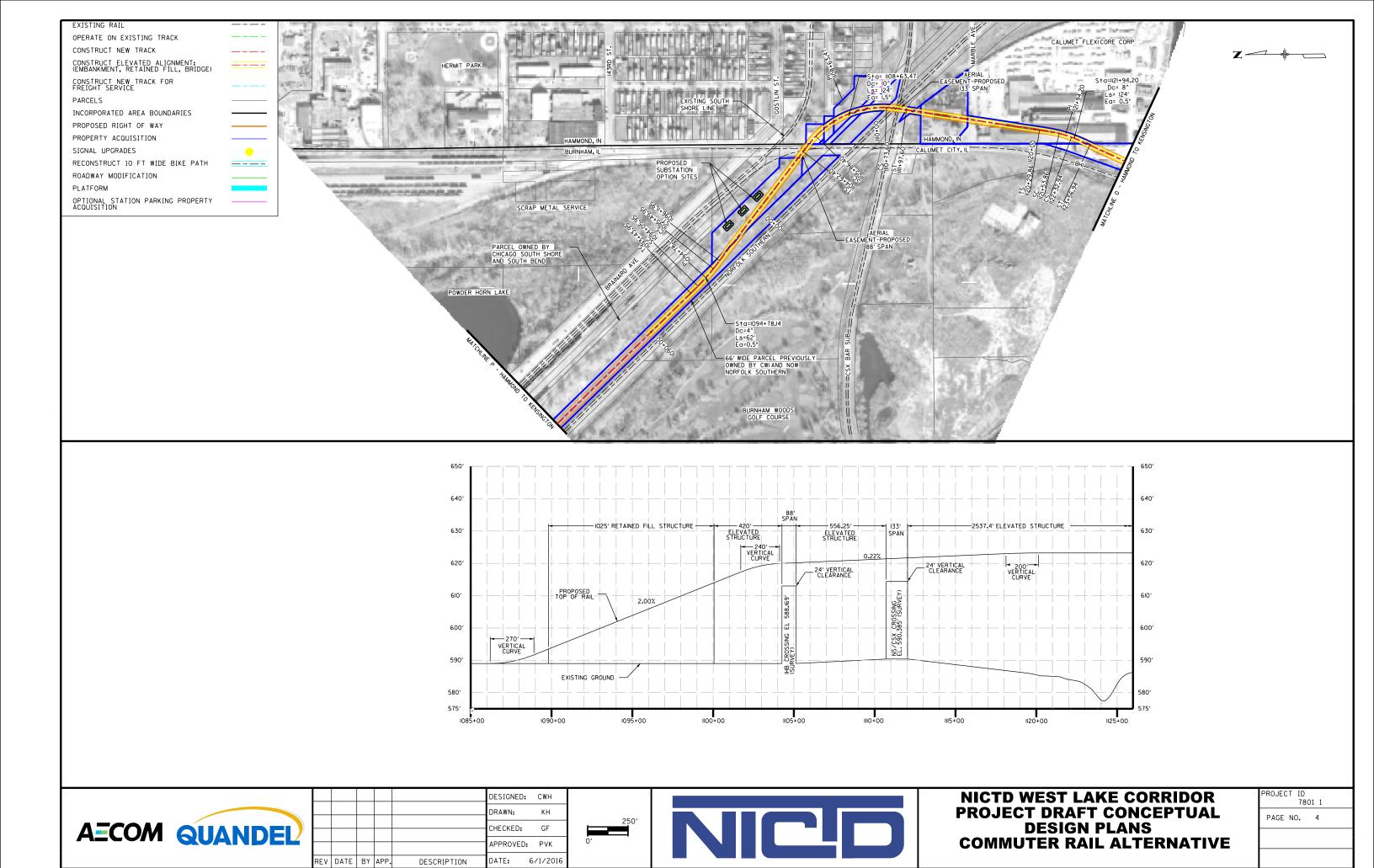


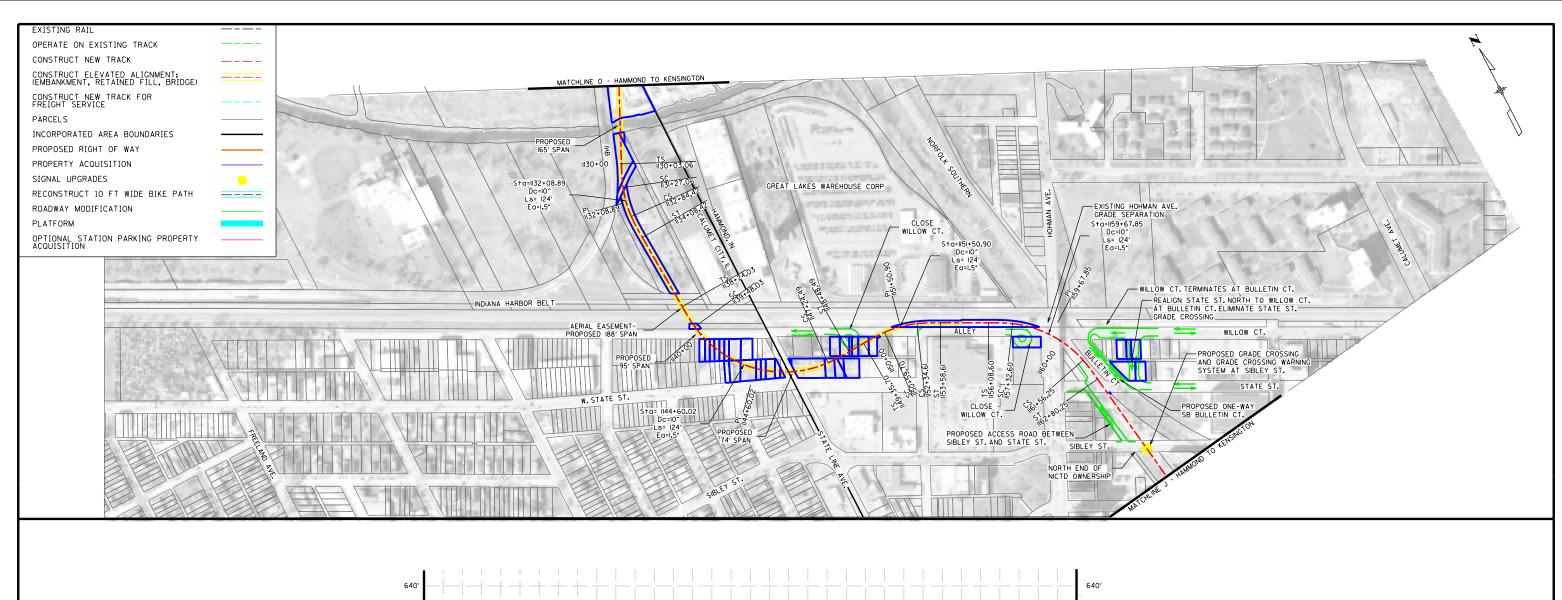


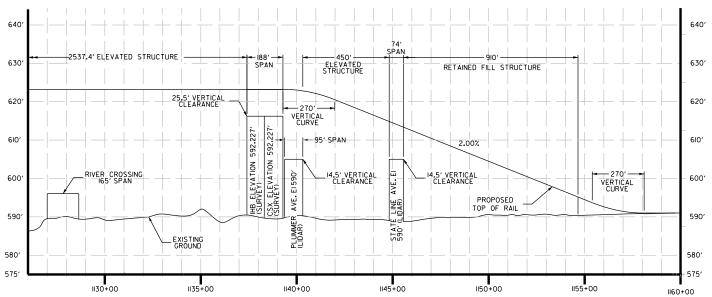
NICTD WEST LAKE CORRIDOR PROJECT DRAFT CONCEPTUAL DESIGN PLANS PROJECT KEY

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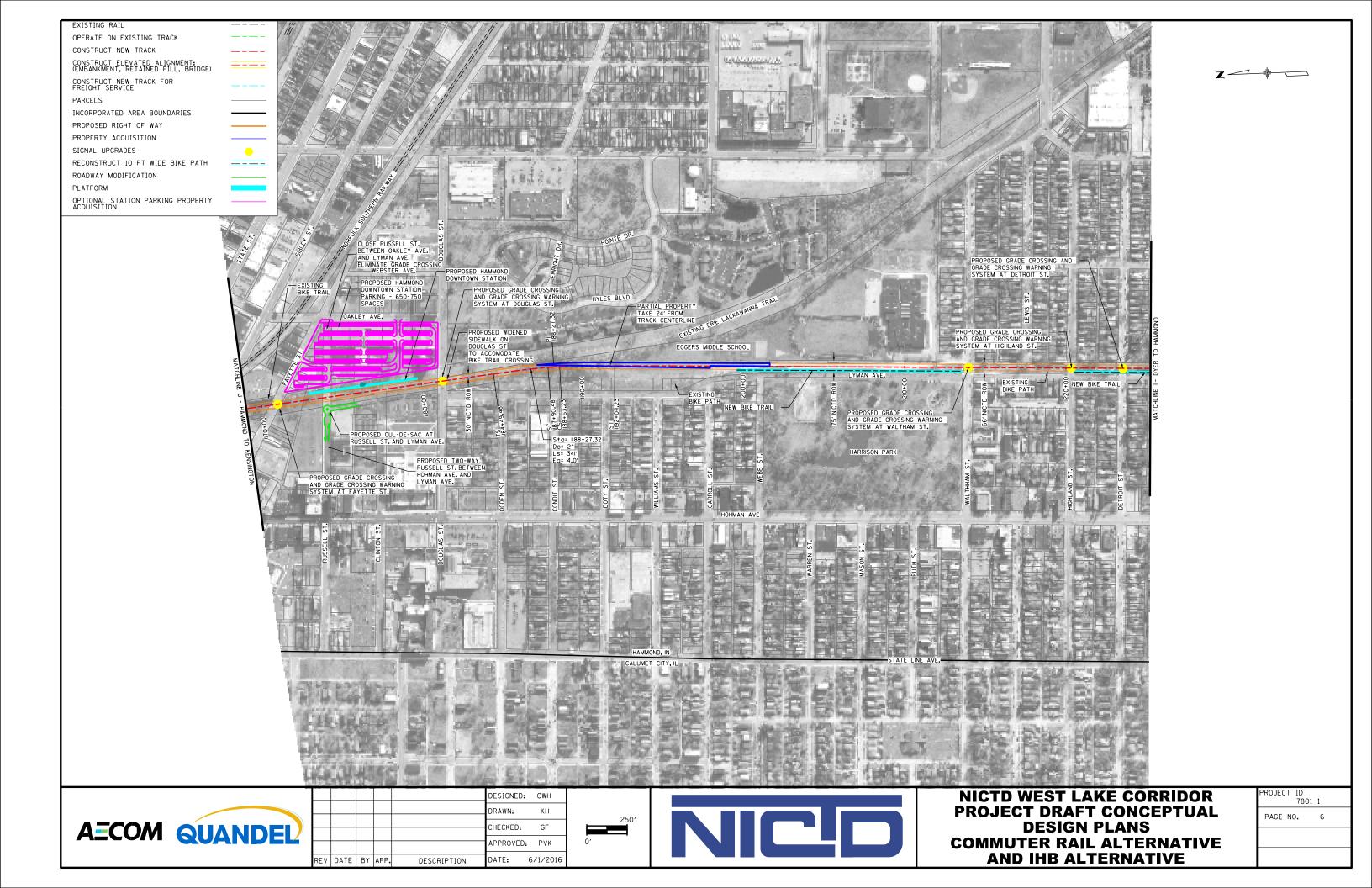
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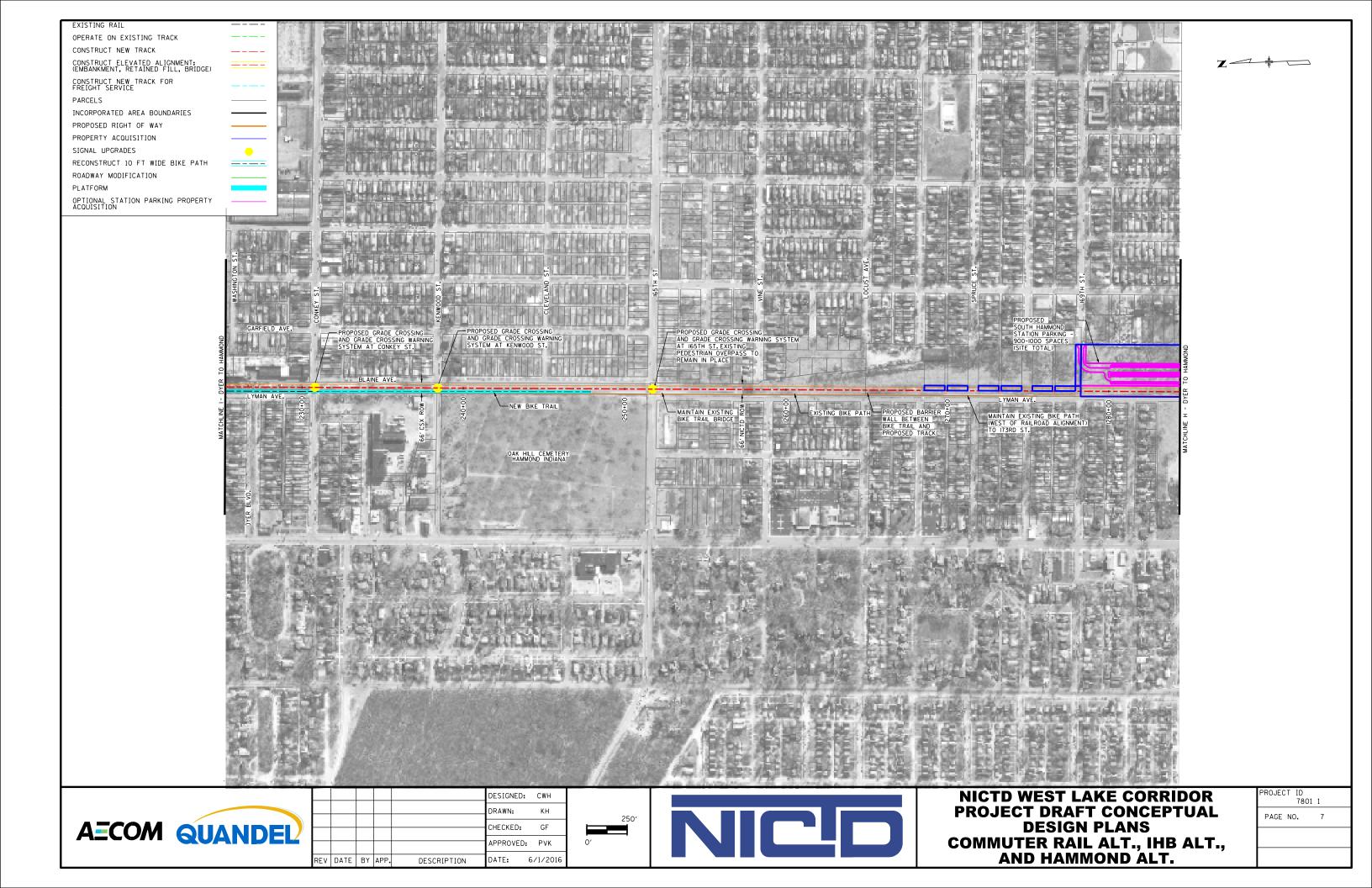


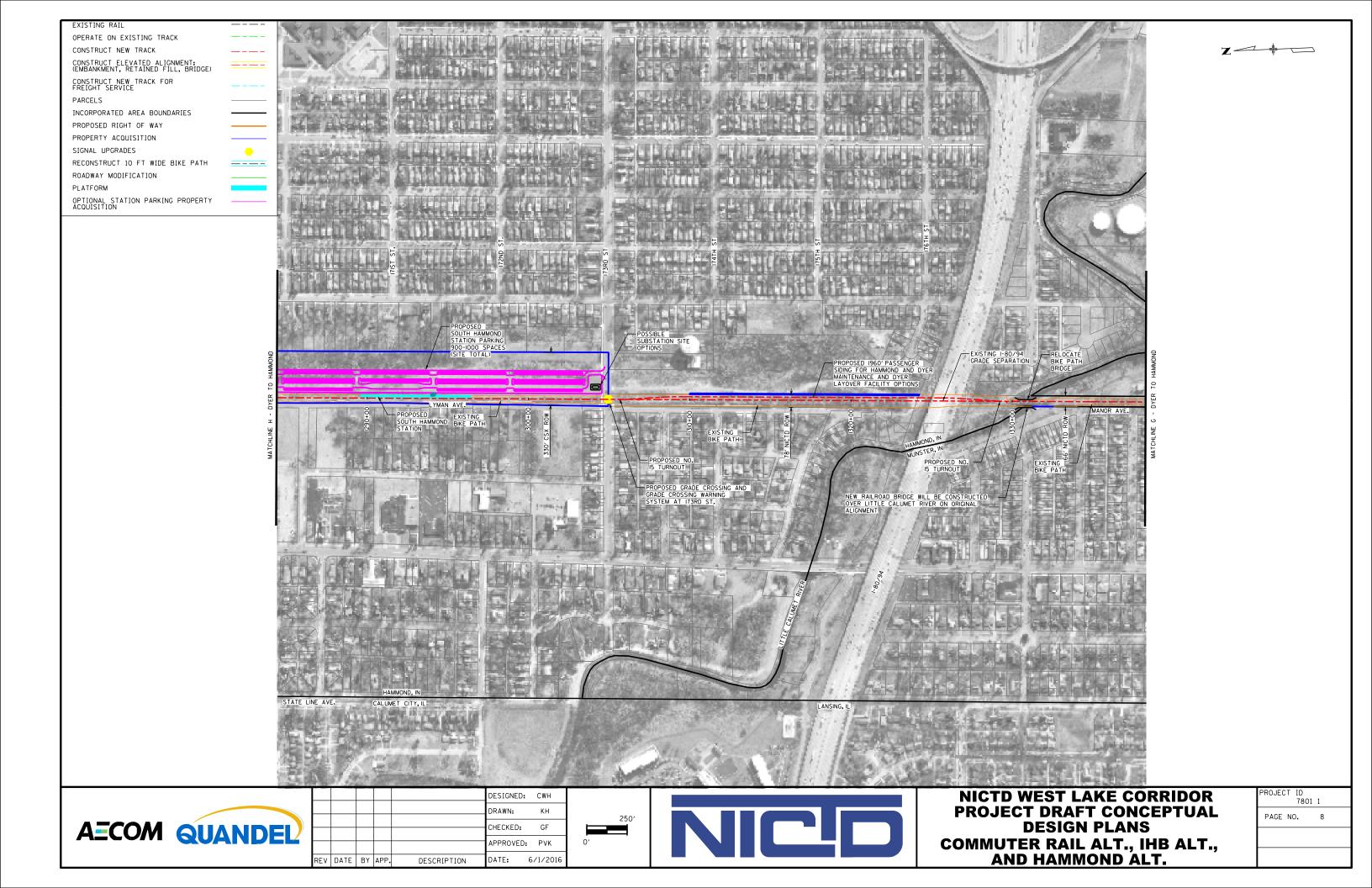


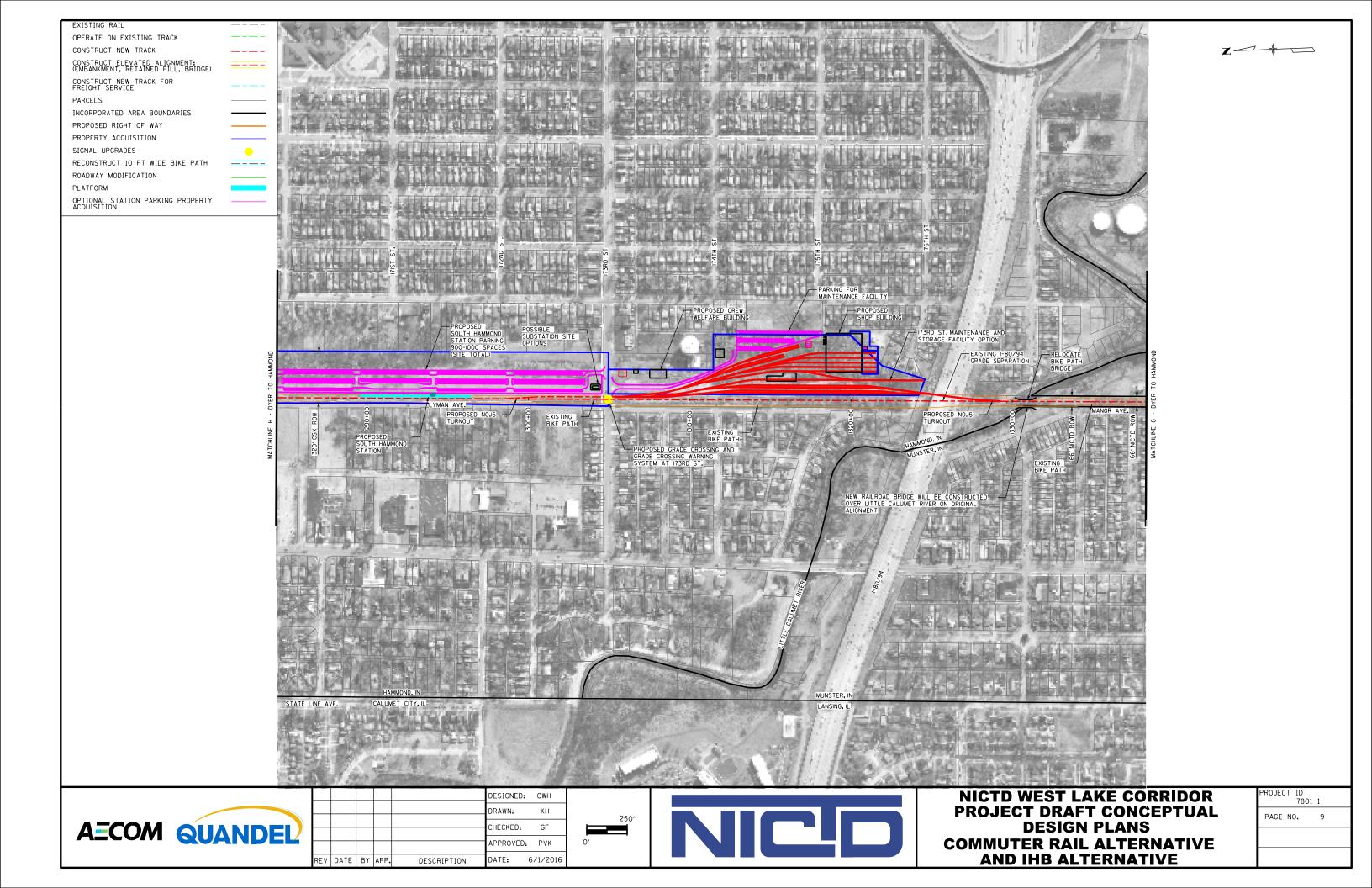
NICTD WEST LAKE CORRIDOR PROJECT DRAFT CONCEPTUAL DESIGN PLANS COMMUTER RAIL ALTERNATIVE

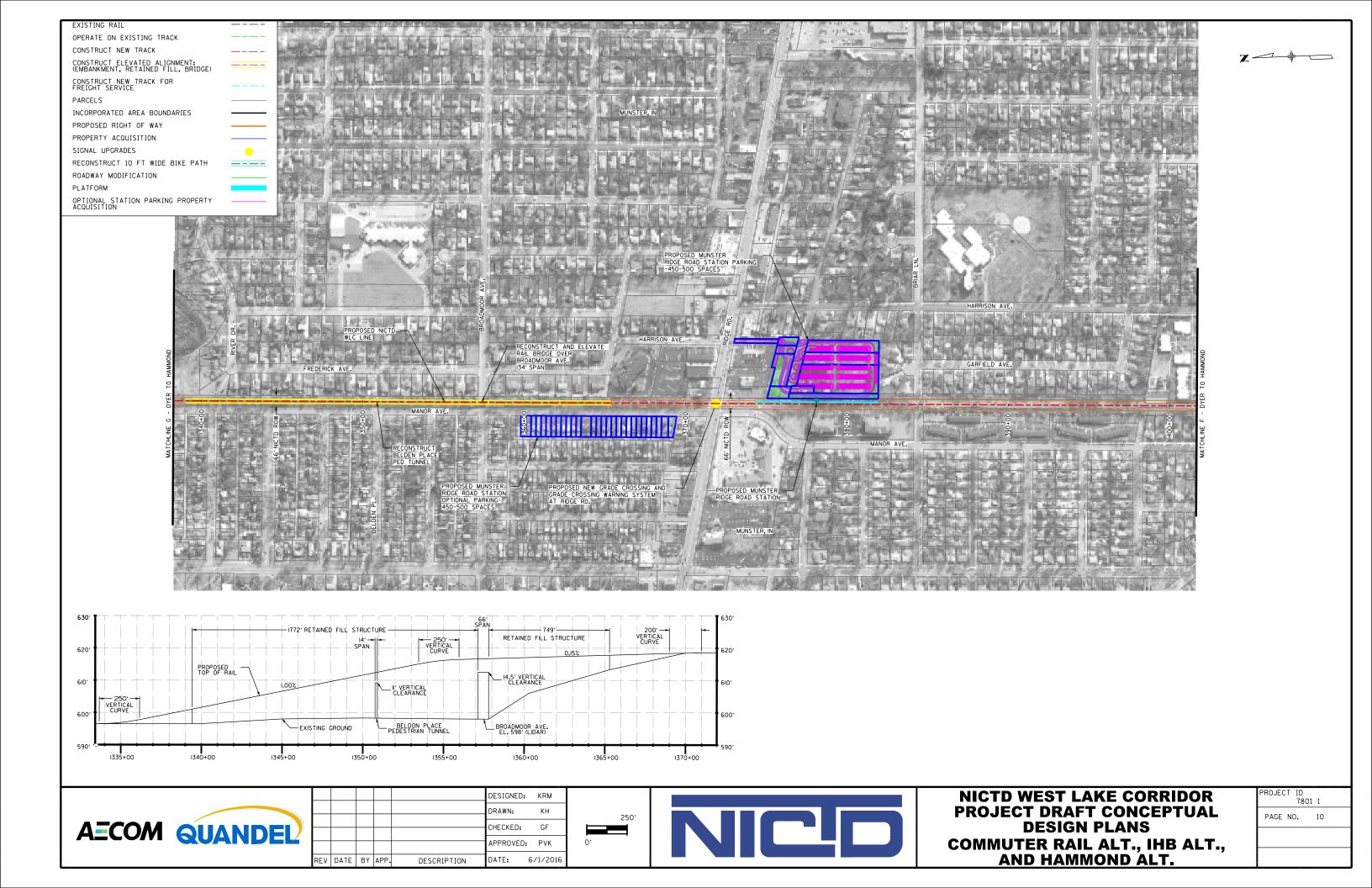
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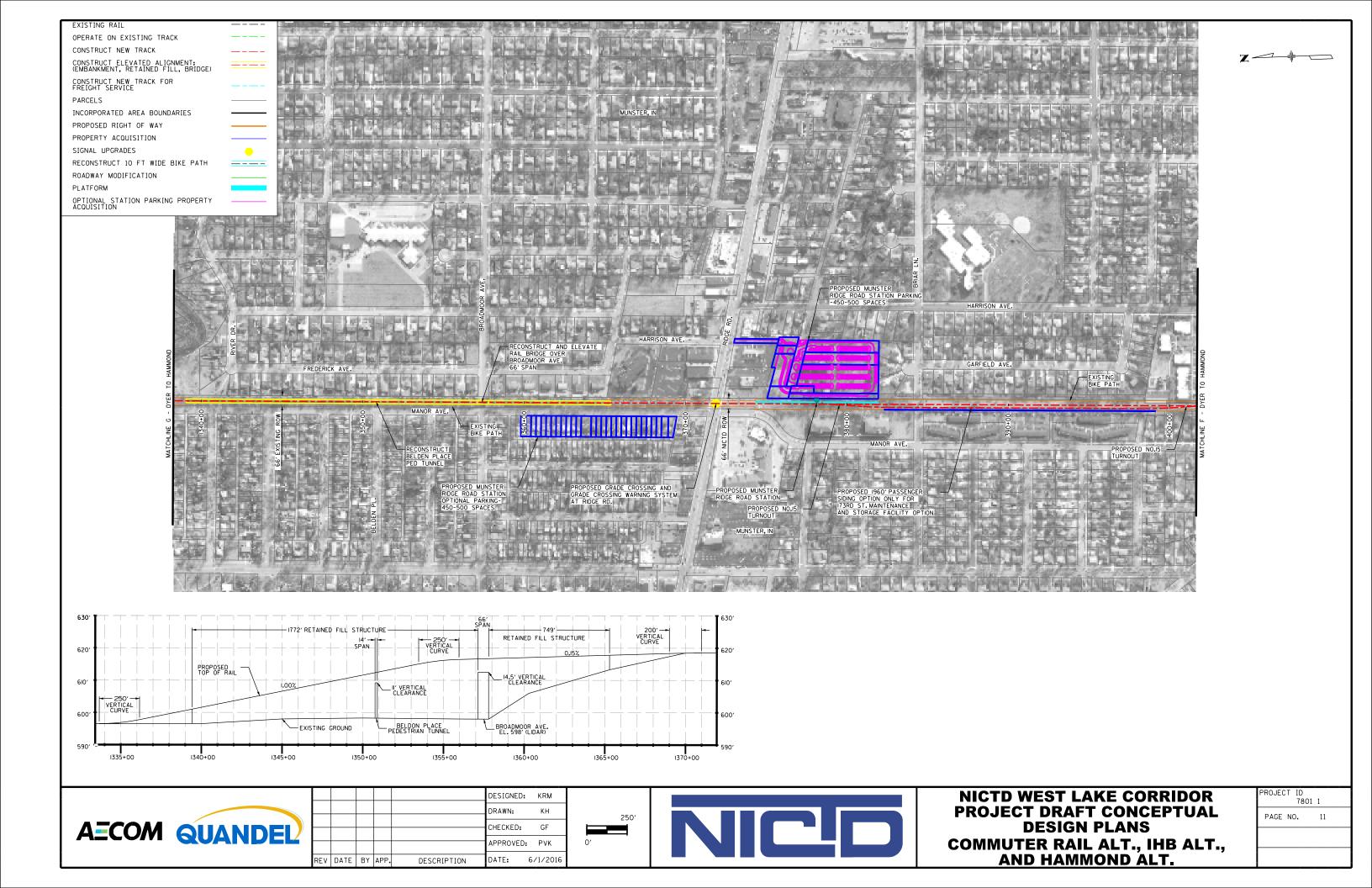


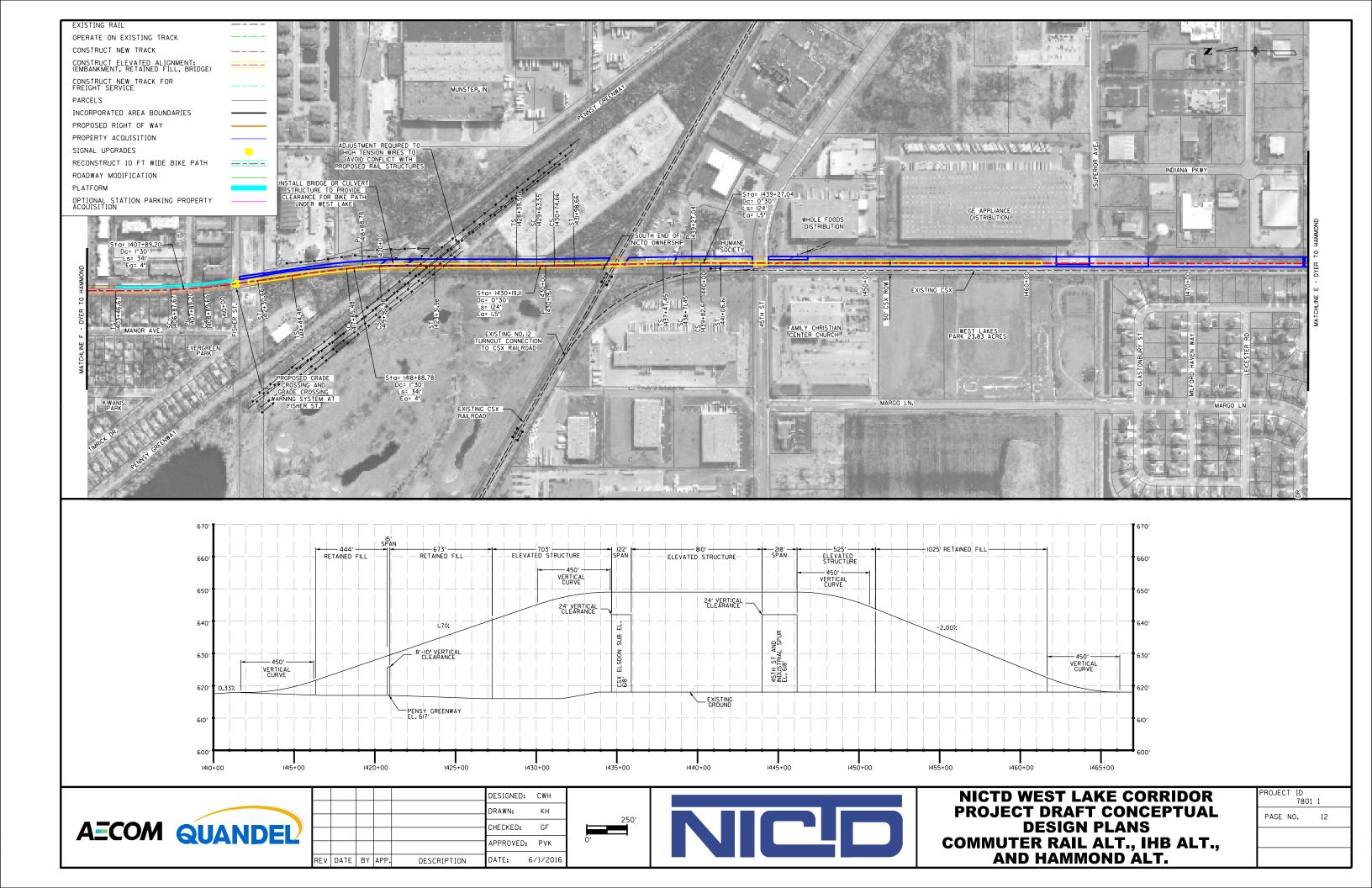


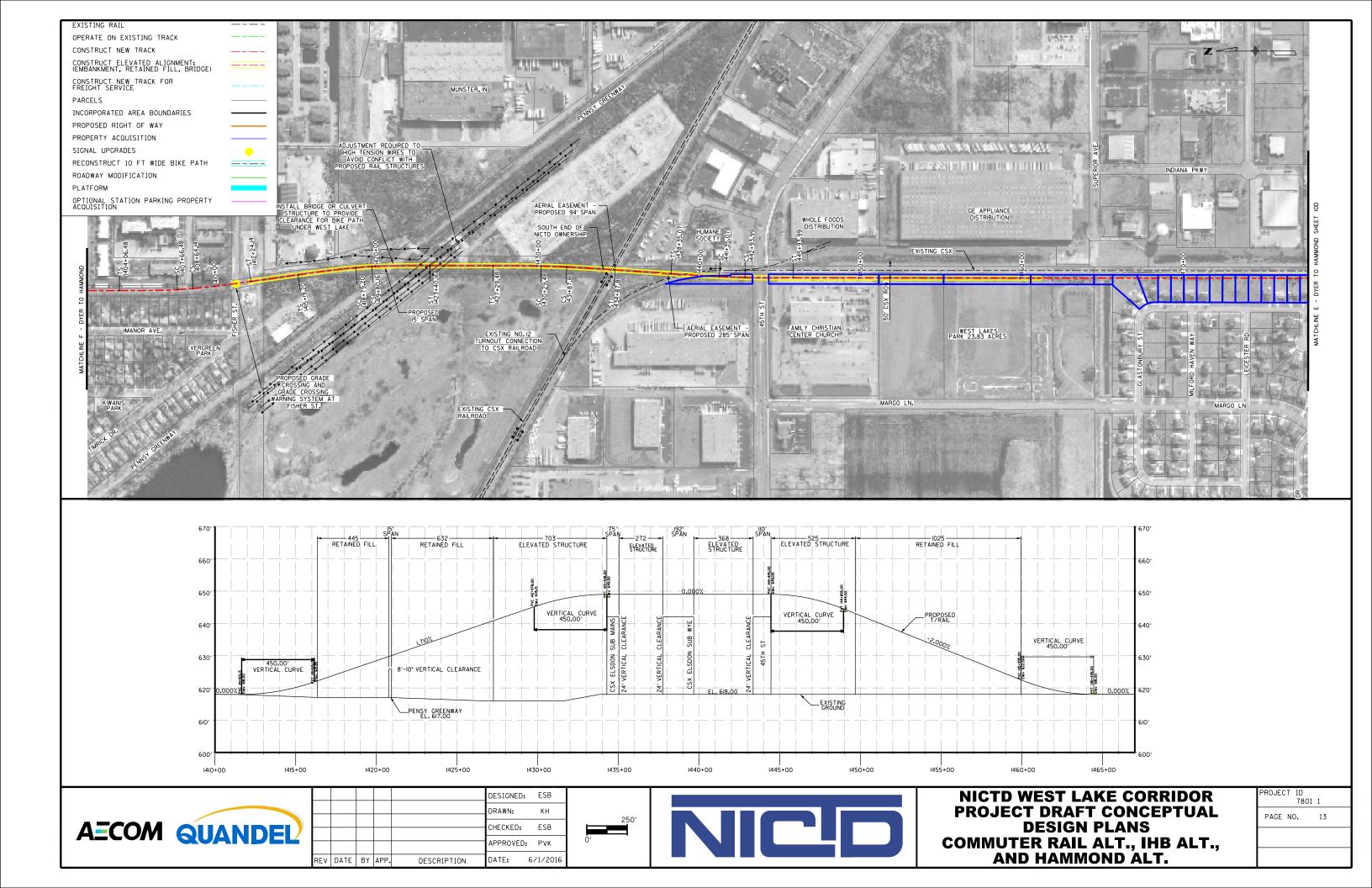


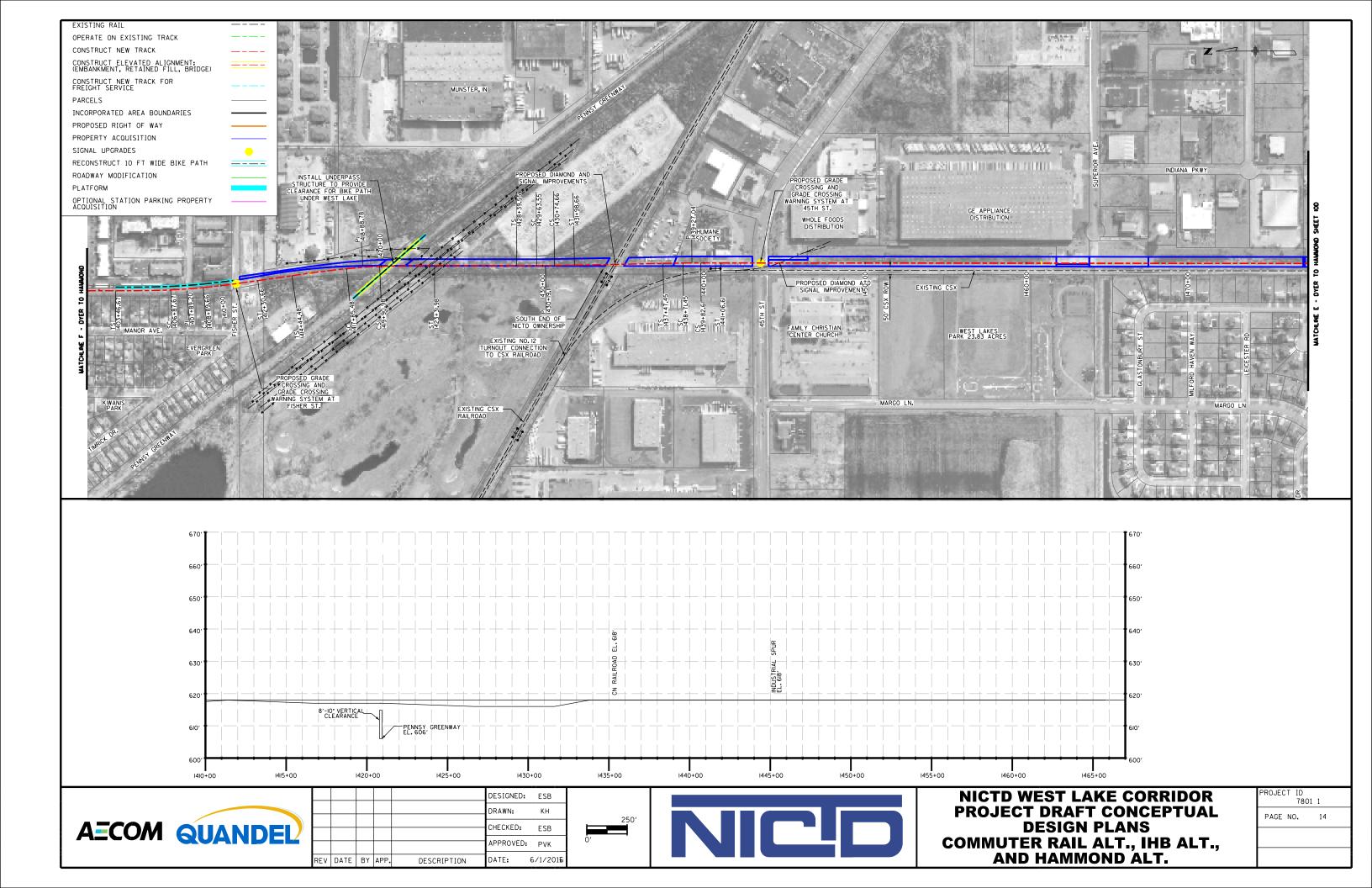


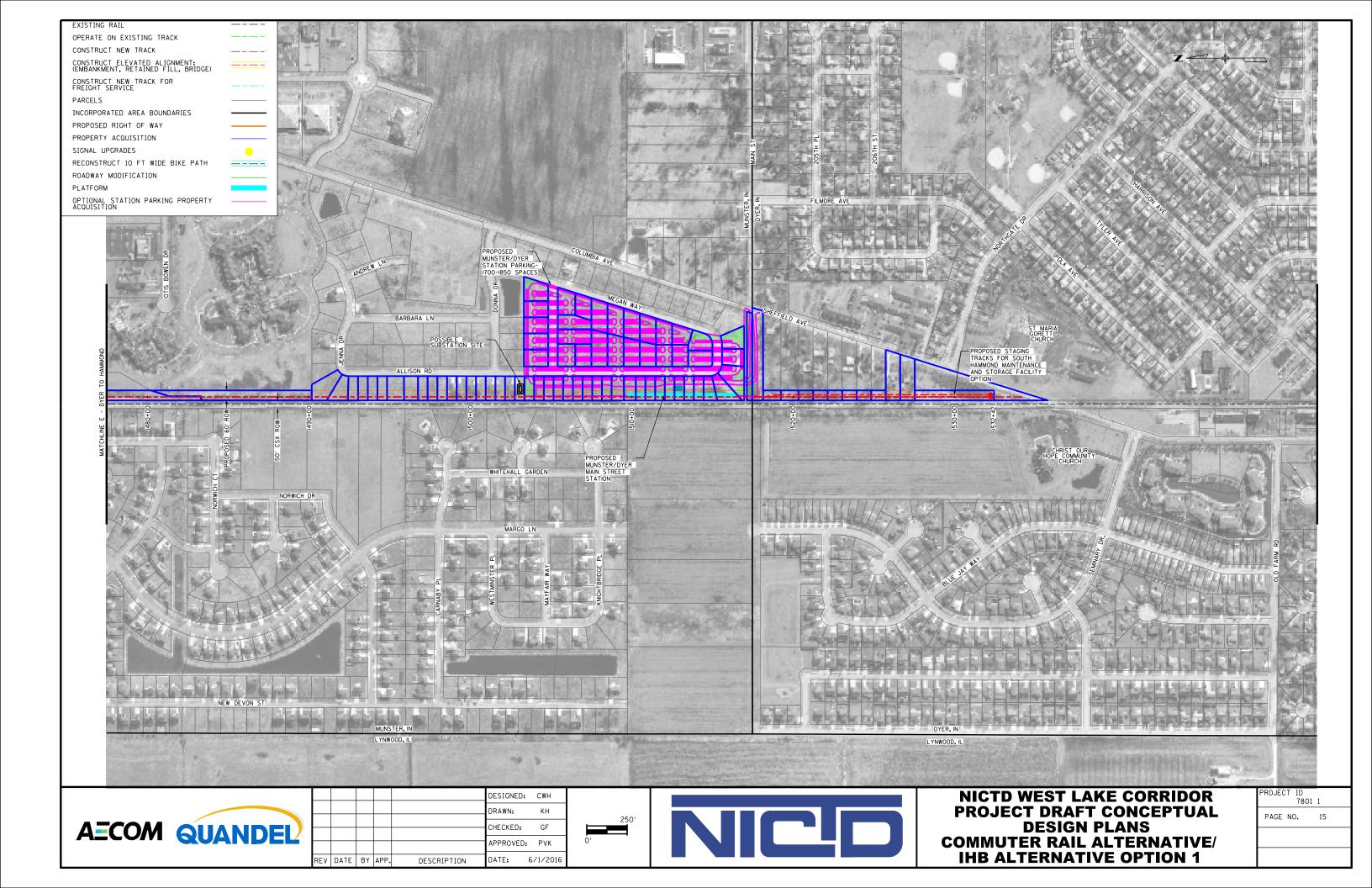


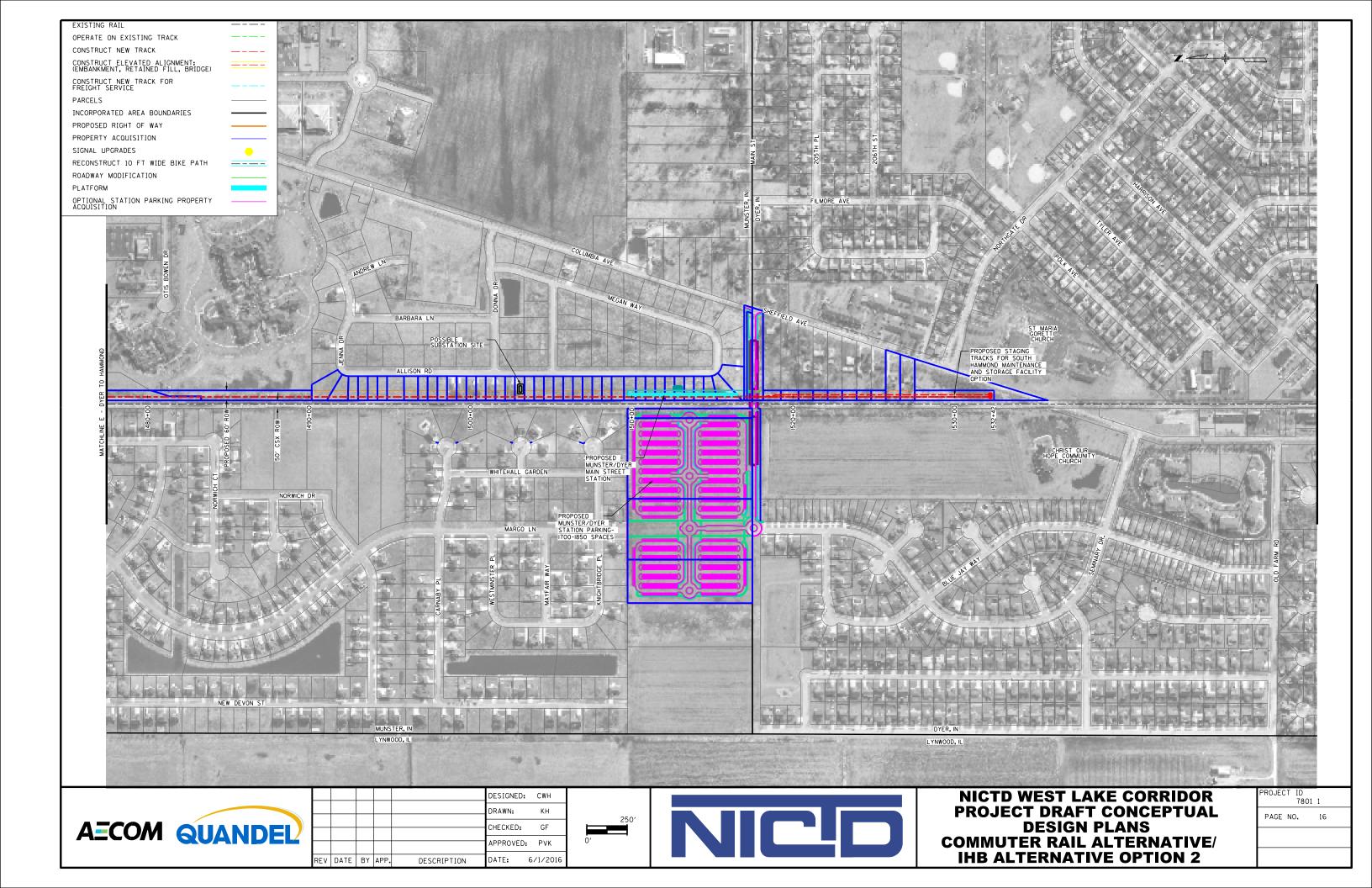


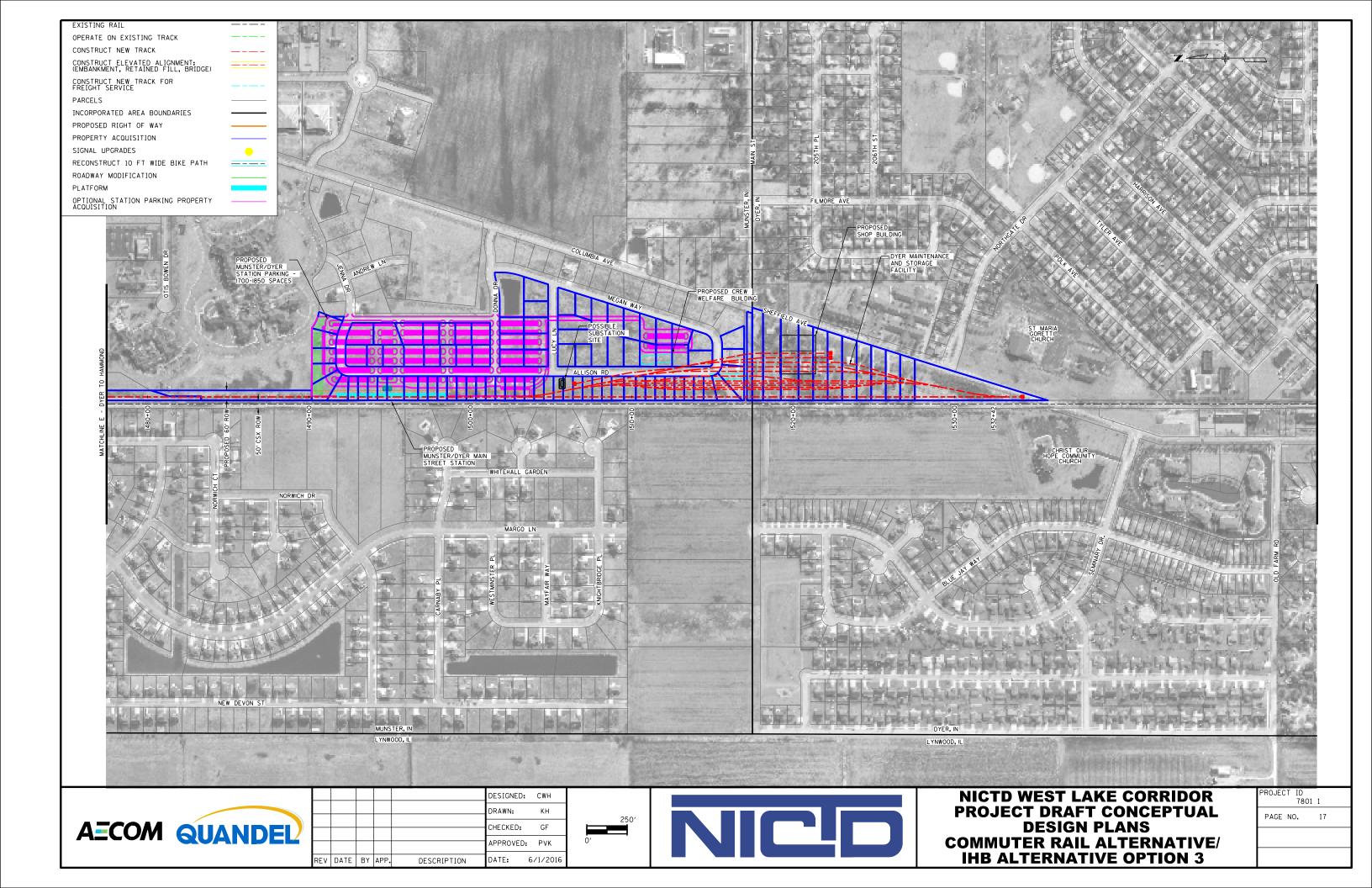


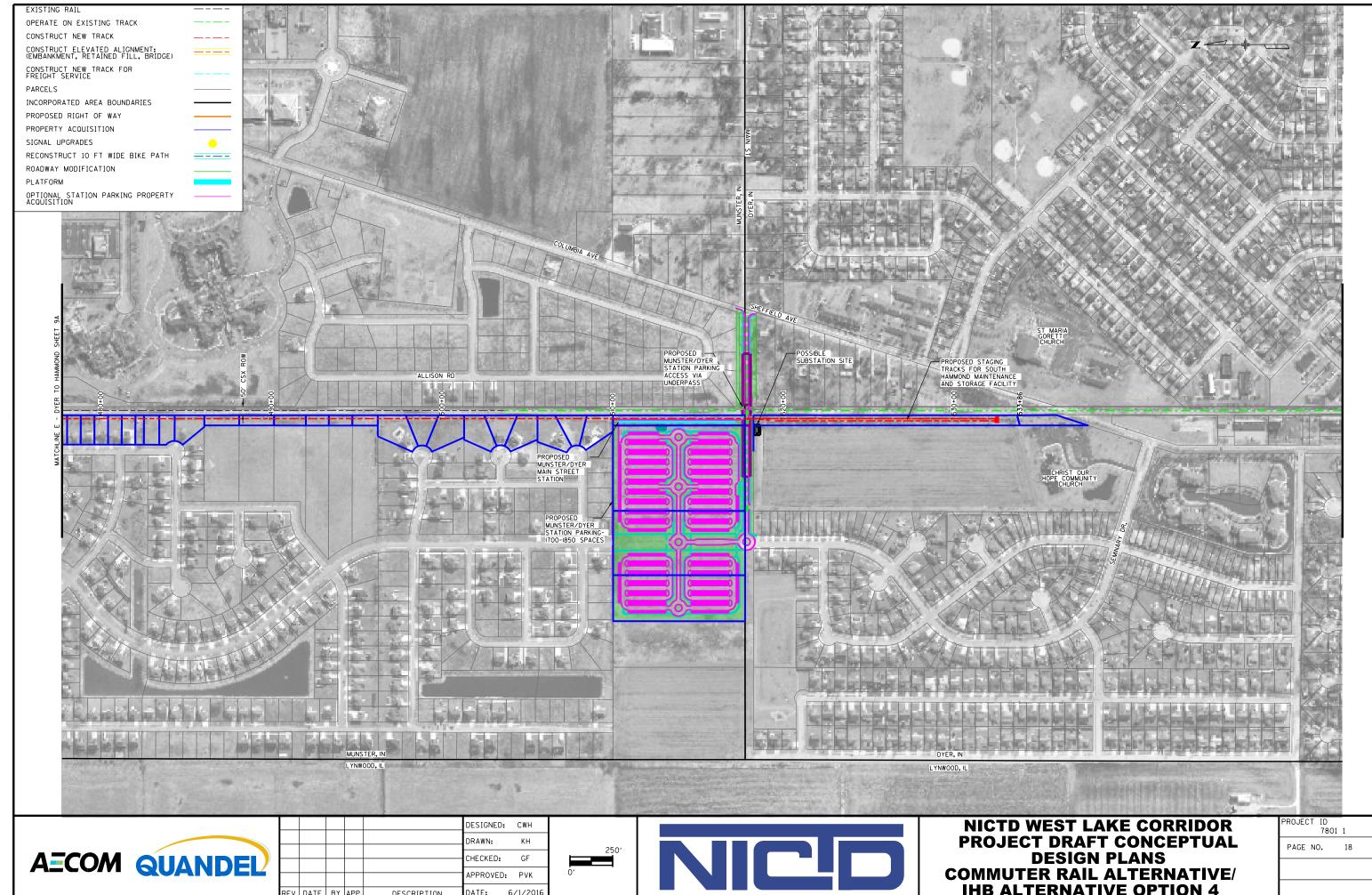








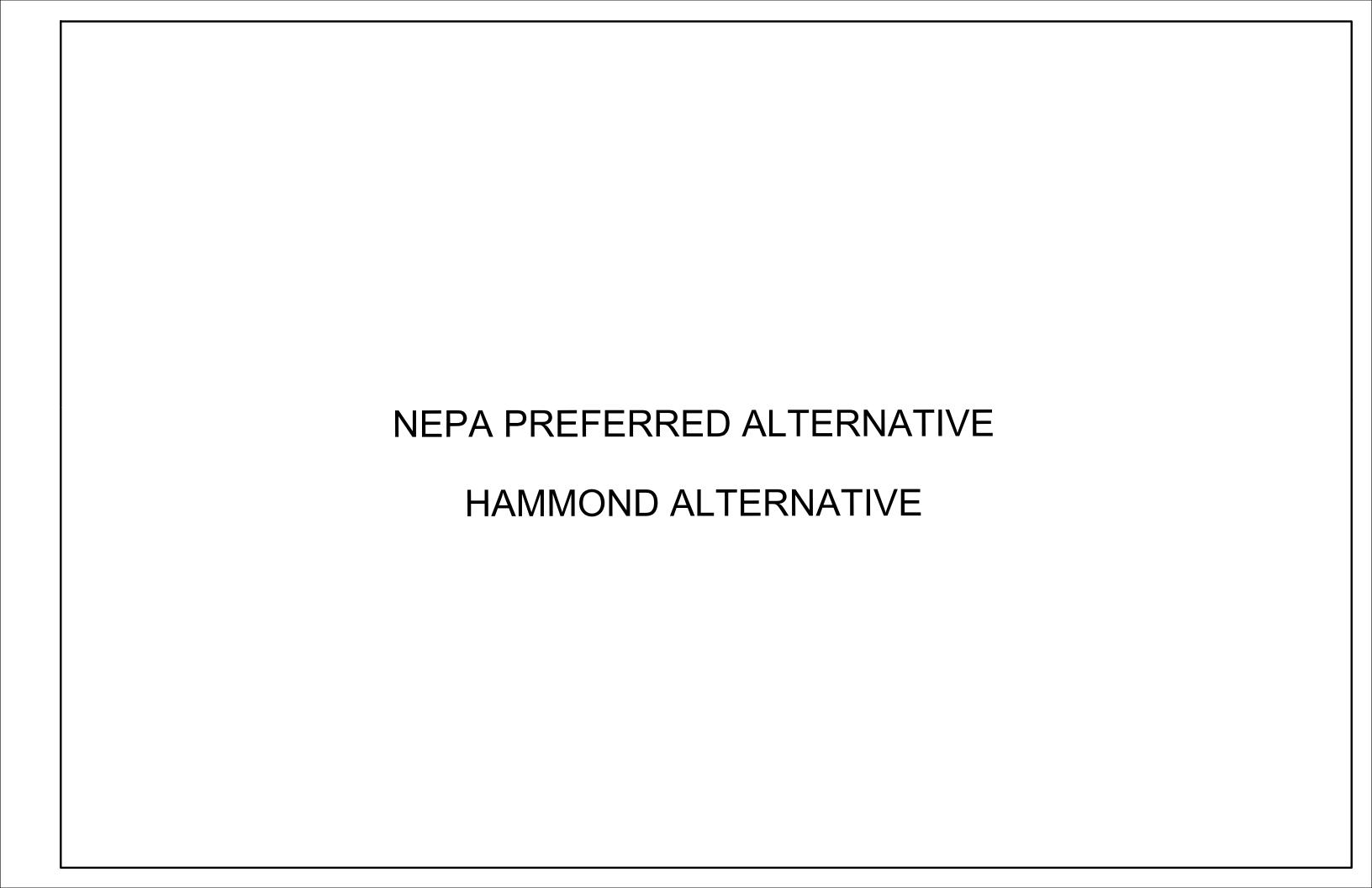


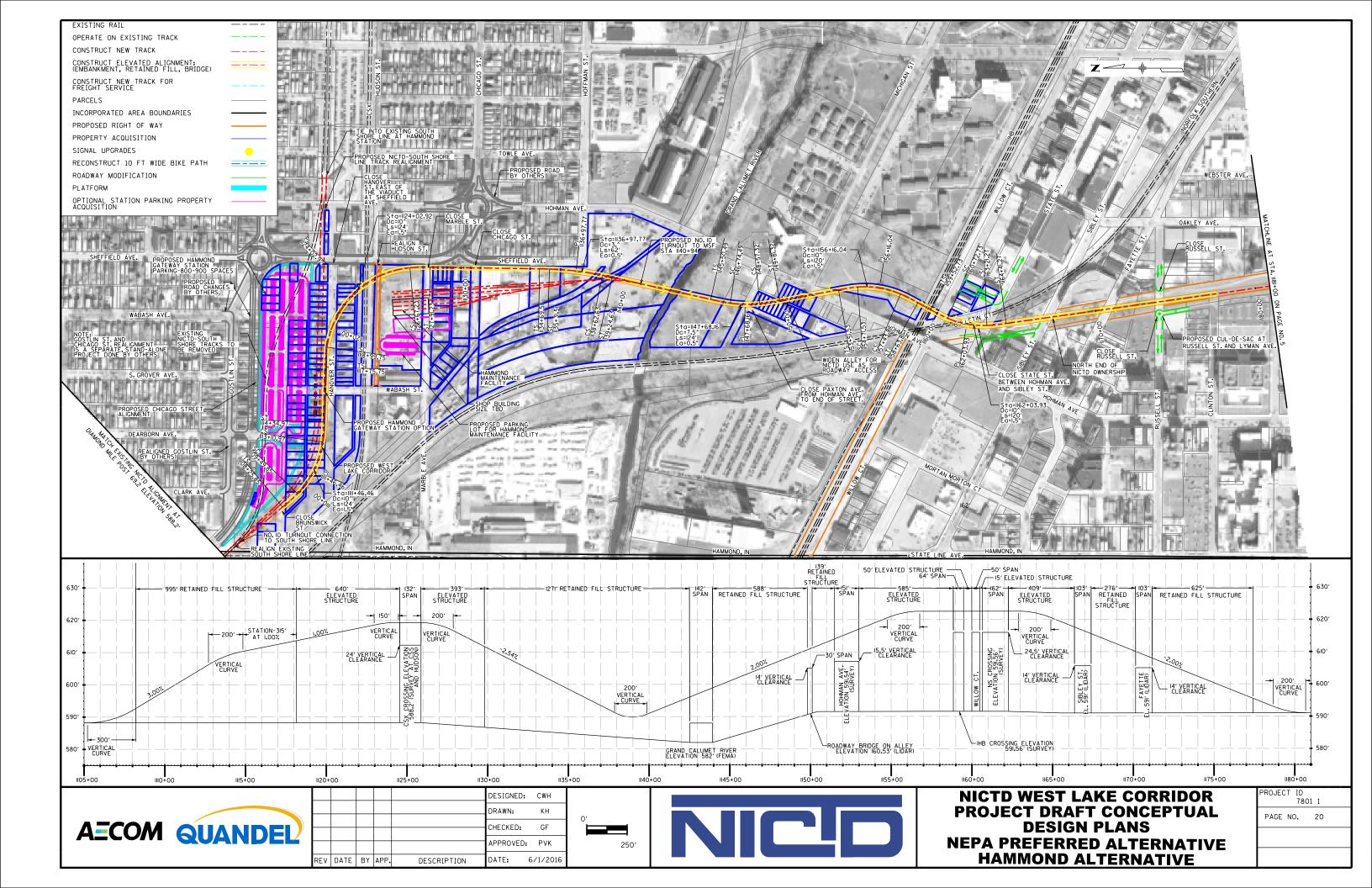


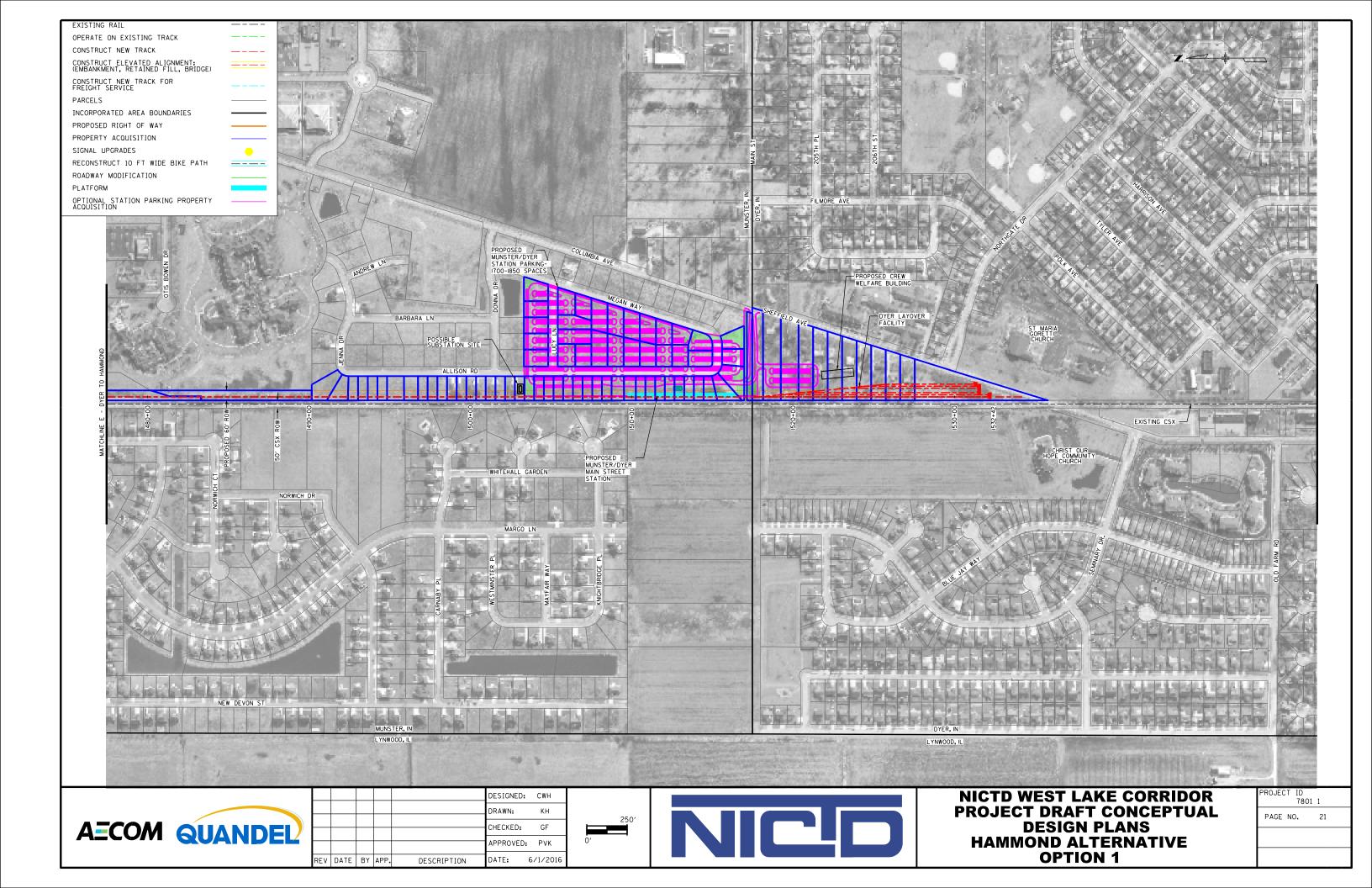
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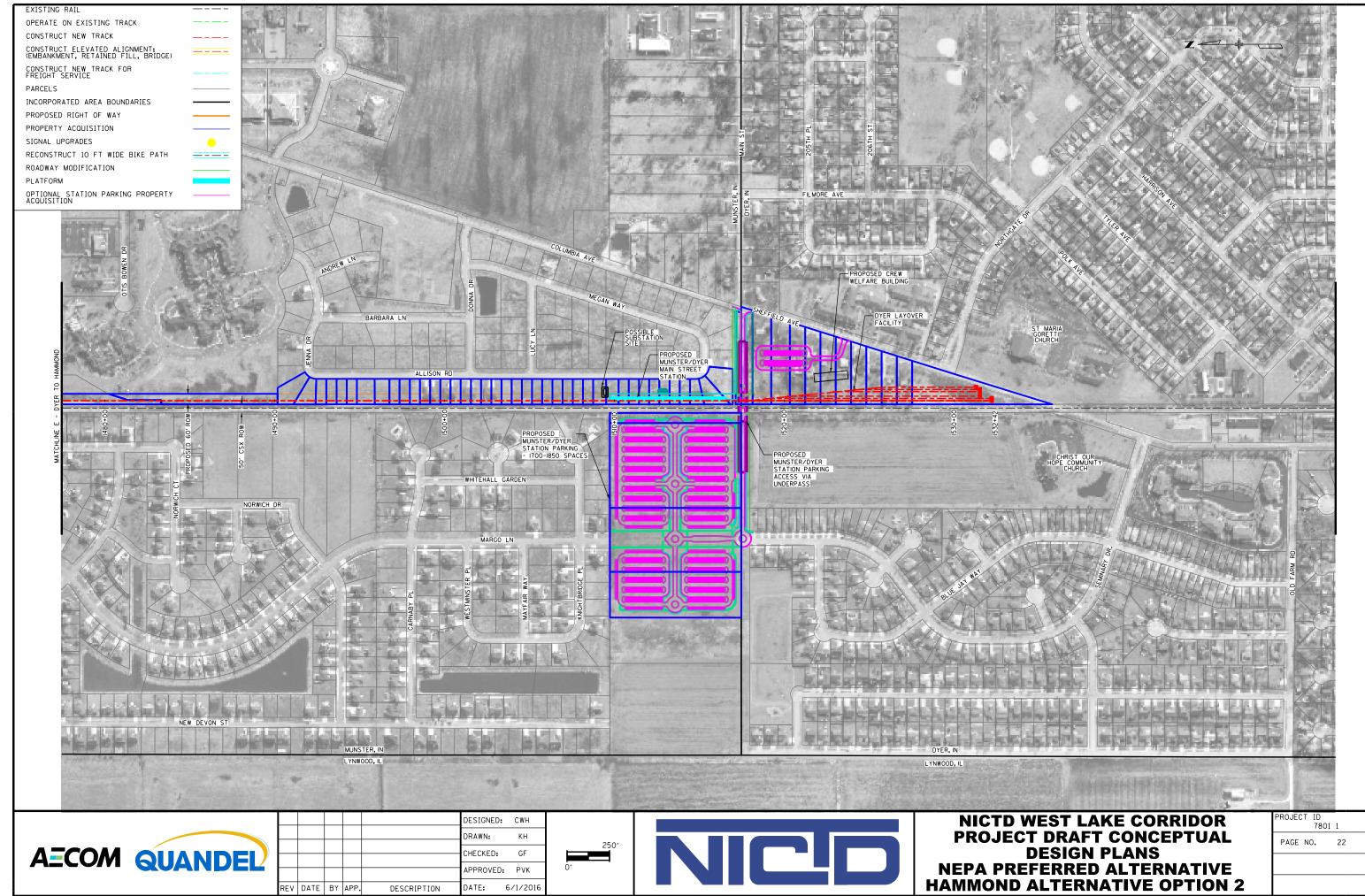


DESIGN PLANS
COMMUTER RAIL ALTERNATIVE/
IHB ALTERNATIVE OPTION 4



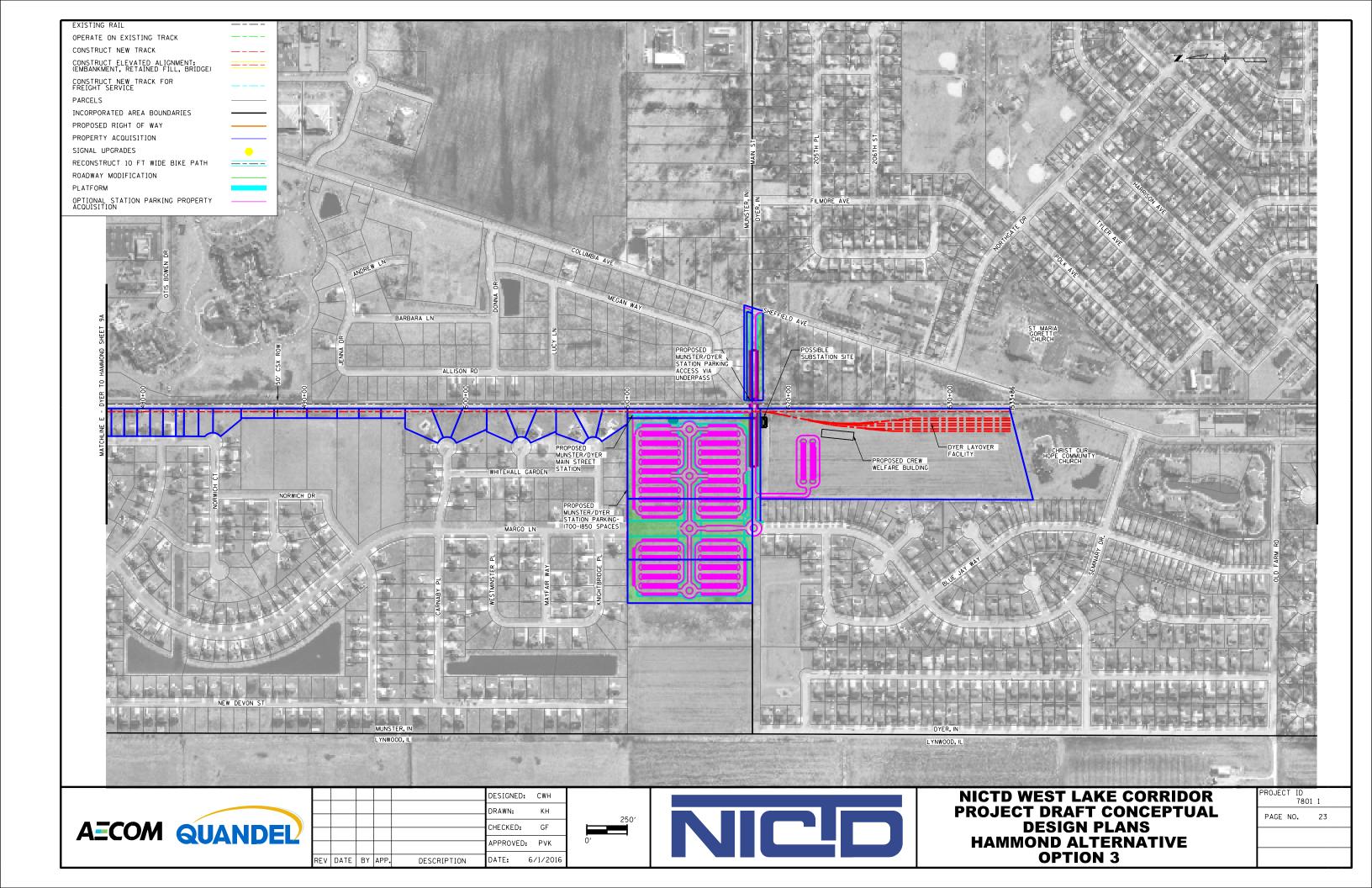




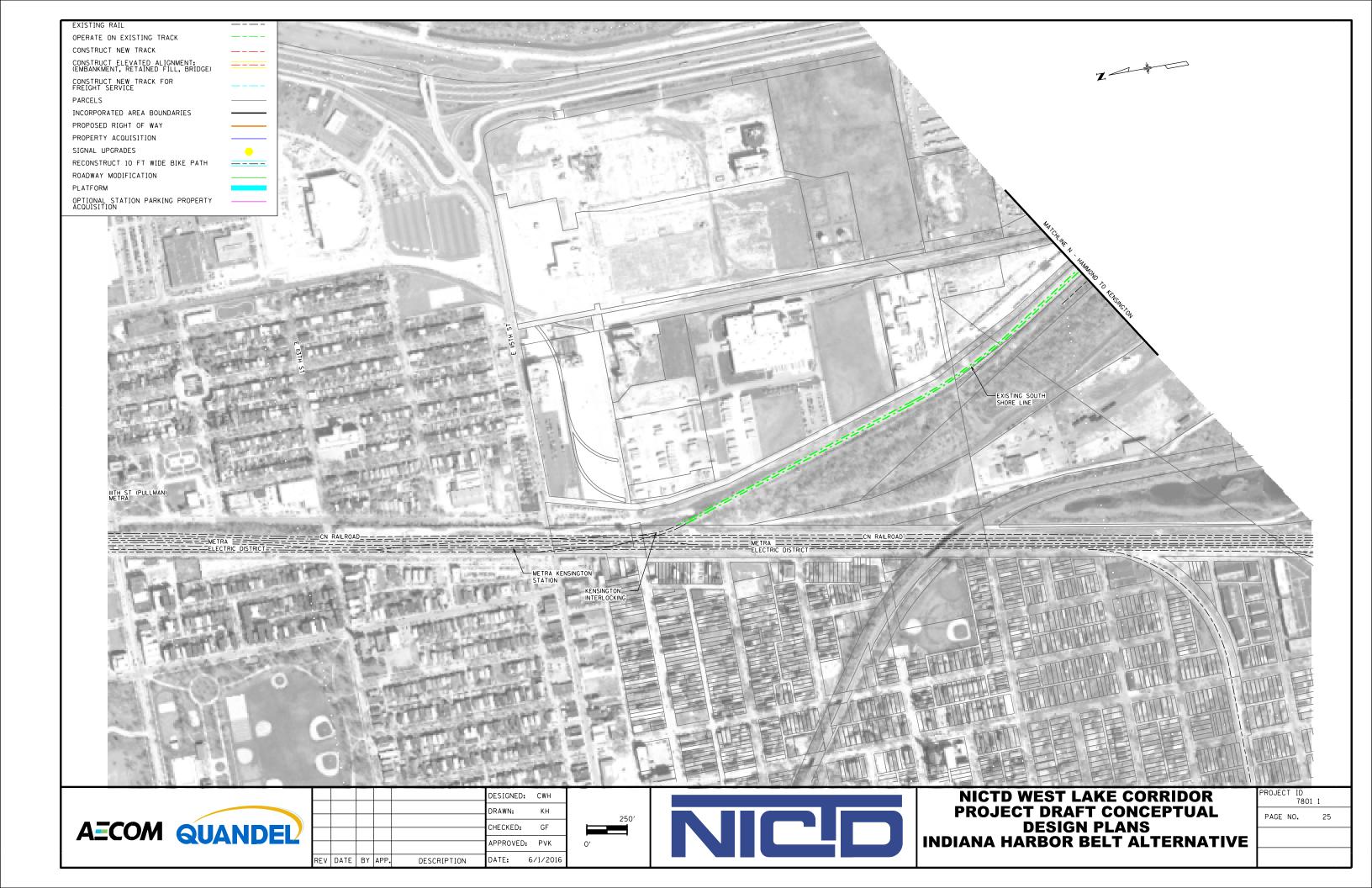


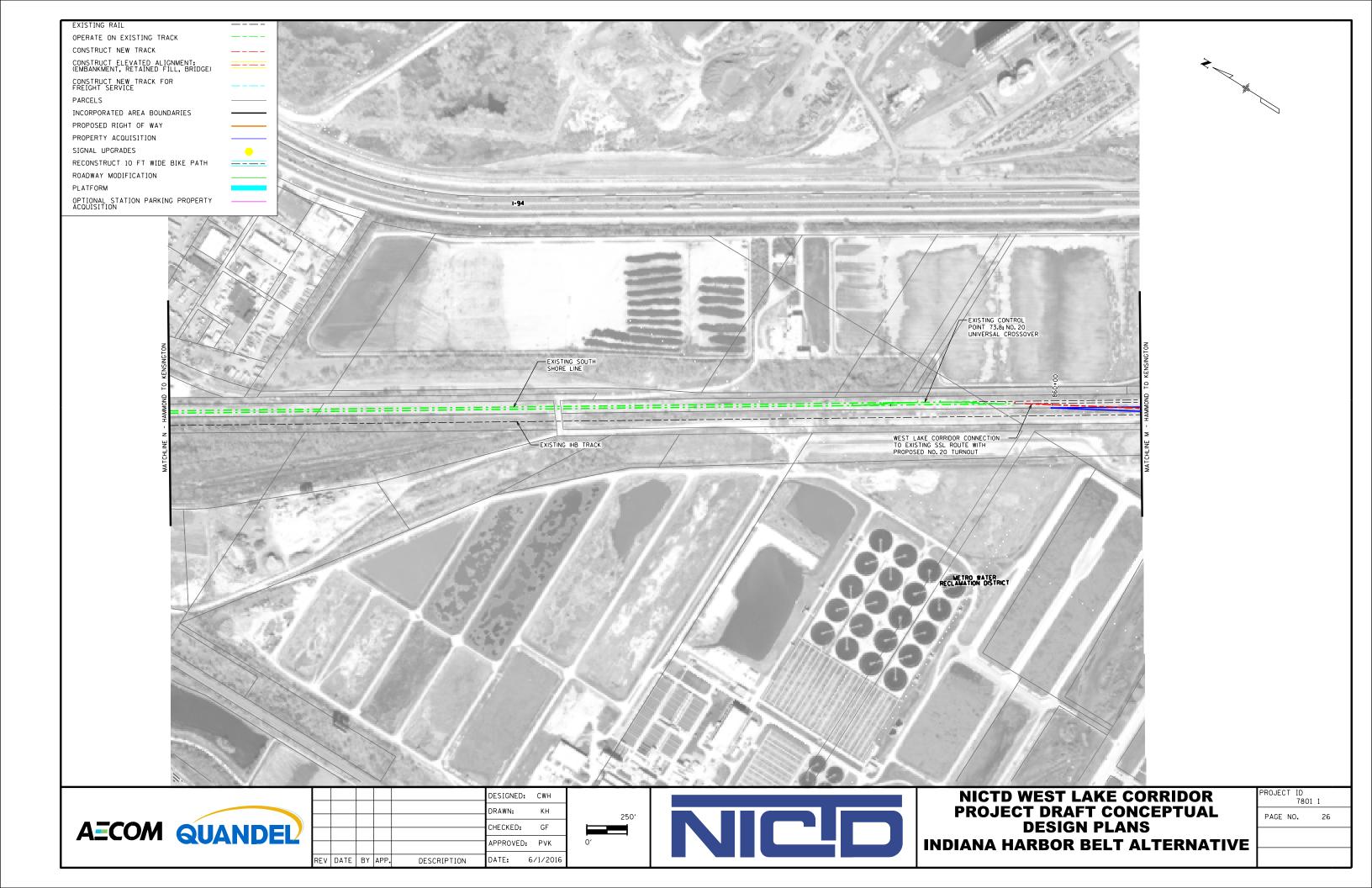
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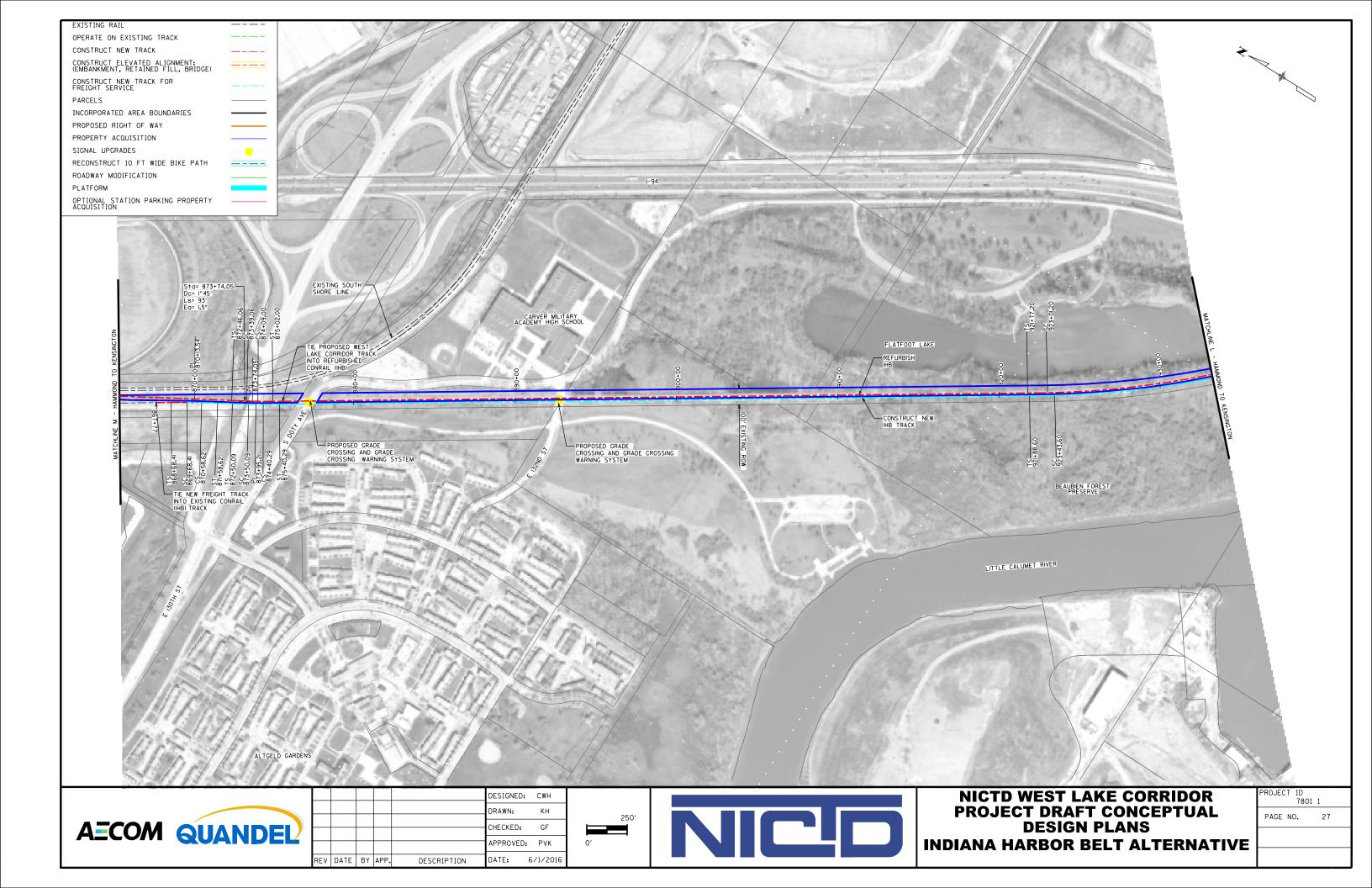


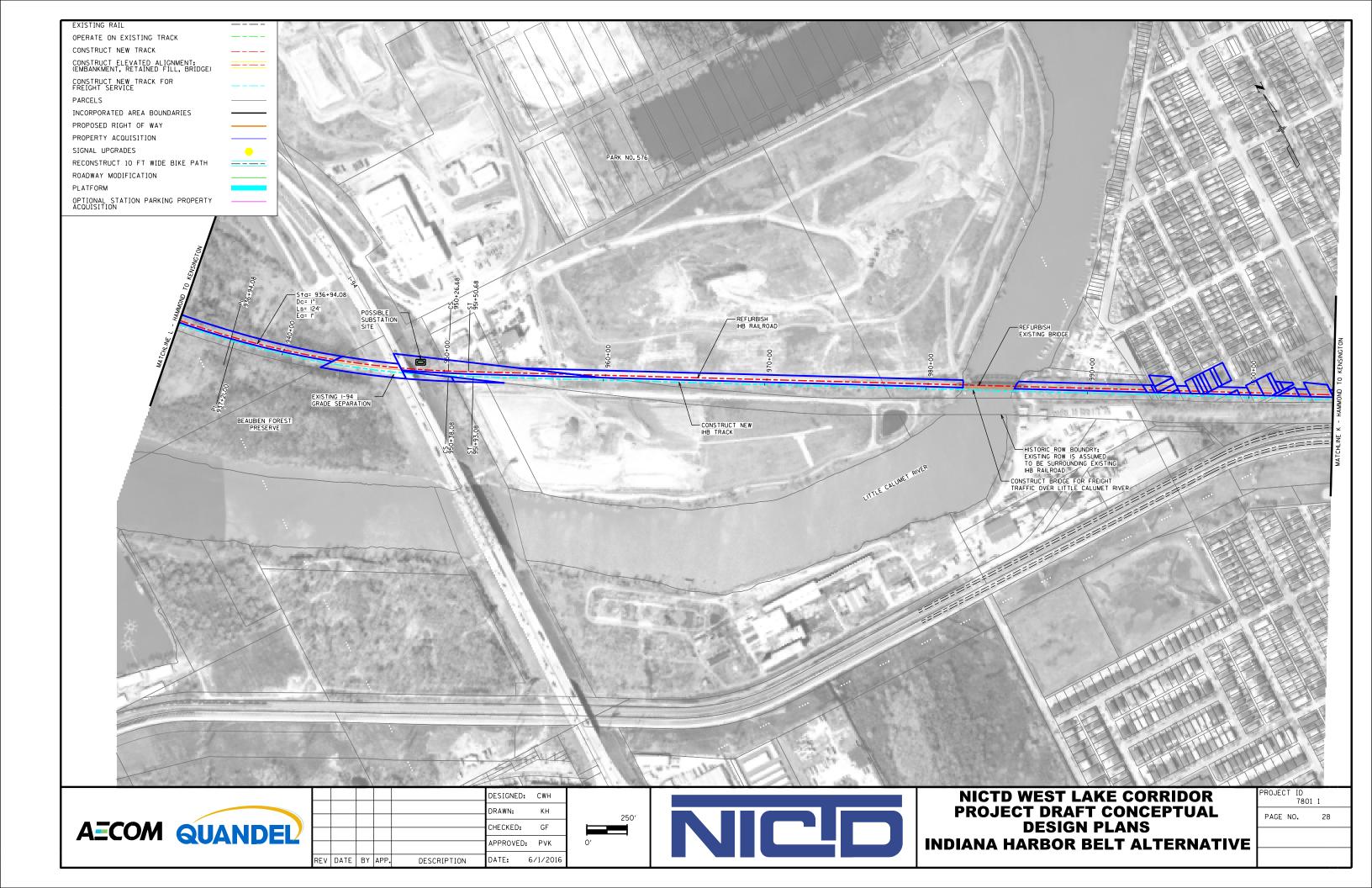




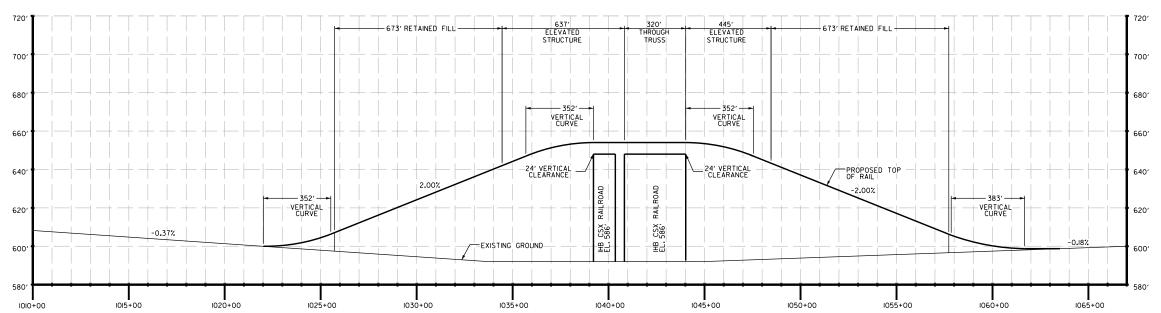
















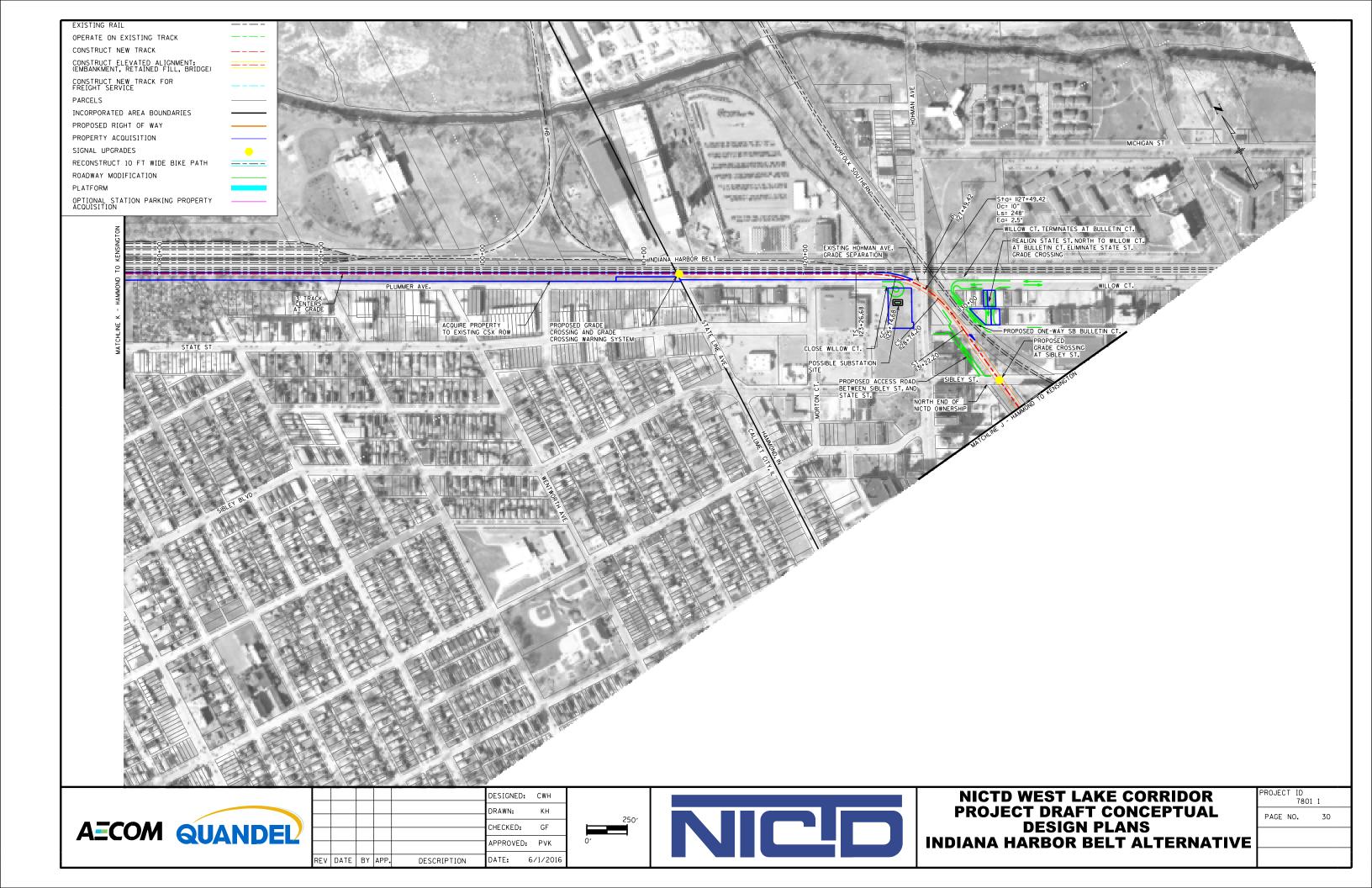
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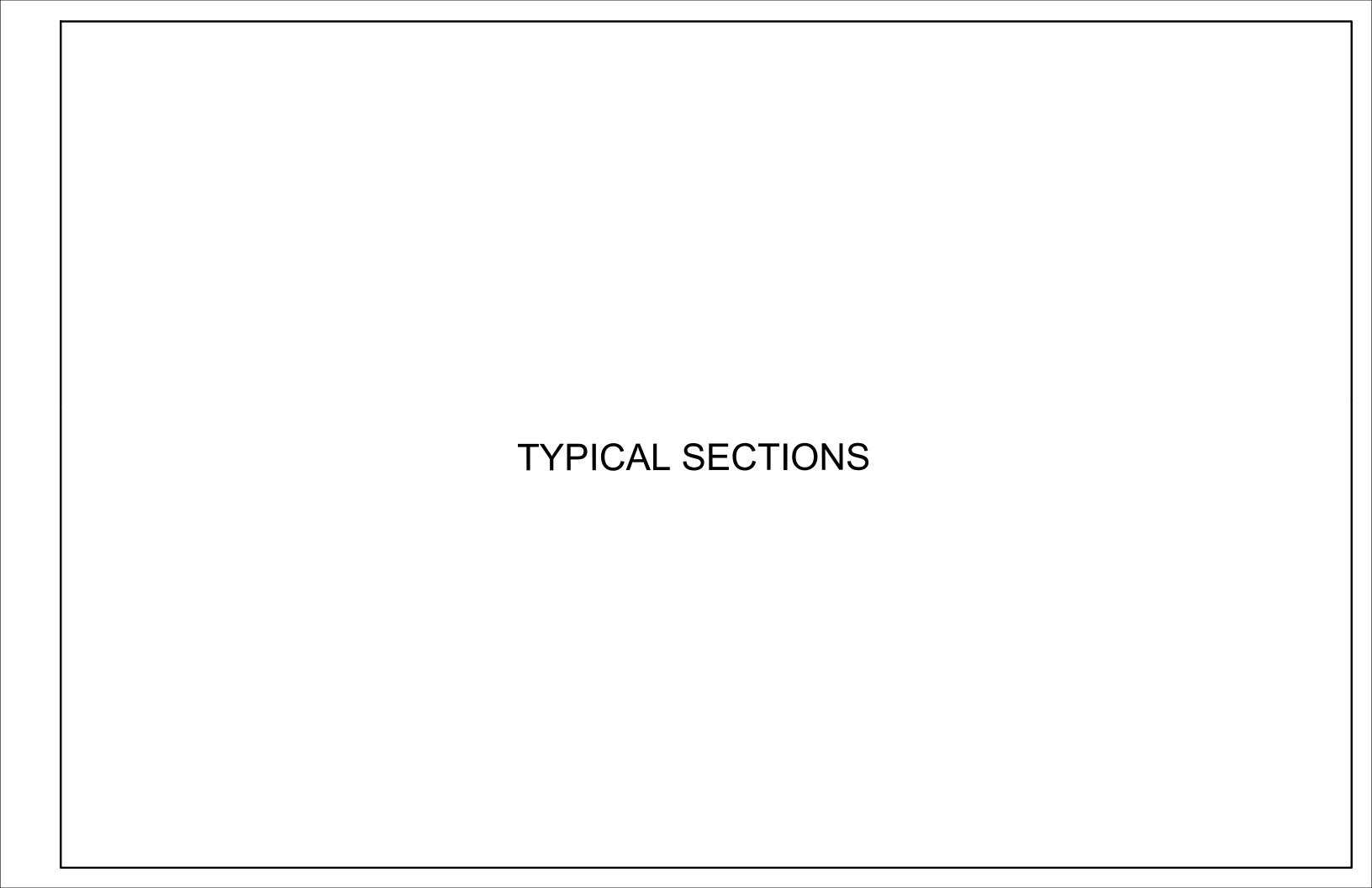


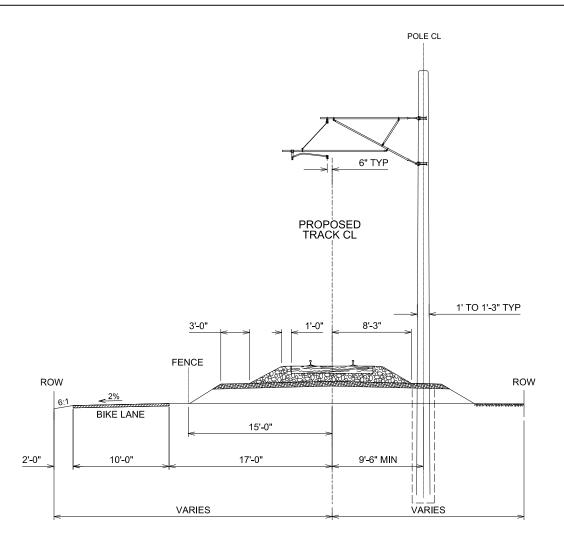


**NICTD WEST LAKE CORRIDOR** PROJECT DRAFT CONCEPTUAL **DESIGN PLANS** INDIANA HARBOR BELT ALTERNATIVE

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# CONSTRAINED SINGLE TRACK WITH BIKE LANE AT GRADE (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX



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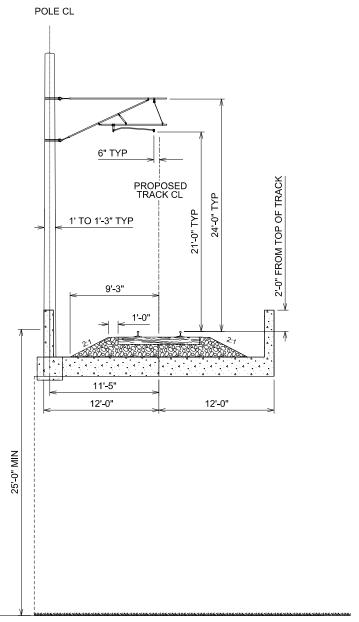


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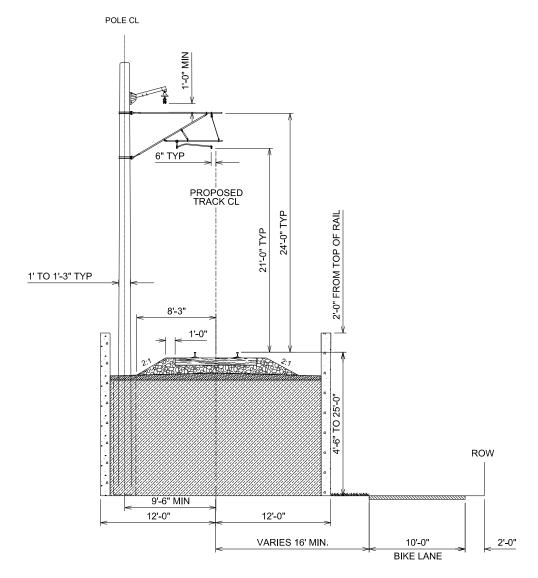
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TRACK ON ELEVATED STRUCTURE (LOOKING SOUTH)

### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 16" OF BALLAST UNDER TIE



TRACK ON RETAINED FILL WITH EXISTING BIKE PATH (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE



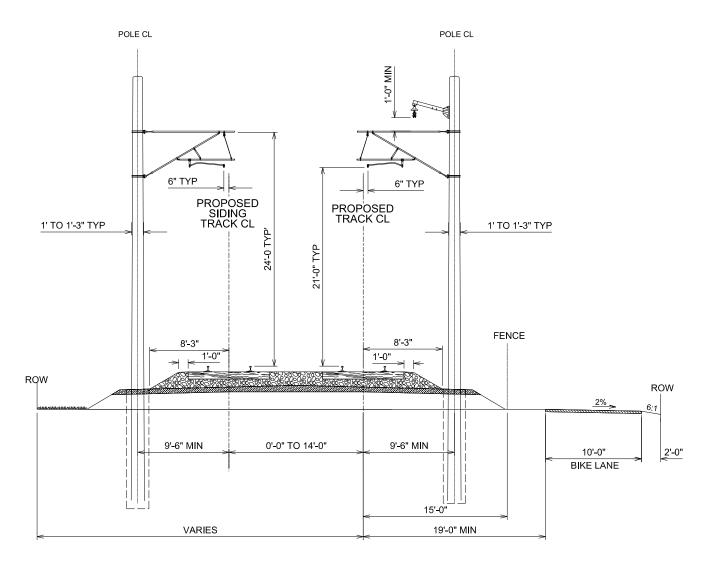


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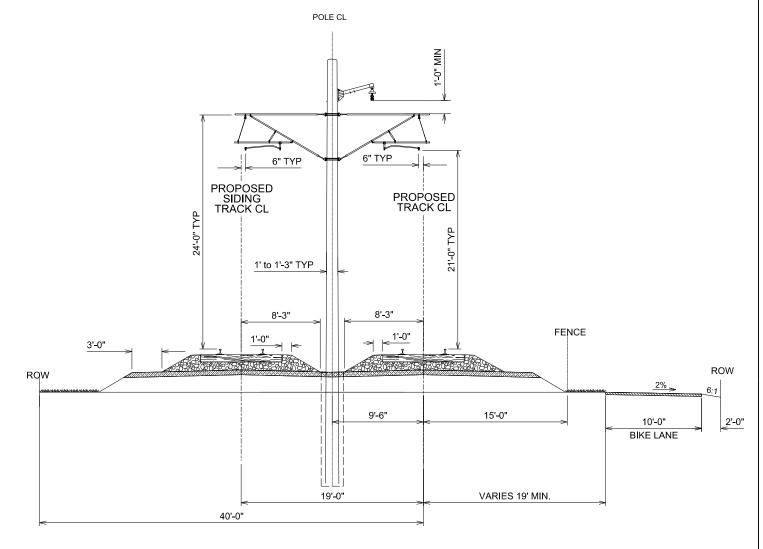
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# SIDING TURNOUT WITH BIKE LANE AT GRADE (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX
- 6. SUB-BALLAST SHOULDER = 3'-0"



# TRACK SECTION WITH SIDING TRACK AND BIKE LANE (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX



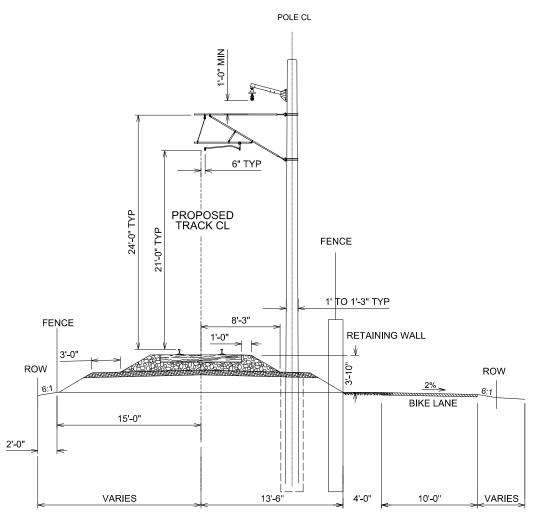


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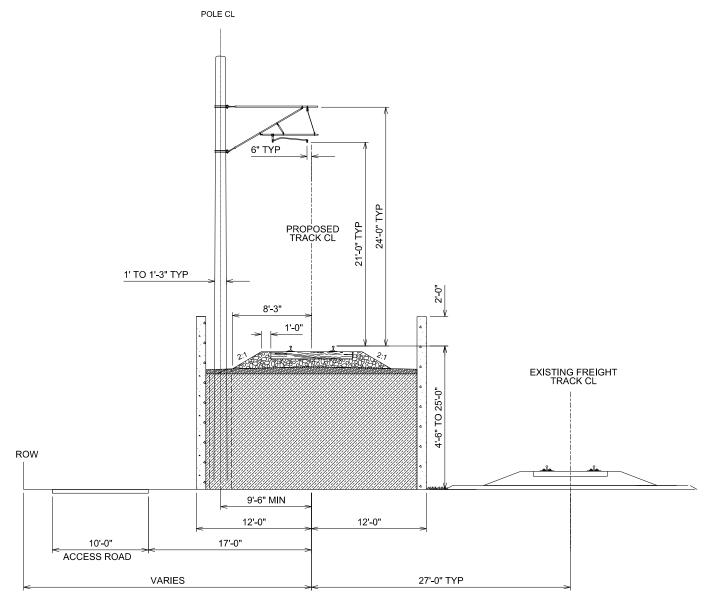


### SINGLE TRACK WITH BIKE LANE AT GRADE

## (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX



# TRACK ON RETAINED FILL ADJACENT TO EXISTING FREIGHT TRACK (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE

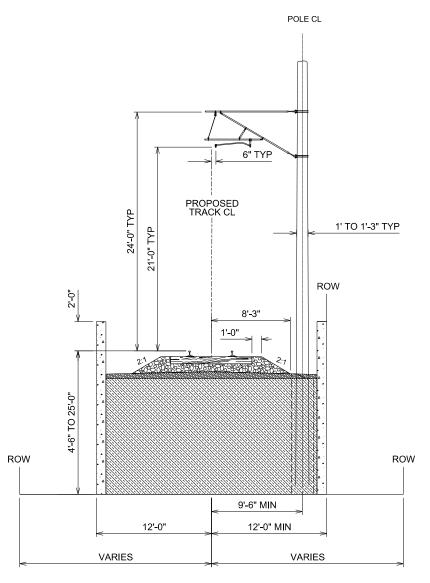




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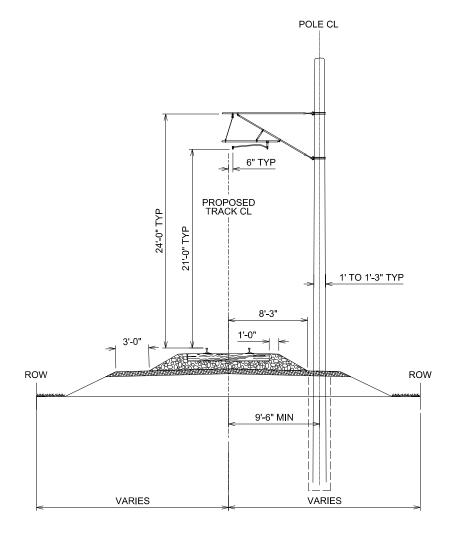


TRACK ON RETAINED FILL

(LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX



# SINGLE TRACK AT GRADE (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX

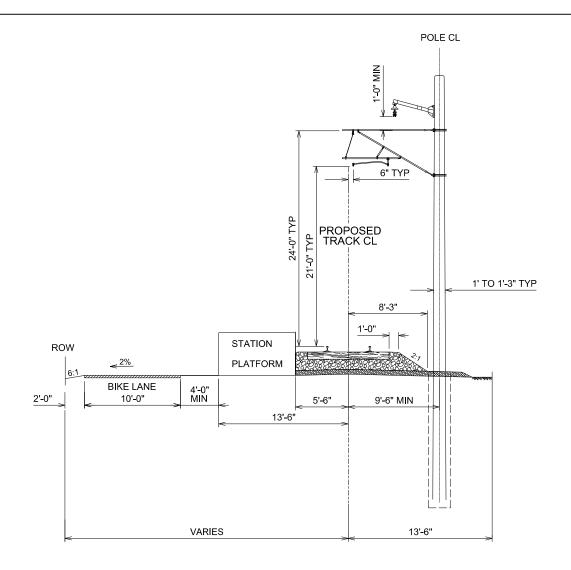




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SINGLE TRACK SECTION WITH STATION AND PROPOSED BIKE LANE (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE

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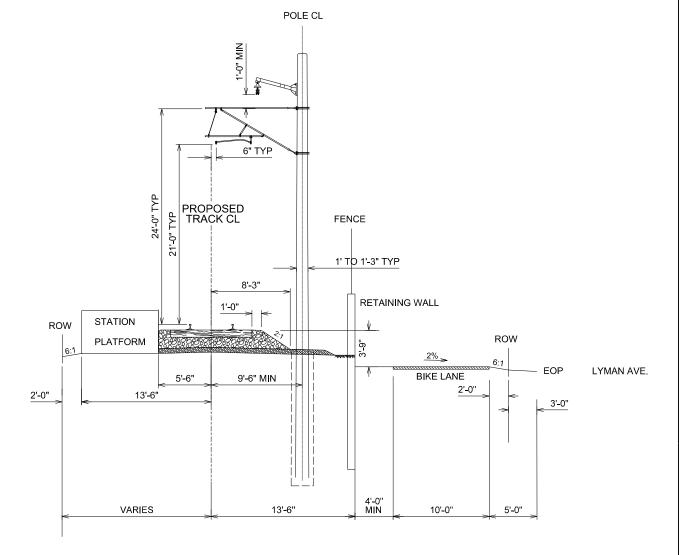
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- 4. SUB-BALAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. SUB-BALLAST SHOULDER 3'-0" WIDE
- 6. PUSH OFF/PULL OFF CANTILEVER BASED ON OCS WIRING LAYOUT AND STAGGER



SINGLE TRACK SECTION WITH STATION AND PROPOSED BIKE LANE
WITH RETAINING WALL
(LOOKING SOUTH)

#### NOTES:

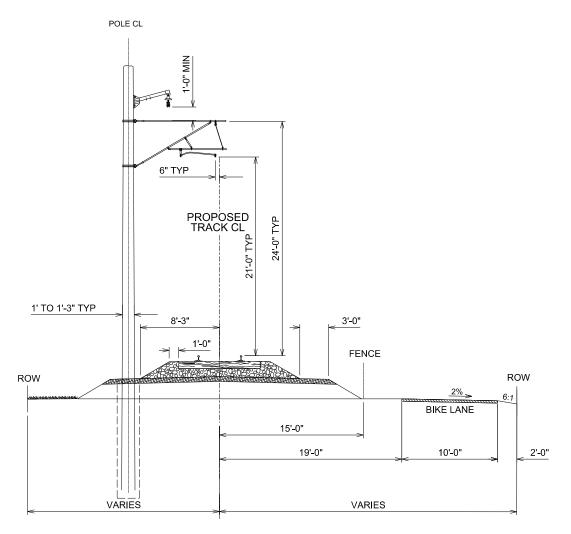
- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. SUB-BALLAST SHOULDER 3'-0" WIDE
- 6. PUSH OFF/PULL OFF CANTILEVER BASED ON OCS WIRING LAYOUT AND STAGGER





NICTD WEST LAKE CORRIDOR PROJECT DRAFT CONCEPTUAL DESIGN PLANS TYPICAL SECTIONS

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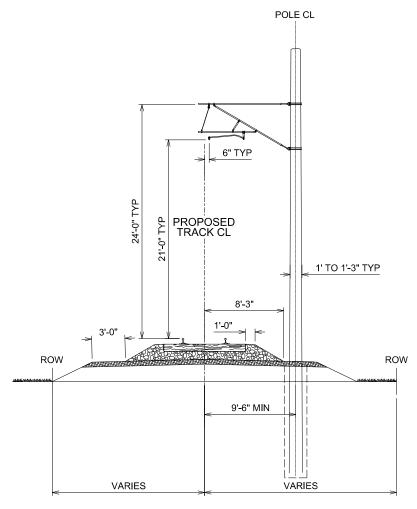


### SINGLE TRACK WITH BIKE LANE AT GRADE

## (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3, MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX



### SINGLE TRACK AT GRADE

## (LOOKING SOUTH)

#### NOTES:

- 1. 8'-6" WIDE TIMBER TIES 7" THICK
- 2. MINIMUM 10" OF BALLAST UNDER TIE
- 3. MINIMUM 6" OF SUB-BALLAST UNDER BALLAST LAYER WITH TOE OF SUB-BALLAST 12'-3" FROM TRACK CENTER LINE
- 4. SUB-BALLAST HAS 2.5% SLOPE FROM CENTER LINE OF TRACK ON BOTH SIDES FOR DRAINAGE
- 5. TOP OF RAIL ELEVATION 4'-6" MAX; EMBANKMENT VARIES FROM 0 TO 2'-0" MAX





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