STORM WATER MANAGEMENT PLANS

LONE TREE #4-65 15-16 1AH - 1DH, 2AH - 2DH, 3AH - 3BH
OIL & GAS WELLS

SECTION 15, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF AURORA, ARAPAHOE COUNTY, STATE OF COLORADO
LATITUDE = 39°42'21.63"N, LONGITUDE = 104°38'34.92"W

PROJECT SCOPE:
1. IN ADDITION TO INDICATING BMPs, THIS SWMP PLAN SERVES AS A GUIDE TO CONSTRUCTING THE ACCESS ROAD, THE CULVERTS AND THE PAD SITE. THERE ARE NO SEPARATE IMPROVEMENT PLANS INDICATING PLAN AND PROFILES.
2. THERE IS ANTICIPATED EXCESS EARTHWORK MATERIAL THAT WILL BE STOCKPILED ADJACENT TO THE PAD UNTIL THE PAD IS REHABILITATED. TOPSOIL WILL ALSO BE TEMPORARILY STOCKPILED ADJACENT TO THE PAD SITE UNTIL THE PAD IS REHABILITATED.
3. THE PAD SITE IS PROPOSED TO BE FLAT (0% GRADE) SO THAT POTENTIAL RUNOFF FROM THE PAD IS ELIMINATED. AT THE BASE OF THE UPSTREAM CUT SLOPE, DIVERSION DITCHES ARE PROPOSED TO CAPTURE ONSITE TRIBUTARY FLOW, ELIMINATING RUNON.

CITY OF AURORA GENERAL NOTES:
1. THE PERMITTEE SHALL BE RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, STORM SEWERS, STORM SEWER APPURTENANCES, OTHER PROPERTIES, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

2. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS MAY BE REQUIRED DURING AND AFTER CONSTRUCTION AND SHALL BE EXECUTED AND COMPLETED BY THE PERMITTEE. THE PERMITTEE SHALL PLAN, INSTALL, AND MAINTAIN ALL EROSION, AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE AND WATER QUALITY BMPS AS INDICATED ON THIS PLAN AND AS NECESSARY TO REDUCE THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE ADVERSE IMPACTS, EROSION AND SEDIMENT DEPOSITION ONTO PAVED SECTIONS, INTO STORM SEWERS, STORM SEWER APPURTENANCES, RECEIVING WATERS, OR OFF THE PROJECT SITE.

3. THE PERMITTEE SHALL TAKE APPROPRIATE PREVENTIVE MEASURES TO MINIMIZE TO THE MAXIMUM EXTENT PRACTICABLE DIRT AND MUD FROM BEING TRACKED OR DEPOSITED ONTO PAVED SECTIONS VIA MULTIPLE BMPS. SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY BE TRACKED, DEPOSITED, OR ACCUMULATED ON PAVED SECTIONS, IN THE FLOW LINES, PRIVATE PROPERTY, AND/OR PUBLIC RIGHTS-OF-WAY OF THE CITY AS A RESULT OF THIS CONSTRUCTION PROJECT SHALL BE CLEANED UP.

4. AREAS REACHING SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL PLACEMENT OPERATIONS MUST BE DRILL SEEDED AND CRIMP MULCHED WITHIN 14 DAYS OF SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL OPERATIONS. IF AN INCOMPLETE AREA IS TO REMAIN INACTIVE FOR LONGER THAN 30 DAYS, IT MUST BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE LANDSCAPED WITHIN 14 DAYS FROM THE SUSPENSION OR COMPLETION OF LAND DISTURBANCE ACTIVITIES.

5. THIS APPROVED SWMP DESIGN DRAWING, THE ASSOCIATED APPROVED SWMP NARRATIVE, A COPY OF THE STORMWATER QUALITY DISCHARGE PERMIT, AND THE RULES AND REGULATIONS REGARDING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES MANUAL SHALL BE KEPT ON SITE AT ALL TIMES.

6. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP (MAINTENANCE) WHEN THE SEDIMENT LEVEL OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP OR AS DEFINED WITHIN THE RULES AND REGULATIONS REGARDING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES MANUAL, WHICHEVER IS MORE RESTRICTIVE. IF MAINTENANCE OF THE BMP DOES NOT RESTORE THE INTENDED FUNCTION, THEN THE BMP MUST BE REPLACED.

7. THE DISCHARGING OF CEMENT, CONCRETE, OR MORTAR FROM READY MIX DELIVERY TRUCKS, PUMP TRUCKS, BATCH PLANTS OR SMALL MECHANICAL MIXERS DIRECTLY ONTO PAVED SURFACES OR DISTURBED GROUND HAVING NO CONTAINMENT IS PROHIBITED. THE DISPOSAL OF ANY LIQUID WASTES OR WASH WATER FROM ANY OPERATIONS SUCH AS PAINTING, DRYWALL, OR TILE INSTALLATIONS DIRECTLY ONTO PAVED SURFACES OR THE GROUND WITHOUT CONTAINMENT IS PROHIBITED. THE PERMITTEE SHALL PROTECT ALL CURB FLOW LINES, ADJACENT WATERWAYS, WETLANDS, STORM SEWERS, STORM SEWER APPURTENANCES, OTHER PROPERTIES, ETC., ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE.

8. IT SHALL BE THE RESPONSIBILITY OF THE PERMITTEE TO RESOLVE CONSTRUCTION PROBLEMS DUE TO CHANGING CONDITIONS OR DESIGN ERRORS THEY MAY ENCOUNTER DURING THE PROGRESS OF ANY PORTION OF THE WORK. IF CONDITIONS IN THE FIELD REQUIRE CHANGES AND THE PROPOSED MODIFICATIONS TO THE APPROVED PLANS INVOLVE SIGNIFICANT CHANGES TO THE CHARACTER OF THE WORK OR TO FUTURE CONTIGUOUS PUBLIC OR PRIVATE IMPROVEMENTS, THE CONTRACTOR, THROUGH THE ENGINEER OF RECORD, SHALL BE RESPONSIBLE TO REVISE PLANS AND SUBMIT THEM TO THE CITY OF AURORA FOR APPROVAL PRIOR TO ANY FURTHER CONSTRUCTION RELATED TO THAT PORTION OF THE WORK. ANY CONTROLS, FEATURES OR IMPROVEMENTS NOT CONSTRUCTED IN ACCORDANCE WITH THE APPROVED SWMP, CITY OF AURORA STANDARD DETAIL DESIGNS, CITY OF AURORA APPROVED VARIANCES, OR AN APPROVED DESIGN DRAWING AMENDMENT SHALL BE REMOVED AND THE CONTROLS, FEATURES AND/OR IMPROVEMENTS SHALL BE RECONSTRUCTED.

9. SECONDARY CONTAINMENT FEATURES SHALL BE IN PLACE FOR ANY BULK FUEL STORAGE, MIXERS, GENERATORS, OR ANY OTHER SPILL OR LEAK SOURCE THAT REMAINS ONSITE FOR A PERIOD LONGER THAN 7 CALENDAR DAYS. A RECOVERY OR SALVAGE DRUM SHALL BE KEPT ON-SITE FOR STORAGE OF CONTAMINATED SOILS.

10. STRAW BALES AND RECYCLED ASPHALT OR CONCRETE ARE NOT ACCEPTABLE FOR THE CONSTRUCTION OF BMPS WITHIN THE CITY OF AURORA AND MAY NOT BE USED.

GENERAL NOTES
1. SEE FIELD WIDE REPORT NOTES AND DETAILS (SHEET 1 OF 3) FOR LEGEND OF BMP NAMES AND SYMBOLS.

2. ALL BMP'S ARE TO BE INSTALLED IN PHASE 1 UNLESS LABELED WITH "PP" (POST PAVING). ALL BMP'S SHALL BE LEFT IN PLACE UNTIL REVEGATATION ESTABLISHMENT IS APPROVED BY THE CITY.

3. REMOVAL OF SEDIMENT TRAPS ON SITE SHALL ONLY OCCUR AFTER ALL AREAS TRIBUTARY TO THE SEDIMENT TRAPS HAVE BEEN FINAL LANDSCAPED AND ALL VEGETATION HAS BEEN ESTABLISHED IN THE OPINION OF THE CITY.

4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN GOOD HOUSEKEEPING PRACTICES ON THE CONSTRUCTION SITE. THIS INCLUDES THE FOLLOWING:
- -GARBAGE/TRASH/CONSTRUCTION DEBRIS SHALL BE REMOVED ON A REGULAR BASIS.
- -WASHING OF EQUIPMENT INTO EXISTING DRAINAGEWAYS IS PROHIBITED.
- -PROPER CLEANUP PROCEDURES SHALL BE USED FOR SPILLED MATERIALS.
- -CLEANUP OF DRIPS OR LEAKS FROM EQUIPMENT OR MACHINERY AT THE SITE.
- -MINIMIZING THE AMOUNT OF UNNEEDED MATERIALS STORED ON-SITE.
- -MARK LOCATIONS FOR SPILL CLEANUP EQUIPMENT AND MATERIALS.
- -FERTILIZERS AND OTHER CHEMICALS ARE APPLIED ONLY IN THE QUANTITY REQUIRED.
- -PORTABLE TOILET FACILITIES ARE PROPERLY MAINTAINED AND PROPERLY SECURED.
- -STORAGE CONTAINERS, DRUMS, AND BAGS SHALL BE STORED AWAY FROM DIRECT TRAFFIC ROUTES TO PREVENT ACCIDENTAL SPILLS.
- -CONTAINERS SHALL BE STORED ON PALLETS OR SIMILAR DEVICES TO PREVENT CORROSION OF THE CONTAINERS.
- -ALL CHEMICAL SUBSTANCES USED IN THE WORK PLACE SHALL BE LISTED WITH THE REPORTABLE QUANTITY OF EACH, AND THE MATERIAL SAFETY DATA SHEET (MSDS) OBTAINED FOR EACH. THE MSDS'S WILL BE READILY AVAILABLE FOR USE; I.E., POSTED AT THE LOCATIONS WHERE THE MATERIALS ARE STORED AND HANDLED. ALL CONTAINERS SHALL BE LABELED TO SHOW THE NAME AND TYPE OF SUBSTANCE, STOCK NUMBER, EXPIRATION DATE, HEALTH HAZARDS, INCLUDING REACTIVITY, CORROSIVITY, IGNITABILITY AND TOXICITY, SUGGESTIONS FOR HANDLING, AND FIRST AID INFORMATION. (THIS INFORMATION CAN USUALLY BE FOUND ON THE MSDS. UNLABELED CHEMICALS AND CHEMICALS WITH DETERIORATED LABELS ARE OFTEN DISPOSED OF UNNECESSARILY OR IMPROPERLY.) INSTRUCTIONS AND MATERIALS/EQUIPMENT FOR SPILL CLEANUP PROCEDURES SHALL BE READILY AVAILABLE ON THE CONSTRUCTION SITE. THIS INCLUDES NOTIFICATION OF THE APPROPRIATE AGENCY OR DEPARTMENT; I.E., DOWNSTREAM WATER USERS, COLORADO DEPARTMENT OF HEALTH, ETC. SEE APPENDIX B "SPILL PREVENTION AND MANAGEMENT" FOR PROCEDURES FOR DEALING WITH AND REPORTING SPILLS AND RELEASES.

5. NO CONCRETE IS ANTICIPATED TO BE USED IN THE CONSTRUCTION OF THIS WELL SITE PAD SO NO WASHOUT AREA IS ANTICIPATED.

6. CAD FILES WILL BE PROVIDED TO THE SURVEYOR FOR CONSTRUCTION STAKING OF THE LIMITS OF CONSTRUCTION AND OTHER IMPROVEMENTS SHOWN HEREIN.

7. IF THE SEEDING AND MULCHING APPLICATION DOES NOT PROVIDE ADEQUATE STABILIZATION FOR THE AREA WHERE SLOPES EXCEED 4:1, THEN MORE ROBUST BMP'S SHALL BE UTILIZED.

8. RS AND SCL NOTE; DEGRADING IN PLACE IF FILTREXX MATERIAL (SEE FIELD WIDE REPORT).

9. ALL CMP SHALL HAVE A FLARED END SECTION AT EACH END.

VARIANCE REQUEST
ON BEHALF OF CONOCOPHILLIPS COMPANY, CVL RESPECTFULLY REQUESTS THE FOLLOWING VARIANCE.
1. NOT TO INCLUDE AREA OF PAD WHEN CALCULATING TRIBUTARY AREA FOR SEDIMENT TRAP/BASIN.

PROJECT OWNER/DEVELOPER SIGNATURE BLOCK
I HAVE REVIEWED THE INFORMATION CONTAINED WITHIN THE STORMWATER MANAGEMENT PLAN AND ACCEPT RESPONSIBILITY FOR THE REQUIREMENTS SET FORTH

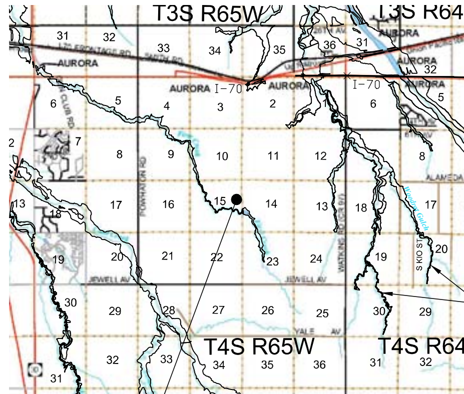
ATTORNEY IN FACT, CONOCOPHILLIPS COMPANY (SIGNATURE) DATE

PLAN PREPARER SIGNATURE BLOCK
I ACKNOWLEDGE MY RESPONSIBILITY FOR THE PREPARATION OF THE STORMWATER MANAGEMENT PLAN.

CO PROFESSIONAL ENGINEER (SIGNATURE) DATE

UNCC
CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

BENCH MARK
COA BM 4S6517NE001, A 3 INCH DIAMETER BRASS CAP STAMPED (C.O.A., BM, 23-50) ATOP THE N.E. CORNER CONC. BASE FOR POWER TOWER ON THE WEST SIDE OF POWHATON ROAD BEING THE 1ST POWER TOWER SOUTH OF THE W. 1/4 CORNER SECTION 4, T4S, R65W, AND BEING 125' SOUTH THEREOF. EL = 5627.698, NAVD 1988



VICINITY MAP
SCALE: 1" = 6,000 FT.

CITY OF AURORA NOTES:
2.03.5.01 CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS ONLY RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

2.03.5.04 ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE CITY STANDARDS AND SPECIFICATIONS.

2.03.5.05 THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC IMPROVEMENT INSPECTIONS DIVISION, 303-739-7420, 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.

2.03.5.06 LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT UTILITY NOTIFICATION CENTER OF COLORADO, 1-800-922-1987 OR 811.

2.03.5.07 THE CONTRACTOR SHALL HAVE ONE SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF AURORA), ONE COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED AT THE JOB SITE AT ALL TIMES.

2.03.5.08 IT IS THE CONSULTANT'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ON-SITE, AND OFF-SITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NEEDED DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS EITHER ON-SITE OR OFF-SITE, WHICH ARISE IN THE FIELD, WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY. THE COST TO RECTIFY ANY ADVERSE SITUATION TO MEET THE CITY STANDARDS AND SPECIFICATIONS AND THE CITY CODE SHALL BE BORNE SOLELY BY THE DEVELOPER.

2.03.5.09 THE OWNER/DEVELOPER MUST OBTAIN THE WRITTEN PERMISSION OF THE ADJACENT PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE GRADING OR CONSTRUCTION.

2.03.5.18 THE OWNER/CONTRACTOR MUST OBTAIN A C.D.P.S. STORM WATER DISCHARGE PERMIT FROM THE COLORADO DEPTARTMENT OF PUBLIC SAFTEY, IF REQUIRED

LIFE SAFETY NOTES:
503.2.1. DIMENSIONS. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 23 FEET, EXCEPT FOR APPROVED SECURITY GATES, IN ACCORDANCE WITH SECTION 503.6, AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET, 6 INCHES.
503.2.3. SURFACE. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNATED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS AND SHALL BE SURFACED SO AS TO PROVIDE ALL WEATHER DRIVING CAPABILITIES. PER NO SPEED REDUCING DEVICES OR TRAFFIC CALMING FEATURES OF ANY TYPE, THAT ALTER THE ELEVATION OF THE ROADWAY, INCLUDING BY NOT LIMITED TO SPEED BUMPS, SHALL BE PERMITTED ON ANY FIRE APPARATUS ACCESS ROAD.

SHEET INDEX
1. COVER SHEET
2. PHASE 1 SWMP

CITY OF AURORA STORMWATER MANAGEMENT:
THIS STORMWATER MANAGEMENT PLAN HAS BEEN PLACED IN THE CITY OF AURORA FILE FOR THIS PROJECT AND HAS BEEN DETERMINED TO COMPLY WITH THE APPLICABLE CITY OF AURORA STORMWATER MANAGEMENT CRITERIA. ADDITIONAL STORMWATER MANAGEMENT, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE OWNER OR HIS/HER AGENTS, DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS SWMP SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEE(S) UNTIL SUCH TIME AS THE SWMP IS PROPERLY COMPLETED, MODIFIED OR VOIDED.

ENSURE THAT THE PROVISIONS OF CRS 37-92-602, AS AMENDED BY SENATE BILL 15-212, REGARDING NOTIFICATION OF DOWNSTREAM WATER RIGHTS HOLDERS ARE UPHELD.

APPROVED FOR ONE YEAR FROM THIS DATE

FIRE DEPARTMENT	DATE
CITY ENGINEER	DATE
AURORA WATER DEPARTMENT	DATE

No.	Revisions	Date	Init.	Appr.	Date

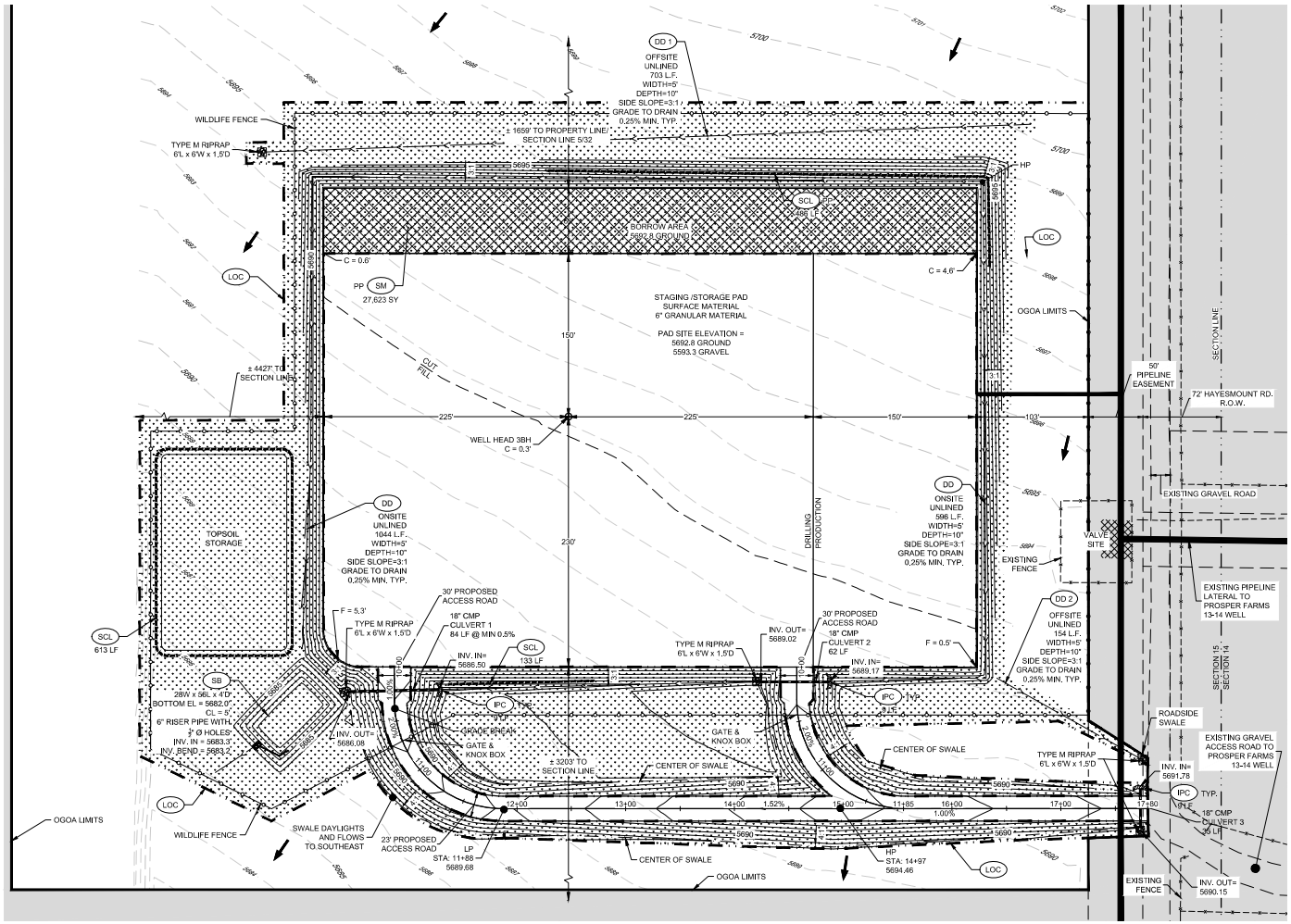
CVL CONSULTANTS
CIVIL ENGINEERING LAND SURVEYING
10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

CONOCOPHILLIPS COMPANY
ATTN: MAXWELL BLAIR
34501 E. QUINCY AVE.
WATKINS, CO 80137
PHONE: (303) 268-3711

BIG SANDY #3-65 36-31 2CH, 2DH, 3AH & 3BH
OIL & GAS WELL
WEST OF N. HUDSON RD.
COVER SHEET

SCALE:	AS SHOWN
FILE NO:	8.13.0201690
DRAWN BY:	KJD
CHECKED BY:	MEL
DATE:	11-23-16
SHEET NUMBER	1

SWMP Cover_WELL NAME.dwg



LEGEND

HP	HIGH POINT ELEVATION	F = X.X' FILL; C = X.X' CUT
SM	SEEDING AND MULCHING	
IPC	CULVERT INLET PROTECTION	
OP	OUTLET PROTECTION	
RS	ROCK SOCKS/WATTLES	
SF	SILT FENCE	X — X
ECB	EROSION CONTROL BLANKET	
DD	DIVERSION DITCH	
SCL	SEDIMENT CONTROL LOG	
LOC	LIMITS OF CONSTRUCTION	
SB	SEDIMENT BASIN	
	EXISTING EASEMENT	
	PROPOSED EASEMENT	
	WILDLIFE FENCE	
	SECTION LINE	
	OVERHEAD POWER LINE	OHP — OHP

AREA OUTSIDE OF LIMITS OF CONSTRUCTION, LOC

NOTES:
1. SEE THE STANDARD NOTES AND DETAILS IN FIELD WIRE REPORT, REVISED JANUARY 2010 (3 SHEETS). FOR ALL STANDARD DETAILS & CITY OF AURORA RULES AND REGULATIONS REGARDING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, NOTES AND LEGENDS OF BMP NAMES AND SYMBOLS.
2. QUANTITIES:
   EXISTING GRADE AT WELL HEAD 3BH = 5693.1'
   PAD SITE ELEVATION = 5692.8' (GROUND), 5693.3.3' (GRAVEL)
   CUT SLOPES = 3:1
   FILL SLOPES = 3:1
   PHASE 1 TOPSOIL = 7311 CY, 1,031 CY PLACED AT 3" DEPTH ON PAD
   CUT/FILL SLOPES, 6279 CY STOCKPILED
   PHASE 1 TOTAL CUT = 18,341 CY (DOES NOT INCLUDE TOPSOIL, INCLUDES DD & SB)
   PHASE 1 TOTAL FILL = 12,062 CY (INCLUDES 10% ADJUSTMENT FOR COMPACTION)
   PHASE 1 GRAVEL BASE AT 6" DEPTH = 4222 CY
   PHASE 1 TOTAL DISTURBED AREA = 11.25 ACRES (INCLUDING ACCESS ROADWAY)
3. ALL DIVERSION DITCHES ARE ANTICIPATED TO BE UNLINED.
4. ENSURE THAT THE PROVISIONS OF CRS 37-92-502, AS AMENDED BY SENATE BILL 15-212, REGARDING NOTIFICATION OF DOWNSTREAM WATER RIGHTS HOLDERS ARE UPHELD.

CITY OF AURORA NOTE:
2.03.5.01 CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS ONLY RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

SOILS:

USING THE US DEPARTMENT OF AGRICULTURE'S WEB SOIL SURVEY, TWO SOIL TYPES EXIST WITHIN THE PROJECT BOUNDARY, ADENA-COLBY SILT LOAMS, 1 TO 5 PERCENT SLOPES (AdC), AND WELD SILT LOAM, 0 TO 3 PERCENT SLOPES (WeB). THE SOILS LISTED ABOVE FALL INTO THE HYDROLOGIC CLASSIFICATION GROUP C, WHICH HAS A SLOW TO MODERATE INFILTRATION RATE. THE K FACTOR DESCRIBES A SOIL'S SUSCEPTIBILITY FOR RILL AND SHEET EROSION POTENTIAL (RATED 0.02 TO 0.69); THE HIGHER THE VALUE THE MORE SUSCEPTIBLE THE SOIL IS TO EROSION. THIS PROJECTS AREA'S SOIL HAS AN AVERAGE K OF 0.32.

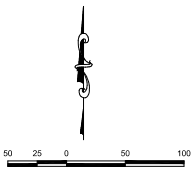
DEWATERING

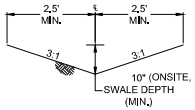
IF DEWATERING IS REQUIRED, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED FOR DISCHARGES TO A STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREET THAT IS TRIBUTARY TO THE MENTIONED FACILITIES, OR ANY WATER OF THE UNITED STATES.

SEDIMENT BASIN:

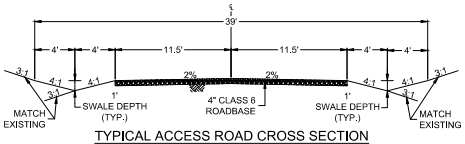
CALCULATIONS IN NARRATIVE AMENDMENTS TO APPROVED PLANS.

DIVERSION DITCH CAPACITY: 2.39 CFS @0.25%





TYPICAL DIVERSION DITCH CROSS SECTION (PRIVATE)
N.T.S.



TYPICAL ACCESS ROAD CROSS SECTION (PRIVATE)
N.T.S.

PROJECT AREA IS FOUND ON FIRM PANEL 08005C0209K, DATED DECEMBER 17, 2010, AND IS LOCATED IN FLOOD ZONE X.

BENCH MARK
COA BM #SB5117NE001, A 3 INCH DIAMETER BRASS CAP STAMPED (C.O.A., BM, 23-50) ATOP THE N.E. CORNER CONC. BASE FOR POWER TOWER ON THE WEST SIDE OF POWHATON ROAD BEING THE 1ST POWER TOWER SOUTH OF THE N. 1/4 CORNER SECTION 4, T4S, R65W, AND BEING 125' SOUTH THEREOF. EL = 5627.686, NAVD 1988

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
UNCC UTILITY NOTIFICATION CENTER OF COLORADO

No.	Revisions	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546
CVL CONSULTANTS
CIVIL ENGINEERING LAND SURVEYING

CONOCOPHILLIPS COMPANY
ATTN: MIKE MELCH
3400 E. CLANCY AVE.
WARNING, CO. 80137
PHONE: (307) 265-4109

LONE TREE #4-45S 15-16 1AH - 4DH, 2AH - 2DH, 3AH-3BH
OIL & GAS WELL
WEST OF HAYESMOUNT RD.
PHASE 1 PAD SITE

DRAWN BY:	KJD
CHECKED BY:	MEL
DATE:	10-10-16
SCALE:	AS SHOWN
FILE NO:	8130201686
SHEET NUMBER	2