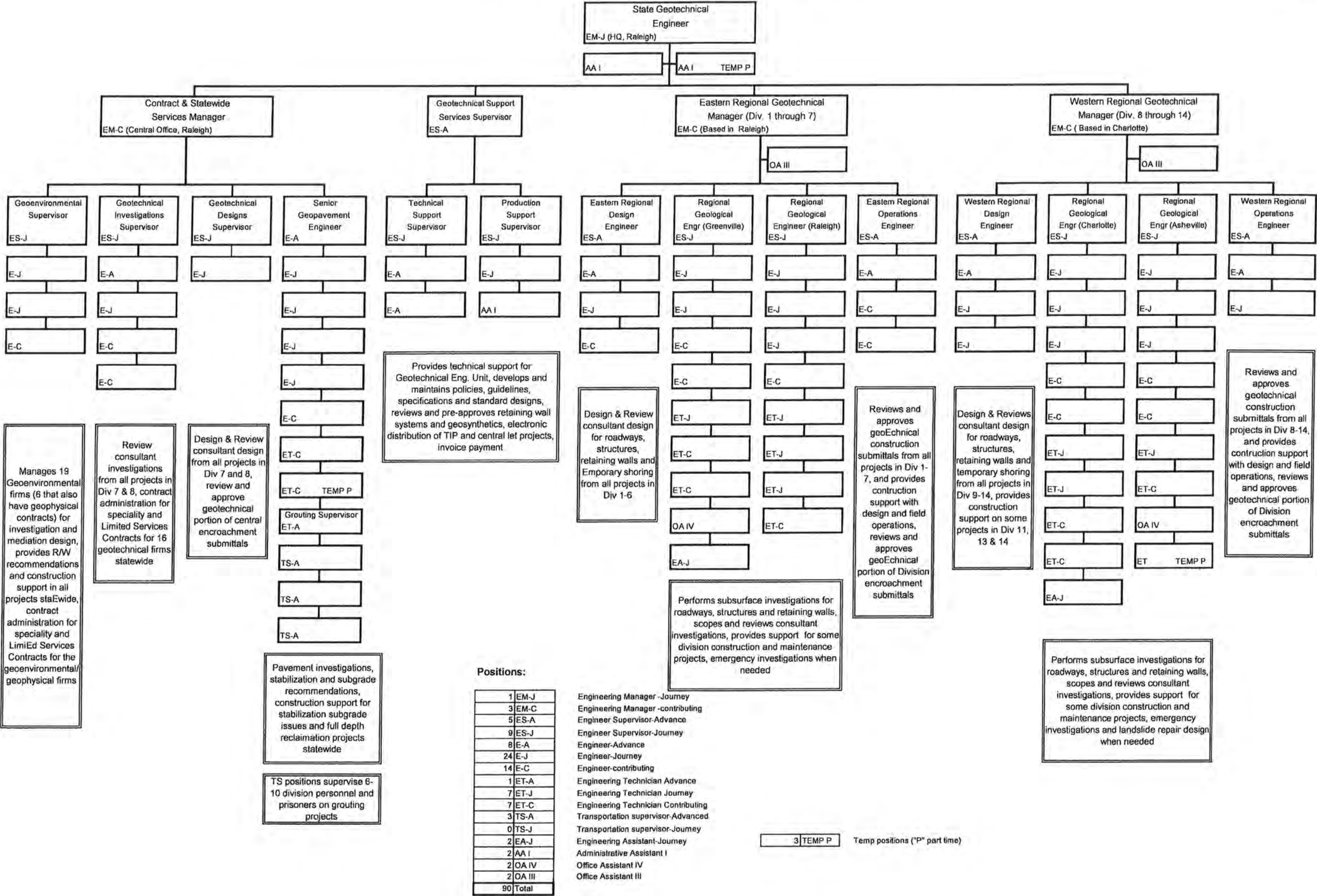
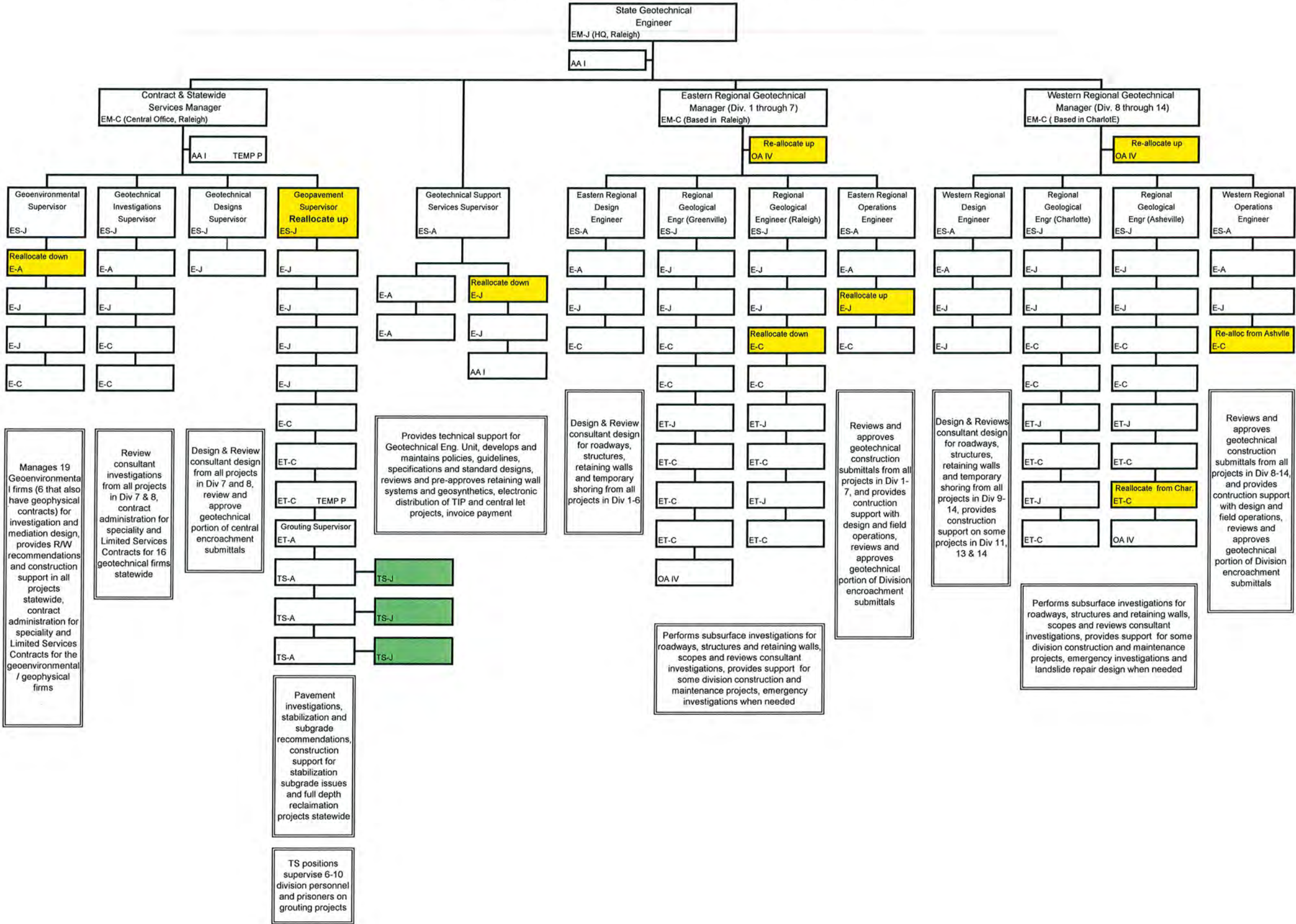


Geotechnical Engineering Unit Organization Chart



Future Budget-Driven Geotechnical Engineering Unit Organization Chart



Positions:			
Current	Revised	Change	
1	1	0	EM-J Engineering Manager -Journey
3	3	0	EM-C Engineering Manager -contributing
5	5	0	ES-A Engineer Supervisor-Advance
9	8	-1	ES-J Engineer Supervisor-Journey
8	8	0	E-A Engineer-Advance
24	23	-1	E-J Engineer-Journey
14	15	1	E-C Engineer-contributing
1	1	0	ET-A Engineering Technician Advance
7	6	-1	ET-J Engineering Technician Journey
7	11	4	ET-C Engineering Technician Contributing
3	3	0	TS-A Transportation supervisor-Advanced
0	3	3	TS-J Transportation supervisor-Journey
2	0	-2	EA-J Engineering Assistant-Journey
2	2	0	AA I Administrative Assistant I
2	4	2	OA IV Office Assistant IV
2	0	-2	OA III Office Assistant III
90	93	3	Total

Position changed

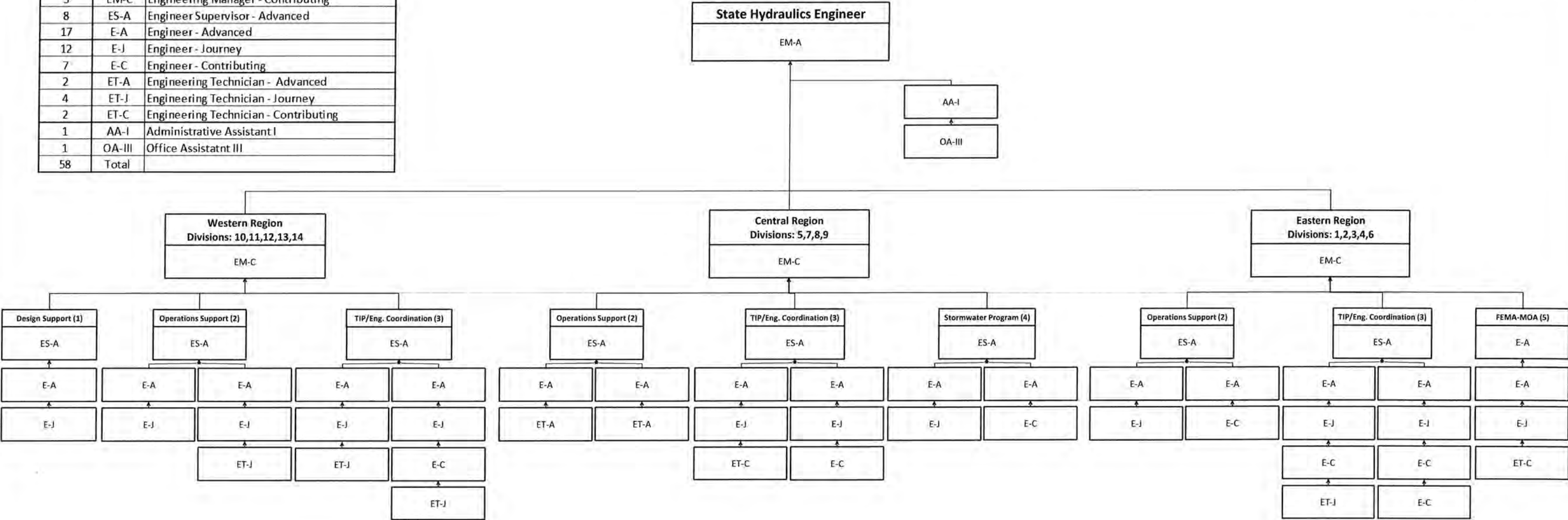
Added positions from changes within Preconstruction, not new to the Department. The 3 TS-J positions are added to help with the workload of our Grouters by assisting or running their own crews at times. Currently, for non-emergency work, we have a 4 week backlog. There are no local cementaceous grouting firms that do pavement work.

Positions:

Current	Classification	
1	EM-A	Engineering Manager - Advanced
3	EM-C	Engineering Manager - Contributing
8	ES-A	Engineer Supervisor - Advanced
17	E-A	Engineer - Advanced
12	E-J	Engineer - Journey
7	E-C	Engineer - Contributing
2	ET-A	Engineering Technician - Advanced
4	ET-J	Engineering Technician - Journey
2	ET-C	Engineering Technician - Contributing
1	AA-I	Administrative Assistant I
1	OA-III	Office Assistant III
58	Total	

Hydraulics Unit Organization Chart

Current Hydraulics Engineering Unit
Organization Structure
B-1



(1) Design Support:

- Provide design support and study of complex hydraulic and hydrologic (H&H) design and review for 2-dimensional hydraulic modeling, coastal bridges and culverts.
- Provide support for H/H software evaluation and training.
- Provide training and coordination for guidelines and guideline updates.
- Provide support for CADD, Geopak Drainage, Lidar Development (QL2), Microstation libraries and Corridor modeling.
- Provide support for Value Engineering, Prequalification Management, and New Drainage Product Committee.
- Provide IT support and integration for website, FEMA/MOA SharePoint site, Environmental GIS, and spatial analysis support.

(2) Operations Support:

- Provide hydraulic and hydrologic (H&H) technical assistance on drainage investigations.
- Provide drainage structure recommendations during emergency and routine replacement conditions.
- Provide H&H review of subdivision/encroachment plans that impact NCDOT assets.
- Review and approve H&H designs for the Low Impact, State-Funded bridge/culvert replacement projects.
- Provide H&H design recommendations for the Division-managed projects.
- Review federally funded municipal projects and review and design bike/pedestrian/greenway projects.

(3) TIP/Eng. Coordination:

- Manage and perform hydraulic and hydrologic (H&H) designs for Transportation Improvement Program (TIP).
- Manage and coordinate private engineering firms for H&H designs on TIP projects.
- Manage and perform hydraulic and hydrologic requirements for Merger process.
- Lead and facilitate Merger Concurrence 4B and 4C meetings.
- Provide technical support and permit drawings for the Federal and State Agencies' approvals.
- Perform H&H designs and flood impact analysis to comply with FEMA's National Flood Insurance Program.
- Develop the project-specific Stormwater Management Plans to comply with the NPDES permit.

(4) Stormwater Program:

- Manage requirements and compliance of the Department's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit in coordination with EPA, and NCDENR.
- Provide compliance strategies and program requirements for State stormwater and water quality regulations.
- Provide technical support and policy guidance to TIP program for water quality and stormwater requirements through design and guidance documents.
- Manage and perform the Department's Stormwater Retrofit program that supports TIP and State water quality requirements.
- Facilitate and manage applied research to support Department's goals and objectives for stormwater and water quality.

(5) FEMA-MOA:

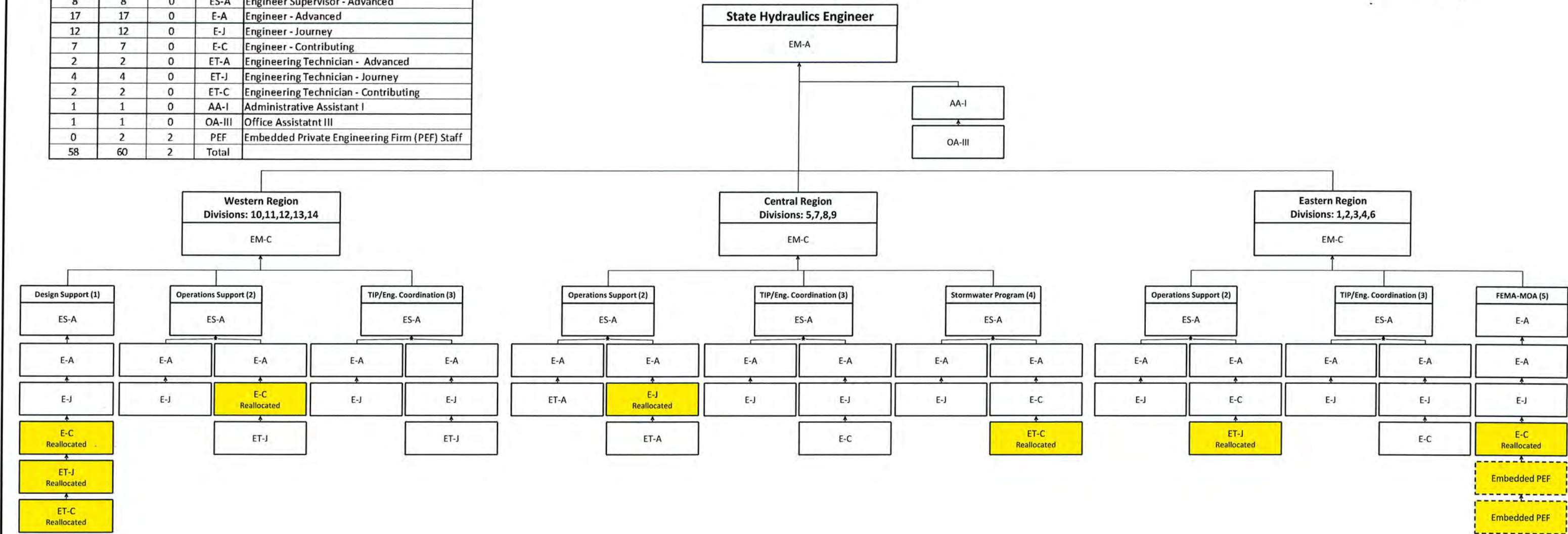
- Review Hydraulic computer models for bridges and culverts that are located in Federal Emergency Management Agency (FEMA) flood hazard areas to ensure compliance with the National Flood Insurance Program (NFIP).
- Consult with North Carolina Floodplain Mapping Program on modeling requirements, specifications and policy.
- Issue certifications and notifications to hydraulic design engineers on bridge and culvert designs.
- Revise Flood Insurance Rate Maps for NCDOT projects that result in changes in flood zone as required by NFIP.
- Provide training to design engineers on FEMA policies on Digital Flood Insurance Rate Maps (DFIRM) and modeling techniques.

Positions:

Current	Revised	Change	Classification	
1	1	0	EM-A	Engineering Manager - Advanced
3	3	0	EM-C	Engineering Manager - Contributing
8	8	0	ES-A	Engineer Supervisor - Advanced
17	17	0	E-A	Engineer - Advanced
12	12	0	E-J	Engineer - Journey
7	7	0	E-C	Engineer - Contributing
2	2	0	ET-A	Engineering Technician - Advanced
4	4	0	ET-J	Engineering Technician - Journey
2	2	0	ET-C	Engineering Technician - Contributing
1	1	0	AA-I	Administrative Assistant I
1	1	0	OA-III	Office Assistant III
0	2	2	PEF	Embedded Private Engineering Firm (PEF) Staff
58	60	2	Total	

Future Hydraulics Unit Organization Chart

Future Hydraulics Engineering Unit
Organization Structure
B-2



(1) Design Support:

- Provide design support and study of complex hydraulic and hydrologic (H&H) design and review for 2-dimensional hydraulic modeling, coastal bridges and culverts.
- Provide support for H/H software evaluation and training.
- Provide training and coordination for guidelines and guideline updates.
- Provide support for CADD, Geopak Drainage, Lidar Development (QL2), Microstation libraries and Corridor modeling.
- Provide support for Value Engineering, Prequalification Management, and New Drainage Product Committee.
- Provide IT support and integration for website, FEMA/MOA SharePoint site, Environmental GIS, and spatial analysis support.

(2) Operations Support:

- Provide hydraulic and hydrologic (H&H) technical assistance on drainage investigations.
- Provide drainage structure recommendations during emergency and routine replacement conditions.
- Provide H&H review of subdivision/encroachment plans that impact NCDOT assets.
- Review and approve H&H designs for the Low Impact, State-Funded bridge/culvert replacement projects.
- Provide H&H design recommendations for the Division-managed projects.
- Review federally funded municipal projects and review and design bike/pedestrian/greenway projects.

(3) TIP/Eng. Coordination:

- Manage and perform hydraulic and hydrologic (H&H) designs for Transportation Improvement Program (TIP).
- Manage and coordinate private engineering firms for H&H designs on TIP projects.
- Manage and perform hydraulic and hydrologic requirements for Merger process.
- Lead and facilitate Merger Concurrence 4B and 4C meetings.
- Provide technical support and permit drawings for the Federal and State Agencies' approvals.
- Perform H&H designs and flood impact analysis to comply with FEMA's National Flood Insurance Program.
- Develop the project-specific Stormwater Management Plans to comply with the NPDES permit.

(4) Stormwater Program:

- Manage requirements and compliance of the Department's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit in coordination with EPA, and NCDENR.
- Provide compliance strategies and program requirements for State stormwater and water quality regulations.
- Provide technical support and policy guidance to TIP program for water quality and stormwater requirements through design and guidance documents.
- Manage and perform the Department's Stormwater Retrofit program that supports TIP and State water quality requirements.
- Facilitate and manage applied research to support Department's goals and objectives for stormwater and water quality.

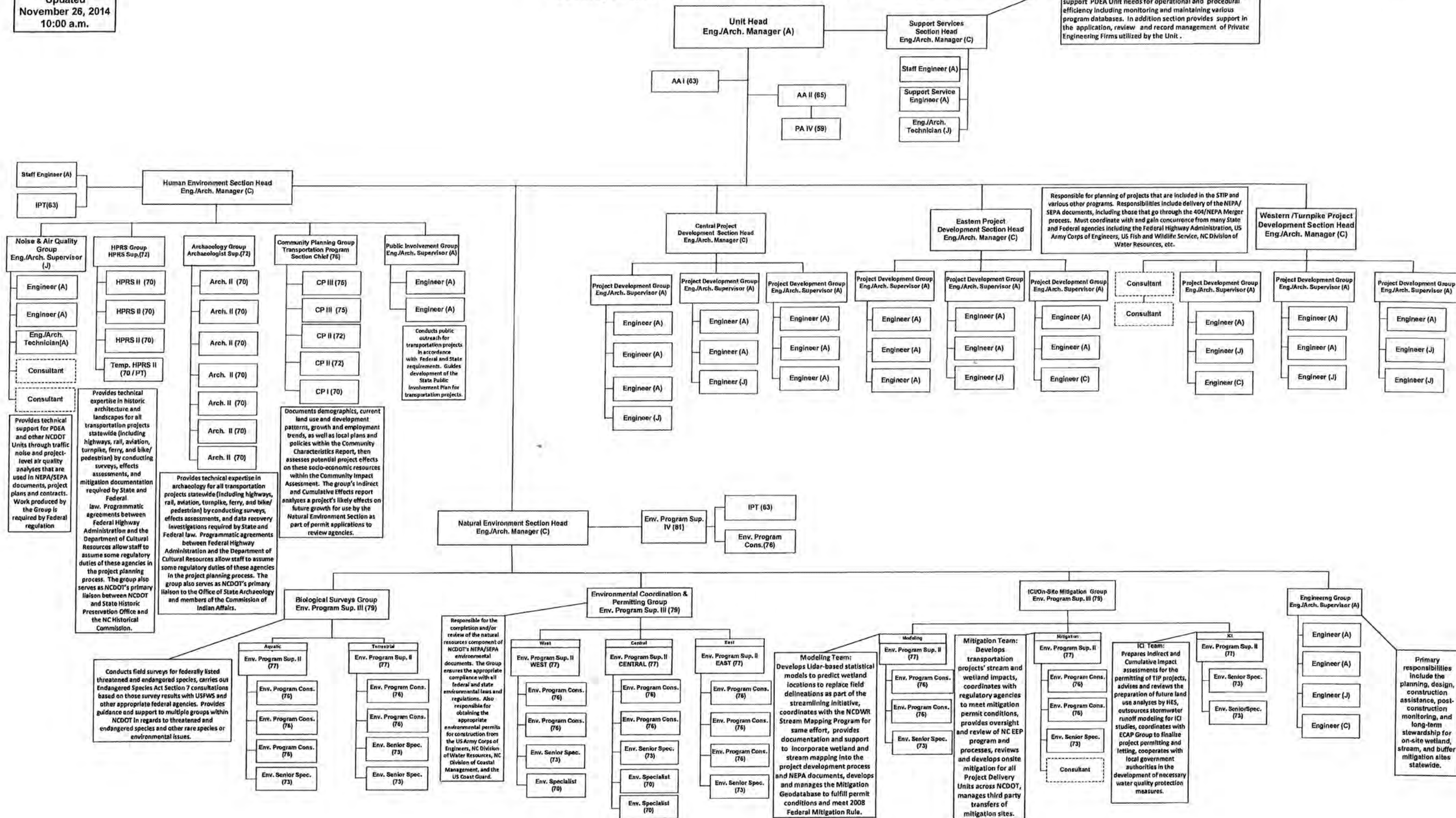
(5) FEMA-MOA:

- Review Hydraulic computer models for bridges and culverts that are located in Federal Emergency Management Agency (FEMA) flood hazard areas to ensure compliance with the National Flood Insurance Program (NFIP).
- Consult with North Carolina Floodplain Mapping Program on modeling requirements, specifications and policy.
- Issue certifications and notifications to hydraulic design engineers on bridge and culvert designs.
- Revise Flood Insurance Rate Maps for NCDOT projects that result in changes in flood zone as required by NFIP.
- Provide training to design engineers on FEMA policies on Digital Flood Insurance Rate Maps (DFIRM) and modeling techniques.

Updated
November 26, 2014
10:00 a.m.

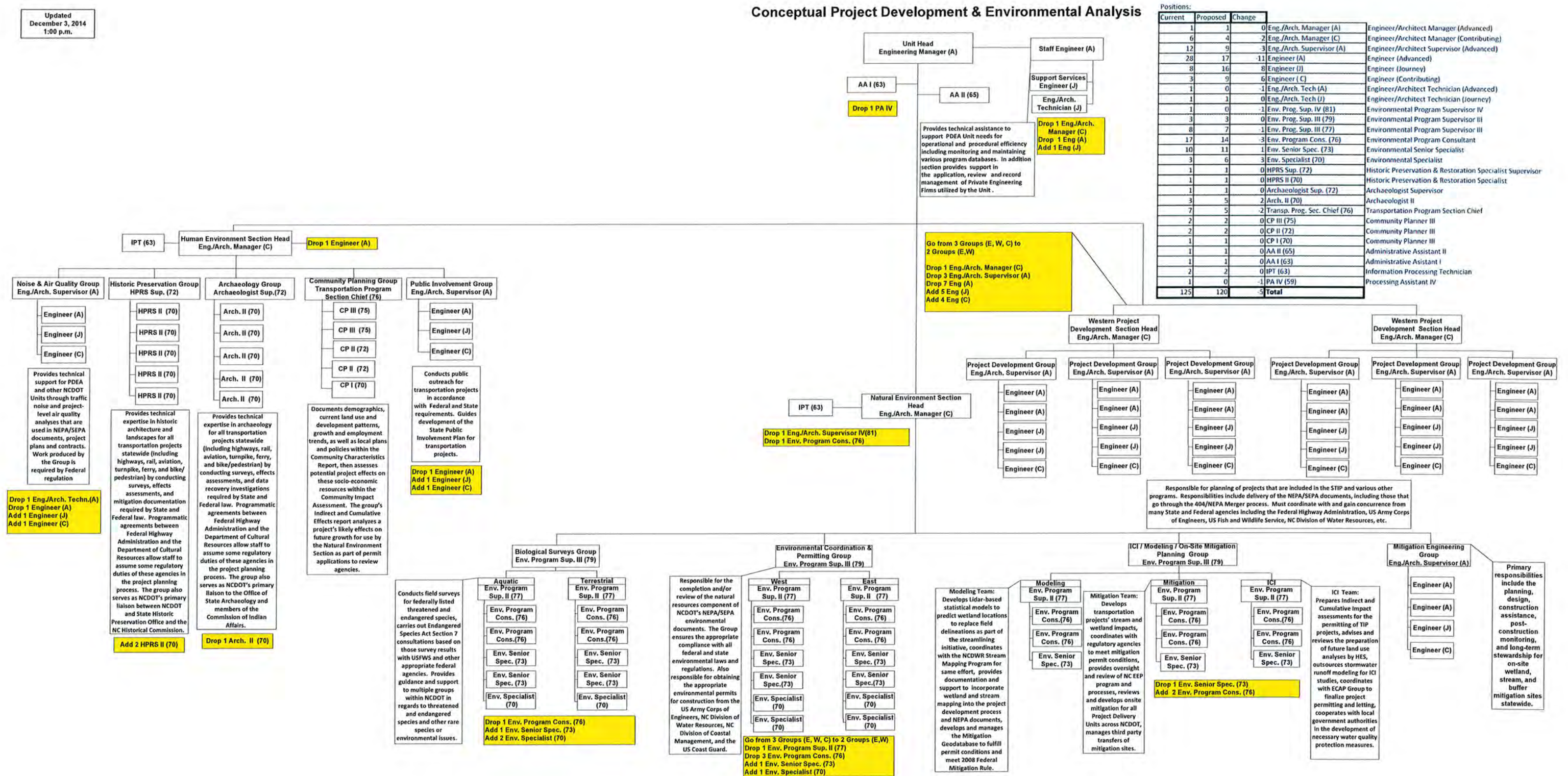
Existing Project Development & Environmental Analysis

Support Service Section (SSS) provides technical assistance to support PDEA Unit needs for operational and procedural efficiency including monitoring and maintaining various program databases. In addition section provides support in the application, review and record management of Private Engineering Firms utilized by the Unit.



Updated
December 3, 2014
1:00 p.m.

Conceptual Project Development & Environmental Analysis

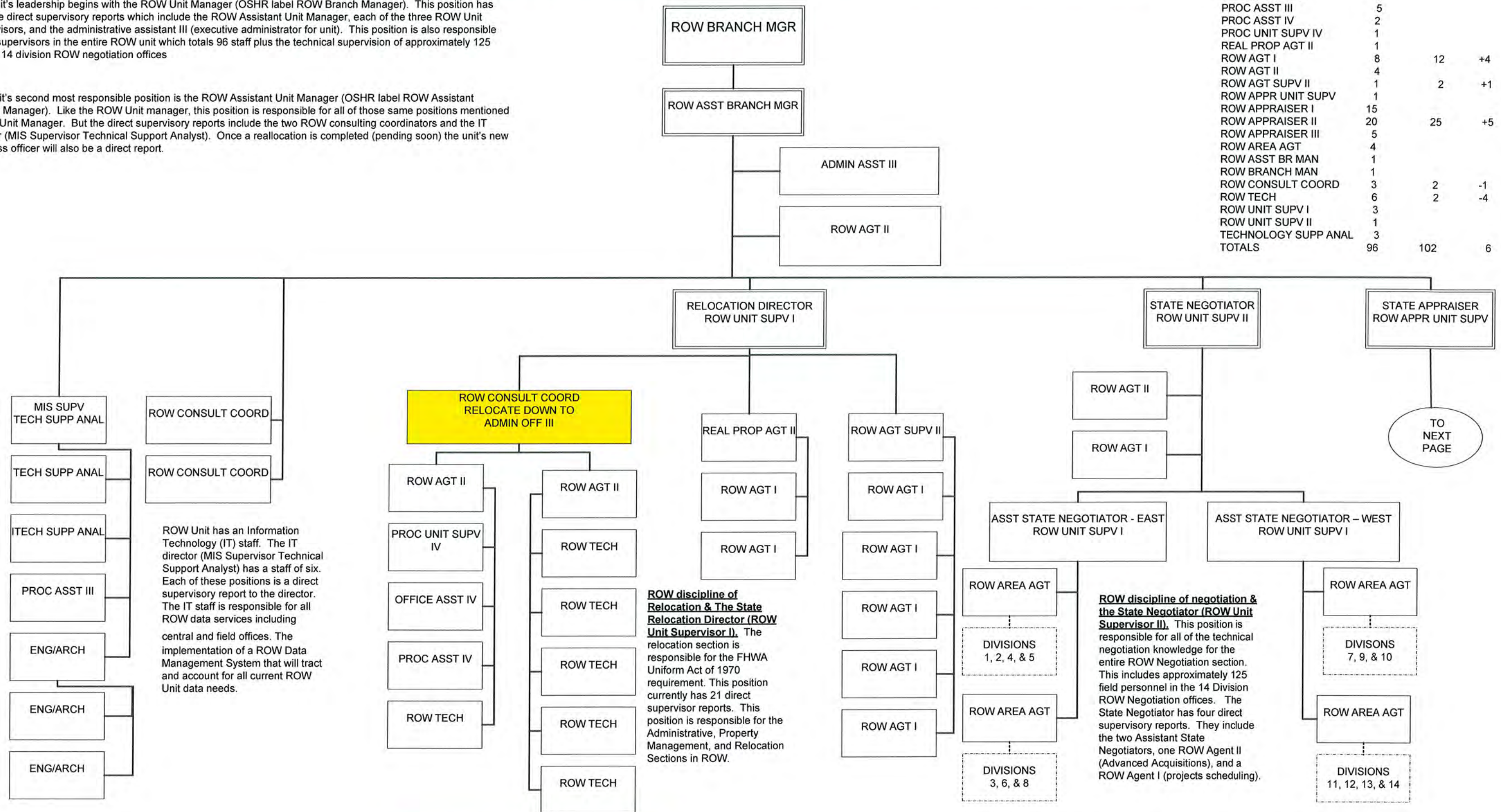


CURRENT 2014 NC DOT'S RIGHT OF WAY UNIT ORGANIZATIONAL CHART

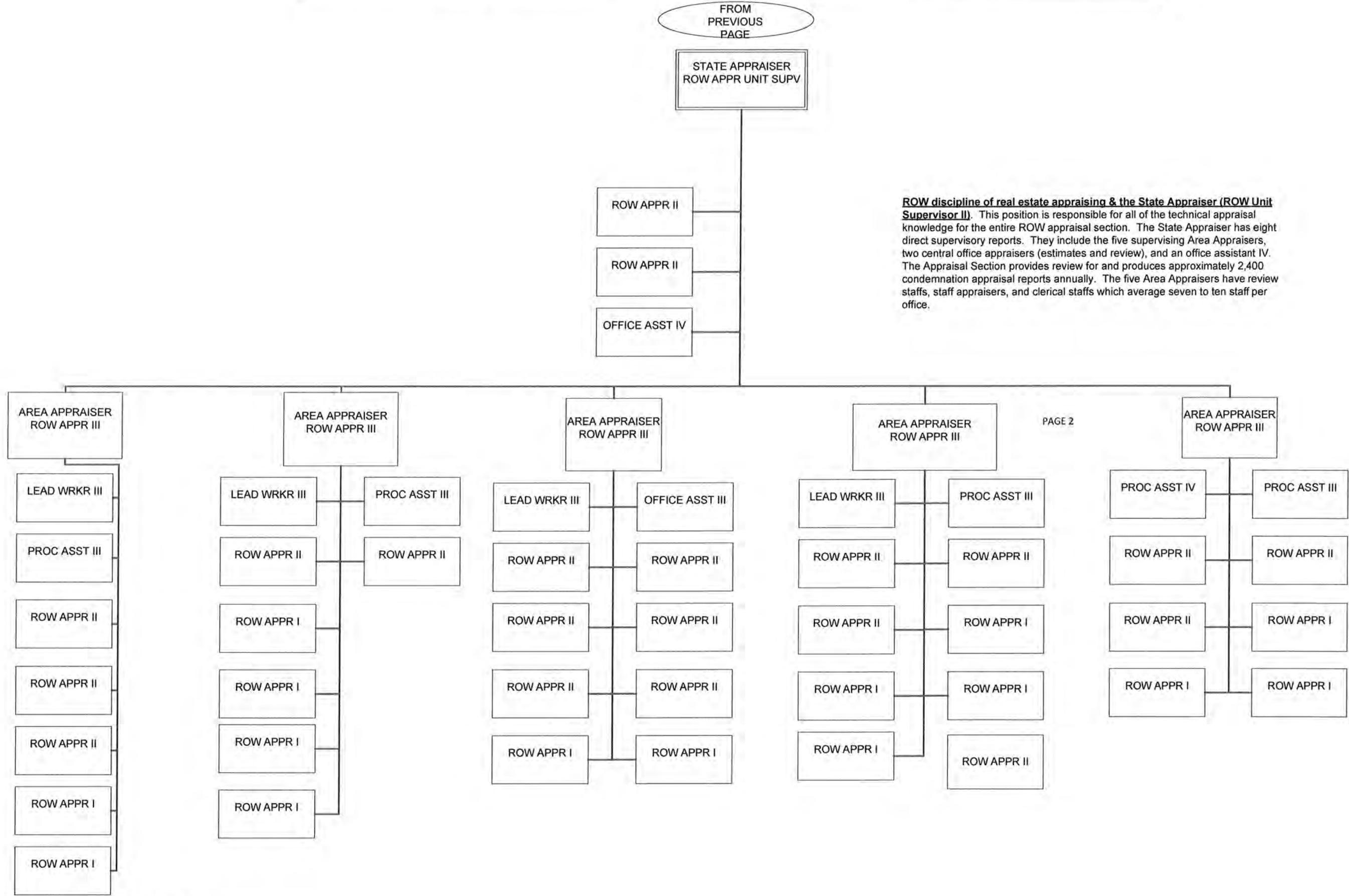
The unit's leadership begins with the ROW Unit Manager (OSHR label ROW Branch Manager). This position has multiple direct supervisory reports which include the ROW Assistant Unit Manager, each of the three ROW Unit Supervisors, and the administrative assistant III (executive administrator for unit). This position is also responsible for all supervisors in the entire ROW unit which totals 96 staff plus the technical supervision of approximately 125 staff in 14 division ROW negotiation offices

The unit's second most responsible position is the ROW Assistant Unit Manager (OSHR label ROW Assistant Branch Manager). Like the ROW Unit manager, this position is responsible for all of those same positions mentioned for the Unit Manager. But the direct supervisory reports include the two ROW consulting coordinators and the IT director (MIS Supervisor Technical Support Analyst). Once a reallocation is completed (pending soon) the unit's new business officer will also be a direct report.

POSITION CHART		D-1	
POSITION DESCRIPTION	CURRENT	REVISED	CHANGED
ADMIN ASST III	1		
ADMIN OFFICER III	0	1	+1
ENGINEERING/ARCHITEC	3		
LEAD WRKR III	4		
OFFICE ASST III	1		
OFFICE ASST IV	2		
PROC ASST III	5		
PROC ASST IV	2		
PROC UNIT SUPV IV	1		
REAL PROP AGT II	1		
ROW AGT I	8	12	+4
ROW AGT II	4		
ROW AGT SUPV II	1	2	+1
ROW APPR UNIT SUPV	1		
ROW APPRAISER I	15		
ROW APPRAISER II	20	25	+5
ROW APPRAISER III	5		
ROW AREA AGT	4		
ROW ASST BR MAN	1		
ROW BRANCH MAN	1		
ROW CONSULT COORD	3	2	-1
ROW TECH	6	2	-4
ROW UNIT SUPV I	3		
ROW UNIT SUPV II	1		
TECHNOLOGY SUPP ANAL	3		
TOTALS	96	102	6



CURRENT 2014 NC DOT'S RIGHT OF WAY UNIT ORGANIZATIONAL CHART



NC DOT'S RIGHT OF WAY UNIT ORGANIZATION CHART

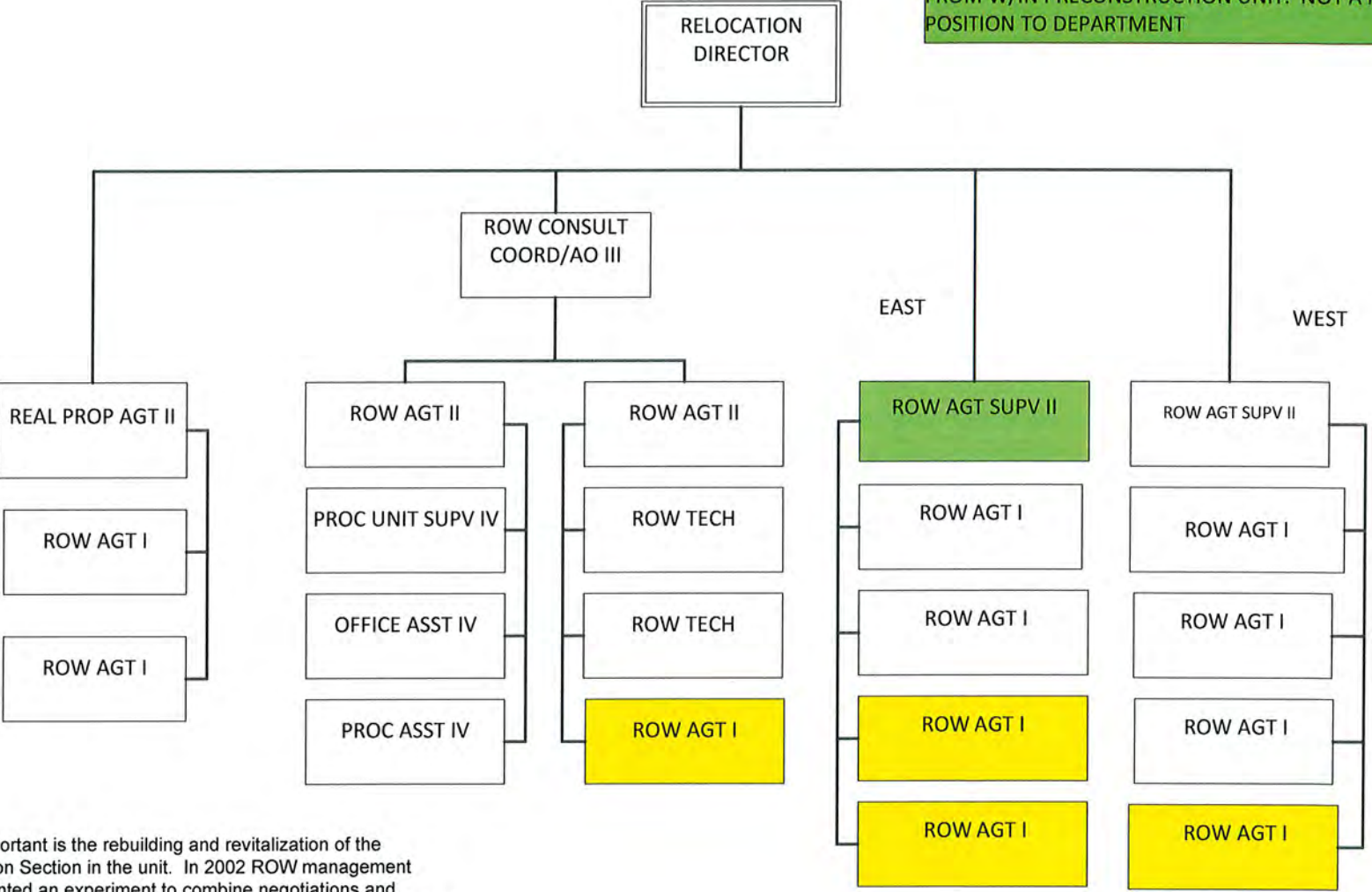
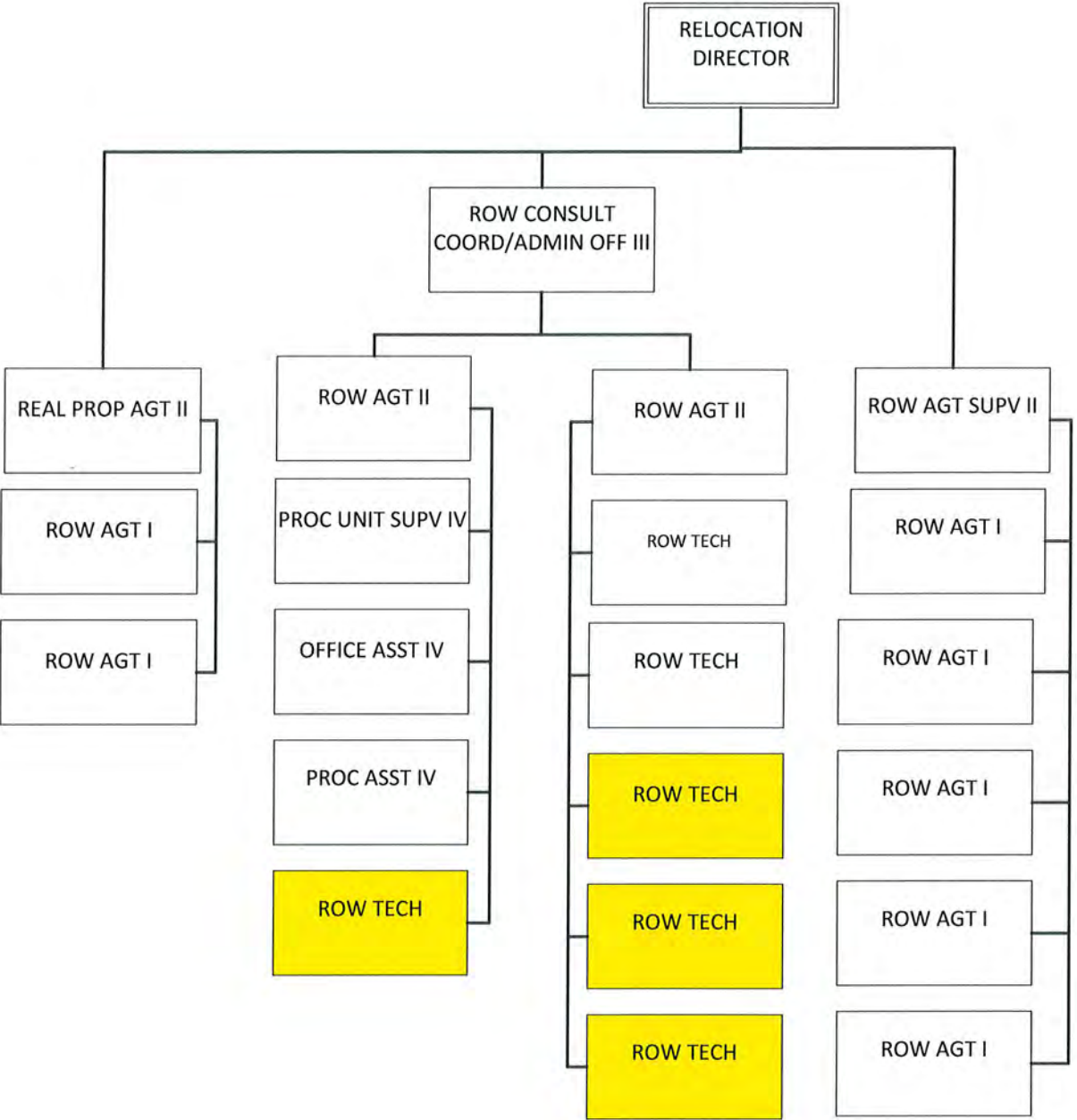
Future Right of Way Unit Organization
Structure D-3

CURRENT 2014 NCDOT'S RIGHT OF WAY UNIT (RELOCATION SECTION)

FUTURE CHANGES IN RIGHT OF WAY UNIT (RELOCATION SECTION)

FILL COLOR – ANY RELOCATED CHANGE UP OR
DOWN

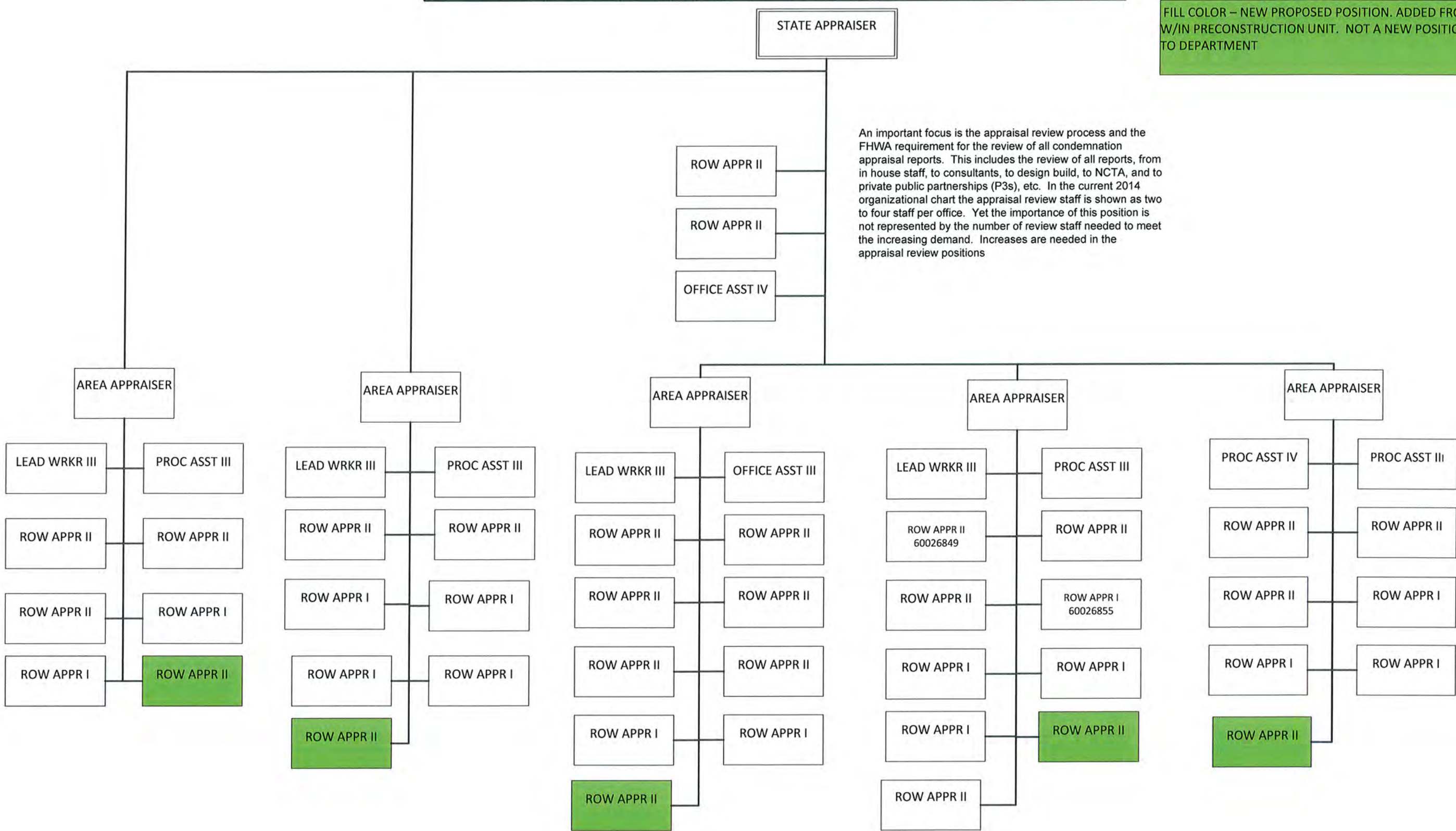
FILL COLOR – NEW PROPOSED POSITION. ADDED
FROM W/IN PRECONSTRUCTION UNIT. NOT A NEW
POSITION TO DEPARTMENT

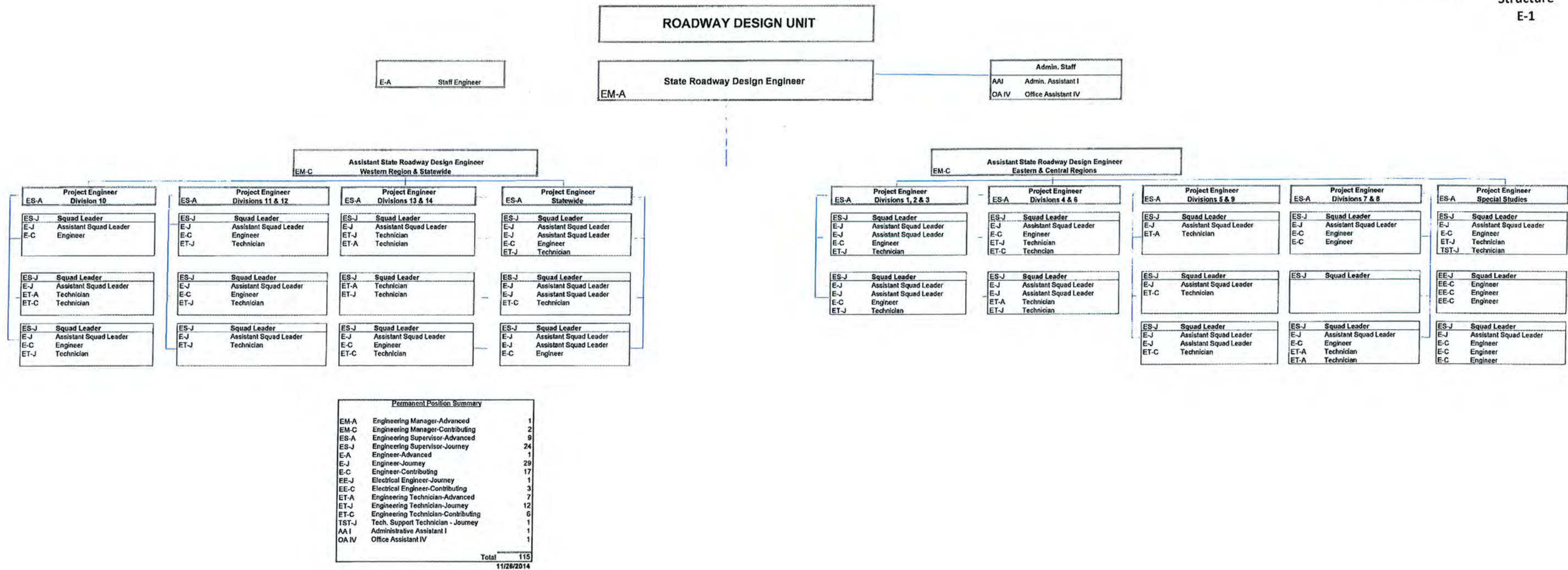


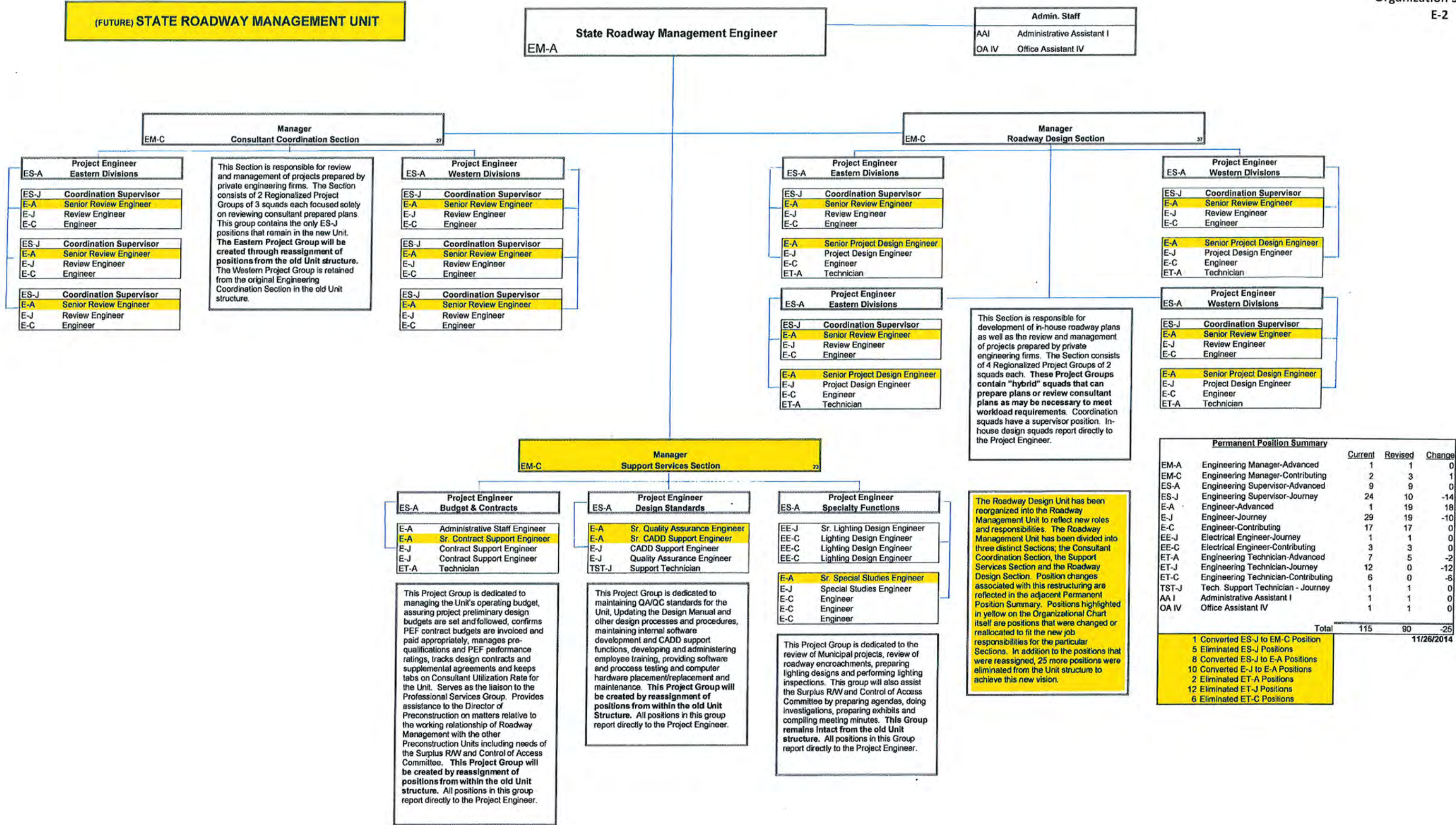
Very important is the rebuilding and revitalization of the Relocation Section in the unit. In 2002 ROW management implemented an experiment to combine negotiations and relocation disciplines into a single agent position. As a result the relocation discipline was negatively affected. The result was a noticeable decline in the knowledge levels and processing quality of relocation claims statewide. For the last 12 years the experience and the staff numbers have declined. With the cited importance of the FHWA requirement, this skilled discipline needs additional staffing increases to meet future experience requirements.

FUTURE CHANGES IN RIGHT OF WAY UNIT (APPRAISAL SECTION)

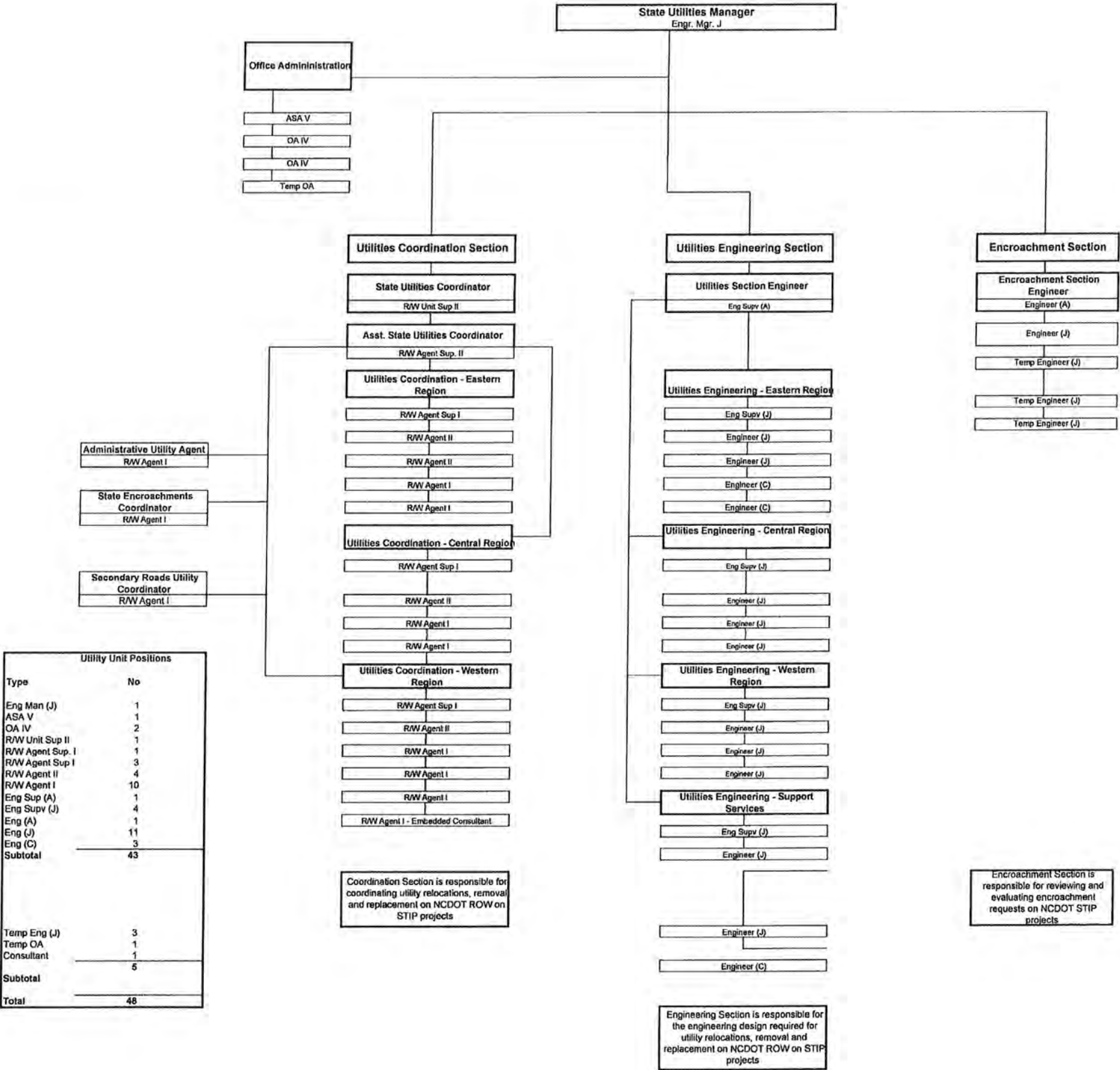
FILL COLOR – NEW PROPOSED POSITION. ADDED FROM W/IN PRECONSTRUCTION UNIT. NOT A NEW POSITION TO DEPARTMENT



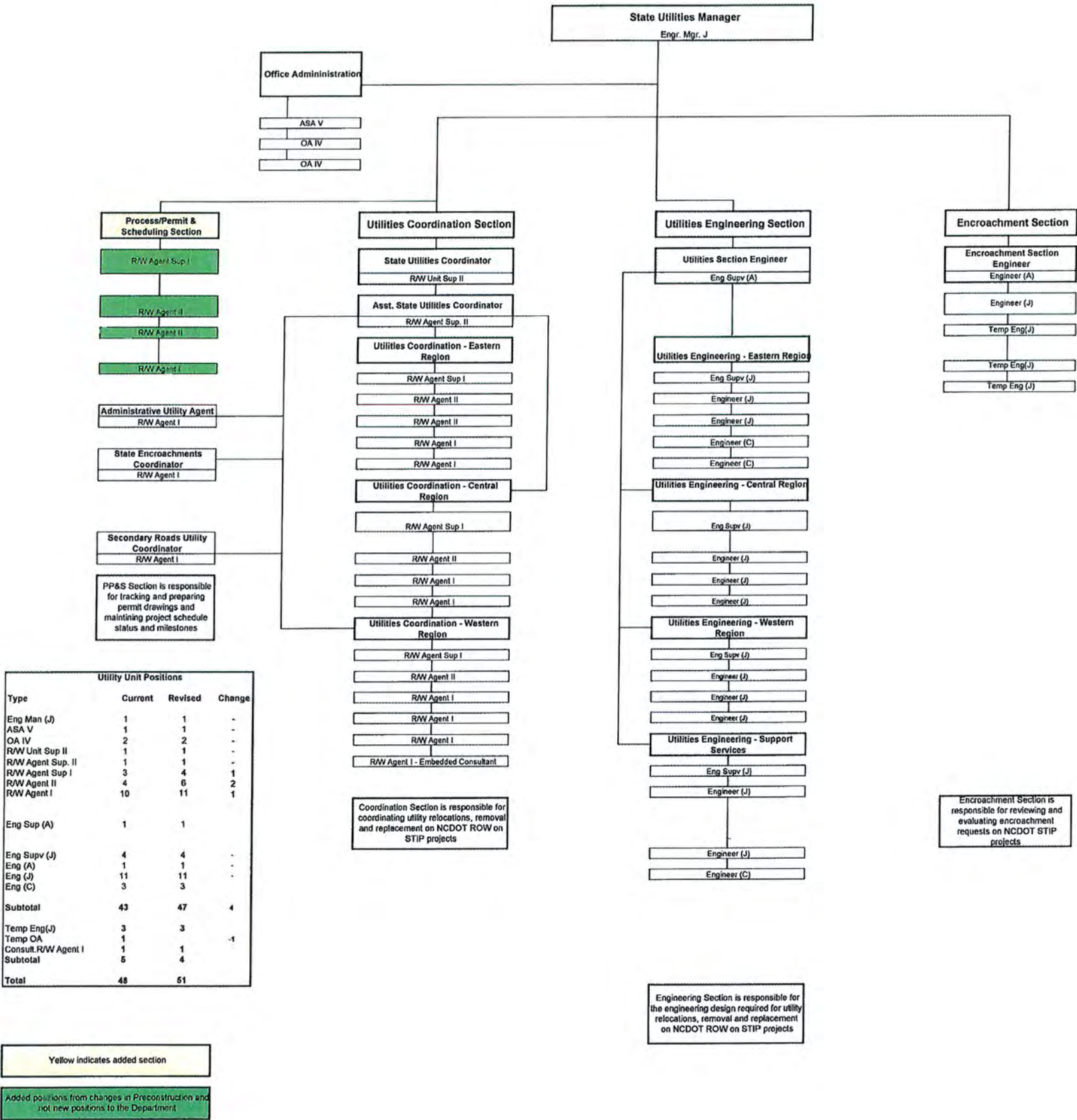


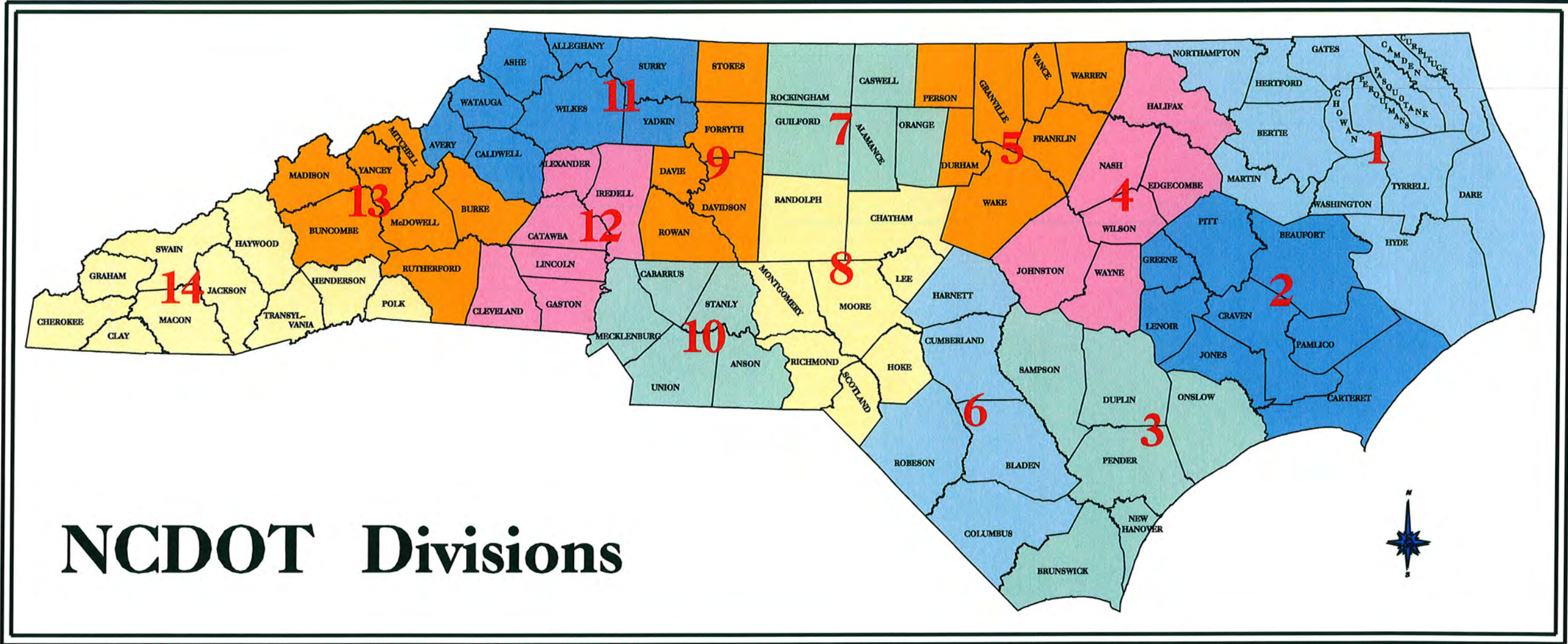


Utilities Unit-Existing



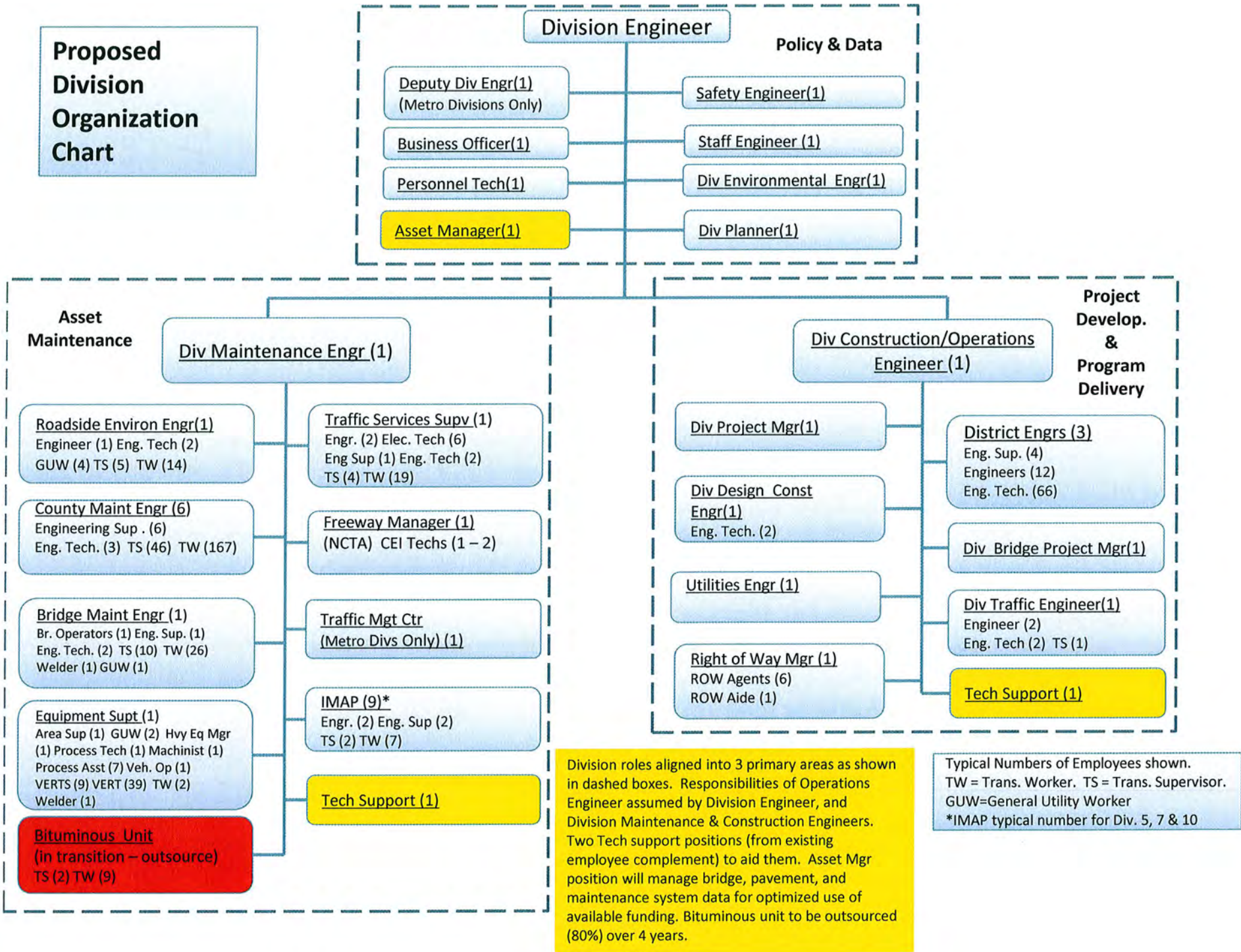
Utilities Unit - Future





NCDOT Divisions

**Proposed
Division
Organization
Chart**



Division Data

Table 1

Division	Total DOT Positions	Rank	Division Area Sq. Miles	Rank	Population	Rank	Interstate Lane Miles *	Rank	Total Pavement Lane Miles	Rank	Unpaved Road Miles	Rank	# of Bridges	Rank	Area of Bridges (SF)	Rank	Maint Budget (3 yr Avg.)	Rank	Snow & Ice Expenditures (3yr Avg.)	Rank	Current Active Projects Value (in \$M)	Rank	# of Traffic Signals **	Rank	Rest Areas	Rank
1	555	6	4572	1	263,605	14	0	13	10198	12	333	4	567	14	9,984,105	2	\$ 67,678,282	14	\$ 1,351,451	11	\$ 312	7	271	13	7	1
2	530	9	4168	3	498,612	11	0	13	10269	11	268	7	621	13	7,178,608	5	\$ 68,222,570	13	\$ 1,112,872	13	\$ 97	14	258	14	3	8
3	526	10	4434	2	691,214	6	348	9	11770	6	122	14	646	12	6,657,750	7	\$ 80,661,373	5	\$ 1,062,889	14	\$ 554	3	324	9	3	8
4	557	4	3480	7	587,369	8	635	4	13480	3	133	12	957	5	6,674,889	6	\$ 81,634,412	4	\$ 2,236,839	8	\$ 222	9	472	5	7	1
5	643	1	3220	9	1,451,414	1	797	2	14237	1	316	6	1038	4	10,189,002	1	\$ 92,026,239	1	\$ 2,959,995	6	\$ 349	6	481	3	3	8
6	522	12	4008	6	680,254	7	450	8	12801	4	251	9	726	11	4,919,003	13	\$ 77,378,783	8	\$ 1,316,593	12	\$ 423	5	317	10	3	8
7	525	11	2460	11	908,955	3	861	1	11570	7	261	8	952	6	7,505,869	4	\$ 82,422,048	3	\$ 4,799,780	4	\$ 879	1	343	8	3	8
8	536	7	4095	4	519,117	9	315	10	13944	2	325	5	911	9	5,882,884	11	\$ 78,348,283	6	\$ 1,581,618	10	\$ 154	12	428	6	2	14
9	455	14	2184	14	747,941	4	630	5	10757	10	181	11	779	10	6,480,423	9	\$ 70,202,947	12	\$ 4,565,054	5	\$ 430	4	312	11	4	7
10	557	4	2445	12	1,441,587	2	756	3	11141	8	125	13	947	8	8,129,142	3	\$ 84,451,192	2	\$ 2,824,626	7	\$ 854	2	474	4	3	8
11	590	2	3316	8	372,794	12	200	12	10910	9	778	1	1307	3	4,114,423	14	\$ 71,935,736	11	\$ 9,716,822	1	\$ 163	11	287	12	5	5
12	479	13	2352	13	741,919	5	474	7	12659	5	203	10	948	7	5,898,014	10	\$ 78,134,382	7	\$ 2,131,838	9	\$ 252	8	548	1	5	5
13	534	8	3155	10	502,926	10	502	6	10137	13	360	3	1584	1	6,582,136	8	\$ 73,291,170	10	\$ 9,471,352	2	\$ 219	10	495	2	6	3
14	587	3	4040	5	357,522	13	267	11	9354	14	570	2	1563	2	5,021,992	12	\$ 73,537,337	9	\$ 7,101,508	3	\$ 121	13	357	7	6	3
weight ranks		5%		6%		5%		10%		16%		6%		8%		8%		11%		6%		9%		6%		4%
Average	543		3424		697,516		445		11659		302		968		6,801,303		\$ 77,137,482		\$ 3,730,946		359		383		4	

Table 1 Weighted Average Rank	Table 2 Weighted Average Rank
9.5	9.4
10.7	10.5
7.7	8.2
5.6	6.8
3.3	6.3
8.2	7.2
5.3	4.4
7.5	7.3
8.9	5.2
5.6	6.2
8.4	9.8
7.4	6.6
7.4	8.1
8.6	8.9

further review needed

* 30 lane miles of interstate in Division 1 (Northampton) shown in Division 4 since they maintain it.
** Signals maintained by DOT forces. Excludes signals maintained by cities for DOT by agreement.

Division Data

(***Numbers Shown are per each Division position except Bridges, Maint. Budget, Active Projects & Signals ***)

Table 2

Division	Total DOT Positions	Rank	Division Area Sq. Miles	Rank	Population	Rank	Interstate Lane Miles	Rank	Total Pavement Lane Miles	Rank	Unpaved Road Miles	Rank	# of Bridges	Rank	Area of Bridges (SF)	Rank	Maint Budget (3 yr Avg.)	Rank	Snow & Ice Expenditures (3yr Avg.)	Rank	Current Active Projects Value (in \$M)	Rank	# of Traffic Signals **	Rank	Rest Areas	Rank
1	555	6	8.2	2	475	14	0.0	13	18.4	13	0.6	5	14.2	14	249603	4	\$ 165,878	14	\$ 2,435	12	4.5	5	67.8	7	0.013	1
2	530	9	7.9	3	941	11	0.0	13	19.4	10	0.5	6	14.4	13	166944	8	\$ 173,154	11	\$ 2,100	13	2.0	13	43.0	13	0.006	11
3	526	10	8.4	1	1314	6	0.7	9	22.4	6	0.2	13	17.9	12	184938	6	\$ 229,804	5	\$ 2,021	14	3.9	7	40.5	14	0.006	10
4	525	11	6.2	7	1055	8	1.1	5	24.2	4	0.2	12	23.9	10	166872	9	\$ 237,309	4	\$ 4,016	9	3.0	10	94.4	1	0.013	2
5	643	1	5.0	10	2257	2	1.2	4	22.1	7	0.5	8	31.5	4	308758	2	\$ 213,518	8	\$ 4,603	7	4.3	6	48.1	12	0.005	13
6	522	12	7.7	4	1303	7	0.9	8	24.5	3	0.5	9	23.4	11	158678	11	\$ 217,968	6	\$ 2,522	11	5.0	3	63.4	9	0.006	8
7	536	7	4.7	13	1731	3	1.6	1	22.0	8	0.5	7	41.4	1	326342	1	\$ 279,397	2	\$ 9,142	5	6.9	1	85.8	3	0.006	9
8	557	4	7.6	5	969	9	0.6	10	26.0	2	0.6	4	24.6	9	158997	10	\$ 216,432	7	\$ 2,951	10	2.6	12	85.6	4	0.004	14
9	557	4	4.8	12	1644	4	1.4	2	23.6	5	0.4	11	31.2	5	259217	3	\$ 273,163	3	\$ 10,033	4	4.7	4	62.4	10	0.009	6
10	590	2	4.4	14	2588	1	1.4	3	20.0	9	0.2	14	28.7	8	246338	5	\$ 310,482	1	\$ 5,071	6	5.1	2	67.7	8	0.005	12
11	479	13	5.6	9	632	12	0.3	12	18.5	12	1.3	1	29.7	6	93510	14	\$ 170,869	12	\$ 16,469	2	3.3	9	57.4	11	0.008	7
12	455	14	4.9	11	1549	5	1.0	6	26.4	1	0.4	10	28.7	7	178728	7	\$ 211,174	9	\$ 4,451	8	3.5	8	91.3	2	0.010	4
13	534	8	5.9	8	942	10	0.9	7	19.0	11	0.7	3	33.0	3	137128	12	\$ 169,264	13	\$ 17,737	1	2.8	11	82.5	5	0.011	3
14	587	3	6.9	6	609	13	0.5	11	15.9	14	1.0	2	36.3	2	116791	13	\$ 178,489	10	\$ 12,098	3	1.5	14	71.4	6	0.010	5
Average	543		6		1286		1		22		1		27		196632		\$ 217,636		6832		4		69		0	

Table 2 Weighted Average Rank
9.4
10.5
8.2
6.8
6.3
7.2
4.4
7.3
5.2
6.2
9.8
6.6
8.1
8.9

*** Bridge values are divided by "hands on" bridge employees per division
Maintenance Budget is divided by # of maintenance/operations employees in each division
Value of active projects is broken down by division construction technicians + current consultant technicians
Traffic signals are divided by # of electronic signal technicians