

CHEROKEE NATION
HOUSING AUTHORITY

PLANS FOR
COWAN ESTATES SUBDIVISION

LOTS 38-64
STREET AND DRAINAGE IMPROVEMENTS
ROLAND, OKLAHOMA



VICINITY MAP
SCALE N.T.S.

SCOTT & ASSOCIATES
INC.
LAND SURVEYORS & ENGINEERS
C.A. #1041 (P.E.S. No. 702) Exp. 6/30/15
Muskogee, Oklahoma 74403
www.scottandassociates.com
505.424.9200

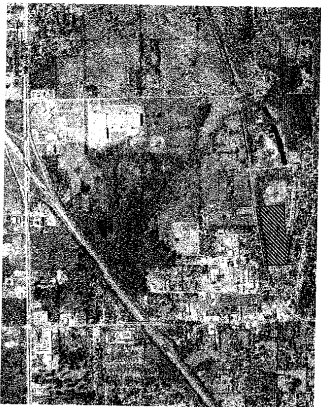
Scott A. Cowan
P.E. No. 15297
9/2/2014



This document is PRELIMINARY in nature and is NOT a final, signed and sealed document.

INDEX

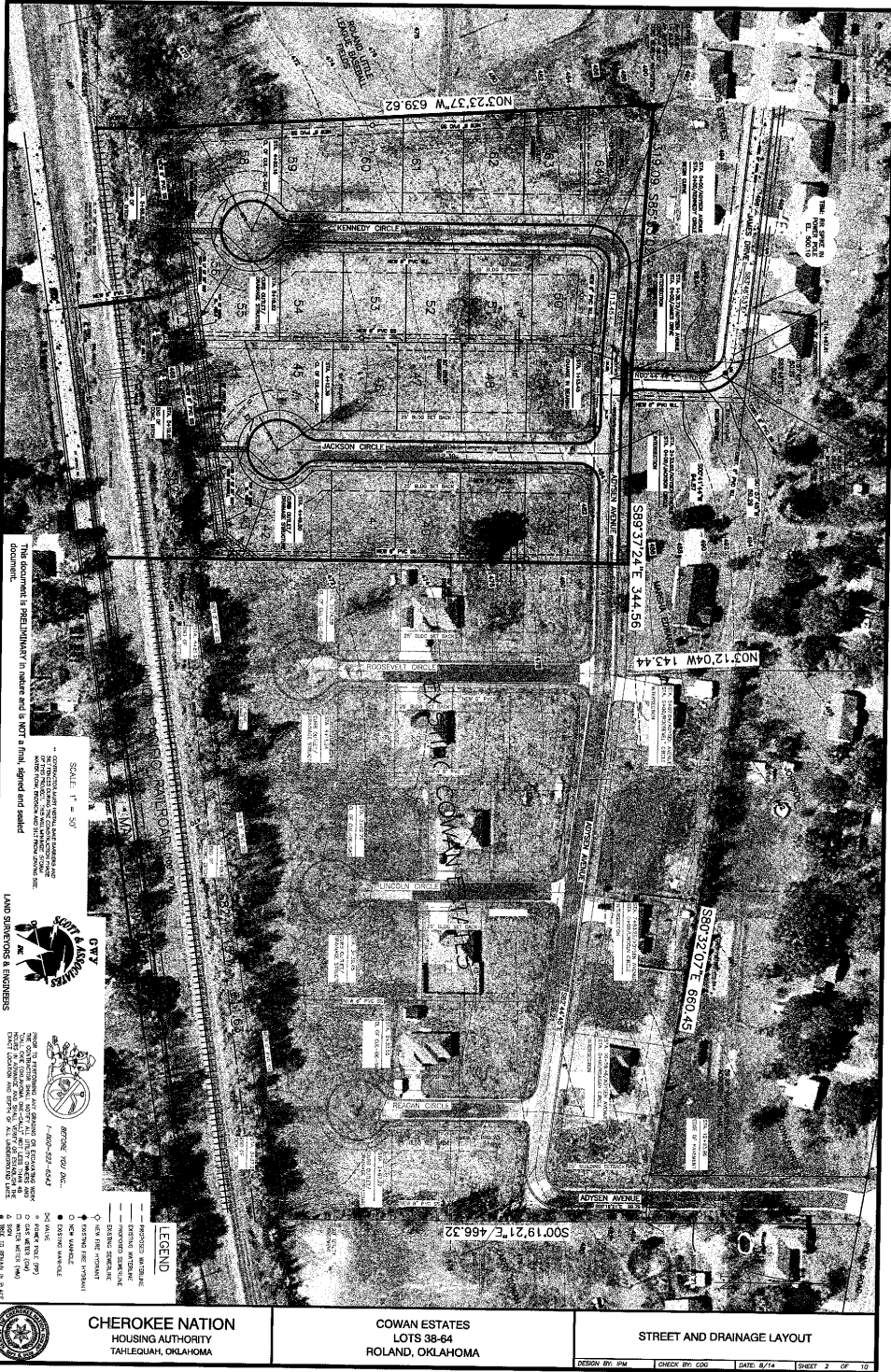
SHEET No.	DESCRIPTION
1.	COVER SHEET
2.	STREET AND DRAIN LAYOUT
3.	GRADING PLAN AND BILL OF MATERIALS
4.	PLAN AND PROFILE
5.	PLAN AND PROFILE
6.	PLAN AND PROFILE
7.	PLAN AND PROFILE
8.	EROSION CONTROL
9.	STREET AND DRAINAGE DETAILS
10.	TOPOGRAPHIC SURVEY WITH LEGAL



SCALE N.T.S.
LOCATION MAP



NOTE TO ENGINEER: ANY CHANGES TO THE ORIGINAL DESIGN SHALL BE MADE BY THE ORIGINAL DESIGNER OR HIS LICENSEE. THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT. ANY CHANGES TO THE ORIGINAL DESIGN SHALL BE MADE BY THE ORIGINAL DESIGNER OR HIS LICENSEE.



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GUY ASSOCIATES
LAND SURVEYORS & ENGINEERS

LEGEND

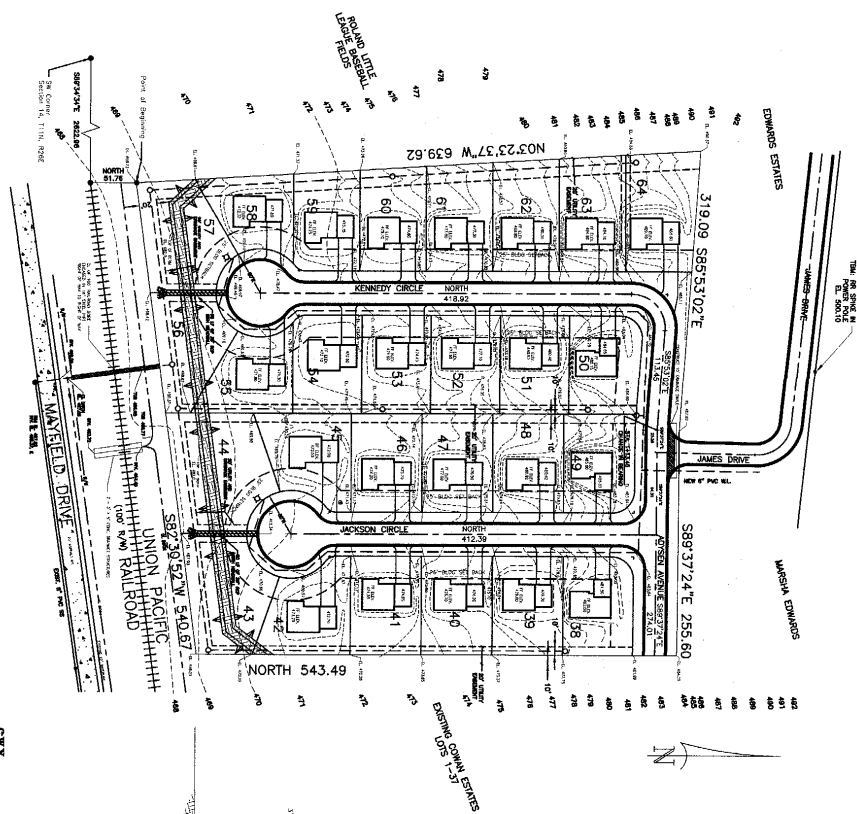
- ◻ IMPROVED INFRASTRUCTURE
- ◻ DRAINAGE INFRASTRUCTURE
- ◻ EXISTING UTILITIES
- ◻ EXISTING CONCRETE
- ◻ EXISTING ASPHALT
- ◻ EXISTING PAVEMENT
- ◻ EXISTING WALKWAY
- ◻ EXISTING DRIVE
- ◻ EXISTING SIDEWALK
- ◻ EXISTING DRIVE (ASPH)
- ◻ EXISTING DRIVE (CON)
- ◻ EXISTING DRIVE (GRAV)
- ◻ EXISTING DRIVE (MUL)
- ◻ EXISTING DRIVE (DIRT)

CHEROKEE NATION
HOUSING AUTHORITY
TAHQEQUAH, OKLAHOMA

COWAN ESTATES
LOTS 38-64
ROLAND, OKLAHOMA

STREET AND DRAINAGE LAYOUT

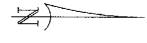
- 1. THIS GRADING PLAN IS BASED ON THE SURFACE GRADE SHOWN ON THE PLAT OF SURVEY FOR THE CHEROKEE NATION HOUSING AUTHORITY TRACT, LOT 38-64, ROLAND, OKLAHOMA, DATED 12/15/11.
- 2. THE SURFACE GRADE IS BASED ON THE SURFACE GRADE SHOWN ON THE PLAT OF SURVEY FOR THE CHEROKEE NATION HOUSING AUTHORITY TRACT, LOT 38-64, ROLAND, OKLAHOMA, DATED 12/15/11.
- 3. THE SURFACE GRADE IS BASED ON THE SURFACE GRADE SHOWN ON THE PLAT OF SURVEY FOR THE CHEROKEE NATION HOUSING AUTHORITY TRACT, LOT 38-64, ROLAND, OKLAHOMA, DATED 12/15/11.
- 4. THE SURFACE GRADE IS BASED ON THE SURFACE GRADE SHOWN ON THE PLAT OF SURVEY FOR THE CHEROKEE NATION HOUSING AUTHORITY TRACT, LOT 38-64, ROLAND, OKLAHOMA, DATED 12/15/11.



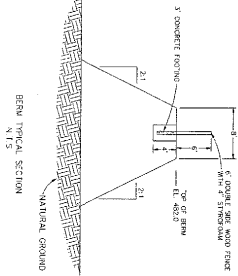
SCALE: 1" = 50'

CONSTRUCTION OF THIS PLAN AND THE BILL OF MATERIALS IS BASED ON THE SURFACE GRADE SHOWN ON THE PLAT OF SURVEY FOR THE CHEROKEE NATION HOUSING AUTHORITY TRACT, LOT 38-64, ROLAND, OKLAHOMA, DATED 12/15/11.

This document is PRELIMINARY in nature and is NOT a final signed and sealed document.



ITEM NO.	DESCRIPTION	QUANTITY	UNIT
1	GRAVEL FOR DRIVEWAY	1,000	CY
2	GRAVEL FOR DRIVEWAY	1,000	CY
3	GRAVEL FOR DRIVEWAY	1,000	CY
4	GRAVEL FOR DRIVEWAY	1,000	CY
5	GRAVEL FOR DRIVEWAY	1,000	CY
6	GRAVEL FOR DRIVEWAY	1,000	CY
7	GRAVEL FOR DRIVEWAY	1,000	CY
8	GRAVEL FOR DRIVEWAY	1,000	CY
9	GRAVEL FOR DRIVEWAY	1,000	CY
10	GRAVEL FOR DRIVEWAY	1,000	CY
11	GRAVEL FOR DRIVEWAY	1,000	CY
12	GRAVEL FOR DRIVEWAY	1,000	CY
13	GRAVEL FOR DRIVEWAY	1,000	CY
14	GRAVEL FOR DRIVEWAY	1,000	CY
15	GRAVEL FOR DRIVEWAY	1,000	CY
16	GRAVEL FOR DRIVEWAY	1,000	CY
17	GRAVEL FOR DRIVEWAY	1,000	CY
18	GRAVEL FOR DRIVEWAY	1,000	CY
19	GRAVEL FOR DRIVEWAY	1,000	CY
20	GRAVEL FOR DRIVEWAY	1,000	CY
21	GRAVEL FOR DRIVEWAY	1,000	CY
22	GRAVEL FOR DRIVEWAY	1,000	CY
23	GRAVEL FOR DRIVEWAY	1,000	CY
24	GRAVEL FOR DRIVEWAY	1,000	CY
25	GRAVEL FOR DRIVEWAY	1,000	CY
26	GRAVEL FOR DRIVEWAY	1,000	CY
27	GRAVEL FOR DRIVEWAY	1,000	CY
28	GRAVEL FOR DRIVEWAY	1,000	CY
29	GRAVEL FOR DRIVEWAY	1,000	CY
30	GRAVEL FOR DRIVEWAY	1,000	CY
31	GRAVEL FOR DRIVEWAY	1,000	CY
32	GRAVEL FOR DRIVEWAY	1,000	CY
33	GRAVEL FOR DRIVEWAY	1,000	CY
34	GRAVEL FOR DRIVEWAY	1,000	CY
35	GRAVEL FOR DRIVEWAY	1,000	CY
36	GRAVEL FOR DRIVEWAY	1,000	CY
37	GRAVEL FOR DRIVEWAY	1,000	CY
38	GRAVEL FOR DRIVEWAY	1,000	CY
39	GRAVEL FOR DRIVEWAY	1,000	CY
40	GRAVEL FOR DRIVEWAY	1,000	CY
41	GRAVEL FOR DRIVEWAY	1,000	CY
42	GRAVEL FOR DRIVEWAY	1,000	CY
43	GRAVEL FOR DRIVEWAY	1,000	CY
44	GRAVEL FOR DRIVEWAY	1,000	CY
45	GRAVEL FOR DRIVEWAY	1,000	CY
46	GRAVEL FOR DRIVEWAY	1,000	CY
47	GRAVEL FOR DRIVEWAY	1,000	CY
48	GRAVEL FOR DRIVEWAY	1,000	CY
49	GRAVEL FOR DRIVEWAY	1,000	CY
50	GRAVEL FOR DRIVEWAY	1,000	CY
51	GRAVEL FOR DRIVEWAY	1,000	CY
52	GRAVEL FOR DRIVEWAY	1,000	CY
53	GRAVEL FOR DRIVEWAY	1,000	CY
54	GRAVEL FOR DRIVEWAY	1,000	CY
55	GRAVEL FOR DRIVEWAY	1,000	CY
56	GRAVEL FOR DRIVEWAY	1,000	CY
57	GRAVEL FOR DRIVEWAY	1,000	CY
58	GRAVEL FOR DRIVEWAY	1,000	CY
59	GRAVEL FOR DRIVEWAY	1,000	CY
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65	GRAVEL FOR DRIVEWAY	1,000	CY
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74	GRAVEL FOR DRIVEWAY	1,000	CY
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81	GRAVEL FOR DRIVEWAY	1,000	CY
82	GRAVEL FOR DRIVEWAY	1,000	CY
83	GRAVEL FOR DRIVEWAY	1,000	CY
84	GRAVEL FOR DRIVEWAY	1,000	CY
85	GRAVEL FOR DRIVEWAY	1,000	CY
86	GRAVEL FOR DRIVEWAY	1,000	CY
87	GRAVEL FOR DRIVEWAY	1,000	CY
88	GRAVEL FOR DRIVEWAY	1,000	CY
89	GRAVEL FOR DRIVEWAY	1,000	CY
90	GRAVEL FOR DRIVEWAY	1,000	CY
91	GRAVEL FOR DRIVEWAY	1,000	CY
92	GRAVEL FOR DRIVEWAY	1,000	CY
93	GRAVEL FOR DRIVEWAY	1,000	CY
94	GRAVEL FOR DRIVEWAY	1,000	CY
95	GRAVEL FOR DRIVEWAY	1,000	CY
96	GRAVEL FOR DRIVEWAY	1,000	CY
97	GRAVEL FOR DRIVEWAY	1,000	CY
98	GRAVEL FOR DRIVEWAY	1,000	CY
99	GRAVEL FOR DRIVEWAY	1,000	CY
100	GRAVEL FOR DRIVEWAY	1,000	CY



COWAN ENGINEERS AND ARCHITECTS
LAND SURVEYORS & ENGINEERS



CHEROKEE NATION HOUSING AUTHORITY
TAHLEQUAH, OKLAHOMA

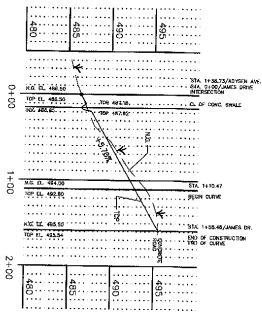
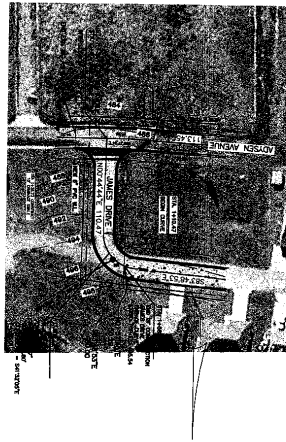
LEGEND
 --- EXISTING GRADE
 --- PROPOSED GRADE
 --- EXISTING SIDEWALK
 --- PROPOSED SIDEWALK
 --- EXISTING DRIVEWAY
 --- PROPOSED DRIVEWAY
 --- EXISTING PAVEMENT
 --- PROPOSED PAVEMENT
 --- EXISTING CURB
 --- PROPOSED CURB
 --- EXISTING WALL
 --- PROPOSED WALL
 --- EXISTING FENCE
 --- PROPOSED FENCE
 --- EXISTING UTILITY
 --- PROPOSED UTILITY
 --- EXISTING TREE
 --- PROPOSED TREE
 --- EXISTING SHrub
 --- PROPOSED SHrub
 --- EXISTING CLIPPER
 --- PROPOSED CLIPPER
 --- EXISTING SIGN
 --- PROPOSED SIGN
 --- EXISTING LIGHT
 --- PROPOSED LIGHT
 --- EXISTING POST
 --- PROPOSED POST
 --- EXISTING RAIL
 --- PROPOSED RAIL
 --- EXISTING FENCE
 --- PROPOSED FENCE
 --- EXISTING WALL
 --- PROPOSED WALL
 --- EXISTING CURB
 --- PROPOSED CURB
 --- EXISTING DRIVEWAY
 --- PROPOSED DRIVEWAY
 --- EXISTING SIDEWALK
 --- PROPOSED SIDEWALK
 --- EXISTING GRADE
 --- PROPOSED GRADE

CHEROKEE NATION HOUSING AUTHORITY
TAHLEQUAH, OKLAHOMA

COWAN ESTATES
LOTS 38-64
ROLAND, OKLAHOMA

GRADING PLAN AND BILL OF MATERIALS

DESIGN BY: JPM CHECK BY: CDD DATE: 8/14 SHEET 3 OF 10



PLAN & PROFILE

SCALE: HORIZ. 1" = 30'
VERT. 1" = 5'

NOTE:
 1. CONTRACTOR SHALL REMOVE ALL EXISTING ASPHALT AND PAVE COURSE MATERIAL AND DEBRIS.
 2. CONTRACTOR SHALL REMOVE A MINIMUM OF 12" OF EXISTING SUBGRADE SOIL AND REPLACE WITH 6" OF NEW SUBGRADE SOIL.
 3. ALL EXISTING CURBS AND GUTTERS SHALL NOT BE REMOVED AND SHALL REMAIN AS SHOWN UNLESS OTHERWISE NOTED.
 4. ALL EXISTING UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
 5. ALL UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
 6. ALL UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
 7. ALL UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
 8. ALL UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
 9. ALL UTILITIES SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.

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REGISTRATION NO. 12345
 STATE OF OKLAHOMA

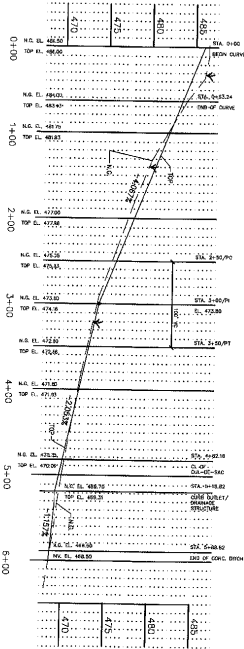
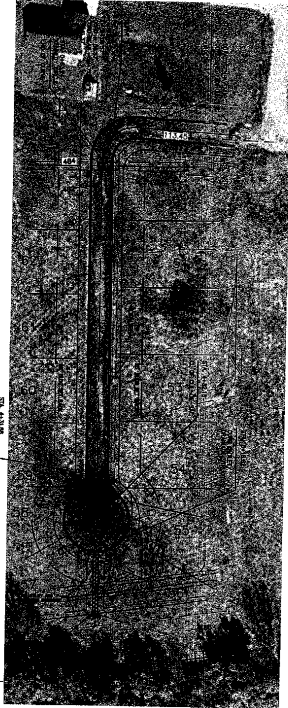
FOR THE PURPOSES OF THE DESIGN OF THIS PROJECT, THE ENGINEER HAS ASSUMED THAT THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE ACCURATE AND COMPLETE. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY TO VERIFY THE EXISTING CONDITIONS.

- LEGEND**
- PROPOSED ROADWAY
 - EXISTING ROADWAY
 - PROPOSED SIDEWALK
 - EXISTING SIDEWALK
 - PROPOSED CURB
 - EXISTING CURB
 - PROPOSED GUTTER
 - EXISTING GUTTER
 - PROPOSED UTILITY
 - EXISTING UTILITY
 - PROPOSED TREE
 - EXISTING TREE
 - PROPOSED SIGN
 - EXISTING SIGN
 - PROPOSED LIGHT
 - EXISTING LIGHT
 - PROPOSED FENCE
 - EXISTING FENCE
 - PROPOSED WALL
 - EXISTING WALL
 - PROPOSED DRIVE
 - EXISTING DRIVE
 - PROPOSED ALLEY
 - EXISTING ALLEY
 - PROPOSED RAMP
 - EXISTING RAMP
 - PROPOSED BRIDGE
 - EXISTING BRIDGE
 - PROPOSED TUNNEL
 - EXISTING TUNNEL
 - PROPOSED ELEVATION
 - EXISTING ELEVATION
 - PROPOSED DISTANCE
 - EXISTING DISTANCE
 - PROPOSED AREA
 - EXISTING AREA
 - PROPOSED VOLUME
 - EXISTING VOLUME
 - PROPOSED WEIGHT
 - EXISTING WEIGHT
 - PROPOSED FORCE
 - EXISTING FORCE
 - PROPOSED MOMENT
 - EXISTING MOMENT
 - PROPOSED ENERGY
 - EXISTING ENERGY
 - PROPOSED POWER
 - EXISTING POWER
 - PROPOSED FLUX
 - EXISTING FLUX
 - PROPOSED DENSITY
 - EXISTING DENSITY
 - PROPOSED PRESSURE
 - EXISTING PRESSURE
 - PROPOSED TEMPERATURE
 - EXISTING TEMPERATURE
 - PROPOSED VELOCITY
 - EXISTING VELOCITY
 - PROPOSED ACCELERATION
 - EXISTING ACCELERATION
 - PROPOSED FREQUENCY
 - EXISTING FREQUENCY
 - PROPOSED PERIOD
 - EXISTING PERIOD
 - PROPOSED PHASE
 - EXISTING PHASE
 - PROPOSED AMPLITUDE
 - EXISTING AMPLITUDE
 - PROPOSED WAVELENGTH
 - EXISTING WAVELENGTH
 - PROPOSED FREQUENCY
 - EXISTING FREQUENCY
 - PROPOSED PERIOD
 - EXISTING PERIOD
 - PROPOSED PHASE
 - EXISTING PHASE
 - PROPOSED AMPLITUDE
 - EXISTING AMPLITUDE
 - PROPOSED WAVELENGTH
 - EXISTING WAVELENGTH

CHEROKEE NATION
 HOUSING AUTHORITY
 TAHLEQUAH, OKLAHOMA

COWAN ESTATES
 LOTS 38-64
 ROLAND, OKLAHOMA

STREET PLAN AND PROFILE
 DESIGN BY: JPM CHECKED BY: LDC DATE: 5/14 SHEET 5 OF 10



PLAN & PROFILE

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

This document is PRELIMINARY in nature and is NOT a final, signed and sealed document.

- NOTES:**
1. CONTRACTOR SHALL REMOVE ALL EXISTING ASPHALT AND BASE COURSE MATERIAL AND SPURCE
 2. CONTRACTOR SHALL REMOVE A MINIMUM OF 12" OF EXISTING SUBGRADE SOIL AND REPLACE WITH
 3. ALL DRIVEWAY CURB AND GUTTERS SHALL BE REMOVED AND RECONSTRUCTED TO MATCH EXISTING DRIVEWAY
 4. ALL DRIVEWAY SHALL MATCH EXISTING DRIVEWAY

ENGINEER'S SEAL AND SIGNATURE REQUIRED FOR THIS DOCUMENT TO BE VALID.

LAND SURVEYORS & ENGINEERS



REFERENCE TO THE ORIGINAL RECORDING OF THIS PLAN SHALL BE MADE TO THE RECORDING OF THIS PLAN TO THE PUBLIC RECORDS OF THE COUNTY OF TULSA, OKLAHOMA.

FOR THE RECORDING OF THIS PLAN, THE ENGINEER HAS VERIFIED THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND ACCURATE TO THE BEST OF HIS KNOWLEDGE AND BELIEF.

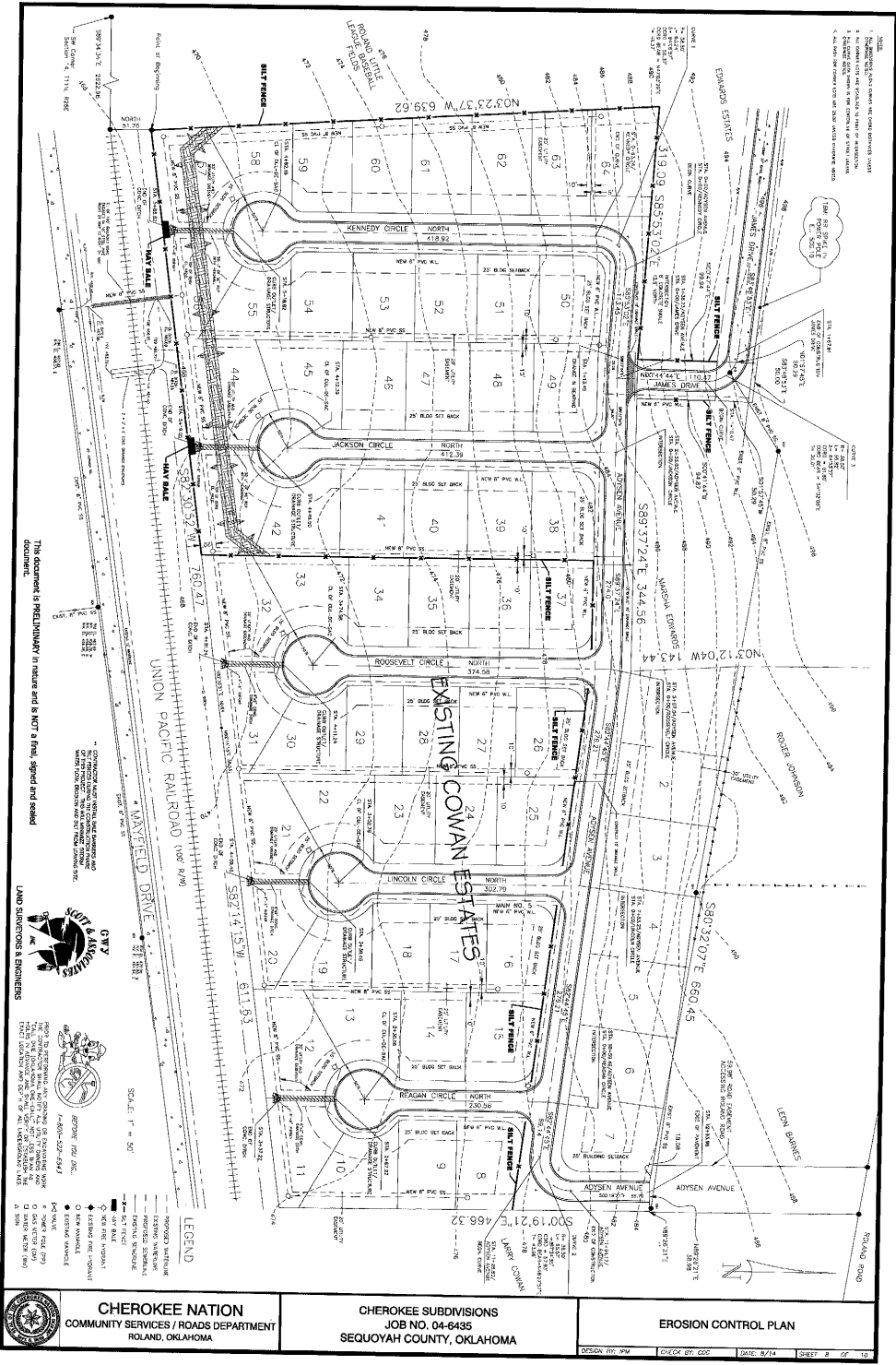
- LEGEND**
- EXISTING DRIVEWAY
 - PROPOSED DRIVEWAY
 - PROPOSED VERTICAL CURVE
 - PROPOSED SIDEWALK
 - EXISTING SIDEWALK
 - EXISTING ASPHALT
 - EXISTING CONCRETE
 - EXISTING GRAVEL
 - EXISTING SAND
 - EXISTING SOIL
 - EXISTING SUBGRADE
 - EXISTING BASE COURSE
 - EXISTING CURB
 - EXISTING GUTTER
 - EXISTING GROUND
 - EXISTING SURFACE
 - EXISTING UNDERGROUND
 - EXISTING UTILITY
 - EXISTING FENCE
 - EXISTING SIGN
 - EXISTING TREE
 - EXISTING ROCK
 - EXISTING PAVEMENT

CHEROKEE NATION HOUSING AUTHORITY
TAHLEQUAH, OKLAHOMA

COWAN ESTATES
LOTS 38-64
ROLAND, OKLAHOMA

PLAN AND PROFILE

DESIGN BY: JMW CHECK BY: CDO DATE: 8/14 SHEET 7 OF 10



- NOTES:
1. PROPOSED EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
 2. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
 3. ALL EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
 4. ALL EROSION CONTROL MEASURES SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CHIEF ENGINEER.

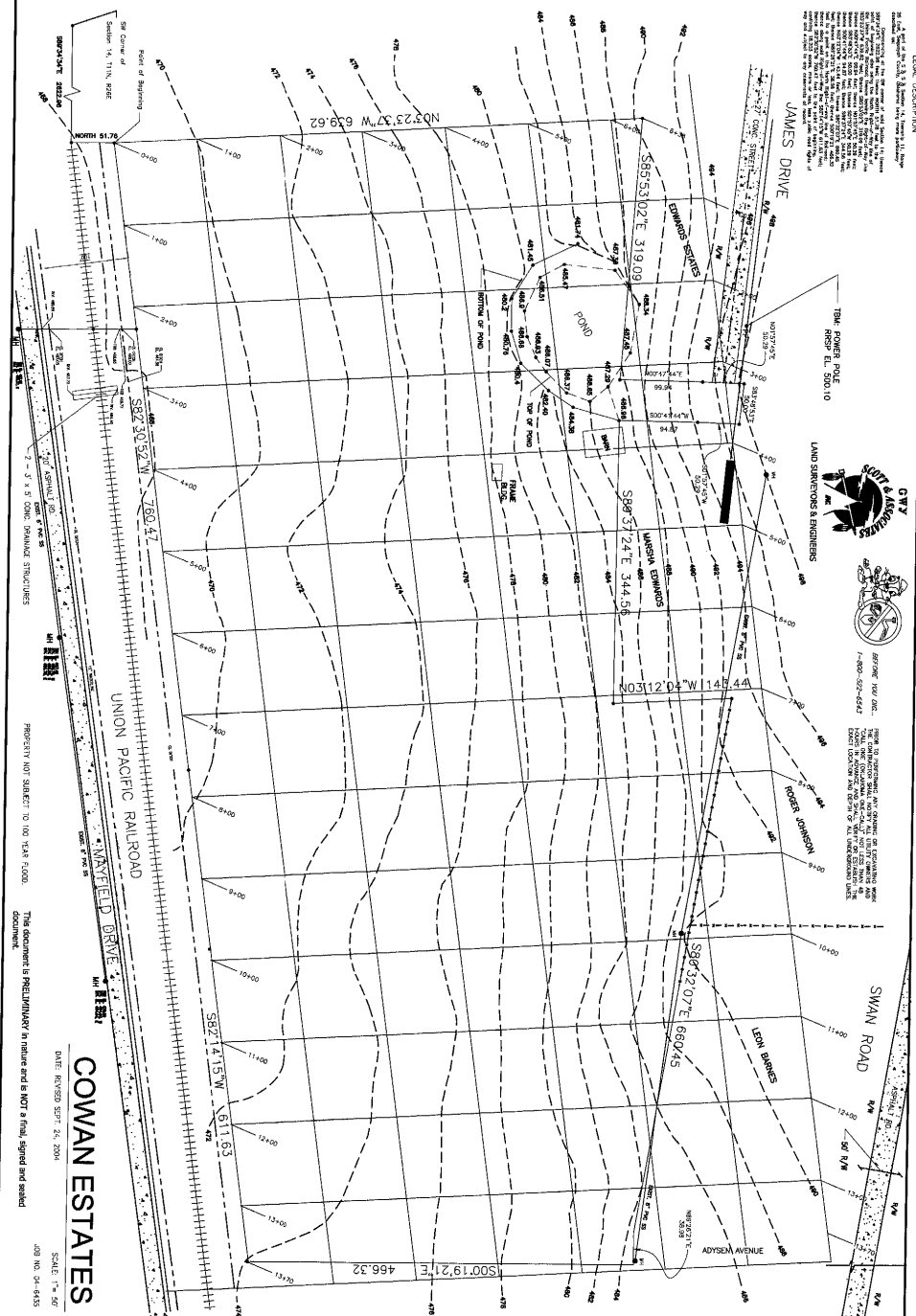
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LEGEND

- PROPOSED EROSION CONTROL MEASURES
- EXISTING EROSION CONTROL MEASURES
- PROPOSED VEGETATIVE STABILIZATION
- EXISTING VEGETATIVE STABILIZATION
- PROPOSED SILT FENCE
- EXISTING SILT FENCE
- PROPOSED SEDIMENT BASIN
- EXISTING SEDIMENT BASIN
- PROPOSED VEGETATIVE STABILIZATION
- EXISTING VEGETATIVE STABILIZATION
- PROPOSED SILT FENCE
- EXISTING SILT FENCE
- PROPOSED SEDIMENT BASIN
- EXISTING SEDIMENT BASIN

1504 - UNCORRECTED
 20' x 40' section of the S.W. 1/4, Section 14, Township 33S, Range 13E, Oklahoma County, Oklahoma. This map is a copy of the original topographic survey and is not a final, signed and sealed document.
 THE PROPERTY NOT SUBJECT TO THIS SURVEY IS SHOWN BY A DOTTED LINE.



COWAN ESTATES
 COMMUNITY SERVICES / ROADS DEPARTMENT
 TAHLEQUAH, OKLAHOMA

COWAN ESTATES
 JOB NO. 04-6435
 SEQUOYAH COUNTY, OKLAHOMA

TOPOGRAPHIC SURVEY

DESIGN BY: PW CHECK BY: SGO DATE: 8/14 SHEET: 10 OF 10



DATE: REVISION SET: 24, 2008
 SCALE: 1" = 80'
 JOB NO.: 04-6435
 This document is preliminary in nature and is not a final, signed and sealed document.
 PROPERTY NOT SUBJECT TO THIS SURVEY IS SHOWN BY A DOTTED LINE.

BY ORDER OF THE BOARD OF DIRECTORS:
 LAND SURVEYORS & ENGINEERS
 C. W. O'NEAL, INC.
 1-800-522-4843
 FROM THE RECORDED AND CORRECTED SURVEYING MAPS
 FOR THE PROPERTY SHOWN ON THE MAPS, THIS IS THE
 EXACT LOCATION AND DESIGN OF ALL UNDERGROUND UTILITIES
 AND RECORDS ARE ON FILE AT THE OFFICE OF THE SURVEYOR.

COWAN ESTATES
 LAND SURVEYORS & ENGINEERS