

DEVELOPING FLEXIBLE SEQUENCES OF CONSTRUCTION

Laura Ridler, P.E. Deputy Director MDOT SHA Office of Highway Development

February 18, 2020



QUALITY ASSURANCE DIVISION

- QAD must enforce the approved ESC plans
- Contractor changes require a field modification request, review, and approval
- 1,000 Field Modification requests in 2019
- SOC's are dictating contractor methods and means
- MDOT SHA and designers are accepting risk that should belong to the contractor





PG1065184, 17-PR-0087 PROJECT OVERVIEW



PG1065184 17-PR-0087 ORIGINAL + SOC

EROSION AND SEDIMENT CONTROL - GENERAL NOTES

SEQUENCE OF CONSTRUCTION

- NOTIFICATION OF SHA'S REGIONAL ENVIRONMENTAL COORDINATOR (REC) AT 410-365-0164 A MINIMUM OF SEVEN (7) DAYS IN ADVANCE OF ANY EARTH DISTURBANCE ACTIVITY TO SCHEDUL & PRE-CONSTRUCTION METRING.
- 2. CLEAR AND GRUB AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS:
- 3. CONSTRUCTION AND STABILIZATION OF PERIMETER CONTROLS:
- 4. CLEAR AND GRUB REMAINING AREAS WITHIN INSTALLED PERIMETER CONTROLS;
- 5. INSTALATION OF INTERIOR SEDIMENT CONTROL MEASURES:
- 6. ROAD GRADING:
- 7. GRADING FOR THE REMAINDER OF THE SITE:
- 8. UTILITY INSTALLATION AND CONNECTIONS TO EXISTING STRUCTURES;
- 9. CONSTRUCTION OF ROADS AND OTHER FEATURES:
- 10. FINAL GRADING, LANDSCAPING, AND STABILIZATION:
- 11. PROGRESSION TO A SUBSEQUENT PHASE OF CONSTRUCTION:
- 12. INSTALATION OF STORMWATER MANAGEMENT MEASURES
- APPROVAL OF SHA'S REGIONAL ENVIRONMENTAL COORDINATOR (REC) PRIOR TO REMOVAL OF SEDIMENT CONTROLS:
- 14. REMOVAL OF CONTROLS AND STABILIZATION (TURFGRASS SOD) OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT CONTROLS, AND
- 15. FINAL SITE SURVEY AND AS-BUILT SUBMISSION IN ACCORDANCE WITH SHA AS-BUILT DIRECTIVE.

PHASE I (RUNOFF WILL BE PERMITTED IN THE PIPES UPON THE INSTALLATION OF THE SPECIFIED EROSION & SERMENT CONTROL MEASURES.)

- NOTIFY SHA'S REGIONAL ENVIRONMENTAL COORDINATOR (410-365-0164) AT LEAST 7 DAYS
 PRIOR TO THE START OF THE CONSTRUCTION TO ARRANGE PRE-CONSTRUCTION MEETING.
- NOTIFY THE REGIONAL ENVIRONMENTAL COORDINATOR (REC), INSPECTION AND COMPLIANCE PROGRAM (410)537-3510 AT LEAST 5 DAYS PRIOR TO STARTING THE WORK.
- CONTRACTOR SHALL STAKEOUT LOD AND INSTALL TRUE PROTECTION FENCE (TEMPORARY ORANGE CONSTRUCTION FENCE (TOC')) WHERE NOTED.
- 4. PERFORM TREE ROOT PRUNING PRIOR TO ANY CLEARING AND GRUBBING ACTIVITIES.
- CONTRACTOR IS REQUIRED TO BRING A PORTARI E WASH OUT UNIT TO THE SITE EACH DAY SO.
 THAT THE CONCRETE TRUCKS WASH OUT BEFORE LEAVING THE PROJECT SITE.
- 6. CLEAR AND GRUE FOR PLACING PERINETER ERS CONTROLS. INSTALL ALL DIVERSION FENCE (DF), SIT FENCE (SF), RIPRAP OUTFALL PROTECTION (SOP), TEMPORARY ASPHALT BERMS (TAB), AND TEMPORARY PIPE DIVERSIONS AS SHOWN ON THE PHASE, I PLANS, DRAWING NO. EST-OT THAU B3-16. INSTALL INLET PROTECTION AT EXISTING INLETS AS SHOWN ON THE PLANS AND AFTER CONSTRUCTING NEW INLETS AS SHOWN. INSTALLATION OF PERIMETER CONTROLS MAY BE BROKEN DOWN BY SECTION OF WORK WITH THE APPROVAL OF SHAS REGIONAL ENVIRONMENTAL COORDINATOR. STRAILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDMENT CONTROL OF THE PLANS OF THE END OF EACH WORK.
- 7. (ESS-01) INSTALL PIER AS SHOWN FROM STA 104-54 AT TO 108-64 RT, AND STRUCTURES MH-1/1,1-72,1-5/1,1-11/1, AND 1-2/1 CENTRUCTING FROM DOWNSTREAM TO UPSTREAM, CONSTRUCT THE FULL DIPTH PAYEMENT AND NEW SDEWALK ENHANCEMENTS AS SHOWN. STABLUZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDIMENT CUNHISLU SEWED.
- 8. (ESI-OZTO ESI-OA) RISTALL PIRE A 5 HOWN FROM STA 120HOR RT TO 128HOR RT, AND STRUCTURES 1-74, 1-773, 1-473, 1-473, 1-472, 1-722, 1-752,

- 9. [ES1-05 TO ES1-07] INSTALL TEMPORARY 18' CMP TO DIVERT RUNOFF FROM EXISTING MAINOLE AT ST. 12-00 LT TO THE EXISTING INLET AT ST. 133-25 LT INSTALL DIREAS SHOWN FROM STA 124-100 RT TO 133-26 RT, AND STRUCTURES 1-3/5, 1-1/5, 1-8/5, 1-1/6, 1-1/6, 1-1/7, 1-2/7, AND MH-3/5 CONSTRUCTING FROM DOWNSTREAM TO UPSTREAM. BLOCK 1-1/15 UNTIL ALL AREAS DRAINING TO 1-1/5 AND 6-2/7 ARE STABILIZED. CONSTRUCT THE FULL DEPTH PAYEMENT AND NEW SIDEWALK ENHANCEMENTS AS SHOWN. STABILIZE AND DISTURBED AREA AT THE END OF EACH WORK DAY THAT ODES NOT RUSW TO A SEMINARY CONTROL DAY.
- 10. (ES.1-09 TO ES.1-08) INISTALL PIPE AS SHOWN FIROM STA 138-46 RT TO 137-49 RT, AND STRUCTURES ES-1/R, MH-3/R, 1-4/7, 1-5/7 CONSTRUCTING FROM DOWNSTREAM TO JPSTREAM. CONSTRUCT THE NEW SIDEWALK ENHANCEMENTS AS SHOWN. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAYTHAT DOES NOT FLOW TO A SEDIMENT CONTROL DEVICE.
- 11. [EST-08 TO EST-51] INSTALL PIPE AS SHOWN FROM STA 188-22 RT TO 151-00 RT ALONG WITH STRUCTURES 1-J12, MH-1/20, M-1-Z/08, 1-Z/01 0-J-20, 1-Z/01, 1-Z/01, 1-Z/01, 1-Z/01, 1-Z/01, 1-Z/01, I-Z/01, I-Z/01,
- 12. (E51-11 TO E51-12) INSTALL PIPE FROMSTATION 151-93 BT TO STATION 156-58 BT, AND STRUCTURES 16/12, Po/11, F-1/13, F-1/11, F-1/11, Pil-1/11, Pil-1/11, Pil-1/11, Pil-1/11, Pil-1/11 CONSTRUCTING FROM DOWNSTREAM TO UPSTREAM. CONSTRUCT THE NEW SIDEWALK ENHANCEMENTS AS SHOWN. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDIMENT CONTROL DEVICE.
- 13. (SS-12 TO SS-1-3) INSTALL PIPES AS HOWN FROM STA 157-78 RT TO 160-89 RT, AND INJETS 1-3/12, 1-5/21, 2-103, AND INJETS 1-3/12, 5-12, 1-203, AND INJETS 1-3/12, 1-2/32, AND CONNECTING PIPES SHALL BE CONSTRUCTED FIRST AND THEN STABILIZE DISTURBED AREA BLOCK F-1/31 LNTL AREAS DOWNING TO TO 1-2/13 ARE STABILIZED. CONSTRUCT THE FULL DEPTH PAVEMENT AND NEW SIDEWALK ENHANCEMENTS AS SHOWN. STABILIZE AND DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT RUDW TO A SEDIMENT CONTROL DEVICE.
- 34. (85:1-3) TO (\$51-5). CONSTRUCT 1-5/15 AND INSTALL DIVERSION PIPE AT 171-92 AND 172-89 RT AS SHOWN ON PLANS. INSTALL PIEF AS SHOWN FIRMOM STA 164-68 RT TO 174-96 RT, AND STRUCTURES 1-5/13, MH-1/13, 1-5/14, 2/14, MH-3/14, 1-3/14, 1-2/15, MH-1/15, 1-3/15, CONSTRUCTING FROM DOWNSTREAM TO JUPSTREAM. CONSTRUCT THE RULL DEPTH PAVEMENT NEW SIDEWAIX EMMANDEMENTS AS SHOWN. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAYTHAT DOES NOT FLOW TO A SEDIMENT CONTROL.
- (ES1-16) CONSTRUCT THE NEW SIDEWALK ENHANCEMENTS AND ADA CURB RAMP ASSHOWN.
 STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT ODES NOT FLOW TO A SEDIMENT DEVICE.
- 16. CLEAN EXISTING INLETS AND PIPES WITHIN LOD PER DETAIL ON ES2-16.
- REMOVE EROSION CONTROLS ONCE CONSTRUCTION IS COMPLETE ALONG THE SOUTHWEST SIDE OF THE PROJECT, WHEN ALL AREA ARE STABILIZED AND WITH THE APPROVAL OF THE REC INSPECTOR. STABILIZE ANY REMAINING AREAS DISTURBED WITH REMOVAL OF SEDIMENT CONTROL MEASURES.
- UPON STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH WRITTEN APPROVAL. FROM (REC), PROCEED TO PHASE II CONSTRUCTION.

<u>FHASE II</u> (RUNOFF WILL BE PERMITTED IN THE FIPES UPON THE INSTALLATION OF THE SPECIF ED IBROSION & SEDIMENT CONTROL MEASURES.)

- NOTIFY SHA'S REGIONAL ENVIRONMENTAL COORDINATOR (410-365-0164) AT LEAST 7 DAYS PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL STAKEOUT LOD AND INSTALL TREE PROTECTION FENCE (TEMPORARY ORANGE CONSTRUCTION FENCE (TOC+) WHERE NOTED.
- 3. PERFORM TREE ROOT PRUNING PRIOR TO ANY CLEARING AND GRUBBING ACTIVITIES.
- CONTRACTOR IS REQUIRED TO BRING A PORTABLE WASH OUT UNIT TO THE SITE EACH DAY SO THAT THE CONCRETE TRUCKS WASH OUT BEFORE LEAVING THE PROJECT SITE.
- 5. CLEAR AND GRUB FOR PLACING PERINETER EAS CONTROLS. INSTALL DIVERSION SPICE [DF], SILT FENCE (SF), RIPRAP DUTFALL PROTECTION (ROP), AND TEMPORARY ASPHALT BE IMAS (TAB) AS SHOWN ON THE PLACE, DRAWLING DOLESSON, DEVELOPMENT OF EXISTING INLETS AS SHOWN ON THE RANS AND AFTER CONSTRUCTING NEW INLETS AS SHOWN. INSTALLATION OF PERINETEF CONTROLS MAY BE BROKEN DOWN BY SECTION OF WORK WITH THE APPROVAL OF SHA'S REGIONAL ENVIRONMENTAL COORDINATION, STABLIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDIMENT CONTROL DEVICE.

- 6. IESZ-01 TO ESZ-02] THEE ROOT PRUME FROM STA. 107-00 TO 107-66 IT PROOF TO EXCAVATING TRENCH FOR STORMARIAN PRE INSTALL PREFERROM STA. 104-50 IT TO STA. 109-57 IT AS SHOWN ON PLANS AND STRUCTURES 1-1/2, 1-1/1, 1-5/1, 1-8/1, 1-6/1, 1-10/2, 1-9/1, AND 1-2/1 CONSTRUCTOR PROOF DOWNSTREAM TO UPSTREAM. CONSTRUCT THE NW SIRVAMX ENHANCEMENTS AS SHOWN. A FIFER SUBJOILINING ROOT ADMINING TO THE STORMANTER MANAGEMENT FACILITIES ARE STABLEED, CONSTRUCT GRASS SWAKE AND MICROGORFERSTION FACILITIES. BUCK OFFOR ACK MUETS FOOWNS INTO STORMWATER MANAGEMENT FACILITIES. UP AND SHOWN ACK MUETS FOR THE STORMARTER SHOWN INTO STORMWATER MANAGEMENT FACILITIES. UP AND STORM ACK MUETS OF TO NEARS IN HIETS DURING GRADING ACTIVITIES. SHABULIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FROW TO A 59 DOMNS TO STORM TO SERVE.
- 7. IESZ-02 TO ESZ-081 INSTRUL INSTRUCT INSTRUCTION TO THE REMAINING PIPE CONNECTING TO MH-4/2, THE TEMPORARY SIZ "OWNERSON PIPE AND PIPE CONNECTING EN./2 TO MH-1/2 TO TEMPORARILY DIVERT DRAINING FROM INITE EN./2, BUCK F-1/2 DIVITE ALL AREA: ORAINING TO F-1/2 ARE STABILIZED. INSTALL PIPE AS SHOWN INFORM STALL 12-67 INTO 12-9-1711, AND STRUCTURES F-1/2, 1-9/2, IN-1/2, IN-1/2, IN-1/3, IN-1/3, IN-1/3, IN-3/3, IN-1/2, IN-3/3, IN-1/2, IN-3/3, IN-1/2, IN-3/3, IN-3/3, IN-1/2, IN-3/3, IN-1/2, IN-3/3, IN-3/3, IN-1/2, IN-3/3, IN-3/3, IN-1/2, IN-3/3, IN-3/3, IN-3/3, IN-3/3, IN-1/2, IN-3/3, IN
- 8. IESZ-04 TO ESZ-06] INSTHUL PIPE AS SHOWN PROM STA 120-29 UT TO 128-01 LT, AND STRUCTURES E-1/4, I-4/A, MEM-14, E/5/, I-1/6, I-2/6, E/2/6, AND E-1/6 CONSTRUCTING FORM OF TO E-1/4 E-2/5, AND E-3/5 MEM E-2/6 E/2/6, E/2/6, AND E-3/5 MEM E-2/6 E/2/6, E/
- IES2 OF TO EE2 07] INSTRUCTIPE AS SHOWN FROM STA 12-100 LT TO 322-R0 LT, AND STRUCTURES F-1/6, 1-5/6, 1-68/6, 1-68/6, 1-4/7A, AND MH-3/6 CONSTRUCTING FROM DOWNSTREAM TO UPSTREAM, BLOCKF-1/6 UNIT ALL AREAS PRAINING TO F-1/6 AME STABILIZED. CONSTRUCT THE NEW SICEWALK ENHANCEMENTS AS SHOWN. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDIMENT CONSTRUCT DEVICE.
- 10. ISS2-07 TO ES2-08I INSTMALE PIPE AS SHOWN FROM STA 1339-24 LT TO 1-04-15 LT, AND INLETS1-677,1-677, 4-67, 1-68, 6-67 CONSTRUCT STORM DRAINS FROM DOWNSTREAM. TO UPSTREAM. CONSTRUCT THE FULL DEPTH PAVEMENT AND NEW SIDEWALK ENHANCEMENTS AS SHOWN. INSTAAL EARTHOURZ 2-07. INSTAAL EARTHOURZ 2-07 INSTAAL EARTHOURZ 2-07
- 11. [ES2-09 TO ES2-10] INSTALL PIPE AND INLETS I-3/10, I-2/10, I-4/9, I-3/9, I-2/9 AND TEMPORARY DIVERSION PIPE AT \$12. L42-99 I. IT CONSTRUCTS STORM DRAINS FROM DOWNSTREAM TO UPSTREAM, CONSTRUCT THE PULL DE'TH PREVNENT AND EWE SDEWALK ENHANCEMENTS AS SHOWN WHICH MAY BE DONE AFTER STORMORAIN CONSTRUCTION DURING PHASE 1. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT RUBY TO A SERIMENT CONTROL DRIVE.
- 12. [ES2-11 TO ES2-12] INSTALL TEMPORARY SAND BAG DIVERSION AT STA. 153-50 LT. INSTALL PIPE AS SHOWN FROM STA. LS1-90 LT TO 156-60 LT, AND STRUCTURES 1-3/11, 1-4/11, 1-4/12, 1-1/12, 1-1/12, INSTALL PIPE AS SHOWN FROM STANDARD STANDARD TO THE STANDARD TO UPSTREAM BLOCK 1-3/12, UNTIL ALL AREAS DRAINING TO 1-1/12 ARE STANDARD. OF THE STANDARD STANDARD STANDARD TO THE WAS UPPERVALKED FROM STANDARD ST
- 13. IESZ-12 TO ESZ-131 INSTIALI TEMPORARY STONE DUTLET STRUCTURE [TSOS-1] AT SIA. 1588-75. LT. INSTIAL PIPE AS SHOWN FROM STA. 1577-71 LT TO 160-61 LT. AND STRUCTURESF-7/13. F-4/23. MH-4/23. F-6/23. MH-4/23. CM-4/23. MH-3/23. CS-2/23. CONSTRUCTURES FROM: DOWNSTREAM TO UPSTREAM. BLOCK F-1/23 LVT. ALL ARRAS DRAINNES TO F-1/3 ARE STABILIZED. CONSTRUCT THE FULL DEPTH ADMINIST LALL ARRAS DRAINNES TO SHOWN STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SEDIMENT CONTROL DEVICE.
- 14. [ES2-13 TO ES2-45] INSTALL PIPE AS SHOWN FROM STA 164+67 LT TO 168+52 LT, AND STRUCTURES 1-4/13, 1-3/13, 1-1/14, Min-4/14, F-1/14, AND 1-4/14 CONSTRUCTING FROM DOWNSTRIAM TO UPSTREAM, BLOCE 1-1/14 UNITI. ALL ARREA DRAINING TO F-1/14- ARE STABILIZED, CONSTRUCT THE NEW SICEWALK ENHANCEMENTS AS SHOWN. STABILIZE ANY DISTURBED AREA AT THE END OF EACH WORK DAY THAT DOES NOT FLOW TO A SED MENT CONSTRUCTION.
- ONCE ALL AREAS ARE STABILIZED, AND WITH THE APPROVAL OF THE REC INSPECTOF, REMOVE THE EROSION AND SEDIMENT CONTROLS AND STABILIZE ANY REMAINING AREAS.



WHERE NO SCE IS PROVIDED, THE CONTRACTOR SHALL DESIGNATE PIECES OF CONSTRUCTION EQUIPMENT THAT SHALL BE ALLOWED WITHIN THE LOD. THE COLUMBIUM SHALL REMAIN WITHIN THE LOD LINTE. THE PROPOSED WORK IS COMPLETED AND SHALL HAVE TREAD/TIMES CLEANED PRIOR TO LEAVING THE



DRAWING NO.

HIGHWAY HYDRAULICS DIVISION

MD 2/2A (POWDER MILL ROAD) FROM PINE STREET TO US 1 (BALTIMORE AVENUE) URBAN RECONSTRUCTION PROJECT

SHEET NO. 100 OF 200

EROSION AND SEDIMENT CONTROL GENERAL NOTES

SCALENTS	_ ADVERTISED DATE_	TUTS/2019 CONTRACT NO. POLICESTER
DESIGNED BY	n	COUNTY PRINCE GEORGE'S
DRWWN BY	LT.	LOGNEE
CHECKED BY	gp.	HORIZONTAL SCALE
MDE/PRD 19-8F-0794 /17-FFI-0087		VEHTICAL SCALE

ESN-02 = 06

PLOTTER: Tuesday August 20, 5019 AT 5010 AM







PG1065184 17-PR-0087 REVISED SOC

EROSION AND SEDIMENT CONTROL - GENERAL NOTES

SEQUENCE OF CONSTRUCTION:

- 1. NOTIFY SHA'S REC PER DWG ESN-01, NOTE 1.
- STANEOUT LOB AND INSTALL TOCT. CLEAR AND GRUB TO INSTALL PERIMETER CONTROLS.
 WHERE TREE ROOT PRUNING IS SPECIFIED, PERFORM TREE ROOT PRUNING CONCURRENTLY
 WITH INSTALLATION OF CONTROLS.
- CLEAR AND GRUB TO INSTALL REMAINING PERIMETER CONTROLS AND INSTALL PERIMETER CONTROLS FOR EACH PHASE PRIOR TO PERFORMING WORK IN THAT PHASE. WORK MAY BE PERFORMED IN AREAS COVERED BY SAME DAY STABILIZATION PRIOR TO INSTALLATION OF PERIMETER CONTROLS AND INDEPENDENTLY OF THE SPECIFIED PHASES.
- CLEAR AND GRUB TO INSTALL ALL REMAINING ESC FOR EACH PHASE PRIOR TO PERFORMING WORK IN THE RESPECTIVE PHASE.
- WORK IN EACH PHASE MAY BE PERFORMED CONCURRENTLY AND IN ANY ORDER. POSITIVE SURFACE RUNGEF AND STORM DRAIN FLOWS MUST BE MAINTAINED, AND THE SPECIFIED CONTROLS MUST BE INSTALLED.
- 6. PRIOR TO CONSTRUCTING SWIM FACILITIES, BMPS 183312, 16530 1,182313, 162314, 162315, 162316, AND BIORETENTION INLET OPENINGS (E.G. F-1-2), PERMANENTLY STABILIZE ALL DISTURBED MEAS BRAINING TO THE SWIM FACILITIES, ENGINE ALL PIETS AND INLETS HAVE BEEN CLEANED, THAT ALL ASSOCIATED DRAINAGE STRUCTURES HAVE BEEN CONSTRUCTED, AND ALL INSETS FLOWING INTO THE SWIM FACILITIES ARE TEMPORABRLY BLOCKED, CONSTRUCT SWIM FACILITIES, PERMANENTLY STABILIZE, AND CONNECT TO STORM DRAIN SYSTEM, UNBLOCKING AMY STRUCTURES THAT TWEER TEMPORABILY BLOCKED.
- PERMANENTLY STABILIZE ALL REMAINING DISTURBED AREAS. WITH THE APPROVAL OF THE REC, REMOVE ESC MEASURES AND PERMANENTLY STABILIZED THOSE AREAS.



HISHWAY HYDRAULICS DIVISION

MD 212A (POWDER MILL ROAD)
FROM PINE STREET TO
US 1 (DALTMORE AVENUE)
URBAN RECONSTRUCTION PROJECT

EROSION AND SEDIMENT CONTROL GENERAL NOTES

DESIGNED BY FIL.

DRAWN BY LT

CHECKED BY SP

MDE/FRO 19-67-6094 /77-FF-6087

HORIZONTAL SCALE VERTICAL SCALE

WING NO. ESN-02

ESN-02 OF 06 SHEET NO. 100 OF 230

BY: 02374 -

TEO; 12186019

PRESCRIPTIVE VS. FLEXIBLE

- Prescriptive: Detail the most likely order contractor will construct project
- Flexible: Limit the SOC to critical ESC restrictions and procedures needed to maintain ESC compliance





GUIDELINES FOR FLEXIBLE SOC'S

- Determine critical ESC related restrictions in the construction process and develop the SOC based on those.
- Designate ESC "Areas" or "Zones", rather than "Stages" or "Phases".
- Allow enough room in the LOD for the contractor to work and maneuver equipment.
- Include ESC information only
- Indicate environmental restrictions or commitments in the general notes on the same plan sheet as the SOC. (e.g. stream restrictions)



GUIDELINES FOR FLEXIBLE SOC'S

- Limit Same Day Stabilization (SDS) to areas where work can be completed in a single day.
- SDS works well in areas of utility installation on pavement where the excavation area will be covered by steel plates.
- Mulch or matting temporary stabilization paired with disturbance the next working day is not acceptable. Consider perimeter ESC measures instead.
- Exclude SDS areas from initial cleaning and grubbing.



GUIDELINES FOR FLEXIBLE SOC'S

For projects with multiple ESC work zones:

- Does one zone need to be completed before another can be started?
- Are there sections of storm drain that must be installed in earlier phases for connections in later phases?
- Can work in separate zones be performed independently?
- Allow the contractor to move between ESC work zones if possible.
 Clearly identify restrictions or points of conflict.
- Material may need to be moved between ESC work zones to balance cut/fills. Can this be done without interim stockpiling?



WHAT'S NEXT?

- Draft Guidance
- ASCE presentation March 2020 (Matt Keenan)
- Designer training workshops (May/June 2020)
- Ask for individual project guidance from PRD or HHD





QUESTIONS?

