# AUTUMN SUNSET SIDEWALK IMPROVEMENTS
# WINDCREST, TEXAS

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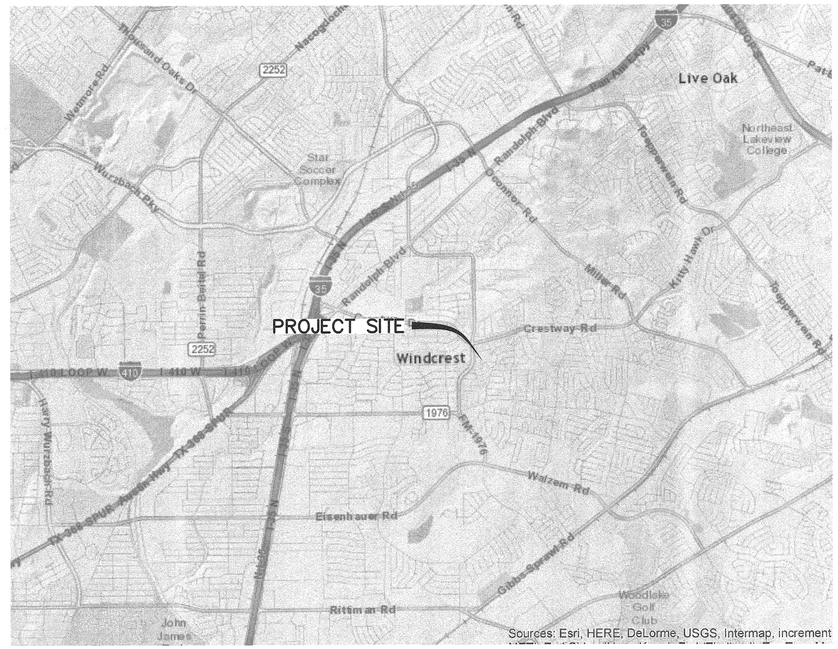
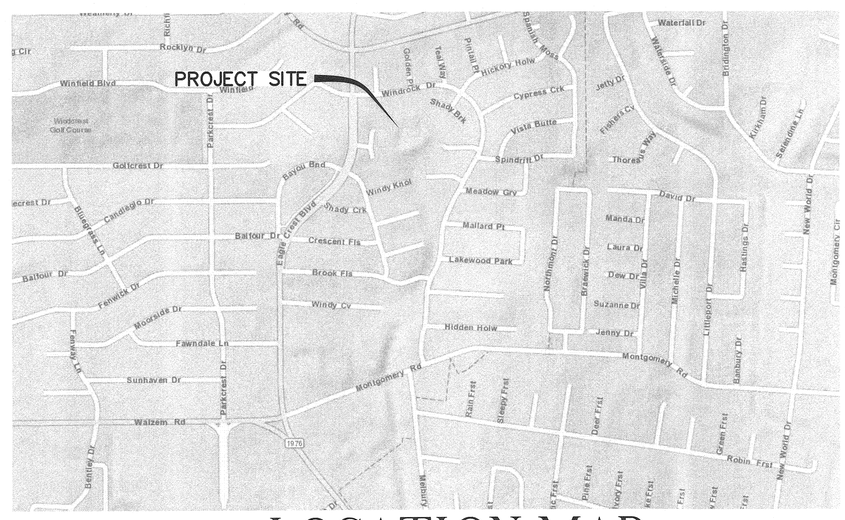



## VICINITY MAP

NOT TO SCALE




## LOCATION MAP

NOT TO SCALE

M & S

ENGINEERING, L.L.C.
ENGINEERS, PLANNERS, AND SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-1394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DATE DRAWN
OCTOBER 2015

SHEET
1
OF 8


Date: Oct 01, 2015, 4:57pm User ID: jwilke
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-CVR-001.dwg

## GENERAL NOTES:

1. CONSTRUCTION INSPECTOR SHALL BE NOTIFIED 48-HOURS PRIOR TO THE START OF CONSTRUCTION
2. BLASTING IS NOT PERMITTED ON THIS PROJECT.
3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
4. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
5. THE TRENCH EXCAVATION AND SHORING SAFETY SYSTEM, AS OUTLINED IN THE TECHNICAL SPECIFICATIONS, WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE.
6. CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN ONLY BE ISSUED TO CONTRACTOR ARE TO BE OBTAINED AT THE CONTRACTORS EXPENSE.
7. CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
8. CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT NO ADDITIONAL COST TO OWNER.
9. LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION OF EXISTING UTILITIES. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
10. WHEN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN A LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES TO BE COORDINATED WITH THE OWNER.
12. THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH APPLICABLE UTILITY COMPANY OR COMPANIES. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
13. THE CONTRACTOR SHALL LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, AND CONTROL POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PUBLIC SURVEYOR IN THE STATE OF TEXAS AT NO ADDITIONAL COST TO OWNER.
14. EXISTING PAVING, BUILDING, AND OTHER ITEMS SHOWN ON THESE PLANS NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR IS FOR INFORMATION ONLY.
15. DEMOLITION PERMITS (IF NEEDED) ARE TO BE OBTAINED BY THE CONTRACTOR.
16. EXISTING SURFACE AND SUBSURFACE STRUCTURES (GAS MAINS, WATER MAINS, STORM SEWER, TELEPHONE CABLES, ETC.) ARE SHOWN ON THE PLANS IF THEIR LOCATION HAS BEEN DETERMINED, BUT IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AVOID DAMAGING THESE EXISTING STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS OR TO SHOW THEM IN THEIR EXACT LOCATION. IF ANY STRUCTURE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE HIS RESPONSIBILITY TO REPAIR THE DAMAGE AT HIS EXPENSE AND RESTORE THE STRUCTURE TO IT'S ORIGINAL CONDITION.
17. THE ORIGINAL PLANS FOR THIS PROJECT WERE PREPARED ON FULL SIZE STANDARD SHEETS (24 INCH x 36 INCH). THE SPECIFIC SCALE FOR THE INDIVIDUAL UNITS WOULD BE TRUE ONLY ON THE ORIGINAL TRACING. REPRODUCED COPIES, REDUCTIONS OR OTHER METHODS OF PRINTING MAY CHANGE OR ALTER THE SCALE. THE ENGINEER IS NOT RESPONSIBLE FOR SCALE DIMENSIONS UTILIZED BY OTHERS ON THESE PLANS.
18. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCE, IF REQUIRED. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
19. ALL CONCEPTS, IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THESE INSTRUMENTS, AS OUTLINED ON THE TITLE SHEET INDEX, AND BY ANY ADDENDUM ARE OWNED BY AND ARE THE PROPERTY OF M & S ENGINEERING, L.L.C. AND WERE CREATED AND DEVELOPED FOR THE USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE CONCEPTS, IDEAS, DESIGN, ARRANGEMENTS, OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION AND CONSENT OF M & S ENGINEERING, L.L.C. OF SPRING BRANCH, TEXAS.
20. A PRE-CONSTRUCTION CONFERENCE IS TO BE HELD PRIOR TO BEGINNING CONSTRUCTION. THE CONFERENCE SHALL TAKE PLACE AT A LOCATION SELECTED BY OWNER AND ENGINEER. CONTRACTOR TO ARRANGE A MEETING DATE WITH THE OWNER AT LEAST SEVEN DAYS PRIOR TO THE MEETING TIME.
21. CONTRACTOR SHALL NOTIFY THE STREET INSPECTOR PRIOR TO THE START OF CONSTRUCTION. A 48-HOUR ADVANCE NOTIFICATION IS REQUIRED.
22. CONTRACTOR SHALL NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO ANY CONSTRUCTION.

## GENERAL ENVIRONMENTAL NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIALS, INCLUDING METHODS OF HANDLING AND DISPOSAL.
2. CONTRACTOR SHALL LOCATE MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS.
3. FUEL STORAGE IS NOT ALLOWED ON THIS PROJECT.
4. THE CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY AND IN WRITING, OF ANY FUEL OR TOXIC MATERIALS SPILLS WITHIN THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TO BE TAKEN TO REMEDY THE PROBLEM.
5. THE CONTRACTOR SHALL DISPOSE OF FUELS, HAZARDOUS MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
6. NO OPEN BURNING IS ALLOWED ON THIS PROJECT.

## STORM WATER NOTES:

1. THROUGHOUT THE CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ASSURE THAT DRAINAGE OF STORM WATER RUNOFF IS NOT BLOCKED.

## SITE GRADING NOTES:

1. THE CONTRACTOR SHALL CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
2. ALL EXCESS EXCAVATED MATERIAL IS TO BE REMOVED FROM THE SITE. THE EXCESS EXCAVATION MATERIAL SHALL NOT BE STOCKPILED.
3. ADJUST MANHOLES COVERS, VALVE BOXES, ELECTRICAL MANHOLES, ETC. TO MATCH PROPOSED FINISHED GRADE (NO SEPARATE PAY).

## PAVING NOTES / TRAFFIC CONTROL NOTES:

1. ANY EXISTING PAVEMENT, CURBS, AND/OR SIDEWALK DAMAGED OR REMOVED BY THE CONTRACTOR ARE TO BE REPAIRED BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT HIS EXPENSE BEFORE ACCEPTANCE OF THE WORK.
2. TRAFFIC CONTROLS DURING CONSTRUCTION TO BE CONTRACTORS RESPONSIBILITY AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE TRAFFIC LANE OPEN AT ALL TIMES DURING CONSTRUCTION (ALL AFFECTED STREETS).

## CONCRETE CONSTRUCTION NOTES:

1. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I. AND SHALL CONTAIN SIX(6) SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
2. ALL REINFORCING BARS SHALL CONFORM TO ASTM A-305 AND ASTM A-316, GRADE 60.
3. ALL CONCRETE AND REINFORCING STEEL SHALL CONFORM TO CURRENT A.C.I. CODE.
4. ALL BAR SPLICES, CORNER DOWELS, AND JOINT DOWELS SHALL HAVE A MINIMUM LAP LENGTH OF 40 BAR DIAMETERS OR 30", WHICHEVER IS GREATER.
5. NO FLY ASH ADDITIVES WILL BE PERMITTED IN STRUCTURAL CONCRETE.

## UTILITY NOTES:

1. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL EXISTING UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR VERTICAL CONTROL OF ALL UTILITIES, AND SHALL ADJUST AS NEEDED.
3. ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH MATERIAL SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER OF LOCATIONS THAT ARE REQUIRED SHALL BE DETERMINED BY THE GEO-TECHNICAL ENGINEER AND APPROVED BY THE STREET INSPECTOR. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

## SAFETY FENCE NOTES:

1. SAFETY FENCE SHALL BE USED TO PROTECT ALL EXCAVATIONS AND TO SEPARATE CONSTRUCTION ACTIVITIES FROM PEDESTRIAN, DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL SAFETY FENCING SHALL BE PLASTIC, 4' MINIMUM HEIGHT AND ORANGE IN COLOR.
3. SAFETY FENCE USED WITHIN THE ROADWAY SHALL BE REFLECTORIZED WITH A MINIMUM OF TWO (2) STRIPS OF RETROREFLECTIVE MATERIAL. A MINIMUM OF 1' WIDE THE LENGTH OF THE FENCE OR DELINEATED BY CHANNELIZING DEVICES.
4. SAFETY FENCE USED TO SEPARATE SIDEWALKS FROM CONSTRUCTION ACTIVITIES SHALL HAVE MINIMUM ENCROACHMENT TO THE SIDEWALK.
5. FENCE MATERIAL SHALL BE SUPPORTED FROM ¼" DIA. NYLON ROPE FROM POSTS SPACED ON A MAXIMUM 8 FT. CENTERS. POSTS SHALL EXTEND 4' ABOVE NATURAL GROUND. FENCE MATERIAL SHALL BE SECURED TO POSTS W/ PLASTIC WIRE TIES, MINIMUM 3 PER POST.
6. POST SHALL INCLUDE SUPPORT BRACES SUFFICIENT TO HANDLE ALL LOADS.
7. PAYMENT FOR SECURITY FENCE SHALL BE BASED ON A LUMP SUM FOR EACH EXTENSION INCLUDING ALL INCIDENTAL WORK (LABOR, MATERIALS, EQUIPMENT, ETC.)

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STATE OF TEXAS
LANCE KLEIN
106110
LICENSED PROFESSIONAL ENGINEER
10/2/15

# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## GENERAL NOTES

JOB: 15COW002
DATE: OCTOBER 2015

| | |
|---|---|
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

| DELTA | DESCRIPTION |
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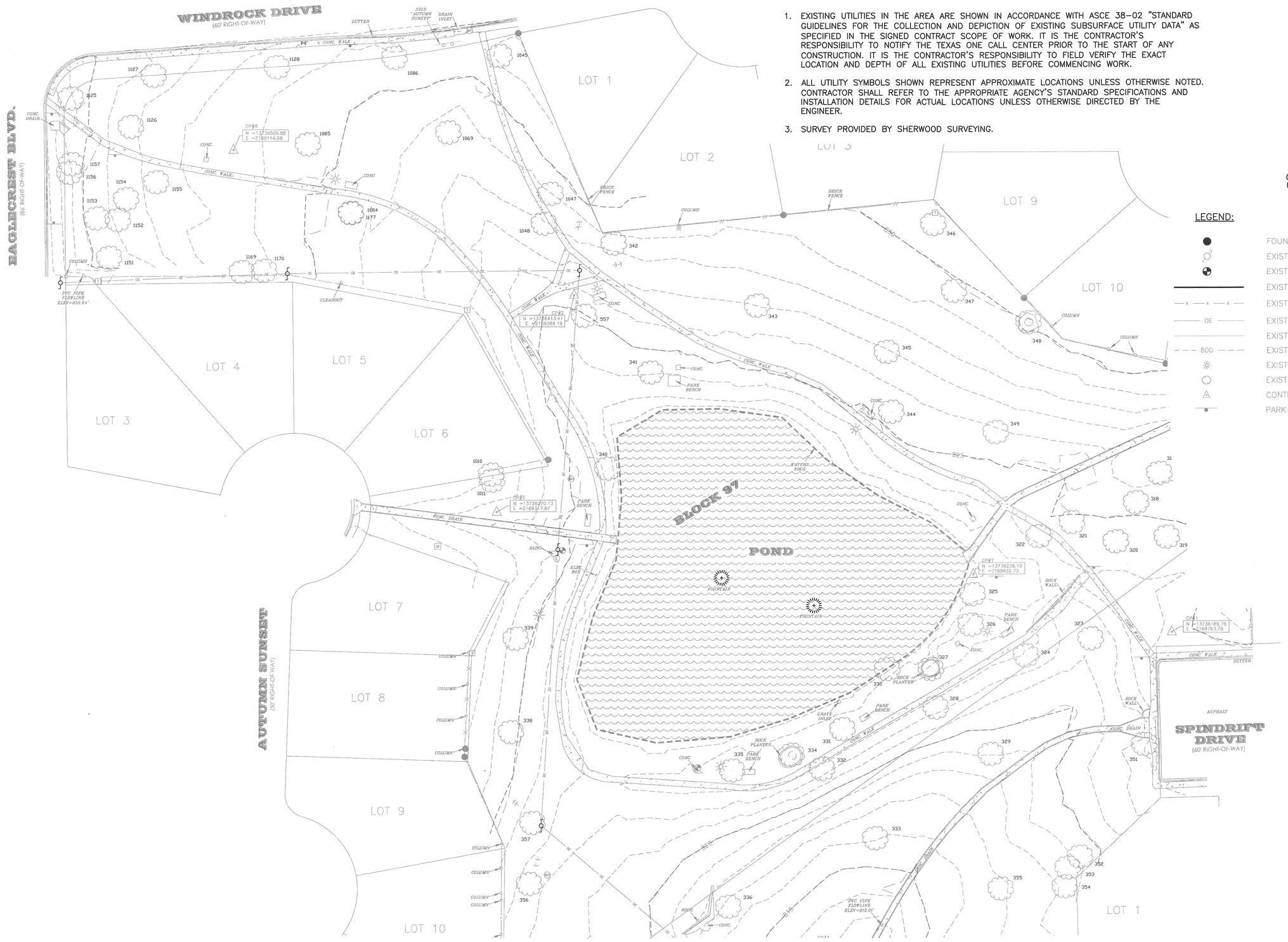
SHEET:


Date: Oct 01, 2015, 4:57pm User ID: jwilks
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-GN-001.dwg

NOTES:

1. EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
2. ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SURVEY PROVIDED BY SHERWOOD SURVEYING.




LEGEND:

- FOUND PINS
- EXIST POWER POLE
- EXIST BENCHMARK
- EXIST PROPERTY BOUNDARY
- EXIST BARBED WIRE FENCE
- EXIST OVERHEAD ELECTRIC
- EXIST ROADWAY FOC
- EXIST CONTOURS
- EXIST LIGHT POLE
- EXIST TREE
- CONTROL POINT
- PARK SIGN

0 15 30 60
SCALE (FEET)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STATE OF TEXAS
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# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## EXISTING SITE PLAN

JOB: 15COW002
DATE: OCTOBER 2015
DRAWN: PM:
DESIGN: DM:
PEER: OTHER:

REVISIONS:

| DELTA | DESCRIPTION |
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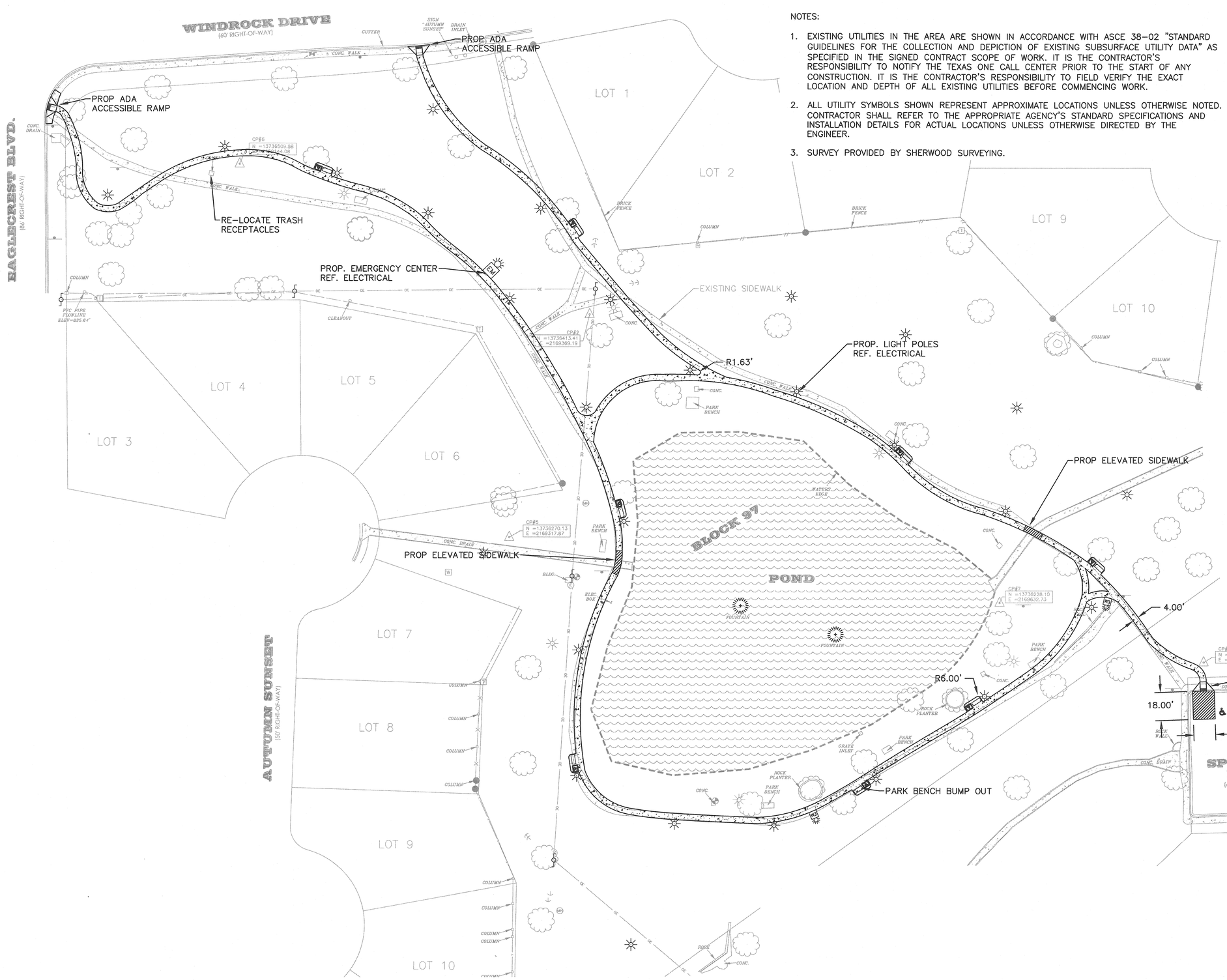
SHEET: 3 OF 8

Date: Oct 01, 2015, 4:53pm User ID: jwilks
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-ESITE-001.dwg

NOTES:

1. EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
2. ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SURVEY PROVIDED BY SHERWOOD SURVEYING.




0 15 30 60
SCALE (FEET)

LEGEND:

- FOUND PINS
- EXIST POWER POLE
- EXIST BENCHMARK
- EXIST LOT LINE
- EXIST BARBED WIRE FENCE
- EXIST OVERHEAD ELECTRIC
- EXIST ROADWAY FOC
- EXIST LIGHT POLE
- EXIST TREE
- CONTROL POINT
- PARK SIGN
- EXIST CONCRETE
- PROP CONCRETE
- PROP PARK BENCH
- PROP SIDEWALK
- PROPOSED LIGHT POLE
- PROPOSED EMERGENCY POST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STATE OF TEXAS
LANCE KLEIN
106110
REGISTERED PROFESSIONAL ENGINEER
10/2/15

# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## PROPOSED SITE PLAN

| | |
|---|---|
| JOB: 15COW002 | |
| DATE: OCTOBER 2015 | |
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

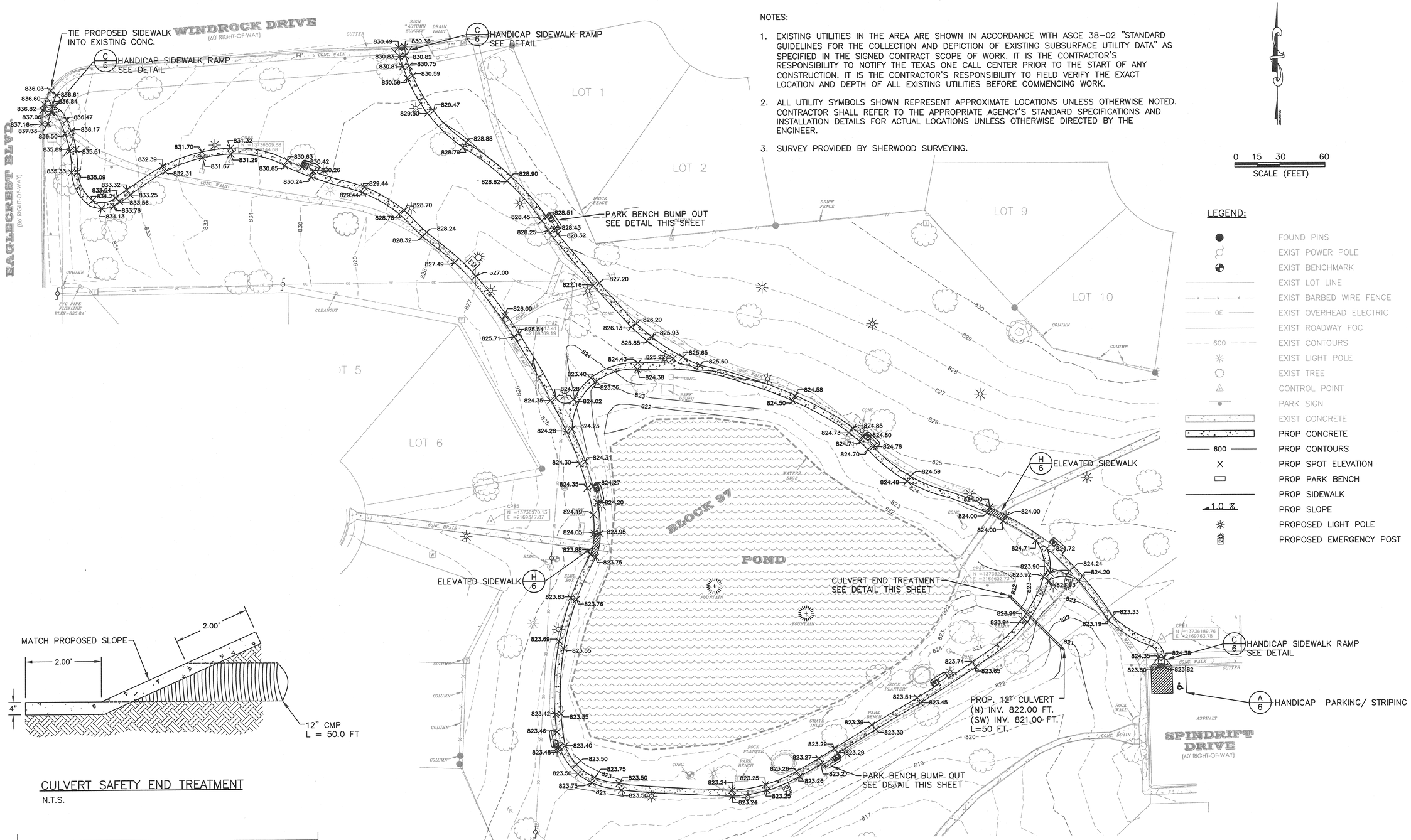
| DELTA | DESCRIPTION |
|---|---|
| | |

SHEET:
4 OF 8

Date: Oct 01, 2015, 4:58pm User ID: jwilks
File: S:\Active Projects\15COW002 Windrock – Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-PSITE-001.dwg

NOTES:

1. EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
2. ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SURVEY PROVIDED BY SHERWOOD SURVEYING.



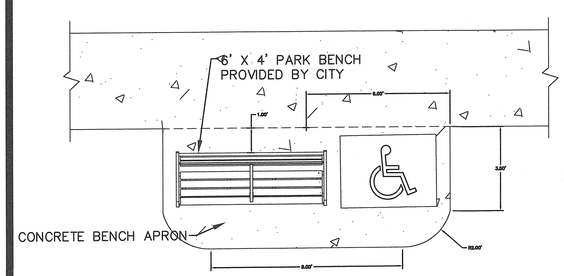

LEGEND:

- FOUND PINS
- EXIST POWER POLE
- EXIST BENCHMARK
- EXIST LOT LINE
- EXIST BARBED WIRE FENCE
- EXIST OVERHEAD ELECTRIC
- EXIST ROADWAY FOC
- EXIST CONTOURS
- EXIST LIGHT POLE
- EXIST TREE
- CONTROL POINT
- PARK SIGN
- EXIST CONCRETE
- PROP CONCRETE
- PROP CONTOURS
- PROP SPOT ELEVATION
- PROP PARK BENCH
- PROP SIDEWALK
- PROP SLOPE
- PROPOSED LIGHT POLE
- PROPOSED EMERGENCY POST




CULVERT SAFETY END TREATMENT

N.T.S.




PARK BENCH BUMP OUT

1"=3'

SIDEWALK NOTES:

1. WHEELCHAIR RAMP SHALL BE CONSTRUCTED WITH 4" CLASS "A" CONCRETE AND 2" GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL.
2. REINFORCING STEEL SHALL BE #4 BARS AT 12" O.C.E.W. OR 6" X 6" – W2.9 X W2.9 WIRE MESH.
3. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% SLOPE AND SIDEWALK CROSS GRADE SHALL HAVE A MAXIMUM SLOPE OF 2%. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
4. THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES SHALL BE LESS THAN 11%. THE CHANGE OF GRADE SHALL BE DEFINED AS THE ALGEBRAIC DIFFERENCE OF THE ADJACENT SURFACE SLOPES. IN THE CASE OF A STREET ACCESS RAMP DESIGNED AT THE 8.33% MAXIMUM SLOPE, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN 2.67% (I.E. 8.33–(–2.67)=11). IN ADDITION, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN OR EQUAL TO 5%.
5. IF THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES IS GREATER THAN OR EQUAL TO 11%, A LEVELING STRIP, 2 FEET IN LENGTH, SHALL BE PROVIDED TO TRANSITION THE ADJACENT SURFACES.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STATE OF TEXAS
LANCE KLEIN
106110
LICENSED PROFESSIONAL ENGINEER
10/2/15

# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## PROPOSED GRADING PLAN

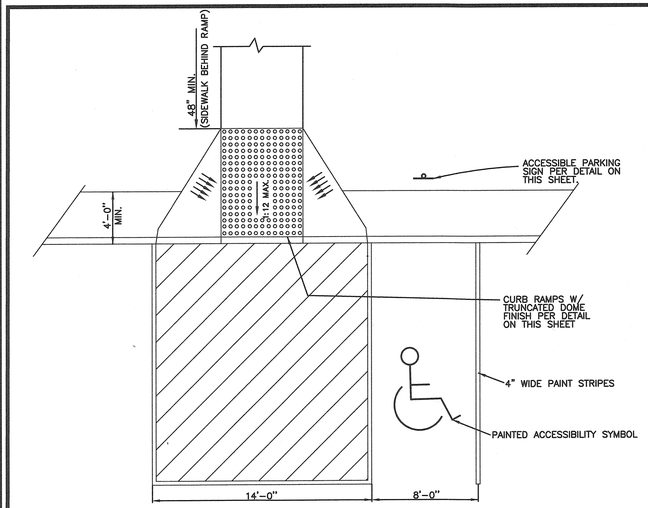
| | |
|---|---|
| JOB: 15COW002 | |
| DATE: OCTOBER 2015 | |
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

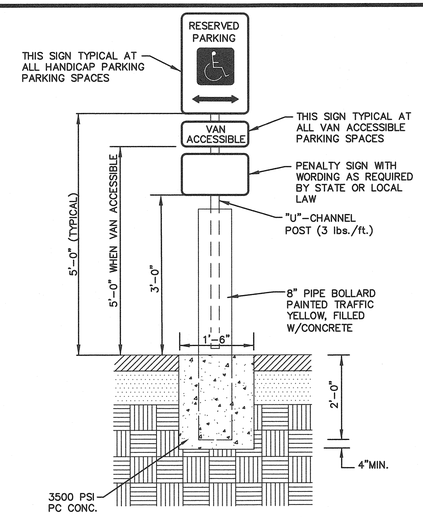
| DELTA | DESCRIPTION |
|---|---|
| | |

SHEET: 5 OF 8

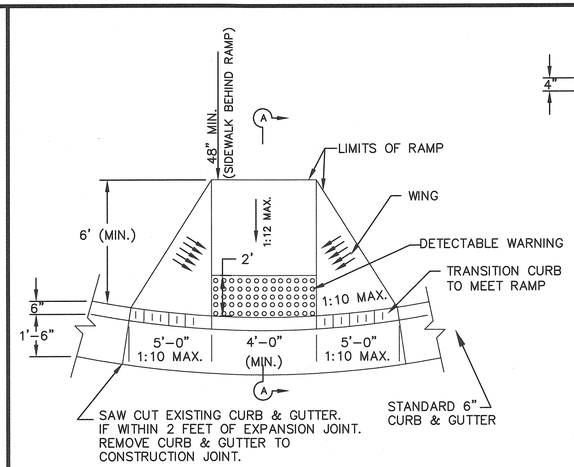
Date: Oct 01, 2015, 4:58pm User ID: jwilks
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTUMN SUNSET-PGRADE-001.dwg

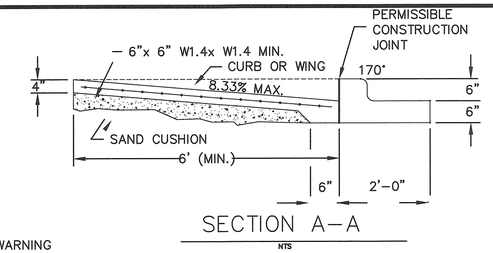



A HANDICAP PARKING AND STRIPING DETAIL
N.T.S




B HANDICAP SIGN DETAIL
N.T.S

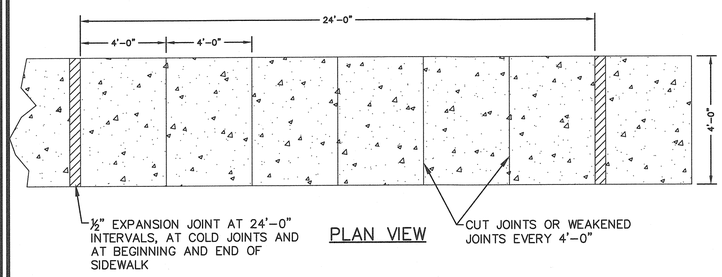


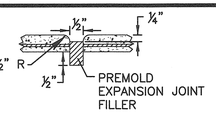

NOTES:

1. DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN. (23mm), A HEIGHT OF NOMINAL 0.2 IN. (5 mm) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN. (60 mm) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT (RE: ADA SECTION 4.29.2), MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTERAL PART OF THE WALKING SURFACE.
2. AREA OF RAMP TO INCLUDE CONTRASTING COLOR DOES NOT INCLUDE THE WINGS.
3. TYPICAL SIDEWALK WIDTHS AND CURB RADII SHOWN FOR ILLUSTRATION, REFER TO TRANSPORTATION MANUAL FOR APPROPRIATE SIDEWALK WIDTHS AND RADII.

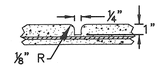
C SIDEWALK RAMP DETAIL
N.T.S



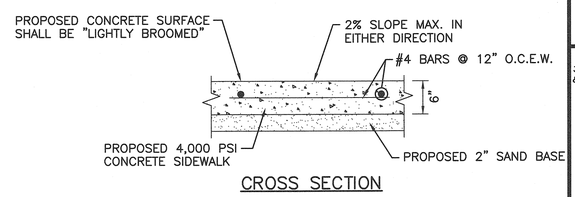

PLAN VIEW




EXPANSION JOINT

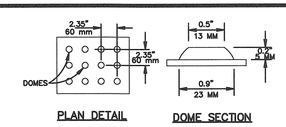



WEAKENED PLANE JOINT

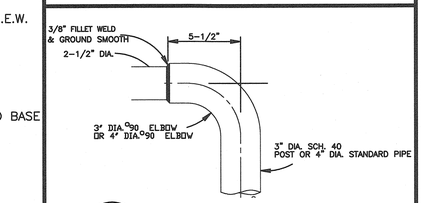



CROSS SECTION

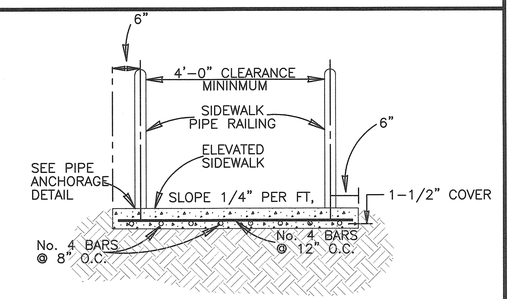
D TYPICAL SIDEWALK SECTION
N.T.S



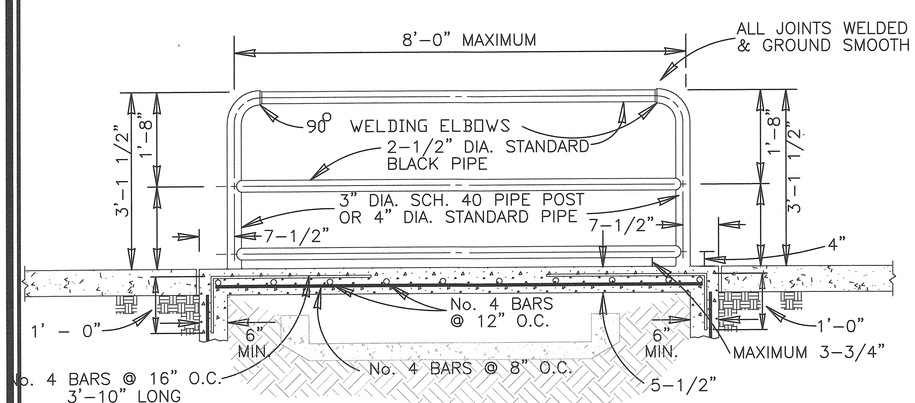

E DETECTABLE WARNING
N.T.S



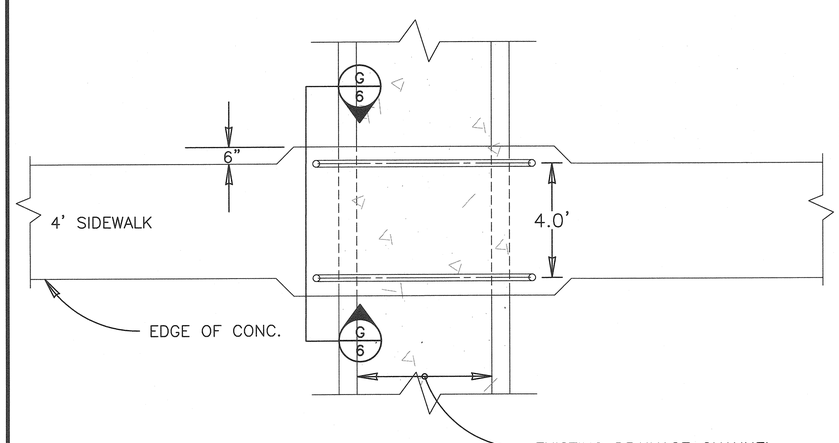

F HANDRAIL PIPE ELBOW
N.T.S



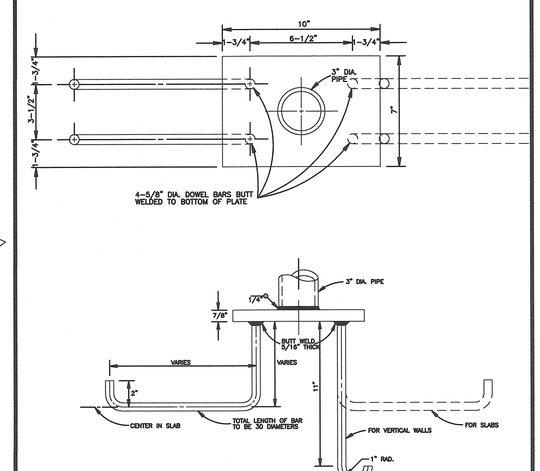

G-G ELEVATED SIDWALK SECTION VIEW
N.T.S




H ELEVATED SIDEWALK SECTION
N.T.S




I ELEVATED SIDEWALK PLAN VIEW
N.T.S




J PIPE ANCHORAGE DETAIL
N.T.S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STATE OF TEXAS
LANCE KLEIN
106110
LICENSED PROFESSIONAL ENGINEER
10/2/15

# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## PROPOSED GRADING DETAILS

| | |
|---|---|
| JOB: 15COW002 | |
| DATE: OCTOBER 2015 | |
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

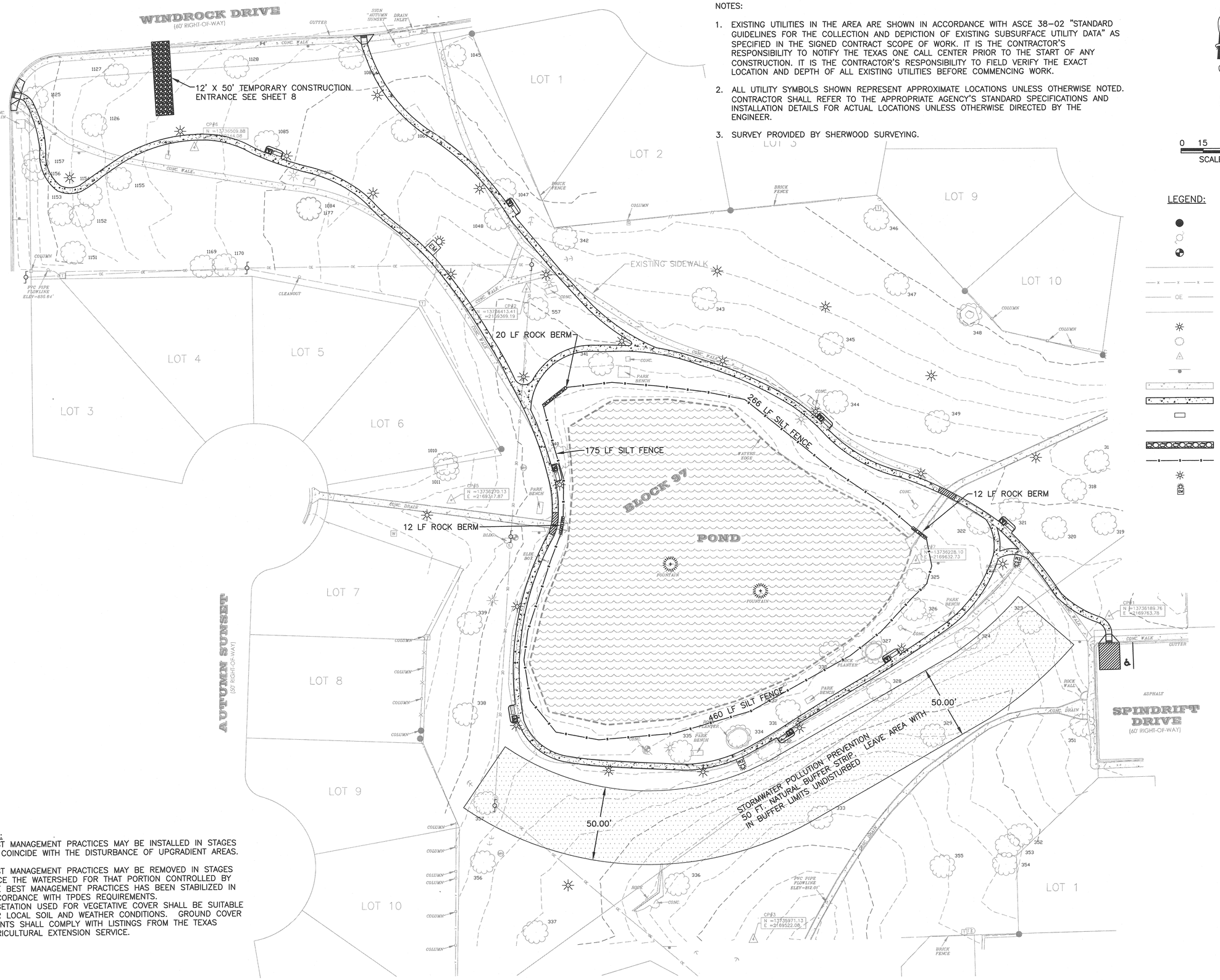
| DELTA | DESCRIPTION |
|---|---|
| | |

SHEET: 6 OF 8

Date: Oct 01, 2015, 4:59pm User ID: jwilks
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-GRADING DET.-001.dwg

NOTES:

1. EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
2. ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SURVEY PROVIDED BY SHERWOOD SURVEYING.




0 15 30 60
SCALE (FEET)

LEGEND:

- FOUND PINS
- EXIST POWER POLE
- EXIST BENCHMARK
- EXIST LOT LINE
- EXIST BARBED WIRE FENCE
- EXIST OVERHEAD ELECTRIC
- EXIST ROADWAY FOC
- EXIST LIGHT POLE
- EXIST TREE
- CONTROL POINT
- PARK SIGN
- EXIST CONCRETE
- PROP CONCRETE
- PROP PARK BENCH
- PROP SIDEWALK
- PROP ROCK BERM
- PROP SILTFENCE
- PROPOSED LIGHT POLE
- PROPOSED EMERGENCY POST

NOTES:

1. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.
2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.
3. VEGETATION USED FOR VEGETATIVE COVER SHALL BE SUITABLE FOR LOCAL SOIL AND WEATHER CONDITIONS. GROUND COVER PLANTS SHALL COMPLY WITH LISTINGS FROM THE TEXAS AGRICULTURAL EXTENSION SERVICE.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STATE OF TEXAS
LANCE KLEIN
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LICENSED PROFESSIONAL ENGINEER
10/2/15

# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## STORMWATER POLLUTION PREVENTION PLAN

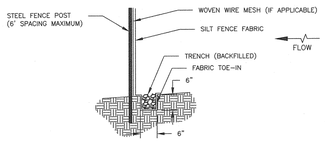
| | |
|---|---|
| JOB: 15COW002 | |
| DATE: OCTOBER 2015 | |
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

| DELTA | DESCRIPTION |
|---|---|
| | |

SHEET: 7 OF 8

Date: Oct 01, 2015, 4:59pm User ID: jwilks
File: S:\Active Projects\15COW002 Windcrest - Autumn Sunset Park\dwg\15COW002-AUTNUM SUNSET-SW3P-001.dwg




NOTES:

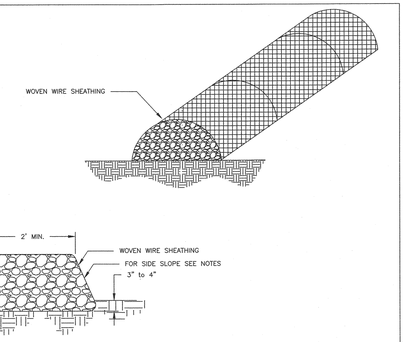
1. TRIANGULAR SEDIMENT FILTER DIKES MAY BE SUBSTITUTED FOR SILT FENCE IN AREAS WHERE INSTALLATION OF SILT FENCE IS NOT POSSIBLE OR WHERE VEHICLE ACCESS MUST BE MAINTAINED PROVIDED THE CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE ACRE.
2. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN$^2$, ULTRAVIOLET STABILITY EXCEEDING 70%, AND A MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
3. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT$^2$, AND BRINDELL HARDNESS EXCEEDING 140.
4. WOVEN WIRE BACKING IS REQUIRED IN THE EDWARDS AQUIFER RECHARGE AND CONTRIBUTING ZONE; OPTIONAL ELSEWHERE. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2"x4" WELDED WIRE, 12 GAUGE MINIMUM.
5. SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOURS AS CLOSE AS POSSIBLE. THE ENDS SHOULD BE CURVED UPSTREAM TO CREATE AN AREA OF WATER IMPOUNDMENT AND PREVENT FLOW FROM ESCAPING AROUND THE FENCE.
6. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT AND SPACED NOT MORE THAN 6 FEET ON CENTER.
7. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED IN (E.G., PAVEMENT OR ROCK OUTCROP) WEIGHT FABRIC FLAP WITH 3" OF WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
8. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
9. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POSTS OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. WHERE ENDS MEET, OVERLAP FABRIC 3-FEET AND SECURELY FASTEN.

MAINTENANCE AND REMOVAL:

12. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
13. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

## SILT FENCE

EXHIBIT A1




NOTES:

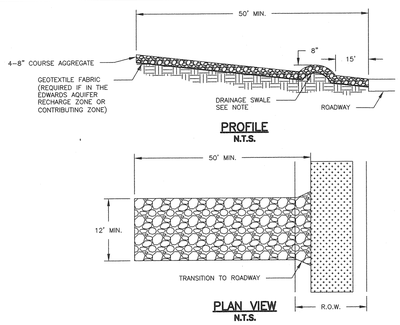
1. USE ONLY CLEAN, OPEN GRADED ROCK 5-8 INCH DIAMETER FOR STREAM FLOW CONDITIONS; USE OPEN GRADED ROCK 3-5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED.
3. THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
4. FOR INSTALLATIONS IN ACTIVE STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
5. ROCK BERMS PLACED IN STATE RIGHT OF WAY WILL BE INSTALLED WITH A MAXIMUM SLOPE OF 6:1 OR FLATTER FOR ALL SLOPES PARALLEL TO THE FRONTAGE ROAD EDGE OF PAVEMENT.

MAINTENANCE AND REMOVAL:

6. REPAIR ANY LOOSE WIRE SHEATHING.
7. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION
8. THE STONE AND/OR FABRIC CORE – WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
9. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
10. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

## ROCK BERM

EXHIBIT A3




NOTES:

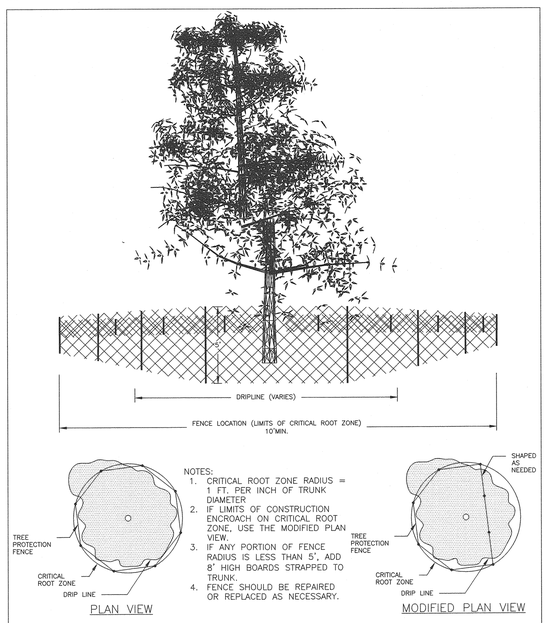
1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION WITH A MINIMUM THICKNESS OF 8 INCHES.
2. IF THE SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE 8 INCHES HIGH WITH 3:1 (H:V) SIDESLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OX/YD$^2$, A MULLEN BURST RATING OF 140 LB/IN$^2$, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. THE MINIMUM WIDTH OF THE ENTRANCE SHOULD BE 12 FT OR THE FULL WIDTH OF THE EXIT ROADWAY, WHICHEVER IS GREATER.
5. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
6. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH 4 INCH MINIMUM CRUSHED STONE OR COMMERCIAL RACK WHICH DRAINS TO A SEDIMENT TRAP OR BASIN.

MAINTENANCE:

7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
8. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

## STABILIZED CONSTRUCTION ENTRANCE

EXHIBIT A5




## TREE PROTECTION CONSTRUCTION FENCE

EXHIBIT A6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# AUTUMN SUNSET SIDEWALK IMPROVEMENTS

## STORMWATER POLLUTION PREVENTION DETAILS

JOB: 15COW002

DATE: OCTOBER 2015

| | |
|---|---|
| DRAWN: | PM: |
| DESIGN: | DM: |
| PEER: | OTHER: |

REVISIONS:

| DELTA | DESCRIPTION |
|---|---|
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SHEET:

8 OF 8

Date: Oct 01, 2015, 4:39pm User ID: jwilks
File: S:\Active Projects\15COW002 Wildcrest - Autumn Sunset Park\dwg\15COW002-AUTUMN SUNSET-SWP DET-001.dwg