

SITE DATA

SITE DESCRIPTION:
PROPOSED COMMERCIAL DEVELOPMENT
3.08 ACRES
PROPOSED IMPROVEMENTS:
DRIVE ACCESS TO PROPOSED STONE STORAGE AREA
FOR FISHER CONTRACTING. STONE AREA TO BE
ENCLOSED WITH A 6-FOOT HIGH PRIVACY FENCE.

ZONING:
SITE: IBD
ADJOINER NORTH: IBD
ADJOINER EAST: IBD
ADJOINER SOUTH: IBD
ADJOINER WEST: IBD

FISHER CONTRACTING

3031 Hudson Street, Franklin, Indiana 46131

CONSTRUCTION PLANS

BID SET: 00.00.2016

CLIENT

FISHER CONTRACTING. LLC

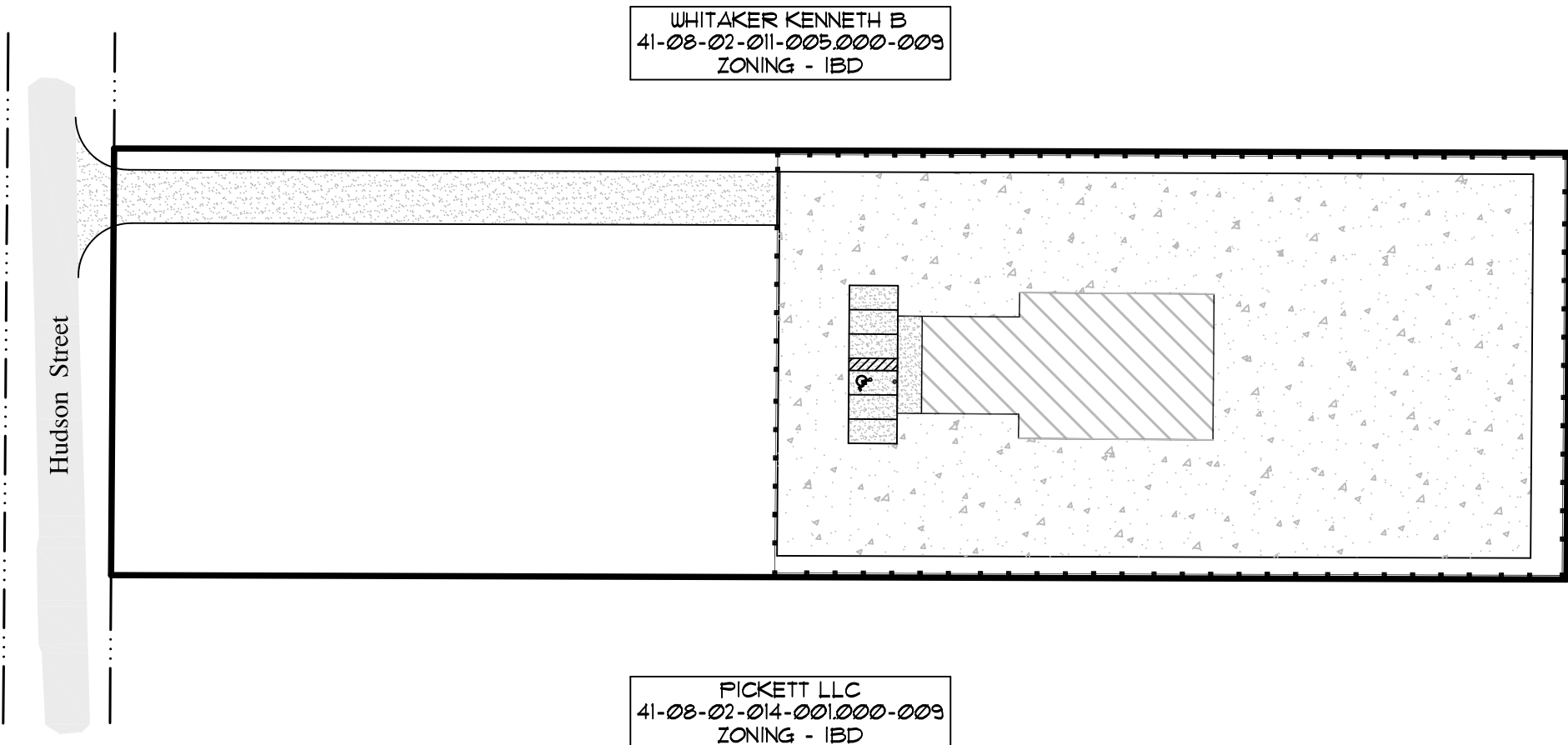
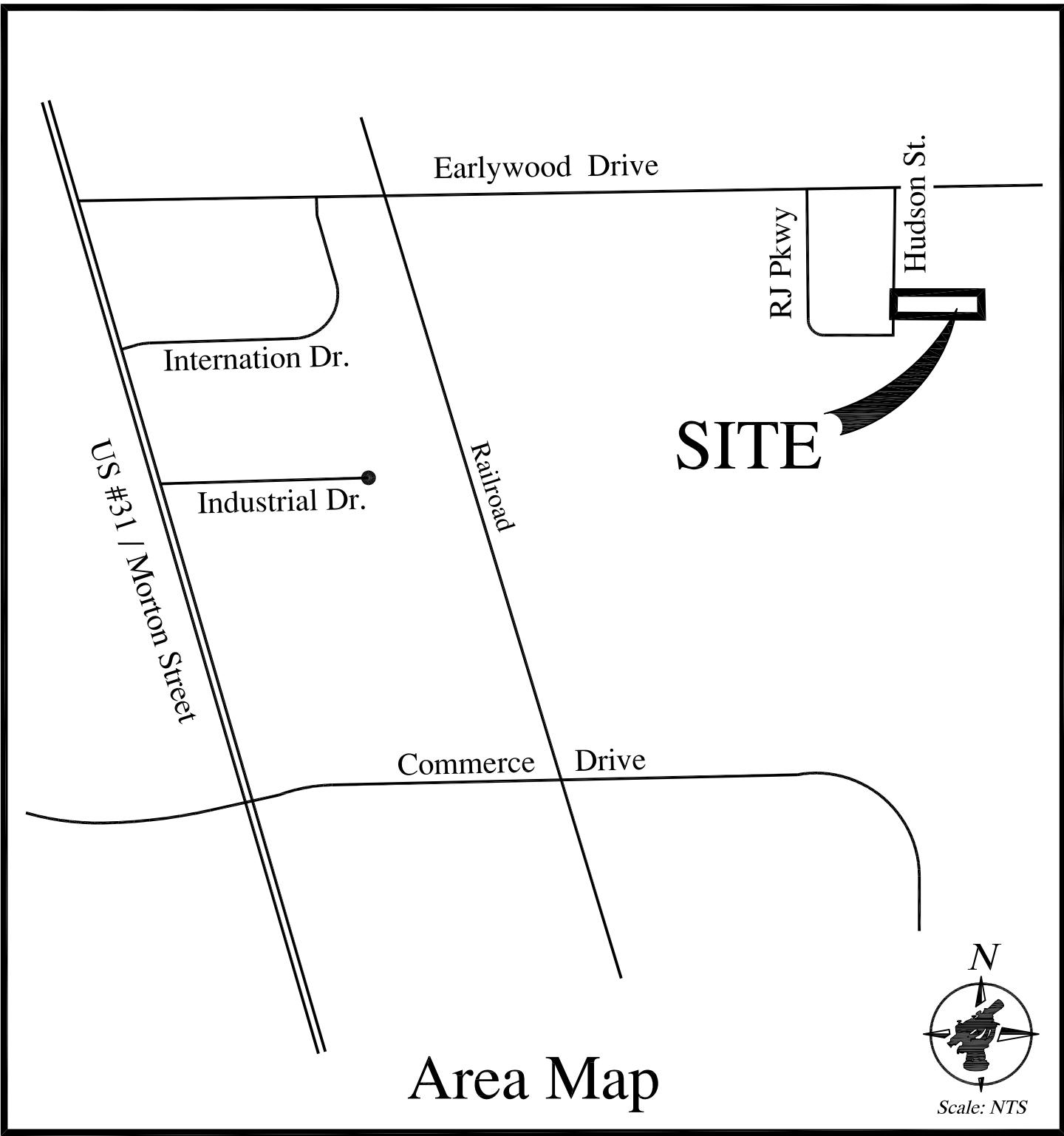
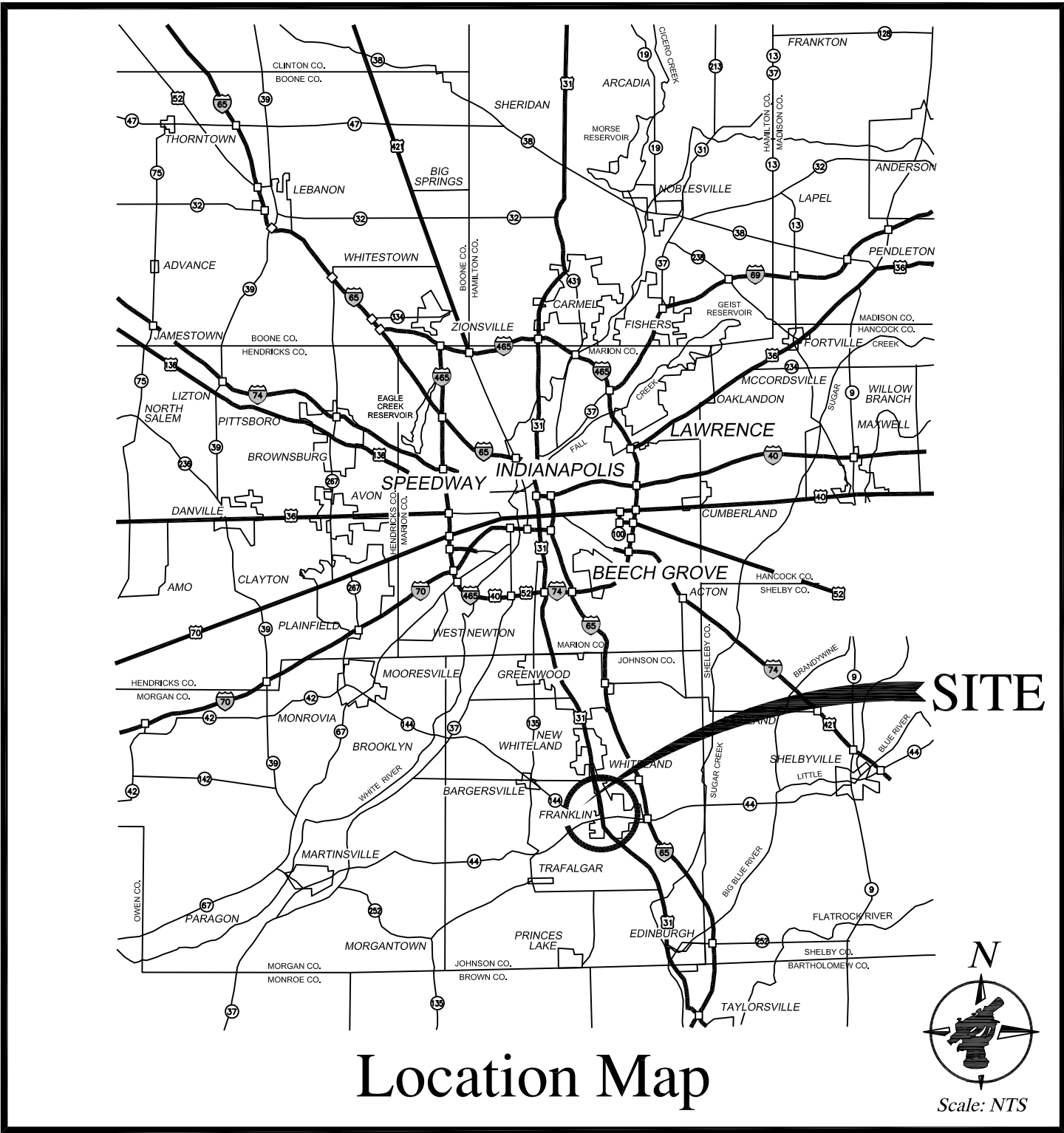
P.O. Box 545
Franklin, Indiana 46131

INDEX OF DRAWINGS

SHEET NUMBER	SHEET DESCRIPTION
1	TITLE SHEET
2	EXISTING SITE CONDITIONS
3	DEVELOPMENT PLAN
4-6	EROSION CONTROL PLAN
7	STORM SEWER PLAN & PROFILES
8	SPECIFICATIONS
9	DETAILS

PLAN REVISIONS

REVISION DATE	REVISION DESCRIPTION



DESCRIPTION

Part of Block "A" of Replat of Block "A" Plat of Lot. No. 3 Pickett/Whitaker Minor Plat recorded March 18, 2014 in Plat Cabinet E, page 123 A&B in the Office of the Recorder of Johnson County, Indiana, more particularly described as follows:

Beginning at the Southeast corner of said Block "A" marked by a capped 5/8" iron pin found in place, thence North 89 degrees 49 minutes 24 seconds West on and along the South line thereof a distance of 682.01 feet to a 5/8" iron pin w/cap found this survey; thence North 00 degrees 24 minutes 53 seconds East (reference plat bearing) on and along the West line thereof a distance of 200.00 feet to a 5/8" iron pin w/cap set this survey; thence South 89 degrees 49 minutes 24 seconds East a distance of 682.01 feet to a point on the East line of Block "A" marked by a 5/8" iron pin w/cap set this survey; thence South 00 degrees 24 minutes 53 seconds West on and along said East line a distance of 200.00 feet to the Point of Beginning of this described tract containing 3.1313 acres, more or less, subject however to all legal rights-of-way and easement of record including but not limited to a ten foot right-of-way dedication off the West side thereof to the City of Franklin leaving after said dedication 3.0854 acres more or less.

UTILITY CONTACTS

SANITARY - City of Franklin
796 South State Street
Franklin, Indiana 46131
Contact: Rick Littleton
(888) 736-3640

ELECTRIC - Duke Energy
2515 North Morton Street
Franklin, Indiana 46131
Contact: Jerry Troxel
(317) 736-2019

GAS - Vectren
600 Industrial Drive
Franklin, Indiana 46131
Contact: Steve Washburn
(317) 736-2989

TELEPHONE - Century Link
1147 Morthon Street
Franklin, Indiana 46131
Contact: Larry Talbot
(317) 736-4863

WATER - Indiana American Water Company
110 South Park Boulevard
Greenwood, Indiana 46143
Contact: Ron Ballard
(317) 881-0270

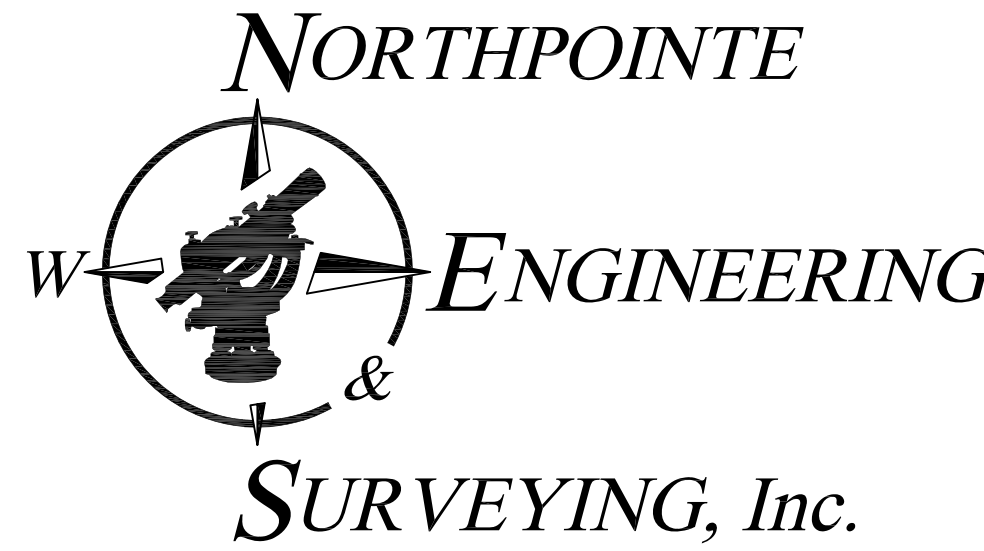
CABLE - Comcast
2520 Endress Place
Greenwood, Indiana 46143
Contact: George Solhan
(317) 535-4198



BENCHMARK:

INDOT - S 18
Bronze marker #S-18 locate on northwest wing of bridge on County Road 300
North, over I-65, 5 miles Northeast of Franklin, Indiana.
Elevation - 779.30 NAVD 88

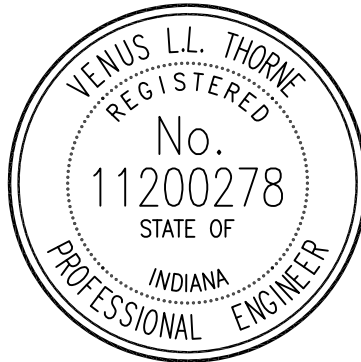
Plans Prepared By:



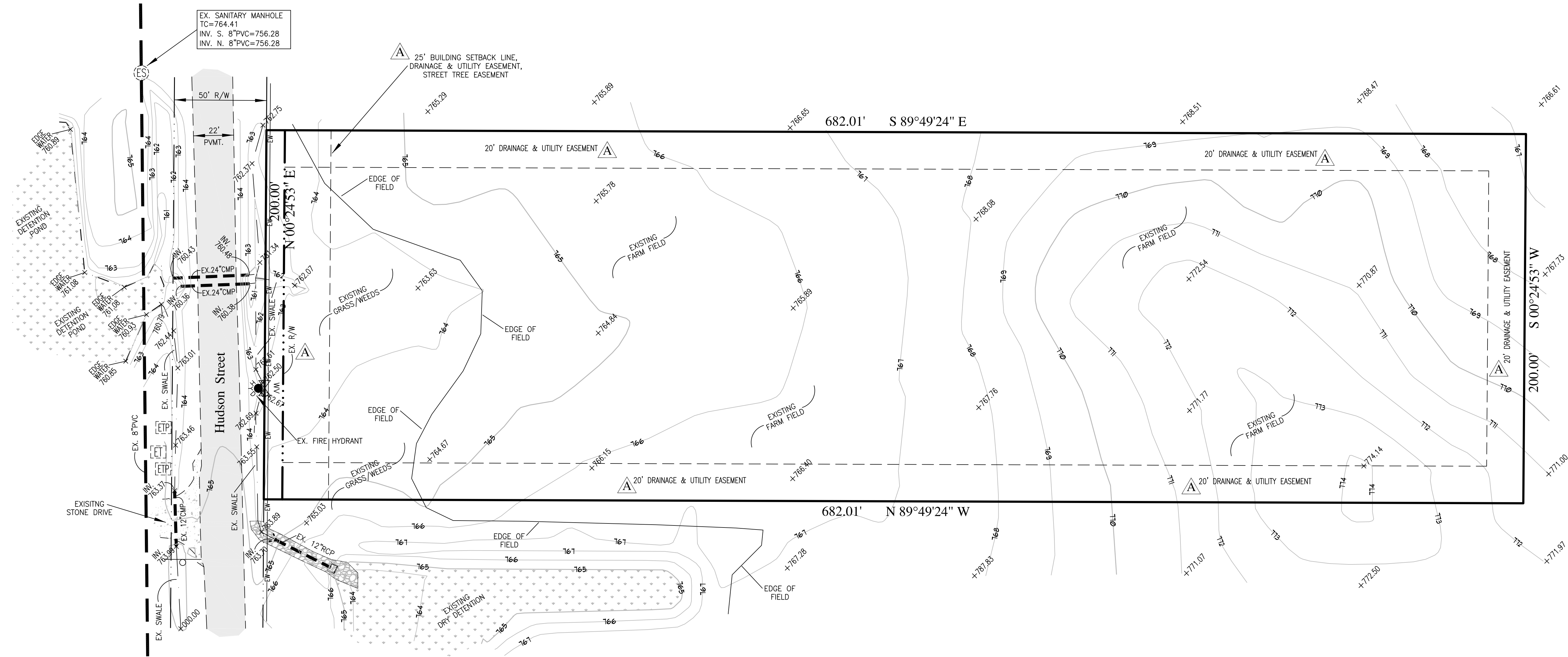
CERTIFIED BY:



02-29-16
Donna Jo Smithers
Professional Surveyor
State of Indiana
Registration Number 20100076



02-29-16
Venus L.L. Thorne
Professional Engineer
State of Indiana
Registration Number 11200278



LEGEND - EXISTING

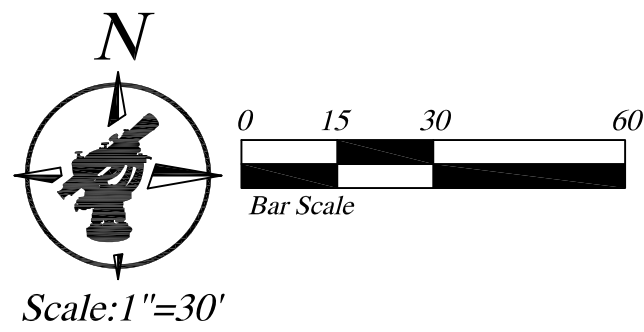
	-EXISTING STORM (CURB) INLET		-EXISTING GAS VALVE
	-EXISTING STORM (BEEHIVE) INLET		-EXISTING UNDERGROUND GAS LINE
	-EXISTING STORM MANHOLE		-EXISTING GAS PIPELINE MARKER
	-EXISTING CONCRETE END SECTION		-EXISTING TELEPHONE PEDESTAL
	-EXISTING STORM SEWER		-EXISTING TELEPHONE MANHOLE
	-EXISTING SANITARY MANHOLE		-EXISTING TRAFFIC MANHOLE
	-EXISTING SANITARY CLEANOUT		-EXISTING TRAFFIC SIGNAL POLE
	-EXISTING SANITARY SEWER		-EXISTING CABLE PEDESTAL
	-EXISTING PAVEMENT GRADE		-EXISTING FIBER OPTIC
	-EXISTING CURB & GUTTER		-EXISTING FIRE HYDRANT
	-EXISTING SPOT ELEVATION		-EXISTING WATERLINE
	-EXISTING UTILITY POLE		-EXISTING WATER METER
	-LIGHT POLE		-EXISTING WATER VALVE
	-EXISTING OVERHEAD UTILITY		-EXISTING STREET SIGN
	-EXISTING ELECTRIC TRANSFORMER		-EXISTING TREE
	-EXISTING UNDERGROUND ELECTRIC		-EXISTING TREE LINE
	-EXISTING A/C CONDENSING UNIT		
	-EXISTING GAS METER		

DESCRIPTION

Part of Block "A" of Replat of Block "A" Plat of Lot. No. 3 Pickett/Whitaker Minor Plat recorded March 18, 2014 in Plat Cabinet E, page 123 A&B in the Office of the Recorder of Johnson County, Indiana, more particularly described as follows:

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REVISIONS	
DATE	DESCRIPTION
12-07-15	ADDED EASEMENTS & RIGHT-OF-WAY



BENCHMARK:

INDOT - S 18
Bronze marker #S-18 locate on northwest wing of bridge on County Road 300 North, over I-65, 5 miles Northeast of Franklin, Indiana.
Elevation - 779.30 NAVD 88

SITE BENCHMARK:

Cut " " on top of east most corner of concrete structure located at the northwest corner of dry detention area.
Elevation = 767.67

UTILITY STATEMENT:
THE EXISTING UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM VISIBLE FIELD EVIDENCE AND/OR EXISTING DRAWINGS. NORTHPOINTE MAKES NO GUARANTEES THAT THE UTILITY INFORMATION SHOWN COMPRISES ALL SUCH UTILITIES IN THE AREA, IN SERVICE OR ABANDONED. NORTHPOINTE FURTHER STATES THAT THE UNDERGROUND UTILITY DATA SHOWN DOES NOT INDICATE PRECISE LOCATIONS.

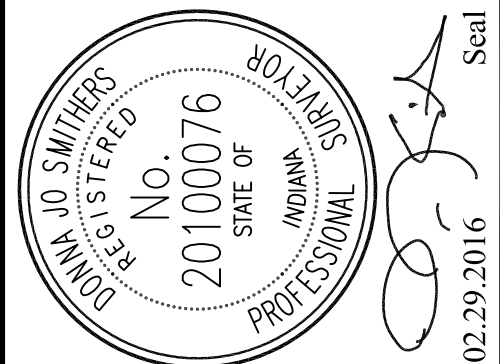
THIS DRAWING/COMPUTER FILE IS THE PROPERTY OF NORTHPOINTE ENGINEERING & SURVEYING INC. (NPES) ANY REPRODUCTION OR REUSE OF THIS DOCUMENT FOR ANY PURPOSE OTHER THAN THE PROJECT FOR WHICH IT WAS ORIGINALLY INTENDED, WITH OR WITHOUT PERMISSION FROM NPES, BY ITS USE, AGREES TO INDEMNIFY AND HOLD HARMLESS NORTHPOINTE FROM ANY LOSS, INCLUDING BUT NOT LIMITED TO ATTORNEY FEES, OCCURRING FROM THEIR USE.



PRO FORMA SURVEY
02.29.2016
This drawing is not intended to be represented as a Retracement or Original Boundary Survey, a Route Survey, or a Surveyor Location Report

UNDERGROUND UTILITIES DISCLAIMER

Information regarding the reputed presence, size, character and location of existing underground utilities and structures related to underground utilities is shown herein. There is no warranty of the accuracy of this information and it shall be considered in that light by those using this drawing. The location and arrangement of underground utilities and structures related to underground utilities shown hereon may be inaccurate and utilities and structures related to underground utilities not shown may be encountered. The owner, his employees, his consultants and his contractors shall hereby distinctly understand that the surveyor is not responsible for the correctness or sufficiency of this information regarding the underground utilities and structures related to underground utilities shown hereon.

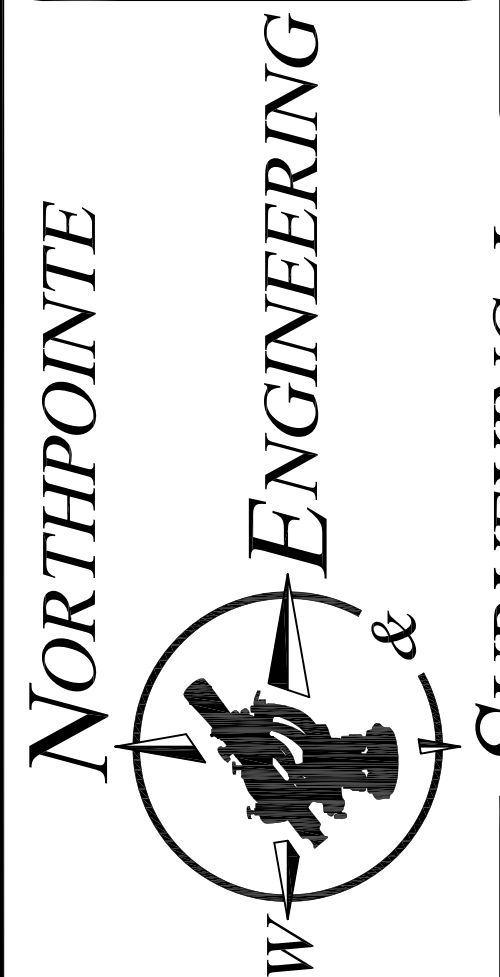


SCALE 1"=30'	DRAWN BY DIS/VT	CHECKED BY DIS/VT
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PREPARED FOR
FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

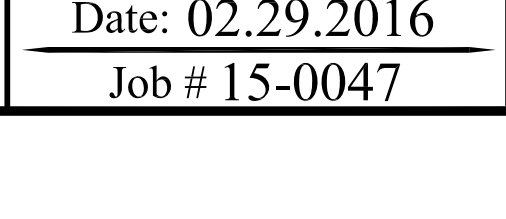
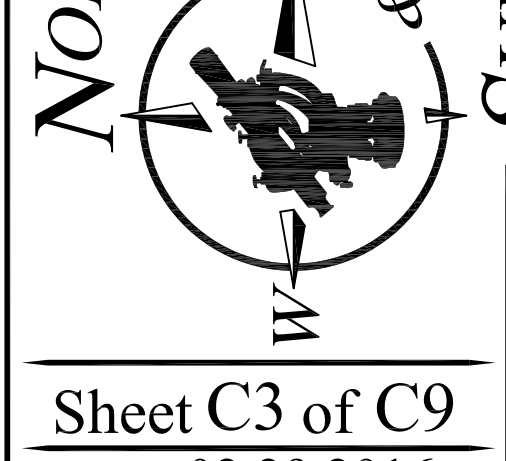
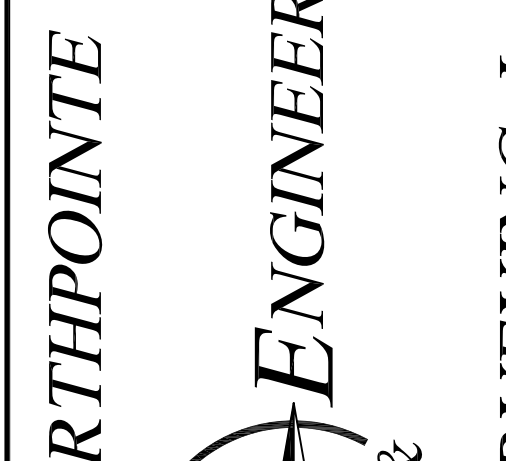
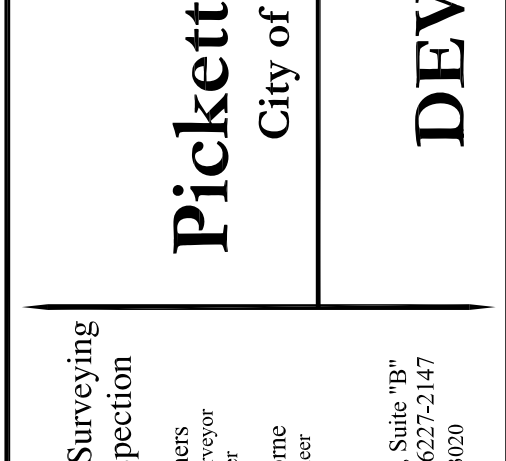
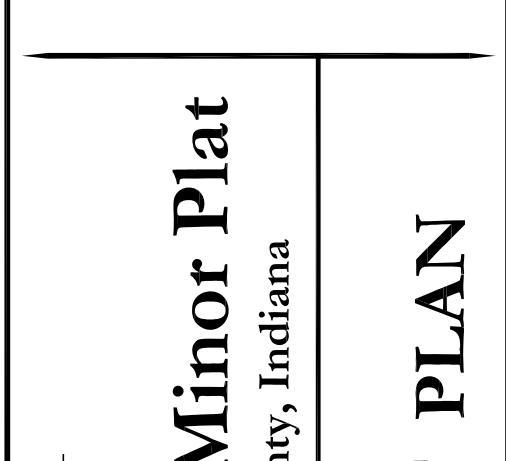
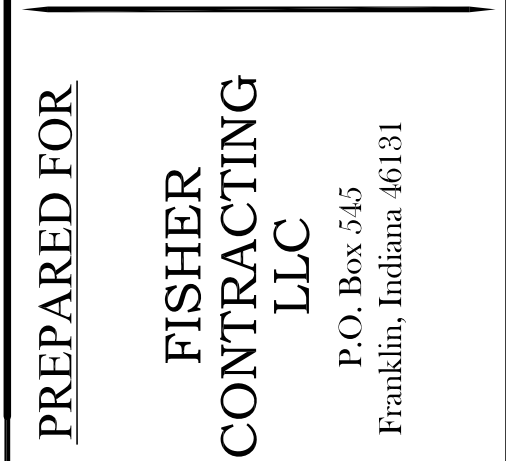
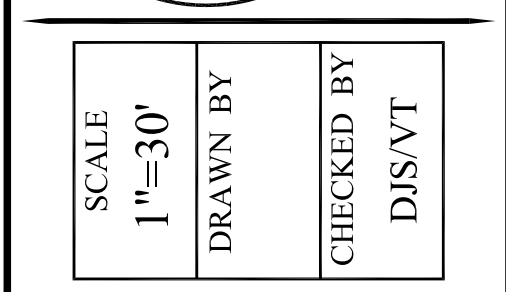
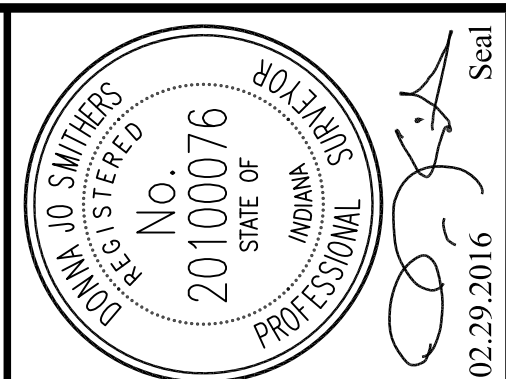
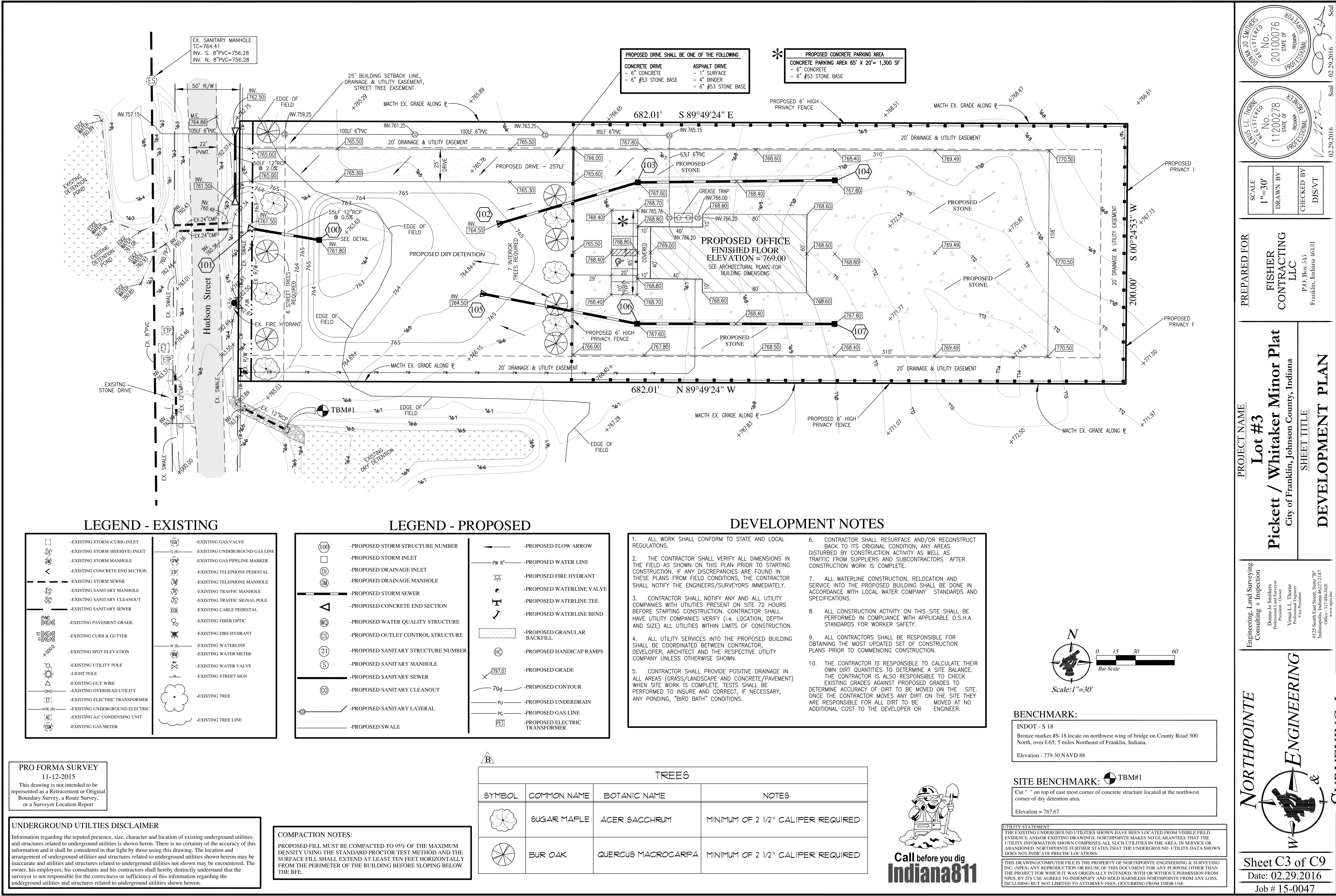
PROJECT NAME
**Lot #3
Pickett / Whitaker Minor Plat**
City of Franklin, Johnson County, Indiana
SHEET TITLE
EXISTING SITE CONDITIONS

Engineering, Land Surveying
& Inspection
Donna Jo Smithers
Professional Land Surveyor
President / Owner
Venus L.L. Thorne
Professional Engineer
Vice President
6125 South East Street, Suite "B"
Indianapolis, Indiana 46227-2147
Office - 317-884-9020
www.npes.biz



Sheet C2 of C9
Date: 02.29.2016
Job # 15-0047

BID SET: 00.00.2016



BID SET: 00.00.2016

Assessment of Construction Plan Elements (Section A)

- ## Assessment of Stormwater Pollution Prevention Plan (Section B)

- B5 - Sediment control measures for concentrated flow areas**

- B13 - Material handling and spill prevention plan

- B14 - Monitoring and maintaining guidelines for each proposed stormwater quality measure**

- ## Stormwater Pollution Prevention Plan - Post Construction Component (Section C)

- # Flood Map

TEMPORARY SEEDING SPECIFICATIONS

Seedbed Preparation

1. Test soil to determine pH and nutrient levels.

2. Apply soil amendments as recommended by the soil test. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.

3. Work the soil amendments into the upper two to four inches of the soil with a disk or rake operated across the slope.

Seeding

1. Select a seed species or an appropriate seed mixture and application rate from Table 1.

2. Apply seed uniformly with a drill or cultipacker seeder or by broadcasting.

Plant or cover seed to the depth shown in Table 1.

Notes:

- If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations.
- Daily seeding when the soil is moist is usually most effective.
- If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.

3. Apply mulch and anchor it in place.

Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days, looking for erosion or movement of mulch and repair immediately.
- Monitor for erosion damage and adequate cover (80 percent density); reseed, fertilize, and apply mulch where necessary.
- If nitrogen deficiency is apparent, top-dress fall seeded wheat or rye seeding with 50 pounds per acre of nitrogen in February or March.

PERMANENT SEEDING SPECIFICATIONS

Materials

soil Amendments - Select materials and rates as determined by a soil test (contact your county soil and water conservation district or cooperative extension office for assistance and soil information, including available soil testing services) or 400 to 600 pounds of 12-12-12 analysis fertilizer, or equivalent. Consider the use of reduced phosphorus application where soil tests indicate adequate phosphorus levels in the soil profile.

Seed - Select an appropriate plant species seed or seed mixture on the basis of soil type, soil pH, region of the state, time of year, and intended land use of the area to be seeded.

Mulch -

- Straw, hay, wood fiber, etc. (to protect seedbed, retain moisture, and encourage plant growth).
- Anchored to prevent removal by wind or water or covered with premanufactured erosion control blankets.

Site Preparation

1. Grade the site to achieve positive drainage.
2. Add topsoil (see **Topsoil Salvage and Utilization** on page 25) or compost mulch (see **Compost Mulching** on page 59) to achieve needed depth for establishment of vegetation. (Compost material may be added to improve soil moisture holding capacity, soil friability, and nutrient availability.)

Seedbed Preparation

1. Test soil to determine pH and nutrient levels.
2. Apply soil amendments as recommended by the soil test and work into the upper two to four inches of soil. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis fertilizer, or equivalent.
3. Till the soil to obtain a uniform seedbed. Use a disk or rake, operated across the slope, to work the soil amendments into the upper two to four inches of the soil.


Seeding

Optimum seeding dates are March 1 to May 10 and August 10 to September 30. Permanent seeding done between May 10 and August 10 may need to be irrigated. Seeding outside or beyond optimum seeding dates is still possible with the understanding that reseeding or overseeding may be required if adequate surface cover is not achieved. Reseeding or overseeding can be easily accomplished if the soil surface remains well protected with mulch.

1. Select a seeding mixture and rate from Table 1. Select seed mixture based on site conditions, soil pH, intended land use, and expected level of maintenance.
2. Apply seed uniformly with a drill or cultipacker seeder (see Figure 1) or by broadcast seeding (see Figure 2). Plant the seed to a depth of one-fourth to one-half inch. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedbed with a roller or cultipacker after completing seeding operations. (If seeding is done with a hydroseeder (see Figure 3), fertilizer and mulch can be applied with the seed in a slurry mixture.)
3. Mulch all seeded areas and use appropriate methods to anchor the mulch in place. Consider using erosion control blankets on sloping areas and conveyance channels

Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days until the vegetation is successfully established.
- Characteristics of a successful stand include vigorous dark green or bluishgreen seedlings with a uniform vegetative cover density of 90 percent or more.
- Check for erosion or movement of mulch.
- Repair damaged, bare, gullied, or sparsely vegetated areas and then fertilize, reseed, and apply cover or anchor mulch.
- If plant cover is sparse or patchy, evaluate the plant materials chosen, soil fertility, moisture condition, and mulch application; repair affected areas either by overseeding or preparing a new seedbed and reseedling. Apply and anchor mulch on the newly seeded areas.
- If vegetation fails to grow, consider soil testing to determine soil pH or nutrient deficiency problems.
- If additional fertilization is needed to get a satisfactory stand, do so according
- to soil test recommendations.
- Add fertilizer the following growing season. Fertilize according to soil test recommendations.
- Fertilize turf areas annually. Apply fertilizer in a split application. For cool-season grasses, apply one-half of the fertilizer in late spring and one-half in early fall. For warm-season grasses, apply one-third in early spring, one-third in late spring, and the remaining one-third in middle summer.



Seal

02.29.16

Venus L.L. Thorne

REGISTERED PROFESSIONAL ENGINEER
INDIANA
STATE OF
No. 11200278

PREPARED FOR

FISHER
CONTRACTING

P.O. Box 543
Franklin, Indiana 46131

PROJECT NAME

Lot #3

Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

City of Franklin, Johnson County, Indiana

SHEET TITLE

EROSION CONTROL PLAN

Engineering, Land Surveying
Consulting & Inspection

Donna Jo Smithers
Professional Land Surveyor
President / Owner

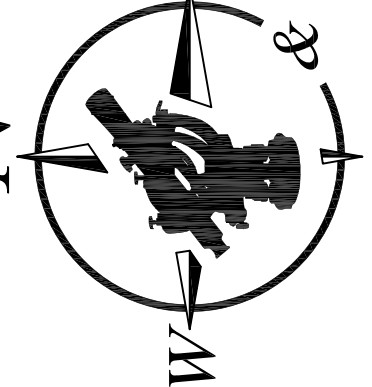
Venus L.L. Thorne
President / Owner
Professional Engineer

Vice President
25 South East Street, Suite "B"

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NORTHPOINTE



SURVEYING, Inc.

Sheet C5 of C9
Date: 02.29.2016
Job # 15-0047

ON-SITE TEMPORARY CONCRETE WASHOUT FACILITY, SINGLE TRUCK WASHOUT PROCEDURES

TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 10 FT. FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND INTERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OF ACCESS AREA TO PREVENT INTERFERENCE OF TRAFFIC.

A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.

WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY.

ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASH OUT.

CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRACKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFF-SITE.

ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER MW-5, SOLID WASTE MANAGEMENT, DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE)

- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THIS BMP, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- STRAW BALES, WOOD STRIKES, AND SHEDDING MATERIALS SHOULD CONFORM TO THE PROVISIONS IN SE-4, STRAW BALE BARRIER.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

TEMPORARY CONCRETE WASHOUT FACILITY (TYPE BELOW GRADE)

- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THIS BMP, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

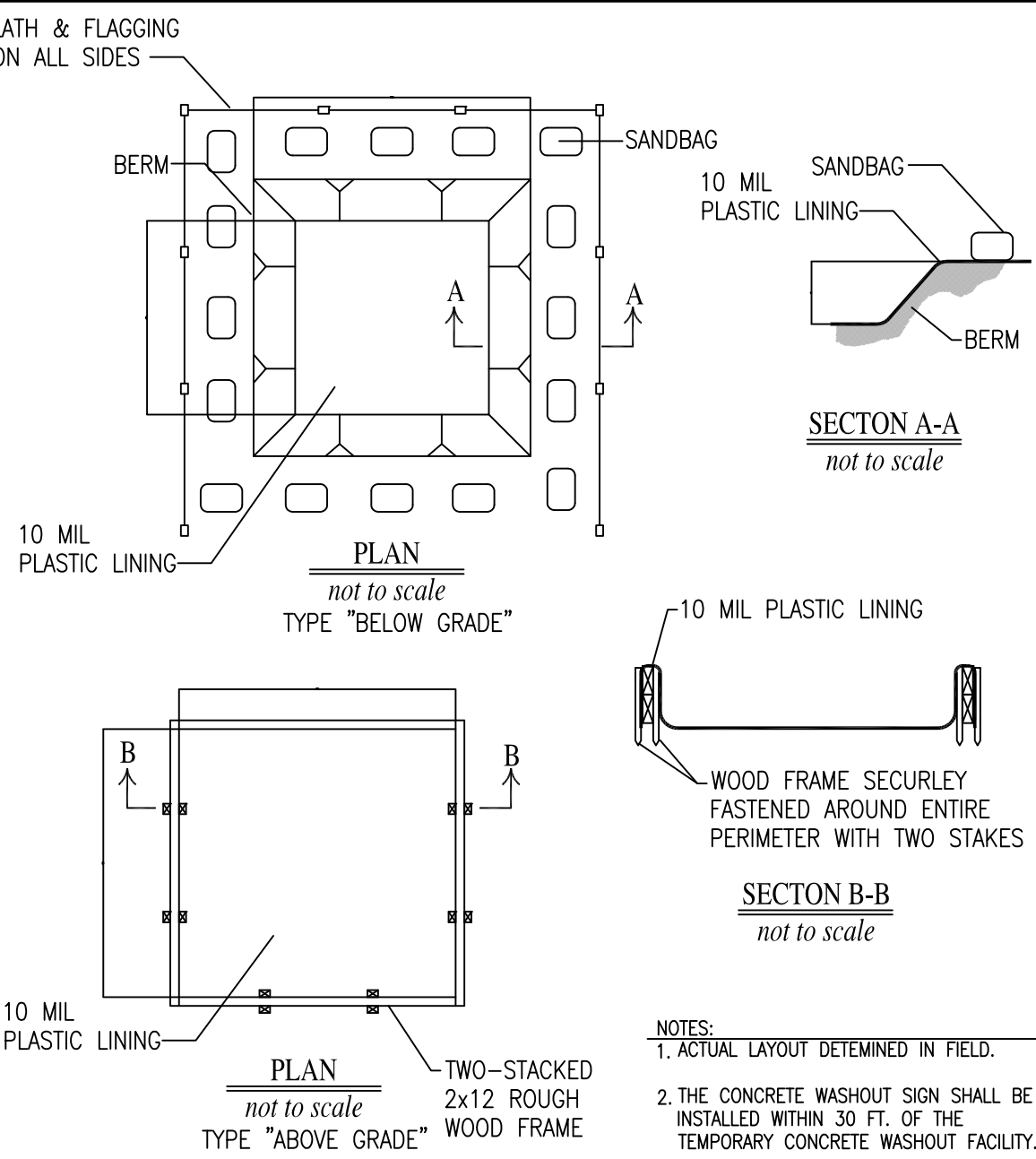
REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF WORK AND DISPOSED OF.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

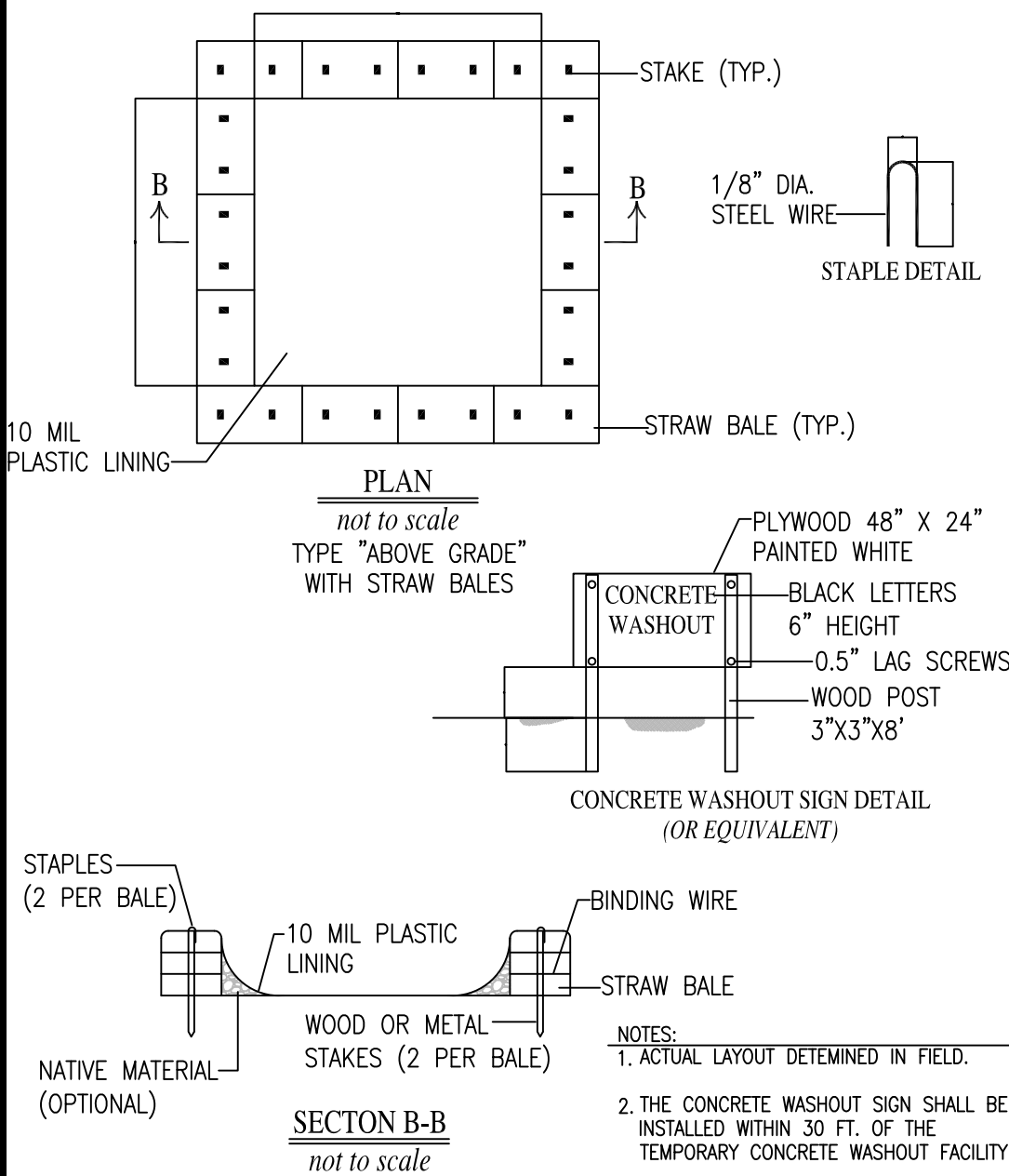
INSPECTION AND MAINTENANCE

- INSPECT AND VERIFY THAT ACTIVITY-BASED BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE THE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDERWAY, INSPECT WEEKLY DURING THE RAINY SEASON AND OF TOP WEEK MEETINGS IN THE NON-RAINY SEASON TO VERIFY CONTINUED BMP IMPLEMENTATION.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE VOLUME CAPACITY WITH A MINIMUM FREEDOM BY 4 IN. FOR ABOVE GRADE FACILITIES AND 10 IN. FOR BELOW GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHOULD BE REMOVED AND DISPOSED OF.
- WASHOUT FACILITIES MUST BE CLEARED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE, ONCE THE WASHOUT IS 75% FULL.

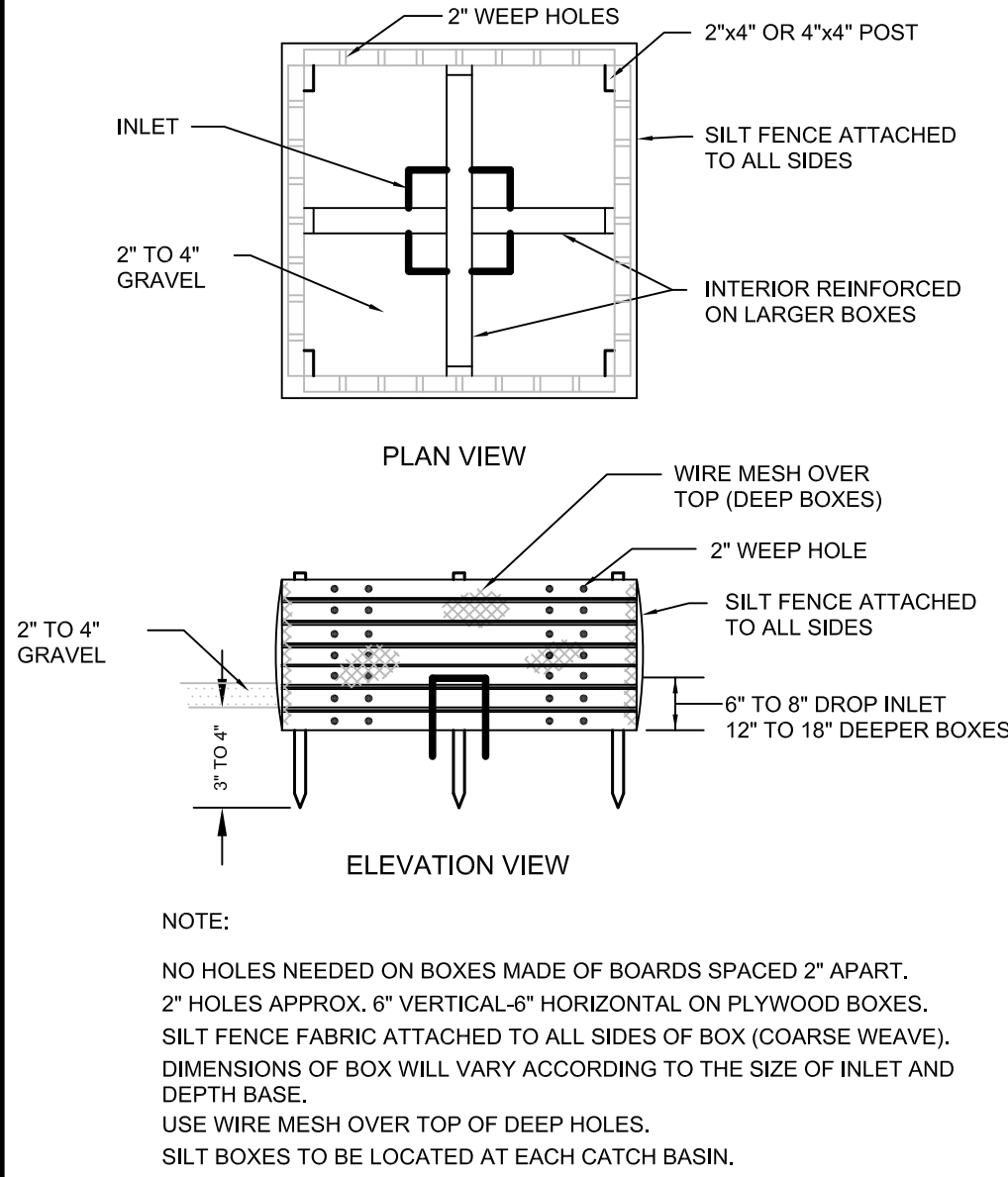
CONCRETE WASTE MANAGEMENT



CONCRETE WASTE MANAGEMENT



CONCRETE WASTE MANAGEMENT



FILTER FENCE DETAIL/FILTER FINCE INSTALLATION DETAIL

SILT FENCE FABRIC SPECIFICATIONS
POLYFELT TS600 OR EQUIVALENT

PROPERTY	TEST PROCEDURE	UNIT	VALUE
GRAB TENSILE	ASTM D4632	POUNDS	165
GRAB ELONGATION	ASTM D4632	PERCENT	>50
PLUNTURE	ASTM D4633	POUNDS	90
TRIANGULAR TEAR	ASTM D4633	POUNDS	75
MULLEN BURST	ASTM D3786	PSI	255
WATER FLOW RATE	ASTM D4491	gpm/ft ²	170
PERMITIVITY	ASTM D4491	CM/SEC	2.0
PERMEABILITY, K A.O.S.	ASTM D4751	Sieve Size	100-60
FABRIC WEIGHT	ASTM D4751	mm	0.15-0.25
THICKNESS	ASTM D3776	oz/yd ²	6.0
U.V. RESISTANCE (500 HOURS)	ASTM D1777	M PERCENT	80
	ASTM D4355	STRENGTH RETAINED	>80

1. SET POSTS AND EXCAVATE A 4"x4" TRENCH UPSLOPE ALONG THE LINE OF THE POSTS.

2. STAPLE THE WIRE MESH FENCING TO BACK POST.

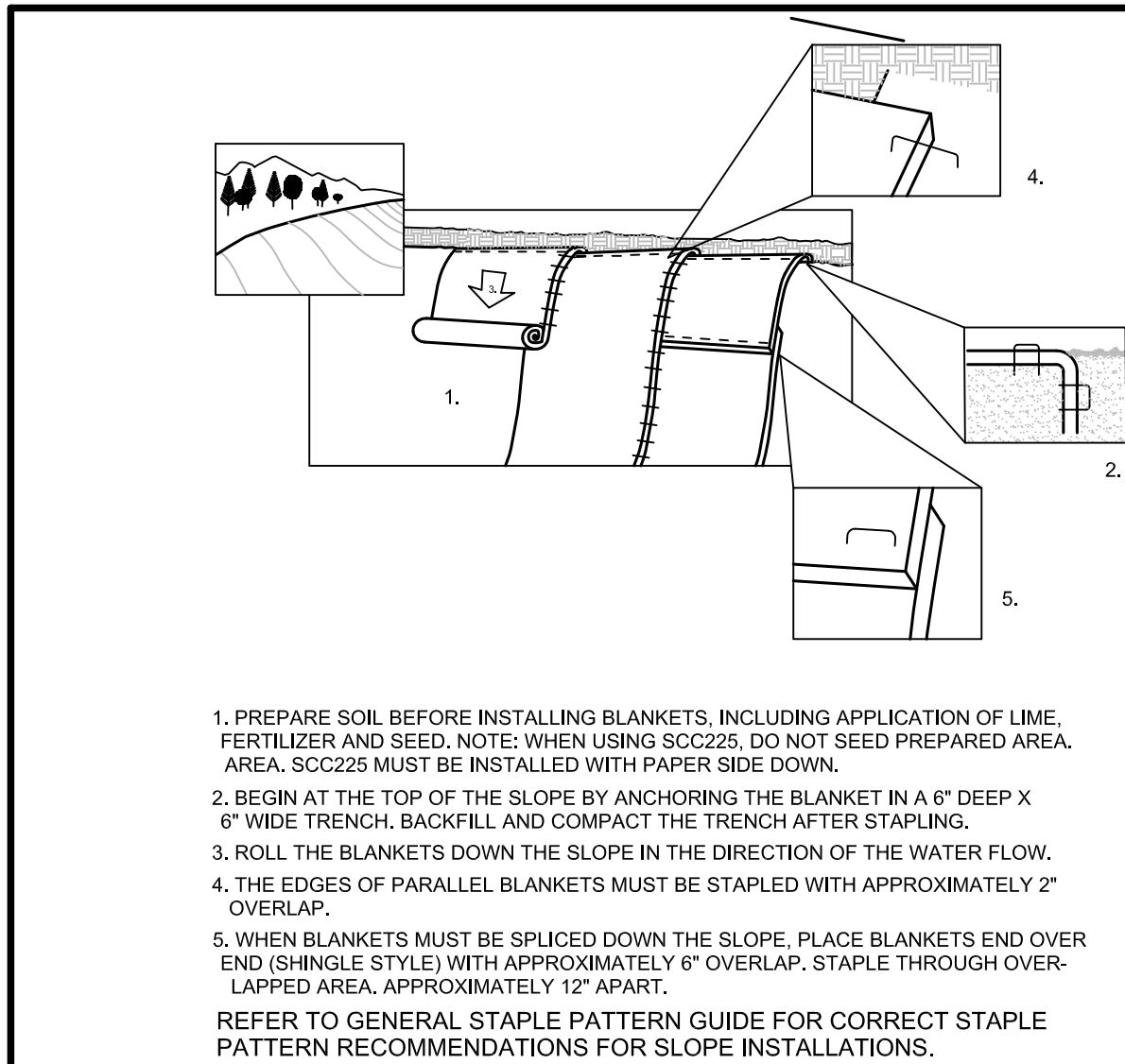
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCING AND EXTEND IT INTO THE TRENCH.

4. BACKFILL THE TRENCH AND COMPACT THE EXCAVATED SOIL.

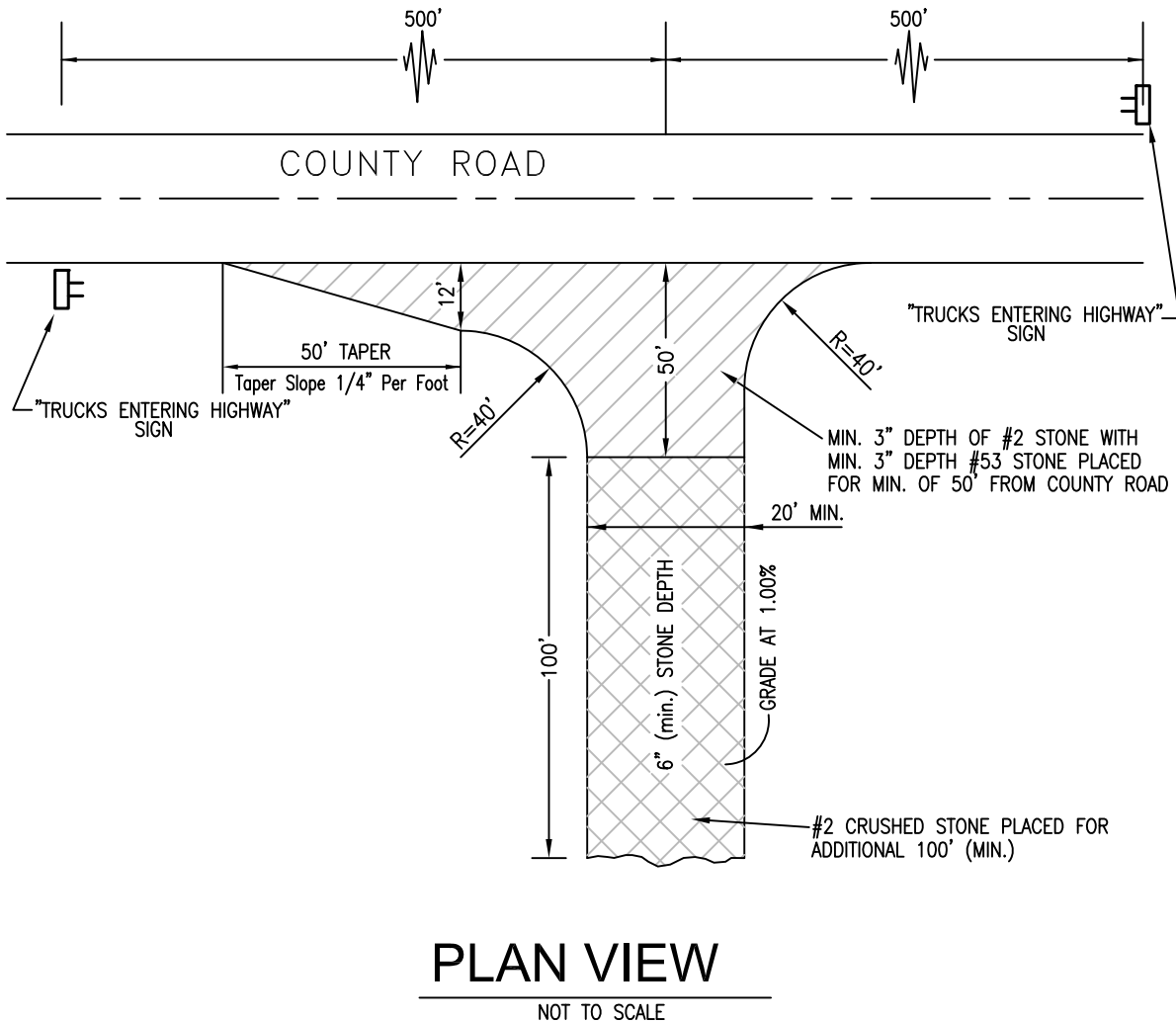
PLAN

ELEVATION

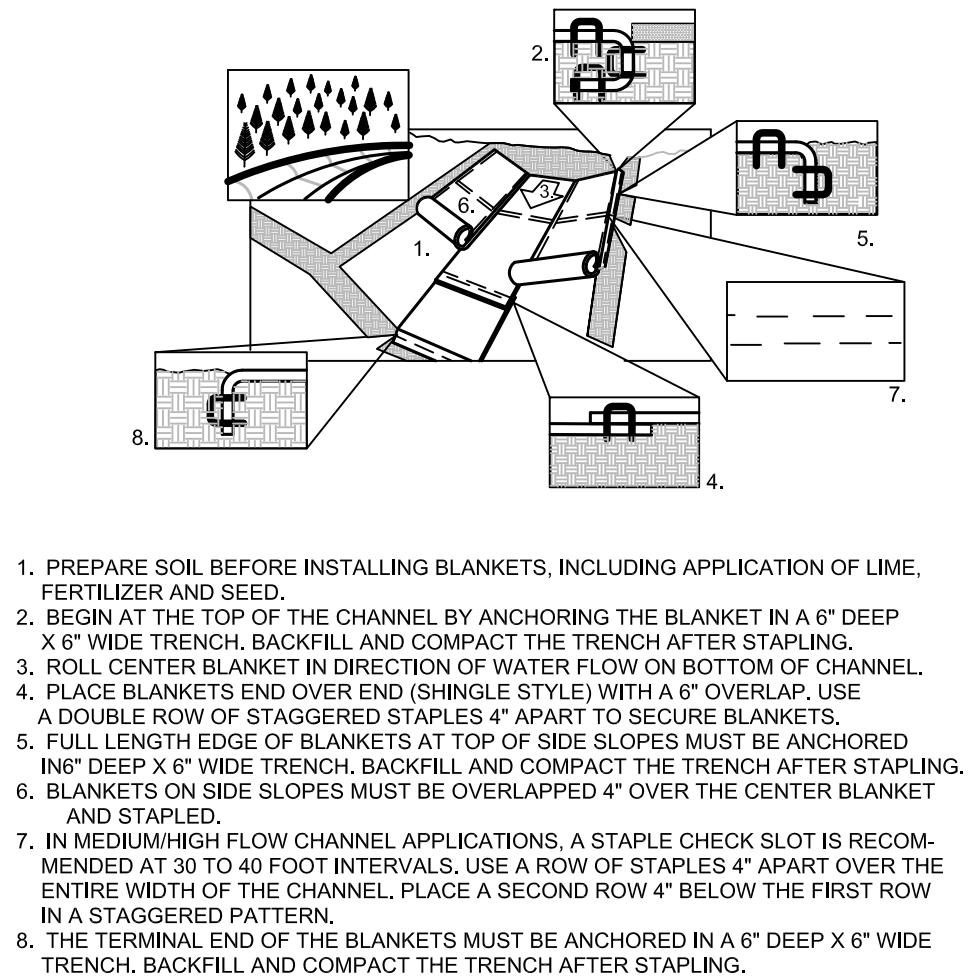
POINTS "A" SHOULD BE HIGHER THAN POINT "D"



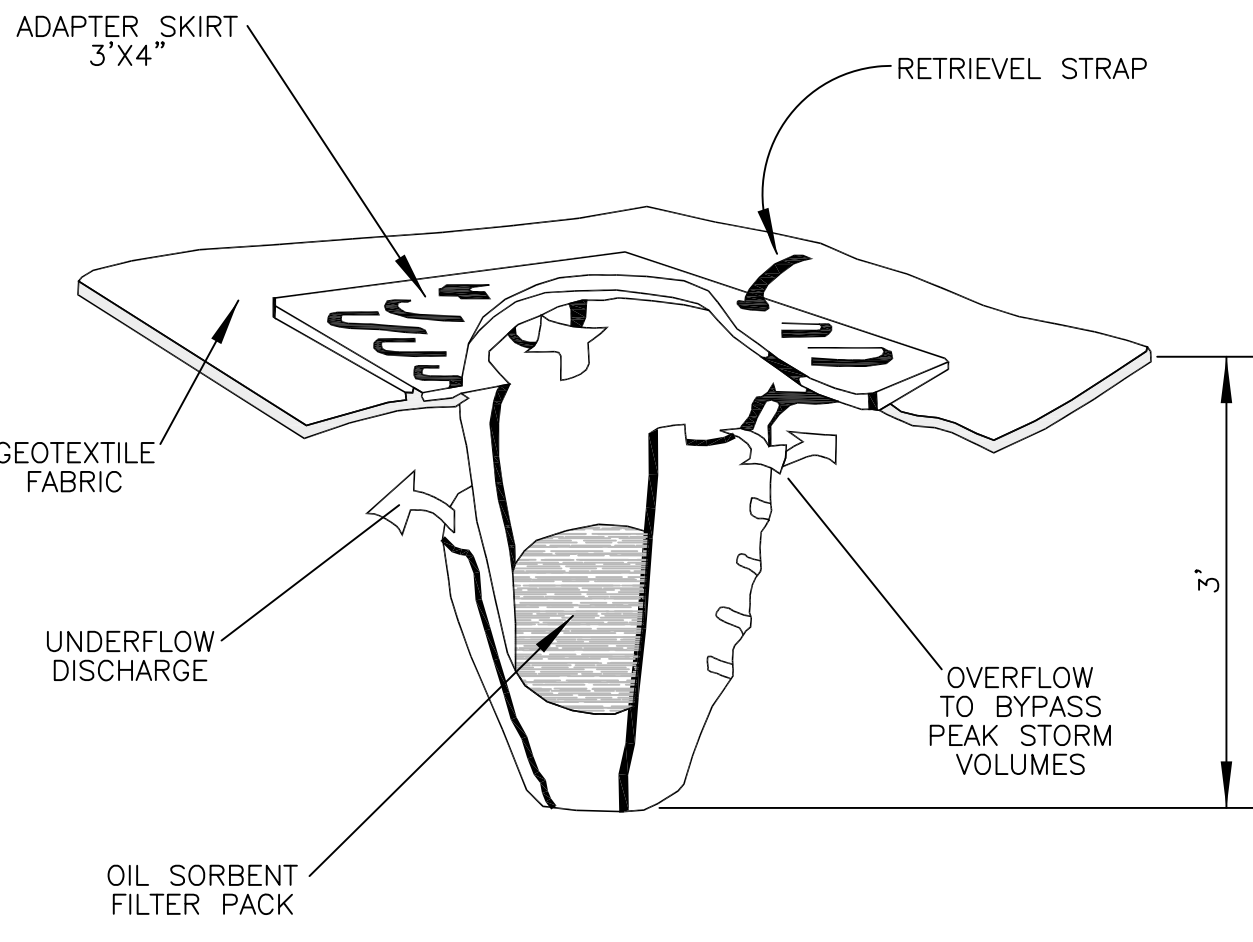
SLOPE APPLICATIONS for EROSION CONTROL BLANKET



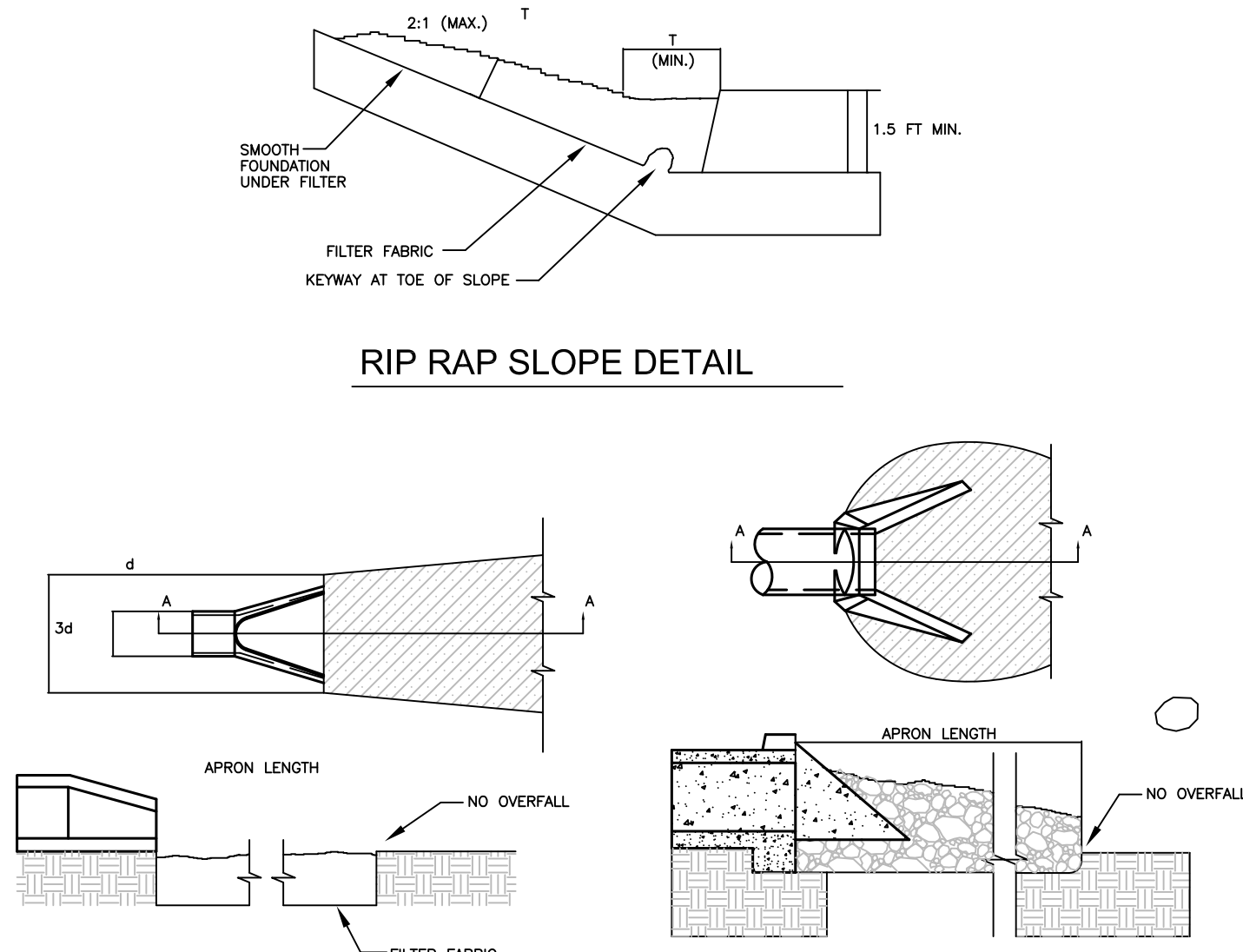
TEMPORARY CONSTRUCTION ENTRANCE DETAIL



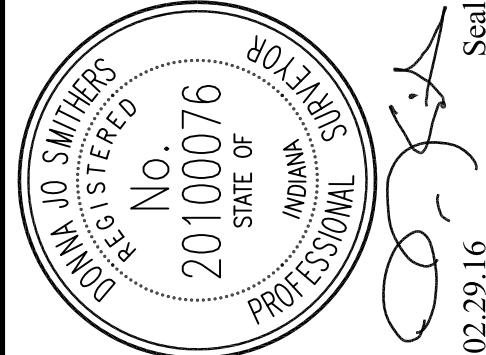
CHANNEL APPLICATIONS for EROSION CONTROL BLANKET



CATCH BASIN INSERT



RIP RAP OUTLET DETAILS



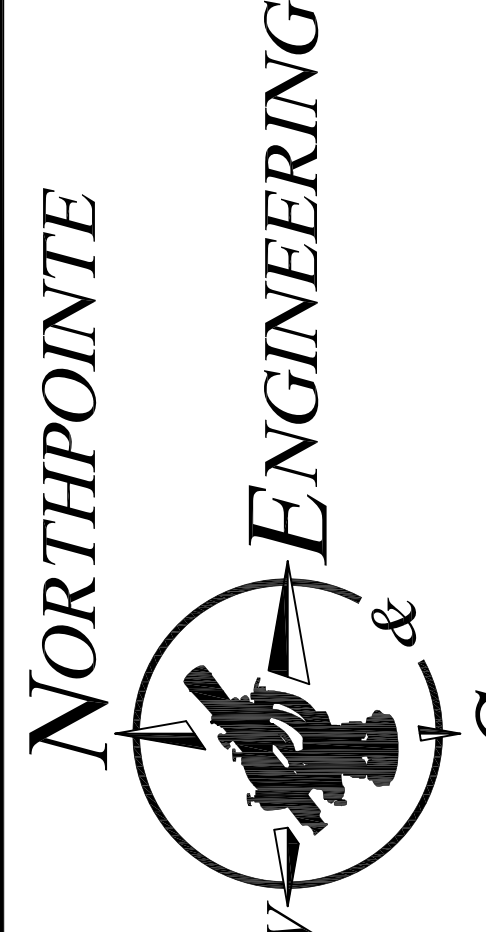
SCALE	DRAWN BY	CHECKED BY
1"=30'		DIS/NT

PREPARED FOR
FISHER CONTRACTING LLC
P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME
Lot #3 Pickett / Whitaker Minor Plat
City of Franklin, Johnson County, Indiana

SHEET TITLE
EROSION CONTROL PLAN

Engineering, Land Surveying
Consulting & Inspection
Donna Jo Smithers
Professional Land Surveyor
President / Owner
Venus L.L. Thorne
Professional Engineer
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Sheet C6 of C9
Date: 02.29.2016
Job # 15-0047

A. NOTICES AND PERMITS

1. The contractor shall be responsible for obtaining or verifying that all permits and approvals are obtained from the respective town, county and state agencies prior to starting construction.
2. It shall be the Contractor's responsibility to determine the exact location of all existing utilities in the vicinity of the construction area prior to starting construction.
3. It shall be the Contractor's responsibility for notification and coordination of all construction with the respective utility companies.
4. It shall be the responsibility of the Developer and Contractor to maintain quality control throughout the project; failure to do so may result in removal and replacement of the defective work. It is recommended that the Developer have a qualified inspector on the job site at all times during construction.
5. It is essential that the work to be done in conjunction with this project shall be installed according to these specifications. The Engineer will be required to certify to certain portions of this project upon completion. Therefore, it is necessary to obtain approval and acceptance by the City of Franklin and Johnson County that construction was done in compliance with these plans and specifications.

B. CLEARING AND GRUBBING

1. Clearing and grubbing shall consist of cutting, removal and satisfactory disposal of all trees, down timber, brush, projecting roots, stumps, rubbish, boulders, broken concrete, fencing (as designated) and other material on the project site and within the boundary as shown on the Construction Documents and/or as designated by "Construction Limits".
2. Special care shall be taken to insure that the trees to be left remaining in the project area shall not receive limb, bark or root injuries. When such injuries occur, all rough edges of scarred areas shall be removed in accordance with accepted horticultural practice and the scars coated thoroughly with an asphaltum base tree paint.

C. STRIPPING OF TOPSOIL

1. The Contractor shall verify that all topsoil has been removed in the areas to be occupied by road, walks and designated building areas. Topsoil shall be removed to a depth of six (6) inches or deeper, if necessary, to remove vegetable matter where required.
2. Topsoil shall be kept separated from suitable fill materials and shall not be used as fill under pavement and/or building areas.
3. Topsoil shall be stored at a location where it does not interfere with construction operations. Excess topsoil shall be used for finish grading on site of drainage swales, yards of new residences, buffer strips, etc.
4. Topsoil shall be reasonably free from subsoil debris and stones.

D. GRADING

1. The Contractor shall perform all grading operations to bring subgrades, after final compaction, to the required grades and sections for site improvement.
2. Subgrade shall be proofrolled with suitable equipment and all spongy and otherwise unsuitable material shall be removed and replaced with suitable material.
3. Subgrade shall be prepared in compliance with most current I.N.D.O.T. standard specifications and as per the City of Franklin Ordinance.
4. ~~See PAVEMENT CONSTRUCTION~~
5. All fill material shall be formed from soil free of deleterious material. Prior to placement of fill a sample of the proposed fill material should be submitted to the Soils Engineer for his approval.
6. All fill material in areas outside building and pavement areas shall be compacted lightly and protected from erosion by one or more of the methods of Item G. Areas where building and pavement construction is feasible shall not have unsuitable material placed in that location and fill shall be compacted to 95% Standard Proctor or better. These areas shall be determined by the Developer's representative.

E. EROSION PROTECTION DURING CONSTRUCTION

1. The Contractor shall provide adequate erosion protection measure during construction such as, but not limited to:
 - a. Siltation basins
 - b. Silt traps
 - c. Straw bale dams
 - d. Soil cement
 - e. Mulch and seeding
 - f. Soil stabilization fabric
 - g. Jute netting
2. Details and placement specifications for the above items are available on request from the Engineer.
3. See "Erosion Control Plan" and Details for more erosion control measures.
4. All erosion control practices shall be in accordance with the IDNR INDIANA STORMWATER QUALITY MANUAL

F. STORM SEWER CONNECTION

1. Storm sewer structures shall comply with current specifications of the City of Franklin, County and all agencies in respect to design and quality of construction.
2. All storm sewer construction inside public right-of-way, either existing or to be dedicated, shall be in accordance with the most current I.N.D.O.T. Specifications.
3. Where reinforced concrete pipe is shown on the construction plans, it shall be in accordance with A.S.T.M. C-76 Class III Wall "B" unless otherwise specified on the plans.
4. Manholes, catchbasins and inlets will be precast structures. Precast concrete and steel for manholes and inlets shall be in accordance with A.S.T.M. C-478.
5. Castings shall be as shown on the detail sheet(s) for manufacturer, type and model number.

G. UTILITIES

1. WATER SERVICE:
 - a. The contractor shall coordinate all waterline construction with the utility, City of Franklin. The contractor shall install only the water mains, valves, fire hydrants and other mainline appurtenances. The utility shall install all service crossings, corporation stops, meter pits and meters.
 - b. All PVC pipe used on this project shall meet ASTM-D 2241 Standard and bear the National Sanitation Foundation seal of approval.
 - c. Solvent-weld joint PVC pipe is not to be used. Only "slip on" gasket joints are acceptable.
 - d. See Sanitary Sewers for vertical and horizontal separations (Note F-8-a and b).
 - e. The water mains are to be installed at a minimum 54" of cover to prevent freezing. This includes casing pipe to carry mains under streets.
 - f. The Contractor shall be responsible for leakage tests on the water mains carried out following procedures outlined by applicable American Water Works Association Standards and meet the leakage requirements designated therein. Certificate copies of the test results shall be submitted to the utility engineer.
 - g. The Contractor shall be responsible for disinfection of the new pipe following procedures outlined by applicable American Water Works Association Standards and produce bacteriologically satisfactory water in two successive sets of samples collected at 24 hour intervals before the new construction is released for use.
 - h. All water lines from the City of Franklin main to the building shall be either cast iron, ductile iron or copper and shall be installed in accordance with the City of Franklin specifications.
 - i. Granular backfill shall be required for all utility crossings under and within 5' of pavement area. (See Section J).
 - j. All water lines shall be in accordance with the specifications of the City of Franklin and the Indiana State Board of Health.
 - k. A continuous #12 wire shall be placed in trench with PVC water main at least 18" below grade.
2. ELECTRIC, TELEPHONE AND TELEPHONE:
 - a. Conduit shall be required for all crossings under pavement areas.
 - b. Granular backfill shall be required for all crossings under pavement areas.
 - c. Concrete pads for electric and telephone transformers shall be set at the approximate ground grade as shown on the Site Development Grading Plans for the respective locations.
 - d. The Contractor shall be responsible for coordinating with each utility their installation of any lines or conduits or any other equipment required in the project. The utilities shall be notified prior to the placement of pavement a minimum of 48 hours so that they might install any crossings.

H. GRANULAR BACKFILL

SHALL BE IN ACCORDANCE WITH I.N.D.O.T. STANDARD SPECIFICATIONS, 1999 EDITION, AS REVISED. The material shall be Compacted aggregate No. 53 under or within 5 feet of all pavement per the City of Franklin.

I. Concrete Curb and Walks

1. See detail sheet for type and details.
 2. Concrete shall be ready mixed portland cement conforming to a.s.t.m. c-150 and water, aggregate shall conform to a.s.t.m. c-33. concrete shall be 6 bag class "a" with compressive strength of concrete at 28 days being minimum 4000 p.s.i. where required.
 3. Reinforcement
 - A. Welded wire fabric shall conform to a.s.t.m. a-185
 - B. Reinforcing steel shall conform to a.s.t.m. a-615
 4. Application
 - A. Place concrete only on a moist, compacted subgrade or base free from loose material, place no concrete on muddy or frozen subgrade.
 - B. Concrete shall be deposited so as to require as little rehandling as practicable, when concrete is to be placed at an atmospheric temperature of 35 degrees f or less I.N.D.O.T. Specifications, 1999 edition as revised shall apply.
 - C. Except as otherwise specified, cure all concrete by one of the methods described in I.N.D.O.T. Specifications, 1999 editions, as revised.
 - E2. Breakdown rolling: accomplish breakdown or initial rolling immediately following rolling of joints and outside edge, check surface after breakdown rolling, and repair displaced areas by loosening and filling, if required, with hot material.
 - E3. Second rolling: follow breakdown rolling as soon as possible, which mixture is hot, continue second rolling until mixture has been thoroughly compacted.
 - E4. Finish rolling: perform finish rolling while mixture is still warm enough for removal of roller marks, continue rolling until roller marks are eliminated and course has attained maximum density.
 - E5. Patching: remove and replace paving areas mixed with foreign materials and defective areas, cut out such areas and fill with fresh, hot bituminous aggregate mix, compact by rolling to maximum surface density and smoothness.
 - E6. Protection: after final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
 - E7. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.
- F. TRAFFIC AND LANE MARKINGS
- F1. Cleaning: sweep and clean surface to eliminate loose material and dust.
 - F2. Stripping: use chlorinated rubber base traffic lane-marking paint, factory-mixed, quick-drying, and non-bleeding.

color: yellow.

 1. Do not apply traffic and lane marking paint until layout and placement has been verified with architect/engineer.
 2. Apply paint with mechanical equipment to produce uniform straight edges, apply in two coats at manufacturer's recommended rates.

G. FIELD QUALITY CONTROL

- G1. Testing and Inspection Service:
 1. Owner shall employ a testing laboratory to perform pavement testing and inspection service for quality control during paving operations.
 2. Testing service shall have representative present to observe and perform tests at all times paving work is in progress.
- G2. General: testing service representative shall take a minimum of two samples per lift of bituminous aggregate mix each day before paving operation, laboratory test shall be performed on these samples to determine aggregate gradation and asphalt content.
 1. Test in-place compacted bituminous aggregate mix courses for compliance with requirements for thickness, density and air voids and surface smoothness, repair or remove and replace unacceptable paving as directed by engineer.
- G3. Thickness: in-place compacted thickness will not be acceptable if exceeding following allowable variation from required thickness:

aggregate base course: 1/2", plus or minus.

base course: 1/2", plus or minus

binder course: 1/4", plus or minus.

surface course: 1/4", plus or minus.

 1. A minimum of two pavement cores per compacted lift shall be taken, cores are to be taken at locations and at times of day as directed by the testing service, the following tests shall be performed by the testing service, on each pavement core:

PAVEMENT THICKNESS

DENSITY

AIR Voids
 2. Testing service shall submit certified results to the owner and architect/engineer within 72 hours after tests are made, with their comments and recommendations for action.
 3. Pavement which fails to comply with approved job mix formula shall be replaced as directed by the architect/engineer.
- G4. Surface smoothness: test finished surface for smoothness, using 10' straightedge applied

J. Finish Grading and Seeding

1. Over the approved rough grade (see section e), spread 4" minimum of topsoil or approved fill to such depth as will finish to the required finish grades and contours after rolling and natural settlement, new grades shall slope uniformly between levels established on the plans and intersections of new grades with existing grades shall be uniform and smooth.
2. Fertilizer and agricultural limestone shall be spread uniformly over the area to be seeded, they shall be mixed into the top 2" of soil with a disk harrow, rotary tiller or other approved equipment. fertilizer shall be spread at the rate of 800 pounds per acre and agricultural limestone at the rate of 1/2 ton per acre unless otherwise specified.
3. Temporary seeding- the areas where stripping, cuts or fills have been graded shall be seeded for silt and erosion protection with one of the following methods:
 - A. Early spring mix: 100% oats
seeding rate: 50 lbs./acre
 - B. Spring or late fall mix: 100% annual rye
seeding rate: 50 lbs./acre
 - C. Fall mix: 100% perennial rye
seeding rate 50 lbs./acre
straw or mulch as approved by the engineer shall be applied at a rate of 2 tons per acre.
4. Mulch-seeding: mulch-seeding shall be as per i.d.o.h specifications, section 621, dated 1988, fertilizer shall be 12-12-12 applied at the rate of 400 pounds per acre, seed mixture shall be 60 pounds per acre of perennial rye grass and 60 pounds per acre of kentucky 31 fescue or alta fescue.



SCALE	DRAWN BY	CHECKED BY
		DIS/VT

PREPARED FOR

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CONTRACTING
LLC
P.O. Box 545
Franklin, Indiana 46131

PROJECT NAME

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City of Franklin, Johnson County, Indiana

SHEET TITLE

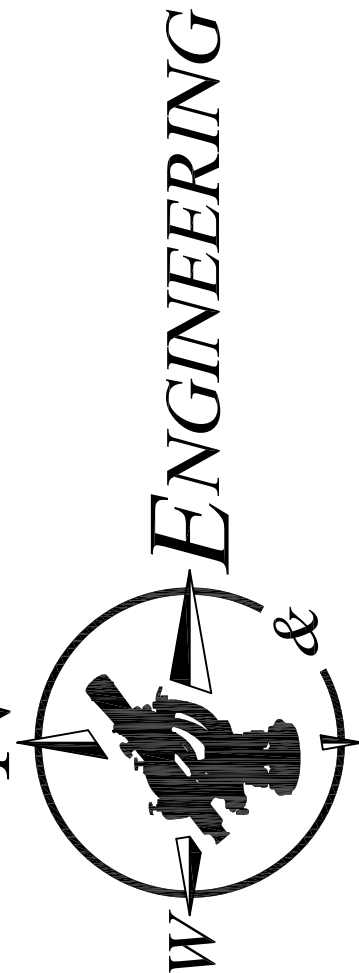
SPECIFICATIONS

Engineering, Land Surveying
Consulting & Inspection

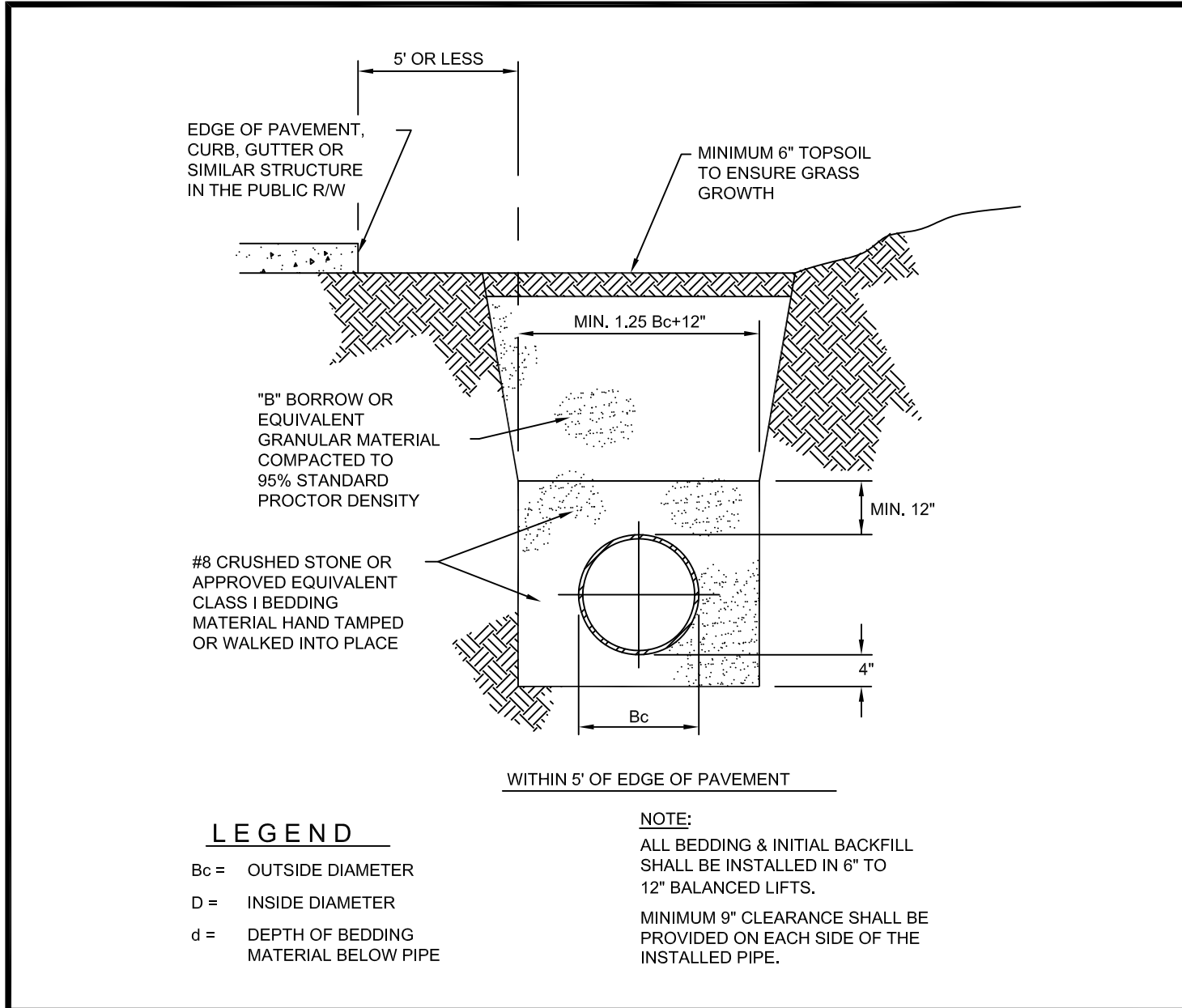
Donna Jo Smithers
Professional Land Surveyor
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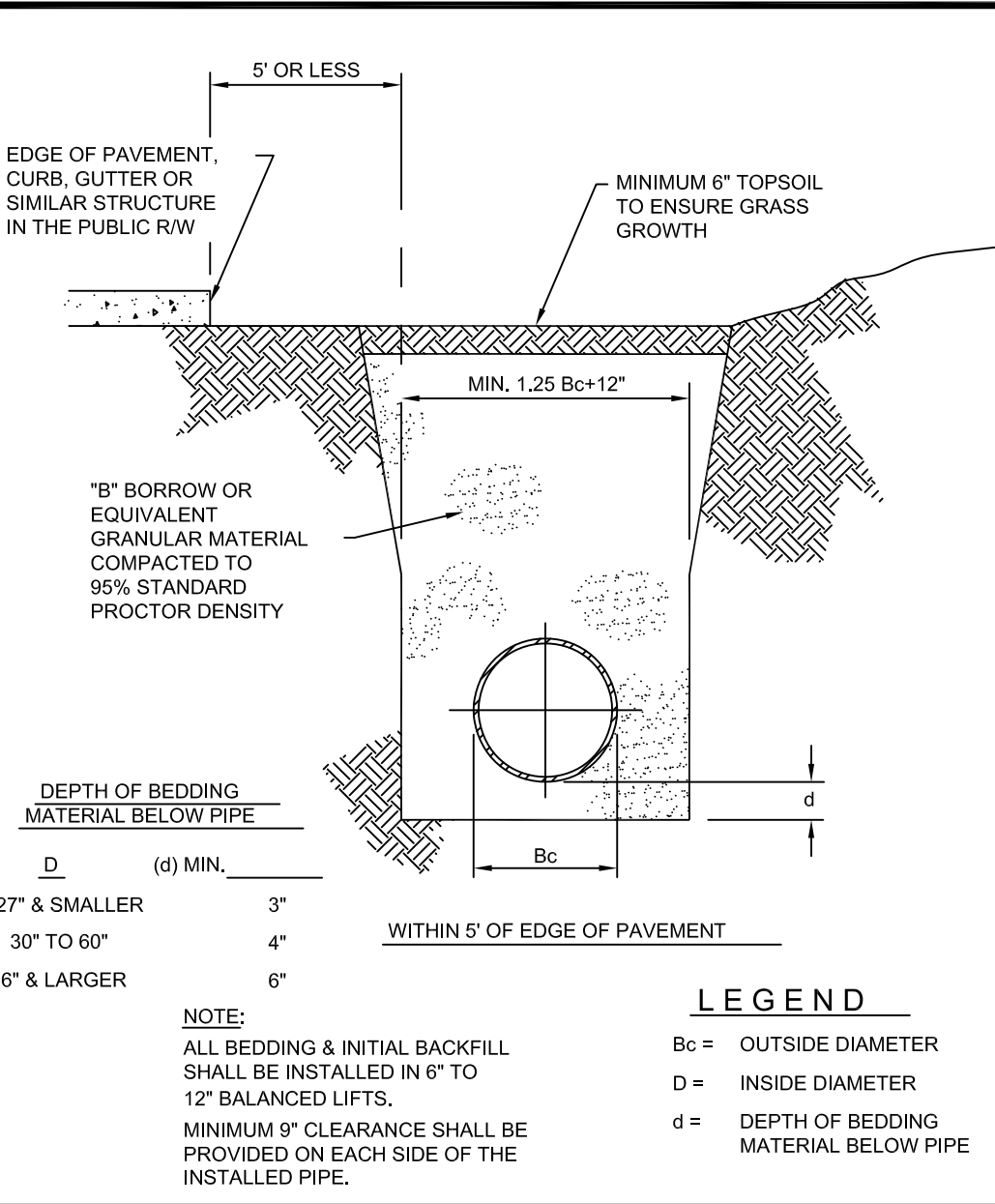
NORTHPOINTE



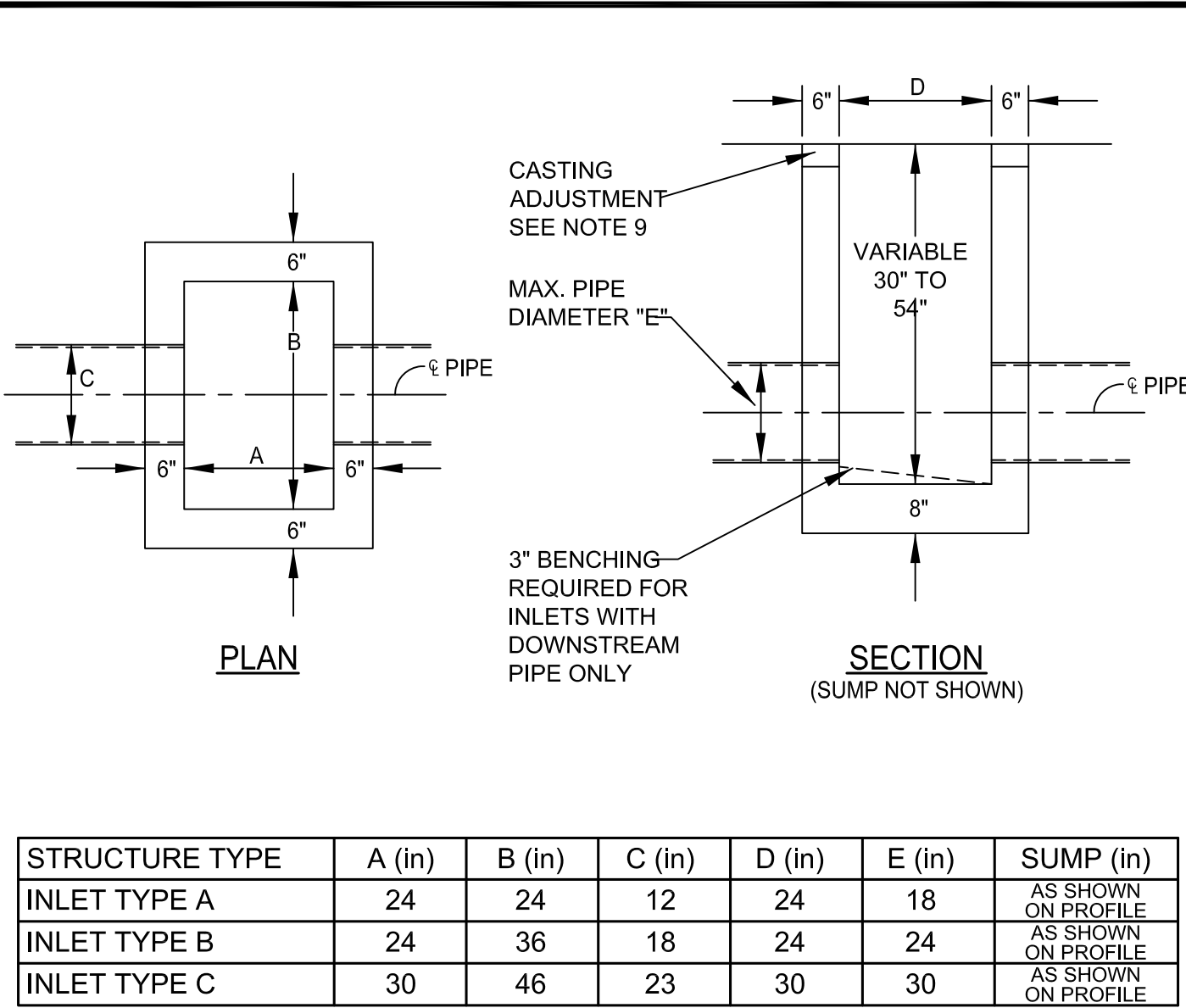
Sheet C8 of C9
Date: 02.29.2016
Job # 15-0047



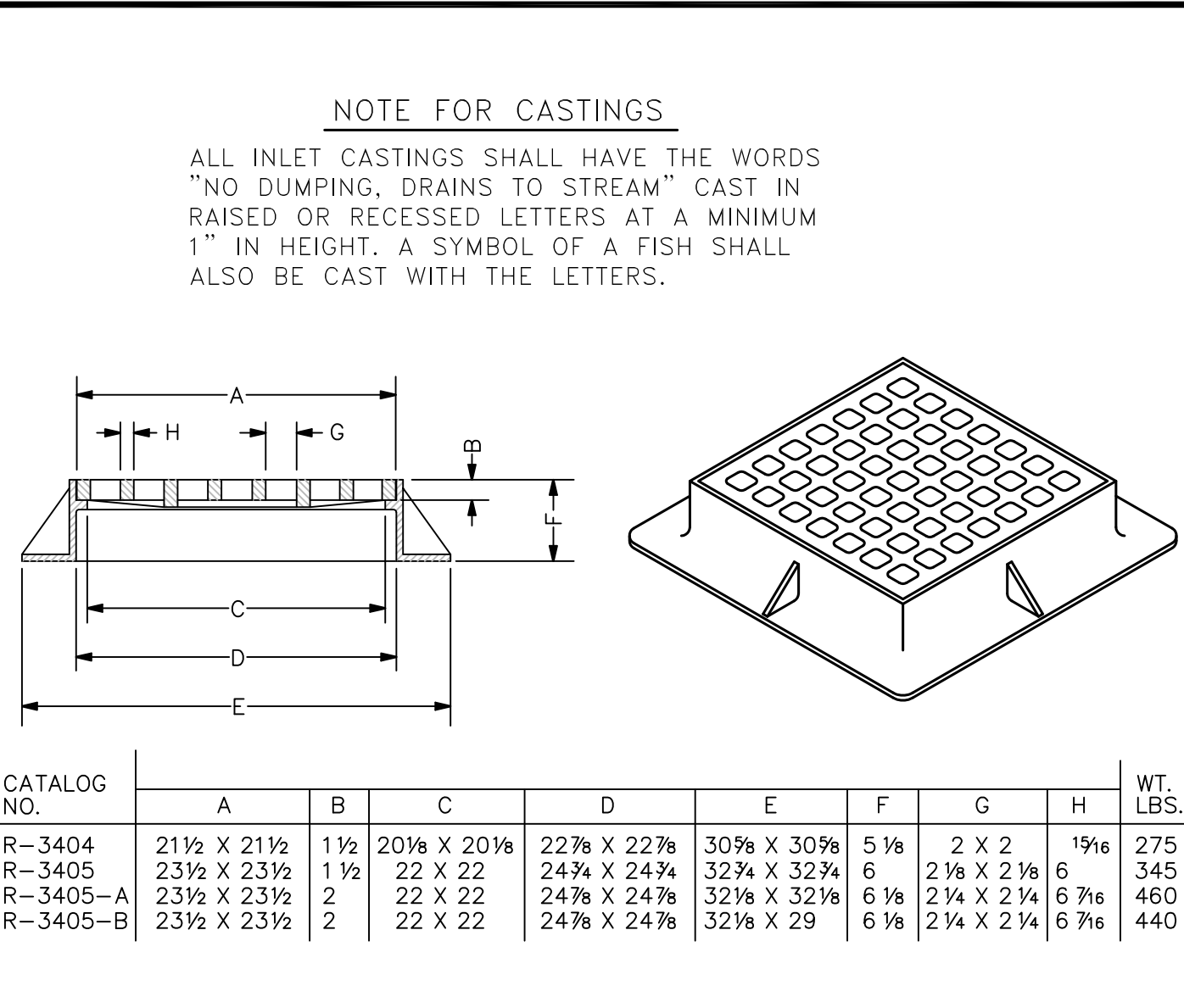
PLASTIC PIPE (PVC & HDPE) TRENCH DETAIL



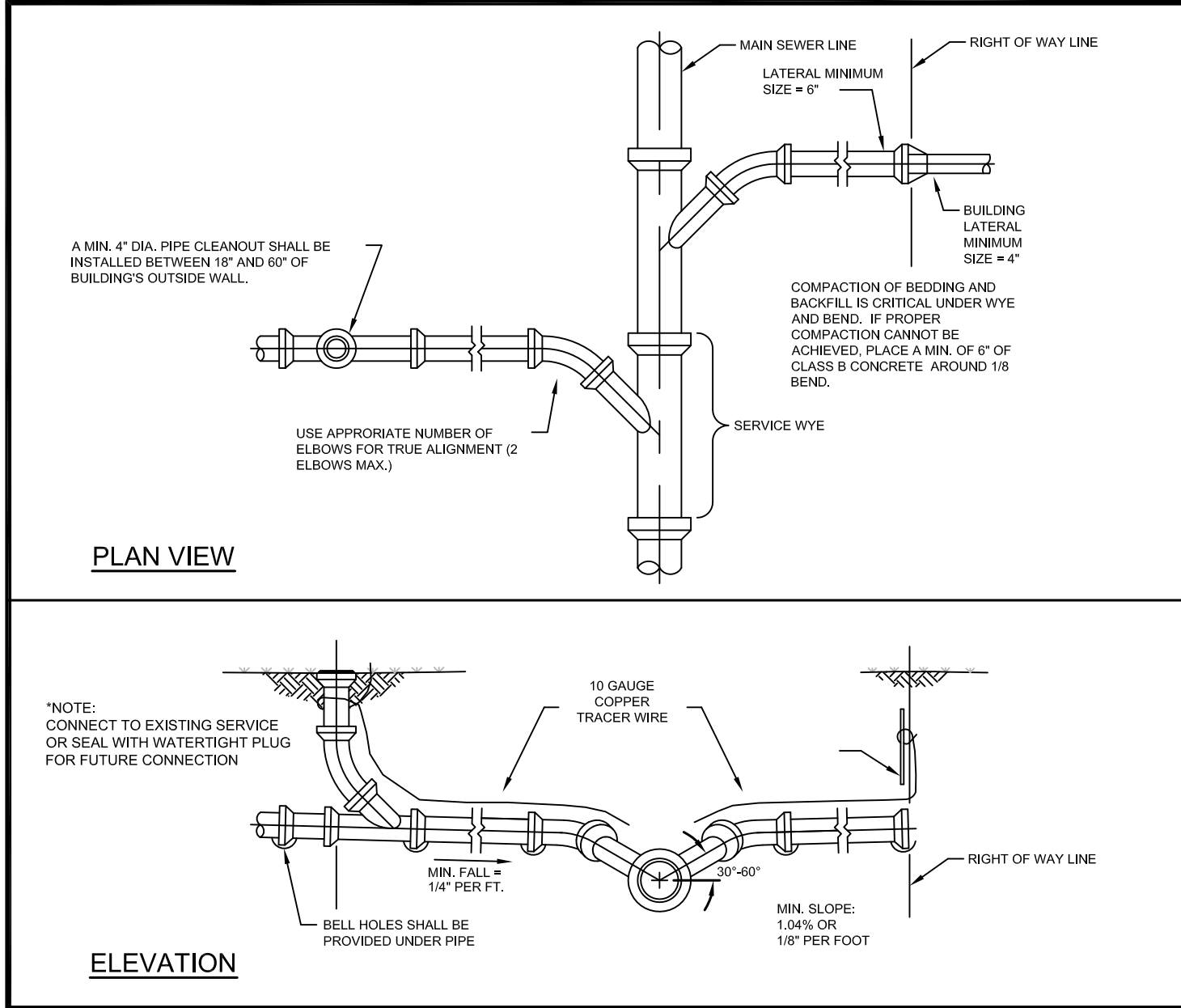
REINFORCED CONCRETE PIPE (RCP) TRENCH DETAIL



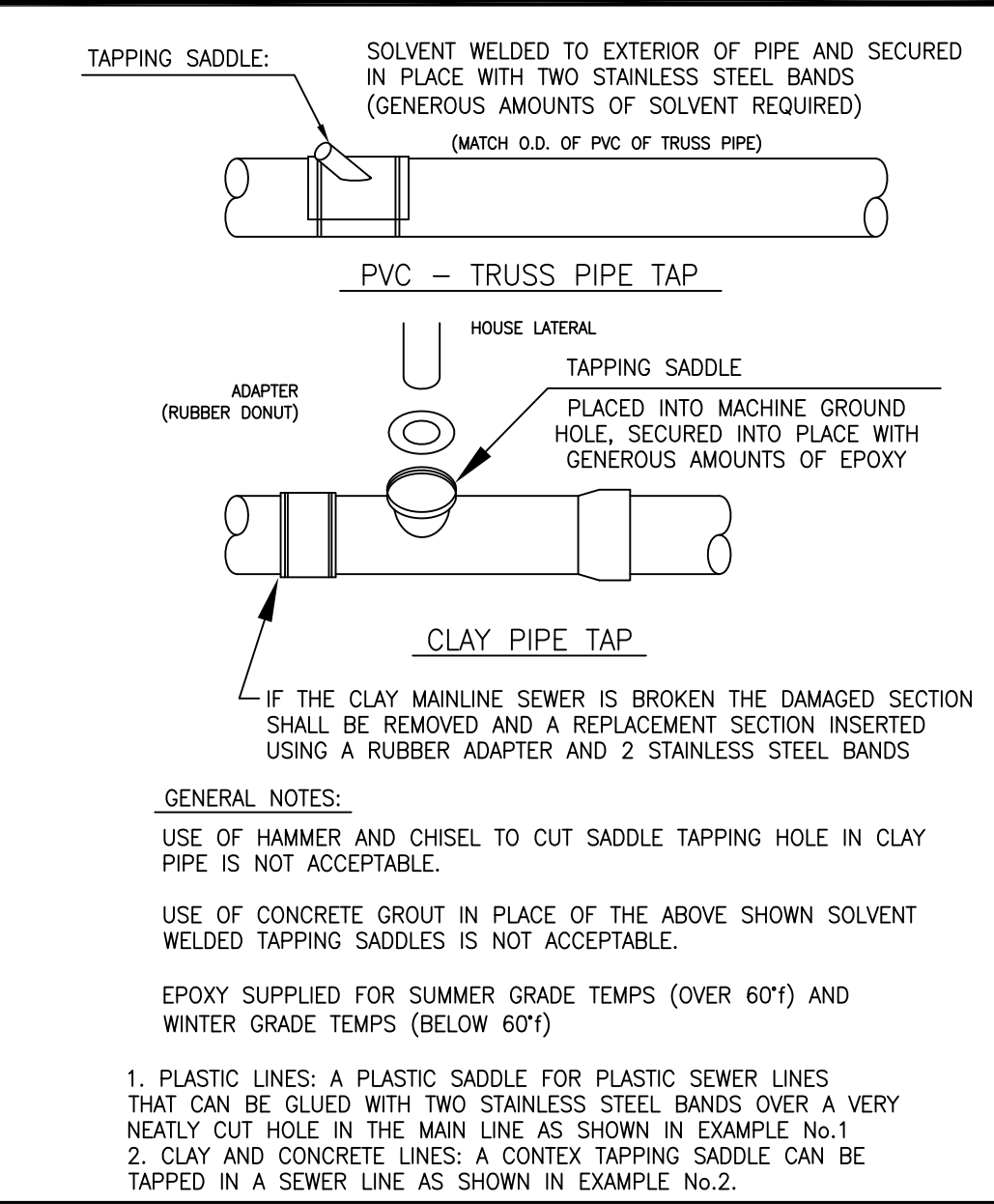
INLETS - TYPES A, B, AND C



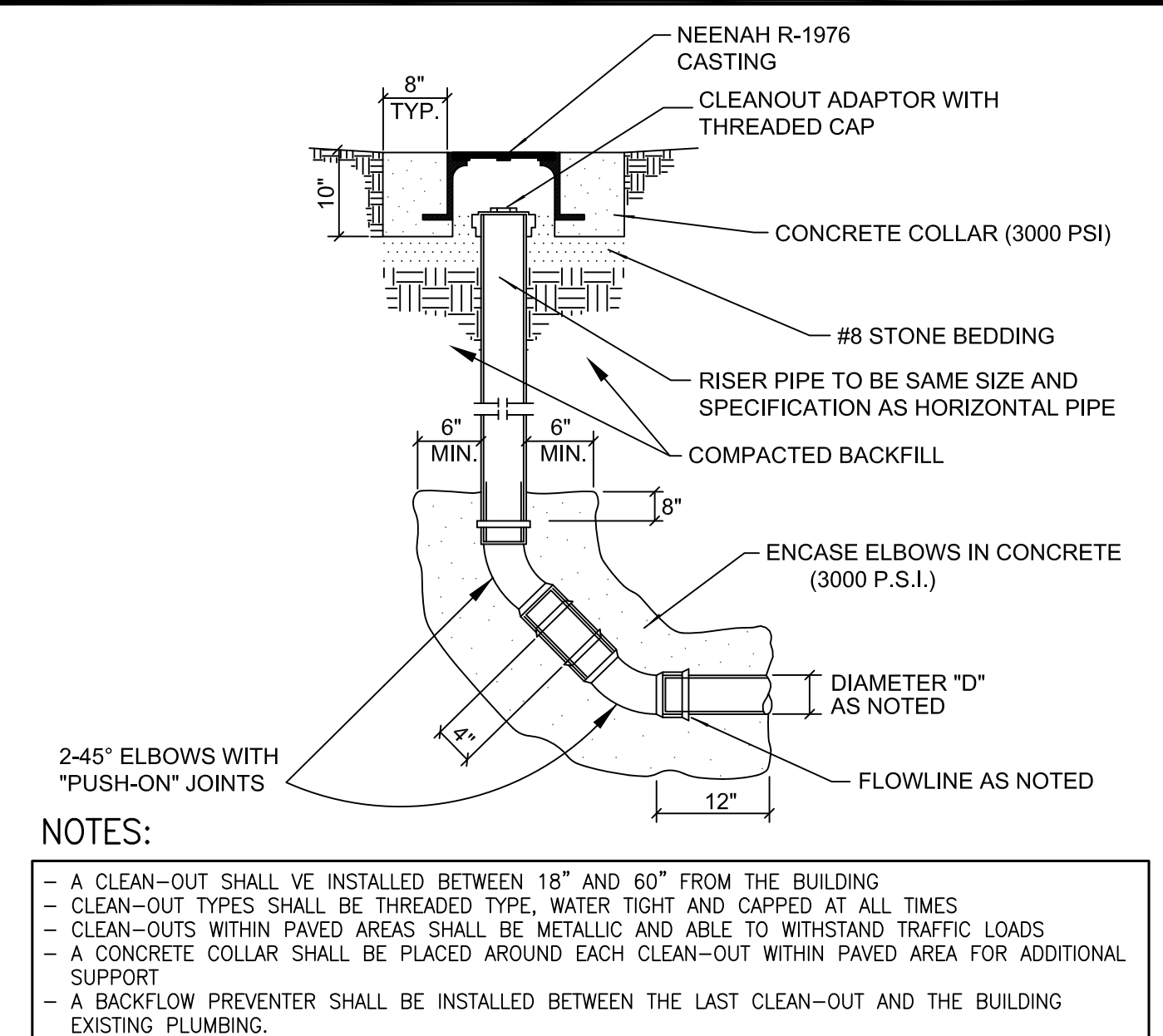
STORM INLET



SERVICE CONNECTION FOR SHALLOW SEWERS (LESS THAN 15' DEEP)



LATERAL CONNECTION INTO EXISTING SEWER



CLEANOUT DETAIL



SCALE	DRAWN BY	CHECKED BY
		DIS/VT

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Lot #3

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SHEET TITLE

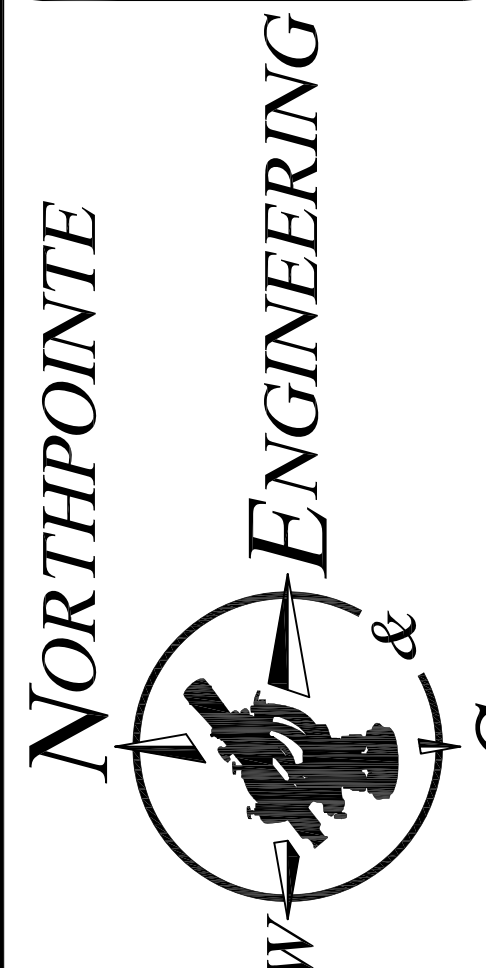
DETAILS

Engineering, Land Surveying
& Inspection

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Sheet C9 of C9

Date: 02.29.2016

Job # 15-0047

BID SET: 00.00.2016