

# **INDOT PROJECT DELIVERY ROLES & RESPONSIBILITIES**

## **PROJECT MANAGER**

- 1. COORDINATES WITH CONSTRUCTION AND MAINTENANCE THE DEVELOPMENT OF PROJECTS FROM THE TIME OF PROGRAMMING THROUGH THE COMPLETION OF CONSTRUCTION**
- 2. TAKES OWNERSHIP OF THE PROJECT SCOPE, BUDGET, AND SCHEDULE**
- 3. SUPERVISES THE PROJECT SCOPE, BUDGET, AND SCHEDULE THROUGHOUT THE LIFE OF THE PROJECT, FROM PLANNING TO CONSTRUCTION**
- 4. COORDINATES WITH DESIGNERS, R/W, UTILITIES, RAILROADS, ENVIRONMENTALISTS, LPAs, ETC.**
- 5. PLANS AND ATTENDS VARIOUS MEETINGS DURING PROJECT DEVELOPMENT**
- 6. SCHEDULES AND MONITORS CONSTRUCTABILITY REVIEWS DURING PROJECT DEVELOPMENT**
- 7. REVIEWS AND RECOMMENDS SOLUTIONS TO THE DESIGNER FOR PROJECT ISSUES (DESIGN, UTILITIES, R/W, ETC.)**
- 8. COMMUNICATES WITH ALL PERSONNEL ASSOCIATED WITH THE PROJECT TO COORDINATE THE WORK TO ACHIEVE PROJECT SUCCESS. MONITORS PROJECT STATUS AND IDENTIFIES ANY RISKS WITH AREA ENGINEER FOR TIME SET**
- 9. PROVIDES DIRECTION TO CONTRACTS ADMINISTRATION FOR THE INTERPRETATION OF PROJECT INTENT**
- 10. PROVIDES PROJECT UPDATES, AS NEEDED, TO VARIOUS OFFICES AND DIVISIONS INCLUDING EXECUTIVE STAFF**
- 11. ATTENDS PRE-CONSTRUCTION MEETINGS**
- 12. ATTENDS CONSTRUCTION SCHEDULED MEETINGS WITH CONTRACTOR**
- 13. REVIEWS REQUESTS FOR CHANGES TO DESIGN OR SCOPE OF CONTRACTS AND MAKE RECOMMENDATIONS TO APPROPRIATE CONSTRUCTION PERSONNEL. PROMPTLY CONTACTS THE ENGINEER OF RECORD REGARDING ANY PROJECT ISSUES THAT ARISE DURING CONSTRUCTION PERTAINING TO ERRORS AND OMISSIONS FOR TIMELY RESOLUTION WITH THE DESIGNER.**
- 14. ATTENDS PARTNERING MEETINGS**
- 15. REPORTS TO PROJECT MANAGEMENT DIVISION AT CENTRAL OFFICE OR CAPITAL PROGRAM MANAGER AT DISTRICTS**

## **PROJECT ENGINEER/SUPERVISOR**

1. PROVIDES ON-SITE ADMINISTRATION OF THE CONSTRUCTION CONTRACT
2. INTERPRETS AND ENFORCES CONTRACT DOCUMENTS, STANDARDS & SPECIFICATIONS
3. VERIFIES THE MEASUREMENT AND PAYMENT FOR ITEMS OF WORK
4. MAINTAINS CONTRACT RECORDS: DAILY, WEEKLY, MONTHLY REPORTS; MATERIAL RECORDS; AS-BUILT DRAWINGS; FINAL CONSTRUCTION RECORD; CHANGE ORDERS, ETC.
5. DIRECTS THE WORK OF ASSIGNED INSPECTORS AND ASSISTANTS
6. COMMUNICATES DIRECTLY WITH THE CONTRACTOR'S SUPERINTENDENT AND MANAGEMENT FOR ALL ISSUES RELATED TO THE CONTRACT
7. ATTENDS SCHEDULED MEETINGS WITH CONTRACTOR
8. ATTENDS PARTNERING MEETINGS
9. COMMUNICATES WITH INDOT PIO AS NECESSARY
10. COMMUNICATES WORK PROGRESS AND ISSUES TO OTHER INDOT PERSONNEL, INCLUDING THE AREA ENGINEER, DISTRICT CONSTRUCTION DIRECTOR AND PROJECT MANAGER
11. REFERS DESIGN AND SCOPE QUESTIONS TO THE AREA ENGINEER AND THE PROJECT MANGER AND PROVIDES RECOMMENDED SOLUTIONS
12. INITIATES CHANGE ORDERS. ENGAGE THE AREA ENGINEER & PROJECT MANAGER IN ALL CHANGE ORDERS. REFERS PROJECT ISSUES REGARDING "ERRORS AND OMISSIONS" TO THE AREA ENGINEER AND PROJECT MANAGER FOR RESOLUTION WITH THE CONSULTANT/DESIGNER
13. REPORTS TO AREA ENGINEER

## **AREA ENGINEER**

1. DIRECTS THE WORK OF ASSIGNED INDOT PROJECT ENGINEERS/SUPERVISORS OR ASSIGNED CONSULTANT PROJECT ENGINEERS/SUPERVISORS
2. IS CHARGED WITH OVERSIGHT RESPONSIBILITY OF LPA CONTRACTS THROUGH CONSULTANT PROJECT ENGINEERS/SUPERVISORS
3. ATTEND PRE-LETTING FIELD CHECKS

**AREA ENGINEER CONT'D**

4. CONDUCTS CONSTRUCTABILITY REVIEWS WITH THE PROJECT MANAGER
5. WITH INPUT FROM THE PROJECT MANAGER, SETS CONTRACT TIME PRIOR TO RFC
6. ASSIST DISTRICT CONSTRUCTION DIRECTOR IN ANSWERING PRE-BID QUESTIONS
7. SCHEDULES AND DIRECTS PRE-CONSTRUCTION CONFERENCES
8. MAKES DETERMINATIONS FOR THE PROPER INTERPRETATIONS OF CONTRACT DOCUMENTS
9. MAKES DECISIONS ON ISSUES RELATED TO CONTRACT ADMINISTRATION
10. MAKES AND APPROVES CHANGE ORDERS/TIME EXTENSIONS OR RECOMMENDS APPROVAL TO DISTRICT CONSTRUCTION DIRECTOR. ENSURES PROJECT MANAGER IS ENGAGED IN ALL CHANGE ORDERS. REFERS PROJECT ISSUES REGARDING "ERRORS AND OMISSIONS" WITH DOCUMENTATION TO THE PROJECT MANAGER FOR TIMELY RESOLUTION WITH THE DESIGNER
11. REFERS QUESTIONS OF DESIGN OR SCOPE CHANGES TO THE PROJECT MANAGER AND MAKES RECOMMENDATIONS REGARDING SOLUTIONS
12. ASSIGNS PROJECT ENGINEERS/SUPERVISORS TO CONTRACTS
13. PARTICIPATES IN VARIOUS TECHNICAL COMMITTEES AND RESEARCH PROJECTS
14. ATTENDS SCHEDULED MEETINGS AND PARTNERING MEETINGS, AS ABLE
15. COMMUNICATES DIRECTLY WITH CONTRACTOR'S MANAGEMENT PERSONNEL CONCERNING CONTRACT ISSUES
16. SCHEDULES PRE-FINAL INSPECTIONS
17. REPORTS TO THE DISTRICT CONSTRUCTION DIRECTOR

**HIGHWAY MAINTENANCE DIRECTOR**

1. PARTICIPATES IN THE DEVELOPMENT OF PROJECT SCOPE, AND SCHEDULE WITH PROJECT MANAGER AND CONSTRUCTION MANAGER
2. IDENTIFIES MAINTENANCE STAFF WHO WILL ATTEND MEETINGS

**HIGHWAY MAINTENANCE DIRECTOR CONT'D**

- 3. ATTENDS STAGE 1 (30%), PRELIMINARY FIELD CHECK DURING PROJECT DEVELOPMENT. SUPPLIES MAINTENANCE RECORDS AND PROVIDE INPUT BASED ON KNOWLEDGE OF ROAD SECTION.**
- 4. IDENTIFY CONDITION FOR SUBDISTRICT ROAD PROJECTS BASED ON MAINTENANCE RECORDS**
- 5. ATTENDS PRE-CONSTRUCTION MEETINGS**
- 6. ATTENDS CONSTRUCTION STATUS MEETINGS AT 30-60-90 TO REVIEW STATUS OF PROJECTS**
- 7. COMPILE AND PLAN MAINTENANCE NEEDS FOR BOTH SHORT-TERM AND LONG-TERM TECH SERVICES.**
- 8. COMMUNICATES AND COORDINATES WITH THE PROJECT MANAGER ON ANY MATTER THAT IMPACTS THE MAINTENANCE WORK PLAN, BUDGET OPERATIONS AND SCHEDULES**
- 9. DIRECTS ALL WORK OF THE DISTRICT MAINTENANCE OFFICE**
- 10. REPORTS TO THE DISTRICT DEPUTY COMMISSIONER**
- 11. SUPPLY MAINTENANCE RECORDS FOR SCOPING**
- 12. ATTEND 30/60/90 MEETINGS DURING CONSTRUCTION PHASE TO REVIEW STATUS OF PROJECTS**
- 13. IDENTIFY MAINTENANCE STAFF WHO WILL ATTEND MEETINGS**
- 14. IDENTIFY PRIORITY FOR SUB-DISTRICT ROAD PROJECTS BASED ON MAINTENANCE RECORDS**
- 15. DURING SCOPING, COMMUNICATE MATTERS THAT MAY AFFECT MAINTENANCE OPERATIONS, SCHEDULES, AND BUDGETS**
- 16. PROVIDE INPUT KNOWLEDGE BASED ON ROADWAY SECTION**
- 17. HAVE KNOWLEDGE OF WARRANTIES ASSOCIATED WITH A PROJECT UPON COMPLETION OF PROJECT**

## **DISTRICT TECHNICAL SERVICES DIRECTOR**

1. DIRECT STAFF OF SPECIALISTS FOR ANNUAL CALL FOR PROJECTS AND ALL OF THE ASSET RECOMMENDATIONS.
2. COORDINATES WORK OF SYSTEM ASSESSMENT MANAGER, WHO WORKS WITH PAVEMENT ENGINEER AND BRIDGE ASSET ENGINEER. THESE THREE INDIVIDUALS HAVE ACCESS TO ALL SYSTEM DATA BRIDGE CONDITIONS VIA INSPECTION REPORTS, ROADWAY CONDITIONS VIA MAINTENANCE OR PERSONAL INSPECTION AND ROADWAY REVIEWS, CRASH DATA AND CONGESTION DATA. THESE ARE EVALUATED TO PROVIDE COST EFFECTIVE RECOMMENDATIONS FOR FUTURE PROJECT NEEDS.
3. SCOPING ENGINEER, ALSO IN THIS SECTION ALSO SUPPORTS THE CALL FOR PROJECT AND DEVELOP SCOPES (WITH SUPPORTING COSTS) FOR PROJECTS SELECTED DURING THE CALL PROCESS.
4. TRAFFIC ENGINEERING PROVIDES RECOMMENDATION FOR SAFETY AND MOBILITY PROJECTS, PERFORMS LANE CLOSURE EXCEPTIONS AND REVIEW TRAFFIC ENGINEERING DESIGN ELEMENTS.
5. REPORTS TO DISTRICT DEPUTY COMMISSIONER.

## **DISTRICT CONSTRUCTION DIRECTOR**

1. DIRECTS ALL WORK OF THE DISTRICT CONSTRUCTION OFFICE, INCLUDING AREA ENGINEERS, FINAL REVIEW, ADMINISTRATION ASSISTANT, ETC.
2. REVIEWS PLANS FOR LETTING AND ANSWERS PRE-BID QUESTIONS
3. REVIEWS DISTRICT NEEDS FOR CONSTRUCTION PERSONNEL AND REQUESTS SUPPLEMENTAL CONSULTANT SERVICES, AS NEEDED
4. MAKES DECISIONS ON CONTRACT ISSUES WITHIN THE DISTRICT
6. PERFORMS PRE-FINAL INSPECTIONS AND WRITES FINAL ACCEPTANCE LETTERS
7. REVIEWS AND APPROVES CHANGE ORDERS/TIME EXTENSIONS OR RECOMMENDS APPROVAL TO SCE
7. DEVELOPS AND MANAGES HIGHWAY PERSONNEL BUDGET
8. REPORTS TO DIRECTOR, CONSTRUCTION DELIVERY

**FIELD ENGINEER**

1. SUPPORTS DISTRICT CONSTRUCTION AND COORDINATES MATTERS RELATED TO CHANGE ORDERS TO EXPEDITE APPROVALS AND MINIMIZE IMPACTS TO THE CONSTRUCTION BUDGET
2. REVIEW CHANGE ORDERS FOR UNIFORMITY AS DEFINED BY THE CONSTRUCTION MANAGEMENT DIVISION'S CHANGE ORDER POLICY
3. REVIEW AND MAKE RECOMMENDATIONS ON CHANGE ORDERS REQUIRING CENTRAL OFFICE APPROVAL
4. PERFORM QUALITY ASSURANCE REVIEW FOR CHANGE ORDER PROCEDURES IN THE DISTRICT
5. PROVIDE SUPPORT TO THE DISTRICT IN MATTERS RELATED TO CONSTRUCTION CONTRACT CLAIMS TO EXPEDITE SETTLEMENTS AND MINIMIZE IMPACTS ON THE CONSTRUCTION BUDGET
6. SUPPORTS THE DISTRICT IN RESOLVING ANY CONSTRUCTION RELATED PROBLEMS AND WORKS TO MINIMIZE IMPACTS ON THE CONSTRUCTION BUDGET
7. ATTENDS PARTNERING MEETINGS
8. COMMUNICATES AND COORDINATES WITH THE PROJECT MANAGER ON ANY MATTER THAT IMPACTS THE CONSTRUCTION BUDGET AND SCHEDULE
9. REPORTS TO THE STATE CONSTRUCTION ENGINEER

**REAL ESTATE PROJECT MANAGER (REPM)**

1. COORDINATES WITH THE PROJECT MANAGER FROM THE DEVELOPMENT AND PLANNING OF PROJECTS THROUGH THE COMPLETION AND CERTIFICATION OR RIGHT-OF-WAY ACQUISITION
2. ATTEND MEETINGS AT THE SCOPING AND PLANNING STAGES OF NEW PROJECTS WHERE ROW ACQUISITION OF 10 OR MORE PARCELS ARE INVOLVED
3. PROVIDE A "PRELIMINARY PROJECT SCOPE ANALYSIS" BASED OFF OF THE EARLY DESIGN OF THE PROJECT WITH THE GOAL OF PROVIDING THE PROJECT MANAGER ESTIMATED ACQUISITION COSTS, ANTICIPATED RELOCATION AND CONDEMNATION ISSUES, PROVIDE AN ESTIMATED ACQUISITION TIMELINES AND POTENTIAL COST SAVING DESIGN ALTERNATIVES

**REAL ESTATE PROJECT MANAGER (REPM) CONT'D**

4. ONCE THE PROJECT IS FINALIZED, THE REPM WILL WORK WITH PROJECT AND UTILITIES MANAGER TO DETERMINE ACQUISITION PRIORITIES
5. COORDINATES AND CONVEYS OBJECTIVES/GOALS WITH THE CENTRAL OFFICE REAL ESTATE SECTION, DISTRICT RIGHT-OF-WAY MANAGERS, THE ATTORNEY GENERAL AND UTILITIES
6. SUPERVISES BUDGET AND SCHEDULE THROUGHOUT THE ACQUISITION PHASE
7. ORGANIZES MONTHLY SCHEDULING MEETINGS WITH PROJECT MANAGERS
8. PROVIDES A RED, YELLOW OR GREEN STATUS REPORT BASED OFF OF ANTICIPATED TIMELINES
9. EFFICIENTLY MANAGES EXPECTATIONS WITH ALL KEY PROJECT PERSONNEL
10. PROVIDES RIGHT-OF WAY CERTIFICATIONS AT PSCS, RFC, LETTING AND AT NOTICE TO PROCEED IF NECESSARY.

**DISTRICTS INDOT ROW SCHEDULING MEETINGS**

1. INDOT REAL ESTATE (APPRAISING, BUYING, CONDEMNATION & PROPERTY MANAGEMENT) SCHEDULES MONTHLY CONFERENCE CALLS WITH EACH DISTRICT'S PROJECT MANAGERS, REAL ESTATE MANAGERS AND CAPITAL PROGRAM MANAGERS TO DISCUSS ON-GOING AND UPCOMING DISTRICT PROJECTS
2. PROJECTS INVOLVING ROW ACQUISITION ARE REVIEWED USING THE PROJECT PARCEL STATUS REPORT WHICH IS GENERATED FROM THE LAND RECORDS SYSTEMS (LRS)
3. ESTIMATED COMPLETION DATES ARE DETERMINED AND PARCELS MAY BE REVIEWED INDIVIDUALLY
4. ESTIMATED DATES ARE TYPICALLY SET WITH THE FOLLOWING CRITERIA; APPRAISING 90-DAYS, BUYING 75-DAYS AND PROPERTY MANAGEMENT 90-DAYS TO COMPLETE THE ACQUISITION PROCESS. IN OTHER WORDS, IT TAKES APPROXIMATELY 255 DAYS FOR A PARCEL TO HAVE A CLEAR STATUS. PLEASE NOTE: THE ESTIMATED COMPLETION ABOVE DOES NOT TAKE INTO CONSIDERATION PARCELS THAT ARE SENT TO CONDEMNATION

*THE UTILITY AND RAILROAD COORDINATION PROCESS IS AN INTEGRAL PART IN DELIVERING INDOT PROJECTS ON-TIME AND ON-BUDGET. THE COORDINATORS NEED TO BE INVOLVED IN THE PROJECT PROCESS AS EARLY AS POSSIBLE TO ASSIST IN THE PROJECT DEVELOPMENT INCLUDING DESIGN; RIGHT-OF-WAY NEEDS; COSTS; SETTING REASONABLE RELOCATION TIMELINES; VENDOR PARTNERSHIP; AND COMMUNICATION. THE TWO-WAY PARTNERSHIP BETWEEN THE UTILITY AND RAILROAD COORDINATORS WITH THE PROJECT MANAGER, DESIGNER, RIGHT-OF-WAY MANAGER, CONSTRUCTION, DISTRICT PERSONNEL, VENDORS, AND CONSULTANTS ARE ESSENTIAL FOR SUCCESSFUL PROJECT DELIVERY.*

## **UTILITY COORDINATOR**

1. **PROACTIVELY ENGAGE ALL PARTNERS INVOLVED IN UTILITY COORDINATION TO FACILITATE THE EXECUTION OF ALL UTILITY RELOCATION WORK**
2. **PARTNER WITH THE PROJECT MANAGER AND OTHER ESSENTIAL PERSONNEL TO REVIEW THE PROJECT SCOPE EARLY IN THE PROCESS**
3. **CONDUCT EARLY RESEARCH TO IDENTIFY POSSIBLE UTILITIES AND TYPES OF FACILITIES WITHIN THE INITIAL SCOPE TO DETERMINE THE FOLLOWING:**
  - **POSSIBLE CONFLICTS**
  - **COSTS**
  - **TIME FOR RELOCATION**
  - **RIGHT-OF-WAY NEEDS**
4. **ONCE THE PROJECT SCOPE IS FINALIZED, MEET WITH THE PROJECT MANAGER, RIGHT-OF-WAY MANAGER, AND OTHER PERTINENT PERSONNEL TO DETERMINE THE FOLLOWING:**
  - **TARGET DATES FOR UTILITY RELOCATION FOR PROJECT**
  - **IDENTIFY CRITICAL PARCELS NEEDED FOR RELOCATION**
  - **IDENTIFY INITIAL REIMBURSABLE POSITION FOR UTILITIES**
  - **BUDGET NEEDS FOR PROJECT**
  - **CLEARING R/W PLAN, IF NEEDED (WHO IS GOING TO DO IT)**
  - **SURVEYING NEEDS AND OPTIONS**
  - **RELOCATION OPTIONS**
  - **INITIAL RISK ASSESSMENT**
5. **DETERMINE NAME AND CONTACT INFORMATION FOR EACH UTILITY FOUND WITHIN PROJECT SCOPE AREA**



**UTILITY COORDINATOR CONT'D**

6. **ATTEND PRELIMINARY FIELD CHECK MEETING(S)**
7. **SCHEDULE ALL ESSENTIAL MEETINGS FOR SUCCESSFUL RELOCATION**
8. **CONTACT THE PROJECT MANAGER IF THERE IS A POSSIBLE COST OVERRUN OR IF AN UNEXPECTED UTILITY HAS BEEN FOUND**
9. **ENSURE CONTINUOUS ENGAGEMENT AND COMMUNICATION WITH PROJECT MANAGER, DESIGNER, CONSTRUCTION, RIGHT-OF-WAY ON PROGRESS OF PROJECT AND POTENTIAL ISSUES**
10. **ASSIST AND INFORM RIGHT-OF-WAY NEEDS REQUIRED FOR UTILITY RELOCATION. PROVIDE ROW BUYERS AND PROJECT MANAGER WITH A ROW ACQUISITION PLAN THAT IDENTIFIES THE CRITICAL PATH NECESSARY TO FACILITATE THE TIMELY ACQUISITION OF PARCELS IN SUPPORT OF UTILITY RELOCATION**
11. **ASSIST DESIGNER THROUGHOUT PROJECT BY PROVIDING ACCURATE UTILITY INFORMATION, WORK PLANS, ALTERNATIVES, ETC**
12. **ADVISE PAVEMENT DESIGNER AND THE GEOTECHNICAL ENGINEER TO CONSIDER ALTERATION OF SUB-GRADE TREATMENT TYPES AND PAVEMENT THICKNESS IN ORDER TO AVOID OR MINIMIZE THE RELOCATION OF HIGH EXPENSE UTILITIES**
13. **PROVIDE ACCURATE SPECIAL PROVISIONS TO CONTRACTS AND CONSTRUCTION. IF CHANGES, ENSURE TIMELY NOTIFICATION OF THE CHANGES IN THE SPECIAL PROVISIONS AND WHY**
14. **PROVIDE PERMITS AND RIGHT OF ENTRIES TO UTILITIES**

**RAILROAD COORDINATOR**

1. **PROACTIVELY ENGAGE ALL PARTNERS INVOLVED IN RAILROAD COORDINATION TO FACILITATE THE EXECUTION OF ALL RAILROAD WORK**
2. **PARTNER WITH THE PROJECT MANAGER AND OTHER ESSENTIAL PERSONNEL TO REVIEW THE PROJECT SCOPE EARLY IN THE PROCESS**

**RAILROAD COORDINATOR CONT'D**

- 3. CONDUCT EARLY RESEARCH TO IDENTIFY RAILROAD(S) INVOLVED AND TYPE OF RAILROAD PROJECT WITHIN THE INITIAL SCOPE TO DETERMINE POSSIBLE ISSUES, COSTS, TIME FOR CONSTRUCTION, AND RIGHT-OF-ENTRY NEEDS**
- 4. PROVIDE INITIAL RESEARCH AND ESTIMATES TO PROJECT TEAM TO FINALIZE THE PROJECT SCOPE**
- 5. ONCE THE PROJECT SCOPE IS FINALIZED, MEET WITH THE PROJECT MANAGER, RAIL DEPARTMENT, AND OTHER PERTINENT PERSONNEL TO DETERMINE THE FOLLOWING:**
  - TARGET DATES FOR PROJECT COMPLETION**
  - IDENTIFY FINANCIAL NEEDS AND PROCESS- LPA FUNDED; STATE; FEDERAL**
  - BUDGET NEEDS FOR PROJECT**
  - INITIAL RISK ASSESSMENT**
- 6. DETERMINE NAME AND CONTACT INFORMATION FOR EACH RAILROAD FOUND WITHIN PROJECT SCOPE AREA**
- 7. ATTEND PRELIMINARY FIELD CHECK MEETING(S)**
- 8. ATTEND DIAGNOSTIC CHECK MEETING(S)**
- 9. SCHEDULE ALL ESSENTIAL MEETINGS FOR SUCCESSFUL RELOCATION**
- 10. CONTACT THE PROJECT MANAGER IF THERE IS A POSSIBLE COST OVERRUN OR IF AN ISSUES HAS DEVELOPED**
- 11. ENSURE CONTINUOUS ENGAGEMENT AND COMMUNICATION WITH PROJECT MANAGER, DESIGNER, CONSTRUCTION, AND RAIL DEPARTMENT ON PROGRESS OF PROJECT AND POTENTIAL ISSUES**
- 12. ASSIST DESIGNER THROUGHOUT PROJECT BY PROVIDING ACCURATE RAILROAD INFORMATION, WORK PLANS, ALTERNATIVES, ETC**
- 13. PROVIDE ACCURATE SPECIAL PROVISIONS TO CONTRACTS, CONSTRUCTION, AND RAIL DEPARTMENT. IF CHANGES, ENSURE TIMELY NOTIFICATION OF THE CHANGES IN THE SPECIAL PROVISIONS AND WHY**
- 14. PROVIDE RAILROAD REGULATORY INFORMATION TO PROJECT MANAGER AND CONSTRUCTION**

## **CENTRAL OFFICE SCOPING**

THE CORRIDOR DEVELOPMENT OFFICE WITHIN THE TRAFFIC ENGINEERING DIVISION EXECUTES AN ARRAY OF ASSIGNMENTS FOR INDOT. THE SECTION SERVES AS COORDINATOR OF THE MOBILITY ASSET TEAM, FIELDS REQUESTS FROM EXECUTIVE OFFICE, THE DISTRICTS AND PROJECT MANAGEMENT, WORKS WITH IEDC ON ECONOMIC IMPACT PROJECTS AND ACTS AS A POINT OF LARGE SCALE PROJECT ORIENTATION WITH DEFICIENCY IDENTIFICATION AND SOLUTION IN OUR PROJECT INTENT REPORTS.

THE PROJECT IDENTIFICATION PROCESS ENDS WITH A PROJECT INTENT REPORT BUT FIRST AREAS OF NEED ARE IDENTIFIED FROM VARIOUS SOURCES INCLUDING INRIX TRAFFIC DATA, INDIANA TRAVEL DEMAND MODEL, CUSTOMER INPUT AND PERSONAL EXPERIENCE. THESE SOURCES HIGHLIGHT THE LOCATIONS ON THE STATE HIGHWAY NETWORK THAT ARE EXPERIENCING THE HIGHEST LEVELS OF CONGESTION AND/OR SUBOPTIMAL SPEED. ONCE A SITE IS IDENTIFIED, THE FOLLOWING PROCESS IS FOLLOWED:

- BACKGROUND INFORMATION GATHERED
- SITE FIELD CHECK & ON SITE OBSERVATION
- EXISTING SITE CONDITIONS EVALUATED
  - PAVEMENT CONDITION
  - BRIDGE CONDITION
  - HORIZONTAL OR VERTICAL ALIGNMENT DEFICIENCIES
- TRAFFIC RELATED OBSERVED DEFICIENCIES RECORDED
- SOLUTION ALTERNATIVES FOR PROPOSED WORK
- PARAMETRIC COST ESTIMATION
  - CONSTRUCTION
  - RIGHT OF WAY
  - UTILITY
  - ENVIRONMENTAL
  - PE
- TRAFFIC ANALYSIS AND SIMULATION OF ALTERNATIVES
- POTENTIAL PROJECT ISSUES IDENTIFIED
- PROPOSED ALIGNMENT DRAWING
- SOLUTION RECOMMENDATION

THESE ITEMS ARE ALL INCLUDED IN THE PROJECT INTENT REPORT AS A PRODUCT THAT PROJECT MANAGEMENT CAN TAKE AND CARRY TO DESIGN/DEVELOPMENT AND CONSTRUCTION.

**CENTRAL OFFICE SCOPING CONT'D**

**ONCE A PROJECT INTENT REPORT IS COMPLETED IT FOLLOWS ANY OF THE FOLLOWING ROUTES:**

- **SUBMITTED INTO THE CALL FOR PROJECTS IN A BID FOR FUNDING**
- **SUBMITTED DIRECTLY TO EXECUTIVE OFFICE IF COMMITTED**
- **SUBMITTED DIRECTLY TO PROJECT MANAGEMENT IF FUNDED AND ASSIGNED**

**PAVEMENT**

**PAVEMENT ENGINEER MANAGER**

**COORDINATES STAFFS (INCLUDES CO, DISTRICT PAVEMENT ENGINEER, AREA ENGINEER) TO ATTEND PARTNERING MEETING AND "PRELIMINARY PAVEMENT & GEOTECHNICAL MEETING" BOTH INITIATED BY THE PROJECT MANAGER NOT LATER THAN 10% PROJECT PLAN DEVELOP. THIS MEETING IS TO DISCUSS AND CLARIFY THE UNDERSTANDING OF THE PROJECT SCOPE OF WORK. THE PAVEMENT ENGINEER WILL PROVIDE A PRELIMINARY PAVEMENT DESIGN THAT VALIDATE AND REFINE THE APPROPRIATE TREATMENT OPTIONS FOR THE PROJECT SCOPE DISCUSSED; WHICH WILL AID THE PROJECT MANAGER IN DETERMINING APPROPRIATE COST.**

**PAVEMENT CONT'D**

**THE PROJECT MANAGER REQUESTS THE APPROPRIATE PAVEMENT AND GEOTECHNICAL AT 20-30% PLAN DEVELOPMENT STAGE;**

- **REQUEST GEOTECHNICAL REPORT OR WAIVER.**
- **REQUESTING TRAFFIC DATA, CORING, GPR, FWD, ETC. AND DOCUMENTING THE GPA PROGRAM WITH REQUEST DATES.**
- **MOT DESCRIPTION AND PLANS SHOULD BE DETERMINED AND PROVIDED TO THE PAVEMENT DESIGNER, PRIOR TO OR CONCURRENT WITH THE REQUEST FORM BEING SUBMITTED.**

**THE PAVEMENT ENGINEERING OFFICE WILL TAKE THIS INFORMATION THAT IS PROVIDED IN THE PAVEMENT REQUEST FORM (AVAILABLE WITHIN THE INDIANA DESIGN MANUAL (IDM) CHAPTER 304) TO PROCESS THE REQUEST FORM THROUGH ERMS, SUBMITTED BY THE PROJECT MANAGER AT APPROXIMATELY 40% PLAN DEVELOPMENT STAGE**

- **LPA PAVEMENT DESIGN REQUEST FORM**
- **INDOT PAVEMENT DESIGN REQUEST FORM**

**PAVEMENT CONT'D**

- **THE PAVEMENT DESIGN ENGINEER WILL BE ASSIGNED A PAVEMENT DESIGN TASK AND HAVE APPROXIMATELY 120 DAYS TO COMPLETE THE DESIGN. THE PAVEMENT DESIGN ENGINEER WILL DELIVER THE PAVEMENT DESIGN TO THE PROJECT MANAGER NOT LATER THAN 60% PROJECT DEVELOPMENT STAGE. THIS DATE MAY BE EARLIER IF MUTUALLY AGREED UPON**
  - **IF THERE ARE ANY ISSUES WITH THE SUBMISSION, THE PAVEMENT DESIGNER MAY RETURN THE PAVEMENT REQUEST AND REQUEST IT BE UPDATED WITH THE AFOREMENTIONED NEEDED TESTING, AND DOCUMENTATION AND BE RESUBMITTED**
  - **A PAVEMENT DESIGN CANNOT BE COMPLETED WITHOUT A REQUEST FORM, TESTING DATA, AND AT A MINIMUM A PRELIMINARY GEOTECHNICAL RECOMMENDATION.**
  - **THE PAVEMENT ENGINEER DESIGNING THE PROJECT WILL DIRECTLY COORDINATE WITH THE PM THE ESTIMATED COMPLETION DATE THROUGH THE GPA SYSTEM. IF THE PAVEMENT DESIGN FINISH DATE DOES NOT MATCH THE 120 DAY RULE THE PAVEMENT DESIGNER AND PROJECT MANAGER WILL NEED TO COORDINATE AND AGREE UPON THE NEW DATE AND DOCUMENT WITHIN GPA**
  
- **THE PAVEMENT DESIGN PROVIDED WILL HAVE A VALIDITY OF NO MORE THAN TWO YEARS**
  - **IF A DESIGN IS OVER TWO YEARS THE PAVEMENT DESIGN MANAGER WILL NEED TO RECEIVE A COPY OF THE ORIGINAL DESIGN WITH A NEW REQUEST FOR VALIDATION AND SCOPE MUST BE DETAILED. DEPENDING UPON THE TIMING THIS COULD AFFECT THE PROJECT DELIVERY**
  
  - **IF ANYTHING INCLUDING SCOPE, PAVEMENT CONCEPTS, PAVING LOCATIONS, AND ANYTHING THAT DEFACTO CHANGES OR MAY CHANGE THE CERTIFIED/PE STAMPED PAVEMENT DESIGN BEFORE OR DURING CONSTRUCTION “REQUIRES” THAT THE PAVEMENT ENGINEER WHO STAMPED THE PAVEMENT DESIGN BE CONTACTED HE OR SHE IS THE ONLY COMPETENT AUTHORITY TO ALTER AUTHORIZE A CHANGE**
  
  - **IF THE WORK IS COMPLETED BY A CONSULTANT, INDOT REVIEWS THE REPORT AND MAKES COMMENTS TO ENSURE FINAL REPORT COMPLETED**

**PAVEMENT CONT'D**

- **PAVEMENT DESIGN TRACKING DATABASE**
  - **THE PAVEMENT ENGINEERS AND PROJECT MANAGERS WILL UPDATE THE GPA DATABASE WITH NOTES AND INFORMATION REGARDING THE PROJECT DESIGN INCLUDING ESTIMATED COMPLETION DATE, WHEN THEY HAVE BEGUN AND COMPLETED THE PROJECT**
  - **90% PAVEMENT VALIDATION**
  - **ALTERNATE BID INFORMATION**
- **PAVEMENT ENGINEER IS STILL INVOLVED THROUGHOUT THE PROCESS AFTER THE DESIGN IS PROVIDED THROUGH FINAL VALIDATION AND CONSTRUCTION SUPPORT, NO ITEMS SHOULD BE CHANGED (QUANTITIES OR MATERIALS) WITHOUT SIGN OFF FROM THE PAVEMENT ENGINEER OF RECORD.**

**GEOTECHNICAL INVESTIGATION MANAGER**

**COORDINATES STAFF (INCLUDES INTERNAL OR CONSULTANT CONTRACTS) TO ATTEND PARTNERING MEETING AND "PRELIMINARY PAVEMENT & GEOTECHNICAL MEETING" BOTH INITIATED BY THE PROJECT MANAGER NOT LATER THAN 10% PROJECT PLAN DEVELOP. THIS MEETING IS TO DISCUSS AND CLARIFY THE UNDERSTANDING OF THE PROJECT SCOPE OF WORK. A PRELIMINARY RECOMMENDATION WILL BE PROVIDED THREE WEEKS FROM A REQUESTED PRELIMINARY RECOMMENDATION BASED ON DATABASE INFORMATION, ENGINEERING JUDGMENT, AND THE KNOWLEDGE OF THE AREA.**

- **IMPORTANT NOTE: THE PROCESS CAN TAKE APPROXIMATELY 120 DAYS FROM RECEIPT OF REQUEST. THE REASON FOR THIS IS THAT THE GEOTECHNICAL REPORT MAY BE PROVIDED BY A CONSULTANT AND THE TIME TO PROCURE A PURCHASE ORDER AND SCHEDULE RESOURCES MAY VARY.**
- **IF THE WORK IS COMPLETED BY A CONSULTANT, ALL INDOT PROCEDURES ARE FOLLOWED AND THE FINAL REPORT IS REVIEWED AND COMMENTS ARE MADE TO ENSURE FINAL REPORT COMPLETED AND APPROVED SIMILAR TO PAVEMENT DESIGN OFFICE. THE FINAL REPORT IS PLACED INTO ERMS AND PROJECT WISE.**

**THE PROJECT MANAGER REQUESTS GEOTECHNICAL TESTING AND REPORTING NEEDS NO LATER THAN 30% PLAN DEVELOPMENT STAGE. RECORDING REQUEST AND DATES WITHIN THE GPA SYSTEM;**

**GEOTECHNICAL INVESTIGATION MANAGER CONT'D**

- **A REQUEST IS SUBMITTED TO THE GEOTECHNICAL MANAGER NOTIFYING THAT A REQUEST IS IN PROJECT WISE/ERMS, WHICH INCLUDE THE SITE DESIGNER PLANS AND SCOPE OF WORK. THESE INCLUDE THE POTENTIAL SITES FOR BORING HOLES, IF APPLICABLE**
  - **REQUEST GEOTECHNICAL WAIVER AND DOCUMENT THE GPA SYSTEM AS APPROPRIATE.**
  - **THE MANAGER THEN TASKS HIS STAFF TO REVIEW INDOT RESOURCE CAPACITY OR IF A CONSULTANT MUST BE UTILIZED TO PERFORM THE GEOTECHNICAL DUTIES. WORK THAT IS TO BE PERFORMED BY THE GEOTECHNICAL OFFICE WILL INCLUDE THE STAFF INTERNAL OR EXTERNAL ATTENDING THE FIELD CHECK.**
- **THE RESPONSIBILITY OF THE GEOTECHNICAL PERSONNEL IS TO ASSESS THE SITE BASED ON THE SITE PLANS PROVIDED DURING THE REQUEST FOR ACCESSIBILITY, SLOPE, OR SOIL CONDITION CONCERNS FOR TESTING OR CONSTRUCTION**
  - **THE GEOTECHNICAL ENGINEER WILL LOCATE BORING LOCATIONS ON THE PLANS AND SCOPE PROPOSAL AND WORK WITH THE FIELD GEOTECHNICAL OPERATION STAFF COLLECTING THE SAMPLES.**
  - **DRILLING WORK OR TESTING WILL BE ASSIGNED AND THE GEOTECHNICAL STAFF OR REPRESENTATIVE WILL CONTACT THE PROPERTY OWNER, UTILITY COMPANY, TRAFFIC CONTROL, OR NECESSARY PARTIES DURING THIS STAGE OF THE PROCESS.**
  - **SAMPLES WILL BE COLLECTED, TESTING PERFORMED, AND REVIEW OF FIELD AND LAB DATA BY THE ENGINEER WHO WILL BE PERFORMING THE ENGINEERING ANALYSES TO PRODUCE THE FINAL REPORT AND RECOMMENDATION NO LATER THAN 120 DAYS FROM THE REQUESTED REPORT.**

**AFTER THE COMPLETION OF THE REPORT, THE GEOTECHNICAL OFFICE IS STILL INVOLVED.**

**1. DURING CONSTRUCTION – GEOTECHNICAL AND PAVEMENT OFFICE IS PROVIDING CONSTRUCTION SUPPORT**

- **A GEOTECHNICAL ENGINEER MUST BE INVOLVED THROUGH THE PROCESS. SPECIFIC EXAMPLE IS DURING BRIDGE WORK A GEOTECHNICAL ENGINEER MUST BE INVOLVED IN APPROVING THE PILE HAMMER SYSTEMS AND PERFORMING PILE LOAD TESTING.**

**GEOTECHNICAL INVESTIGATION MANAGER CONT'D**

- **ADDITIONALLY, SUBGRADE FOR PAVEMENT MIX DESIGN WILL BE REVIEWED BY THE GEOTECHNICAL OFFICE AND APPROVED DURING CONSTRUCTION.**
  
- **AFTER THE SITE DESIGNER DEVELOPS THE PLANS ON GEOTECHNICAL RECOMMENDATION THEY MUST BE REVIEWED AND SIGNED OFF ON BY GEOTECHNICAL ENGINEER**
  - **IN HOUSE OR CONSULTANT**
  - **AFTER FINAL PLANS ARE COMPLETED THE DESIGNER SENDS THE CHECK PRINT FOR FINAL VALIDATION. GEOTECHNICAL ENGINEER WILL REVIEW AND SIGN OFF (INTERNAL OR EXTERNAL)**
  
- **LETTING PLANS INCLUDE ALL SPECIAL PROVISIONS REVIEWED BY GEOTECHNICAL – NO CHANGES TO QUANTITY OR MATERIAL WITHOUT GEOTECHNICAL AND PAVEMENT ENGINEER SIGN OFF**

**HYDRAULICS ENGINEERS**

- 1. PERFORMS PRELIMINARY HYDROLOGIC AND HYDRAULIC MODELING FOR PRELIMINARY SMALL STRUCTURE, PIPE LINER, AND BRIDGE SIZES FOR ENGINEERS REPORTS AND PLANNING DOCUMENTS UTILIZING LIMITED FIELD SURVEY. PRELIMINARY STRUCTURE SIZES ARE FOR COST ESTIMATING AND PLANNING PURPOSES ONLY. PIPE LINER STUDIES ARE DONE PRIOR TO THE ASSET TEAM CALL FOR PROJECTS, TO ENSURE THE RIGHT REPAIR IS BEING PROPOSED**
  
- 2. PERFORMS HYDROLOGIC AND HYDRAULIC MODELING FOR FINAL SMALL STRUCTURE, PIPE LINER, AND BRIDGE SIZES FOR DISTRICT AND CENTRAL OFFICE IN-HOUSE DESIGNED PROJECTS, UTILIZING FINAL SURVEY, APPROXIMATELY 60 DAYS PRIOR TO STAGE 1**
  
- 3. PERFORMS HYDRAULIC MODELING AND CHECKLISTS FOR DNR CONSTRUCTION IN A FLOODWAY PERMITS, WHEN REQUIRED FOR PROJECTS DESIGNED IN-HOUSE**
  
- 4. PROVIDES FINAL HYDRAULICS REVIEWS FOR CONSULTANT DESIGNED PROJECTS AT 60 DAYS PRIOR TO STAGE 1, TO CONFIRM THAT CALCULATIONS ARE BEING DONE IN ACCORDANCE WITH HYDRAULICS POLICY. THIS INCLUDES SMALL STRUCTURES, BRIDGES, AND REHABILITATION PROJECTS INVOLVING SCOUR CALCULATIONS FOR PROJECTS ON BOTH THE INDOT AND LPA SYSTEMS**



**HYDRAULICS ENGINEERS CONT'D**

5. PROVIDES FINAL STORM DRAIN DESIGNS FOR CENTRAL OFFICE IN-HOUSE DESIGNED PROJECTS AT APPROXIMATELY STAGE 2
6. PROVIDES STORM DRAIN REVIEW FOR CONSULTANT DESIGNED PROJECTS AT APPROXIMATELY STAGE 2, TO CONFIRM THAT CALCULATIONS ARE BEING DONE IN ACCORDANCE WITH HYDRAULICS POLICY
7. PERFORMS SCOUR CALCULATIONS FOR BRIDGE REHABILITATION PROJECTS FOR IN-HOUSE DESIGNS PROJECTS, AND PROVIDES SCOUR CALCULATION REVIEW FOR CONSULTANT DESIGNED PROJECTS
8. REVIEWS HYDRAULICS CALCULATIONS FOR RIGHT OF WAY PERMITS, IF A PERMIT REQUESTOR IS PLANNING TO DRAIN THEIR STORMWATER TO INDOT'S RIGHT OF WAY. THIS REVIEW IS NOT REQUIRED AND IS ONLY PERFORMED AT THE DISTRICT'S REQUEST
9. PERFORMS RESEARCH, FIELD WORK, HYDROLOGIC MODELING AND HYDRAULIC MODELING FOR ANY DRAINAGE ISSUES, DRAINAGE COMPLAINTS, LEGAL ISSUES, AND CONSTRUCTION ISSUES THAT MAY ARISE DUE TO HEAVY RAINFALL, CHANGES IN DRAINAGE PATTERNS, CHANGES CAUSED BY INDOT PROJECTS, OR DISCOVERIES MADE IN THE MIDDLE OF CONSTRUCTION
10. PERFORMS HYDROLOGIC AND HYDRAULIC MODELING FOR PIPE LINERS TO BE INSTALLED BY MAINTENANCE FORCES
11. WRITES, EDITS, AND UPDATES HYDRAULIC POLICY IN THE INDIANA DESIGN MANUAL AS NEEDED
12. MANAGES AND PARTICIPATES IN VARIOUS JTRP RESEARCH PROJECTS

**ENVIRONMENTAL SERVICES DIVISION (ESD)**

1. AT THE REQUEST OF THE PROJECT MANAGER, ESD STAFF ADVISE THE PROJECT MANAGER ON PROCEDURES AND COMPLETION TARGET DATES FOR ENVIRONMENTAL DOCUMENTATION. THIS IS FOR THE PROJECT MANAGER'S USE IN SETTING PROJECT SCHEDULES IN SPMS AND CONSULTANT DELIVERABLE SCHEDULES.
2. FOR MAJOR PROJECTS ONLY AND AT THE REQUEST OF THE PROJECT MANAGER, ESD STAFF PARTICIPATE IN SCOPING, INCLUDING SETTING TARGET DATES FOR COMPLETING DOCUMENTATION AND ADVISING ON THE SUITE OF INVESTIGATIONS AND DOCUMENTS THAT MAY BE REQUIRED TO DELIVER THE PROJECT. BY AGREEMENT BETWEEN THE PROJECT MANAGER AND ESD MANAGERS, ESD MAY OR MAY NOT REMAIN CLOSELY INVOLVED IN ADVISING AS THE PROJECT PROGRESSES.

**ENVIRONMENTAL SERVICES CONT'D**

- 3. THROUGHOUT PROJECT DEVELOPMENT, ESD STAFF ARE AVAILABLE TO PROVIDE ADVICE ON STRATEGIES FOR COMPLETING ENVIRONMENTAL DOCUMENTATION AND ON ADJUSTMENTS TO THE CONSULTANT'S DELIVERABLE SCHEDULE.**
- 4. AS SOON AS DESIGN AND INVESTIGATIONS ARE SUFFICIENTLY ADVANCED TO ESTIMATE IMPACTS, THE PROJECT MANAGER SHOULD REQUEST A PERMIT DETERMINATION FROM ESD'S ECOLOGY AND WATERWAY PERMITTING OFFICE. THIS PERMIT DETERMINATION WILL PROVIDE AN OUTLINE OF POSSIBLE REQUIRED STATE AND FEDERAL WATERWAY PERMITS AND AN ASSESSMENT OF THE LIKELIHOOD THAT MITIGATION WILL BE REQUIRED. THIS DETERMINATION MUST BE REFRESHED IF THERE IS AN CHANGE IN SCOPE OR FOOTPRINT.**
- 5. ESD STAFF WILL PROVIDE TIMELY REVIEW OF CONSULTANT-PREPARED DOCUMENTS. IN ADDITION TO CORRECTIONS NEEDED TO MAKE THE DOCUMENT APPROVABLE, ESD STAFF WILL PROVIDE FEEDBACK ON DOCUMENT QUALITY TO THE PREPARER AND THE PROJECT MANAGER THROUGH PSCS.**
- 6. ESD STAFF WILL COORDINATE WITHIN ESD AND WITH STATE AND FEDERAL AGENCIES TO OBTAIN REQUIRED APPROVALS. FOR DOCUMENTATION THAT IS COMPLETE, ACCURATE, AND PROVIDED WITH SUFFICIENT LEAD TIME (AS DIRECTED BY THE PROJECT MANAGER IN ITEMS 1, 2, AND 3 ABOVE), ESD WILL DELIVER APPROVALS FOR DOCUMENTATION ON OR BEFORE THE TARGET DATE FOR COMPLETION. PROJECT MANAGERS SHOULD INCLUDE TIME FOR FEDERAL REVIEW IN PROJECT SCHEDULES IF IT IS REQUIRED.**
- 7. OCCASIONALLY, BY SPECIAL AGREEMENT BETWEEN THE PROJECT MANAGER AND ESD MANAGERS, AND IF STAFF ARE AVAILABLE, ESD STAFF WILL PREPARE DOCUMENTS.**
- 8. SHOULD CONSTRUCTION ACTIVITIES RESULT IN A VIOLATION OF STATE OR FEDERAL ENVIRONMENTAL LAW, ESD WILL ADVISE THE PROJECT MANAGER ON POSSIBLE RESOLUTION MEASURES.**