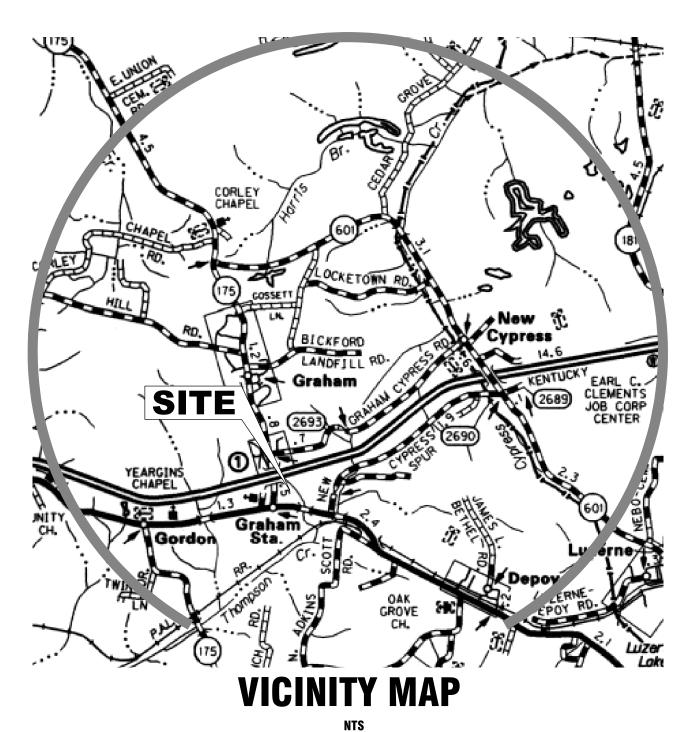


# PARADISE REGIONAL **BUSINESS PARK** LOT 7A SPEC BUILDING PAD - GRADE AND DRAIN

# MUHLENBERG COUNTY, KENTUCKY



# OCTOBER, 2013



624 Wellington Way Lexington, Ky. 40503 www.mselex.com

Phone: (859)223-5694 Fax: (859)223-2607

SET No. \_\_\_\_\_ MSE PROJECT No. 5069-02

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### STREET NOTES

1. SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GENERAL SPECIFICATIONS. MINIMUM SUBGRADE CROWN SHALL BE 1/4 INCH PER FOOT. CROWN SHALL BE CHECKED AND COMPACTION TESTS AT SPECIFIED INTERVALS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO PLACING THE FIRST LIFT OF STONE.

<u>GENERAL NOTES</u>

MADE FOR ROCK EXCAVATION.

ENTRANCES.

DISTURBING SITE.

BE REQUIRED.

EXISTING ROADS.

STORM DRAINAGE FACILITIES NOTES

- 1. STORM SEWER PIPE SHALL BE AS DESIGNATED ON THE APPROVED CONSTRUCTION PLANS, AND SHALL CONFORM TO THE GENERAL SPECIFICATIONS.
- 2. BEDDING AND BACKFILL SHALL CONSIST OF THE FOLLOWING: A. WHEN THE TRENCH EXCAVATION IS IN ROCK. THE PIPE SHALL BE BEDDED ON AT LEAST 6 INCHES OF NO. 9 OR NO. 68 CRUSHED STONE, AND SHALL BE BACKFILLED WITH NO. 9 OR NO. 68 CRUSHED STONE FOR A MINIMUM OF 12 INCHES ABOVE THE TOP OF THE PIPE. BACKFILL ABOVE THIS CUSHION SHALL NOT CONTAIN PIECES OF ROCK LARGER THAN 12 INCHES IN ANY DIMENSION.
  - B. WHEN THE TRENCH EXCAVATION IS IN SOIL, THE PIPE SHALL BE BEDDED ON AT LEAST 6 INCHES OF NO. 9 OR NO. 68 CRUSHED STONE, AND SHALL BE BACKFILLED WITH NO. 9 OR NO. 68 CRUSHED STONE TO THE SPRINGLINE OF THE PIPE. THE REMAINING PORTION OF THE TRENCH, NOT LOCATED WITHIN A STREET, CAN BE BACK FILLED WITH SELECT SOIL CONTAINING ROCKS NO LARGER THAN 1 1/2 INCH IN SIZE.
- C. WHEN THE TRENCH EXCAVATION IS WITHIN A STREET (I.E., BACK OF CURB TO BACK OF CURB), THEN THE ENTIRE TRENCH SHALL BE BACKFILLED WITH NO. 9 OR NO. 68 CRUSHED STONE.
- 3. MANHOLES SHALL BE CONSTRUCTED OF PRECAST CONCRETE AND SHALL CONFORM TO THE GENERAL SPECIFICATIONS. ALL MANHOLE TOPS SHALL BE ECCENTRIC IN DESIGN. CONICAL TOPS SHALL BE USED FOR ALL MANHOLES WITH DEPTHS SUFFICIENT FOR THEIR USE. MINOR GRADE ADJUSTMENTS (THROUGH THE USE OF GRADE RINGS) TO THE RIM ELEVATION SHALL NOT EXCEED 12 INCHES. NO MORE THAN 2 GRADE RINGS SHALL BE PERMITTED. BITUMINOUS MASTIC SEALANT SHALL BE USED AT EACH JOINT OF THE MANHOLE AND BETWEEN ALL GRADE RINGS AND/OR CASTINGS. NON-SHRINK (HYDRAULIC) GROUT SHALL BE REQUIRED INSIDE THE MANHOLES WHERE THE PIPES ENTER AND EXIT.
- 4. HEADWALLS AND OTHER CONCRETE STRUCTURES SHALL BE AS DESIGNATED ON THE APPROVED CONSTRUCTION PLANS, AND SHALL CONFORM TO THE GENERAL SPECIFICATIONS.
- 5. DRAINAGE SWALES SHALL CONFORM TO THE GENERAL SPECIFICATIONS. DRAINAGE SWALES SHALL BE SODDED OR HAVE VEGETATION BLANKETS USED TO THE ELEVATION OF THE 25-YEAR FREQUENCY STORM.
- 6. MINIMUM 3 FOOT HIGH CHAIN LINK FENCING SHALL BE REQUIRED ALONG THE PERIMETER OF THE HEADWALL IF THE DISTANCE FROM THE PIPE INVERT TO THE TOP OF THE HEADWALL EXCEEDS 3.5 FEET.

- CONTRACTOR SHALL LOCATE PROPERTY LINES, RIGHTS-OF-WAY AND UNDERGROUND UTILITIES. PROTECT UNDERGROUND UTILITIES.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ANY AREAS WHERE UNACCEPTABLE SOILS, SINKHOLES, WET AREAS OR OTHER CONDITIONS ARE ENCOUNTERED WHICH MAY ADVERSELY AFFECT THE SITE. IF DIRECTED BY ENGINEER, REMOVE UNSUITABLE SOILS AND REPLACE THEM WITH ACCEPTABLE SOILS.
- EARTH AND ROCK WORK IS UNCLASSIFIED. NO EXTRA PAYMENT WILL BE
- CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS IN GRADING PLAN AS NECESSARY TO PROVIDE FOR SMOOTH TRANSITION FOR EXISTING
- THE CONTRACTOR SHALL ESTABLISH EROSION CONTROL MEASURES BEFORE
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY
- THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AND THE KENTUCKY DEPARTMENT OF HIGHWAYS GUIDANCE MANUAL.
- THE CONTRACTOR MUST MAINTAIN ACCESS TO EXISTING BUSINESSES AND
- ALL EARTHWORK TO COMPLY WITH KENTUCKY DEPT. OF HIGHWAYS (KY-DOH SECTION 400) SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2000 AND ANY AMENDMENTS.

WATER: MUHLENBERG COUNTY WATER DISTRICT 301 DEAN ROAD GREENEVILLE KY 42345 (270) 338-1300

ELECTRIC SERVICE PROVIDERS: KENTUCKY UTILITIES

UTILITIES CONTACT INFORMATION

TELEPHONE/FIBER OPTIC: AT&T/COMCAST CABLE

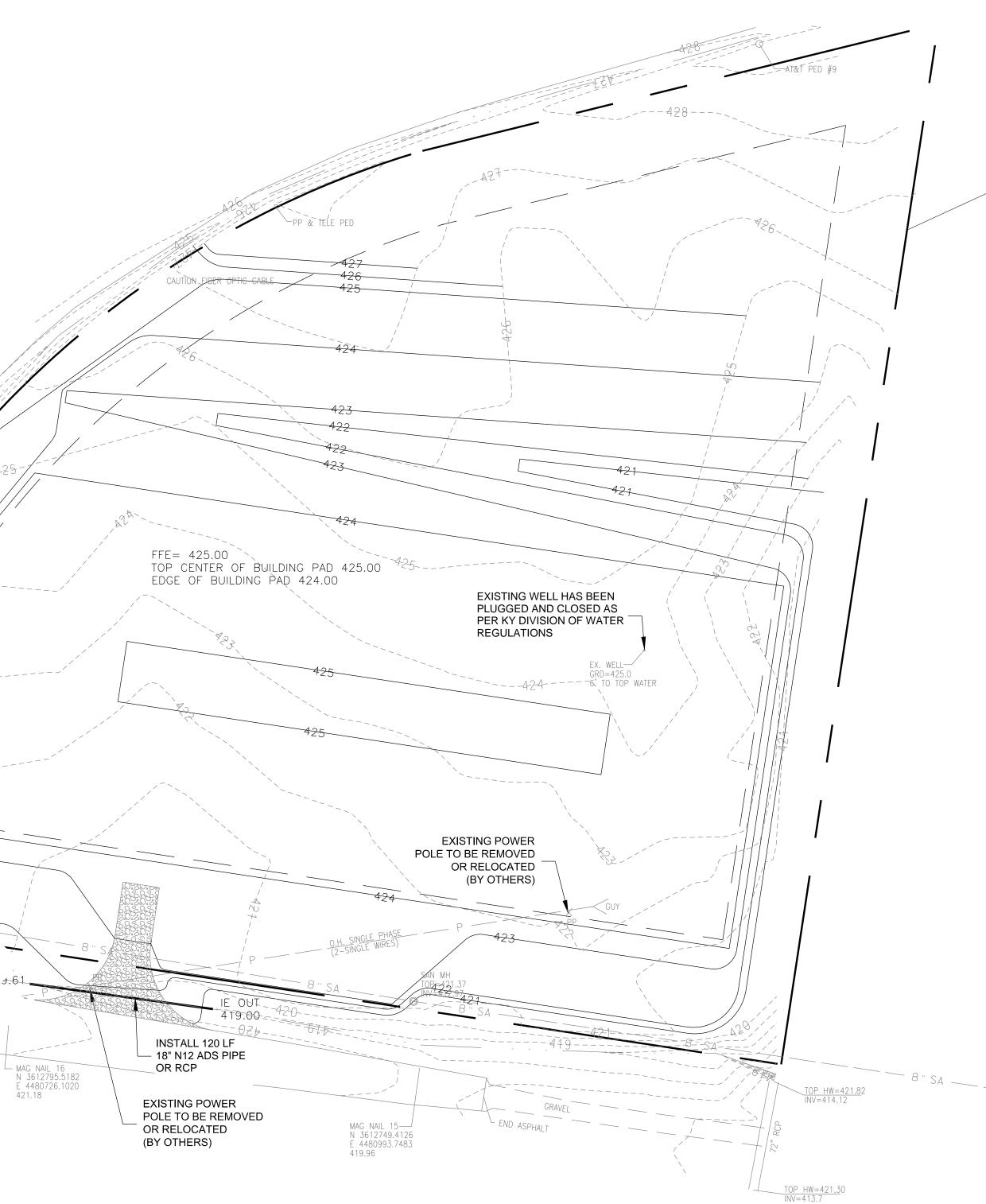


Know what's **below**. **Call** before you dig.

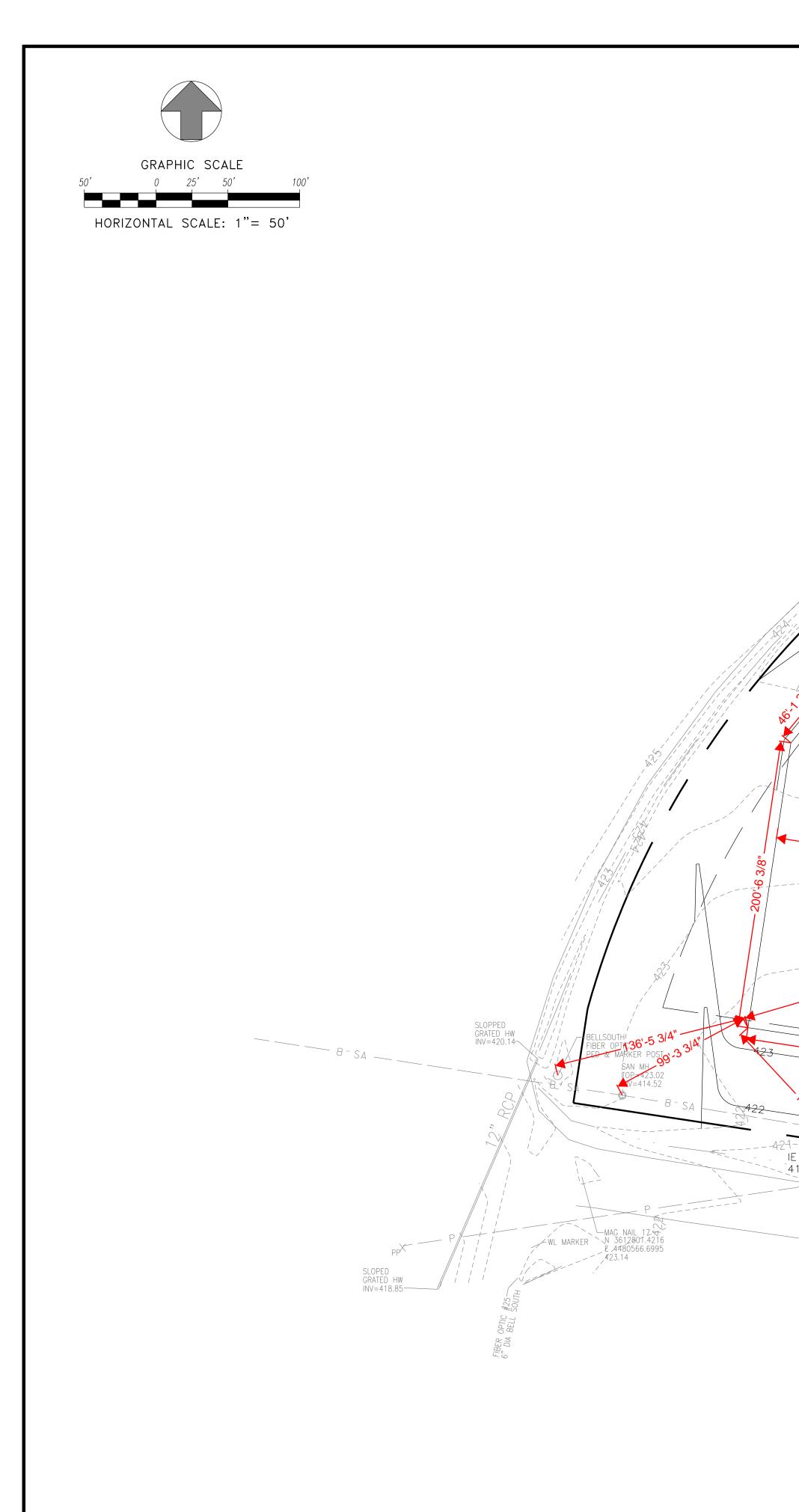
| GENERAL NOTES |                    | PARADISE REGIONAL BUSINESS PARK | LOT 7A - SPEC BUILDING PAD |                    |   |   | MUHLENBERG COUNTY, KENTUCKY  |
|---------------|--------------------|---------------------------------|----------------------------|--------------------|---|---|--|
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| DATE REVISION |                    |                                 |                            | Design Documents:  | The design professional waves any and all responsibility and liability for problems which arise from failure to follow these plans, specifications and the design intent they convey. | <ul> <li>Copyright (©</li> <li>Copyright (©</li> <li>This document discloses subject matter considered confidential by mas of kentucky, inc. and on which mas of kentucky, inc. has properly rights. neither receipt nor</li> </ul> | possession thereof confers or transfer any rights to reproduce the document or any part thereof, or to disclose any information contained therein to others, or to use it for<br>any purpose without the written permission of mse of kentucky, inc. |
| 10. 5069–02   | DESIGNED BY J.R.M. | J.R.M.                          | 3Y G.A.R.                  | REVIEWED BY G.A.R. |   | OCTORFR 2013  | AS SHOWN   |
| PROJECT NO.   | DESIGNED           | DRAWN BY                        | CHECKED BY                 | REVIEWED           |   | DATE  |  |
|               | Engineers          | Architects                      | Planners                   |                    |   | Phone: (859)223-5694  | Fax: (859)223-2607   |
|               |                    |                                 |                            |                    |   | Wellington Way  | ngton, Ky. 40503<br>/.mselex.com   |
|               |                    |                                 |                            |                    |   | 624 Welling   | Lexington, Ky. 40:<br>www.mselex.com   |

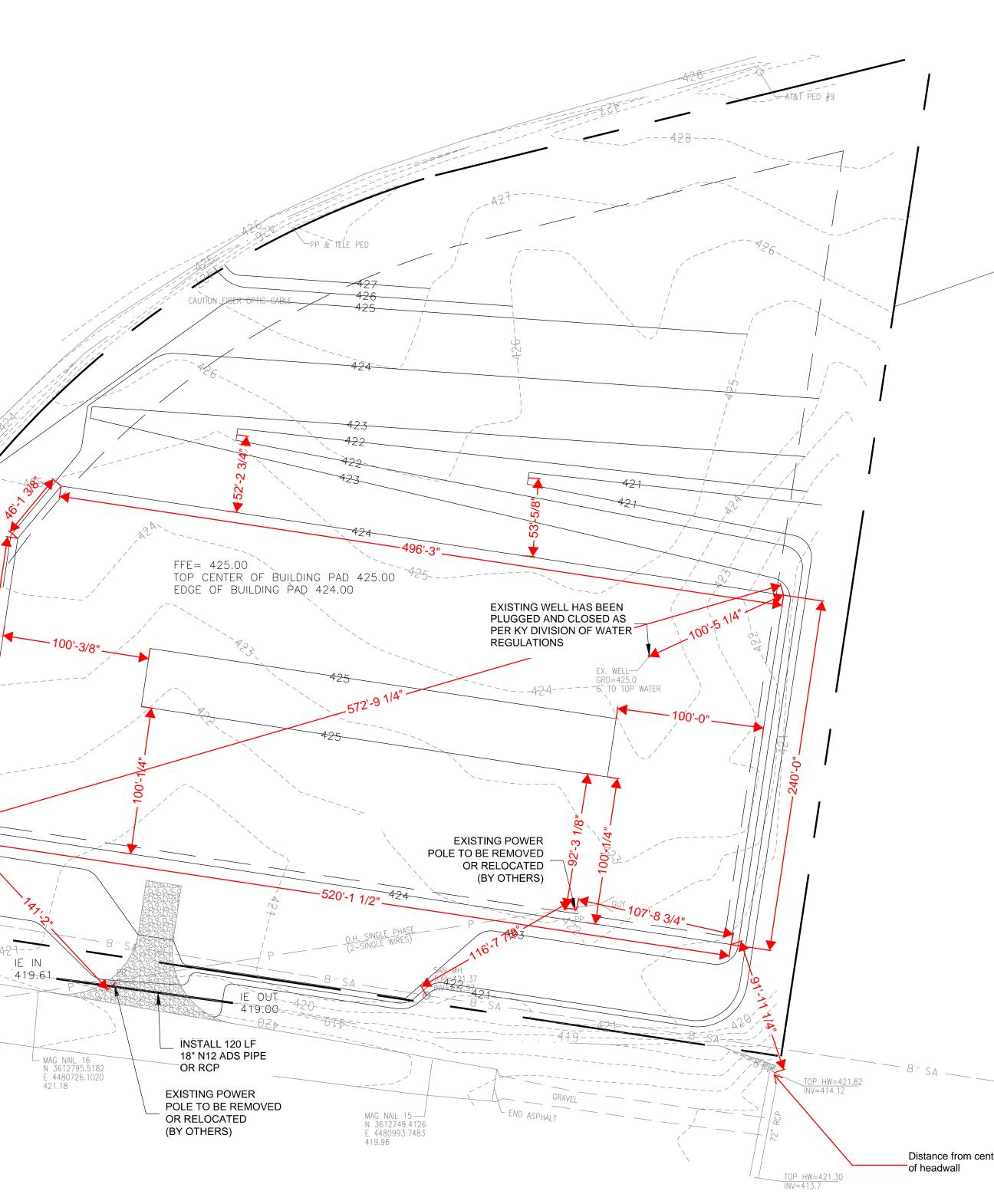
SHEET



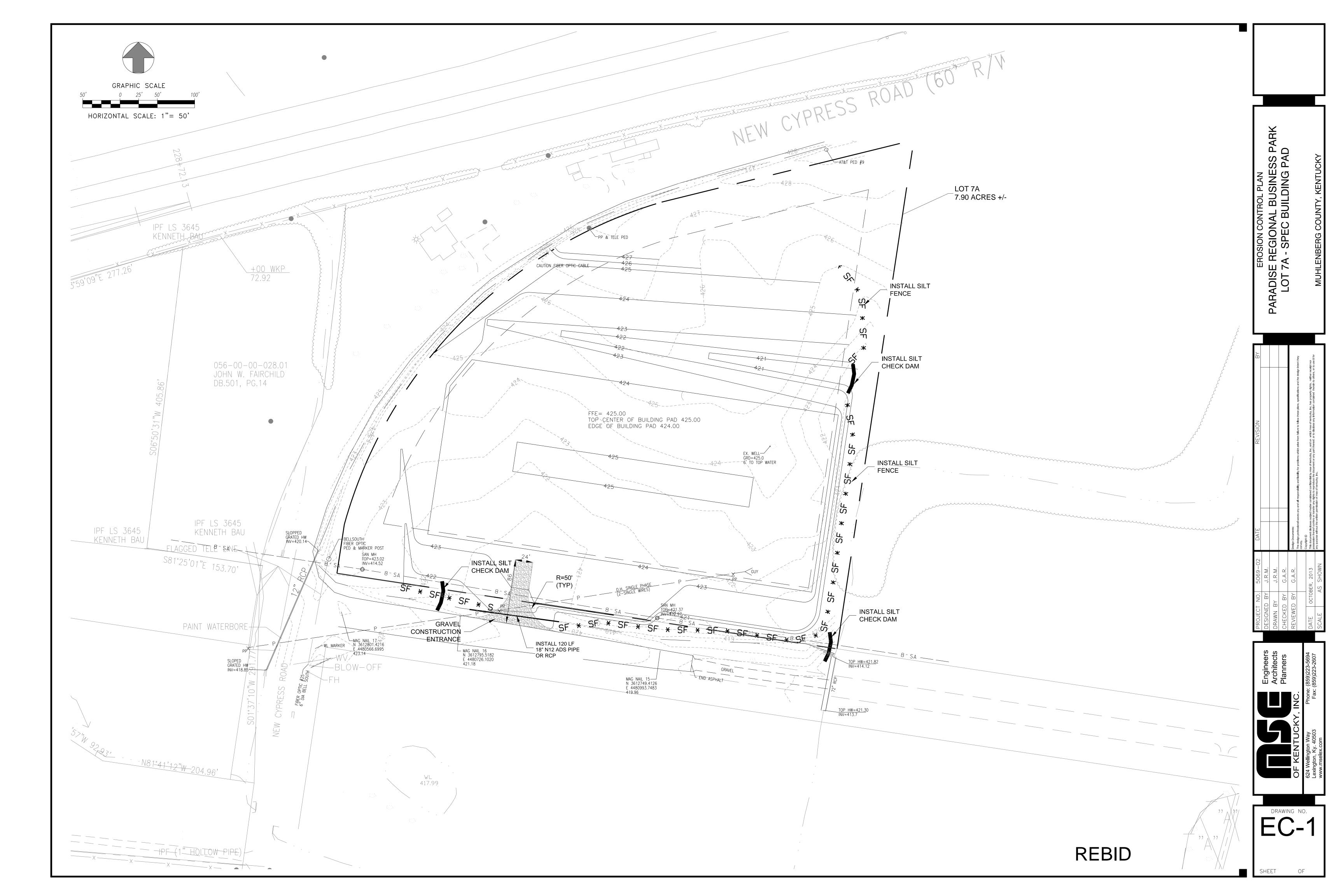


| LOT 7A<br>7.90 ACRES +/- |       | SITE GRADING PLAN<br>PARADISE REGIONAL BUSINESS PARK<br>LOT 7A - SPEC BUILDING PAD<br>MUHLENBERG COUNTY, KENTUCKY  |
|--------------------------|-------|--|
|                          |       | IT       NO.       5069–02       DATE       REVISION       BY         ED       BY       J.R.M.       Page  |
|                          | REBID | ACHIERCE DESIGNED<br>PROJECT N<br>PROJECT N<br>PRO |





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|--------------------------|-------|--|
|                          |       | PROJECT NO.       5069-02       DATE       REVISION       BY         DESIGNED BY       J.R.M.       M       M       M       M         DRAWN BY       J.R.M.       A       M       M       M       M         DRAWN BY       J.R.M.       A       M       M       M       M       M         CHECKED BY       G.A.R.       Beign Documents.       M |
| enter                    | REBID | C-1AD<br>Branners<br>DE RENTORY, INC.<br>Engineers<br>Architects<br>Planners<br>Fax: (859)223-5694<br>Fax: (859)223-5694<br>Fax: (859)223-5694<br>Fax: (859)223-5694   |



EROSION CONTROL NOTES

THE EROSION CONTROL MEASURES NOTED BELOW ARE MINIMUMS AND DO NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR COMPLIANCE WITH ANY AND ALL U.S. EPA . KENTUCKY DIVISION OF WATER AND/OR LOCAL REQUIREMENTS.

CONTRACTOR SHALL ESTABLISH EROSION CONTROL MEASURES PRIOR TO DISTURBING SITE.

CONTRACTOR SHALL SHALL LIMIT ACCESS TO THE SITE TO THE CONSTRUCTION ENTRANCES. THE LOCATION OF THE CONSTRUCTION ENTRANCES SHALL BE APPROVED BY THE ENGINEER AND DESIGNATED ON THE SWPPP. THE CONTRACTOR SHALL INSTALL STONE SURFACE AT THE LOCATION WHERE CONSTRUCTION TRAFFIC LEAVES AND ENTERS THE SITE. THESE ACCESS POINTS SHALL BE MIN. 20' WIDE, 50' LONG, 0.5' DEEP AND USE NO 7 STONE OVER GEOTEXTILE FABRIC. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND PARKING AREAS FREE FORM MUD, DIRT, DEBRIS, AND ROCK. DUST SHALL BE KEPT TO A MINIMUM BE UTILIZING SPRINKLING, CALCIUM CHLORIDE, VEGETATIVE COVER, SPRAY ON ADHESIVES OR OTHER APPROVED METHODS. THIS ENTRANCE SHALL BE MAINTAINED UNTIL THE PERMANENT ACCESS ROAD HAS BEEN CONSTRUCTED.

CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AND THE KENTUCKY DEPARTMENT OF HIGHWAYS GUIDANCE MANUAL.

CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

CONTRACTOR MUST MAINTAIN ACCESS TO EXISTING BUSINESSES AND EXISTING ROADS UNLESS PRIOR WRITTEN AGREEMENT HAS BEEN SUBMITTED TO THE ENGINEER.

CONTRACTOR SHALL PROVIDE A CONCRETE WASHOUT STRUCTURE OR AREA UPSTREAM OF THE DETENTION BASIN IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. THE LOCATION OF THE CONCRETE WASHOUT STRUCTURE/AREA SHALL BE APPROVED BY THE ENGINEER AND DESIGNATED ON THE SWPPP.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT EROSION ONTO ADJACENT PROPERTY. ANY REMEDIAL MEASURES REQUIRED TO CORRECT DAMAGE CREATED BY EROSION SHALL BE AT THE CONTRACTOR'S EXPENSE.

ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION, IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION.

ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. A FIELD LOG OF INSPECTIONS SHALL BE MADE AND A COPY GIVEN TO THE OWNER.

SILT FENCES TO BE CLEANED OUT WHEN THEY BECOME ONE-THIRD FULL.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NO MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PART OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED UNLESS THAT ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 21 DAYS.

TOPSOIL STOCKPILES THAT ARE NOT BEING UTILIZED FOR A PERIOD OF 14 DAYS TO BE SURROUNDED BY SILT FENCES RESEEDED AND PLACED WHERE SOIL EROSION WOULD GO TO THE SEDIMENT BASINS.

WHEN SEASONAL CONDITIONS PROHIBIT THE APPLICATION OF TEMPORARY OR PERMANENT SEEDING, NON-VEGETATIVE SOIL STABILIZATION PRACTICES SUCH AS MULCHING AND MATTING SHALL BE USED, UNTIL SUCH TIME AS CONDITIONS PERMIT.

ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION ACTIVITIES ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

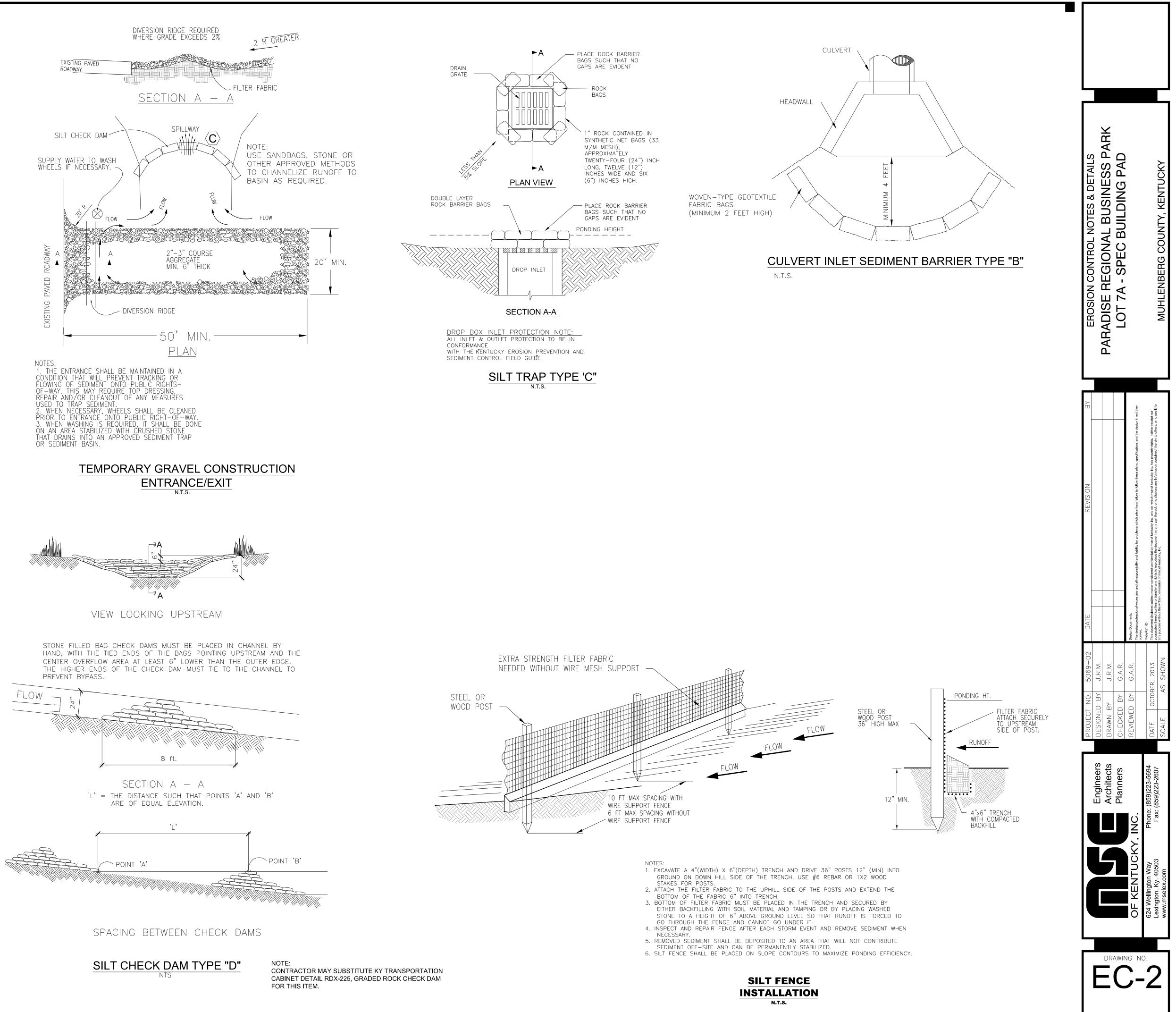
ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.

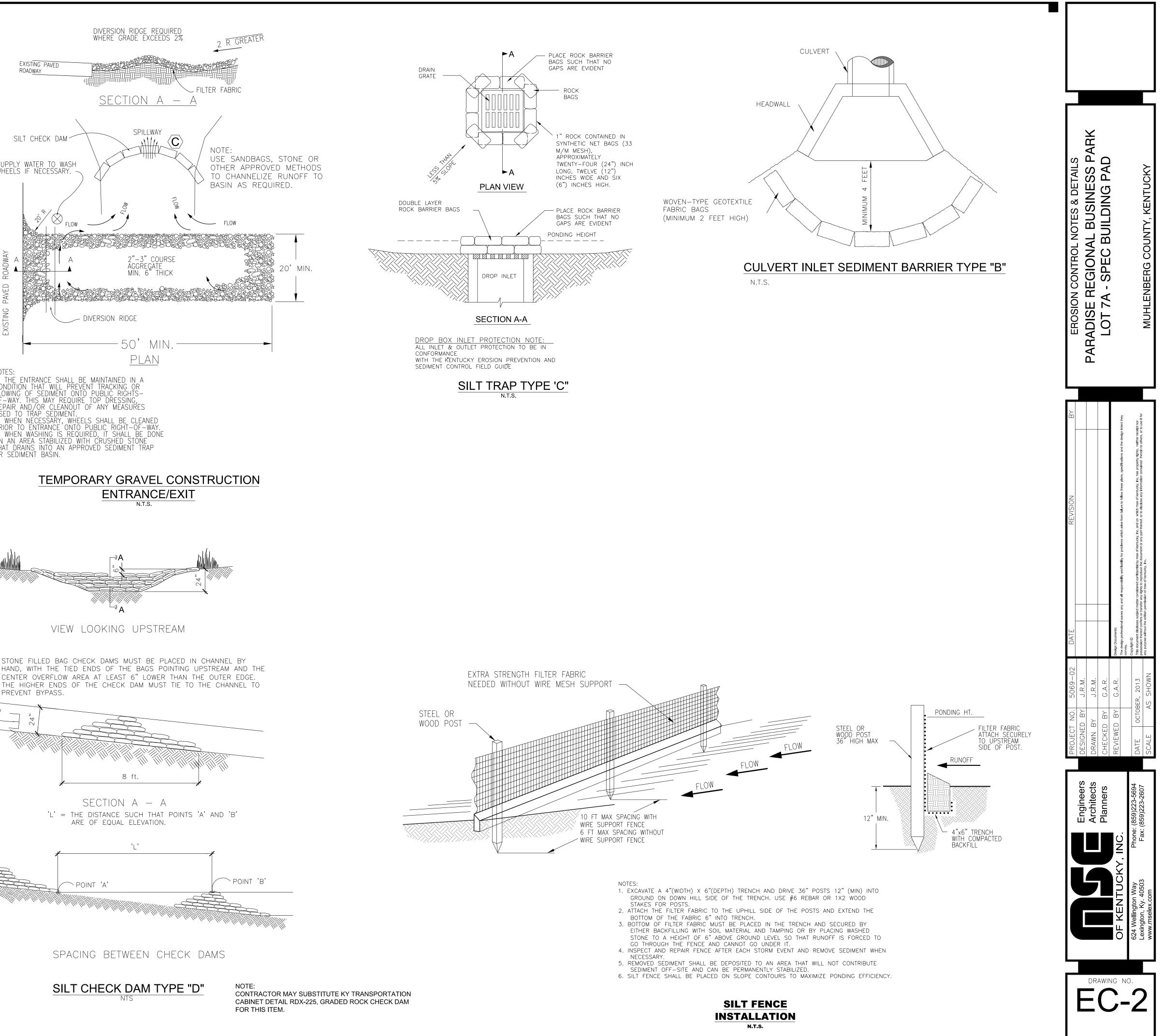
THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL STORM STRUCTURES, PIPES, DRAINAGE SWALES/DITCHES CLEANED OF SILT AND DEBRIS AND FUNCTIONING PROPERLY. IN THE EVENT SEDIMENTATION ACCUMULATES ALONG SWALES/DITCHES DURING CONSTRUCTION THE CONTRACTOR SHALL REGRADE TO THE DESIGNED ELEVATIONS AT NO ADDITIONAL COST TO THE OWNER.

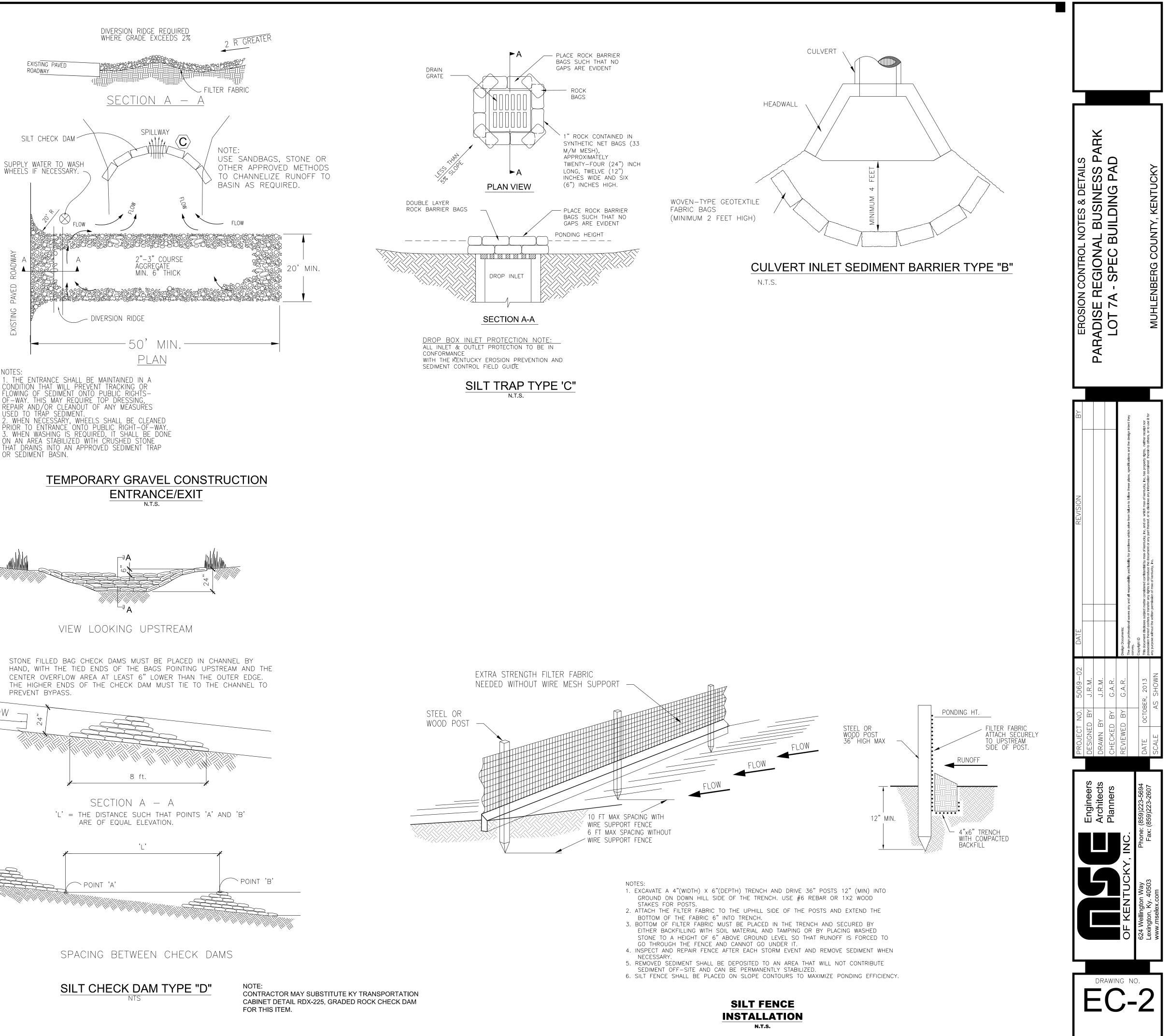
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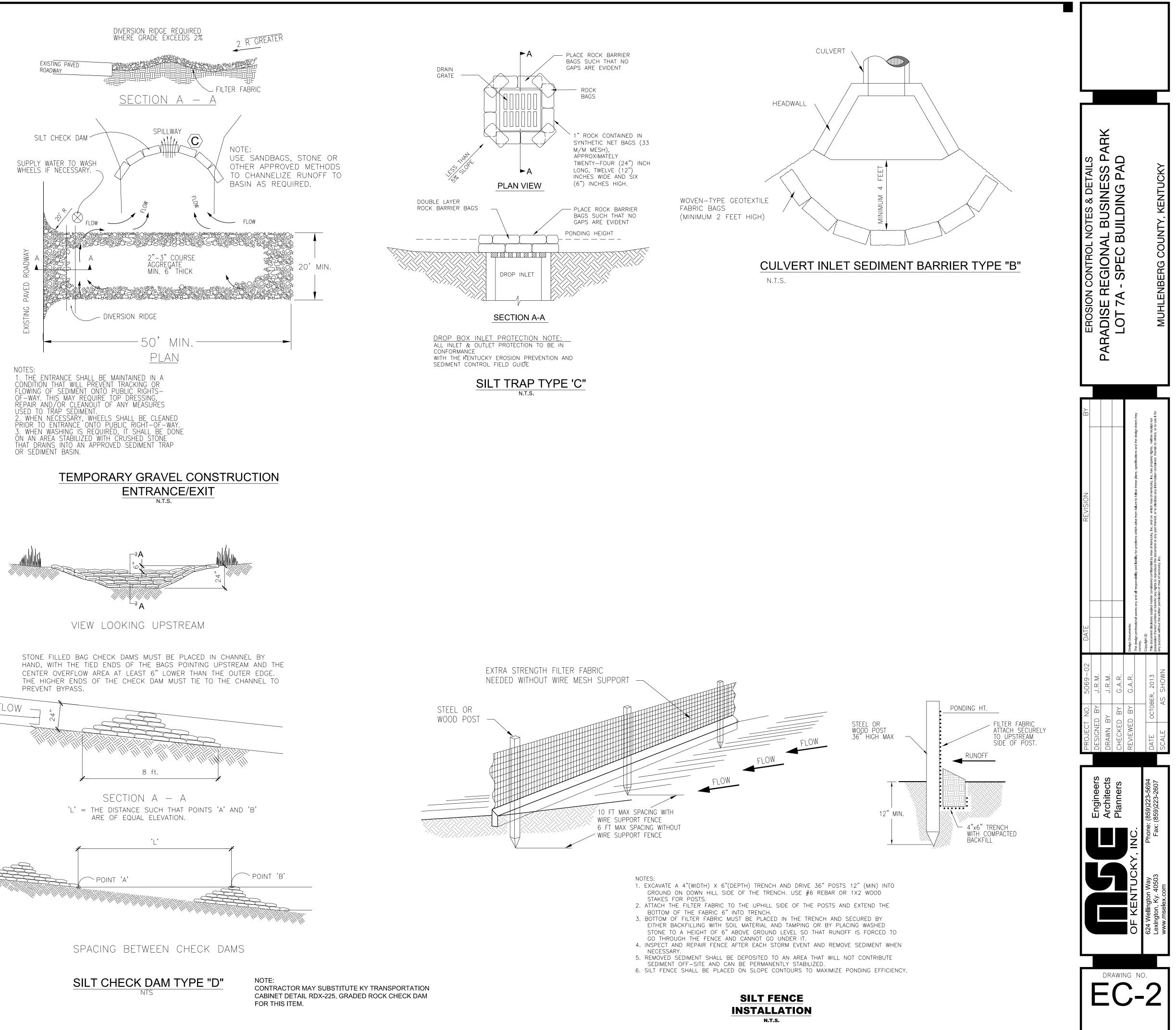
## **DOUBLE NET EROSION CONTROL BLANKET NOTE:**

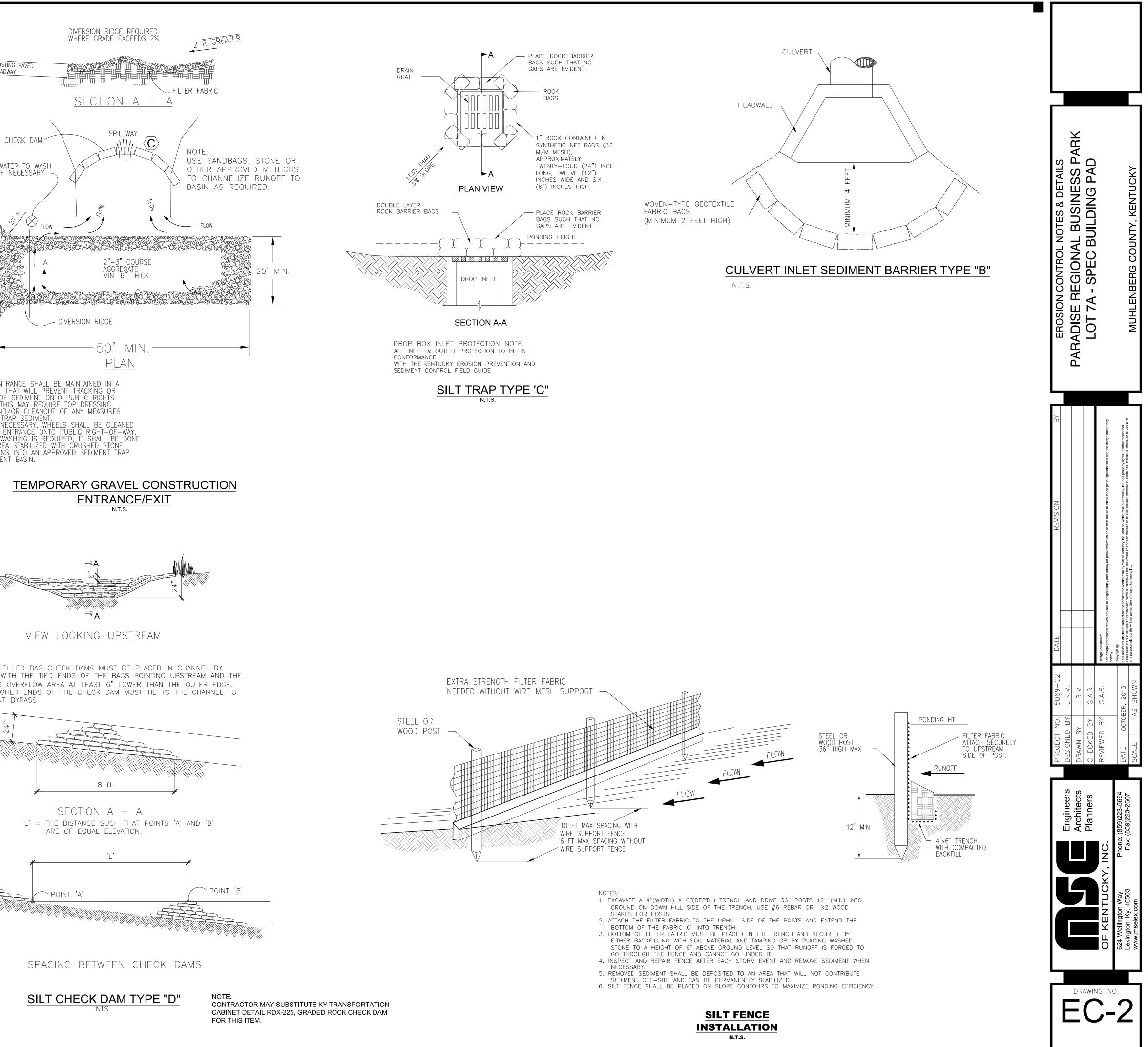
CONTRACTOR SHALL PROVIDE AND INSTALL EROSION CONTROL BLANKET FOR PROTECTION OF DISTURBED, SEEDED SLOPES OR DITCHES WHERE CALLED FOR ON THE DRAWINGS. BLANKET SHALL BE: DOUBLE NET EROSION CONTROL BLANKET S150BN AS MANUFACTURED BY NORTH AMERICAN GREEN, 14649 HIGHWAY 41 NORTH, EVANSVILLE, IN 47725 (1-812-867-6632) OR APPROVED EQUAL. BLANKET SHALL BE BIODEGRADABLE, NATURAL FIBER, STRAW MATRIX MEETING FHWA FP-03, CATEGORY TYPE 2.D. INSTALLATION SHALL BE IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS INCLUDING PREPARATION OF THE SEEDED SLOPES TO RECEIVE PROTECTION.

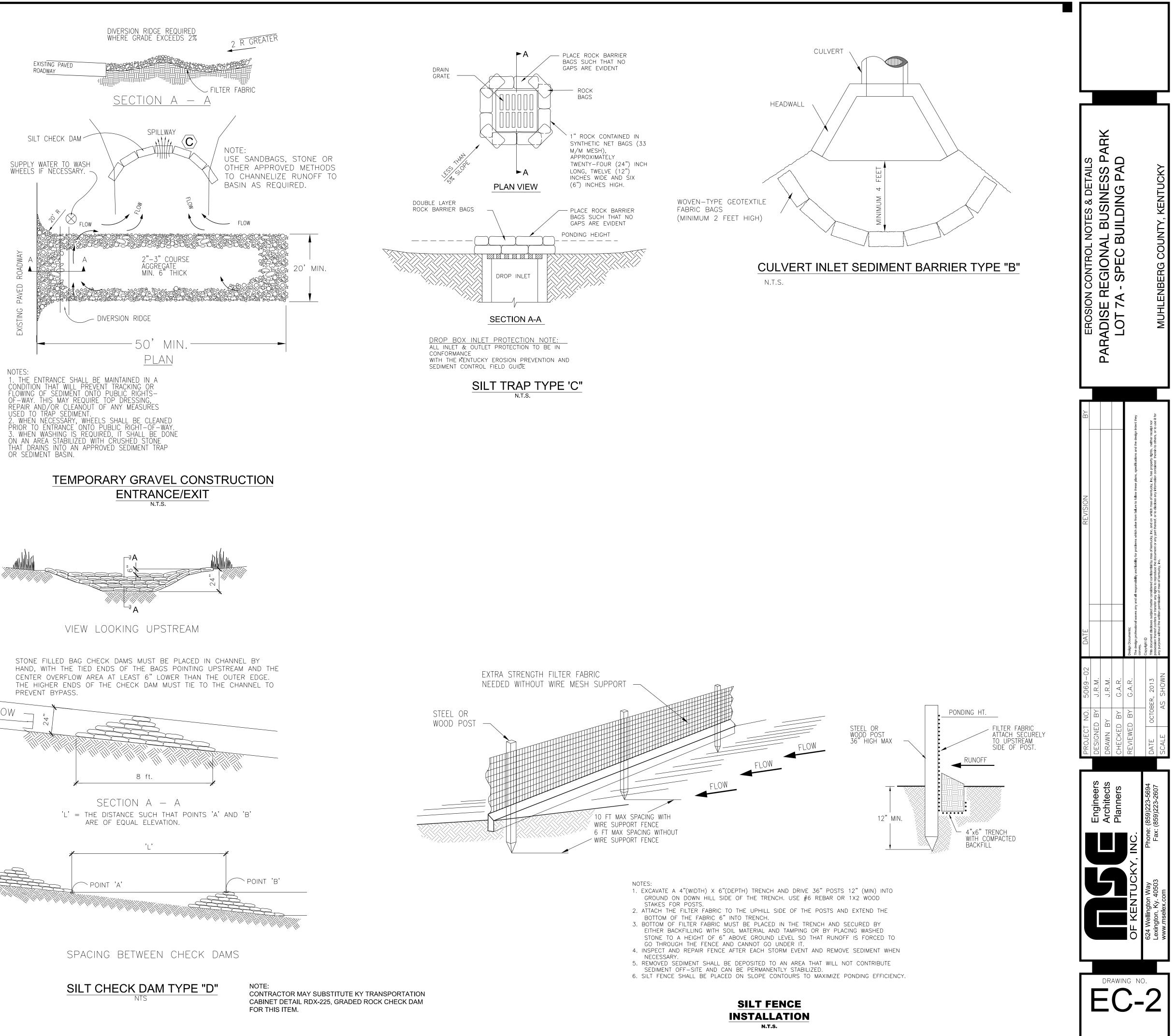












SHEET